FINAL LIMITED PHASE II ESA REPORT

OF

1614 West Pembroke Avenue
Hampton, Virginia 23661

Prepared for:

City of Hampton
Department of Economic Development
C/o Susan Borland
One Franklin Street, Suite 600
Hampton, Virginia 23669

Submitted to:

Stepan Nevshehirlian, Brownfields Project Manager –
United States Environmental Protection Agency
1650 Arch Street (3HS51)
Philadelphia, PA 19103-2029
email: nevshehirlian.stepan@epa.gov
(215) 814-3402

Prepared By:

124 West Queens Way
Hampton, Virginia 23669

Prepared by: _____
Daniel R. Christian
Junior Geologist

Reviewed by: _____
Michael S. Iwashchenko, P.G.
Environmental Services Director

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1.0 INTRODUCTION

On behalf of the City of Hampton (COH), REMSA, Inc. prepared a Limited Phase II Environmental Site Assessment (ESA) in May 2014 for the property located at 1614 West Pembroke Avenue, Hampton Virginia, 23661 (the 'subject property or Site'). The Limited Phase II ESA was performed for the buyer (COH) to ascertain existing conditions prior to redevelopment. The subject property (LRSN 1001353) is currently a vacant lot located in an M-2 zone (light and heavy manufacturing).

2.0 GENERAL SITE INFORMATION

The subject property is located just north in the intersection of W. Pembroke Ave and Norwood Circle. The Site is bounded to the south by a railway and W. Pembroke Ave that leads to retail and manufacturing facilities on the south side of W. Pembroke Ave. To the east lies another vacant, City-owned, property (1554 W. Pembroke Ave. [LRSN: 1001354]) that leads to Newsome Industrial Park. The Site is bounded on the north by Salters Creek Rd. and further north to a residential neighborhood. The Site is bounded on the west by the metal scrapyard Old Dominion Recycling located at1618 W. Pembroke Avenue. A topographic location map is provided as **Figure 1** in **Appendix A.**

The currently vacant subject property is comprised collectively of ~5.816 acres of dirt, gravel, grassland, scattered trees, drainage ditches (three, running west to east). The Site was once part of the adjacent (west) automotive scrapyard from at least the early 1960s until the late 1990s or early 2000s A railroad is located south of the subject property and north of W. Pembroke Ave. (Appendix B). A railway runs along the southeastern border of the Site, and there are three equally spaced storm water ditches that flow from west to east and continue on to the adjacent property. A Site Map indicating property boundaries is provided as **Figure 2** in **Appendix B**.

No onsite subsurface utilities were marked by Miss Utility and nor were encountered during field activities.

The purpose of the Limited Phase II ESA is to determine if constituents of potential concern (COPCs) such as Total Petroleum Hydrocarbons-Gasoline Range Organics (TPH-GRO), Total Petroleum Hydrocarbons-Diesel Range Organics (TPH-DRO), Semi Volatile Organic Compounds (SVOCs), Volatile Organic Compounds (VOCs), Target Compound List (TCL) pesticides and herbicides, and Target Analyte List (TAL) inorganics to include Mercury (HG) and hexavalent Chromium (Cr^{6+}) are currently impacting onsite soil and groundwater; Polychlorinated Biphenyls (PCBs) are an additional COPC for groundwater only; SVOCs, VOCs, and TAL inorganics are also COPCs for surface sediments; SVOCs, VOCs, PCBs, and TAL inorganics are also COPCs for surface water.

The COPCs laboratory analytical results detected from this Limited Phase II ESA are compared to the most current Virginia Voluntary Remediation Program (VRP) Tier II and Tier III

Standards for residential and commercial properties and EPA Region 3 TCL herbicide screening standards, respectively.

2.1 Previous Environmental Reports

On behalf of the COH, REMSA prepared a Phase I Environmental Site Assessment (ESA) in July 2012. Two onsite Recognized Environmental Conditions (RECs) and three offsite RECs were identified in relation to the subject property. Based on a review of the 2012 Phase I ESA and historical land use information, the following RECs were addressed within the Site Specific Sampling and Analytical Plan (SAP) and the proposed Limited Phase II ESA scope of work:

1. **REC** – Pits, Ponds, Lagoons: A drainage pit was recently excavated (last three months from the completion of the Phase I ESA) on the western edge of the Site along the fence of the adjacent Old Dominion Recycling facility. To date, it is unknown who excavated the pit without authorization from the property owner. No sheens were observed in the standing pool of water, however, the adjacent property owner backfilled the pit following a conversation with the city attorney's office. At the time, this water filled pit represented an exposure route to the restricted groundwater. Historic REC[2] – A fuel oil tank illustrated in 1949 Certified Sanborn Map located along West Sunset Avenue and south of the existing structure. REMSA believes this tank was likely an Aboveground Storage Tank (AST);
2. **Controlled REC (CREC) –** State Regulated Facilities: The subject property is listed as Virginia Department of Environmental Quality (VDEQ) Voluntary Remediation Program (VRP) site #00273. Remediation of releases of hazardous wastes and petroleum for the Site was and remains in the form of deed restrictions on groundwater and land use. These restrictions are primarily a result of an earlier investigation finding total petroleum hydrocarbons (TPH) present in the soils in concentrations exceeding VDEQ screening levels (EEE, 2000), and also are based on the results of a groundwater screening for a construction worker in a trench that indicated RCRA 8 metals and pentachlorophenol in excess of screening levels (IT, 2001). A Declaration of Restrictive Covenants, dated February 25, 2003 stated that the groundwater under the subject property can only be used for environmental monitoring and testing and that the subject property cannot be used for residential purposes or for children's daycare facilities, schools or playground purposes. The EDR Radius Report adds that the City of Hampton Dept. of Health will not allow any wells (except environmental monitoring wells) within a 500-ft radius of the subject property. VRP site #00273 was issued a Certification of Satisfactory Completion of Remediation from the VRP on March 20, 2003 and was based on the implementation of an institutional control/deed restriction.
3. **CREC –** State Regulated Facilities: Several registered and/or Leaking Underground Storage Tank (LUST) and Leaking Tank (LTANK) sites are located within the minimum search distance from the subject property. All LUST and LTANK facilities are listed as "case closed." Based on distance, offsite impacts from these reported LUST and LTANK

sites are unlikely, but there is insufficient information to conclude whether these offsite incidents have impacted soils and/or groundwater under the subject property.

4. **REC** – Adjacent Railway Line: The subject property is adjacent to a railway that has been present since at least 1907 (historical topographic map), and very likely, much earlier. Additionally, it appears that there may have been a spur that extended from the main line onto the subject property as evidenced by a switch located in the south-central area of the Site. This may have been a possible source of long-term pesticide/herbicide application.

2.2 Site Topography and Hydrology

The Site is located approximately fifteen (15) feet above sea level. The general topographic slope and inferred direction of groundwater flow is to the north-northeast draining into a northeast-running ditch that flows northeastward into Newmarket Creek. The Site lies within the Coastal Plain Groundwater Area. The area is composed of unconsolidated sediments of Cretaceous to recent age overlying a bedrock basement. The sediments thicken eastward from a featheredge at the Fall Zone to 7,000 feet along the coastline. Sediments dip gently eastward and are subdivided into four major aquifers from the land surface downward. The Aquifers are separated by confining beds, which restrict but do not prevent vertical flow of groundwater.

3.0 INVESTIGATIVE METHODS AND RESULTS

Investigative methods for this Limited Phase II ESA consisted of the following measures:

- Preparation of the Site Specific SAP and subsequent review by the Environmental Protection Agency (EPA);
- Contacting and scheduling the Geoprobe subcontractor identified as Fishburne Drilling Inc.
- Contacting Environmental Conservation Laboratories, Inc. (ENCO) and arranging for shipment of appropriate laboratory supplied sample containers;
- Contacting Miss Utility at least 72 hours prior to disturbing site soils;
- Communications with COH to schedule for site visit and subsequent sample collection;
- On April 10, 16, and 17 of 2014 the advancement of eleven (11) onsite soil borings (GP-#) to a maximum depth of twelve (12) feet below ground surface (bgs) by the Geoprobe or direct push sampling technology to include field screening of soil quality using the PID and installation of temporary monitoring wells at all sample locations to facilitate the collection of groundwater samples;
- Collection of soil and groundwater samples from each boring at various depths to include standard decontamination procedures between each sample global positioning satellite (GPS) location;
- Documenting soil lithology for all GP-# borings;

- Measurement of Site characteristics to include the locations of all boring locations using a GPS device for mapping purposes;
- Photo documentation of field and sampling activities;
- Laboratory analyses of soil samples by: EPA Method 8260B for VOCs; EPA Method 8015C for TPH-GRO; EPA Method 8015C for TPH-DRO; EPA Method 8081B for TCL Pesticides; EPA Method 8151A for TCL Herbicides; EPA Method 8270D for SVOCs; EPA Methods 6010C and 7471B (Mercury only) for TAL inorganics; and EPA Method 7169A for Hexavalent Chromium;
- Laboratory analyses of sediment samples by: EPA Method 8260B for VOCs; EPA Method 8270D for SVOCs; EPA Methods 6010C and 7471B (Mercury only) for TAL inorganics; and EPA Method 3500-CR D for Hexavalent Chromium;
- Laboratory analyses of groundwater samples by: EPA Method 8015C for TPH-GRO; EPA Method 8015C for TPH-DRO; EPA Method 8260B for VOCs; EPA Method 8270D for SVOCs; EPA Methods 6010C and 7470A (Mercury only) for TAL inorganics; EPA Method 8081B for TCL Pesticides; EPA Method 8151A for TCL Herbicides; EPA Method 8082A for PCBs; and EPA Method3500-CR D for Hexavalent Chromium;
- Laboratory analyses of surface water samples by: Method 8260B for VOCs; EPA Method 8270D for SVOCs; EPA Method 8082A for PCBs; EPA Methods 6010C and 7470A (Mercury only) for TAL inorganics; and EPA Method3500-CR D for Hexavalent Chromium;
- Extraction and offsite disposal of all temporary well construction materials;
- Sealing all eleven (11) geoprobe boring locations with Benseal;
- For Quality Assurance and Quality Control (QA/QC), the analysis of one trip blank for dissolved phase VOCs;
- Completion of Chain of Custody (COC) documentation and overnight shipment of samples to ENCO laboratory located in Cary, North Carolina;
- Tabulation of laboratory analytical data and comparison to recent (1-11-12, 10-22-13, 1-3-14, 1-7-14) VRP Tier II and Tier III standards or to recent (November 2013) EPA Region 3 RSL standards; and
- Preparation of figures using field observation and measurement data.

3.1 Advancement of Soil Borings

As required, Miss Utility of Virginia was contacted on March 28, 2014 and April 7, 2014 regarding underground utility marking. Miss Utility responded to the requests on April 9, 2014. The Miss Utility disposition ticket is provided as **Appendix B**.

Under supervision of REMSA personnel, Fishburne Drilling Inc. advanced a total of eleven (11) soil borings using a CME-45C hollow stem auger drill rig mounted on a CME-300 tracked carrier. The soil boring locations identified as GP14-1 to GP54-11 were advanced to a maximum depth of twelve feet bgs. A sample location map depicting all boring locations and site features is provided as **Figure 3**.

Due to the presence of a 50' easement from the railway, two borings identified as GP14-1 and GP14-5 were moved northwest to the minimum allowable distance of 50'. During soil boring activities, soil lithology, observation data, and sample collection times were recorded in bound field books. A copy of the field notes are provided as **Appendix C**.

Surface cover for boring locations consisted of grass, phragmites, blackberry bushes and other brush reaching heights of ten feet in some locations. In general, Site soil lithology consists of two to eight inches of an organic silty loam, underlain by backfill and/or a silty clay layer to approximately four feet bgs, underlain by a tan to orange sorted medium or coarse grained sand with intermittent lenses of silty clay to approximately ten feet bgs, underlain by a mottled orange and grey clay layer between ten to twelve feet bgs. GP14-1 to GP14-11 soil boring logs is provided as **Appendix D**.

3.2 Soil Field Screening

During the advancement of geoprobe borings GP14-5 to GP14-11, the presence of vapor phase volatile organic compounds was evaluated using a pre-calibrated Ion Science Phocheck +1000 photoionization detector (PID). The PID calibration sheet is provided with **Appendix B**.

Soil samples collected during soil boring activities were divided into two portions. One portion of the soil sample was placed into a separate disposable resealable plastic bag for VOC field screening using a PID. The other portion of the soil sample was containerized and placed into a cooler pre-chilled with ice for laboratory analyses. Soil field screening was performed using a PID after allowing VOCs to equilibrate in the headspace of the sealed plastic bag for a minimum of fifteen minutes. The PID probe tip was inserted into the sealed bag for headspace analysis and the highest VOC concentration was recorded for each collected soil sample.

Vapor phase VOC concentrations ranged from 0.0 parts per million (ppm) in GP14-1, GP14-4, GP14-5, GP14-6, GP14-8, GP14-9, GP14-10, AND GP14-11 to 212 ppm in GP14-7. As specified in the SAP, for each soil boring, the VOC concentrations for each two foot sample interval was recorded in the field. A summary of VOC concentration data for all soil field screening activities as well as percent solids data are provided in **Table 1**.

3.3 Sample Collection Methodology

Standard decontamination procedures were used between each sampling location and depth interval. All samples were placed into pre-labeled, laboratory supplied sample containers and placed in a pre-chilled cooler containing wet ice. Following sample collection, the Chain of Custody (COC) was completed to include specific sampling times.

For discreet sampling of adsorbed phase VOCs, a new disposable Terracore sampler was used to collect the soil sample directly from the acetate sleeve. This discreet sample was collected along a 6-inch depth interval. Care was taken to collect this undisturbed sample as quickly as possible

from the acetate sleeve to minimize potential volatilization and maintain sample integrity. Adsorbed phase VOC sample depths ranged from 1' below ground surface (bgs) at G14-11 to 8' bgs at GP14-2.

Composite soil samples submitted for laboratory analyses (TPH-GRO, TPH-DRO, TCL pesticides, TCL herbicides, SVOCs, TAL inorganics, Hexavalent Chromium) were homogenized prior to sample collection. A clean stainless steel mixing bowl was utilized to homogenize the soil sample. Homogenization of the selected soil sample was performed at each boring location once the depth interval exhibiting the highest detectable PID reading had been identified. The soil sample was homogenized by mixing the soil by hand while wearing new disposable nitrile gloves. Following homogenization, soil samples were collected and compacted by hand and placed into two or three, depending on the Geoprobe location, four (4) ounce clear glass containers with Teflon lids. The SVOC sample container was filled to capacity to minimize head space. Samples for TPH-GRO, TPH-DRO, TCL pesticides, TCL herbicides, SVOCs, TAL inorganics, and Hexavalent Chromium were analyzed from the same four (4) ounce (oz.) sample containers and were collected at the corresponding VOC sample depths.

Groundwater quality was assessed through the collection of groundwater samples and laboratory analyses. Groundwater sampling and analyses was performed to ascertain existing Site conditions and evaluate Site groundwater quality with respect to the previously identified RECs and/or historical activities conducted at and/or adjacent to the Site.

Groundwater VOC samples were collected at varying depths dependent on soil lithology. Temporary wells were installed at all boring locations to accommodate slow groundwater recharge. The temporary wells were constructed of a 5' PVC screen overlain by 5' sections of PVC pipe. A non-permeable clay layer was encountered at most boring locations between 8' and 12' below ground surface (bgs). Groundwater samples were collected at a depth of 5' to 10' bgs at all sample locations to include both the soil to groundwater interface and the deepest encountered groundwater. Of note, groundwater samples for analyses of TPH-DRO, TPH-GRO, TCL pesticides, TCL herbicides, SVOCs, PCBs, TAL inorganics, and Hexavalent Chromium were collected at the corresponding VOC sample depths. Trip blanks were tested for VOC concentrations to meet Quality Assurance (QA) and Quality Control (QC) measures.

Surface sediment samples were collected along each storm water drainage ditch trending west to east in order to evaluate impacts from up-gradient sources including the adjacent up-gradient solid waste facility. All samples were collected in areas of standing water. Sediment samples were collected up to six inches (6") bgs by means of a hand auger and were tested for VOCs, SVOCs, TAL inorganics, and Hexavalent Chromium.

A surface water sample was collected from the drainage pit in the northwest corner of the Site. The sample is intended to evaluate impacts from up-gradient sources such as the active automotive salvage yard. The surface water sample was collected using a one liter capacity dip

cup sampler. The dip cup was drawn through the standing water column and was analyzed for VOCs, SVOCs, TAL inorganics, and Hexavalent Chromium.

Following sample collection and preservation activities, all soil, groundwater, surface sediment, and surface water samples were submitted with completed COC's via Federal Express overnight delivery to an independent NAVLAP certified laboratory for analyses. Laboratory analyses of all soil and groundwater samples were conducted by Environmental Conservation Laboratories (ENCO) located in Cary, North Carolina. The complete soil and groundwater laboratory report and COC documents are provided as **Appendix E**.

3.4 Soil Total Petroleum Hydrocarbons Diesel Range Organics and Total Petroleum Hydrocarbons Gasoline Range Organics Results

Soil sampling and analyses was performed to ascertain existing Site conditions and evaluate Site soil quality with respect to the previously identified RECs and/or historical activities conducted at and/or adjacent to the Site. To fully evaluate maximum adsorbed phase petroleum hydrocarbons, both VOC and SVOC soil samples were collected at depths with maximum recorded PID values, which required sampling at various depths throughout the Site. Additionally, soil samples for analyses of TPH-GRO, TPH-DRO, TCL pesticides, TCL herbicides, TAL inorganics, and Hexavalent Chromium were collected at the corresponding VOC and SVOC sample depth. Soil (adsorbed phase) laboratory analytical results are reported on a dry weight basis and presented as milligrams per kilogram (mg/kg) or parts per million (ppm).

Detected adsorbed phase TPH-DRO concentrations ranged from 3.8 mg/kg at GP14-4 to a maximum concentration of 7,300 mg/kg at GP14-7. TPH-DRO concentrations were detected above the Method Reporting Limit (MRL) of 3.8 mg/kg at all boring locations and consist of : GR14-1 (380 mg/kg), GP14-2 (42 mg/kg), GP14-3 (320 mg/kg), GP14-4 (3.8 mg/kg), GP14-5 (6.1 mg/kg), GP14-6 (260 mg/kg), GP14-7 (7,300 mg/kg), GP14-8 (310 mg/kg), GP14-9 (230 mg/kg), GP14-10 (94 mg/kg), and GP14-11 (270 mg/kg).

Adsorbed phase TPH-GRO concentrations were detected above the MRL of 1.5 mg/kg at only boring location GP14-7 (12 mg/kg). TPH-GRO concentrations were not detected above the MDL ("U") at remaining boring locations. A summary of adsorbed phase TPH-DRO and TPH-GRO laboratory analytical results is presented as **Table 2**.

3.5 Soil Volatile Organic Compounds and Semi-volatile Inorganic Compounds Results

Adsorbed phase VOC concentrations that were detected above the MRL are: 2-Butanone or Methyl Ethyl Ketone (MEK), Acetone, Ethylbenzene, Isopropylbenzene (cumene), Methyl tert-butyl ether (MTBE), Toluene, and Total Xylenes. No VOC concentrations exceed the Virginia Voluntary Remediation Program (VRP) Tier II standards for residential properties or VRP Tier

III Standards for commercial/industrial properties. The remaining VOC concentrations were not detected above the MRL. A summary of soil VOC analytical results are presented as **Table 3**.

In summary, adsorbed phase VOC concentrations were not detected above the MRL at soil boring locations GP14-4 and GP14-11. Soil borings locations identified as GP14-1, GP14-2, GP14-3, GP14-5, GP14-6, GP14-7, GP14-8, GP14-9, and GP14-10 have VOC concentrations that were detected above the MRL and below the VRP Tier II standards for residential properties.

Adsorbed phase SVOC concentrations that were detected above the MRL are: 1,1'-Biphenyl, 2-Methylnaphthalene, Acenaphthene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)Fluoranthene, Benzo(k)Fluoranthene, bis-(2Ethylhexyl)phthalate, Carbazole, Chrysene, Dibenzofuran, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, and Pyrene. SVOC concentrations exceeding the VRP Tier II standards for residential properties are: 1,1'-Biphenyl, 2-Methylnaphthalene, Acenaphthene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)Fluoranthene, Benzo(k)Fluoranthene, Chrysene, Dibenzofuran, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, and Pyrene. SVOC analyte concentrations exceeding the VRP Tier III standards for commercial/industrial properties are: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)Fluoranthene, Benzo(k)Fluoranthene, Chrysene, Dibenzofuran, Indeno(1,2,3-cd)pyrene, and Naphthalene. A summary of soil SVOC analytical results are presented as **Table 4**.

In summary, adsorbed phase SVOC concentrations were not detected above the MRL at soil boring locations GP14-2, GP14-4, GP14-5, GP14-9, GP14-10, and GP14-11. Soil boring locations identified as GP14-1, GP14-3, GP14-6, GP14-7, and GP14-8 have SVOC concentrations that were detected above the VRP Tier II standards for residential properties. Soil boring locations identified as GP14-3, GP14-6, GP14-7, and GP14-8 have detected SVOC analyte concentrations that were detected above the VRP Tier III standards for commercial/industrial properties.

3.6 Soil Target Analyte List Inorganics and Hexavalent Chromium Results

Detected TAL inorganics that exceed VRP Tier II for residential properties consist of: Aluminum (Al), Antimony (Sb), Arsenic (As), Chromium (Cr), Cobalt (Co), Iron (Fe), Lead (Pb), Manganese (Mn), and Mercury (Hg). Detected adsorbed phase TAL inorganic that exceed VRP Tier III standards for commercial/industrial sites consist of: Arsenic (As) and Chromium (Cr). Adsorbed phase TAL inorganic analytes that did not exceed the respective VRP Tier II standards at any sample location are: Barium (Ba); Beryllium (Be); Cadmium(Cd); Calcium (Ca); Copper (Cu); Magnesium (Mg); Nickel (Ni); Potassium (K); Selenium (Se); Silver (Ag), Sodium (Na); Thallium (Tl), Vanadium (V), and Zinc (Zn). Hexavalent Chromium (Cr^{6+}) was not reported at concentrations higher than the MDL and is excluded from the VRP tables.

A summary of soil TAL inorganics and Hexavalent Chromium concentrations are presented as **Table 5**.

With the exception of Thallium, various trace concentrations of remaining TAL inorganics were detected at all sample locations. The recently revised VRP Tier II (revision date Jan. 3, 2014) standards for Thallium (0.078 mg/kg) are lower than the laboratory MRL and Method Detection Limit (MDL). The laboratory MRL and MDL are 0.592 mg/kg and 0.118 mg/kg, respectively.

Accordingly, Thallium is reported as a "U" for all sample locations indicating the analyte was analyzed for, but not detected above the MDL. Thus, an accurate assessment for onsite Thallium concentrations via EPA Method 6010B is not ascertainable based on provided laboratory analytical results when comparing results to the revised VRP Tier II standards. However, all sample locations have detected Thallium concentrations that are less than the VRP Tier III Standard for commercial/industrial sites. For brevity purposes, further discussion of remaining TAL inorganics that did not exceed VRP Tier II standards are omitted from this report.

Aluminum concentrations ranged from 3,000 mg/kg in GP14-6 to a maximum concentration of 11,300 mg/kg in GP14-1. Aluminum concentrations exceed the VRP Tier II Standard of 7,700 mg/kg at GP14-1 (11,300 mg/kg), GP14-3 (5,410 mg/kg), GP14-4 (10,700 mg/kg), GP14-5 (11,000 mg/kg), and GP14-11 (9,340 mg/kg). For all remaining sample locations, Aluminum concentrations did not exceed the VRP Tier II Standards. Additionally, for all sample locations, Aluminum concentrations did not exceed the VRP Tier III Standard for commercial/industrial sites of 99,000 mg/kg.

Antimony concentrations ranged from U in GP14-2 and GP14-5 to a maximum concentration of 13.9 mg/kg in GP14-3. GP14-3 (13.9 mg/kg), GP14-7 (5.70 mg/kg), and GP14-8 (4.29 mg/kg) are the only sample locations where Antimony concentrations exceed the VRP Tier II standard of 3.10 mg/kg. For all remaining sample locations, Antimony concentrations did not exceed the VRP Tier II Standards. Additionally, for all sample locations, Antimony concentrations did not exceed the VRP Tier III Standard for commercial/industrial sites of 41.0 mg/kg.

For all sample locations except GP14-7, Arsenic concentrations exceed the VRP Tier II standard of 0.610 mg/kg for residential sites. Arsenic concentrations exceed the VRP Tier III standard of 2.40 mg/kg for commercial/industrial sites at GP14-1 (5.53 mg/kg), GP14-2 (3.73 mg/kg), GP14-3 (3.62 mg/kg), GP14-6 (3.73 mg/kg), GP14-8 (5.74 mg/kg), GP14-9 (3.30 mg/kg), GP14-10 (4.30 mg/kg) and GP14-11 (4.08 mg/kg). However, naturally occurring background Arsenic concentrations in the Coastal Plain of Virginia typically range from 2 to 20 mg/kg. Arsenic concentrations ranged from 0.395 mg/kg in GP14-7 to a maximum concentration of 5.74 mg/kg in GP14-8. The average onsite adsorbed phase Arsenic concentration is 3.633 mg/kg.

All sample locations exceed the Chromium VRP Tier III Standard of 5.60 mg/kg for commercial/industrial sites. Chromium concentrations ranged from 9.61 mg/kg in GP14-6 to a maximum concentration of 24.6 mg/kg in GP14-1. Sample locations with respective Chromium concentrations exceeding the VRP Tier III standard for commercial/industrial sites are: GP14-1 (24.6 mg/kg), GP14-2 (10.1 mg/kg); GP14-3 (22.0 mg/kg); GP14-4 (9.69 mg/kg); GP14-5 (10.6 mg/kg); GP14-6 (9.61 mg/kg); GP14-7 (12.9 mg/kg); GP14-8 (20.3 mg/kg); GP14-9 (10.2 mg/kg); GP14-10 (14.5 mg/kg); and GP14-11 (10.5 mg/kg). Hexavalent Chromium was not detected above the MDL at any sample location.

Cobalt concentrations exceed the VRP Tier II standard of 0.424 mg/kg for residential sites at all locations, but do not exceed the VRP Tier III standard of 30.0 mg/kg for commercial/industrial sites at any location. Cobalt concentrations ranged from 0.931 mg/kg in GP14-2 to a maximum concentration of 4.21 mg/kg in GP14-3. Sample locations with respective detected Cobalt concentrations exceeding the VRP Tier II standard for residential sites are: GP14-1 (3.59), GP54-2 (0.931 mg/kg); GP14-3 (4.21 mg/kg); GP14-4 (1.27 mg/kg); GP14-5 (1.23 mg/kg); GP14-6 (2.07 mg/kg); GP14-7 (4.09 mg/kg); GP14-8 (3.03 mg/kg); GP14-9 (2.13 mg/kg); GP14-10 (1.39 mg/kg); and GP14-11 (1.54 mg/kg).

For all sample locations, Iron concentrations exceed the VRP Tier II standard of 552 mg/kg for residential sites, but do not exceed the VRP Tier III standard of 72,000 mg/kg for commercial/industrial sites. Iron concentrations ranged from 3,280 mg/kg in GP14-2 to a maximum concentration of 19,300 mg/kg in GP14-1. Sample locations with respective detected Iron concentrations exceeding the VRP Tier II standard for residential sites are: GP14-1 (19,300 mg/kg); GP14-2 (3,280 mg/kg); GP14-3 (14,100 mg/kg); GP14-4 (3,840 mg/kg); GP14-5 (4,220 mg/kg); GP14-6 (9,680 mg/kg); GP14-7 (13,700 mg/kg); GP14-8 (17,800 mg/kg); GP14-9 (14,000 mg/kg); GP14-10 (4,740 mg/kg); and GP14-11 (5,230 mg/kg).

Except for two sample locations identified as GP14-1 and GP14-3 all sample locations were below the Lead VRP Tier II Standard of 552 mg/kg for residential sites. Sample locations with respective detected Manganese concentrations exceeding the VRP Tier II standard for residential sites are GP14-1 (327 mg/kg) and GP14-3 (303 mg/kg). No sample locations exceed the Lead VRP Tier III standard of 800 mg/kg for commercial/industrial sites.

Manganese concentrations ranged from 7.60 mg/kg in GP14-5 to a maximum concentration of 259 mg/kg in GP14-7. Sample locations with respective detected Manganese concentrations exceeding the VRP Tier II standard of 41.7 mg/kg for residential sites are: GP14-1 (117 mg/kg), GP14-3 (122 mg/kg), GP14-6 (64.6 mg/kg), GP14-7 (259 mg/kg), GP14-8 (65.3 mg/kg), GP14-9 (81.8 mg/kg), GP14-10 (100 mg/kg), and GP14-11 (41.7 mg/kg). No sample locations exceed the Manganese VRP Tier III standard of 2,300 mg/kg for commercial/industrial sites.

Except for GP14-7 (1.98 mg/kg), all sample locations were below the Mercury VRP Tier II Standard of 1.00 mg/kg for residential sites. No sample locations exceed the Mercury VRP Tier III standard of 4.30 mg/kg for commercial/industrial sites.

3.7 Soil Target Compound List Pesticides and Target Compound List Herbicides Results

Borehole locations GP14-5 and GP14-11 were advanced 50' north and perpendicular from the southern adjacent railroad tracks, and in only these locations were soil TCL Pesticides and TCL Herbicides analyzed for. Both sample locations were moved northward due to an existing railroad right-of way. Only these two boring locations were moved as proposed in the Sampling and Analysis Plan (SAP). At both sample locations all pesticide analytes were not detected above the laboratory MDL (e.g. "U") and were subsequently below both the VRP Tier II and VRP Tier III Standards and below the EPA Region 3 soil screening levels. In addition, at both sample locations, all herbicide analytes were not detected above the laboratory MDL (e.g. "U") and were subsequently below both the VRP Tier II and VRP Tier III Standards and below the EPA Region 3 soil screening levels. Summaries of soil TCL Pesticides and soil TCL Herbicides analytical results are presented as **Table 6** and **Table 7,** respectively.

3.8 Surface Sediment Volatile Organic Compounds and Semi-volatile Organic Compounds Results

Three surface sediment samples identified as SS14-1, SS14-2 and SS14-3 were collected along each storm water drainage ditch trending west to east in order to evaluate impacts from up-gradient sources including the adjacent up-gradient solid waste facility. All sediment samples were collected in areas of standing water. Sediment samples were collected up to 6-inches bgs by means of a hand auger and were tested for VOCs, SVOCs, TAL inorganics, and Hexavalent Chromium.

With the exception of Acetone, all VOC concentrations were not detected above the laboratory MDL at any sample location. Acetone was detected above the MRL of 0.0058 mg/kg and below the VRP Tier II value of 61,000 mg/kg at SS14-1 (0.97 mg/kg), SS14-2 (1.0 mg/kg), and SS14-3 (1.1 mg/kg). A summary of surface sediment VOC analytical results are presented as **Table 8**.

Only at SS14-3, SVOC concentrations exceed the VRP Tier II standards for residential properties and consist of: Benzo(a)pyrene (1.1 mg/kg) and Benzo(b)fluoranthene (1.8 mg/kg). No SVOC concentrations exceed the VRP Tier III standards for commercial/industrial properties at any sample locations. A summary of surface sediment SVOC analytical results are presented as **Table 9**.

3.9 Surface Sediment Target Analyte List Inorganics and Hexavalent Chromium Results

Detected surface sediment TAL inorganics that exceed VRP Tier II Standards for residential properties consist of Arsenic (As) and Chromium (Cr). Concentrations of the following TAL Inorganics that exceed the MRL consist of: Aluminum (Al); Antimony (Sb); Arsenic (As); Barium (Ba), Beryllium (Be); Cadmium (Cd); Calcium (Ca); Chromium (Cr); Cobalt (Co); Copper (Cu); Iron (Fe); Lead (Pb); Magnesium (Mg); Manganese (Mn); Mercury (Hg); Nickel (Ni); Potassium (K); Sodium (Na); Vanadium (V); and Zinc (Zn). Concentrations of the following TAL Inorganics that exceed the MDL, but not the MRL is limited to Selenium (Se). Silver and Thallium were not detected at concentrations above the MDL at any sample location. At SS14-3 (1.1 mg/kg), a Hexavalent Chromium (Cr^{6+}) was reported at a concentration higher than the MDL and is excluded from the VRP standard tables. For brevity purposes, further discussion of remaining TAL inorganics that did not exceed VRP Tier II standards are omitted from this report. A summary of surface sediment TAL inorganics and Hexavalent Chromium concentrations are presented as **Table 10**.

Arsenic concentrations ranged from 1.88 mg/kg at SS14-2 to 6.58 mg/kg at SS14-3. Arsenic concentrations exceed the sediment VRP Tier II Standard for residential properties of 6.1 mg/kg only at SS14-3 (6.58 mg/kg).

Chromium concentrations ranged from 11.5 mg/kg at SS14-2 to 16.7 mg/kg at SS14-1. Chromium concentrations exceed the sediment VRP Tier II Standard for residential properties of 2.9 mg/kg at SS14-1 (16.7 mg/kg), SS14-2 (11.5 mg/kg), and at SS14-3 (15.4 mg/kg). As previously stated, Hexavalent Chromium was reported above the MDL at SS14-3 (1.1 mg/kg).

3.10 Groundwater Total Petroleum Hydrocarbons Diesel Range Organics and Total Petroleum Hydrocarbons Gasoline Range Organics Results

Groundwater (dissolved phase) laboratory analytical results are presented as micrograms per liter (*u*g/L) or parts per billion (ppb) for all analytes with the exception of TPH-DRO, TPH-GRO and Hexavalent Chromium which are presented as milligrams per liter (mg/L) or parts per million (ppm).

Dissolved phase TPH-DRO concentrations ranged from 0.077 mg/L at GP14-10 to a maximum concentration of 0.84 mg/L at GP14-3. TPH-DRO concentrations were detected above the MRL of 0.055 mg/L at boring locations GR14-1 (0.52 mg/L), GP14-2 (0.59 mg/L), GP14-3 (0.84 mg/L), GP14-4 (0.14 mg/L), GP14-6 (0.39 mg/L), GP14-7 (0.42 mg/L), GP14-8 (0.15 mg/L), and GP14-9 (0.16 mg/L). The only location with a TPH-DRO concentration between the MDL and MRL was GP14-10 (0.077 mg/L). TPH-DRO concentrations were not detected above the MDL at boring locations GP14-5 and GP14-11.

Dissolved phase TPH-GRO concentrations ranged from 0.011 mg/L at GP14-10 to a maximum concentration of 1.06 mg/L at GP14-7. TPH-GRO concentrations detected above the MRL at boring locations GP14-2 (0.067 mg/L), GP14-3 (0.107 mg/L), and GP14-7 (1.06 mg/L). Locations with TPH-GRO concentrations between the MDL and MRL are GP14-4 (0.013 mg/L), GP14-6 (0.014 mg/L), and GP14-9 (0.011 mg/L). TPH-DRO concentrations were not detected above the MDL at boring locations GP14-1, GP14-5 GP14-8, and GP14-11. A summary of dissolved phase TPH-DRO and TPH-GRO laboratory analytical results is presented as **Table 11**.

3.11 Groundwater Volatile Organic Compounds and Semi-volatile Organic Compounds Results

Dissolved phase VOC concentrations that were detected above the MRL are: Acetone; Benzene; Ethylbenzene; Isopropylbenzene (cumene); Methyl Tert-butyl Ether (MTBE); M-Xylene; O-Xylene; P-Xylene; Toluene; Total Xylenes; and Trichlorofluoromethane. VOC concentrations that exceed the VRP Tier II standards for residential properties include Benzene and Methyl Tert-butyl Ether (MTBE). VOC concentrations that exceed the VRP Tier III standards for residential sites include M-Xylene and O-Xylene; however, it should be noted that M-Xylene and P-Xylene were reported as a combined value and it is uncertain which, if either, value would exceed the Tier III standard if analyzed individually. The remaining VOC concentrations were not detected above the MRL. A summary of groundwater VOC analytical results are presented as **Table 12**.

In summary, VOC concentrations were detected above the MRL at all boring locations. Sample locations GP14-3 and GP14-7 exceed dissolved phase VOC VRP Tier II standards for residential properties and/or dissolved phase VRP Tier III standards for commercial/industrial properties.

Except for GP14-7, all boring location dissolved phase SVOC analytes were not detected above the laboratory MRL and were subsequently below VRP Tier II Standards for residential properties and VRP Tier III Standards for commercial/industrial properties. SVOCs reported above the MRL, but below VRP Tier II and VRP Tier III Standards in GP14-7 include Carbazole, Dibenzofuran, Fluorene, Naphthalene, and Phenanthrene. A summary of dissolved phase SVOC analytical results are presented as **Table 13**.

3.12 Groundwater Target Analyte List Inorganics and Hexavalent Chromium Results

Detected groundwater TAL inorganics that exceed VRP Tier II for residential properties consist of: Aluminum (Al), Arsenic (As), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Iron (Fe), Lead (Pb), Manganese (Mn), Mercury (Hg), Nickel (Ni), Thallium (Tl), Vanadium (V), and Zinc (Zn). Detected dissolved phase TAL inorganics that exceed VRP Tier III standards for commercial/industrial is limited to Mercury (Hg). Dissolved phase TAL inorganic analytes that did not exceed the respective VRP Tier II standards at any sample location are: Antimony (Sb), Barium (Ba), Calcium (Ca), Copper (Cu), Magnesium (Mg), Potassium (K),

Selenium (Se), Silver (Ag), and Sodium (Na). Hexavalent Chromium (Cr^{6+}) was detected at concentrations higher than the MRL and is currently excluded from the VRP tables. For brevity purposes, further discussion of remaining TAL inorganics that did not exceed VRP Tier II standards are omitted from this report. Dissolved phase TAL metals were collected from depths ranging from 5' to 10' bgs. A summary of groundwater TAL inorganics and Hexavalent Chromium concentrations is presented as **Table 14**.

For all sample locations, Aluminum concentrations exceed the VRP Tier II standard of 1,600 *u*g/L for residential sites. Aluminum concentrations ranged from 4,940 *u*g/L or parts per billion (ppb) in GP14-6 to a maximum concentration of 129,000 *u*g/L in GP14-1. Sample locations with respective detected Aluminum concentrations exceeding the VRP Tier II standard for residential sites are: GP14-1 (129,000 *u*g/L), GP14-2 (44,700 *u*g/L), GP14-3 (5,500 *u*g/L), GP14-4 (22,900 *u*g/L), GP14-5 (93,100 *u*g/L), GP14-6 (4,940 *u*g/L), GP14-7 (11,800 *u*g/L), GP14-8 (25,600 *u*g/L), GP14-9 (37,600 *u*g/L), GP14-10 (28,300 *u*g/L), and GP14-11 (5,390 *u*g/L). There is no established groundwater VRP Tier III Standard value for Aluminum.

Groundwater Arsenic concentrations ranged from U at GP14-3 to a maximum concentration of 95.5 *u*g/L at GP14-2. Sample locations with detected Arsenic concentrations exceeding the VRP Tier II standard of 10 *u*g/L for residential sites are: GP14-1 (52.8 *u*g/L); GP14-2 (20.0 *u*g/L); GP14-5 (25.2 *u*g/L); GP14-8 (95.5 *u*g/L); and GP14-9 (17.3 *u*g/L). There is no established groundwater VRP Tier III Standard value for Arsenic.

The Beryllium groundwater VRP Tier II value of 4 *u*g/L for residential sites is exceeded at boring locations GP14-1 (16.0 *u*g/L) and GP14-5 (5.05 *u*g/L). There is no established groundwater VRP Tier III Standard value for Beryllium.

The Cadmium groundwater VRP Tier II value of 5 *u*g/L for residential sites is exceeded at boring locations GP14-1 (24.4 *u*g/L) and GP14-9 (5.92 *u*g/L). There is no established groundwater VRP Tier III Standard value for Cadmium.

Groundwater Chromium concentrations ranged from 2.38 *u*g/L at GP14-3 to 294 *u*g/L at GP54-2. The VRP Tier II value of 100 *u*g/L for residential sites is exceeded only at boring location GP14-1 (294 *u*g/L). There is no established groundwater VRP Tier III Standard value for Chromium. Hexavalent Chromium (Cr^{6+}) was detected at GP14-1 (0.022 mg/L). There is no established groundwater VRP Tier II or Tier III Standard value for Hexavalent Chromium.

Cobalt concentrations exceed the groundwater VRP Tier II Standard of 0.47 *u*g/L for residential sites at all boring locations and ranged from 1.29 *u*g/L at GP14-11 to a maximum concentration of 71.4 *u*g/L at GP14-1. Boring locations that exceed the VRP Tier II Standard include GP14-1 (74.1 *u*g/L), GP14-2 (16.3 *u*g/L), GP14-3 (7.32 *u*g/L), GP14-4 (3.80 *u*g/L), GP14-5 (15.2 *u*g/L), GP14-6 (3.23 *u*g/L), GP14-7 (13.0 *u*g/L), GP14-8 (48.7 *u*g/L), GP14-9 (12.7 *u*g/L), GP14-10

(5.99 *u*g/L), and GP14-11 (1.29 *u*g/L). There is no established groundwater VRP Tier III Standard value for Cobalt.

Iron concentrations exceed the groundwater VRP Tier II Standard of 1,100 *u*g/L for residential sites at all boring locations and ranged from 6,610 *u*g/L at GP14-11 to a maximum concentration of 275,000 *u*g/L at GP14-1. Boring locations that exceed the VRP Tier II Standard include GP14-1 (275,000 *u*g/L), GP14-2 (123,000 *u*g/L), GP14-3 (75,800 *u*g/L), GP14-4 (15,800 *u*g/L), GP14-5 (61,600 *u*g/L), GP14-6 (78,800 *u*g/L), GP14-7 (63,200 *u*g/L), GP14-8 (118,000 *u*g/L), GP14-9 (56,900 *u*g/L), GP14-10 (30,900 *u*g/L), and GP14-11 (6,610 *u*g/L) There is no established groundwater VRP Tier III Standard value for Iron.

Lead concentrations exceed the groundwater VRP Tier II Standard of 15 *u*g/L for residential sites at all boring locations except GP14-3, GP14-6 and GP14-11. Lead concentrations ranged from 4.42 *u*g/L at GP14-11 to a maximum concentration of 3,940 *u*g/L at GP14-1. Boring locations that exceed the VRP Tier II Standard include GP14-1 (3,940 *u*g/L), GP14-2 (404 *u*g/L), GP14-4 (33.5 *u*g/L), GP14-5 (104 *u*g/L), GP14-7 (106 *u*g/L), GP14-8 (42.3 *u*g/L), GP14-9 (158 *u*g/L), and GP14-10 (85.1 *u*g/L). There is no established groundwater VRP Tier III Standard value for Lead.

Manganese concentrations exceed the groundwater VRP Tier II Standard of 32 *u*g/L for residential sites at all boring locations and ranged from 66.7 at GP14-4 to a maximum concentration of 2,990 *u*g/L at GP14-1. Boring locations that exceed the VRP Tier II Standard include GP14-1 (2,990 *u*g/L), GP14-2 (533 *u*g/L), GP14-3 (178 *u*g/L), GP14-4 (66.7 *u*g/L), GP14-5 (270 *u*g/L), GP14-6 (554 *u*g/L), GP14-7 (848 *u*g/L), GP14-8 (1,650 *u*g/L), GP14-9 (806 *u*g/L), GP14-10 (553 *u*g/L), and GP14-11 (81 *u*g/L). There is no established groundwater VRP Tier III Standard value for Manganese.

Mercury concentrations exceeding the groundwater VRP Tier III Standard of 0.0670 *u*g/L for residential properties was detected at boring location GP14-9 (0.227 *u*g/L). Mercury concentration exceeding the groundwater VRP Tier III Standard of 0.281 *u*g/L for commercial/industrial sites was detected only at boring location GP14-1 (1.75 *u*g/L). Of note, the current Tier II standard is established at 2.0 *u*g/L, which is higher than the revised action level Tier III standards.

Nickel concentrations exceed the groundwater VRP Tier II Standard of 30 *u*g/L for residential sites at four boring locations identified as: GP14-1 (259 *u*g/L); GP14-2 (49.2*u*g/L); GP14-5 (43.7 *u*g/L); and GP14-8 (58.2 *u*g/L). There is no established groundwater VRP Tier III Standard value for Nickel.

Thallium concentrations exceed the groundwater VRP Tier II Standard concentration of 2 *u*g/L for residential sites at boring location GP14-6 (3.66 *u*g/L). There is no established groundwater VRP Tier III Standard value for Thallium.

Vanadium concentrations exceed the groundwater VRP Tier II Standard of 7.8 *u*g/L for residential properties at all boring locations except for GP14-3 (5.91 *u*g/L), which was the lowest groundwater Vanadium concentration. Boring locations that exceed the VRP Tier II Standard include GP14-1 (245 *u*g/L), GP14-2 (93.2 *u*g/L), GP14-4 (46.8 *u*g/L), GP14-5 (216 *u*g/L), GP14-6 (12.8 *u*g/L), GP14-7 (31.7 *u*g/L), GP14-8 (109 *u*g/L), GP14-9 (109 *u*g/L), GP14-10 (56.9 *u*g/L), and GP14-11 (13.1 *u*g/L). There is no established groundwater VRP Tier III Standard value for Vanadium.

Zinc concentrations exceed the groundwater VRP Tier II Standard of 470 *u*g/L for residential sites at boring locations GP14-1 (6,420 *u*g/L), GP14-2 (738 *u*g/L), and GP14-7 (525 *u*g/L). There is no established groundwater VRP Tier III Standard value for Zinc.

3.13 Groundwater Target Compound List Pesticides and Target Compound List Herbicides Results

Borehole locations GP14-5 and GP14-11 were advanced 50’ perpendicular and north from the southern adjacent railroad tracks, and only at these two locations were groundwater samples collected and analyzed for TCL Pesticides and TCL Herbicides analyzed. At both sample locations all pesticide analytes were not detected above the laboratory MDL (e.g. “U”) and were subsequently below both the VRP Tier II and VRP Tier III Standards and below the EPA Region 3 screening levels. In addition, at both sample locations all herbicide analytes were not detected above the laboratory MDL (e.g. “U”) and were subsequently below both the VRP Tier II and VRP Tier III Standards and below the EPA Region 3 screening levels. Summaries of groundwater TCL Pesticides and soil TCL Herbicides analytical results are presented as **Table 15** and **Table 16** respectfully.

3.14 Groundwater Polychlorinated Biphenyls Results

Polychlorinated Biphenyls (PCBs) were analyzed at all boring locations for groundwater concentrations. PCBs were not detected above the MDL at any boring location. A summary of groundwater PCB laboratory analytical results is presented as **Table 17**.

3.15 Surface Water Volatile Organic Compounds and Semi Volatile Compounds Results

A surface water sample identified as SW14-1 was collected from the drainage pit in the northwest corner of the Site. The surface water sample is intended to evaluate impacts from up-gradient offsite sources to include the adjacent property currently utilized as an automotive salvage yard. The surface water sample was collected using a one liter capacity dip cup drawn through the standing water column and were tested for VOCs, SVOCs, TAL inorganics, and Hexavalent Chromium.

VOCs and SVOCs concentrations did not exceed the MDL's ("U") for any compound at the sample site. A summary of surface water VOC and SVOC laboratory analytical results are provided as **Tables 18** and **19**, respectively.

3.16 Surface Water Target Analyte List Inorganics and Hexavalent Chromium Results

Detected surface water TAL inorganics that exceed the VRP Tier II Standard for residential properties consist of Aluminum (Al), Cadmium (Cd), Copper (Cu), Iron (Fe), Lead (Pb), Manganese (Mn), Nickel (Ni), and Zinc (Zn). Surface water TAL inorganic analytes that did not exceed the respective VRP Tier II standards at any sample location are: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Calcium (Ca), Chromium (Cr), Cobalt (Co), Magnesium (Mg), Mercury (Pb), Potassium (K), Selenium (Se), Silver (Ag), Sodium (Na), Thallium (Tl), and Vanadium (V). Hexavalent Chromium (Cr^{6+}) was not detected at concentrations higher than the MRL and is excluded from the currently established VRP tables. For brevity purposes, further discussion of remaining TAL inorganics that did not exceed VRP Tier II standards are omitted from this report. A summary of surface water TAL inorganics and Hexavalent Chromium concentrations is presented as **Table 20**.

Aluminum concentrations exceed the surface water VRP Tier II Standard of 87 *u*g/L for residential sites at sampling location SW14-1 (2,090 *u*g/L). There is no established surface water VRP Tier III Standard value for Aluminum.

Cadmium concentrations exceed the surface water VRP Tier II Standard of 1.1 *u*g/L for residential sites at sampling location SW14-1 (2.65 *u*g/L). There is no established surface water VRP Tier III Standard value for Cadmium.

Copper concentrations exceed the surface water VRP Tier II Standard of 9 *u*g/L for residential sites at sampling location SW14-1 (66.6 *u*g/L). There is no established surface water VRP Tier III Standard value for Copper.

Iron concentrations exceed the surface water VRP Tier II Standard of 1,000 *u*g/L for residential sites at sampling location SW14-1 (4,370 *u*g/L). There is no established surface water VRP Tier III Standard value for Iron.

Lead concentrations exceed the surface water VRP Tier II Standard of 14 *u*g/L for residential sites at sampling location SW14-1 (72.4 *u*g/L). There is no established surface water VRP Tier III Standard value for Lead.

Manganese concentrations exceed the surface water VRP Tier II Standard of 100 *u*g/L for residential sites at sampling location SW14-1 (1,180 *u*g/L). There is no established surface water VRP Tier III Standard value for Manganese.

Nickel concentrations exceed the surface water VRP Tier II Standard of 20 *u*g/L for residential sites at sampling location SW14-1 (23.7 *u*g/L). There is no established surface water VRP Tier III Standard value for Nickel.

Zinc concentrations exceed the surface water VRP Tier II Standard of 120 *u*g/L for residential sites at sampling location SW14-1 (451 *u*g/L). There is no established surface water VRP Tier III Standard value for Manganese.

3.17 Surface Water Polychlorinated Biphenyls Results

Polychlorinated Biphenyls (PCBs) were analyzed at one sample location identified as SW-1 for surface water concentrations. PCBs were not detected above the MDL ("U") at the sample location. A summary of surface water PCB laboratory analytical results is presented as **Table 21**.

4.0 RESULTS AND CONCLUSIONS

As understood by REMSA, the Site is proposed to be redeveloped for commercial use only. Accordingly, only the VRP Tier III standards potentially affect the redevelopment and future use of the subject property. Based on site characteristics, site observations, field data and laboratory analytical results collected during performance of this Limited Phase II ESA, REMSA concludes the following:

- Adsorbed phase TPH-DRO concentrations were detected at all eleven boring locations;
- An adsorbed phase TPH-GRO concentration was detected at boring location GP14-7;
- Soil boring locations identified as GP14-1, GP14-2, GP14-3, GP14-5, GP14-6, GP14-7, GP14-8, GP14-9, and GP14-10 have VOC concentrations that were detected above the MRL and below the VRP Tier II standards for residential properties. Adsorbed phase VOC concentrations that were detected above the MRL consist of: 2-Butanone or Methyl Ethyl Ketone (MEK), Acetone, Ethylbenzene, Isopropylbenzene (cumene), Methyl tert-butyl ether (MTBE), Toluene, and Total Xylenes. However, no VOC concentrations exceed the Virginia Voluntary Remediation Program (VRP) Tier II standards for residential properties or VRP Tier III Standards for commercial/industrial properties;
- Adsorbed phase SVOC analyte concentrations exceeding the VRP Tier II standards for residential properties consist of: 1,1-Biphenyl, 2-Methylnaphthalene, Acenaphthene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)Fluoranthene, Benzo(k)Fluoranthene, Chrysene, Dibenzofuran, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, and Pyrene. Soil boring locations identified as GP14-1, GP14-3, GP14-6, GP14-7, and GP14-8 have SVOC concentrations that were detected above the VRP Tier II standards for residential properties;
- Soil boring locations identified as GP14-3, GP14-6, GP14-7, and GP14-8 have SVOC concentrations that were detected above the VRP Tier III standards for commercial/industrial properties. Adsorbed phase SVOC analyte concentrations

exceeding the VRP Tier III standards for commercial/industrial properties consist of: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)Fluoranthene, Benzo(k)Fluoranthene, Chrysene, Dibenzofuran, Indeno(1,2,3-cd)pyrene, and Naphthalene;

- Detected adsorbed phase TAL inorganics that exceed VRP Tier II for residential properties consist of: Aluminum (Al), Antimony (Sb), Arsenic (As), Chromium (Cr), Cobalt (Co), Iron (Fe), Lead (Pb), Manganese (Mn), and Mercury (Hg);
- Detected adsorbed phase TAL inorganics that exceed VRP Tier III standards for commercial/industrial sites consist of: Arsenic (As) and Chromium (Cr);
- Detected adsorbed phase TAL inorganics that did not exceed the respective VRP Tier II standards at any sample location are: Barium (Ba); Beryllium (Be); Cadmium(Cd); Calcium (Ca); Copper (Cu); Magnesium (Mg); Nickel (Ni); Potassium (K); Selenium (Se); Silver (Ag), Sodium (Na); Thallium (Tl), Vanadium (V), and Zinc (Zn);
- Adsorbed phase Hexavalent Chromium (Cr^{6+}) was not reported at concentrations higher than the MDL and is currently excluded from the VRP tables;
- With the exception of Thallium, various concentrations of remaining TAL inorganics were detected at all sample locations. The recently revised VRP Tier II (revision date Jan. 3, 2014) standards for Thallium (0.078 mg/kg) are lower than the laboratory MRL and Method Detection Limit (MDL). The laboratory MRL and MDL are 0.592 mg/kg and 0.118 mg/kg, respectively. Accordingly, Thallium is reported as a "U" for all sample locations indicating the analyte was analyzed for, but not detected above the MDL. Thus, an accurate assessment for onsite Thallium concentrations via EPA Method 6010B is not ascertainable based on provided laboratory analytical results when comparing results to the revised VRP Tier II standards. However, all sample locations have detected Thallium concentrations that are less than the VRP Tier III Standard for commercial/industrial sites;
- Based on proximity to the railroad, only borehole locations GP14-5 and GP14-11 were analyzed for TCL Pesticides and TCL Herbicides concentrations. At both sample locations, all soil pesticide and herbicide analytes were not detected above the laboratory MDL (e.g. "U") and were subsequently below both the VRP Tier II and VRP Tier III Standards and below the EPA Region 3 soil screening levels;
- With the exception of Acetone, all sediment VOC concentrations were not detected above the laboratory MDL at any sample location. Acetone was detected above the MRL of 0.0058 mg/kg and below the VRP Tier II value of 61,000 mg/kg at SS14-1 (0.97 mg/kg), SS14-2 (1.0 mg/kg), and SS14-3 (1.1 mg/kg);
- No sediment SVOC concentrations were detected above the MRL; however, SVOC analyte concentrations exceeding the VRP Tier II standards for residential properties consist of: Benzo(a)pyrene (1.1 mg/kg) and Benzo(b)fluoranthene (1.8 mg/kg), which are limited to SS14-3. Within onsite sediments, no SVOC concentrations exceed the VRP Tier III standards for commercial/industrial properties at any sample locations;
- Detected sediment TAL inorganics that exceed VRP Tier II Standards for residential properties consist of Arsenic (As) and Chromium (Cr);
- A sediment Hexavalent Chromium (Cr^{6+}) was reported only at SS14-3 (1.1J mg/kg) at a

concentration higher than the MDL. However, Hexavalent Chromium is excluded from the currently established VRP standard tables;

- Dissolved phase TPH-DRO concentrations were detected at boring locations GR14-1, GP14-2, GP14-3, GP14-4, GP14-6, GP14-7, GP14-8, and GP14-9;
- Dissolved phase TPH-GRO concentrations were detected at boring locations GP14-2, GP14-3, and GP14-7;
- Dissolved phase VOC concentrations that were detected above the MRL are: Acetone; Benzene; Ethylbenzene; Isopropylbenzene (cumene); Methyl Tert-butyl Ether (MTBE); M-Xylene; O-Xylene; P-Xylene; Toluene; Total Xylenes; and Trichlorofluoromethane;
- Dissolved phase VOC concentrations that exceed the VRP Tier II standards for residential properties include Benzene and MTBE;
- Dissolved phase VOC concentrations that exceed the VRP Tier III standards for residential sites include M-Xylene and O-Xylene; however, it should be noted that M-Xylene and P-Xylene were reported as a combined value and it is uncertain which, if either, value would exceed the Tier III standard if analyzed and reported individually;
- Dissolved phase SVOCs analytes were reported above the MRL, but are below VRP Tier II and VRP Tier III Standards are limited to GP14-7 and include Carbazole, Dibenzofuran, Fluorene, Naphthalene, and Phenanthrene;
- Detected groundwater TAL inorganics that exceed VRP Tier II for residential properties consist of: Aluminum (Al), Arsenic (As), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Iron (Fe), Lead (Pb), Manganese (Mn), Mercury (Hg), Nickel (Ni), Thallium (Tl), Vanadium (V), and Zinc (Zn);
- Detected dissolved phase TAL inorganics that exceed VRP Tier III standards for commercial/industrial is limited to Mercury (Hg);
- Dissolved phase Hexavalent Chromium (Cr^{6+}) was detected at concentrations higher than the MRL, but does not have an established screening value within the VRP tables;
- Based on proximity to the railroad tracks, only borehole locations GP14-5 and GP14-11 were analyzed for TCL Pesticides and TCL Herbicides. At both sample locations, all groundwater TCL Pesticides and TCL Herbicides analytes were not detected above the laboratory MDL (e.g. “U”) and were subsequently below both the VRP Tier II and VRP Tier III Standards and below the EPA Region 3 screening levels;
- Dissolved phase PCBs were not detected above the MDL at any of the eleven (11) boring locations;
- A surface water sample was analyzed for VOC and SVOC concentrations at one surface water location identified as SW14-1 and all analyte concentrations were reported as below the MDL;
- Surface water TAL inorganics that exceed the VRP Tier II Standard for residential properties consist of Aluminum (Al), Cadmium (Cd), Copper (Cu), Iron (Fe), Lead (Pb), Manganese (Mn), Nickel (Ni), and Zinc (Zn);
- Surface water Hexavalent Chromium (Cr^{6+}) was not detected at concentrations higher than the MRL.
- Polychlorinated Biphenyls (PCBs) were not detected within onsite surface water concentration and are subsequently below the VRP Tier II Standards.

5.0 RECOMMENDATIONS

Based on site characteristics, site observations, field data and laboratory analytical results collected during performance of this Limited Phase II ESA, REMSA recommends the following:

- Since petroleum hydrocarbons were detected above the MDL and an UST was not being removed, the detected petroleum concentrations should be reported to the VDEQ by the current owner (Responsible Party). REMSA, Inc. anticipates that no further assessment may be required by VDEQ for the detected petroleum constituents;
- A surficial sediment Hexavalent Chromium concentration was detected at SS14-3 (1.1 mg/kg). The onsite sediments may require further delineation and subsequent excavation and disposal. However, this additional assessment may not be required based on redevelopment plans and future intended use. At this time, REMSA does not recommend additional assessment or remedial action.
- According to the Virginia Department of Environmental Quality (VDEQ) Solid Waste Guidance Memorandum dated July 17, 2012 (**Appendix F)** VDEQ does not recommend the removal and reuse of Hexavalent Chromium impacted soils as fill material if concentrations exceed: 0.290 mg/kg for residential reuse and other high exposure frequency receptor locations; and 5.6 mg/kg for commercial/industrial receptor locations.

6.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

REMSA, Inc. is an environmental consulting firm with offices located throughout the nation including two offices within the Commonwealth of Virginia. REMSA, Inc. provides environmental services for the assessment and remediation of sites impacted by petroleum products, hazardous substances, and other environmental conditions. Credentials of participating individuals of the Limited Phase II ESA are provided below.

Michael S. Iwashchenko is a Certified Professional Geologist (CPG) with over 25 years of experience with assessments of private, commercial, institutional and industrial sites and qualifies as an Environmental Professional (EP). Mr. Iwashchenko provided project management and senior review for this project.

Daniel R. Christian is a junior level geologist who holds a Bachelor's degree in Ocean and Earth Science with Geological Concentration from Old Dominion University in Norfolk, Virginia. Mr. Christian conducted field sampling and tabulated laboratory analytical results as well as report writing for this project.

Andrew M. Gowen is a Virginia state licensed Asbestos Inspector and Lead Risk Assessor who holds a Bachelor's degree in Biology from the University of Maine at Machias. Mr. Gowen provided field and CAD support for this project.

Troy Savage holds a Bachelor of Science in Biology and a Master of Science in Ecology from

Old Dominion University in Norfolk, Virginia. He has three years of environmental consulting experience. He remains current in his field through work experience, journal review, and continuing education credits. Mr. Savage provided field and GIS support for this project.

7.0 REFERENCES

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TABLES

TABLE 1. SOIL FIELD SCREENING RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No.: E18-10-T03P

Sample Identification Number	Sample Interval Depth Below Ground Surface (Feet)	Soil Vapor Phase Concentration (PPM)
GP14-1	0-2	0.4
	2-4	2.3
	4-6	0.1
	6-8	0.0
	8-10	0.3
	10-12	0.0
GP14-2	0-2	0.1
	2-4	0.1
	4-6	NS
	6-8	NS
	8-10	5.4
	10-12	2.7
GP14-3	0-2	0.6
	2-4	16.8
	4-6	34.5
	6-8	37.4
	8-10	1.5
	10-12	0.2
GP14-4	0-2	0.0
	2-4	0.0
	4-6	0.0
	6-8	0.0
	8-10	0.0
	10-12	0.0
GP14-5	0-2	0.0
	2-4	0.0
	4-6	0.0
	6-8	0.0
	8-10	0.0
	10-12	0.0
GP14-6	0-2	0.5
	2-4	2.6
	4-6	1.0
	6-8	0.0
	8-10	1.9
	10-12	0.5

Notes: Soil samples were collected on April 10, 16, and 17, 2014.
Soil samples were submitted for laboratory analysis at various depths between boring locations.
A precalibrated Ionscience Phocheck 1000 Photoionization Detector used to measure soil vapor phase concentra
"NS" denotes not sampled.

TABLE 1. SOIL FIELD SCREENING RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No.: E18-10-T03P

Sample Identification Number	Sample Interval Depth Below Ground Surface (Feet)	Soil Vapor Phase Concentration (PPM)
GP14-7	0-2	5.9
	2-4	212
	4-6	19.2
	6-8	1.3
	8-10	1.3
	10-12	3.0
GP14-8	0-2	0.2
	2-4	2.3
	4-6	1.2
	6-8	0.6
	8-10	0.0
	10-12	0.0
GP14-9	0-2	0.0
	2-4	0.4
	4-6	0.0
	6-8	0.0
	8-10	0.0
	10-12	0.0
GP14-10	0-2	0.0
	2-4	0.0
	4-6	0.0
	6-8	0.0
	8-10	0.0
	10-12	0.0
GP14-11	0-2	0.0
	2-4	0.0
	4-6	0.2
	6-8	0.0
	8-10	0.0
	10-12	0.0

Notes: Soil samples were collected on April 10, 16, and 17, 2014.
Soil samples were submitted for laboratory analysis at various depths between boring locations.
A precalibrated Ionscience Phocheck 1000 Photoionization Detector used to measure soil vapor phase concentra
"NS" denotes not sampled.

TABLE 2. SUMMARY OF ADSORBED PHASE GASOLINE RANGE ORGANIC AND DIESEL RANGE ORGANIC ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Analyte	Notify VDEQ	GP14-1 (mg/kg)	GP14-2 (mg/kg)	GP14-3 (mg/kg)	GP14-4 (mg/kg)	GP14-5 (mg/kg)	GP14-6 (mg/kg)	GP14-7 (mg/kg)
TPH-DRO	>MDL	380	42	320	3.8	6.1	260	7,300
TPH-GRO	>MDL	U	U	U	U	U	U	12

Analyte	Notify VDEQ	GP14-8 (mg/kg)	GP14-9 (mg/kg)	GP14-10 (mg/kg)	GP14-11 (mg/kg)
TPH-DRO	>MDL	310	230	94	270
TPH-GRO	>MDL	U	U	U	U

NOTES: Soil samples were collected on April 10, 16, and 17 2014.
MDL denotes Method Detection Limit. If Total Petroleum Hydrocarbons Diesel Range Organics (TPH-DRO) or Total Petroleum Hydrocarbons Gasoline Range Organics (TPH-GRO) is above MDL, then owner should notify VDEQ.
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NS denotes not sampled.
Soil samples analyzed by EPA Method 8015C for TPH-DRO and EPA Method 8015C for TPH-GRO.
Laboratory analytical results reported in milligrams per kilograms (mg/kg) or parts per million (ppm).
Laboratory analysis performed by ENCO Laboratories.
(Value) denotes reported value exceeds MDL.

TABLE 3. SUMMARY OF SOIL VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Sample I.D.	CAS	Tier II	Tier III	GP14-1	GP14-2	GP14-3	GP14-4	GP14-5	GP14-6	GP14-7	GP14-8	GP14-9	GP14-10	GP14-11
Analyte	Code	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	71-55-6	1.99	3,800	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	0.00106	2.80	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	567	18,000	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	0.0471	0.680	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	75-34-3	0.0161	17.0	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	75-35-4	0.0690	110	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	120-82-1	6.20	27.0	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromo-3-chloropropane	96-12-8	0.00318	0.069	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	106-93-4	0.000361	0.170	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene (ortho)	95-50-1	28.9	980	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.0347	2.20	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	78-87-5	0.0486	4.70	U	U	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene (meta)	541-73-1	7.83	12.0	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene (para)	106-46-7	2.40	12.0	U	U	U	U	U	U	U	U	U	U	U
2-Butanone (methyl ethyl ketone)	78-93-3	1.25	20,000	0.030	U	U	U	U	0.0057 J	U	0.014	0.0035 J	0.0035 J	U
2-Hexanone	591-78-6	0.0130	140	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone (MIBK)	108-10-1	0.353	5,300	U	U	U	U	U	U	U	U	U	U	U
Acetone	67-64-1	2.75	63,000	0.096	0.032	U	U	0.0047	0.028	0.079	0.052	0.014	0.014	U
Benzene	71-43-2	0.0977	5.40	U	U	U	U	U	U	0.013	U	U	U	U
Bromochloromethane	74-97-5	0.0401	68.0	U	U	U	U	U	U	U	0.0007 J	U	U	U
Bromodichloromethane	75-27-4	0.270	1.40	U	U	U	U	U	U	U	U	U	U	U
Bromoform	75-25-2	0.472	220	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	74-83-9	0.0105	3.20	U	U	U	U	U	U	U	U	U	U	U
Carbon disulfide	75-15-0	0.492	370	0.0017 J	U	U	U	U	U	U	U	U	U	U
Carbon tetrachloride	56-23-5	0.058	3.00	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	108-90-7	3.05	140	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	75-00-3	13.3	6,100	U	U	U	U	U	U	U	U	U	U	U
Chloroform	67-66-3	0.290	1.50	U	U	U	U	U	U	U	U	U	U	U
Chloromethane	74-87-3	0.0941	50.0	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	156-59-2	0.517	200	U	U	U	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	10061-01-5	0.00443	8.30	U	U	U	U	U	U	U	U	U	U	U
Cyclohexane	110-82-7	55.5	2,900	U	U	U	U	U	U	U	U	U	U	U
Dibromochloromethane	124-48-1	0.48	3.30	U	U	U	U	U	U	U	U	U	U	U
Dichlorodifluoromethane	75-71-8	1.15	40.0	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	100-41-4	5.40	27.0	U	0.0016	U	U	U	U	0.0019	U	U	U	U
Isopropylbenzene (cumene)	98-82-8	3.41	1,100	U	U	U	U	U	U	0.0052	U	U	U	U
Methyl acetate	79-20-9	3.82	100,000	U	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	1634-04-4	0.0417	220	U	U	U	U	U	0.0075	0.024	U	U	U	U
Methylcyclohexane	108-87-2	-	-	0.0006 J	U	U	U	U	U	U	U	U	U	U
Methylene chloride	75-09-2	0.0231	310	U	U	U	U	U	U	U	U	U	U	U

TABLE 3. SUMMARY OF SOIL VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Styrene	100-42-5	5.60	3,600	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	127-18-4	0.0807	41.0	U	U	U	U	U	U	U	U	U	U	U
Toluene	108-88-3	31.1	4,500	U	U	U	U	U	U	0.0037	U	U	U	U
Total Xylenes	1330-20-7	63.0	270	U	0.0018 J	U	U	U	U	0.026	U	U	U	U
trans-1,2-Dichloroethene	156-60-5	0.677	69.0	U	U	U	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	10061-02-6	0.00443	8.30	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	79-01-6	0.0540	2.00	U	U	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	75-69-4	2.45	340	U	U	U	0.018	U	U	U	U	U	U	U
Vinyl Chloride	75-01-4	0.0178	1.70	U	U	U	U	U	U	U	U	U	U	U
1,1,1,2-tetrachloroethane	630-20-6	0.00636	9.30	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3-Trichlorobenzene	87-61-6	0.0874	49.0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2,4-trimethylbenzene	95-63-6	0.115	26.0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethene (total)	540-59-0	0.0960	920	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,3,5-trimethylbenzene	108-67-8	0.658	1,000	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,3-Dichloropropene (total)	542-75-6	0.00443	8.30	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,4-dioxane	123-91-1	0.00155	17.0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Hexane	110-54-3	57.0	260	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
isopropyltoluene	99-87-6	-	-	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
m-xylene	108-38-3	59.0	250	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
n-butylbenzene	104-51-8	14.2	5,100	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
n-propylbenzene	103-65-1	5.36	2,100	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
o-xylene	95-47-6	69.0	300	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
p-xylene	106-42-3	60.0	260	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
sec-butylbenzene	135-98-8	29.2	10,000	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
tert-butylbenzene	98-06-6	9.30	10,000	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

NOTES: Soil samples were collected on April 10, 16, and 17 2014.
Soil Volatile Organic Compounds (VOCs) analyzed by EPA Method 8260B.
Laboratory analytical results reported in milligrams per kilograms (mg/kg) or parts per million (ppm).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier II	denotes the reported value exceeds VRP Tier II Soil Screening Level. Revised 1/3/14
VRP Tier III	denotes the reported value exceeds VRP Tier III Soil Screening Level for Commercial/Industrial sites. Revised 10/22/13.
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II,III tables.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II,III tables.

TABLE 4. SUMMARY OF SOIL SEMI-VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Sample I.D.	CAS	Tier II	Tier III	GP14-1	GP14-2	GP14-3	GP14-4	GP14-5	GP14-6	GP14-7	GP14-8	GP14-9	GP14-10	GP14-11
Analyte	Code	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1'-Biphenyl	92-52-4	0.051	21.0	UD	U	UD	U	U	UD	12 JD	UD	UD	UD	UD
2,2'-Oxybis(1-chloropropane)	108-60-1	0.00371	22.0	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
2,4,5-Trichlorophenol	95-95-4	19.2	6,200	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
2,4,6-Trichlorophenol	88-06-2	0.194	62.0	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
2,4-Dichlorophenol	120-83-2	0.214	180	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
2,4-Dimethylphenol	105-67-9	1.65	1,200	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
2,4-Dinitrophenol	51-28-5	0.172	120	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
2,4-Dinitrotoluene	121-14-2	0.0142	5.50	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
2,6-Dinitrotoluene	606-20-2	0.00304	1.20	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
2-Chloronaphthalene	91-58-7	16.5	8,200	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
2-Chlorophenol	95-57-8	0.275	510	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
2-Methylnaphthalene	91-57-6	0.825	220	UD	U	UD	U	U	UD	56 D	UD	UD	UD	UD
2-Methylphenol	95-48-7	2.79	3,100	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
2-Nitroaniline	88-74-4	0.230	600	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
2-Nitrophenol	88-75-5	-	-	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
3,3'-Dichlorobenzidine	91-94-1	0.0423	3.80	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
3-Methylphenol	108-39-4	2.74	3,100	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
3-Nitroaniline	99-09-2			UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
4,6-Dinitro-2-methylphenol	534-52-1	0.0111	4.90	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
4-Bromophenyl-phenylether	101-55-3	-	-	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
4-Chloro-3-methylphenol	59-50-7	6.71	6,200	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
4-Chloroaniline	106-47-8	0.00497	8.60	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
4-Chlorophenyl-phenylether	7005-72-3	-	-	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
4-Nitroaniline	100-01-6	0.0498	86.0	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
4-Nitrophenol	100-02-7	-	-	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Acenaphthene	83-32-9	24.2	3,300	0.46 JD	U	UD	U	U	UD	130 D	0.33 JD	UD	UD	UD
Acenaphthylene	208-96-8	10.5	1,700	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Acetophenone	98-86-2	1.23	10,000	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Anthracene	120-12-7	255	17,000	UD	U	UD	U	U	UD	220 D	0.74 JD	UD	UD	UD
Atrazine	1912-24-9	0.0868	7.50	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Benzaldehyde	100-52-7	0.500	10,000	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Benzo(a)anthracene	56-55-3	0.150	2.10	UD	U	0.34 JD	U	U	0.72 JD	340 D	1.0 D	UD	UD	UD
Benzo(a)pyrene	50-32-8	0.0150	0.210	0.2 JD	U	0.33 JD	U	U	0.68 JD	260 D	0.97 D	UD	UD	UD
Benzo(b)fluoranthene	205-99-2	0.150	2.10	0.33 JD	U	0.52 JD	U	U	0.89 JD	440 D	1.5 JD	UD	UD	UD
Benzo(g,h,i)perylene	191-24-2	170	1,700	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Benzo(k)fluoranthene	207-08-9	1.50	21.0	UD	U	UD	U	U	UD	150 JD	UD	UD	UD	UD
bis(2-Chloroethoxy)methane	111-91-1	0.0171	180	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
bis(2-chloroethyl)ether	111-44-4	0.0000704	1.00	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
bis-(2-Ethylhexyl)phthalate	117-81-7	35.0	120	0.80 JD	0.37 J	5.1 D	U	U	UD	25 JD	UD	UD	UD	UD
Butylbenzylphthalate	85-68-7	12.0	910	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Caprolactam	105-60-2	3.80	31,000	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD

TABLE 4. SUMMARY OF SOIL SEMI-VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Carbazole	86-74-8	-	-	UD	U	UD	U	U	UD	120 D	0.31 JD	UD	UD	UD
Chrysene	218-01-9	15.0	210	UD	U	0.36 JD	U	U	0.80 JD	330 D	1.1 D	UD	UD	UD
Dibenzo(a,h)anthracene	53-70-3	0.0150	0.210	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Dibenzofuran	132-64-9	0.639	100	UD	U	UD	U	U	UD	120 D	UD	UD	UD	UD
Dibutyl phthalate	84-74-2	9.44	6,200	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Diethylphthalate	84-66-2	16.0	49,000	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Dimethylphthalate	131-11-3	-	-	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Di-n-octylphthalate	117-84-0	61.0	620	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Fluoranthene	206-44-0	230	2,200	0.33 JD	0.13 J	0.53 JD	U	U	1.4 D	840 D	2.4 D	UD	UD	UD
Fluorene	86-73-7	24.2	2,200	UD	U	UD	U	U	UD	210 D	0.53 JD	UD	UD	UD
Hexachlorobenzene	118-74-1	0.300	1.10	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Hexachlorobutadiene	87-68-3	0.027	22.0	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Hexachlorocyclopentadiene	77-47-4	8.74	370	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Hexachloroethane	67-72-1	0.0134	43.0	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Indeno(1,2,3-cd)pyrene	193-39-5	0.150	2.10	UD	U	UD	U	U	UD	82 JD	UD	UD	UD	UD
Isophorone	78-59-1	0.658	1,800	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Naphthalene	91-20-3	0.026	18.0	UD	U	UD	U	U	UD	98 D	UD	UD	UD	UD
Nitrobenzene	98-95-3	0.00350	24.0	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
N-Nitroso-di-n-propylamine	621-64-7	0.0000429	0.25	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
N-Nitrosodiphenylamine	86-30-6	1.45	350	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Pentachlorophenol	87-86-5	0.597	2.70	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Phenanthrene	85-01-8	170	1,700	UD	U	UD	U	U	0.75 JD	830 D	2.3 D	UD	UD	UD
Phenol	108-95-2	11.0	18,000	UD	U	UD	U	U	UD	UD	UD	UD	UD	UD
Pyrene	129-00-0	65.5	1,700	0.28 JD	U	0.45 JD	U	U	1.2 D	600 D	1.8 D	UD	UD	UD
1,2,4,5-Tetrachlorobenzene	95-94-3	0.0322	18.0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2,3,4,6-Tetrachlorophenol	58-90-2	6.09	1,800	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4-Methylphenol	106-44-5	5.33	6,200	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Benzoic Acid	65-85-0	22.42	250,000	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

NOTES: Soil samples were collected on April 10, 16, and 17 2014.
Soil Semi-Volatile Organic Compounds (VOCs) analyzed by EPA Method 8270D.
Laboratory analytical results reported in milligrams per kilograms (mg/kg) or parts per million (ppm).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier II	denotes the reported value exceeds VRP Tier II Soil Screening Level. Revised 1/3/14
VRP Tier III	denotes the reported value exceeds VRP Tier III Soil Screening Level for Commercial/Industrial sites. Revised 10/22/13.
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II,III tables.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II,III tables.

TABLE 5. SUMMARY OF SOIL TARGET ANALYTE LIST INORGANCS AND HEXAVALENT CHROMIUM ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Sample I.D.	CAS	Tier II	Tier III	GP14-1	GP14-2	GP14-3	GP14-4	GP14-5	GP14-6	GP14-7	GP14-8	GP14-9	GP14-10	GP14-11
Analyte	Code	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	7429-90-5	7,700	99,000	11,300 D	5,160	5,410 D	10,700	11,000	3,000	5,290 D	5,880 D	4,160 D	5,250	9,340
Antimony	7440-36-0	3.10	41.0	3.06 D	U	13.9 D	0.542 J	U	1.980	5.70 D	4.29 D	2.03 JD	1.17 J	0.385 J
Arsenic	7440-38-2	0.610	2.40	5.53 D	3.73	3.62 D	1.44	1.48	3.73	0.395 JD	5.74 D	3.30 D	4.30	4.08
Barium	7440-39-3	1,500	19,000	104 D	16.8	103 D	42.0	54.3	49.4	57.1 D	128 D	40.8 D	58.1	52.5
Beryllium	7440-41-7	16.0	200	0.400 D	0.359	0.227 D	0.228	0.207	0.147	UD	0.246 D	0.200 D	0.234	0.315
Cadmium (food, soil)	7440-43-9	7.00	80.0	2.64 D	U	1.95 D	0.0252 J	U	0.772	1.05 D	3.44 D	1.02 D	0.841	0.268
Calcium	7440-70-2	-	-	11,500 BD	398 B	5,560 BD	1,500 B	790 B	24,200 B	5,620 BD	1,660 BD	15,800 BD	1,720 B	2,200 B
Chromium	7440-47-3	0.290	5.60	24.6 D	10.1	22.0 D	9.69	10.6	9.61	12.9 D	20.3 D	10.2 D	14.5	10.5
Cobalt	7440-48-4	0.424	30.0	3.59 D	0.931	4.21 D	1.27	1.23	2.07	4.09 D	3.03 D	2.13 D	1.39	1.54
Copper	7440-50-8	310	4,100	42.8 D	4.89	92.3 D	4.24	3.33	21.5	35.0 D	51.3 D	42.2 D	54.4	16.1
Iron	7439-89-6	552	72,000	19,300 BD	3,280	14,100 BD	3,840 B	4,220 B	9,680 B	13,700 BD	17,800 BD	14,000 BD	4,740 B	5,230 B
Lead	7439-92-1	270	800	327 D	7.00	303 D	10.6	11.0	86.2	153 D	218 D	176 D	257	56.2
Magnesium	7439-95-4	-	-	891 BD	361 B	1220 BD	434 B	367 B	1,000 B	3,040 BD	838 BD	462 BD	317 B	588 B
Manganese (nonfood)	7439-96-5	41.7	2,300	117 D	8.48	122 D	10.50	7.60	64.6	259 D	65.3 D	81.8 D	100	41.7
Mercury	7439-97-6	1.00	4.30	0.309	U	0.143	0.0345	0.0506	0.165	1.98 D	0.0886	0.184	0.185	0.0602
Nickel	7440-02-0	39.1	2,000	17.8 D	2.86 J	23.1 D	3.51	3.20	6.46	13.9 D	22.6 D	13.1 D	7.05	4.84
Potassium	7440-09-7	-	-	337 D	450	428 D	333	255	557	1,330 D	261 D	218 D	265	400
Selenium	7782-49-2	5.10	510	UD	U	UD	U	0.369 J	U	UD	0.703 JD	UD	0.415 J	U
Silver	7440-22-4	1.19	510	UD	0.321 J	UD	0.130 J	U	U	UD	UD	UD	U	0.220 J
Sodium	7440-23-5	-	-	126 D	26.3 J	98.5 D	34.4	81.3	217	118 D	48.1 JD	130 D	35.9	35.2
Thallium	7440-28-0	0.0780	1.00	UD	U	UD	U	U	U	UD	UD	UD	U	U
Vanadium	-	39.0	510	14.4 D	23.9	14.5 D	15.2	16.8	8.77	37.2 D	12.5 D	8.96 D	13.4	17.9
Zinc	7440-66-6	584	31,000	371 D	10.5	431 D	13.0	9.07	175	305 D	301 D	199 D	178	45.8
Cyanide	57-12-5	2.20	14.0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Mercury, inorganic salts	7487-94-7	2.30	31.0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylmercury	22967-92-6	0.780	10.0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Hexavalent Chromium	18540-29-9	-	-	U	U	U	U	U	U	UD	U	U	U	U

NOTES: Soil samples were collected on April 10, 16, and 17 2014.
Soil Target Analyte List (TAL) inorganics analyzed by EPA Method 6010C/7471B.
Soil Hexavalent Chromium analyzed by EPA Method 7169A.
Laboratory analytical results reported in milligrams per kilograms (mg/kg) or parts per million (ppm).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier II	denotes the reported value exceeds VRP Tier II Soil Screening Level. Revised 1/3/14
VRP Tier III	denotes the reported value exceeds VRP Tier III Soil Screening Level for Commercial/Industrial sites. Revised 10/22/13.
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II,III tables.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II,III tables.
(Analyte)	denotes Hexavalent Chromium was reported and is not present in the current VRP Tier II, III tables.

TABLE 6. SUMMARY OF SOIL TARGET COMPOUND LIST PESTICIDES ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Sample I.D.	CAS	Tier II	Tier III	GP14-5	GP14-11
Analyte	Code	mg/kg	mg/kg	mg/kg	mg/kg
4,4'-DDD	72-54-8	0.381	7.20	U	U
4,4'-DDE	72-55-9	1.40	5.10	U	U
4,4'-DDT	50-29-3	1.70	7.00	U	U
Aldrin	309-00-2	0.0290	0.100	U	U
alpha-BHC	319-84-6	0.00210	0.270	U	U
alpha-Chlordane	5103-71-9	1.57	6.50	U	U
beta-BHC	319-85-7	0.0075	0.960	U	U
Chlordane	12789-03-6	1.60	6.50	U	U
delta-BHC	319-86-8	0.00170	0.270	U	U
Dieldrin	60-57-1	0.00362	0.110	U	U
Endosulfan	115-29-7	6.34	370	U	U
Endosulfan I	959-98-8	1.23	370	U	U
Endosulfan II	33213-65-9	1.23	370	U	U
Endosulfan Sulfate	1031-07-8	0.903	370	U	U
Endrin	72-20-8	1.80	18.0	U	U
Endrin Aldehyde	7421-93-4	0.839	18.0	U	U
Endrin Ketone	53494-70-5	1.80	18.0	U	U
gamma-BHC (lindane)	58-89-9	0.0678	2.10	U	U
gamma-Chlordane	5103-74-2	1.60	6.50	U	U
Heptachlor	76-44-8	0.110	0.380	U	U
Heptachlor epoxide	1024-57-3	0.0530	0.190	U	U
Methoxychlor	72-43-5	31.0	310	U	U
Toxaphene	8001-35-2	0.440	1.60	U	U

NOTES: Soil samples were collected on April 10, 16, and 17 2014.
Soil Target Compound List (TCL) pesticides analyzed by EPA Method 8081B.
Laboratory analytical results reported in milligrams per kilograms (mg/kg) or parts per million (ppm).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL)
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier II	denotes the reported value exceeds VRP Tier II Soil Screening Level. Revised 1/3/14
VRP Tier III	denotes the reported value exceeds VRP Tier III Soil Screening Level for Commercial/Industrial sites. Revised 10/2

TABLE 7. SUMMARY OF SOIL TARGET COMPOUND LIST HERBICIDES ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Sample I.D. Analyte	CAS Code	Resident Soil mg/kg	Industrial Soil mg/kg	GP14-5 mg/kg	GP14-11 mg/kg
2,4-D	94-75-7	690	7,700	U	U
2,4-DB	94-82-6	490	4,900	U	U
2,4,5-T	93-76-5	610	6,200	U	U
2,4,5-TP (Silvex)	93-72-1	490	4,900	U	U
Dalapon	75-99-0	1,800	18,000	U	U
Dicamba	1918-00-9	1,800	18,000	U	U
Dichlorprop	120-36-5	-	-	U	U
Dinoseb	88-85-7	61	620	U	U
MCPP	93-65-2	61	620	U	U
MCPA	94-74-6	31	310	U	U

NOTES: Soil samples were collected on April 10, 16, and 17 2014.
Soil Target Compound List (TCL) herbicides analyzed by EPA Method 8151A.
Laboratory analytical results reported in milligrams per kilograms (mg/kg) or parts per million (ppm).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory meth
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
Laboratory analysis performed by ENCO Laboratories.
EPA RSL denotes the reported value exceeds EPA Region 3 Soil Screening Level for residential sites. Revised 1
EPA RSL denotes the reported value exceeds EPA Region 3 Soil Screening Level for commercial/industrial sites

TABLE 8. SUMMARY OF SURFACE SEDIMENT VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Sample I.D.	CAS	Tier II	Tier III	SS14-1	SS14-2	SS14-3
Analyte	Code	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	71-55-6	8,700	-	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5.6	-	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	43,000	-	U	U	U
1,1,2-Trichloroethane	79-00-5	1.6	-	U	U	U
1,1-Dichloroethane	75-34-3	33	-	U	U	U
1,1-Dichloroethene	75-35-4	240	-	U	U	U
1,2,4-Trichlorobenzene	120-82-1	62	-	U	U	U
1,2-Dibromo-3-chloropropane	96-12-8	0.054	-	U	U	U
1,2-Dibromoethane	106-93-4	0.34	-	U	U	U
1,2-Dichlorobenzene (ortho)	95-50-1	1900	-	U	U	U
1,2-Dichloroethane	107-06-2	4.3	-	U	U	U
1,2-Dichloropropane	78-87-5	9.4	-	U	U	U
1,3-Dichlorobenzene (meta)	541-73-1	-	-	U	U	U
1,4-Dichlorobenzene (para)	106-46-7	24	-	U	U	U
2-Butanone (methyl ethyl ketone)	78-93-3	28,000	-	U	U	U
2-Hexanone	591-78-6	210	-	U	U	U
4-Methyl-2-pentanone (MIBK)	108-10-1	5,300	-	U	U	U
Acetone	67-64-1	61,000	-	0.97 D	1.0 D	1.1 D
Benzene	71-43-2	11	-	U	U	U
Bromochloromethane	74-97-5	160	-	U	U	U
Bromodichloromethane	75-27-4	2.7	-	U	U	U
Bromoform	75-25-2	620	-	U	U	U
Bromomethane	74-83-9	7.3	-	U	U	U
Carbon disulfide	75-15-0	820	-	U	U	U
Carbon tetrachloride	56-23-5	6.1	-	U	U	U
Chlorobenzene	108-90-7	290	-	U	U	U
Chloroethane	75-00-3	15,000	-	U	U	U
Chloroform	67-66-3	2.9	-	U	U	U
Chloromethane	74-87-3	120	-	U	U	U
cis-1,2-Dichloroethene	156-59-2	160	-	U	U	U
cis-1,3-Dichloropropene	10061-01-5	17	-	U	U	U
Cyclohexane	110-82-7	7,000	-	U	U	U
Dibromochloromethane	124-48-1	6.8	-	U	U	U
Dichlorodifluoromethane	75-71-8	94	-	U	U	U
Ethylbenzene	100-41-4	54	-	U	U	U
Isopropylbenzene (cumene)	98-82-8	2,100	-	U	U	U
Methyl acetate	79-20-9	78,000	-	U	U	U
Methyl tert-butyl ether	1634-04-4	430	-	U	U	U
Methylcyclohexane	108-87-2	-	-	U	U	U
Methylene chloride	75-09-2	360	-	U	U	U
Styrene	100-42-5	6,300	-	U	U	U
Tetrachloroethene	127-18-4	86	-	U	U	U
Toluene	108-88-3	5,000	-	U	U	U
Total Xylenes	1330-20-7	630	-	U	U	U
trans-1,2-Dichloroethene	156-60-5	150	-	U	U	U
trans-1,3-Dichloropropene	10061-02-6	17	-	U	U	U
Trichloroethene	79-01-6	4.4	-	U	U	U
Trichlorofluoromethane	75-69-4	790	-	U	U	U
Vinyl Chloride	75-01-4	0.60	-	U	U	U
1,1,1,2-tetrachloroethane	630-20-6	19	-	NR	NR	NR
1,2,3-Trichlorobenzene	87-61-6	49	-	NR	NR	NR
1,2,4-trimethylbenzene	95-63-6	62	-	NR	NR	NR
1,2-Dichloroethene (total)	540-59-0	700	-	NR	NR	NR
1,3,5-trimethylbenzene	108-67-8	780	-	NR	NR	NR
1,3-Dichloropropene (total)	542-75-6	17	-	NR	NR	NR
1,4-dioxane	123-91-1	49	-	NR	NR	NR

TABLE 8. SUMMARY OF SURFACE SEDIMENT VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Hexane	110-54-3	570	-	NR	NR	NR
isopropyltoluene	99-87-6	-	-	NR	NR	NR
m-xylene	108-38-3	590	-	NR	NR	NR
n-butylbenzene	104-51-8	3,900	-	NR	NR	NR
n-propylbenzene	103-65-1	3,400	-	NR	NR	NR
o-xylene	95-47-6	690	-	NR	NR	NR
p-xylene	106-42-3	600	-	NR	NR	NR
sec-butylbenzene	135-98-8	7,800	-	NR	NR	NR
tert-butylbenzene	98-06-6	7,800	-	NR	NR	NR

NOTES: Surface sediment samples were collected on April 8, 2014.
Surface sediment Volatile Organic Compounds (VOCs) analyzed by EPA Method 8260B.
Laboratory analytical results reported in milligrams per kilograms (mg/kg) or parts per million (ppm).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier II	denotes the reported value exceeds VRP Tier II Sediment Screening Level. Revised 1/7/14
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II table.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II table.

TABLE 9. SUMMARY OF SURFACE SEDIMENT SEMI-VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Sample I.D.	CAS	Tier II	Tier III	SS14-1	SS14-2	SS14-3
Analyte	Code	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1'-Biphenyl	92-52-4	51	-	UD	UD	UD
2,2'-Oxybis(1-chloropropane)	108-60-1	46	-	UD	UD	UD
2,4,5-Trichlorophenol	95-95-4	6,100	-	UD	UD	UD
2,4,6-Trichlorophenol	88-06-2	61	-	UD	UD	UD
2,4-Dichlorophenol	120-83-2	180	-	UD	UD	UD
2,4-Dimethylphenol	105-67-9	1,200	-	UD	UD	UD
2,4-Dinitrophenol	51-28-5	120	-	UD	UD	UD
2,4-Dinitrotoluene	121-14-2	16	-	UD	UD	UD
2,6-Dinitrotoluene	606-20-2	3.3	-	UD	UD	UD
2-Chloronaphthalene	91-58-7	6,300	-	UD	UD	UD
2-Chlorophenol	95-57-8	390	-	UD	UD	UD
2-Methylnaphthalene	91-57-6	230	-	UD	UD	UD
2-Methylphenol	95-48-7	3,100	-	UD	UD	UD
2-Nitroaniline	88-74-4	610	-	UD	UD	UD
2-Nitrophenol	88-75-5	-	-	UD	UD	UD
3,3'-Dichlorobenzidine	91-94-1	11	-	UD	UD	UD
3-Methylphenol	108-39-4	3,100	-	UD	UD	UD
3-Nitroaniline	99-09-2	-	-	UD	UD	UD
4,6-Dinitro-2-methylphenol	534-52-1	4.9	-	UD	UD	UD
4-Bromophenyl-phenylether	101-55-3	-	-	UD	UD	UD
4-Chloro-3-methylphenol	59-50-7	6,100	-	UD	UD	UD
4-Chloroaniline	106-47-8	24	-	UD	UD	UD
4-Chlorophenyl-phenylether	7005-72-3	-	-	UD	UD	UD
4-Nitroaniline	100-01-6	240	-	UD	UD	UD
4-Nitrophenol	100-02-7	-	-	UD	UD	UD
Acenaphthene	83-32-9	3,400	-	UD	UD	UD
Acenaphthylene	208-96-8	1,700	-	UD	UD	UD
Acetophenone	98-86-2	7,800	-	UD	UD	UD
Anthracene	120-12-7	17,000	-	UD	UD	UD
Atrazine	1912-24-9	21	-	UD	UD	UD
Benzaldehyde	100-52-7	7,800	-	UD	UD	UD
Benzo(a)anthracene	56-55-3	1.5	-	UD	UD	1.1 JD
Benzo(a)pyrene	50-32-8	0.15	-	UD	UD	1.1 JD
Benzo(b)fluoranthene	205-99-2	1.5	-	UD	UD	1.8 JD
Benzo(g,h,i)perylene	191-24-2	1,700	-	UD	UD	UD
Benzo(k)fluoranthene	207-08-9	15	-	UD	UD	0.73 JD
bis(2-Chloroethoxy)methane	111-91-1	180	-	UD	UD	UD
bis(2-chloroethyl)ether	111-44-4	2.1	-	UD	UD	UD
bis-(2-Ethylhexyl)phthalate	117-81-7	350	-	UD	UD	UD
Butylbenzylphthalate	85-68-7	2,600	-	UD	UD	UD
Caprolactam	105-60-2	31,000	-	UD	UD	UD
Carbazole	86-74-8	-	-	UD	UD	UD
Chrysene	218-01-9	150	-	UD	UD	UD
Dibenzo(a,h)anthracene	53-70-3	0.15	-	UD	UD	UD
Dibenzofuran	132-64-9	78	-	UD	UD	UD
Dibutyl phthalate	84-74-2	49,000	-	UD	UD	UD
Diethylphthalate	84-66-2	-	-	UD	UD	UD
Dimethylphthalate	131-11-3	6,100	-	UD	UD	UD
Di-n-octylphthalate	117-84-0	610	-	UD	UD	UD
Fluoranthene	206-44-0	2,300	-	0.99 JD	UD	1.7 JD
Fluorene	86-73-7	2,300	-	UD	UD	UD
Hexachlorobenzene	118-74-1	3.0	-	UD	UD	UD
Hexachlorobutadiene	87-68-3	61	-	UD	UD	UD
Hexachlorocyclopentadiene	77-47-4	370	-	UD	UD	UD
Hexachloroethane	67-72-1	43	-	UD	UD	UD

TABLE 9. SUMMARY OF SURFACE SEDIMENT SEMI-VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Indeno(1,2,3-cd)pyrene	193-39-5	1.5	-	UD	UD	UD
Isophorone	78-59-1	5,100	-	UD	UD	UD
Naphthalene	91-20-3	36	-	UD	UD	UD
Nitrobenzene	98-95-3	48	-	UD	UD	UD
N-Nitroso-di-n-propylamine	621-64-7	0.69	-	UD	UD	UD
N-Nitrosodiphenylamine	86-30-6	990	-	UD	UD	UD
Pentachlorophenol	87-86-5	8.9	-	UD	UD	UD
Phenanthrene	85-01-8	1,700	-	UD	UD	UD
Phenol	108-95-2	18,000	-	UD	UD	UD
Pyrene	129-00-0	1,700	-	0.83 JD	UD	1.3 JD
1,2,4,5-Tetrachlorobenzene	95-94-3	18	-	NR	NR	NR
2,3,4,6-Tetrachlorophenol	58-90-2	1,800	-	NR	NR	NR
4-Methylphenol	106-44-5	6,100	-	NR	NR	NR
Benzoic Acid	65-85-0	240,000	-	NR	NR	NR

NOTES: Surface sediment samples were collected on April 8, 2014.
Surface sediment Semi-Volatile Organic Compounds (VOCs) analyzed by EPA Method 8270D.
Laboratory analytical results reported in milligrams per kilograms (mg/kg) or parts per million (ppm).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier II	denotes the reported value exceeds VRP Tier II Sediment Screening Level. Revised 1/7/14
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II table.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II table.

TABLE 10. SUMMARY OF SURFACE SEDIMENT TARGET ANALYTE LIST INORGANCS AND HEXAVALENT CHROMIUM ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Sample I.D.	CAS	Tier II	Tier III	SS14-1	SS14-2	SS14-3
Analyte	Code	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	7429-90-5	77,000	-	7,290	10,500	11,300 D
Antimony	7440-36-0	31	-	2.49	0.787 J	2.59 D
Arsenic	7440-38-2	6.1	-	2.99	1.88	6.58 D
Barium	7440-39-3	15,000	-	78.4	41.0	122 D
Beryllium	7440-41-7	160	-	0.233	0.174	0.248 D
Cadmium (food, soil)	7440-43-9	70	-	0.741	0.0178 J	2.64 D
Calcium	7440-70-2	-	-	2,790 B	1,920 B	2,690 BD
Chromium	7440-47-3	2.9	-	16.7	11.5	15.4 D
Cobalt	7440-48-4	23	-	2.54	1.84	3.54 D
Copper	7440-50-8	3,100	-	28.7	7.62	66.7 D
Iron	7439-89-6	55,000	-	12,100 B	7,040 B	12,700 BD
Lead	7439-92-1	400	-	157	21.5	250 D
Magnesium	7439-95-4	-	-	1,170	448 B	632 BD
Manganese (nonfood)	7439-96-5	1,800	-	93.8	24.9	226 D
Mercury	7439-97-6	10	-	0.124	0.0411	0.231
Nickel	7440-02-0	1,500	-	13.5	5.37	22.3 D
Potassium	7440-09-7	-	-	588	486	631 D
Selenium	7782-49-2	390	-	0.613 JB	0.208 JB	0.342 JBD
Silver	7440-22-4	390	-	U	U	UD
Sodium	7440-23-5	-	-	44.1	33.3	130 D
Thallium	7440-28-0	0.78	-	U	U	UD
Vanadium	NA	390	-	15.6	16.1	16.9
Zinc	7440-66-6	23,000	-	234	24.4	702
Cyanide	57-12-5	2.2	-	NR	NR	NR
Mercury, inorganic salts	7487-94-7	2.3	-	NR	NR	NR
Methylmercury	22967-92-6	0.78	-	NR	NR	NR
Hexavalent Chromium	18540-29-9	-	-	U	U	1.1 J

NOTES: Surface sediment samples were collected on April 8, 2014.
Surface sediment Target Analyte List (TAL) inorganics analyzed by EPA Method 6010C/7471B.
Surface sediment Hexavalent Chromium analyzed by EPA Method 7169A.
Laboratory analytical results reported in milligrams per kilograms (mg/kg) or parts per million (ppm).
NR denotes the analyte was not reported.
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier II	denotes the reported value exceeds VRP Tier II Sediment Screening Level. Revised 1/7/14
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II table.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II table.
(Analyte)	denotes Hexavalent Chromium was reported and is not present in the current VRP Tier II, III tables.

TABLE 11. SUMMARY OF DISSOLVED PHASE GASOLINE RANGE ORGANIC AND DIESEL RANGE ORGANIC ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Analyte	Notify VDEQ	GP14-1 (mg/L)	GP14-2 (mg/L)	GP14-3 (mg/L)	GP14-4 (mg/L)	GP14-5 (mg/L)	GP14-6 (mg/L)	GP14-7 (mg/L)
TPH-DRO	>MDL	0.52	0.59	0.84	0.14	U	0.39	0.42
TPH-GRO	>MDL	U	0.067	0.107	0.013 J	U	0.014 J	1.06

Analyte	Notify VDEQ	GP14-8 (mg/L)	GP14-9 (mg/L)	GP14-10 (mg/L)	GP14-11 (mg/L)
TPH-DRO	>MDL	0.15	0.16	0.077 J	U
TPH-GRO	>MDL	U	0.011 J	U	U

NOTES: Groundwater samples were collected on April 10, 16, and 17 2014.
MDL denotes Method Detection Limit. If Total Petroleum Hydrocarbons Diesel Range Organics (TPH-DRO) or Total Petroleum Hydrocarbons Gasoline Range Organics (TPH-GRO) is above MDL, then owner should notify VDEQ.
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NS denotes not sampled.
Groundwater samples analyzed by EPA Method 8015C for TPH-DRO and EPA Method 8015C for TPH-GRO.
Laboratory analytical results reported in milligrams per liter (mg/L) or parts per million (ppm).
Laboratory analysis performed by ENCO Laboratories.
(Value) denotes reported value exceeds MDL.

TABLE 12. SUMMARY OF GROUNDWATER VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, Virginia 23661
REMSA Project No. E018-10-T03P

Sample I.D.	CAS	Tier III	Tier III	Tier II	GP14-1	GP14-2	GP14-3	GP14-4	GP14-5	GP14-6	GP14-7	GP14-8	GP14-9	GP14-10	GP14-11
Analyte	Code	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)
1,1,1-Trichloroethane	71-55-6	742	3,114	200	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	0.580	2.92	0.066	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	145	611	5,300	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	0.619	2.60	5	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	75-34-3	66.2	334	2.4	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	75-35-4	19.5	82.1	7	U	U	U	U	U	U	U	U	U	U	U
1,2,3-Trichlorobenzene	87-61-6	-	-	0.52	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	120-82-1	3.59	15.1	70	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromo-3-chloropropane	96-12-8	0.266	3.40	0.2	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	106-93-4	1.53	7.69	0.05	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene (ortho)	95-50-1	266	1,116	600	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	107-06-2	15.1	63.6	5	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	78-87-5	3.62	15.2	5	U	U	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene (meta)	541-73-1	-	-	0.43	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene (para)	106-46-7	22.5	113	75	U	U	U	U	U	U	U	U	U	U	U
1,4-dioxane	123-91-1	16,107	81,179	0.67	U	U	U	U	U	U	U	U	U	U	U
2-Butanone (methyl ethyl ketone)	78-93-3	224,155	941,450	490	U	4.5 J	U	U	U	U	U	U	U	U	U
2-Hexanone	591-78-6	821	3,449	3.4	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone (methyl isobutyl ketone)	108-10-1	55,452	232,900	100	U	U	U	U	U	U	U	U	U	U	U
Acetone	67-64-1	2,828,174	11,878,330	1,200	38	110	13	16	15	18	24	23	10	11	13
Benzene	71-43-2	941	1,236	5	U	U	0.45 J	U	U	U	8.9	U	U	U	U
Bromochloromethane	74-97-5	69.9	294	8.3	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	75-27-4	7.59	38.2	80	U	U	U	U	U	U	U	U	U	U	U
Bromoform	75-25-2	1,011	5,097	80	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	74-83-9	0.174	0.730	0.7	U	U	U	U	U	U	U	U	U	U	U
Carbon disulfide	75-15-0	124	521	72	U	U	U	U	U	U	U	U	U	U	U
Carbon tetrachloride	56-23-5	3.59	18.1	5	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	108-90-7	41.0	172	100	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	75-00-3	2,298	9,652	2,100	U	U	U	U	U	U	U	U	U	U	U
Chloroform	67-66-3	27.3	35.5	80	U	U	U	U	U	U	U	U	U	U	U
Chloromethane	74-87-3	26.0	109	19	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	156-59-2	-	-	70	U	U	U	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	10061-01-5	52.3	220	0.43	U	U	U	U	U	U	U	U	U	U	U
Cyclohexane	110-82-7	102	429	1,300	U	U	U	U	U	U	U	U	U	U	U
Dibromochloromethane	124-48-1	28.1	142	80	U	U	U	U	U	U	U	U	U	U	U
Dichlorodifluoromethane	75-71-8	0.744	3.12	19	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	100-41-4	30.2	152	700	U	3.4	0.61 J	U	U	U	20	U	U	U	U
Hexane	110-54-3	0.992	4.17	25	U	U	U	U	U	U	U	U	U	U	U
Isopropylbenzene (cumene)	98-82-8	88.7	373	39	U	U	U	U	U	U	4.5	U	U	U	U
Methyl acetate	79-20-9	-	-	1,600	U	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	1634-04-4	3,900	19,655	12	1.2	U	70	U	U	8.2	10	1.6	U	U	U
Methylcyclohexane	108-87-2	17.7	74.5	630	U	U	U	U	U	U	U	U	U	U	U
Methylene chloride	75-09-2	19,253	80,862	5	U	U	U	U	U	U	U	U	U	U	U
m-xylene	108-38-3	71.5	149	10,000	U	2.1*	5.9*	U	U	0.46*J	130*	U	U	U	U
o-xylene	95-47-6	51.9	207	10,000	U	1.6	U	U	U	U	62	U	U	U	U

TABLE 12. SUMMARY OF GROUNDWATER VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, Virginia 23661
REMSA Project No. E018-10-T03P

p-xylene	106-42-3	74.4	155	10,000	U	2.1*	5.9*	U	U	0.46*J	130*	U	U	U	U
Styrene	100-42-5	928	3,896	100	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	127-18-4	5.76	24.2	5	U	U	U	U	U	U	U	U	U	U	U
Toluene	108-88-3	1,921	8,067	1,000	U	U	U	U	U	U	23	U	U	U	U
Total Xylenes	1330-20-7	492	2,068	10,000	U	3.6	5.9	U	U	0.46 J	200	U	U	U	U
trans-1,2-Dichloroethene	156-60-5	1534	6,441	100	U	U	U	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	10061-02-6	52.3	220	0.43	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	79-01-6	1.24	2.18	5	U	U	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	75-69-4	18.4	77.3	110	U	U	U	1.5	U	U	U	U	U	U	U
Vinyl Chloride	75-01-4	1.42	24.5	2	U	U	U	U	U	U	U	U	U	U	U
1,1,1,2-tetrachloroethane	630-20-6	32.2	162	0.52	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2,4-trimethylbenzene	95-63-6	2.90	12.2	1.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethene (total)	540-59-0	-	-	13	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,3,5-trimethylbenzene	108-67-8	-	-	8.7	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,3-Dichloropropene (total)	542-75-6	52.3	220	0.41	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
isopropyltoluene	99-87-6	-	-	68	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
n-butylbenzene	104-51-8	-	-	78	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
n-propylbenzene	103-65-1	243	1,020	53	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
sec-butylbenzene	135-98-8	-	-	-	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
tert-butylbenzene	98-06-6	-	-	-	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

NOTES: Groundwater samples were collected on April 10, 16, and 17 2014.
Groundwater Volatile Organic Compounds (VOCs) analyzed by EPA Method 8260B.
Laboratory analytical results reported in micrograms per liter (ug/L) or parts per billion (ppb).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
* M-xylene and P-xylene laboratory results are combined.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier III (Residential)	denotes the reported value exceeds VRP Tier III Groundwater Screening Level for Residential sites. Revised 1/3/14.
VRP Tier III (Commercial)	denotes the reported value exceeds VRP Tier III Groundwater Screening Level for Commercial/Industrial sites. Revised 1/3/14.
VRP Tier II	denotes the reported value exceeds VRP Tier II Groundwater Screening Level. Revised 1/3/14
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II,III tables.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II,III tables.

TABLE 13. SUMMARY OF GROUNDWATER SEMI-VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, Virginia 23661
REMSA Project No. E018-10-T03P

Sample I.D.	CAS	Tier III	Tier III	Tier II	GP14-1	GP14-2	GP14-3	GP14-4	GP14-5	GP14-6	GP14-7	GP14-8	GP14-9	GP14-10	GP14-11
Analyte	Code	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)
1,1'-Biphenyl	92-52-4	3.31	13.9	0.083	U	U	U	U	U	U	2.3 J	U	U	U	U
2,2'-Oxybis(1-chloropropane)	108-60-1	802	4,043	0.31	U	U	U	U	U	U	U	U	U	U	U
2,4,5-Trichlorophenol	95-95-4	-	-	89	U	U	U	U	U	U	U	U	U	U	U
2,4,6-Trichlorophenol	88-06-2	73,843	372,166	3.5	U	U	U	U	U	U	U	U	U	U	U
2,4-Dichlorophenol	120-83-2	-	-	3.5	U	U	U	U	U	U	U	U	U	U	U
2,4-Dimethylphenol	105-67-9	-	-	27	U	U	U	U	U	U	2.4 J	U	U	U	U
2,4-Dinitrophenol	51-28-5	-	-	3	U	U	U	U	U	U	U	U	U	U	U
2,4-Dinitrotoluene	121-14-2	123,843	624,169	0.22	U	U	U	U	U	U	U	U	U	U	U
2,6-Dinitrotoluene	606-20-2	-	-	1.5	U	U	U	U	U	U	U	U	U	U	U
2-Chloronaphthalene	91-58-7	-	-	55	U	U	U	U	U	U	U	U	U	U	U
2-Chlorophenol	95-57-8	-	-	7.1	U	U	U	U	U	U	U	U	U	U	U
2-Methylnaphthalene	91-57-6	-	-	2.7	U	U	U	U	U	U	15	U	U	U	U
2-Methylphenol	95-48-7	1,274,367	5,352,342	72	U	U	U	U	U	U	1.5 J	U	U	U	U
2-Nitroaniline	88-74-4	2,162	9,079	15	U	U	U	U	U	U	U	U	U	U	U
2-Nitrophenol	88-75-5	-	-	-	U	U	U	U	U	U	U	U	U	U	U
3,3'-Dichlorobenzidine	91-94-1	436,394	2,199,426	0.11	U	U	U	U	U	U	U	U	U	U	U
3-Methylphenol	108-39-4	1,787,755	7,508,571	72	U	U	U	U	U	U	2.4*J	U	U	U	U
3-Nitroaniline	99-09-2	-	-	-	U	U	U	U	U	U	U	U	U	U	U
4,6-Dinitro-2-methylphenol	534-52-1	-	-	0.12	U	U	U	U	U	U	U	U	U	U	U
4-Bromophenyl-phenylether	101-55-3	-	-	-	U	U	U	U	U	U	U	U	U	U	U
4-Chloro-3-methylphenol	59-50-7	-	-	110	U	U	U	U	U	U	U	U	U	U	U
4-Chloroaniline	106-47-8	-	-	0.32	U	U	U	U	U	U	U	U	U	U	U
4-Chlorophenyl-phenylether	7005-72-3	-	-	-	U	U	U	U	U	U	U	U	U	U	U
4-Methylphenol	106-44-5	1,529,864	6,425,428	7.2	U	U	U	U	U	U	2.4*J	U	U	U	U
4-Nitroaniline	100-01-6	12,146,726	51,016,248	3.3	U	U	U	U	U	U	U	U	U	U	U
4-Nitrophenol	100-02-7	-	-	-	U	U	U	U	U	U	U	U	U	U	U
Acenaphthene	83-32-9	-	-	40	U	U	U	U	U	U	23	U	U	U	U
Acenaphthylene	208-96-8	-	-	110	U	U	U	U	U	U	U	U	U	U	U
Acetophenone	98-86-2	-	-	150	U	U	U	U	U	U	U	U	U	U	U
Anthracene	120-12-7	-	-	130	U	U	U	U	U	U	5.0 J	U	U	U	U
Atrazine	1912-24-9	-	-	3	U	U	U	U	U	U	U	U	U	U	U
Benzaldehyde	100-52-7	-	-	150	U	U	U	U	U	U	U	U	U	U	U
Benzo(a)anthracene	56-55-3	178	2,273	0.029	U	U	U	U	U	U	U	U	U	U	U
Benzo(a)pyrene	50-32-8	46.7	596	0.2	U	U	U	U	U	U	U	U	U	U	U
Benzo(b)fluoranthene	205-99-2	3,246	41,446	0.029	U	U	U	U	U	U	U	U	U	U	U
Benzo(g,h,i)perylene	191-24-2	-	-	110	U	U	U	U	U	U	U	U	U	U	U
Benzo(k)fluoranthene	207-08-9	3,654	46,649	0.29	U	U	U	U	U	U	U	U	U	U	U
bis(2-Chloroethoxy)methane	111-91-1	-	-	4.7	U	U	U	U	U	U	U	U	U	U	U
bis(2-chloroethyl)ether	111-44-4	106	535	0.012	U	U	U	U	U	U	U	U	U	U	U
bis-(2-Ethylhexyl)phthalate	117-81-7	921,717	4,645,455	6	U	U	U	U	U	U	U	U	U	U	U
Butylbenzylphthalate	85-68-7	-	-	14	U	U	U	U	U	U	U	U	U	U	U
Caprolactam	105-60-2	-	-	770	U	U	U	U	U	U	U	U	U	U	U
Carbazole	86-74-8	-	-	3.4	U	U	U	U	U	U	30	U	U	U	U
Chrysene	218-01-9	4,084	52,147	2.9	U	U	U	U	U	U	U	U	U	U	U
Dibenzo(a,h)anthracene	53-70-3	1,389	17,729	0.0029	U	U	U	U	U	U	U	U	U	U	U

TABLE 13. SUMMARY OF GROUNDWATER SEMI-VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, Virginia 23661
REMSA Project No. E018-10-T03P

Dibenzofuran	132-64-9	-	-	0.58	U	U	U	U	U	U	16	U	U	U	U
Dibutyl phthalate	84-74-2	-	-	67	U	U	U	U	U	U	U	U	U	U	U
Diethylphthalate	84-66-2	-	-	1100	U	U	U	U	U	U	U	U	U	U	U
Dimethylphthalate	131-11-3	-	-	-	U	U	U	U	U	U	U	U	U	U	U
Di-n-octylphthalate	117-84-0	-	-	-	U	U	U	U	U	U	U	U	U	U	U
Fluoranthene	206-44-0	-	-	63	U	U	U	U	U	U	2.6 J	U	U	U	U
Fluorene	86-73-7	-	-	22	U	U	U	U	U	U	23	U	U	U	U
Hexachlorobenzene	118-74-1	0.761	3.84	1	U	U	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	87-68-3	2.63	13.2	0.26	U	U	U	U	U	U	U	U	U	U	U
Hexachlorocyclopentadiene	77-47-4	0.0189	0.0794	50	U	U	U	U	U	U	U	U	U	U	U
Hexachloroethane	67-72-1	13.9	70.1	0.79	U	U	U	U	U	U	U	U	U	U	U
Indeno(1,2,3-cd)pyrene	193-39-5	1,331	16,996	0.029	U	U	U	U	U	U	U	U	U	U	U
Isophorone	78-59-1	766,807	3,220,588	67	U	U	U	U	U	U	U	U	U	U	U
Naphthalene	91-20-3	17.4	73.0	0.14	U	1.6 J	U	U	U	U	50	U	U	U	U
Nitrobenzene	98-95-3	620	3125	0.12	U	U	U	U	U	U	U	U	U	U	U
N-Nitroso-di-n-propylamine	621-64-7	132	664	0.0093	U	U	U	U	U	U	U	U	U	U	U
N-Nitrosodiphenylamine	86-30-6	45,654	230,094	10	U	U	U	U	U	U	U	U	U	U	U
Pentachlorophenol	87-86-5	4,763,620	24,008,645	1	U	U	U	U	U	U	U	U	U	U	U
Phenanthrene	85-01-8	-	-	110	U	U	U	U	U	U	19	U	U	U	U
Phenol	108-95-2	1,533,613	6,441,176	450	U	U	U	U	U	U	U	U	U	U	U
Pyrene	129-00-0	-	-	8.7	U	U	U	U	U	U	U	U	U	U	U
1,2,4,5-Tetrachlorobenzene	95-94-3	-	-	0.12	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2,3,4,6-Tetrachlorophenol	58-90-2	-	-	-	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Benzoic Acid	65-85-0	-	-	5,800	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

NOTES: Groundwater samples were collected on April 10, 16, and 17 2014.
Groundwater Semi-Volatile Organic Compounds (VOCs) analyzed by EPA Method 8270D.
Laboratory analytical results reported in micrograms per liter (ug/L) or parts per billion (ppb).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
* denotes 3 & 4 Methylphenol results were combined in laboratory report.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier III (Residential)	denotes the reported value exceeds VRP Tier III Groundwater Screening Level for Residential sites. Revised 1/3/14.
VRP Tier III (Commercial)	denotes the reported value exceeds VRP Tier III Groundwater Screening Level for Commercial/Industrial sites. Revised 1/3/14.
VRP Tier II	denotes the reported value exceeds VRP Tier II Groundwater Screening Level. Revised 1/3/14
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II,III tables.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II,III tables.

TABLE 14. SUMMARY OF GROUNDWATER TARGET ANALYTE LIST INORGANICS AND HEXAVALENT CHROMIUM ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, Virginia 23661
REMSA Project No. E018-10-T03P

Sample I.D.	CAS	Tier III	Tier III	Tier II	GP14-1	GP14-2	GP14-3	GP14-4	GP14-5	GP14-6	GP14-7	GP14-8	GP14-9	GP14-10	GP14-11
Analyte	Code	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)
Aluminum	7429-90-5	-	-	1,600	129,000 D	44,700	5,500	22,900	93,100	4,940	11,800	25,600	37,600	28,300	5,390
Antimony	7440-36-0	-	-	6	UD	UD	UD	UD	UD	UD	UD	UD	3.99 JD	U	UD
Arsenic	7440-38-2	-	-	10	52.8 D	20.0	U	U	25.2	9.90 J	5.56 J	95.5	17.3	8.21 J	U
Barium	7440-39-3	-	-	2,000	1,730 D	415	29.9	94.4	352	45.8	83.0	115	318	138	46.6
Beryllium	7440-41-7	-	-	4	16.0 D	2.40	2.04	0.593 J	5.05	0.129 J	0.823 J	1.18	1.27	0.650 J	0.438 J
Cadmium (food, soil)	7440-43-9	-	-	5	24.4 D	2.94	U	U	0.669 J	U	1.49	U	5.92	0.640 J	U
Calcium	7440-70-2	-	-	-	328,000 D	82,600	31,700	112,000	78,400	52,200	53,400	90,100	89,300	137,000	24,800
Chromium	7440-47-3	-	-	100	294	77.2	2.38 J	31.2	130	8.06 J	25.3	59.6	80.1	48.3	7.92 J
Cobalt	7440-48-4	-	-	0.47	71.4 D	16.3 JD	7.32 JD	3.80 JD	15.2 JD	3.23 JD	13.0 D	48.7 D	12.7 D	5.99 JD	1.29 JD
Copper	7440-50-8	-	-	1,300	637	77.3	U	13.9	76.2	2.19 J	37.3	24.3	70.4	61.7	3.14 J
Iron	7439-89-6	-	-	1,100	275,000	123,000	75,800	15,800	61,600	78,800	63,200	118,000	56,900	30,900	6,610
Lead	7439-92-1	-	-	15	3,940 D	404	9.23 J	33.5	104	9.08 J	106	42.3	158	85.1	4.42 J
Magnesium	7439-95-4	-	-	-	50800 D	19,400	69,800	14,200	14,500	14,000	12,700	20,200	17,500	20,200	4,480
Manganese (nonfood)	7439-96-5	-	-	32	2,990 D	533	178	66.7	270	554	848	1,650	806	553	81
Mercury	7439-97-6	0.0670	0.281	2	1.75	U	U	U	U	U	U	U	0.227	U	U
Nickel	7440-02-0	-	-	30	259 D	49.2	4.46 J	12.1	43.7	4.93 J	22.7	58.2	25.9	14.7	4.45 J
Potassium	7440-09-7	-	-	-	14,800 D	5,290	1,130	3,140	7,700	1,680	3,500	4,610	8,180	4,500	2,910
Selenium	7782-49-2	-	-	50	UD	U	U	U	U	U	U	U	U	U	U
Silver	7440-22-4	-	-	7.1	UD	U	U	U	2.53 J	U	U	2.81 J	3.26 J	U	U
Sodium	7440-23-5	-	-	-	45,600 D	29,600	14,600	4,870	12,800	32,200	38,100	42,300	26,500	13,300	5,730
Thallium	7440-28-0	-	-	2	UD	UD	UD	UD	UD	3.66 JD	UD	UD	UD	UD	UD
Vanadium	7440-62-2	-	-	7.8	245 D	93.2	5.91 J	46.8	216	12.8	31.7	109	139	56.9	13.1
Zinc	7440-66-6	-	-	470	6,420 D	738	95.6	44.7	180	23.7	525	150	394	125	10.7
Cyanide	57-12-5	15.3	64.4	200	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Mercury, inorganic salts	7487-94-7	-	-	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylmercury	22967-92-6	-	-	0.16	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Hexavalent Chromium*	18540-29-9	-	-	-	0.022*	U	U	U	U	U	U	U	U	U	U

NOTES: Groundwater samples were collected on April 10, 16, and 17 2014.
Groundwater Target Analyte List (TAL) inorganics analyzed by EPA Method 6010C/7470A.
Groundwater Hexavalent Chromium analyzed by EPA Method 7196A.
Target Analyte List (TAL) inorganic analytical results reported in micrograms per liter (ug/L) or parts per billion (ppb).
* Hexavalent Chromium results reported in milligrams per liter (mg/L) or parts per million (ppm).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier III (Residential)	denotes the reported value exceeds VRP Tier III Groundwater Screening Level for Residential sites. Revised 1/3/14.
VRP Tier III (Commercial)	denotes the reported value exceeds VRP Tier III Groundwater Screening Level for Commercial/Industrial sites. Revised 1/3/14.
VRP Tier II	denotes the reported value exceeds VRP Tier II Groundwater Screening Level. Revised 1/3/14
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II,III tables.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II,III tables.
(Analyte)	denotes Hexavalent Chromium was reported and is not present in the current VRP Tier II, III tables.

TABLE 15. SUMMARY OF GROUNDWATER TARGET COMPOUND LIST PESTICIDES ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Sample I.D. Analyte	CAS Code	Tier III (*u* g/L)	Tier III (*u* g/L)	Tier II (*u* g/L)	GP14-5 (*u* g/L)	GP14-11 (*u* g/L)
4,4'-DDD	72-54-8	1,307	6,588	0.28	U	U
4,4'-DDE	72-55-9	148	743	0.2	U	U
4,4'-DDT	50-29-3	738	3,718	0.2	U	U
Aldrin	309-00-2	2.76	13.9	0.00021	U	U
alpha-BHC	319-84-6	0.195	0.980	0.0062	U	U
alpha-Chlordane	5103-71-9	36.6	154	0.19	U	U
beta-BHC	319-85-7	219	1,101	0.022	U	U
delta-BHC	319-86-8	-	-	0.011	U	U
Dieldrin	60-57-1	12.9	65.2	0.0015	U	U
Endosulfan I	959-98-8	-	-	22	U	U
Endosulfan II	33213-65-9	-	-	22	U	U
Endosulfan Sulfate	1031-07-8	-	-	22	U	U
Endrin	72-20-8	-	-	2	U	U
Endrin Aldehyde	7421-93-4	-	-	1.1	U	U
Endrin Ketone	53494-70-5	-	-	1.1	U	U
gamma-BHC	58-89-9	374	1,883	0.2	U	U
gamma-Chlordane	5103-74-2	36.6	154	0.19	U	U
Heptachlor	76-44-8	1.56	7.85	0.4	U	U
Heptachlor epoxide	1024-57-3	10.9	54.9	0.2	U	U
Methoxychlor	72-43-5	-	-	40	U	U
Toxaphene	8001-35-2	310	1,562	3	U	U
Chlordane	57-74-9	36.7	154	2	NR	NR
Endosulfan	115-29-7	-	-	7.8	NR	NR

NOTES: Groundwater samples were collected on April 10, 16, and 17 2014.
Groundwater Target Compound List (TCL) pesticides analyzed by EPA Method 8081B.
Laboratory analytical results reported in micrograms per liter (ug/L) or parts per billion (ppb).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier III (Residential)	denotes the reported value exceeds VRP Tier III Groundwater Screening Level for Residential sites. Revised 1/3/14.
VRP Tier III (Commercial)	denotes the reported value exceeds VRP Tier III Groundwater Screening Level for Commercial/Industrial sites. Revised 1/3/14.
VRP Tier II	denotes the reported value exceeds VRP Tier II Groundwater Screening Level. Revised 1/3/14
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II,III tables.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II,III tables.

TABLE 16. SUMMARY OF GROUNDWATER TARGET COMPOUND LIST HERBICIDES ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, VA 23661
REMSA Project No. E18-10-T03P

Sample I.D. Analyte	CAS Code	Tapwater (ug/L)	MCL (ug/L)	GP14-5 (ug/L)	GP14-11 (ug/L)
2,4-D	94-75-7	130	70	U	U
2,4-DB	94-82-6	91	-	U	U
2,4,5-T	93-76-5	120	-	U	U
2,4,5-TP (Silvex)	93-72-1	84	50	U	U
Dalapon	75-99-0	460	200	U	U
Dicamba	1918-00-9	440	-	U	U
Dichlorprop	120-36-5	-	-	U	U
Dinoseb	88-85-7	11	7.0	U	U
MCPP	93-65-2	12	-	U	U
MCPA	94-74-6	5.7	-	U	U

NOTES: Groundwater samples were collected on April 10, 16, and 17 2014.
Soil Target Compound List (TCL) herbicides analyzed by EPA Method 8151A.
Laboratory analytical results reported in micrograms per liter (ug/L) or parts per billion (ppb).
MCL denotes EPA Maximum Contaminant Level.
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
Laboratory analysis performed by ENCO Laboratories.
EPA RSL denotes the reported value exceeds EPA Region 3 tapwater Screening Level for residential sites. Revised 11/13
EPA RSL denotes the reported value exceeds EPA Region 3 MCL for commercial/industrial sites. Revised 11/13

TABLE 17. SUMMARY OF GROUNDWATER POLYCHLORINATED BIPHENYLS ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, Virginia 23661
REMSA Project No. E018-10-T03P

Sample I.D.	CAS	Tier III	Tier III	Tier II	GP14-1	GP14-2	GP14-3	GP14-4	GP14-5	GP14-6	GP14-7	GP14-8	GP14-9	GP14-10	GP14-11
Analyte	Code	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)	(*u* g/L)
Aroclor-1016	12674-11-2	149	750	0.5	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1221	11104-28-2	1.42	7.15	0.5	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1232	11141-16-5	1.42	7.15	0.5	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1248	12672-29-6	2.37	12.0	0.5	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1254	11097-69-1	3.69	18.6	0.5	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1260	11096-82-5	3.11	15.7	0.5	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1242	53469-21-9	5.50	27.7	0.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Aroclor-1262	37324-23-5	0.226	1.14	0.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Aroclor-1268	11100-14-4	0.226	1.14	0.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Total PCBs	1336-36-3	-	-	0.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

NOTES: Groundwater samples were collected on April 10, 16, and 17 2014.
Groundwater Polychlorinate Biphenyls (PCBs) analyzed by EPA Method 8082A.
Laboratory analytical results reported in micrograms per liter (ug/L) or parts per billion (ppb).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier III (Residential)	denotes the reported value exceeds VRP Tier III Groundwater Screening Level for Residential sites. Revised 1/3/14.
VRP Tier III (Commercial)	denotes the reported value exceeds VRP Tier III Groundwater Screening Level for Commercial/Industrial sites. Revised 1/3/14.
VRP Tier II	denotes the reported value exceeds VRP Tier II Groundwater Screening Level. Revised 1/3/14
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II,III tables.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II,III tables.

TABLE 18. SUMMARY OF SURFACE WATER VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, Virginia 23661
REMSA Project No. E018-10-T03P

Sample I.D.	CAS	Tier III	Tier II	SW14-1
Analyte	Code	(*u* g/L)	(*u* g/L)	(*u* g/L)
1,1,1-Trichloroethane	71-55-6	-	-	U
1,1,2,2-Tetrachloroethane	79-34-5	-	40	U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	-	-	U
1,1,2-Trichloroethane	79-00-5	-	160	U
1,1-Dichloroethane	75-34-3	-	-	U
1,1-Dichloroethene	75-35-4	-	7,100	U
1,2,3-Trichlorobenzene	87-61-6	-	-	U
1,2,4-Trichlorobenzene	120-82-1	-	70	U
1,2-Dibromo-3-chloropropane	96-12-8	-	-	U
1,2-Dibromoethane	106-93-4	-	-	U
1,2-Dichlorobenzene (ortho)	95-50-1	-	1,300	U
1,2-Dichloroethane	107-06-2	-	370	U
1,2-Dichloropropane	78-87-5	-	150	U
1,3-Dichlorobenzene (meta)	541-73-1	-	960	U
1,4-Dichlorobenzene (para)	106-46-7	-	190	U
1,4-dioxane	123-91-1	-	-	U
2-Butanone (methyl ethyl ketone)	78-93-3	-	-	U
2-Hexanone	591-78-6	-	-	U
4-Methyl-2-pentanone	108-10-1	-	-	U
Acetone	67-64-1	-	-	U
Benzene	71-43-2	-	510	U
Bromochloromethane	74-97-5	-	-	U
Bromodichloromethane	75-27-4	-	170	U
Bromoform	75-25-2	-	1,400	U
Bromomethane	74-83-9	-	1,500	U
Carbon disulfide	75-15-0	-	-	U
Carbon tetrachloride	56-23-5	-	16	U
Chlorobenzene	108-90-7	-	1,600	U
Chloroethane	75-00-3	-	-	U
Chloroform	67-66-3	-	11,000	U
Chloromethane	74-87-3	-	-	U
cis-1,2-Dichloroethene	156-59-2	-	-	U
cis-1,3-Dichloropropene	10061-01-5	-	-	U
Cyclohexane	110-82-7	-	-	U
Dibromochloromethane	124-48-1	-	130	U
Dichlorodifluoromethane	75-71-8	-	-	U
Ethylbenzene	100-41-4	-	2,100	U
Hexane	110-54-3	-	-	U
Isopropylbenzene (cumene)	98-82-8	-	-	U
Methyl acetate	79-20-9	-	-	U
Methyl tert-butyl ether	1634-04-4	-	-	U
Methylcyclohexane	108-87-2	-	-	U
Methylene chloride	75-09-2	-	5,900	U
m-xylene	108-38-3	-	-	U
o-xylene	95-47-6	-	-	U
p-xylene	106-42-3	-	-	U
Styrene	100-42-5	-	-	U
Tetrachloroethene	127-18-4	-	33	U
Toluene	108-88-3	-	6,000	U
Total Xylenes	1330-20-7	-	-	U
trans-1,2-Dichloroethene	156-60-5	-	10,000	U
trans-1,3-Dichloropropene	10061-02-6	-	-	U
Trichloroethene	79-01-6	-	300	U
Trichlorofluoromethane	75-69-4	-	-	U
Vinyl Chloride	75-01-4	-	24	U

TABLE 18. SUMMARY OF SURFACE WATER VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, Virginia 23661
REMSA Project No. E018-10-T03P

1,1,1,2-tetrachloroethane	630-20-6	-	-	NR
1,2,4-trimethylbenzene	95-63-6	-	-	NR
1,2-Dichloroethene (total)	540-59-0	-	-	NR
1,3,5-trimethylbenzene	108-67-8	-	-	NR
1,3-Dichloropropene (total)	542-75-6	-	210	NR
isopropyltoluene	99-87-6	-	-	NR
n-butylbenzene	104-51-8	-	-	NR
n-propylbenzene	103-65-1	-	-	NR
sec-butylbenzene	135-98-8	-	-	NR
tert-butylbenzene	98-06-6	-	-	NR

NOTES: Surface water samples were collected on April 8, 2014.
Surface water Volatile Organic Compounds (VOCs) analyzed by EPA Method 8260B.
Laboratory analytical results reported in micrograms per liter (ug/L) or parts per billion (ppb).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier II	denotes the reported value exceeds VRP Tier II Other Surface Water-Fresh Screening Level. Revised 1/11/12
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II table.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II table.

TABLE 19. SUMMARY OF SURFACE WATER SEMI-VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, Virginia 23661
REMSA Project No. E018-10-T03P

Sample I.D. / Analyte	CAS Code	Tier III (*u* g/L)	Tier II (*u* g/L)	SW14-1 (*u* g/L)
1,1'-Biphenyl	92-52-4	-	-	U
2,2'-Oxybis(1-chloropropane)	108-60-1	-	65,000	U
2,4,5-Trichlorophenol	95-95-4	-	3,600	U
2,4,6-Trichlorophenol	88-06-2	-	24	U
2,4-Dichlorophenol	120-83-2	-	290	U
2,4-Dimethylphenol	105-67-9	-	850	U
2,4-Dinitrophenol	51-28-5	-	5,300	U
2,4-Dinitrotoluene	121-14-2	-	34	U
2,6-Dinitrotoluene	606-20-2	-	-	U
2-Chloronaphthalene	91-58-7	-	1,600	U
2-Chlorophenol	95-57-8	-	150	U
2-Methylnaphthalene	91-57-6	-	-	U
2-Methylphenol	95-48-7	-	-	U
2-Nitroaniline	88-74-4	-	-	U
2-Nitrophenol	88-75-5	-	-	U
3,3'-Dichlorobenzidine	91-94-1	-	0.28	U
3-Methylphenol	108-39-4	-	-	U
3-Nitroaniline	99-09-2	-	-	U
4,6-Dinitro-2-methylphenol	534-52-1	-	280	U
4-Bromophenyl-phenylether	101-55-3	-	-	U
4-Chloro-3-methylphenol	59-50-7	-	-	U
4-Chloroaniline	106-47-8	-	-	U
4-Chlorophenyl-phenylether	7005-72-3	-	-	U
4-Methylphenol	106-44-5	-	-	U
4-Nitroaniline	100-01-6	-	-	U
4-Nitrophenol	100-02-7	-	-	U
Acenaphthene	83-32-9	-	990	U
Acenaphthylene	208-96-8	-	-	U
Acetophenone	98-86-2	-	-	U
Anthracene	120-12-7	-	40,000	U
Atrazine	1912-24-9	-	-	U
Benzaldehyde	100-52-7	-	-	U
Benzo(a)anthracene	56-55-3	-	0.18	U
Benzo(a)pyrene	50-32-8	-	0.18	U
Benzo(b)fluoranthene	205-99-2	-	0.18	U
Benzo(g,h,i)perylene	191-24-2	-	-	U
Benzo(k)fluoranthene	207-08-9	-	0.18	U
bis(2-Chloroethoxy)methane	111-91-1	-	-	U
bis(2-chloroethyl)ether	111-44-4	-	5.3	U
bis-(2-Ethylhexyl)phthalate	117-81-7	-	22	U
Butylbenzylphthalate	85-68-7	-	1,900	U
Caprolactam	105-60-2	-	-	U
Carbazole	86-74-8	-	-	U
Chrysene	218-01-9	-	0.018	U
Dibenzo(a,h)anthracene	53-70-3	-	0.18	U
Dibenzofuran	132-64-9	-	-	U
Dibutyl phthalate	84-74-2	-	44,000	U
Diethylphthalate	84-66-2	-	1,100,000	U
Dimethylphthalate	131-11-3	-	4,500	U
Di-n-octylphthalate	117-84-0	-	-	U
Fluoranthene	206-44-0	-	140	U
Fluorene	86-73-7	-	5,300	U
Hexachlorobenzene	118-74-1	-	0.0029	U
Hexachlorobutadiene	87-68-3	-	180	U
Hexachlorocyclopentadiene	77-47-4	-	1,100	U

TABLE 19. SUMMARY OF SURFACE WATER SEMI-VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, Virginia 23661
REMSA Project No. E018-10-T03P

Hexachloroethane	67-72-1	-	33	U
Indeno(1,2,3-cd)pyrene	193-39-5	-	0.18	U
Isophorone	78-59-1	-	9,600	U
Naphthalene	91-20-3	-	-	U
Nitrobenzene	98-95-3	-	690	U
N-Nitroso-di-n-propylamine	621-64-7	-	5.1	U
N-Nitrosodiphenylamine	86-30-6	-	60	U
Pentachlorophenol	87-86-5	-	6.7	U
Phenanthrene	85-01-8	-	-	U
Phenol	108-95-2	-	860,000	U
Pyrene	129-00-0	-	4,000	U
1,2,4,5-Tetrachlorobenzene	95-94-3	-	1.1	NR
2,3,4,6-Tetrachlorophenol	58-90-2	-	-	NR
Benzoic Acid	65-85-0	-	-	NR

NOTES: Surface water samples were collected on April 8, 9, and 10, 2014.
Surface water Semi-Volatile Organic Compounds (VOCs) analyzed by EPA Method 8270D.
Laboratory analytical results reported in micrograms per liter (ug/L) or parts per billion (ppb).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier II	denotes the reported value exceeds VRP Tier II Other Surface Water-Fresh Screening Level. Revised 1/11/12
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II table.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II table.

TABLE 20. SUMMARY OF SURFACE WATER TARGET ANALYTE LIST INORGANICS AND HEXAVALENT CHROMIUM ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, Virginia 23661
REMSA Project No. E018-10-T03P

Sample I.D. Analyte	CAS Code	Tier III (*u* g/L)	Tier II (*u* g/L)	SW14-1 (*u* g/L)
Aluminum	7429-90-5	-	87	2,090
Antimony	7440-36-0	-	640	1.91 J
Arsenic	7440-38-2	-	150	U
Barium	7440-39-3	-	-	101
Beryllium	7440-41-7	-	-	U
Cadmium (food, soil)	7440-43-9	-	1.1	2.65
Calcium	7440-70-2	-	-	97,900
Chromium	7440-47-3	-	11	5.53 J
Cobalt	7440-48-4	-	-	3.07
Copper	7440-50-8	-	9	66.6
Iron	7439-89-6	-	1,000	4,370
Lead	7439-92-1	-	14	72.4
Magnesium	7439-95-4	-	-	12,100
Manganese (nonfood)	7439-96-5	-	100	1,180
Mercury	7439-97-6	-	-	0.299
Nickel	7440-02-0	-	20	23.7
Potassium	7440-09-7	-	-	14,100
Selenium	7782-49-2	-	5	U
Silver	7440-22-4	-	-	2.49 JB
Sodium	7440-23-5	-	-	26,100
Thallium	7440-28-0	-	0.47	U
Vanadium	7440-62-2	-	-	5.33 J
Zinc	7440-66-6	-	120	451
Cyanide	57-12-5	-	5.2	NR
Mercury, inorganic salts	7487-94-7	-	0.77	NR
Methylmercury	22967-92-6	-	0.3 mg/kg in fish	NR
Hexavalent Chromium	18540-29-9	-	-	U

NOTES: Surface water samples were collected on April 8, 2014.
Surface water Target Analyte List (TAL) inorganics analyzed by EPA Method 6010C/7470C.
Surface water Hexavalent Chromium analyzed by EPA Method 7196A.
Target Analyte List (TAL) inorganic analytical results reported in micrograms per liter (ug/L) or parts per billion (ppb).
* Hexavalent Chromium results reported in milligrams per liter (mg/L) or parts per million (ppm).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier II	denotes the reported value exceeds VRP Tier II Other Surface Water-Fresh Screening Level. Revised 1/11/12
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II table.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II table.
(Analyte)	denotes Hexavalent Chromium was reported and is not present in the current VRP Tier II, III tables.

TABLE 21. SUMMARY OF SURFACE WATER POLYCHLORINATED BIPHENYLS ANALYTICAL RESULTS
1614 West Pembroke Avenue, Hampton, Virginia 23661
REMSA Project No. E018-10-T03P

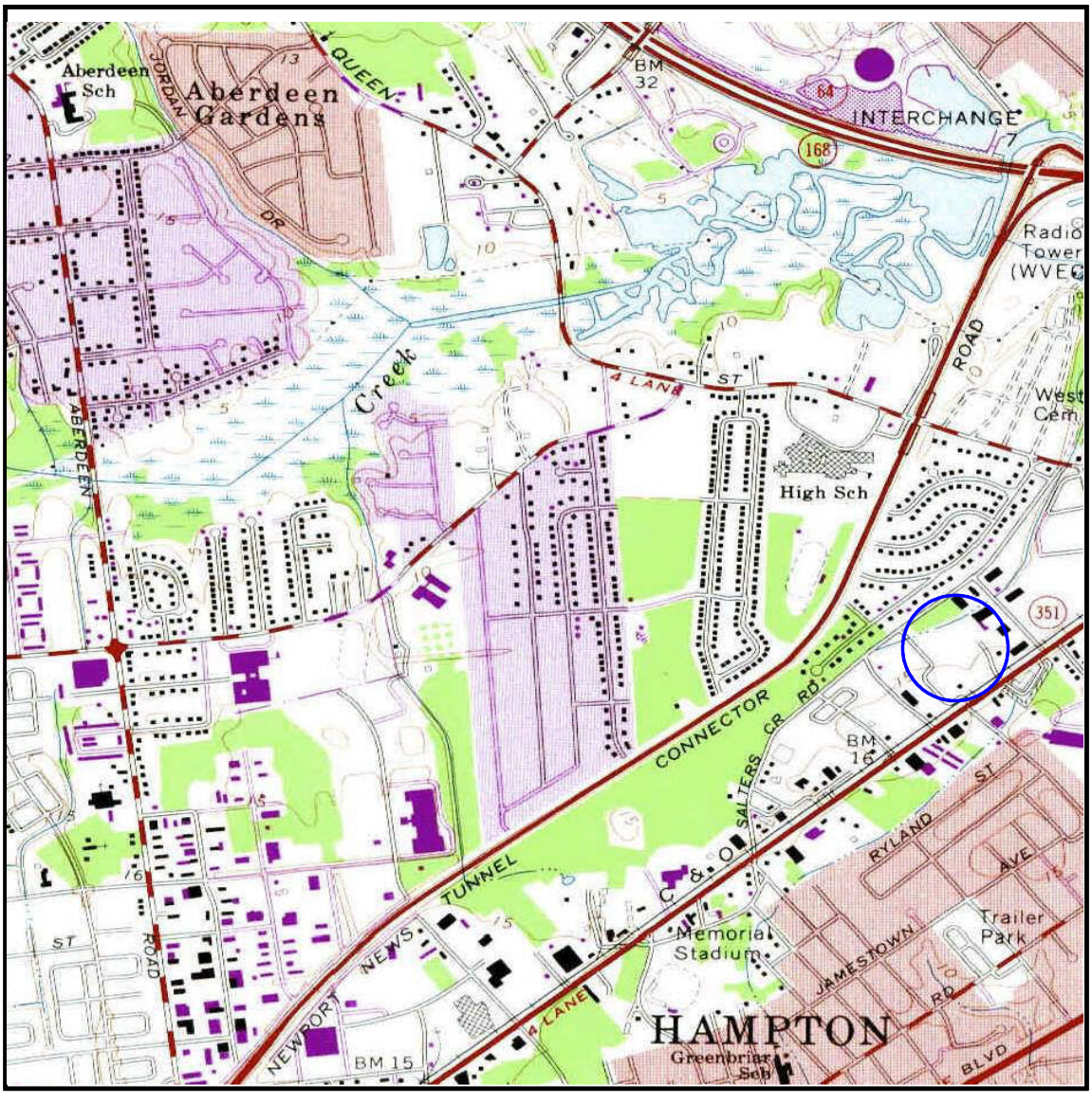
Sample I.D. Analyte	CAS Code	Tier III (*u* g/L)	Tier II (*u* g/L)	SW14-1 (*u* g/L)
Aroclor-1016	12674-11-2	-	0.00064	U
Aroclor-1221	11104-28-2	-	0.00064	U
Aroclor-1232	11141-16-5	-	0.00064	U
Aroclor-1248	12672-29-6	-	0.00064	U
Aroclor-1254	11097-69-1	-	0.00064	U
Aroclor-1260	11096-82-5	-	0.00064	U
Aroclor-1242	53469-21-9	-	0.00064	NA
Aroclor-1262	37324-23-5	-	0.00064	NA
Aroclor-1268	11100-14-4	-	0.00064	NA
Total PCBs	1336-36-3	-	0.00064	NA

NOTES: Surface water samples were collected on April 8, 2014.
Surface water Polychlorinate Biphenyls (PCBs) analyzed by EPA Method 8082A.
Laboratory analytical results reported in micrograms per liter (ug/L) or parts per billion (ppb).
U denotes that the analyte was analyzed for but not detected above the Method Detection Limit (MDL).
J denotes that the reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL).
B denotes that the analyte was detected in the associated method blank.
D denotes that the sample was analyzed at dilution.
NR denotes the analyte was not reported.
Laboratory analysis performed by ENCO Laboratories.

VRP Tier II	denotes the reported value exceeds VRP Tier II Other Surface Water-Fresh Screening Level. Revised 1/11/12
(Analyte)	denotes analyte was reported and is present in the current VRP Tier II,III tables.
(Analyte)	denotes analyte was not reported and is present in the current VRP Tier II,III tables.

APPENDIX A

Figures



SOURCE: USGS 1986 TOPOGRAPHIC QUADRANGLE - EDR, Inc.

0' 2,000' 4,000'

APPROXIMATE SCALE IN FEET

KEY

SITE LOCATION

MAY 12, 2014	DRAWN BY: AMG	PROJECT NO.: E18-10-T03P

FIGURE 1: TOPOGRAPHIC SITE LOCATION MAP
1614 WEST PEMBROKE AVENUE
HAMPTON, VIRGINIA 23661

REMSA
RESEARCH, ENVIRONMENTAL & MANAGEMENT SUPPORT

SOURCE: CITY OF HAMPTON GIS, 2014

0' 400' 800'

APPROXIMATE SCALE IN FEET

KEY

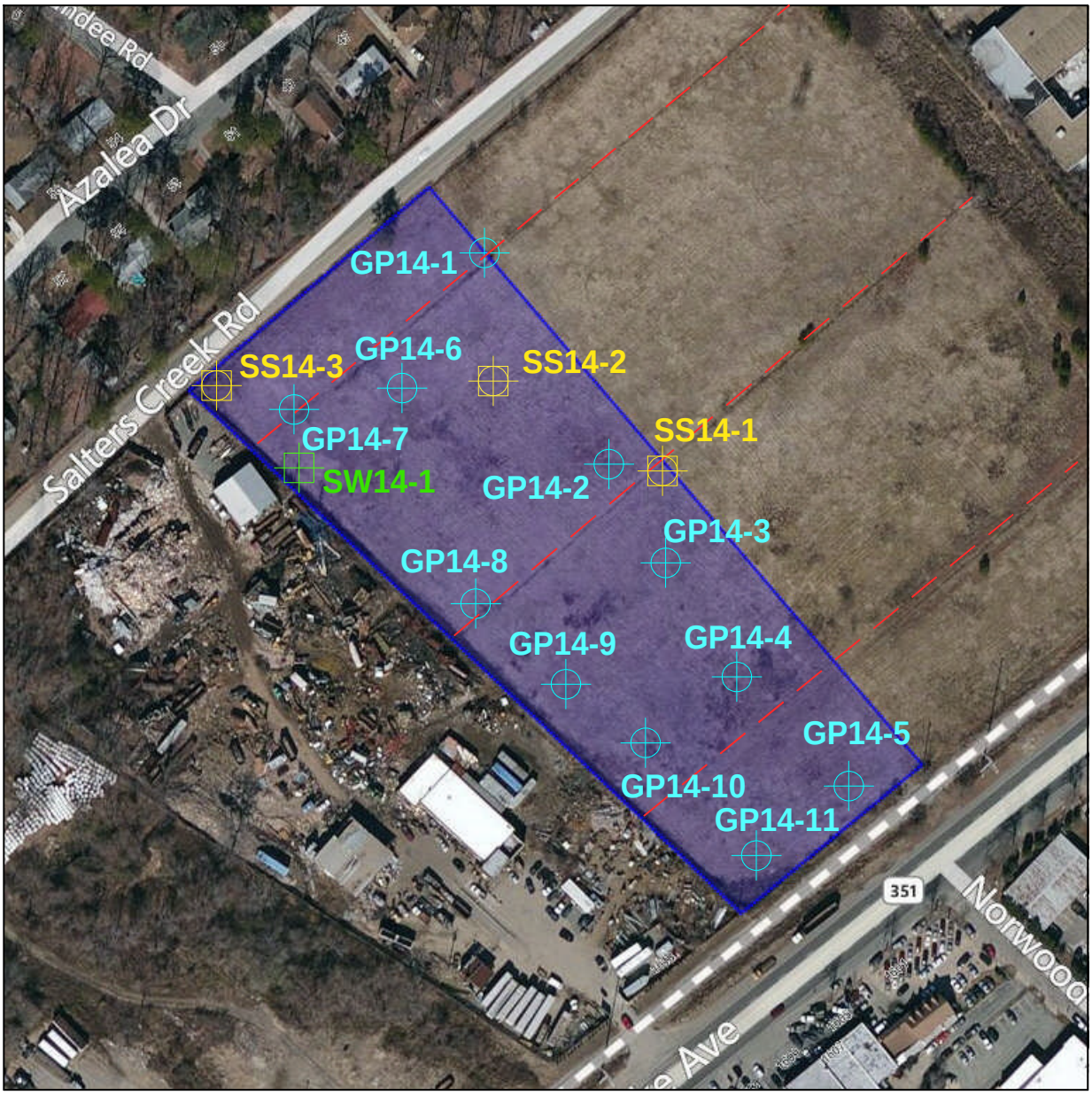
PARCEL AND BOUNDARY

MAY 12, 2014	DRAWN BY:DRC	PROJECT NO.: E18-10-T03P

FIGURE 2: PARCEL BOUNDARY MAP
1614 WEST PEMBROKE AVENUE
HAMPTON, VIRGINIA 23661

REMSA
RESEARCH, ENVIRONMENTAL & MANAGEMENT SUPPORT

SOURCE: CITY OF HAMPTON GIS, 2014



0' 200' 400'

APPROXIMATE SCALE IN FEET

KEY

- PARCEL AND BOUNDARY
- STORMWATER DITCH
- GEOPROBE SAMPLE LOCATION
- SURFACE SEDIMENT SAMPLE LOCATION
- SURFACE WATER SAMPLE LOCATION

MAY 12, 2014	DRAWN BY:DRC	PROJECT NO.: E18-10-T03P

FIGURE 3: SAMPLE LOCATION MAP
1614 WEST PEMBROKE AVENUE
HAMPTON, VIRGINIA 23661

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RESEARCH, ENVIRONMENTAL & MANAGEMENT SUPPORT

APPENDIX B

Miss Utility Disposition Ticket
And PID Calibration

From: tickets@missutilityofvirginia.com
To: Dan Christian
Subject: VUPS EMLCFM 2014/04/09 #03383 A409701608-00A NORM RESP LREQ
Date: Wednesday, April 09, 2014 2:39:29 PM

EMLCFM 03383 VUPSa 04/09/14 14:39:26 A409701608-00A RESPONSE

Thank you for calling "Miss Utility of Virginia"! This is an automatically generated response from the utilities who received your notice of excavation. If you have questions about the response, call the "field contact" for that utility. For your safety, please respect and protect the marks, excavate carefully around the marked utility lines and call the Miss Utility center if you see clear evidence of unmarked utilities.

811 - Remember, you can now reach Miss Utility by dialing our 3 digit toll free number - 811.

Ticket : A409701608 Rev: 00A Taken: 04/07/14 12:32 PM

State: VA Cnty: HAMPTON CITY Place:
Address : 1554-1614 PEMBROKE AVE W
Responses due by: 04/10/14 07:00 AM Expires: 04/29/14 07:00 AM

Click here to view any available utility site location information

Marking Code	Description	Response	
ATT	AT&T (ATT392)	04/09/14 02:39 PM	30
	No Conflict; utility is outside of stated work area.		
	Field Contact: LLOYD MAGOWN (903)753-3145		
	In the event of damage to a facility call: (800)252-1133		
HMP	HAMPTON CITY - SEWER (COH425)	04/07/14 02:01 PM	10
	Marked		
	Field Contact: BERNARD K JACKSON (757)810-4699		
	In the event of damage to a facility call: (757)727-8311		
DOM	DOMINION VIRGINIA POWER (DOM120)	04/09/14 12:49 PM	30
	No Conflict; utility is outside of stated work area.		
	Field Contact: LISA GILL (757)944-0638		
	In the event of damage to a facility call: (888)667-3000		
LTC	LEVEL 3 COMMUNICATIONS (LTC903)	04/08/14 02:46 PM	30
	No Conflict; utility is outside of stated work area.		
	Field Contact: CALL CENTER (877)366-8344		
	In the event of damage to a facility call: (877)366-8344		
NPN	NEWPORT NEWS CITY - WATER (NNWW76)	04/08/14 10:57 AM	30
	No Conflict; utility is outside of stated work area.		
	Field Contact: THERESA BARKA (757)234-4892		
	In the event of damage to a facility call: (757)234-4800		
VNG	VIRGINIA NATURAL GAS (VNG115)	04/09/14 09:27 AM	30
	No Conflict; utility is outside of stated work area.		
	Field Contact: LISA OLSON (757)951-7211		
	In the event of damage to a facility call: (877)572-3342		
VZN	VERIZON (VZN432)	04/09/14 12:49 PM	30
	No Conflict; utility is outside of stated work area.		
	Field Contact: LISA GILL (757)944-0638		
	In the event of damage to a facility call: (877)562-2253		

geotech

All equipment serviced by Geotech Environmental Equipment, Inc. is tested and calibrated using manufacturer recommended procedures and standards prior to being returned to the owner. Upon request, calibration and performance of many meters can be checked and documented for the customer as part of the standard service evaluation. Please contact a Geotech Environmental Equipment Sales Representative for details regarding any specific service or repair order.

Instrument	Serial Number	Date	Standard	Instrument Reading
Phocheck 1000	RMA #105881	01/24/14	100 ppm	101 ppm
100 ppm Iso	13-4638	01/24/14		
Nitrogen	38077-88	01/24/14		

Equipment Calibrated By: Brandon Hurley

Geotech Environmental Equipment, Inc.
2650 E. 40th Ave., Denver, CO 80205
Phone 303-320-4764 1-800-833-7958
Fax 303-322-7242
sales@geotechenv.com www.geotechenv.com

APPENDIX C

Field Notes

E18-10-T03P 4-10-14

11:25 start drilling GP14-1

11:45 collect soil samples 4'

0-4 50% recovery

0-4 ~~Dark~~ silty fill material
(black patches)

4-8 100% recovery

4-6 Dark silty loam, wet
8-10 Dark gray mottled
fine sandy loam

8-12 ~~100~~ 90% Recovery PRL

8-10 Dark gray mottled
fine sandy loam

10-12 Coarse and interlayed
with sandy loam

12:10 Collect GW samples 5'-10'
All collected

E18-10-T03P 4-10-14

Start drilling GP14-2 12:34

12:50 collect soil samples at 8'

0-4 60% Recovery

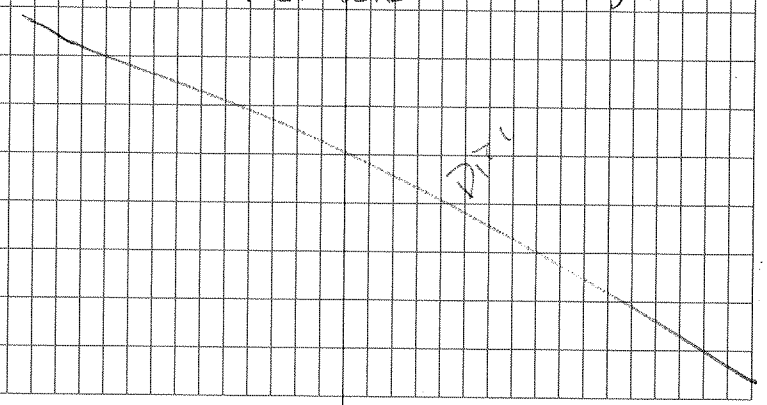
0-4 ~~silty~~ PRL
sand and silt with fill
Brick at bottom

4-8 0% Recovery

8-12 60% Recovery

8-9 silty sand
9-11 mottled clay loam
11-12 mottled sandy loam

1:10 collect GW at 5'-10'
Filled one amber L slow recharge
and 5 VOAs moving on



DT

514-10-T03P 4-10-14

1:30 Start drilling GP14-3

1:35 collect soil samples at 2'

0-4 50% recovery

0-2 moist silty loam w/ fill

2-4 dark gray fill material ~~silt~~ DRC

4-8 30% Recovery

4-8 dark gray fill material

8-12 60% Recovery

8-11 wet medium sand

11-12 mottled clay loam

1:55 Collect GW at 5'-10'

Slow Recharge filled 5 VOAs

2:30 fill out COCs

3:00 Leave Site

E18-10-TOSP 4-16-14

9:45 Onsite with Draw
Tim and helper arrived
40° Clear skies same time
10:15 Start Drilling GP14-4

0-4 60% Recovery
10:30 collect soil samples at 2'

0-4
Sandy loam w/ fill
material, moist

4-8 90% Recovery
4-5 sandy loam
5-6 coarse grey sand, wet
6-8 mottled coarse sand, wet

8-12 70% Recovery
8-10 mottled medium sand, wet
10-12 grey medium sand, moist
at 10' a 2" clay layer
11:00 collect all gw samples
5'-10'

E18-10-TOSP 4-16-14

11:15 Start Drilling GP14-5

0-4 35% Recovery
0-1 Dark silty loam, moist
1-3 mottled clay loam
3-4 Dark silty sand w/ fill, moist

4-8 80% Recovery
11:20 collect samples at 5'
4-6 Dark silty sand, moist
6-7 clay loam
7-8 medium mottled sand, wet

8-12 100% recovery
wet → 8-10 Medium sand grading to coarse sand w/ pebbles
10-11 clay loam mottled
11-12 mottled fine sand
11:35 Collect GW samples 5'-10'
Filled 6 VOAS and one amber 1L

E18-10-T03P 4-16-14

11:50 Start Drilling GP14-6

0-4 80% Recovery

11:58 Sample Soil at 4'

0-4 75% Recovery

0-1 moist silty loam

1-4 various fill materials (moist) at 4'

4-8 70% Recovery

4-5 fill material

5-6 clay loam

6-8 fine sand wet

8-12 20% Recovery

8-10 fine sandy loam

10-12 Dark fine sandy loam, wet

Collect GW samples at 5'-10'

12:25 all samples collected

E18-10-T03P 4-16-14

12:40 Start Drilling GP14-7

0-4 40% recovery

12:50 Collect soil samples at 4'

0-4 50% Recovery

0-1 Dark silty loam

1-3 Asphalt and other fill material

3-4 Dark fill material with sand

4-8 40% Recovery

4-5 Dark fill material

5-6 mottled clay loam

6-8 mottled fine sand loam

8-12 10% Recovery

8-12 Coarse sand, wet

1:00 Collect GW samples 5'-10'

E18-10-TO3P 4-16-14

1:15 Start drilling GP14-8

0-4 50% Recovery

1:20 collect soil samples at 2'

0-2 fill material with gravel and sand

2-3 dark silty loam with fill

3-4 dark silty loam

4-8 20% Recovery

4-8 dark silty loam

8-12 100% Recovery

8-9 dark sandy ~~silt~~ loam, moist

9-10 fine sand, wet

10-11 mottled medium sand, wet

11-12 clay (light gray)

1:40 collect gw samples at 5'-10'

slow recharge

collected 5 voas and one 250 mL w/o Nitric Acid

~~2:15~~ Leave Site

PHFA172

E18-10-TO3P 4-17-14

8:20 Arrive at site with Dan

40° clear skies, windy

8:45 Start drilling GP14-9

8:50 collect soil samples at 2'

0-4 70% Recovery

0-1 clay loam, mottled

2-4 dark fill material w/ sand and silt

4-8 30% recovery

4-8 silty loam, wet

8-12 100% Recovery

8-10 gray fine sandy silt, wet

10-11 sandy clay, mottled

11-12 gray clay

9:20 collect GW from 5'-10'

slow recharge, filled 5 voas and 1 amber 1L

E18-10 - T03P 4-17-14

9:38 Start Drilling GP14-10

9:45 Collect soil samples at 2'

0-4 60% recovery

0-1 clay loam, mottled

1-3 brick fill material

3-4 clay loam, gravel

4-8 60% recovery

4-5 fine sandy loam, wet

5-8 medium sand, wet

8-12

8-12 medium to coarse sand, wet

10:00 collect gw samples at 5'-10'

all gw collected

DIZ

E18-10-T03P 4-17-14

10:20 start drilling GP14-11

40' off of railroad fence

36' off of Old Dominion fence

10:30

Collect soil samples at 2'

0-4 80% Recovery

0-2 fill material

2-4 clay loam, mottled

4-8 70% recovery

4-7 clay loam, mottled

7-8 coarse mottled sand, wet

8-12 80% recovery

8-12 coarse mottled sand, wet

~~10:45~~ Collect gw at 5'-10'

DIZ 11:00

all gw collected

11:40 complete COC documentation

start walking to abandon wells

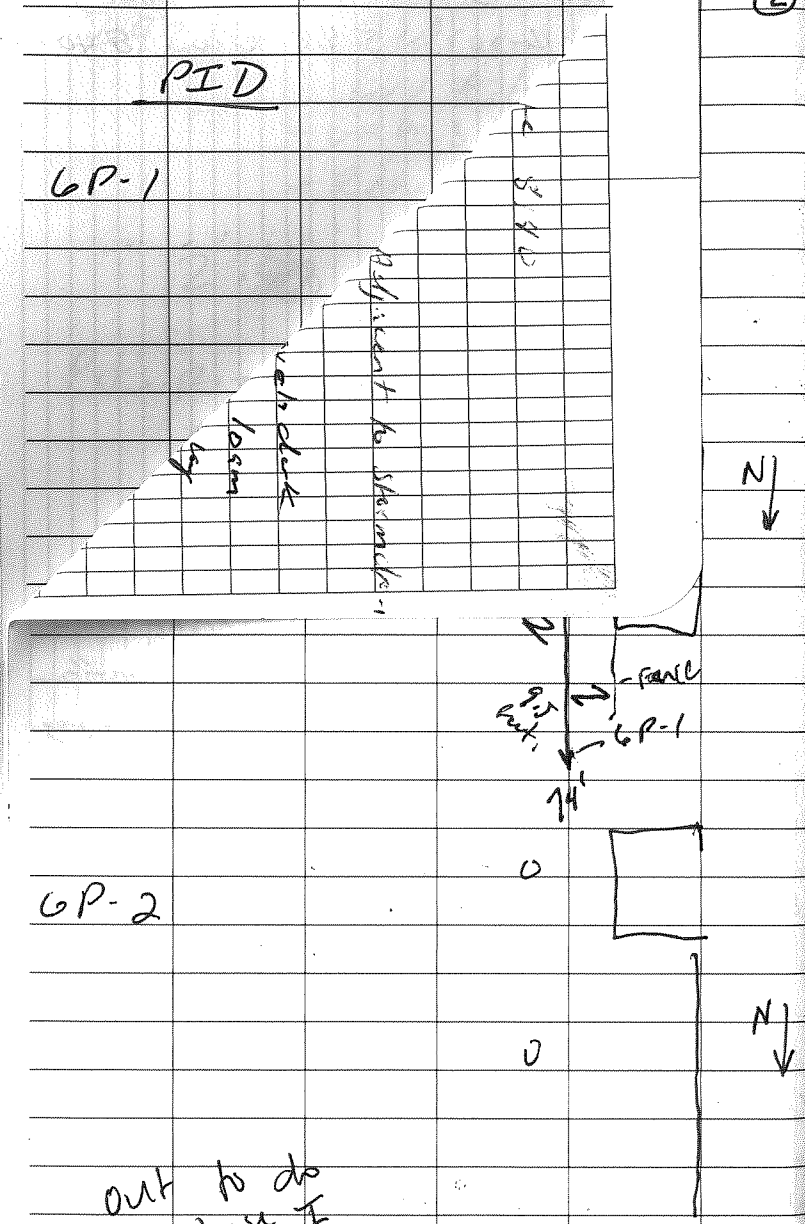
on 16th and 15th

*PHFA121

12:12 Leave Site

PID

6P-1



out to do phase I

E18-10-T03P

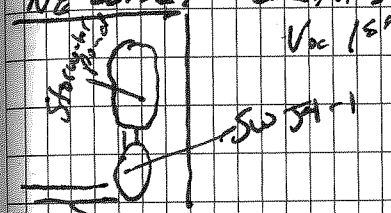
1554 West Pembroke 4/8/14

Troy, Dan, Mike, Drew on site at 8:40, Safety & Hasp discussed and Sampling protocols.

9:00 Am Troy and Drew move to NE corner of the site for Surface water and sediment samples

Begin	Surface water and Sediment	Finish
9:36	SW 54-1	9:45

NE corner water sample



Voc 1st

all samples collected by Troy Savage & A. Gowen.

Concrete diversion

Start			Finish
10:31	SW 54-1	One sample	10:37

Sediment voc 1st grey clay on bottom sample

10:37	SS 54-1	(1 vial broken and replaced)	10:45
11:03	SS-54-2	Brown/grey Clayey Silt.	11:09

Shallow water

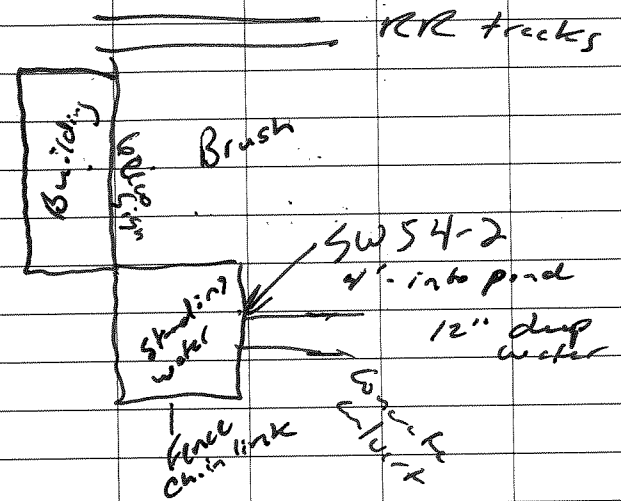
11:14	SS-54-3	11:21

in small narrow Brown/grey ditch - 6" water Clayey loam

TS

Start 11:50 SW 54-2 done ② 11:54

W Pembroke Road



C-O-C forms filled out V2:10
all samples on ice in cooler
Break for Lunch
photos collected for all locations

T.S.

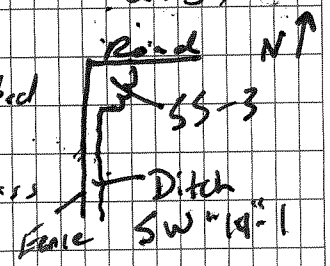
4/8/14

1614 West Pembroke

Sediment and surface water sampling
Troy Savage; A. Gower on site 1:45

Start			Finish
1:45	SS-"14"-1	drk grey with scrap metal and gravel	1:55
2:00	SS-"14"-2	light grey; Clay w/gravel	2:14
2:26	SS-"14"-3		2:37

NW corner of Site Next to barbed wire fence.
grey clay w/ glass and gravel



2:40 SW-"14"-1 2:44

On edge of fence
6" deep surface water in phragmitics
Some oil on surface of water
not iron deposits
offsite 2:48

END
T.S.

4-10 1654 w Pembrook

8:15 on site
8:30 @ Rig
Bail GP-10 recharge
2 1L Amber left @ 9:15
GP-11 Last 2 wt. Bottles
9:45
GP 6 - All but Last
2 1L Amber 10:15
10:27 back to GP-10 Not
10:39 PID

	GP:4	1	9	14-1	14-2	14-3
0-2	0.3	23.7	1.6	0.4	0.1	0.6
2-4	0.1	30.3	0.9	2.3	0.1	168
4-6	0.1	47.3	1.6	0.7	NS	34.
6-8	0.0	53.6	0.2	0.3	NS	37.
8-10	0.5	65.7	0.6	0.3	5.4	1.5
10-12	3.1	67.6	0.0	0.0	2.7	0.2

11:08 Set up GP-4 → bail
1123
3 of 5 40ml Vials only
→ GP1
11:45 → Filled all but
2 1L Amber
Let recharge

E1810-T03P PHFF 138 4-10-14

→ GP 10 then Lunch
One 1L Amber filled
11:58 + Partial → on Ice
Food! 12:10 → PID *Ice Run
12:27 PID GP 14-9 and 1
12:33 GP 14-1 PID
12:40 MOB 4-Runner to Dan
12:51 GP 54-6
Last 1L Amber?
1255 GP6 - Done
Back to GP-4
13:16 Filled GP 54-4
rest of vials 1 1L Amber
2 plastic + Attempting
One more 1L Amber
13:22 filled one Left!
→ GP-1 2 Amber 1L
Filled
GP1 Done. 13:33
PID 14-2 13:45
1352 GP-2 Sampling
1402 Filled Last 1L Amber
+ round plastic

Need: 4-10-14 14:00

GP-2 - Bailer for GP-2 ✓
- 2 Samples

GP-4 - One more Amber 1L to fill ✓

GP 54-4 Done @ 14:11

→ GP-10 to Finish 1L Amber
14:20

Fed Ex
15:16 Called

Back to
REMEA
@ 4:00

4-16-14 W. Pem E1810-T03P

9:50 on site
10:13

GP-14-2 Water Samples
10:25 1.5 Amber 1L Filled
→ Recharge.
10:47 Both 1L Amber Filled
Need two Plastic - Recharge
11:00 Round Plastic Done
Need Sq. Plastic ...
11:14 GP14-2 Done All on Ice

GP14-5 11:45 Dan Mob → #6
1.5 1L Amber + VOA Filled
*Need 2.5 1L Amber + 2 Plastic
Fill 0.5L of 1L Amber first on Ice
11:59 1L Amber 05B Filled
12:02 1L Amber 05D Filled
12:06 1L Amber 05C Filled
12:10 Plastics Filled

4-16-14 E18-10-T03P

PID

	12:22	12:30	13:15	14:02	14:05
GP	14-4	14-5	14-6	14-7	14-8
0-2	0.0	0.0	0.5	5.9	0.2
2-4	0.0	0.0	2.6	212	2.3
4-6	0.0	0.0	1.0	19.2	1.2
6-8	0.0	0.0	0.0	1.3	0.6
8-10	0.0	0.0	1.9	1.3	0.0
10-12	0.0	0.0	0.5	3.0	0.0

GP 14-7 13:20 Voa + one Partial 1L
Finish 1L Amber
Need Rest → Tomorrow

2:10 PID
Head Back
@ REMSA @ 2:30
COC Fed Ex

4-17 E18 10 T03P

GP14-7 8:20 Drillers on site
Sample H_2O GP-14-7
2 1L Amber + 2 Plastic
8:39 Both Amber Filled
8:50 Both Plastic Filled
* Done

GP 14-8 Need 3 1L Amber + one Plastic
9:08 1st Amber Filled
2nd Amber Half Filled
9:40 Very Slow recharge
10:00 Second 1L Filled + 1/10 next
10:34 3/4 L Filled of 1L
11:00
Done

GP14-9 10:07 1 1L Amber Filled
Need 1 more + Plastics
10:37 → 10:45
Done

4-17-14 E18-10-T03P

10:10 Disp off Sampler

10:20 PID

10:30 → back to GP8

10:35 " GP9

GP	14-9	14-10	14-11
0-2	0.0	0.0	0.0
2-4	0.4	0.0	0.0
4-6	0.0	0.0	0.2
6-8	0.0	0.0	0.0
8-10	0.0	0.0	0.0
10-12	0.0	0.0	0.0

10:45 back to GP-8

Done w/ meter @ 11:10

→ Dam + Rig

COC - Cooler

PID Done @ 11:11

pull wells + Trash

Back to REMSA

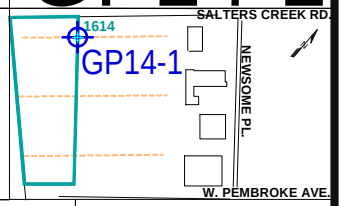
~ 1:00

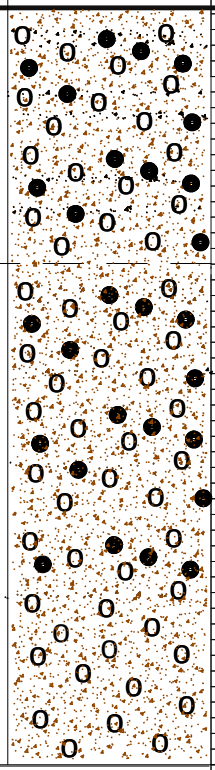
Fed-Ex Ready 1:35

APPENDIX D

Soil Boring Logs

SOIL BORING LOG

LOCATION: 1614 W. PEMBROKE AVE. HAMPTON, VIRGINIA	CLIENT: CITY OF HAMPTON, VIRGINIA PROPERTY #: #PIN/LRSN 1001353	BORING I.D. #: **GP14-1**
CONSULTANT: REMSA, INC. 124 W. QUEENS WAY HAMPTON, VA 23669 PROJECT #: E18-10-T03P LOGGED BY: DAN CHRISTIAN	DRILLER: FISHBURNE INC. DRILLING METHOD: 5410 GEOPROBE SAMPLING METHOD: ACETATE SLEEVE DATE DRILLED: APRIL 10, 2014 TOTAL BORING DEPTH: 12'	

LITHOLOGIC DESCRIPTION (COLOR, TEXTURE, SOIL CLASSIFICATION)	LITHOLOGIC INTERVAL (FEET)	GRAPHIC BORE LOG	DEPTH (FEET)	SAMPLE INTERVAL	VOC's (PPM)
DARK SILTY FILL MATERIAL (BLACK PATCHES) (GP)	0"- 4'		1'	0'- 2'	0.4
			2'		
			3'	2'- 4'	2.3
			4'		*
DARK SILTY LOAM (WET) (GP)	4'- 8'		5'	4'-6'	0.7
			6'		
			7'	6'-8'	0.3
			8'		
DARK GRAY MOTTLED FINE SANDY LOAM (GP)	8'-10'		9'	8'-10'	0.3
			10'		
COARSE SAND INTERLAYED WITH SANDY LOAM (GW)	10' - 12'		11'	10'-12'	0.0
			12'		
			13'		
			14'		
			15'		
			16'		
			17'		
			18'		
			19'		
			20'		

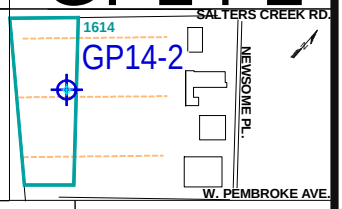
NOTES: SOIL SAMPLES COLLECTED APRIL 10, 2014
WATER SAMPLES COLLECTED APRIL 10, 16, 2014
RECOVERY: 0-4' 50% 4'-8' 100% 8'-12' 90%

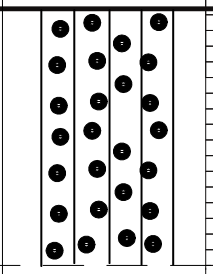
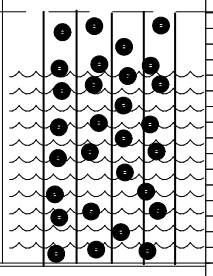
5'-10' GROUNDWATER SAMPLE DEPTH
GROUNDWATER TESTED FOR VOCs, SVOCs, TAL METALS, PCBs, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES IS DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7470A; 8082A; 8015C; AND 3500-CR D RESPECTIVELY.

SOIL SAMPLES TESTED FOR VOCs, SVOCs, TAL METALS, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7471B; 8015C; AND 7169A RESPECTIVELY.

"*" DENOTES SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS.

SOIL BORING LOG

LOCATION:	1614 W. PEMBROKE AVE. HAMPTON, VIRGINIA	CLIENT: CITY OF HAMPTON, VIRGINIA PROPERTY #: #PIN/LRSN 1001353	BORING I.D. #: GP14-2
CONSULTANT:	REMSA, INC. 124 W. QUEENS WAY HAMPTON, VA 23669	DRILLER: FISHBURNE INC. DRILLING METHOD: 5410 GEOPROBE SAMPLING METHOD: ACETATE SLEEVE	
PROJECT #:	E18-10-T03P	DATE DRILLED: APRIL 10, 2014	
LOGGED BY:	DAN CHRISTIAN	TOTAL BORING DEPTH: 12'	

LITHOLOGIC DESCRIPTION (COLOR, TEXTURE, SOIL CLASSIFICATION)	LITHOLOGIC INTERVAL (FEET)	GRAPHIC BORE LOG	DEPTH (FEET)	SAMPLE INTERVAL	VOC's (PPM)
SAND AND SILT WITH FILL (BRICK AT BOTTOM) (GM)	0"- 4'		1' 2' 3' 4'	0'- 2'	0.1
				2'- 4'	0.1
NO RECOVERY	4'- 8'	NO RECOVERY	5' 6' 7' 8'	4'-6'	NS
				6'-8'	NS
SILTY SAND (GM)	8'- 9'		9'	8'-10'	* 5.4
MOTTLED SANDY LOAM (GM)	9' - 12'		10' 11' 12'	10'-12'	2.7
			13' 14' 15' 16' 17' 18' 19' 20'		

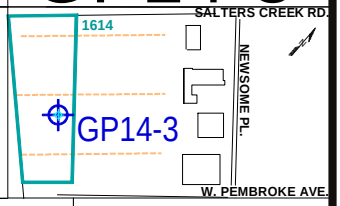
NOTES: SOIL SAMPLES COLLECTED APRIL 10, 2014
WATER SAMPLES COLLECTED APRIL 10, 16, 2014
RECOVERY: 0-4' 60% 4'-8' 0% 8'-12' 60%

5'-10' GROUNDWATER SAMPLE DEPTH
GROUNDWATER TESTED FOR VOCs, SVOCs, TAL METALS, PCBs, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES IS DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7470A; 8082A; 8015C; AND 3500-CR D RESPECTIVELY.

SOIL SAMPLES TESTED FOR VOCs, SVOCs, TAL METALS, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7471B; 8015C; AND 7169A RESPECTIVELY.

"*" DENOTES SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS.

SOIL BORING LOG

LOCATION: 1614 W. PEMBROKE AVE. HAMPTON, VIRGINIA	CLIENT: CITY OF HAMPTON, VIRGINIA PROPERTY #: #PIN/LRSN 1001353	BORING I.D. #: **GP14-3**
CONSULTANT: REMSA, INC. 124 W. QUEENS WAY HAMPTON, VA 23669 PROJECT #: E18-10-T03P LOGGED BY: DAN CHRISTIAN	DRILLER: FISHBURNE INC. DRILLING METHOD: 5410 GEOPROBE SAMPLING METHOD: ACETATE SLEEVE DATE DRILLED: APRIL 10, 2014 TOTAL BORING DEPTH: 12'	

LITHOLOGIC DESCRIPTION (COLOR, TEXTURE, SOIL CLASSIFICATION)	LITHOLOGIC INTERVAL (FEET)	GRAPHIC BORE LOG	DEPTH (FEET)	SAMPLE INTERVAL	VOC's (PPM)
MOIST SILTY LOAM (Pt)	0" - 2'		1'	0'- 2'	0.6
			2'		*
DARK GRAY FILL MATERIAL (GP)	2'- 4'		3'	2'- 4'	16.8
			4'		
			5'	4'-6'	34.5
DARK GRAY FILL MATERIAL (GP)	4'- 8'		6'		
			7'	6'-8'	37.4
			8'		
MEDIUM SAND (GW)	8'- 11'		9'	8'-10'	1.5
			10'		
MOTTLED CLAY LOAM (CL)	11'- 12'		11'	10'-12'	0.2
			12'		
			13'		
			14'		
			15'		
			16'		
			17'		
			18'		
			19'		
			20'		

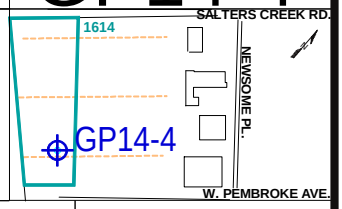
NOTES: SOIL SAMPLES COLLECTED APRIL 10, 2014
WATER SAMPLES COLLECTED APRIL 10, 16, 2014
RECOVERY: 0-4' 50% 4'-8' 30% 8'-12' 60%

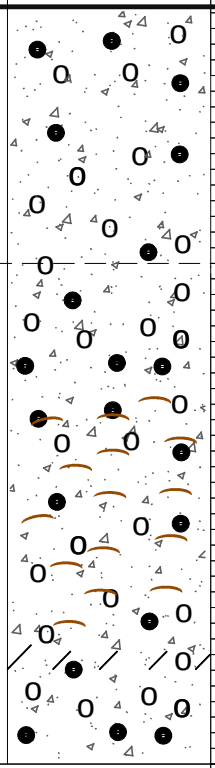
5'-10' GROUNDWATER SAMPLE DEPTH
GROUNDWATER TESTED FOR VOCs, SVOCs, TAL METALS, PCBs, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES IS DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7470A; 8082A; 8015C; AND 3500-CR D RESPECTIVELY.

SOIL SAMPLES TESTED FOR VOCs, SVOCs, TAL METALS, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7471B; 8015C; AND 7169A RESPECTIVELY.

"*" DENOTES SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS.

SOIL BORING LOG

LOCATION:	1614 W. PEMBROKE AVE. HAMPTON, VIRGINIA	CLIENT: CITY OF HAMPTON, VIRGINIA PROPERTY #: #PIN/LRSN 1001353	BORING I.D. #: GP14-4
CONSULTANT:	REMSA, INC. 124 W. QUEENS WAY HAMPTON, VA 23669	DRILLER: FISHBURNE INC. DRILLING METHOD: 5410 GEOPROBE SAMPLING METHOD: ACETATE SLEEVE	
PROJECT #:	E18-10-T03P	DATE DRILLED: APRIL 16, 2014	
LOGGED BY:	DAN CHRISTIAN	TOTAL BORING DEPTH: 12'	

LITHOLOGIC DESCRIPTION (COLOR, TEXTURE, SOIL CLASSIFICATION)	LITHOLOGIC INTERVAL (FEET)	GRAPHIC BORE LOG	DEPTH (FEET)	SAMPLE INTERVAL	VOC's (PPM)
SANDY LOAM WITH FILL MATERIAL (MOIST) (GP)	0" - 4'		1'	0'- 2'	0.0
			2'		*
			3'	2'- 4'	0.0
			4'		
SANDY LOAM (GP)	4'- 5'		5'	4'-6'	0.0
COARSE GRAY SAND (GP)	5'- 6'		6'		
MOTTLED COARSE SAND (WET) (GP)	6'-8'		7'	6'-8'	0.0
			8'		
MOTTLED MEDIUM SAND (WET) (GP)	8'- 10'		9'	8'-10'	0.0
CLAY LAYER 10' 2" (CL)			10'		
GRAY MEDIUM SAND (MOIST) (GP)	10'- 12'		11'	10'-12'	0.0
			12'		
			13'		
			14'		
			15'		
			16'		
			17'		
			18'		
			19'		
			20'		

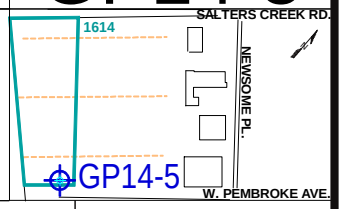
NOTES: SOIL SAMPLES COLLECTED APRIL 16, 2014
WATER SAMPLES COLLECTED APRIL 16, 2014
RECOVERY: 0-4' 60% 4'-8' 90% 8'-12' 70%

5'-10' GROUNDWATER SAMPLE DEPTH
GROUNDWATER TESTED FOR VOCs, SVOCs, TAL METALS, PCBs, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES IS DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7470A; 8082A; 8015C; AND 3500-CR D RESPECTIVELY.

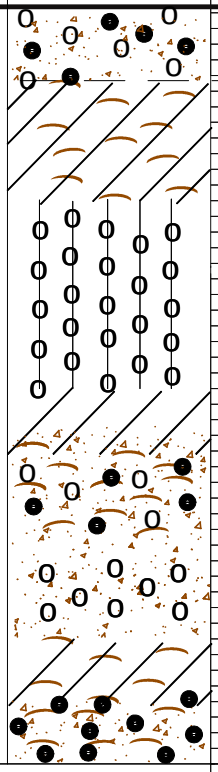
SOIL SAMPLES TESTED FOR VOCs, SVOCs, TAL METALS, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7471B; 8015C; AND 7169A RESPECTIVELY.

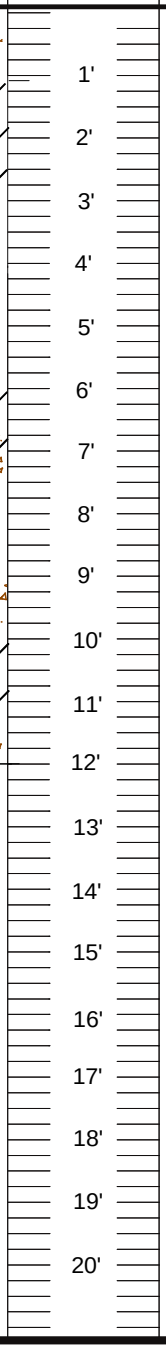
"*" DENOTES SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS.

SOIL BORING LOG

LOCATION: 1614 W. PEMBROKE AVE. HAMPTON, VIRGINIA	CLIENT: CITY OF HAMPTON, VIRGINIA PROPERTY #: #PIN/LRSN 1001353	BORING I.D. #: **GP14-5**
CONSULTANT: REMSA, INC. 124 W. QUEENS WAY HAMPTON, VA 23669 PROJECT #: E18-10-T03P LOGGED BY: DAN CHRISTIAN	DRILLER: FISHBURNE INC. DRILLING METHOD: 5410 GEOPROBE SAMPLING METHOD: ACETATE SLEEVE DATE DRILLED: APRIL 16, 2014 TOTAL BORING DEPTH: 12'	

LITHOLOGIC DESCRIPTION (COLOR, TEXTURE, SOIL CLASSIFICATION)		LITHOLOGIC INTERVAL (FEET)	SAMPLE INTERVAL	VOC's (PPM)
DARK SILTY LOAM (MOIST)	(GP)	0" - 1'	0'- 2'	0.0
MOTTLED CLAY LOAM	(CL)	1'- 3'	2'- 4'	0.0
DARK SILTY SAND WITH FILL	(SM)	3'- 4'		
DARK SILTY SAND (MOIST)	(SM)	4'- 6'	4'-6'	* 0.0
CLAY LOAM	(CL)	6'- 7'	6'-8'	0.0
MEDIUM MOTTLED SAND	(GP)	7'- 8'		
MEDIUM SAND GRADING TO COARSE SAND WITH PEBBLES	(GW)	8'- 10'	8'-10'	0.0
CLAY LOAM MOTTLED	(CL)	10'- 11'	10'-12'	0.0
MOTTLED FINE SAND	(GM)	11'- 12'		





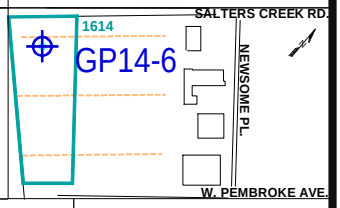
NOTES: SOIL SAMPLES COLLECTED APRIL 16, 2014
WATER SAMPLES COLLECTED APRIL 16, 17, 2014
RECOVERY: 0-4' 35% 4'-8' 80% 8'-12' 100%

5'-10' GROUNDWATER SAMPLE DEPTH
GROUNDWATER TESTED FOR VOCs, SVOCs, TAL METALS, PCBs, TPH-DRO, TPH-GRO, HEXAVALENT CHROMIUM, TCL PESTICIDES, AND TCL HERBICIDES. ANALYSES IS DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7470A; 8082A; 8015C; 3500-CR D; 8081B; AND 8151A RESPECTIVELY.

SOIL SAMPLES TESTED FOR VOCs, SVOCs, TAL METALS, TPH-DRO, TPH-GRO HEXAVALENT CHROMIUM, TCL PESTICIDES, AND TCL HERBICIDES. ANALYSES DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7471B; 8015C; 7169A; 8081B; AND 8151A RESPECTIVELY.

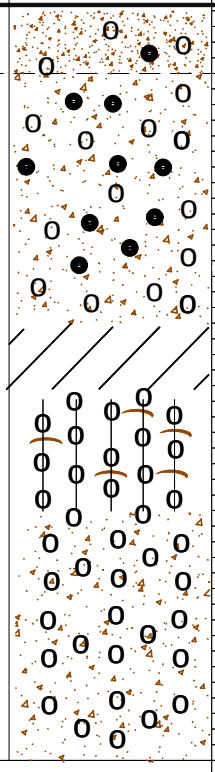
"*" DENOTES SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS.

SOIL BORING LOG

LOCATION: 1614 W. PEMBROKE AVE. HAMPTON, VIRGINIA	CLIENT: CITY OF HAMPTON, VIRGINIA PROPERTY #: #PIN/LRSN 1001353	BORING I.D. #: **GP14-6**
CONSULTANT: REMSA, INC. 124 W. QUEENS WAY HAMPTON, VA 23669 PROJECT #: E18-10-T03P LOGGED BY: DAN CHRISTIAN	DRILLER: FISHBURNE INC. DRILLING METHOD: 5410 GEOPROBE SAMPLING METHOD: ACETATE SLEEVE DATE DRILLED: APRIL 16, 2014 TOTAL BORING DEPTH: 12'	

LITHOLOGIC DESCRIPTION (COLOR, TEXTURE, SOIL CLASSIFICATION)		LITHOLOGIC INTERVAL (FEET)
DARK SILTY LOAM	(GP)	0" - 1'
ASPHALT AND OTHER FILL MATERIAL	(GP)	1'- 3'
DARK FILL MATERIAL WITH SAND	(GP)	3'- 4'
DARK FILL MATERIAL	(GP)	4'- 5'
MOTTLED CLAY LOAM	(CL)	5'- 6'
MOTTLED FINE LOAM	(GM)	6'- 8'
COARSE SAND (WET)	(GW)	8'- 12'

GRAPHIC BORE LOG



DEPTH (FEET)	SAMPLE INTERVAL	VOC's (PPM)
1'	0'- 2'	0.5
2'		
3'	2'- 4'	2.6
4'		*
5'	4'-6'	1.0
6'		
7'	6'-8'	0.0
8'		
9'	8'-10'	1.9
10'		
11'	10'-12'	0.5
12'		
13'		
14'		
15'		
16'		
17'		
18'		
19'		
20'		

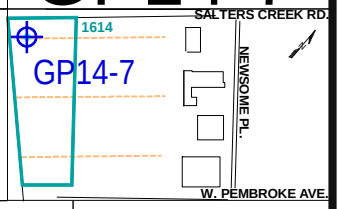
NOTES: SOIL SAMPLES COLLECTED APRIL 16, 2014
WATER SAMPLES COLLECTED APRIL 16, 2014
RECOVERY: 0-4' 80% 4'-8' 70% 8'-12' 20%

5'-10' GROUNDWATER SAMPLE DEPTH
GROUNDWATER TESTED FOR VOCs, SVOCs, TAL METALS, PCBs, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES IS DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7470A; 8082A; 8015C; AND 3500-CR D RESPECTIVELY.

SOIL SAMPLES TESTED FOR VOCs, SVOCs, TAL METALS, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7471B; 8015C; AND 7169A RESPECTIVELY.

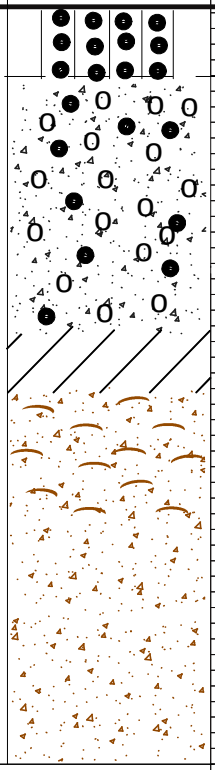
"*" DENOTES SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS.

SOIL BORING LOG

LOCATION: 1614 W. PEMBROKE AVE. HAMPTON, VIRGINIA	CLIENT: CITY OF HAMPTON, VIRGINIA PROPERTY #: #PIN/LRSN 1001353	BORING I.D. #: GP14-7
CONSULTANT: REMSA, INC. 124 W. QUEENS WAY HAMPTON, VA 23669 PROJECT #: E18-10-T03P LOGGED BY: DAN CHRISTIAN	DRILLER: FISHBURNE INC. DRILLING METHOD: 5410 GEOPROBE SAMPLING METHOD: ACETATE SLEEVE DATE DRILLED: APRIL 16, 2014 TOTAL BORING DEPTH: 12'	

LITHOLOGIC DESCRIPTION (COLOR, TEXTURE, SOIL CLASSIFICATION)		LITHOLOGIC INTERVAL (FEET)	SAMPLE INTERVAL	VOC's (PPM)
DARK SILTY LOAM	(GM)	0" - 1'	0'- 2'	0.2
ASPHALT AND OTHER FILL MATERIAL	(GP)	1'- 3'	2'- 4'	0.1
DARK FILL MATERIAL WITH SAND	(GP)	3'- 4'		
DARK FILL MATERIAL	(GP)	4'- 5'	4'-6'	0.2 *
CLAY LOAM	(CL)	5'- 6'		
MOTTLED FINE SAND LOAM	(GM)	6'- 8'	6'-8'	0.1
COARSE SAND (WET)	(GW)	8'- 12'	8'-10'	0.5
			10'-12'	0.2

GRAPHIC BORE LOG



DEPTH (FEET): 1', 2', 3', 4', 5', 6', 7', 8', 9', 10', 11', 12', 13', 14', 15', 16', 17', 18', 19', 20'

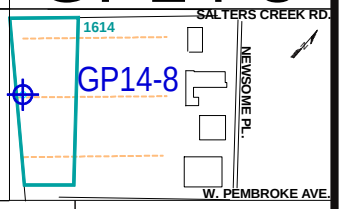
NOTES: SOIL SAMPLES COLLECTED APRIL 16, 2014
WATER SAMPLES COLLECTED APRIL 16, 2014
RECOVERY: 0-4' 50% 4'-8' 40% 8'-12' 10%

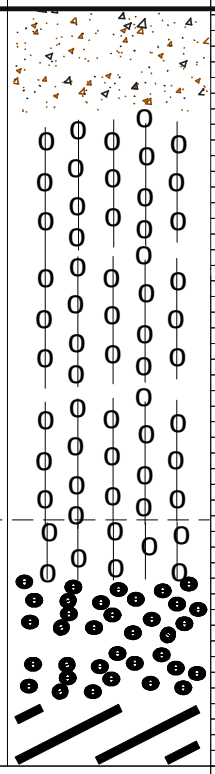
5'-10' GROUNDWATER SAMPLE DEPTH
GROUNDWATER TESTED FOR VOCs, SVOCs, TAL METALS, PCBs, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES IS DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7470A; 8082A; 8015C; AND 3500-CR D RESPECTIVELY.

SOIL SAMPLES TESTED FOR VOCs, SVOCs, TAL METALS, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7471B; 8015C; AND 7169A RESPECTIVELY.

"*" DENOTES SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS.

SOIL BORING LOG

LOCATION: 1614 W. PEMBROKE AVE. HAMPTON, VIRGINIA	CLIENT: CITY OF HAMPTON, VIRGINIA PROPERTY #: #PIN/LRSN 1001353	BORING I.D. #: **GP14-8**
CONSULTANT: REMSA, INC. 124 W. QUEENS WAY HAMPTON, VA 23669 PROJECT #: E18-10-T03P LOGGED BY: DAN CHRISTIAN	DRILLER: FISHBURNE INC. DRILLING METHOD: 5410 GEOPROBE SAMPLING METHOD: ACETATE SLEEVE DATE DRILLED: APRIL 16, 2014 TOTAL BORING DEPTH: 12'	

LITHOLOGIC DESCRIPTION (COLOR, TEXTURE, SOIL CLASSIFICATION)	LITHOLOGIC INTERVAL (FEET)	GRAPHIC BORE LOG	DEPTH (FEET)	SAMPLE INTERVAL	VOC's (PPM)
FILL MATERIAL WITH GRAVEL AND SAND	0"- 2'		1'	0'- 2'	0.2
DARK SILTY LOAM WITH FILL (SM)	2'- 3'		2'		*
DARK SILTY LOAM (SM)	3'- 4'		3'	2'- 4'	2.3
			4'		
DARK SILTY LOAM (SM)	4'- 8'		5'	4'-6'	1.2
			6'		
			7'	6'-8'	0.6
			8'		
SANDY LOAM (WET) (SM)	8'- 9'		9'	8'-10'	0.0
FINE SAND (WET) (SP)	9'- 10'		10'		
MOTTLED MEDIUM SAND (WET) (SP)	10'- 11'		11'	10'-12'	0.0
CLAY (LIGHT GREY) (CH)	11'- 12'		12'		
			13'		
			14'		
			15'		
			16'		
			17'		
			18'		
			19'		
			20'		

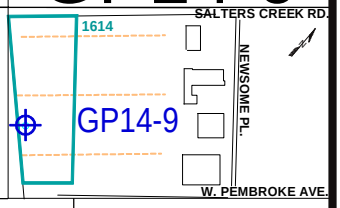
NOTES: SOIL SAMPLES COLLECTED APRIL 16, 2014
WATER SAMPLES COLLECTED APRIL 16, 17, 2014
RECOVERY: 0-4' 50% 4'-8' 20% 8'-12' 100%

5'-10' GROUNDWATER SAMPLE DEPTH
GROUNDWATER TESTED FOR VOCs, SVOCs, TAL METALS, PCBs, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES IS DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7470A; 8082A; 8015C; AND 3500-CR D RESPECTIVELY.

SOIL SAMPLES TESTED FOR VOCs, SVOCs, TAL METALS, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7471B; 8015C; AND 7169A RESPECTIVELY.

"*" DENOTES SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS.

SOIL BORING LOG

LOCATION: 1614 W. PEMBROKE AVE. HAMPTON, VIRGINIA	CLIENT: CITY OF HAMPTON, VIRGINIA PROPERTY #: #PIN/LRSN 1001353	BORING I.D. #: **GP14-9**
CONSULTANT: REMSA, INC. 124 W. QUEENS WAY HAMPTON, VA 23669 PROJECT #: E18-10-T03P LOGGED BY: DAN CHRISTIAN	DRILLER: FISHBURNE INC. DRILLING METHOD: 5410 GEOPROBE SAMPLING METHOD: ACETATE SLEEVE DATE DRILLED: APRIL 17, 2014 TOTAL BORING DEPTH: 12'	

LITHOLOGIC DESCRIPTION (COLOR, TEXTURE, SOIL CLASSIFICATION)		LITHOLOGIC INTERVAL (FEET)	GRAPHIC BORE LOG	DEPTH (FEET)	SAMPLE INTERVAL	VOC's (PPM)
MOTTLED CLAY LOAM	(CL)	0"- 1'		1'	0'- 2'	0.0
DARK FILL MATERIAL WITH SAND AND SILT	(SM)	1'- 4'		2' 3' 4'	2'- 4' *	0.4
SILTY LOAM (WET)	(SM)	4'- 8'		5' 6' 7' 8'	4'-6' 6'-8'	0.0 0.0
FINE SANDY SILT	(SM)	8'- 10'		9' 10'	8'-10'	0.0
MOTTLED SANDY CLAY	(SC)	10'- 11'		11'	10'-12'	0.0
CLAY (LIGHT GREY)	(CH)	11'- 12'		12' 13' 14' 15' 16' 17' 18' 19' 20'		

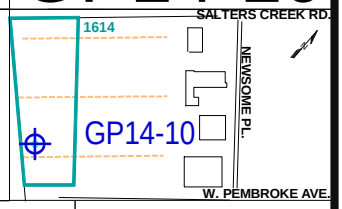
NOTES: SOIL SAMPLES COLLECTED APRIL 17, 2014
WATER SAMPLES COLLECTED APRIL 17, 2014
RECOVERY: 0-4' 70% 4'-8' 30% 8'-12' 100%

5'-10' GROUNDWATER SAMPLE DEPTH
GROUNDWATER TESTED FOR VOCs, SVOCs, TAL METALS, PCBs, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES IS DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7470A; 8082A; 8015C; AND 3500-CR D RESPECTIVELY.

SOIL SAMPLES TESTED FOR VOCs, SVOCs, TAL METALS, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7471B; 8015C; AND 7169A RESPECTIVELY.

"*" DENOTES SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS.

SOIL BORING LOG

LOCATION:	1614 W. PEMBROKE AVE. HAMPTON, VIRGINIA	CLIENT: CITY OF HAMPTON, VIRGINIA PROPERTY #: #PIN/LRSN 1001353	BORING I.D. #: GP14-10
CONSULTANT:	REMSA, INC. 124 W. QUEENS WAY HAMPTON, VA 23669	DRILLER: FISHBURNE INC. DRILLING METHOD: 5410 GEOPROBE SAMPLING METHOD: ACETATE SLEEVE	
PROJECT #:	E18-10-T03P	DATE DRILLED: APRIL 17, 2014	
LOGGED BY:	DAN CHRISTIAN	TOTAL BORING DEPTH: 12'	

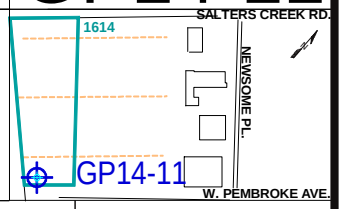
LITHOLOGIC DESCRIPTION (COLOR, TEXTURE, SOIL CLASSIFICATION)		LITHOLOGIC INTERVAL (FEET)	GRAPHIC BORE LOG	DEPTH (FEET)	SAMPLE INTERVAL	VOC's (PPM)
MOTTLED CLAY LOAM	(CL)	0"- 1'		1'	0'- 2'	0.0
DARK FILL MATERIAL		1'- 3'		2'		*
CLAY LOAM (GREY)	(CL)	3'- 4'		3'	2'- 4'	0.0
FINE SANDY LOAM (WET)	(SM)	4'- 5'		4'		
				5'	4'-6'	0.0
MEDIUM SAND (WET)	(SW)	5'- 8'		6'		
				7'	6'-8'	0.0
				8'		
MEDIUM TO COARSE SAND (WET)	(SW)	8'- 12'		9'	8'-10'	0.0
				10'		
				11'	10'-12'	0.0
				12'		
				13'		
				14'		
				15'		
				16'		
				17'		
				18'		
				19'		
				20'		

NOTES: SOIL SAMPLES COLLECTED APRIL 17, 2014
WATER SAMPLES COLLECTED APRIL 17, 2014
RECOVERY: 0-4' 60% 4'-8' 60% 8'-12' UNDOCUMENTED

5'-10' GROUNDWATER SAMPLE DEPTH
GROUNDWATER TESTED FOR VOCs, SVOCs, TAL METALS, PCBs, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES IS DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7470A; 8082A; 8015C; AND 3500-CR D RESPECTIVELY.

SOIL SAMPLES TESTED FOR VOCs, SVOCs, TAL METALS, TPH-DRO, TPH-GRO AND HEXAVALENT CHROMIUM.
ANALYSES DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7471B; 8015C; AND 7169A RESPECTIVELY.

SOIL BORING LOG

LOCATION: 1614 W. PEMBROKE AVE. HAMPTON, VIRGINIA	CLIENT: CITY OF HAMPTON, VIRGINIA PROPERTY #: #PIN/LRSN 1001353	BORING I.D. #: **GP14-11**
CONSULTANT: REMSA, INC. 124 W. QUEENS WAY HAMPTON, VA 23669 PROJECT #: E18-10-T03P LOGGED BY: DAN CHRISTIAN	DRILLER: FISHBURNE INC. DRILLING METHOD: 5410 GEOPROBE SAMPLING METHOD: ACETATE SLEEVE DATE DRILLED: APRIL 17, 2014 TOTAL BORING DEPTH: 12'	

LITHOLOGIC DESCRIPTION (COLOR, TEXTURE, SOIL CLASSIFICATION)	LITHOLOGIC INTERVAL (FEET)	GRAPHIC BORE LOG	DEPTH (FEET)	SAMPLE INTERVAL		VOC's (PPM)
FILL MATERIAL	0"- 2'		1'	0'- 2'	*	0.0
MOTTLED CLAY LOAM (CL)	2'- 4'		2' 3'	2'- 4'		0.0
MOTTLED CLAY LOAM (CL)	4'- 7'		4' 5' 6'	4'-6'		0.2
MOTTLED COARSE SAND (WET) (SW)	7'- 8'		7' 8'	6'-8'		0.0
MOTTLED COARSE SAND (WET) (SW)	8'- 12'		9' 10' 11'	8'-10'		0.0
			12'	10'-12'		0.0
			13' 14' 15' 16' 17' 18' 19' 20'			

NOTES: SOIL SAMPLES COLLECTED APRIL 17, 2014
WATER SAMPLES COLLECTED APRIL 17, 2014
RECOVERY: 0-4' 80% 4'-8' 70% 8'-12' 80%

5'-10' GROUNDWATER SAMPLE DEPTH
GROUNDWATER TESTED FOR VOCs, SVOCs, TAL METALS, PCBs, TPH-DRO, TPH-GRO, HEXAVALENT CHROMIUM, TCL PESTICIDES, AND TCL HERBICIDES. ANALYSES IS DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7470A; 8082A; 8015C; 3500-CR D; 8081B; AND 8151A RESPECTIVELY.

SOIL SAMPLES TESTED FOR VOCs, SVOCs, TAL METALS, TPH-DRO, TPH-GRO HEXAVALENT CHROMIUM, TCL PESTICIDES, AND TCL HERBICIDES. ANALYSES DONE BY EPA SW846 METHODS: 8260B; 8270D; 6010C/7471B; 8015C; 7169A; 8081B; AND 8151A RESPECTIVELY.

"*" DENOTES SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS.

APPENDIX E

ENCO Chain of Custody and Laboratory Reports

ENCO Laboratories

Accurate. Timely. Responsive. Innovative.

102-A Woodwinds Industrial Court
Cary NC, 27511
Phone: 919.467.3090 FAX: 919.467.3515

Wednesday, April 23, 2014
REMSA, Inc. (RE026)
Attn: Mike Iwashchenko
124 W. Queens Way
Hampton, VA 23669

RE: Laboratory Results for
Project Number: E-18-10-T03P, Project Name/Desc: 1614 West Pembroke Avenue
ENCO Workorder(s): C404168

Dear Mike Iwashchenko,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Wednesday, April 9, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: SS-1 **Lab ID: C404168-01** **Sampled: 04/08/14 13:55** **Received: 04/09/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/05/14		04/14/14	11:31	04/18/14 12:43
EPA 7196A	05/08/14	04/19/14	04/12/14	09:19	04/14/14 13:50
EPA 7471B	05/06/14		04/10/14	11:06	04/11/14 15:32
EPA 8260B	04/22/14		04/17/14	14:38	04/18/14 02:52
EPA 8270D	04/22/14	05/24/14	04/14/14	07:00	04/15/14 20:37

Client ID: SS-1 **Lab ID: C404168-01RE1** **Sampled: 04/08/14 13:55** **Received: 04/09/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	04/22/14		04/21/14	15:42	04/22/14 01:04
EPA 8270D	04/22/14	05/24/14	04/14/14	07:00	04/16/14 15:09

Client ID: SS-2 **Lab ID: C404168-02** **Sampled: 04/08/14 14:14** **Received: 04/09/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/05/14		04/14/14	11:31	04/18/14 12:45
EPA 7196A	05/08/14	04/19/14	04/12/14	09:19	04/14/14 13:50
EPA 7471B	05/06/14		04/10/14	11:06	04/11/14 15:34
EPA 8260B	04/22/14		04/17/14	14:38	04/18/14 03:25
EPA 8270D	04/22/14	05/24/14	04/14/14	07:00	04/15/14 21:05

Client ID: SS-2 **Lab ID: C404168-02RE1** **Sampled: 04/08/14 14:14** **Received: 04/09/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	04/22/14		04/21/14	15:42	04/22/14 01:38

Client ID: SS-3 **Lab ID: C404168-03** **Sampled: 04/08/14 14:37** **Received: 04/09/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/05/14		04/14/14	11:31	04/18/14 12:47
EPA 7196A	05/08/14	04/19/14	04/12/14	09:19	04/14/14 13:50
EPA 7471B	05/06/14		04/10/14	11:06	04/11/14 15:37
EPA 8260B	04/22/14		04/17/14	14:38	04/18/14 03:57
EPA 8270D	04/22/14	05/24/14	04/14/14	07:00	04/15/14 21:33

Client ID: SS-3 **Lab ID: C404168-03RE1** **Sampled: 04/08/14 14:37** **Received: 04/09/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/05/14		04/14/14	11:31	04/18/14 13:33
EPA 8260B	04/22/14		04/21/14	15:42	04/22/14 02:12

Client ID: Trip Blank **Lab ID: C404168-04** **Sampled: 04/08/14 13:55** **Received: 04/09/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	04/22/14		04/17/14	14:54	04/18/14 22:33

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SAMPLE DETECTION SUMMARY

Client ID: SS-1 **Lab ID: C404168-01**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	7290		2.83	13.5	mg/kg dry	EPA 6010C	
Antimony - Total	2.49		0.148	1.35	mg/kg dry	EPA 6010C	
Arsenic - Total	2.99		0.135	0.674	mg/kg dry	EPA 6010C	
Barium - Total	78.4		0.135	0.674	mg/kg dry	EPA 6010C	
Beryllium - Total	0.233		0.0162	0.0674	mg/kg dry	EPA 6010C	
Cadmium - Total	0.741		0.0129	0.0674	mg/kg dry	EPA 6010C	
Calcium - Total	2790	B	7.55	33.7	mg/kg dry	EPA 6010C	QB-01
Chromium - Total	16.7		0.135	0.674	mg/kg dry	EPA 6010C	
Cobalt - Total	2.54		0.135	0.674	mg/kg dry	EPA 6010C	
Copper - Total	28.7		0.256	0.674	mg/kg dry	EPA 6010C	
Fluoranthene	0.99	JD	0.74	2.2	mg/kg dry	EPA 8270D	R-01
Iron - Total	12100	B	0.647	3.37	mg/kg dry	EPA 6010C	QB-01
Lead - Total	157		0.162	0.674	mg/kg dry	EPA 6010C	
Magnesium - Total	1170	B	0.876	33.7	mg/kg dry	EPA 6010C	QB-01
Manganese - Total	93.8		0.135	0.674	mg/kg dry	EPA 6010C	
Mercury - Total	0.124		0.00846	0.0294	mg/kg dry	EPA 7471B	
Nickel - Total	13.5		0.485	3.37	mg/kg dry	EPA 6010C	
Potassium - Total	588		5.39	33.7	mg/kg dry	EPA 6010C	
Pyrene	0.83	JD	0.74	2.2	mg/kg dry	EPA 8270D	R-01
Selenium - Total	0.613	JB	0.135	0.674	mg/kg dry	EPA 6010C	J-01
Sodium - Total	44.1		8.09	33.7	mg/kg dry	EPA 6010C	
Vanadium - Total	15.6		0.135	0.674	mg/kg dry	EPA 6010C	
Zinc - Total	234		1.48	3.37	mg/kg dry	EPA 6010C	

Client ID: SS-1 **Lab ID: C404168-01RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	0.97	D	0.20	0.58	mg/kg dry	EPA 8260B	

Client ID: SS-2 **Lab ID: C404168-02**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	10500		2.60	12.4	mg/kg dry	EPA 6010C	
Antimony - Total	0.787	J	0.136	1.24	mg/kg dry	EPA 6010C	
Arsenic - Total	1.88		0.124	0.619	mg/kg dry	EPA 6010C	
Barium - Total	41.0		0.124	0.619	mg/kg dry	EPA 6010C	
Beryllium - Total	0.174		0.0149	0.0619	mg/kg dry	EPA 6010C	
Cadmium - Total	0.0178	J	0.0119	0.0619	mg/kg dry	EPA 6010C	
Calcium - Total	1920	B	6.93	30.9	mg/kg dry	EPA 6010C	QB-01
Chromium - Total	11.5		0.124	0.619	mg/kg dry	EPA 6010C	
Cobalt - Total	1.84		0.124	0.619	mg/kg dry	EPA 6010C	
Copper - Total	7.62		0.235	0.619	mg/kg dry	EPA 6010C	
Iron - Total	7040	B	0.594	3.09	mg/kg dry	EPA 6010C	QB-01
Lead - Total	21.5		0.149	0.619	mg/kg dry	EPA 6010C	
Magnesium - Total	448	B	0.804	30.9	mg/kg dry	EPA 6010C	QB-01
Manganese - Total	24.9		0.124	0.619	mg/kg dry	EPA 6010C	
Mercury - Total	0.0411		0.00854	0.0297	mg/kg dry	EPA 7471B	
Nickel - Total	5.37		0.446	3.09	mg/kg dry	EPA 6010C	
Potassium - Total	486		4.95	30.9	mg/kg dry	EPA 6010C	
Selenium - Total	0.208	JB	0.124	0.619	mg/kg dry	EPA 6010C	J-01
Sodium - Total	33.3		7.43	30.9	mg/kg dry	EPA 6010C	
Vanadium - Total	16.1		0.124	0.619	mg/kg dry	EPA 6010C	
Zinc - Total	24.4		1.36	3.09	mg/kg dry	EPA 6010C	

Client ID: SS-2 **Lab ID: C404168-02RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	1.0	D	0.14	0.41	mg/kg dry	EPA 8260B	

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SAMPLE DETECTION SUMMARY

Client ID: SS-3 **Lab ID: C404168-03**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	11900		2.72	12.9	mg/kg dry	EPA 6010C	
Benzo(a)anthracene	1.1	JD	0.84	2.1	mg/kg dry	EPA 8270D	R-01
Benzo(a)pyrene	1.1	JD	0.50	2.1	mg/kg dry	EPA 8270D	R-01
Benzo(b)fluoranthene	1.8	JD	0.71	2.1	mg/kg dry	EPA 8270D	R-01
Benzo(k)fluoranthene	0.73	JD	0.71	2.1	mg/kg dry	EPA 8270D	R-01
Chrysene	1.1	JD	0.84	2.1	mg/kg dry	EPA 8270D	R-01
Fluoranthene	1.7	JD	0.71	2.1	mg/kg dry	EPA 8270D	R-01
Hexavalent Chromium	1.1	J	0.19	1.3	mg/kg dry	EPA 7196A	
Mercury - Total	0.231		0.00893	0.0310	mg/kg dry	EPA 7471B	
Pyrene	1.3	JD	0.71	2.1	mg/kg dry	EPA 8270D	R-01

Client ID: SS-3 **Lab ID: C404168-03RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	1.1	D	0.17	0.49	mg/kg dry	EPA 8260B	
Aluminum - Total	11300	D	5.43	25.9	mg/kg dry	EPA 6010C	R-01
Antimony - Total	2.59	D	0.285	2.59	mg/kg dry	EPA 6010C	R-01
Arsenic - Total	6.58	D	0.259	1.29	mg/kg dry	EPA 6010C	R-01
Barium - Total	122	D	0.259	1.29	mg/kg dry	EPA 6010C	R-01
Beryllium - Total	0.248	D	0.0310	0.129	mg/kg dry	EPA 6010C	R-01
Cadmium - Total	2.64	D	0.0248	0.129	mg/kg dry	EPA 6010C	R-01
Calcium - Total	2690	BD	14.5	64.7	mg/kg dry	EPA 6010C	QB-01, R-01
Chromium - Total	15.4	D	0.259	1.29	mg/kg dry	EPA 6010C	R-01
Cobalt - Total	3.54	D	0.259	1.29	mg/kg dry	EPA 6010C	R-01
Copper - Total	66.7	D	0.492	1.29	mg/kg dry	EPA 6010C	R-01
Iron - Total	12700	BD	1.24	6.47	mg/kg dry	EPA 6010C	QB-01
Lead - Total	250	D	0.310	1.29	mg/kg dry	EPA 6010C	R-01
Magnesium - Total	632	BD	1.68	64.7	mg/kg dry	EPA 6010C	QB-01, R-01
Manganese - Total	226	D	0.259	1.29	mg/kg dry	EPA 6010C	R-01
Nickel - Total	22.3	D	0.931	6.47	mg/kg dry	EPA 6010C	R-01
Potassium - Total	631	D	10.3	64.7	mg/kg dry	EPA 6010C	R-01
Selenium - Total	0.342	JBD	0.259	1.29	mg/kg dry	EPA 6010C	R-01, J-01
Sodium - Total	130	D	15.5	64.7	mg/kg dry	EPA 6010C	R-01
Vanadium - Total	16.9	D	0.259	1.29	mg/kg dry	EPA 6010C	R-01
Zinc - Total	702	D	2.85	6.47	mg/kg dry	EPA 6010C	R-01

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ANALYTICAL RESULTS

Description:	SS-1	**Lab Sample ID:**	C404168-01	**Received:**	04/09/14 10:15
Matrix:	Sediment	**Sampled:**	04/08/14 13:55	**Work Order:**	C404168
Project:	1614 West Pembroke Avenue	**Sampled By:**	Andrew Gowen	**% Solids:**	74.18

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**7290**		mg/kg dry	1	2.83	13.5	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Antimony [7440-36-0]	**2.49**		mg/kg dry	1	0.148	1.35	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Arsenic [7440-38-2]^	**2.99**		mg/kg dry	1	0.135	0.674	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Barium [7440-39-3]^	**78.4**		mg/kg dry	1	0.135	0.674	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Beryllium [7440-41-7]	**0.233**		mg/kg dry	1	0.0162	0.0674	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Cadmium [7440-43-9]^	**0.741**		mg/kg dry	1	0.0129	0.0674	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Calcium [7440-70-2]	**2790**	B	mg/kg dry	1	7.55	33.7	4D10028	EPA 6010C	04/18/14 12:43	JDH	QB-01
Chromium [7440-47-3]^	**16.7**		mg/kg dry	1	0.135	0.674	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Cobalt [7440-48-4]	**2.54**		mg/kg dry	1	0.135	0.674	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Copper [7440-50-8]	**28.7**		mg/kg dry	1	0.256	0.674	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Iron [7439-89-6]	**12100**	B	mg/kg dry	1	0.647	3.37	4D10028	EPA 6010C	04/18/14 12:43	JDH	QB-01
Lead [7439-92-1]^	**157**		mg/kg dry	1	0.162	0.674	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Magnesium [7439-95-4]	**1170**	B	mg/kg dry	1	0.876	33.7	4D10028	EPA 6010C	04/18/14 12:43	JDH	QB-01
Manganese [7439-96-5]	**93.8**		mg/kg dry	1	0.135	0.674	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Mercury [7439-97-6]^	**0.124**		mg/kg dry	1	0.00846	0.0294	4D10022	EPA 7471B	04/11/14 15:32	T1D	
Nickel [7440-02-0]	**13.5**		mg/kg dry	1	0.485	3.37	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Potassium [7440-09-7]	**588**		mg/kg dry	1	5.39	33.7	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Selenium [7782-49-2]^	**0.613**	JB	mg/kg dry	1	0.135	0.674	4D10028	EPA 6010C	04/18/14 12:43	JDH	J-01
Silver [7440-22-4]^	0.135	U	mg/kg dry	1	0.135	0.674	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Sodium [7440-23-5]	**44.1**		mg/kg dry	1	8.09	33.7	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Thallium [7440-28-0]	0.135	U	mg/kg dry	1	0.135	0.674	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Vanadium [7440-62-2]^	**15.6**		mg/kg dry	1	0.135	0.674	4D10028	EPA 6010C	04/18/14 12:43	JDH	
Zinc [7440-66-6]^	**234**		mg/kg dry	1	1.48	3.37	4D10028	EPA 6010C	04/18/14 12:43	JDH	

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
1,1,2-Trichloroethane [79-00-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
1,1-Dichloroethane [75-34-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
1,1-Dichloroethene [75-35-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
1,2,4-Trichlorobenzene [120-82-1]^	0.0009	U	mg/kg dry	1	0.0009	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
1,2-Dibromoethane [106-93-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
1,2-Dichlorobenzene [95-50-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
1,2-Dichloroethane [107-06-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
1,2-Dichloropropane [78-87-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
1,3-Dichlorobenzene [541-73-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
1,4-Dichlorobenzene [106-46-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
2-Butanone [78-93-3]^	0.0020	U	mg/kg dry	1	0.0020	0.0054	4D17022	EPA 8260B	04/18/14 02:52	kat	
2-Hexanone [591-78-6]^	0.0010	U	mg/kg dry	1	0.0010	0.0054	4D17022	EPA 8260B	04/18/14 02:52	kat	
4-Methyl-2-pentanone [108-10-1]^	0.0015	U	mg/kg dry	1	0.0015	0.0054	4D17022	EPA 8260B	04/18/14 02:52	kat	
Acetone [67-64-1]^	**0.97**	D	mg/kg dry	100	0.20	0.58	4D21017	EPA 8260B	04/22/14 01:04	KAT	
Benzene [71-43-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Bromochloromethane [74-97-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Bromodichloromethane [75-27-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Bromoform [75-25-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	

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ANALYTICAL RESULTS

Description:	SS-1	**Lab Sample ID:**	C404168-01	**Received:**	04/09/14 10:15
Matrix:	Sediment	**Sampled:**	04/08/14 13:55	**Work Order:**	C404168
Project:	1614 West Pembroke Avenue	**Sampled By:**	Andrew Gowen	**% Solids:**	74.18

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bromomethane [74-83-9]^	0.0010	U	mg/kg dry	1	0.0010	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Carbon disulfide [75-15-0]^	0.0023	U	mg/kg dry	1	0.0023	0.0054	4D17022	EPA 8260B	04/18/14 02:52	kat	
Carbon Tetrachloride [56-23-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Chlorobenzene [108-90-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Chloroethane [75-00-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Chloroform [67-66-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Chloromethane [74-87-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
cis-1,2-Dichloroethene [156-59-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
cis-1,3-Dichloropropene [10061-01-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Cyclohexane [110-82-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0022	4D17022	EPA 8260B	04/18/14 02:52	kat	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Dichlorodifluoromethane [75-71-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Ethylbenzene [100-41-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Freon 113 [76-13-1]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Isopropylbenzene [98-82-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Methyl acetate [79-20-9]^	0.0017	U	mg/kg dry	1	0.0017	0.0022	4D17022	EPA 8260B	04/18/14 02:52	kat	
Methyl cyclohexane [108-87-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0022	4D17022	EPA 8260B	04/18/14 02:52	kat	
Methylene Chloride [75-09-2]^	0.0008	U	mg/kg dry	1	0.0008	0.0022	4D17022	EPA 8260B	04/18/14 02:52	kat	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Styrene [100-42-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Tetrachloroethene [127-18-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Toluene [108-88-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
trans-1,2-Dichloroethene [156-60-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
trans-1,3-Dichloropropene [10061-02-6]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Trichloroethene [79-01-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Trichlorofluoromethane [75-69-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Vinyl chloride [75-01-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D17022	EPA 8260B	04/18/14 02:52	kat	
Xylenes (Total) [1330-20-7]^	0.0011	U	mg/kg dry	1	0.0011	0.0022	4D17022	EPA 8260B	04/18/14 02:52	kat	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.055*	*1*	*0.0544*	*101 %*	*71-126*	*4D17022*	*EPA 8260B*	*04/18/14 02:52*	*kat*	
4-Bromofluorobenzene	*0.062*	*1*	*0.0582*	*107 %*	*71-126*	*4D21017*	*EPA 8260B*	*04/22/14 01:04*	*KAT*	
Dibromofluoromethane	*0.053*	*1*	*0.0544*	*98 %*	*72-133*	*4D17022*	*EPA 8260B*	*04/18/14 02:52*	*kat*	
Dibromofluoromethane	*0.057*	*1*	*0.0582*	*98 %*	*72-133*	*4D21017*	*EPA 8260B*	*04/22/14 01:04*	*KAT*	
Toluene-d8	*0.048*	*1*	*0.0544*	*89 %*	*80-123*	*4D17022*	*EPA 8260B*	*04/18/14 02:52*	*kat*	
Toluene-d8	*0.056*	*1*	*0.0582*	*97 %*	*80-123*	*4D21017*	*EPA 8260B*	*04/22/14 01:04*	*KAT*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.49	UD	mg/kg dry	5	0.49	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2,4,5-Trichlorophenol [95-95-4]^	0.45	UD	mg/kg dry	5	0.45	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2,4,6-Trichlorophenol [88-06-2]^	1.0	UD	mg/kg dry	5	1.0	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2,4-Dichlorophenol [120-83-2]^	1.7	UD	mg/kg dry	5	1.7	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2,4-Dimethylphenol [105-67-9]^	1.6	UD	mg/kg dry	5	1.6	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2,4-Dinitrophenol [51-28-5]^	0.60	UD	mg/kg dry	5	0.60	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2,4-Dinitrotoluene [121-14-2]^	1.1	UD	mg/kg dry	5	1.1	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2,6-Dinitrotoluene [606-20-2]^	1.2	UD	mg/kg dry	5	1.2	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01

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ANALYTICAL RESULTS

Description: SS-1	**Lab Sample ID:** C404168-01	**Received:** 04/09/14 10:15
Matrix: Sediment	**Sampled:** 04/08/14 13:55	**Work Order:** C404168
Project: 1614 West Pembroke Avenue	**Sampled By:** Andrew Gowen	**% Solids:** 74.18

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2-Chloronaphthalene [91-58-7]^	0.66	UD	mg/kg dry	5	0.66	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2-Chlorophenol [95-57-8]^	1.6	UD	mg/kg dry	5	1.6	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2-Methyl-4,6-dinitrophenol [534-52-1]^	1.9	UD	mg/kg dry	5	1.9	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2-Methylnaphthalene [91-57-6]^	0.81	UD	mg/kg dry	5	0.81	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2-Methylphenol [95-48-7]^	0.74	UD	mg/kg dry	5	0.74	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2-Nitroaniline [88-74-4]^	0.57	UD	mg/kg dry	5	0.57	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
2-Nitrophenol [88-75-5]^	1.8	UD	mg/kg dry	5	1.8	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
3 & 4-Methylphenol [108-39-4/106-44-5]^	1.7	UD	mg/kg dry	5	1.7	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
3,3'-Dichlorobenzidine [91-94-1]^	1.4	UD	mg/kg dry	5	1.4	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
3-Nitroaniline [99-09-2]^	0.54	UD	mg/kg dry	5	0.54	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
4-Bromophenyl-phenylether [101-55-3]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
4-Chloro-3-methylphenol [59-50-7]^	1.9	UD	mg/kg dry	5	1.9	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
4-Chloroaniline [106-47-8]^	0.44	UD	mg/kg dry	5	0.44	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
4-Chlorophenyl-phenylether [7005-72-3]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
4-Nitroaniline [100-01-6]^	1.8	UD	mg/kg dry	5	1.8	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
4-Nitrophenol [100-02-7]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Acenaphthene [83-32-9]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Acenaphthylene [208-96-8]^	0.81	UD	mg/kg dry	5	0.81	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Acetophenone [98-86-2]^	0.94	UD	mg/kg dry	5	0.94	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Anthracene [120-12-7]^	1.0	UD	mg/kg dry	5	1.0	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Atrazine [1912-24-9]^	0.50	UD	mg/kg dry	5	0.50	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Benzaldehyde [100-52-7]^	1.8	UD	mg/kg dry	5	1.8	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Benzo(a)anthracene [56-55-3]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Benzo(a)pyrene [50-32-8]^	1.1	UD	mg/kg dry	10	1.1	4.4	4D14001	EPA 8270D	04/16/14 15:09	jfi	R-01
Benzo(b)fluoranthene [205-99-2]^	1.5	UD	mg/kg dry	10	1.5	4.4	4D14001	EPA 8270D	04/16/14 15:09	jfi	R-01
Benzo(g,h,i)perylene [191-24-2]^	1.1	UD	mg/kg dry	5	1.1	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Benzo(k)fluoranthene [207-08-9]^	0.74	UD	mg/kg dry	5	0.74	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Bis(2-chloroethoxy)methane [111-91-1]^	1.0	UD	mg/kg dry	5	1.0	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	QV-01, R-01
Bis(2-chloroethyl)ether [111-44-4]^	0.94	UD	mg/kg dry	5	0.94	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Bis(2-chloroisopropyl)ether [108-60-1]^	0.67	UD	mg/kg dry	5	0.67	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Butylbenzylphthalate [85-68-7]^	0.94	UD	mg/kg dry	5	0.94	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Caprolactam [105-60-2]^	2.0	UD	mg/kg dry	5	2.0	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	QL-02, R-01
Carbazole [86-74-8]^	0.81	UD	mg/kg dry	5	0.81	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Chrysene [218-01-9]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Dibenzo(a,h)anthracene [53-70-3]^	0.94	UD	mg/kg dry	5	0.94	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Dibenzofuran [132-64-9]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Diethylphthalate [84-66-2]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Dimethylphthalate [131-11-3]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Di-n-butylphthalate [84-74-2]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Di-n-octylphthalate [117-84-0]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Fluoranthene [206-44-0]^	**0.99**	JD	mg/kg dry	5	0.74	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Fluorene [86-73-7]	0.94	UD	mg/kg dry	5	0.94	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Hexachlorobenzene [118-74-1]^	0.81	UD	mg/kg dry	5	0.81	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Hexachlorobutadiene [87-68-3]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Hexachlorocyclopentadiene [77-47-4]^	1.0	UD	mg/kg dry	5	1.0	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01

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ANALYTICAL RESULTS

Description: SS-1	**Lab Sample ID:** C404168-01	**Received:** 04/09/14 10:15
Matrix: Sediment	**Sampled:** 04/08/14 13:55	**Work Order:** C404168
Project: 1614 West Pembroke Avenue	**Sampled By:** Andrew Gowen	**% Solids:** 74.18

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexachloroethane [67-72-1]^	0.67	UD	mg/kg dry	5	0.67	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.94	UD	mg/kg dry	5	0.94	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Isophorone [78-59-1]^	1.1	UD	mg/kg dry	5	1.1	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Naphthalene [91-20-3]^	0.81	UD	mg/kg dry	5	0.81	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Nitrobenzene [98-95-3]^	1.0	UD	mg/kg dry	5	1.0	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
N-Nitroso-di-n-propylamine [621-64-7]^	1.0	UD	mg/kg dry	5	1.0	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	1.6	UD	mg/kg dry	5	1.6	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Pentachlorophenol [87-86-5]^	1.4	UD	mg/kg dry	5	1.4	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Phenanthrene [85-01-8]^	0.88	UD	mg/kg dry	5	0.88	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Phenol [108-95-2]^	0.67	UD	mg/kg dry	5	0.67	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01
Pyrene [129-00-0]^	**0.83**	JD	mg/kg dry	5	0.74	2.2	4D14001	EPA 8270D	04/15/14 20:37	jfi	R-01

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.7*	*5*	*2.25*	*77 %*	*23-137*	*4D14001*	*EPA 8270D*	*04/15/14 20:37*	*jfi*	*R-01*
2-Fluorobiphenyl	*1.9*	*5*	*2.25*	*83 %*	*29-119*	*4D14001*	*EPA 8270D*	*04/15/14 20:37*	*jfi*	*R-01*
2-Fluorophenol	*1.8*	*5*	*2.25*	*82 %*	*20-124*	*4D14001*	*EPA 8270D*	*04/15/14 20:37*	*jfi*	*R-01*
Nitrobenzene-d5	*1.4*	*5*	*2.25*	*60 %*	*17-126*	*4D14001*	*EPA 8270D*	*04/15/14 20:37*	*jfi*	*R-01*
Phenol-d5	*1.9*	*5*	*2.25*	*84 %*	*15-131*	*4D14001*	*EPA 8270D*	*04/15/14 20:37*	*jfi*	*R-01*
Terphenyl-d14	*2.3*	*5*	*2.25*	*101 %*	*60-120*	*4D14001*	*EPA 8270D*	*04/15/14 20:37*	*jfi*	*R-01*

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.20	U	mg/kg dry	1	0.20	1.3	4D12005	EPA 7196A	04/14/14 13:50	RMM	

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ANALYTICAL RESULTS

Description:	SS-2	**Lab Sample ID:**	C404168-02	**Received:**	04/09/14 10:15
Matrix:	Sediment	**Sampled:**	04/08/14 14:14	**Work Order:**	C404168
Project:	1614 West Pembroke Avenue	**Sampled By:**	Andrew Gowen	**% Solids:**	80.80

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**10500**		mg/kg dry	1	2.60	12.4	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Antimony [7440-36-0]	**0.787**	J	mg/kg dry	1	0.136	1.24	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Arsenic [7440-38-2]^	**1.88**		mg/kg dry	1	0.124	0.619	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Barium [7440-39-3]^	**41.0**		mg/kg dry	1	0.124	0.619	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Beryllium [7440-41-7]	**0.174**		mg/kg dry	1	0.0149	0.0619	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Cadmium [7440-43-9]^	**0.0178**	J	mg/kg dry	1	0.0119	0.0619	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Calcium [7440-70-2]	**1920**	B	mg/kg dry	1	6.93	30.9	4D10028	EPA 6010C	04/18/14 12:45	JDH	QB-01
Chromium [7440-47-3]^	**11.5**		mg/kg dry	1	0.124	0.619	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Cobalt [7440-48-4]	**1.84**		mg/kg dry	1	0.124	0.619	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Copper [7440-50-8]	**7.62**		mg/kg dry	1	0.235	0.619	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Iron [7439-89-6]	**7040**	B	mg/kg dry	1	0.594	3.09	4D10028	EPA 6010C	04/18/14 12:45	JDH	QB-01
Lead [7439-92-1]^	**21.5**		mg/kg dry	1	0.149	0.619	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Magnesium [7439-95-4]	**448**	B	mg/kg dry	1	0.804	30.9	4D10028	EPA 6010C	04/18/14 12:45	JDH	QB-01
Manganese [7439-96-5]	**24.9**		mg/kg dry	1	0.124	0.619	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Mercury [7439-97-6]^	**0.0411**		mg/kg dry	1	0.00854	0.0297	4D10022	EPA 7471B	04/11/14 15:34	T1D	
Nickel [7440-02-0]	**5.37**		mg/kg dry	1	0.446	3.09	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Potassium [7440-09-7]	**486**		mg/kg dry	1	4.95	30.9	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Selenium [7782-49-2]^	**0.208**	JB	mg/kg dry	1	0.124	0.619	4D10028	EPA 6010C	04/18/14 12:45	JDH	J-01
Silver [7440-22-4]^	0.124	U	mg/kg dry	1	0.124	0.619	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Sodium [7440-23-5]	**33.3**		mg/kg dry	1	7.43	30.9	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Thallium [7440-28-0]	0.124	U	mg/kg dry	1	0.124	0.619	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Vanadium [7440-62-2]^	**16.1**		mg/kg dry	1	0.124	0.619	4D10028	EPA 6010C	04/18/14 12:45	JDH	
Zinc [7440-66-6]^	**24.4**		mg/kg dry	1	1.36	3.09	4D10028	EPA 6010C	04/18/14 12:45	JDH	

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0003	U	mg/kg dry	1	0.0003	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
1,1,2-Trichloroethane [79-00-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
1,1-Dichloroethane [75-34-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
1,1-Dichloroethene [75-35-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
1,2,4-Trichlorobenzene [120-82-1]^	0.0008	U	mg/kg dry	1	0.0008	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0005	U	mg/kg dry	1	0.0005	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
1,2-Dibromoethane [106-93-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
1,2-Dichlorobenzene [95-50-1]^	0.0004	U	mg/kg dry	1	0.0004	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
1,2-Dichloroethane [107-06-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
1,2-Dichloropropane [78-87-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
1,3-Dichlorobenzene [541-73-1]^	0.0004	U	mg/kg dry	1	0.0004	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
1,4-Dichlorobenzene [106-46-7]^	0.0004	U	mg/kg dry	1	0.0004	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
2-Butanone [78-93-3]^	0.0016	U	mg/kg dry	1	0.0016	0.0046	4D17022	EPA 8260B	04/18/14 03:25	kat	
2-Hexanone [591-78-6]^	0.0008	U	mg/kg dry	1	0.0008	0.0046	4D17022	EPA 8260B	04/18/14 03:25	kat	
4-Methyl-2-pentanone [108-10-1]^	0.0013	U	mg/kg dry	1	0.0013	0.0046	4D17022	EPA 8260B	04/18/14 03:25	kat	
Acetone [67-64-1]^	**1.0**	D	mg/kg dry	100	0.14	0.41	4D21017	EPA 8260B	04/22/14 01:38	KAT	
Benzene [71-43-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Bromochloromethane [74-97-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Bromodichloromethane [75-27-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Bromoform [75-25-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	

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ANALYTICAL RESULTS

Description:	SS-2	**Lab Sample ID:**	C404168-02	**Received:**	04/09/14 10:15
Matrix:	Sediment	**Sampled:**	04/08/14 14:14	**Work Order:**	C404168
Project:	1614 West Pembroke Avenue	**Sampled By:**	Andrew Gowen	**% Solids:**	80.80

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bromomethane [74-83-9]^	0.0008	U	mg/kg dry	1	0.0008	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Carbon disulfide [75-15-0]^	0.0019	U	mg/kg dry	1	0.0019	0.0046	4D17022	EPA 8260B	04/18/14 03:25	kat	
Carbon Tetrachloride [56-23-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Chlorobenzene [108-90-7]^	0.0004	U	mg/kg dry	1	0.0004	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Chloroethane [75-00-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Chloroform [67-66-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Chloromethane [74-87-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
cis-1,2-Dichloroethene [156-59-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
cis-1,3-Dichloropropene [10061-01-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Cyclohexane [110-82-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0018	4D17022	EPA 8260B	04/18/14 03:25	kat	
Dibromochloromethane [124-48-1]^	0.0002	U	mg/kg dry	1	0.0002	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Dichlorodifluoromethane [75-71-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Ethylbenzene [100-41-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Freon 113 [76-13-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Isopropylbenzene [98-82-8]^	0.0005	U	mg/kg dry	1	0.0005	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Methyl acetate [79-20-9]^	0.0015	U	mg/kg dry	1	0.0015	0.0018	4D17022	EPA 8260B	04/18/14 03:25	kat	
Methyl cyclohexane [108-87-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0018	4D17022	EPA 8260B	04/18/14 03:25	kat	
Methylene Chloride [75-09-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0018	4D17022	EPA 8260B	04/18/14 03:25	kat	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0002	U	mg/kg dry	1	0.0002	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Styrene [100-42-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Tetrachloroethene [127-18-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Toluene [108-88-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
trans-1,2-Dichloroethene [156-60-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
trans-1,3-Dichloropropene [10061-02-6]^	0.0003	U	mg/kg dry	1	0.0003	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Trichloroethene [79-01-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Trichlorofluoromethane [75-69-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Vinyl chloride [75-01-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0009	4D17022	EPA 8260B	04/18/14 03:25	kat	
Xylenes (Total) [1330-20-7]^	0.0009	U	mg/kg dry	1	0.0009	0.0018	4D17022	EPA 8260B	04/18/14 03:25	kat	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.046*	*1*	*0.0458*	*100 %*	*71-126*	*4D17022*	*EPA 8260B*	*04/18/14 03:25*	*kat*	
4-Bromofluorobenzene	*0.045*	*1*	*0.0413*	*110 %*	*71-126*	*4D21017*	*EPA 8260B*	*04/22/14 01:38*	*KAT*	
Dibromofluoromethane	*0.045*	*1*	*0.0458*	*98 %*	*72-133*	*4D17022*	*EPA 8260B*	*04/18/14 03:25*	*kat*	
Dibromofluoromethane	*0.040*	*1*	*0.0413*	*98 %*	*72-133*	*4D21017*	*EPA 8260B*	*04/22/14 01:38*	*KAT*	
Toluene-d8	*0.042*	*1*	*0.0458*	*91 %*	*80-123*	*4D17022*	*EPA 8260B*	*04/18/14 03:25*	*kat*	
Toluene-d8	*0.041*	*1*	*0.0413*	*100 %*	*80-123*	*4D21017*	*EPA 8260B*	*04/22/14 01:38*	*KAT*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.45	UD	mg/kg dry	5	0.45	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2,4,5-Trichlorophenol [95-95-4]^	0.41	UD	mg/kg dry	5	0.41	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2,4,6-Trichlorophenol [88-06-2]^	0.93	UD	mg/kg dry	5	0.93	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2,4-Dichlorophenol [120-83-2]^	1.5	UD	mg/kg dry	5	1.5	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2,4-Dimethylphenol [105-67-9]^	1.4	UD	mg/kg dry	5	1.4	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2,4-Dinitrophenol [51-28-5]^	0.55	UD	mg/kg dry	5	0.55	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2,4-Dinitrotoluene [121-14-2]^	0.99	UD	mg/kg dry	5	0.99	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2,6-Dinitrotoluene [606-20-2]^	1.1	UD	mg/kg dry	5	1.1	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01

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ANALYTICAL RESULTS

Description: SS-2 | **Lab Sample ID:** C404168-02 | **Received:** 04/09/14 10:15

Matrix: Sediment | **Sampled:** 04/08/14 14:14 | **Work Order:** C404168

Project: 1614 West Pembroke Avenue | **Sampled By:** Andrew Gowen | **% Solids:** 80.80

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2-Chloronaphthalene [91-58-7]^	0.61	UD	mg/kg dry	5	0.61	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2-Chlorophenol [95-57-8]^	1.4	UD	mg/kg dry	5	1.4	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2-Methyl-4,6-dinitrophenol [534-52-1]^	1.7	UD	mg/kg dry	5	1.7	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2-Methylnaphthalene [91-57-6]^	0.74	UD	mg/kg dry	5	0.74	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2-Methylphenol [95-48-7]^	0.68	UD	mg/kg dry	5	0.68	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2-Nitroaniline [88-74-4]^	0.53	UD	mg/kg dry	5	0.53	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
2-Nitrophenol [88-75-5]^	1.6	UD	mg/kg dry	5	1.6	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
3 & 4-Methylphenol [108-39-4/106-44-5]^	1.5	UD	mg/kg dry	5	1.5	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
3,3'-Dichlorobenzidine [91-94-1]^	1.3	UD	mg/kg dry	5	1.3	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
3-Nitroaniline [99-09-2]^	0.50	UD	mg/kg dry	5	0.50	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
4-Bromophenyl-phenylether [101-55-3]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
4-Chloro-3-methylphenol [59-50-7]^	1.7	UD	mg/kg dry	5	1.7	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
4-Chloroaniline [106-47-8]^	0.40	UD	mg/kg dry	5	0.40	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
4-Chlorophenyl-phenylether [7005-72-3]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
4-Nitroaniline [100-01-6]^	1.6	UD	mg/kg dry	5	1.6	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
4-Nitrophenol [100-02-7]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Acenaphthene [83-32-9]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Acenaphthylene [208-96-8]^	0.74	UD	mg/kg dry	5	0.74	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Acetophenone [98-86-2]^	0.87	UD	mg/kg dry	5	0.87	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Anthracene [120-12-7]^	0.93	UD	mg/kg dry	5	0.93	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Atrazine [1912-24-9]^	0.46	UD	mg/kg dry	5	0.46	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Benzaldehyde [100-52-7]^	1.7	UD	mg/kg dry	5	1.7	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Benzo(a)anthracene [56-55-3]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Benzo(a)pyrene [50-32-8]^	0.48	UD	mg/kg dry	5	0.48	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Benzo(b)fluoranthene [205-99-2]^	0.68	UD	mg/kg dry	5	0.68	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Benzo(g,h,i)perylene [191-24-2]^	0.99	UD	mg/kg dry	5	0.99	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Benzo(k)fluoranthene [207-08-9]^	0.68	UD	mg/kg dry	5	0.68	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Bis(2-chloroethoxy)methane [111-91-1]^	0.93	UD	mg/kg dry	5	0.93	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	QV-01, R-01
Bis(2-chloroethyl)ether [111-44-4]^	0.87	UD	mg/kg dry	5	0.87	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Bis(2-chloroisopropyl)ether [108-60-1]^	0.61	UD	mg/kg dry	5	0.61	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Butylbenzylphthalate [85-68-7]^	0.87	UD	mg/kg dry	5	0.87	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Caprolactam [105-60-2]^	1.9	UD	mg/kg dry	5	1.9	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	QL-02, R-01
Carbazole [86-74-8]^	0.74	UD	mg/kg dry	5	0.74	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Chrysene [218-01-9]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Dibenzo(a,h)anthracene [53-70-3]^	0.87	UD	mg/kg dry	5	0.87	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Dibenzofuran [132-64-9]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Diethylphthalate [84-66-2]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Dimethylphthalate [131-11-3]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Di-n-butylphthalate [84-74-2]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Di-n-octylphthalate [117-84-0]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Fluoranthene [206-44-0]^	0.68	UD	mg/kg dry	5	0.68	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Fluorene [86-73-7]	0.87	UD	mg/kg dry	5	0.87	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Hexachlorobenzene [118-74-1]^	0.74	UD	mg/kg dry	5	0.74	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Hexachlorobutadiene [87-68-3]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Hexachlorocyclopentadiene [77-47-4]^	0.93	UD	mg/kg dry	5	0.93	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01

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ANALYTICAL RESULTS

Description:	SS-2	**Lab Sample ID:**	C404168-02	**Received:**	04/09/14 10:15
Matrix:	Sediment	**Sampled:**	04/08/14 14:14	**Work Order:**	C404168
Project:	1614 West Pembroke Avenue	**Sampled By:**	Andrew Gowen	**% Solids:**	80.80

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexachloroethane [67-72-1]^	0.62	UD	mg/kg dry	5	0.62	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.87	UD	mg/kg dry	5	0.87	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Isophorone [78-59-1]^	1.1	UD	mg/kg dry	5	1.1	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Naphthalene [91-20-3]^	0.74	UD	mg/kg dry	5	0.74	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Nitrobenzene [98-95-3]^	0.93	UD	mg/kg dry	5	0.93	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
N-Nitroso-di-n-propylamine [621-64-7]^	0.93	UD	mg/kg dry	5	0.93	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	1.4	UD	mg/kg dry	5	1.4	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Pentachlorophenol [87-86-5]^	1.3	UD	mg/kg dry	5	1.3	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Phenanthrene [85-01-8]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Phenol [108-95-2]^	0.61	UD	mg/kg dry	5	0.61	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01
Pyrene [129-00-0]^	0.68	UD	mg/kg dry	5	0.68	2.0	4D14001	EPA 8270D	04/15/14 21:05	jfi	R-01

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.6*	*5*	*2.06*	*78 %*	*23-137*	*4D14001*	*EPA 8270D*	*04/15/14 21:05*	*jfi*	*R-01*
2-Fluorobiphenyl	*1.3*	*5*	*2.06*	*65 %*	*29-119*	*4D14001*	*EPA 8270D*	*04/15/14 21:05*	*jfi*	*R-01*
2-Fluorophenol	*1.2*	*5*	*2.06*	*58 %*	*20-124*	*4D14001*	*EPA 8270D*	*04/15/14 21:05*	*jfi*	*R-01*
Nitrobenzene-d5	*0.94*	*5*	*2.06*	*45 %*	*17-126*	*4D14001*	*EPA 8270D*	*04/15/14 21:05*	*jfi*	*R-01*
Phenol-d5	*1.3*	*5*	*2.06*	*62 %*	*15-131*	*4D14001*	*EPA 8270D*	*04/15/14 21:05*	*jfi*	*R-01*
Terphenyl-d14	*1.9*	*5*	*2.06*	*91 %*	*60-120*	*4D14001*	*EPA 8270D*	*04/15/14 21:05*	*jfi*	*R-01*

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.19	U	mg/kg dry	1	0.19	1.2	4D12005	EPA 7196A	04/14/14 13:50	RMM	

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ANALYTICAL RESULTS

Description: SS-3	**Lab Sample ID:** C404168-03	**Received:** 04/09/14 10:15
Matrix: Sediment	**Sampled:** 04/08/14 14:37	**Work Order:** C404168
Project: 1614 West Pembroke Avenue	**Sampled By:** Andrew Gowen	**% Solids:** 77.30

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**11900**		mg/kg dry	1	2.72	12.9	4D10028	EPA 6010C	04/18/14 12:47	JDH	
Aluminum [7429-90-5]	**11300**	D	mg/kg dry	2	5.43	25.9	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Antimony [7440-36-0]	**2.59**	D	mg/kg dry	2	0.285	2.59	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Arsenic [7440-38-2]^	**6.58**	D	mg/kg dry	2	0.259	1.29	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Barium [7440-39-3]^	**122**	D	mg/kg dry	2	0.259	1.29	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Beryllium [7440-41-7]	**0.248**	D	mg/kg dry	2	0.0310	0.129	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Cadmium [7440-43-9]^	**2.64**	D	mg/kg dry	2	0.0248	0.129	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Calcium [7440-70-2]	**2690**	BD	mg/kg dry	2	14.5	64.7	4D10028	EPA 6010C	04/18/14 13:33	JDH	QB-01, R-01
Chromium [7440-47-3]^	**15.4**	D	mg/kg dry	2	0.259	1.29	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Cobalt [7440-48-4]	**3.54**	D	mg/kg dry	2	0.259	1.29	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Copper [7440-50-8]	**66.7**	D	mg/kg dry	2	0.492	1.29	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Iron [7439-89-6]	**12700**	BD	mg/kg dry	2	1.24	6.47	4D10028	EPA 6010C	04/18/14 13:33	JDH	QB-01
Lead [7439-92-1]^	**250**	D	mg/kg dry	2	0.310	1.29	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Magnesium [7439-95-4]	**632**	BD	mg/kg dry	2	1.68	64.7	4D10028	EPA 6010C	04/18/14 13:33	JDH	QB-01, R-01
Manganese [7439-96-5]	**226**	D	mg/kg dry	2	0.259	1.29	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Mercury [7439-97-6]^	**0.231**		mg/kg dry	1	0.00893	0.0310	4D10022	EPA 7471B	04/11/14 15:37	T1D	
Nickel [7440-02-0]	**22.3**	D	mg/kg dry	2	0.931	6.47	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Potassium [7440-09-7]	**631**	D	mg/kg dry	2	10.3	64.7	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Selenium [7782-49-2]^	**0.342**	JBD	mg/kg dry	2	0.259	1.29	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01, J-01
Silver [7440-22-4]^	0.259	UD	mg/kg dry	2	0.259	1.29	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Sodium [7440-23-5]	**130**	D	mg/kg dry	2	15.5	64.7	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Thallium [7440-28-0]	0.259	UD	mg/kg dry	2	0.259	1.29	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Vanadium [7440-62-2]^	**16.9**	D	mg/kg dry	2	0.259	1.29	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01
Zinc [7440-66-6]^	**702**	D	mg/kg dry	2	2.85	6.47	4D10028	EPA 6010C	04/18/14 13:33	JDH	R-01

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
1,1,2-Trichloroethane [79-00-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
1,1-Dichloroethane [75-34-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
1,1-Dichloroethene [75-35-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
1,2,4-Trichlorobenzene [120-82-1]^	0.0009	U	mg/kg dry	1	0.0009	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
1,2-Dibromoethane [106-93-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
1,2-Dichlorobenzene [95-50-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
1,2-Dichloroethane [107-06-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
1,2-Dichloropropane [78-87-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
1,3-Dichlorobenzene [541-73-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
1,4-Dichlorobenzene [106-46-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
2-Butanone [78-93-3]^	0.0019	U	mg/kg dry	1	0.0019	0.0051	4D17022	EPA 8260B	04/18/14 03:57	kat	
2-Hexanone [591-78-6]^	0.0009	U	mg/kg dry	1	0.0009	0.0051	4D17022	EPA 8260B	04/18/14 03:57	kat	
4-Methyl-2-pentanone [108-10-1]^	0.0014	U	mg/kg dry	1	0.0014	0.0051	4D17022	EPA 8260B	04/18/14 03:57	kat	
Acetone [67-64-1]^	**1.1**	D	mg/kg dry	100	0.17	0.49	4D21017	EPA 8260B	04/22/14 02:12	KAT	
Benzene [71-43-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	

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ANALYTICAL RESULTS

Description:	SS-3	**Lab Sample ID:**	C404168-03	**Received:**	04/09/14 10:15
Matrix:	Sediment	**Sampled:**	04/08/14 14:37	**Work Order:**	C404168
Project:	1614 West Pembroke Avenue	**Sampled By:**	Andrew Gowen	**% Solids:**	77.30

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bromochloromethane [74-97-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Bromodichloromethane [75-27-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Bromoform [75-25-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Bromomethane [74-83-9]^	0.0009	U	mg/kg dry	1	0.0009	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Carbon disulfide [75-15-0]^	0.0022	U	mg/kg dry	1	0.0022	0.0051	4D17022	EPA 8260B	04/18/14 03:57	kat	
Carbon Tetrachloride [56-23-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Chlorobenzene [108-90-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Chloroethane [75-00-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Chloroform [67-66-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Chloromethane [74-87-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
cis-1,2-Dichloroethene [156-59-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
cis-1,3-Dichloropropene [10061-01-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Cyclohexane [110-82-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0021	4D17022	EPA 8260B	04/18/14 03:57	kat	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Dichlorodifluoromethane [75-71-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Ethylbenzene [100-41-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Freon 113 [76-13-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Isopropylbenzene [98-82-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Methyl acetate [79-20-9]^	0.0016	U	mg/kg dry	1	0.0016	0.0021	4D17022	EPA 8260B	04/18/14 03:57	kat	
Methyl cyclohexane [108-87-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0021	4D17022	EPA 8260B	04/18/14 03:57	kat	
Methylene Chloride [75-09-2]^	0.0007	U	mg/kg dry	1	0.0007	0.0021	4D17022	EPA 8260B	04/18/14 03:57	kat	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Styrene [100-42-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Tetrachloroethene [127-18-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Toluene [108-88-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
trans-1,2-Dichloroethene [156-60-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
trans-1,3-Dichloropropene [10061-02-6]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Trichloroethene [79-01-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Trichlorofluoromethane [75-69-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Vinyl chloride [75-01-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17022	EPA 8260B	04/18/14 03:57	kat	
Xylenes (Total) [1330-20-7]^	0.0010	U	mg/kg dry	1	0.0010	0.0021	4D17022	EPA 8260B	04/18/14 03:57	kat	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.051*	*1*	*0.0514*	*98 %*	*71-126*	*4D17022*	*EPA 8260B*	*04/18/14 03:57*	*kat*	
4-Bromofluorobenzene	*0.054*	*1*	*0.0490*	*111 %*	*71-126*	*4D21017*	*EPA 8260B*	*04/22/14 02:12*	*KAT*	
Dibromofluoromethane	*0.052*	*1*	*0.0514*	*101 %*	*72-133*	*4D17022*	*EPA 8260B*	*04/18/14 03:57*	*kat*	
Dibromofluoromethane	*0.048*	*1*	*0.0490*	*97 %*	*72-133*	*4D21017*	*EPA 8260B*	*04/22/14 02:12*	*KAT*	
Toluene-d8	*0.046*	*1*	*0.0514*	*90 %*	*80-123*	*4D17022*	*EPA 8260B*	*04/18/14 03:57*	*kat*	
Toluene-d8	*0.048*	*1*	*0.0490*	*98 %*	*80-123*	*4D21017*	*EPA 8260B*	*04/22/14 02:12*	*KAT*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.47	UD	mg/kg dry	5	0.47	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2,4,5-Trichlorophenol [95-95-4]^	0.43	UD	mg/kg dry	5	0.43	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2,4,6-Trichlorophenol [88-06-2]^	0.97	UD	mg/kg dry	5	0.97	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2,4-Dichlorophenol [120-83-2]^	1.6	UD	mg/kg dry	5	1.6	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2,4-Dimethylphenol [105-67-9]^	1.5	UD	mg/kg dry	5	1.5	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01

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ANALYTICAL RESULTS

Description: SS-3	**Lab Sample ID:** C404168-03	**Received:** 04/09/14 10:15
Matrix: Sediment	**Sampled:** 04/08/14 14:37	**Work Order:** C404168
Project: 1614 West Pembroke Avenue	**Sampled By:** Andrew Gowen	**% Solids:** 77.30

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4-Dinitrophenol [51-28-5]^	0.58	UD	mg/kg dry	5	0.58	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2,4-Dinitrotoluene [121-14-2]^	1.0	UD	mg/kg dry	5	1.0	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2,6-Dinitrotoluene [606-20-2]^	1.2	UD	mg/kg dry	5	1.2	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2-Chloronaphthalene [91-58-7]^	0.63	UD	mg/kg dry	5	0.63	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2-Chlorophenol [95-57-8]^	1.5	UD	mg/kg dry	5	1.5	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2-Methyl-4,6-dinitrophenol [534-52-1]^	1.8	UD	mg/kg dry	5	1.8	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2-Methylnaphthalene [91-57-6]^	0.78	UD	mg/kg dry	5	0.78	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2-Methylphenol [95-48-7]^	0.71	UD	mg/kg dry	5	0.71	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2-Nitroaniline [88-74-4]^	0.55	UD	mg/kg dry	5	0.55	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
2-Nitrophenol [88-75-5]^	1.7	UD	mg/kg dry	5	1.7	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
3 & 4-Methylphenol [108-39-4/106-44-5]^	1.6	UD	mg/kg dry	5	1.6	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
3,3'-Dichlorobenzidine [91-94-1]^	1.4	UD	mg/kg dry	5	1.4	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
3-Nitroaniline [99-09-2]^	0.52	UD	mg/kg dry	5	0.52	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
4-Bromophenyl-phenylether [101-55-3]^	0.84	UD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
4-Chloro-3-methylphenol [59-50-7]^	1.8	UD	mg/kg dry	5	1.8	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
4-Chloroaniline [106-47-8]^	0.42	UD	mg/kg dry	5	0.42	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
4-Chlorophenyl-phenylether [7005-72-3]^	0.84	UD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
4-Nitroaniline [100-01-6]^	1.7	UD	mg/kg dry	5	1.7	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
4-Nitrophenol [100-02-7]^	0.84	UD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Acenaphthene [83-32-9]^	0.84	UD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Acenaphthylene [208-96-8]^	0.78	UD	mg/kg dry	5	0.78	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Acetophenone [98-86-2]^	0.91	UD	mg/kg dry	5	0.91	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Anthracene [120-12-7]^	0.97	UD	mg/kg dry	5	0.97	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Atrazine [1912-24-9]^	0.48	UD	mg/kg dry	5	0.48	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Benzaldehyde [100-52-7]^	1.7	UD	mg/kg dry	5	1.7	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Benzo(a)anthracene [56-55-3]^	**1.1**	JD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Benzo(a)pyrene [50-32-8]^	**1.1**	JD	mg/kg dry	5	0.50	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Benzo(b)fluoranthene [205-99-2]^	**1.8**	JD	mg/kg dry	5	0.71	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Benzo(g,h,i)perylene [191-24-2]^	1.0	UD	mg/kg dry	5	1.0	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Benzo(k)fluoranthene [207-08-9]^	**0.73**	JD	mg/kg dry	5	0.71	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Bis(2-chloroethoxy)methane [111-91-1]^	0.97	UD	mg/kg dry	5	0.97	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	QV-01, R-01
Bis(2-chloroethyl)ether [111-44-4]^	0.91	UD	mg/kg dry	5	0.91	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Bis(2-chloroisopropyl)ether [108-60-1]^	0.64	UD	mg/kg dry	5	0.64	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.84	UD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Butylbenzylphthalate [85-68-7]^	0.91	UD	mg/kg dry	5	0.91	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Caprolactam [105-60-2]^	1.9	UD	mg/kg dry	5	1.9	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	QL-02, R-01
Carbazole [86-74-8]^	0.78	UD	mg/kg dry	5	0.78	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Chrysene [218-01-9]^	**1.1**	JD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Dibenzo(a,h)anthracene [53-70-3]^	0.91	UD	mg/kg dry	5	0.91	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Dibenzofuran [132-64-9]^	0.84	UD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Diethylphthalate [84-66-2]^	0.84	UD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Dimethylphthalate [131-11-3]^	0.84	UD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Di-n-butylphthalate [84-74-2]^	0.84	UD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Di-n-octylphthalate [117-84-0]^	0.84	UD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Fluoranthene [206-44-0]^	**1.7**	JD	mg/kg dry	5	0.71	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Fluorene [86-73-7]	0.91	UD	mg/kg dry	5	0.91	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01

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ANALYTICAL RESULTS

Description: SS-3	**Lab Sample ID:** C404168-03	**Received:** 04/09/14 10:15
Matrix: Sediment	**Sampled:** 04/08/14 14:37	**Work Order:** C404168
Project: 1614 West Pembroke Avenue	**Sampled By:** Andrew Gowen	**% Solids:** 77.30

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexachlorobenzene [118-74-1]^	0.78	UD	mg/kg dry	5	0.78	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Hexachlorobutadiene [87-68-3]^	0.84	UD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Hexachlorocyclopentadiene [77-47-4]^	0.97	UD	mg/kg dry	5	0.97	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Hexachloroethane [67-72-1]^	0.65	UD	mg/kg dry	5	0.65	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.91	UD	mg/kg dry	5	0.91	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Isophorone [78-59-1]^	1.1	UD	mg/kg dry	5	1.1	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Naphthalene [91-20-3]^	0.78	UD	mg/kg dry	5	0.78	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Nitrobenzene [98-95-3]^	0.97	UD	mg/kg dry	5	0.97	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
N-Nitroso-di-n-propylamine [621-64-7]^	0.97	UD	mg/kg dry	5	0.97	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	1.5	UD	mg/kg dry	5	1.5	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Pentachlorophenol [87-86-5]^	1.4	UD	mg/kg dry	5	1.4	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Phenanthrene [85-01-8]^	0.84	UD	mg/kg dry	5	0.84	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Phenol [108-95-2]^	0.64	UD	mg/kg dry	5	0.64	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01
Pyrene [129-00-0]^	**1.3**	JD	mg/kg dry	5	0.71	2.1	4D14001	EPA 8270D	04/15/14 21:33	jfi	R-01

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	*Notes*
2,4,6-Tribromophenol	*1.9*	*5*	*2.13*	*87 %*	*23-137*	*4D14001*	*EPA 8270D*	*04/15/14 21:33*	*jfi*	*R-01*
2-Fluorobiphenyl	*1.6*	*5*	*2.13*	*74 %*	*29-119*	*4D14001*	*EPA 8270D*	*04/15/14 21:33*	*jfi*	*R-01*
2-Fluorophenol	*1.4*	*5*	*2.13*	*67 %*	*20-124*	*4D14001*	*EPA 8270D*	*04/15/14 21:33*	*jfi*	*R-01*
Nitrobenzene-d5	*1.0*	*5*	*2.13*	*49 %*	*17-126*	*4D14001*	*EPA 8270D*	*04/15/14 21:33*	*jfi*	*R-01*
Phenol-d5	*1.6*	*5*	*2.13*	*73 %*	*15-131*	*4D14001*	*EPA 8270D*	*04/15/14 21:33*	*jfi*	*R-01*
Terphenyl-d14	*2.2*	*5*	*2.13*	*105 %*	*60-120*	*4D14001*	*EPA 8270D*	*04/15/14 21:33*	*jfi*	*R-01*

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	**1.1**	J	mg/kg dry	1	0.19	1.3	4D12005	EPA 7196A	04/14/14 13:50	RMM	

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ANALYTICAL RESULTS

Description: Trip Blank | **Lab Sample ID:** C404168-04 | **Received:** 04/09/14 10:15
Matrix: Water | **Sampled:** 04/08/14 13:55 | **Work Order:** C404168
Project: 1614 West Pembroke Avenue | **Sampled By:** ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Acetone [67-64-1]^	1.2	U	ug/L	1	1.2	5.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
m,p-Xylenes [108-38-3/106-42-3]	0.17	U	ug/L	1	0.17	2.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.16	U	ug/L	1	0.16	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	

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ANALYTICAL RESULTS

Description: Trip Blank | **Lab Sample ID:** C404168-04 | **Received:** 04/09/14 10:15

Matrix: Water | **Sampled:** 04/08/14 13:55 | **Work Order:** C404168

Project: 1614 West Pembroke Avenue | **Sampled By:** ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4D17035	EPA 8260B	04/18/14 22:33	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*51*	*1*	*50.0*	*103 %*	*51-122*	*4D17035*	*EPA 8260B*	*04/18/14 22:33*	*MSZ*	
Dibromofluoromethane	*52*	*1*	*50.0*	*104 %*	*68-117*	*4D17035*	*EPA 8260B*	*04/18/14 22:33*	*MSZ*	
Toluene-d8	*51*	*1*	*50.0*	*102 %*	*67-127*	*4D17035*	*EPA 8260B*	*04/18/14 22:33*	*MSZ*	

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17035 - EPA 5030B_MS

Blank (4D17035-BLK1) Prepared: 04/17/2014 14:54 Analyzed: 04/18/2014 12:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.012	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Cyclohexane	0.36	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Freon 113	0.35	U	1.0	ug/L							
Isopropylbenzene	0.14	U	1.0	ug/L							
m,p-Xylenes	0.17	U	2.0	ug/L							
Methyl acetate	0.51	U	1.0	ug/L							
Methyl cyclohexane	0.54	U	1.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.16	U	1.0	ug/L							
o-Xylene	0.065	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17035 - EPA 5030B_MS - Continued

Blank (4D17035-BLK1) Continued Prepared: 04/17/2014 14:54 Analyzed: 04/18/2014 12:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
4-Bromofluorobenzene	*51*			*ug/L*	*50.0*		*102*	*51-122*			
Dibromofluoromethane	*50*			*ug/L*	*50.0*		*101*	*68-117*			
Toluene-d8	*52*			*ug/L*	*50.0*		*104*	*67-127*			

LCS (4D17035-BS1) Prepared: 04/17/2014 14:54 Analyzed: 04/18/2014 13:13

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0		116	75-133			
Benzene	20		1.0	ug/L	20.0		98	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		103	83-117			
Cyclohexane	21		1.0	ug/L	20.0		107	0-200			
Methyl acetate	21		1.0	ug/L	20.0		104	0-200			
Methyl cyclohexane	19		1.0	ug/L	20.0		95	0-200			
Toluene	19		1.0	ug/L	20.0		94	71-118			
Trichloroethene	20		1.0	ug/L	20.0		100	74-119			
4-Bromofluorobenzene	*57*			*ug/L*	*50.0*		*114*	*51-122*			
Dibromofluoromethane	*51*			*ug/L*	*50.0*		*102*	*68-117*			
Toluene-d8	*51*			*ug/L*	*50.0*		*101*	*67-127*			

Matrix Spike (4D17035-MS1) Prepared: 04/17/2014 14:54 Analyzed: 04/18/2014 13:43

Source: C404957-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.21 U	117	75-133			
Benzene	20		1.0	ug/L	20.0	0.15 U	102	81-134			
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	99	83-117			
Cyclohexane	21		1.0	ug/L	20.0	0.36 U	107	0-200			
Methyl acetate	20		1.0	ug/L	20.0	0.51 U	98	0-200			
Methyl cyclohexane	19		1.0	ug/L	20.0	0.54 U	96	0-200			
Toluene	18		1.0	ug/L	20.0	0.14 U	92	71-118			
Trichloroethene	22		1.0	ug/L	20.0	0.15 U	110	74-119			
4-Bromofluorobenzene	*56*			*ug/L*	*50.0*		*112*	*51-122*			
Dibromofluoromethane	*51*			*ug/L*	*50.0*		*101*	*68-117*			
Toluene-d8	*52*			*ug/L*	*50.0*		*104*	*67-127*			

Matrix Spike Dup (4D17035-MSD1) Prepared: 04/17/2014 14:54 Analyzed: 04/18/2014 14:12

Source: C404957-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.21 U	116	75-133	0.3	20	
Benzene	19		1.0	ug/L	20.0	0.15 U	97	81-134	5	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	102	83-117	3	16	
Cyclohexane	20		1.0	ug/L	20.0	0.36 U	102	0-200	4	50	
Methyl acetate	18		1.0	ug/L	20.0	0.51 U	91	0-200	8	50	
Methyl cyclohexane	18		1.0	ug/L	20.0	0.54 U	88	0-200	9	50	
Toluene	18		1.0	ug/L	20.0	0.14 U	91	71-118	1	17	

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17035 - EPA 5030B_MS - Continued

Matrix Spike Dup (4D17035-MSD1) Continued Prepared: 04/17/2014 14:54 Analyzed: 04/18/2014 14:12

Source: C404957-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	100	74-119	9	22	
4-Bromofluorobenzene	*56*			*ug/L*	*50.0*		*113*	*51-122*			
Dibromofluoromethane	*50*			*ug/L*	*50.0*		*101*	*68-117*			
Toluene-d8	*50*			*ug/L*	*50.0*		*101*	*67-127*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D10022 - EPA 7471B

Blank (4D10022-BLK1) Prepared: 04/10/2014 11:06 Analyzed: 04/11/2014 14:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.00690	U	0.0240	mg/kg wet							

LCS (4D10022-BS1) Prepared: 04/10/2014 11:06 Analyzed: 04/11/2014 14:54

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.624		0.0240	mg/kg wet	0.581		107	80-120			

Matrix Spike (4D10022-MS1) Prepared: 04/10/2014 11:06 Analyzed: 04/11/2014 14:59

Source: C404096-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.786		0.0291	mg/kg dry	0.727	0.0540	101	80-120			

Matrix Spike Dup (4D10022-MSD1) Prepared: 04/10/2014 11:06 Analyzed: 04/11/2014 15:01

Source: C404096-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.772		0.0291	mg/kg dry	0.703	0.0540	102	80-120	2	20	

Post Spike (4D10022-PS1) Prepared: 04/10/2014 11:06 Analyzed: 04/11/2014 15:03

Source: C404096-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.49		0.200	ug/L	5.00	0.359	103	75-125			

Batch 4D10028 - EPA 3050B

Blank (4D10028-BLK1) Prepared: 04/14/2014 11:31 Analyzed: 04/18/2014 10:51

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2.10	U	10.0	mg/kg wet							
Antimony	0.110	U	1.00	mg/kg wet							
Arsenic	0.100	U	0.500	mg/kg wet							
Barium	0.100	U	0.500	mg/kg wet							
Beryllium	0.0120	U	0.0500	mg/kg wet							
Cadmium	0.00960	U	0.0500	mg/kg wet							
Calcium	**11.6**	**J**	25.0	mg/kg wet							
Chromium	0.100	U	0.500	mg/kg wet							
Cobalt	0.100	U	0.500	mg/kg wet							

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D10028 - EPA 3050B - Continued

Blank (4D10028-BLK1) Continued Prepared: 04/14/2014 11:31 Analyzed: 04/18/2014 10:51

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Copper	0.190	U	0.500	mg/kg wet							
Iron	**1.03**	**J**	2.50	mg/kg wet							
Lead	0.120	U	0.500	mg/kg wet							
Magnesium	**1.34**	**J**	25.0	mg/kg wet							
Manganese	0.100	U	0.500	mg/kg wet							
Nickel	0.360	U	2.50	mg/kg wet							
Potassium	4.00	U	25.0	mg/kg wet							
Selenium	**0.165**	**J**	0.500	mg/kg wet							
Silver	0.100	U	0.500	mg/kg wet							
Sodium	6.00	U	25.0	mg/kg wet							
Thallium	0.100	U	0.500	mg/kg wet							
Vanadium	0.100	U	0.500	mg/kg wet							
Zinc	1.10	U	2.50	mg/kg wet							

LCS (4D10028-BS1) Prepared: 04/14/2014 11:31 Analyzed: 04/18/2014 11:46

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	98.8		10.0	mg/kg wet	100		99	80-120			
Antimony	9.56		1.00	mg/kg wet	10.0		96	80-120			
Arsenic	9.95		0.500	mg/kg wet	10.0		99	80-120			
Barium	9.64		0.500	mg/kg wet	10.0		96	80-120			
Beryllium	0.945		0.0500	mg/kg wet	1.00		95	80-120			
Cadmium	0.940		0.0500	mg/kg wet	1.00		94	80-120			
Calcium	115	B	25.0	mg/kg wet	100		115	80-120			
Chromium	9.60		0.500	mg/kg wet	10.0		96	80-120			
Cobalt	9.78		0.500	mg/kg wet	10.0		98	80-120			
Copper	9.43		0.500	mg/kg wet	10.0		94	80-120			
Iron	48.8	B	2.50	mg/kg wet	50.0		98	80-120			
Lead	9.85		0.500	mg/kg wet	10.0		99	80-120			
Magnesium	103	B	25.0	mg/kg wet	100		103	80-120			
Manganese	9.68		0.500	mg/kg wet	10.0		97	80-120			
Nickel	9.83		2.50	mg/kg wet	10.0		98	80-120			
Potassium	512		25.0	mg/kg wet	500		102	80-120			
Selenium	9.62	B	0.500	mg/kg wet	10.0		96	80-120			
Silver	9.85		0.500	mg/kg wet	10.0		99	80-120			
Sodium	507		25.0	mg/kg wet	500		101	80-120			
Thallium	9.03		0.500	mg/kg wet	10.0		90	80-120			
Vanadium	9.74		0.500	mg/kg wet	10.0		97	80-120			
Zinc	9.68		2.50	mg/kg wet	10.0		97	80-120			

Matrix Spike (4D10028-MS1) Prepared: 04/14/2014 11:31 Analyzed: 04/18/2014 12:29

Source: C404167-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	11400		12.2	mg/kg dry	122	8150	NR	75-125			QM-05
Antimony	7.33		1.22	mg/kg dry	12.2	0.490	56	75-125			QM-05
Arsenic	14.1		0.612	mg/kg dry	12.2	2.64	94	75-125			
Barium	51.6		0.612	mg/kg dry	12.2	36.2	125	75-125			
Beryllium	1.42		0.0612	mg/kg dry	1.22	0.189	100	75-125			
Cadmium	1.20		0.0612	mg/kg dry	1.22	0.0117 U	98	75-125			

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D10028 - EPA 3050B - Continued

Matrix Spike (4D10028-MS1) Continued Prepared: 04/14/2014 11:31 Analyzed: 04/18/2014 12:29

Source: C404167-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Calcium	1550	B	30.6	mg/kg dry	122	1400	122	75-125			
Chromium	23.7		0.612	mg/kg dry	12.2	8.94	121	75-125			
Cobalt	15.2		0.612	mg/kg dry	12.2	2.28	105	75-125			
Copper	18.7		0.612	mg/kg dry	12.2	6.46	100	75-125			
Iron	5920	B	3.06	mg/kg dry	61.2	5370	891	75-125			QM-05
Lead	28.3		0.612	mg/kg dry	12.2	15.6	104	75-125			
Magnesium	833	B	30.6	mg/kg dry	122	561	223	75-125			QM-05
Manganese	42.0		0.612	mg/kg dry	12.2	26.8	124	75-125			
Nickel	19.6		3.06	mg/kg dry	12.2	5.58	114	75-125			
Potassium	1160		30.6	mg/kg dry	612	467	114	75-125			
Selenium	11.9	B	0.612	mg/kg dry	12.2	0.346	95	75-125			
Silver	12.4		0.612	mg/kg dry	12.2	0.122 U	102	75-125			
Sodium	666		30.6	mg/kg dry	612	57.2	99	75-125			
Thallium	10.6		0.612	mg/kg dry	12.2	0.122 U	87	75-125			
Vanadium	30.2		0.612	mg/kg dry	12.2	14.2	131	75-125			QM-05
Zinc	33.9		3.06	mg/kg dry	12.2	18.0	130	75-125			QM-05

Matrix Spike Dup (4D10028-MSD1) Prepared: 04/14/2014 11:31 Analyzed: 04/18/2014 12:31

Source: C404167-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	10700		12.2	mg/kg dry	122	8150	NR	75-125	6	20	QM-05
Antimony	7.13		1.22	mg/kg dry	12.2	0.490	54	75-125	3	20	QM-05
Arsenic	13.7		0.612	mg/kg dry	12.2	2.64	91	75-125	2	20	
Barium	48.3		0.612	mg/kg dry	12.2	36.2	99	75-125	6	20	
Beryllium	1.40		0.0612	mg/kg dry	1.22	0.189	99	75-125	1	20	
Cadmium	1.19		0.0612	mg/kg dry	1.22	0.0117 U	97	75-125	1	20	
Calcium	1460	B	30.6	mg/kg dry	122	1400	47	75-125	6	20	QM-05
Chromium	22.6		0.612	mg/kg dry	12.2	8.94	111	75-125	5	20	
Cobalt	14.5		0.612	mg/kg dry	12.2	2.28	99	75-125	5	20	
Copper	18.9		0.612	mg/kg dry	12.2	6.46	101	75-125	0.9	20	
Iron	5370	B	3.06	mg/kg dry	61.2	5370	3	75-125	10	20	QM-05
Lead	27.7		0.612	mg/kg dry	12.2	15.6	99	75-125	2	20	
Magnesium	767	B	30.6	mg/kg dry	122	561	168	75-125	8	20	QM-05
Manganese	36.9		0.612	mg/kg dry	12.2	26.8	82	75-125	13	20	
Nickel	18.4		3.06	mg/kg dry	12.2	5.58	105	75-125	6	20	
Potassium	1100		30.6	mg/kg dry	612	467	104	75-125	6	20	
Selenium	11.6	B	0.612	mg/kg dry	12.2	0.346	92	75-125	3	20	
Silver	12.5		0.612	mg/kg dry	12.2	0.122 U	102	75-125	0.8	20	
Sodium	682		30.6	mg/kg dry	612	57.2	102	75-125	2	20	
Thallium	11.2		0.612	mg/kg dry	12.2	0.122 U	91	75-125	5	20	
Vanadium	28.6		0.612	mg/kg dry	12.2	14.2	117	75-125	6	20	
Zinc	31.6		3.06	mg/kg dry	12.2	18.0	111	75-125	7	20	

Post Spike (4D10028-PS1) Prepared: 04/14/2014 11:31 Analyzed: 04/18/2014 12:34

Source: C404167-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	135		0.200	mg/L	2.00	137	NR	80-120			QM-08
Antimony	0.202		0.0200	mg/L	0.200	0.00826	97	80-120			
Arsenic	0.243		0.0100	mg/L	0.200	0.0444	99	80-120			

QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D10028 - EPA 3050B - Continued

Post Spike (4D10028-PS1) Continued Prepared: 04/14/2014 11:31 Analyzed: 04/18/2014 12:34

Source: C404167-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Barium	0.813		0.0100	mg/L	0.200	0.610	101	80-120			
Beryllium	0.0227		0.00100	mg/L	0.0200	0.00318	98	80-120			
Cadmium	0.0194		0.00100	mg/L	0.0200	-5.78E-5	97	80-120			
Calcium	25.0	B	0.500	mg/L	2.00	23.5	74	80-120			QM-08
Chromium	0.348		0.0100	mg/L	0.200	0.151	99	80-120			
Cobalt	0.237		0.0100	mg/L	0.200	0.0383	99	80-120			
Copper	0.307		0.0100	mg/L	0.200	0.109	99	80-120			
Iron	92.8	B	0.0500	mg/L	1.00	90.4	238	80-120			QM-08
Lead	0.466		0.0100	mg/L	0.200	0.262	102	80-120			
Magnesium	11.2	B	0.500	mg/L	2.00	9.44	88	80-120			
Manganese	0.652		0.0100	mg/L	0.200	0.451	100	80-120			
Nickel	0.300		0.0500	mg/L	0.200	0.0939	103	80-120			
Potassium	17.9		0.500	mg/L	10.0	7.85	101	80-120			
Selenium	0.204	B	0.0100	mg/L	0.200	0.00582	99	80-120			
Silver	0.200		0.0100	mg/L	0.200	0.000702	100	80-120			
Sodium	10.9		0.500	mg/L	10.0	0.964	99	80-120			
Thallium	0.180		0.0100	mg/L	0.200	-0.0108	95	80-120			
Vanadium	0.443		0.0100	mg/L	0.200	0.240	102	80-120			
Zinc	0.490		0.0500	mg/L	0.200	0.303	94	80-120			

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17022 - EPA 5030B_MS

Blank (4D17022-BLK1) Prepared: 04/17/2014 14:38 Analyzed: 04/18/2014 02:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.0004	U	0.0010	mg/kg wet							
1,1,2,2-Tetrachloroethane	0.0003	U	0.0010	mg/kg wet							
1,1,2-Trichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethene	0.0006	U	0.0010	mg/kg wet							
1,2,4-Trichlorobenzene	0.0008	U	0.0010	mg/kg wet							
1,2-Dibromo-3-chloropropane	0.0006	U	0.0010	mg/kg wet							
1,2-Dibromoethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
1,2-Dichloroethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichloropropane	0.0006	U	0.0010	mg/kg wet							
1,3-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
1,4-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
2-Butanone	0.0018	U	0.0050	mg/kg wet							
2-Hexanone	0.0009	U	0.0050	mg/kg wet							
4-Methyl-2-pentanone	0.0014	U	0.0050	mg/kg wet							
Acetone	0.0017	U	0.0050	mg/kg wet							
Benzene	0.0004	U	0.0010	mg/kg wet							
Bromochloromethane	0.0004	U	0.0010	mg/kg wet							
Bromodichloromethane	0.0004	U	0.0010	mg/kg wet							
Bromoform	0.0003	U	0.0010	mg/kg wet							
Bromomethane	0.0009	U	0.0010	mg/kg wet							
Carbon disulfide	0.0021	U	0.0050	mg/kg wet							

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17022 - EPA 5030B_MS - Continued

Blank (4D17022-BLK1) Continued Prepared: 04/17/2014 14:38 Analyzed: 04/18/2014 02:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon Tetrachloride	0.0006	U	0.0010	mg/kg wet							
Chlorobenzene	0.0005	U	0.0010	mg/kg wet							
Chloroethane	0.0005	U	0.0010	mg/kg wet							
Chloroform	0.0004	U	0.0010	mg/kg wet							
Chloromethane	0.0006	U	0.0010	mg/kg wet							
cis-1,2-Dichloroethene	0.0005	U	0.0010	mg/kg wet							
cis-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Cyclohexane	0.0005	U	0.0020	mg/kg wet							
Dibromochloromethane	0.0003	U	0.0010	mg/kg wet							
Dichlorodifluoromethane	0.0006	U	0.0010	mg/kg wet							
Ethylbenzene	0.0006	U	0.0010	mg/kg wet							
Freon 113	0.0006	U	0.0010	mg/kg wet							
Isopropylbenzene	0.0005	U	0.0010	mg/kg wet							
Methyl acetate	0.0016	U	0.0020	mg/kg wet							
Methyl cyclohexane	0.0005	U	0.0020	mg/kg wet							
Methylene Chloride	0.0007	U	0.0020	mg/kg wet							
Methyl-tert-Butyl Ether	0.0003	U	0.0010	mg/kg wet							
Styrene	0.0004	U	0.0010	mg/kg wet							
Tetrachloroethene	0.0005	U	0.0010	mg/kg wet							
Toluene	0.0005	U	0.0010	mg/kg wet							
trans-1,2-Dichloroethene	0.0007	U	0.0010	mg/kg wet							
trans-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Trichloroethene	0.0005	U	0.0010	mg/kg wet							
Trichlorofluoromethane	0.0005	U	0.0010	mg/kg wet							
Vinyl chloride	0.0004	U	0.0010	mg/kg wet							
Xylenes (Total)	0.0010	U	0.0020	mg/kg wet							
4-Bromofluorobenzene	*0.050*			*mg/kg wet*	*0.0500*		*100*	*71-126*			
Dibromofluoromethane	*0.048*			*mg/kg wet*	*0.0500*		*97*	*72-133*			
Toluene-d8	*0.045*			*mg/kg wet*	*0.0500*		*89*	*80-123*			

LCS (4D17022-BS1) Prepared: 04/17/2014 14:38 Analyzed: 04/18/2014 00:38

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.017		0.0010	mg/kg wet	0.0200		84	61-124			
Benzene	0.018		0.0010	mg/kg wet	0.0200		88	59-133			
Chlorobenzene	0.016		0.0010	mg/kg wet	0.0200		82	69-121			
Toluene	0.016		0.0010	mg/kg wet	0.0200		80	66-119			
Trichloroethene	0.017		0.0010	mg/kg wet	0.0200		84	71-122			
4-Bromofluorobenzene	*0.051*			*mg/kg wet*	*0.0500*		*101*	*71-126*			
Dibromofluoromethane	*0.048*			*mg/kg wet*	*0.0500*		*95*	*72-133*			
Toluene-d8	*0.047*			*mg/kg wet*	*0.0500*		*94*	*80-123*			

LCS Dup (4D17022-BSD1) Prepared: 04/17/2014 14:38 Analyzed: 04/18/2014 01:12

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.019		0.0010	mg/kg wet	0.0200		94	61-124	10	23	
Benzene	0.019		0.0010	mg/kg wet	0.0200		97	59-133	10	19	
Chlorobenzene	0.019		0.0010	mg/kg wet	0.0200		95	69-121	15	18	

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17022 - EPA 5030B_MS - Continued

LCS Dup (4D17022-BSD1) Continued Prepared: 04/17/2014 14:38 Analyzed: 04/18/2014 01:12

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Toluene	0.019		0.0010	mg/kg wet	0.0200		95	66-119	17	21	
Trichloroethene	0.020		0.0010	mg/kg wet	0.0200		102	71-122	19	26	
4-Bromofluorobenzene	*0.044*			*mg/kg wet*	*0.0500*		*87*	*71-126*			
Dibromofluoromethane	*0.042*			*mg/kg wet*	*0.0500*		*85*	*72-133*			
Toluene-d8	*0.043*			*mg/kg wet*	*0.0500*		*85*	*80-123*			

Batch 4D21017 - EPA 5030B_MS

Blank (4D21017-BLK1) Prepared: 04/21/2014 15:42 Analyzed: 04/21/2014 22:50

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.035	UD	0.10	mg/kg wet							
1,1,2,2-Tetrachloroethane	0.030	UD	0.10	mg/kg wet							
1,1,2-Trichloroethane	0.060	UD	0.10	mg/kg wet							
1,1-Dichloroethane	0.057	UD	0.10	mg/kg wet							
1,1-Dichloroethene	0.062	UD	0.10	mg/kg wet							
1,2,4-Trichlorobenzene	0.085	UD	0.10	mg/kg wet							
1,2-Dibromo-3-chloropropane	0.057	UD	0.10	mg/kg wet							
1,2-Dibromoethane	0.031	UD	0.10	mg/kg wet							
1,2-Dichlorobenzene	0.044	UD	0.10	mg/kg wet							
1,2-Dichloroethane	0.032	UD	0.10	mg/kg wet							
1,2-Dichloropropane	0.055	UD	0.10	mg/kg wet							
1,3-Dichlorobenzene	0.047	UD	0.10	mg/kg wet							
1,4-Dichlorobenzene	0.045	UD	0.10	mg/kg wet							
2-Butanone	0.18	UD	0.50	mg/kg wet							
2-Hexanone	0.091	UD	0.50	mg/kg wet							
4-Methyl-2-pentanone	0.14	UD	0.50	mg/kg wet							
Acetone	0.17	UD	0.50	mg/kg wet							
Benzene	0.040	UD	0.10	mg/kg wet							
Bromochloromethane	0.035	UD	0.10	mg/kg wet							
Bromodichloromethane	0.035	UD	0.10	mg/kg wet							
Bromoform	0.030	UD	0.10	mg/kg wet							
Bromomethane	0.090	UD	0.10	mg/kg wet							
Carbon disulfide	0.21	UD	0.50	mg/kg wet							
Carbon Tetrachloride	0.060	UD	0.10	mg/kg wet							
Chlorobenzene	0.048	UD	0.10	mg/kg wet							
Chloroethane	0.054	UD	0.10	mg/kg wet							
Chloroform	0.043	UD	0.10	mg/kg wet							
Chloromethane	0.065	UD	0.10	mg/kg wet							
cis-1,2-Dichloroethene	0.053	UD	0.10	mg/kg wet							
cis-1,3-Dichloropropene	0.030	UD	0.10	mg/kg wet							
Cyclohexane	0.053	UD	0.20	mg/kg wet							
Dibromochloromethane	0.026	UD	0.10	mg/kg wet							
Dichlorodifluoromethane	0.062	UD	0.10	mg/kg wet							
Ethylbenzene	0.056	UD	0.10	mg/kg wet							
Freon 113	0.060	UD	0.10	mg/kg wet							
Isopropylbenzene	0.054	UD	0.10	mg/kg wet							
Methyl acetate	0.16	UD	0.20	mg/kg wet							
Methyl cyclohexane	0.052	UD	0.20	mg/kg wet							

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D21017 - EPA 5030B_MS - Continued

Blank (4D21017-BLK1) Continued Prepared: 04/21/2014 15:42 Analyzed: 04/21/2014 22:50

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Methylene Chloride	0.069	UD	0.20	mg/kg wet							
Methyl-tert-Butyl Ether	0.027	UD	0.10	mg/kg wet							
Styrene	0.044	UD	0.10	mg/kg wet							
Tetrachloroethene	0.049	UD	0.10	mg/kg wet							
Toluene	0.046	UD	0.10	mg/kg wet							
trans-1,2-Dichloroethene	0.069	UD	0.10	mg/kg wet							
trans-1,3-Dichloropropene	0.031	UD	0.10	mg/kg wet							
Trichloroethene	0.050	UD	0.10	mg/kg wet							
Trichlorofluoromethane	0.054	UD	0.10	mg/kg wet							
Vinyl chloride	0.044	UD	0.10	mg/kg wet							
Xylenes (Total)	0.099	UD	0.20	mg/kg wet							
4-Bromofluorobenzene	*0.052*			*mg/kg wet*	*0.0500*		*105*	*71-126*			
Dibromofluoromethane	*0.049*			*mg/kg wet*	*0.0500*		*98*	*72-133*			
Toluene-d8	*0.047*			*mg/kg wet*	*0.0500*		*94*	*80-123*			

LCS (4D21017-BS1) Prepared: 04/21/2014 15:42 Analyzed: 04/21/2014 21:10

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	1600	D	1.0	ug/L	2000		82	61-124			
Benzene	2100	D	1.0	ug/L	2000		103	59-133			
Chlorobenzene	1600	D	1.0	ug/L	2000		81	69-121			
Toluene	1800	D	1.0	ug/L	2000		90	66-119			
Trichloroethene	1800	D	1.0	ug/L	2000		91	71-122			
4-Bromofluorobenzene	*0.054*			*mg/kg wet*	*0.0500*		*107*	*71-126*			
Dibromofluoromethane	*0.051*			*mg/kg wet*	*0.0500*		*102*	*72-133*			
Toluene-d8	*0.052*			*mg/kg wet*	*0.0500*		*103*	*80-123*			

Matrix Spike (4D21017-MS1) Prepared: 04/21/2014 15:42 Analyzed: 04/21/2014 21:43

Source: A402194-01RE1

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	1700	D	1.0	ug/L	2000	0.62 U	85	61-124			
Benzene	2200	D	1.0	ug/L	2000	0.40 U	110	59-133			
Chlorobenzene	1900	D	1.0	ug/L	2000	0.48 U	94	69-121			
Toluene	2000	D	1.0	ug/L	2000	0.46 U	102	66-119			
Trichloroethene	2500	D	1.0	ug/L	2000	620	94	71-122			
4-Bromofluorobenzene	*0.048*			*mg/kg wet*	*0.0455*		*105*	*71-126*			
Dibromofluoromethane	*0.043*			*mg/kg wet*	*0.0455*		*94*	*72-133*			
Toluene-d8	*0.044*			*mg/kg wet*	*0.0455*		*97*	*80-123*			

Matrix Spike Dup (4D21017-MSD1) Prepared: 04/21/2014 15:42 Analyzed: 04/21/2014 22:16

Source: A402194-01RE1

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	1700	D	1.0	ug/L	2000	0.62 U	86	61-124	1	23	
Benzene	2200	D	1.0	ug/L	2000	0.40 U	108	59-133	2	19	
Chlorobenzene	1800	D	1.0	ug/L	2000	0.48 U	91	69-121	4	18	
Toluene	2000	D	1.0	ug/L	2000	0.46 U	102	66-119	0.5	21	
Trichloroethene	2600	D	1.0	ug/L	2000	620	98	71-122	3	26	

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D21017 - EPA 5030B_MS - Continued

Matrix Spike Dup (4D21017-MSD1) Continued Prepared: 04/21/2014 15:42 Analyzed: 04/21/2014 22:16

Source: A402194-01RE1

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4-Bromofluorobenzene	*0.048*			*mg/kg wet*	*0.0455*		*106*	*71-126*			
Dibromofluoromethane	*0.042*			*mg/kg wet*	*0.0455*		*93*	*72-133*			
Toluene-d8	*0.045*			*mg/kg wet*	*0.0455*		*99*	*80-123*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D14001 - EPA 3550C_MS

Blank (4D14001-BLK1) Prepared: 04/14/2014 07:00 Analyzed: 04/14/2014 16:21

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1'-Biphenyl	0.073	U	0.33	mg/kg wet							
2,4,5-Trichlorophenol	0.067	U	0.33	mg/kg wet							
2,4,6-Trichlorophenol	0.15	U	0.33	mg/kg wet							
2,4-Dichlorophenol	0.25	U	0.33	mg/kg wet							
2,4-Dimethylphenol	0.23	U	0.33	mg/kg wet							
2,4-Dinitrophenol	0.089	U	0.33	mg/kg wet							
2,4-Dinitrotoluene	0.16	U	0.33	mg/kg wet							
2,6-Dinitrotoluene	0.18	U	0.33	mg/kg wet							
2-Chloronaphthalene	0.098	U	0.33	mg/kg wet							
2-Chlorophenol	0.23	U	0.33	mg/kg wet							
2-Methyl-4,6-dinitrophenol	0.28	U	0.33	mg/kg wet							
2-Methylnaphthalene	0.12	U	0.33	mg/kg wet							
2-Methylphenol	0.11	U	0.33	mg/kg wet							
2-Nitroaniline	0.085	U	0.33	mg/kg wet							
2-Nitrophenol	0.26	U	0.33	mg/kg wet							
3 & 4-Methylphenol	0.25	U	0.33	mg/kg wet							
3,3'-Dichlorobenzidine	0.21	U	0.33	mg/kg wet							
3-Nitroaniline	0.080	U	0.33	mg/kg wet							
4-Bromophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Chloro-3-methylphenol	0.28	U	0.33	mg/kg wet							
4-Chloroaniline	0.065	U	0.33	mg/kg wet							
4-Chlorophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Nitroaniline	0.26	U	0.33	mg/kg wet							
4-Nitrophenol	0.13	U	0.33	mg/kg wet							
Acenaphthene	0.13	U	0.33	mg/kg wet							
Acenaphthylene	0.12	U	0.33	mg/kg wet							
Acetophenone	0.14	U	0.33	mg/kg wet							
Anthracene	0.15	U	0.33	mg/kg wet							
Atrazine	0.074	U	0.33	mg/kg wet							
Benzaldehyde	0.27	U	0.33	mg/kg wet							
Benzo(a)anthracene	0.13	U	0.33	mg/kg wet							
Benzo(a)pyrene	0.078	U	0.33	mg/kg wet							
Benzo(b)fluoranthene	0.11	U	0.33	mg/kg wet							
Benzo(g,h,i)perylene	0.16	U	0.33	mg/kg wet							
Benzo(k)fluoranthene	0.11	U	0.33	mg/kg wet							
Bis(2-chloroethoxy)methane	0.15	U	0.33	mg/kg wet							
Bis(2-chloroethyl)ether	0.14	U	0.33	mg/kg wet							
Bis(2-chloroisopropyl)ether	0.099	U	0.33	mg/kg wet							
Bis(2-ethylhexyl)phthalate	0.13	U	0.33	mg/kg wet							

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D14001 - EPA 3550C_MS - Continued

Blank (4D14001-BLK1) Continued Prepared: 04/14/2014 07:00 Analyzed: 04/14/2014 16:21

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Butylbenzylphthalate	0.14	U	0.33	mg/kg wet							
Caprolactam	0.30	U	0.33	mg/kg wet							
Carbazole	0.12	U	0.33	mg/kg wet							
Chrysene	0.13	U	0.33	mg/kg wet							
Dibenzo(a,h)anthracene	0.14	U	0.33	mg/kg wet							
Dibenzofuran	0.13	U	0.33	mg/kg wet							
Diethylphthalate	0.13	U	0.33	mg/kg wet							
Dimethylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-butylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-octylphthalate	0.13	U	0.33	mg/kg wet							
Fluoranthene	0.11	U	0.33	mg/kg wet							
Fluorene	0.14	U	0.33	mg/kg wet							
Hexachlorobenzene	0.12	U	0.33	mg/kg wet							
Hexachlorobutadiene	0.13	U	0.33	mg/kg wet							
Hexachlorocyclopentadiene	0.15	U	0.33	mg/kg wet							
Hexachloroethane	0.10	U	0.33	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.14	U	0.33	mg/kg wet							
Isophorone	0.17	U	0.33	mg/kg wet							
Naphthalene	0.12	U	0.33	mg/kg wet							
Nitrobenzene	0.15	U	0.33	mg/kg wet							
N-Nitroso-di-n-propylamine	0.15	U	0.33	mg/kg wet							
N-nitrosodiphenylamine/Diphenylamine	0.23	U	0.33	mg/kg wet							
Pentachlorophenol	0.21	U	0.33	mg/kg wet							
Phenanthrene	0.13	U	0.33	mg/kg wet							
Phenol	0.099	U	0.33	mg/kg wet							
Pyrene	0.11	U	0.33	mg/kg wet							
2,4,6-Tribromophenol	*1.4*			*mg/kg wet*	*1.67*		*84*	*23-137*			
2-Fluorobiphenyl	*1.3*			*mg/kg wet*	*1.67*		*80*	*29-119*			
2-Fluorophenol	*1.5*			*mg/kg wet*	*1.67*		*89*	*20-124*			
Nitrobenzene-d5	*1.1*			*mg/kg wet*	*1.67*		*67*	*17-126*			
Phenol-d5	*1.4*			*mg/kg wet*	*1.67*		*84*	*15-131*			
Terphenyl-d14	*1.6*			*mg/kg wet*	*1.67*		*96*	*60-120*			

LCS (4D14001-BS1) Prepared: 04/14/2014 07:00 Analyzed: 04/14/2014 16:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.7		0.33	mg/kg wet	1.67		102	54-125			
2-Chlorophenol	1.4		0.33	mg/kg wet	1.67		85	50-105			
4-Chloro-3-methylphenol	1.5		0.33	mg/kg wet	1.67		88	55-106			
4-Nitrophenol	1.0		0.33	mg/kg wet	1.67		60	30-124			
Acenaphthene	1.3		0.33	mg/kg wet	1.67		79	49-111			
N-Nitroso-di-n-propylamine	1.2		0.33	mg/kg wet	1.67		74	52-126			
Pentachlorophenol	1.2		0.33	mg/kg wet	1.67		73	10-101			
Phenol	1.4		0.33	mg/kg wet	1.67		82	28-121			
Pyrene	1.4		0.33	mg/kg wet	1.67		83	66-115			
2,4,6-Tribromophenol	*1.9*			*mg/kg wet*	*1.67*		*111*	*23-137*			
2-Fluorobiphenyl	*1.4*			*mg/kg wet*	*1.67*		*83*	*29-119*			
2-Fluorophenol	*1.6*			*mg/kg wet*	*1.67*		*95*	*20-124*			

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D14001 - EPA 3550C_MS - Continued

LCS (4D14001-BS1) Continued Prepared: 04/14/2014 07:00 Analyzed: 04/14/2014 16:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrobenzene-d5	*1.3*			*mg/kg wet*	*1.67*		*77*	*17-126*			
Phenol-d5	*1.4*			*mg/kg wet*	*1.67*		*86*	*15-131*			
Terphenyl-d14	*1.6*			*mg/kg wet*	*1.67*		*95*	*60-120*			

Matrix Spike (4D14001-MS1) Prepared: 04/14/2014 07:00 Analyzed: 04/14/2014 17:18

Source: A402144-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.9		0.36	mg/kg dry	1.80	0.17 U	106	54-125			
2-Chlorophenol	1.5		0.36	mg/kg dry	1.80	0.25 U	86	50-105			
4-Chloro-3-methylphenol	1.7		0.36	mg/kg dry	1.80	0.30 U	95	55-106			
4-Nitrophenol	1.2		0.36	mg/kg dry	1.80	0.14 U	68	30-124			
Acenaphthene	1.5		0.36	mg/kg dry	1.80	0.14 U	82	49-111			
N-Nitroso-di-n-propylamine	1.3		0.36	mg/kg dry	1.80	0.16 U	75	52-126			
Pentachlorophenol	1.6		0.36	mg/kg dry	1.80	0.23 U	92	10-101			
Phenol	1.5		0.36	mg/kg dry	1.80	0.11 U	85	28-121			
Pyrene	1.6		0.36	mg/kg dry	1.80	0.12 U	88	66-115			
2,4,6-Tribromophenol	*2.1*			*mg/kg dry*	*1.80*		*117*	*23-137*			
2-Fluorobiphenyl	*1.5*			*mg/kg dry*	*1.80*		*81*	*29-119*			
2-Fluorophenol	*1.6*			*mg/kg dry*	*1.80*		*92*	*20-124*			
Nitrobenzene-d5	*1.3*			*mg/kg dry*	*1.80*		*73*	*17-126*			
Phenol-d5	*1.5*			*mg/kg dry*	*1.80*		*86*	*15-131*			
Terphenyl-d14	*1.7*			*mg/kg dry*	*1.80*		*95*	*60-120*			

Matrix Spike Dup (4D14001-MSD1) Prepared: 04/14/2014 07:00 Analyzed: 04/14/2014 17:46

Source: A402144-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.8		0.36	mg/kg dry	1.80	0.17 U	97	54-125	9	23	
2-Chlorophenol	1.3		0.36	mg/kg dry	1.80	0.25 U	71	50-105	18	27	
4-Chloro-3-methylphenol	1.5		0.36	mg/kg dry	1.80	0.30 U	81	55-106	16	28	
4-Nitrophenol	1.1		0.36	mg/kg dry	1.80	0.14 U	61	30-124	10	35	
Acenaphthene	1.3		0.36	mg/kg dry	1.80	0.14 U	72	49-111	12	27	
N-Nitroso-di-n-propylamine	1.2		0.36	mg/kg dry	1.80	0.16 U	65	52-126	14	24	
Pentachlorophenol	1.4		0.36	mg/kg dry	1.80	0.23 U	77	10-101	18	26	
Phenol	1.2		0.36	mg/kg dry	1.80	0.11 U	67	28-121	23	32	
Pyrene	1.5		0.36	mg/kg dry	1.80	0.12 U	81	66-115	8	28	
2,4,6-Tribromophenol	*1.9*			*mg/kg dry*	*1.80*		*108*	*23-137*			
2-Fluorobiphenyl	*1.3*			*mg/kg dry*	*1.80*		*71*	*29-119*			
2-Fluorophenol	*1.4*			*mg/kg dry*	*1.80*		*78*	*20-124*			
Nitrobenzene-d5	*1.2*			*mg/kg dry*	*1.80*		*64*	*17-126*			
Phenol-d5	*1.3*			*mg/kg dry*	*1.80*		*70*	*15-131*			
Terphenyl-d14	*1.7*			*mg/kg dry*	*1.80*		*92*	*60-120*			

Classical Chemistry Parameters - Quality Control

Batch 4D12005 - NO PREP

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Classical Chemistry Parameters - Quality Control

Batch 4D12005 - NO PREP - Continued

Blank (4D12005-BLK1) Prepared: 04/12/2014 09:19 Analyzed: 04/14/2014 13:50

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.15	U	1.0	mg/kg wet							

LCS (4D12005-BS1) Prepared: 04/12/2014 09:19 Analyzed: 04/14/2014 13:50

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	11		1.0	mg/kg wet	10.0		106	84-124			

Matrix Spike (4D12005-MS1) Prepared: 04/12/2014 09:19 Analyzed: 04/14/2014 13:50

Source: A402117-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	12		1.2	mg/kg dry	11.9	0.72	98	84-124			

Matrix Spike (4D12005-MS2) Prepared: 04/12/2014 09:19 Analyzed: 04/14/2014 13:50

Source: C404168-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	13		1.3	mg/kg dry	12.8	1.1	95	84-124			

Matrix Spike Dup (4D12005-MSD1) Prepared: 04/12/2014 09:19 Analyzed: 04/14/2014 13:50

Source: A402117-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	12		1.2	mg/kg dry	11.9	0.72	98	84-124	0.9	11	

Matrix Spike Dup (4D12005-MSD2) Prepared: 04/12/2014 09:19 Analyzed: 04/14/2014 13:50

Source: C404168-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	14		1.3	mg/kg dry	13.0	1.1	95	84-124	2	11	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence (85% or greater confidence) to make a "tentative identification".
J-01	Result is estimated due to positive results in the associated method blank.
QB-01	The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact of the deviation.
QL-02	The associated laboratory control sample exhibited high bias; since the result is ND, the impact on data quality is minimal.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-08	Post-digestion spike did not meet method requirements due to confirmed matrix effects (dilution test).
QV-01	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.

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ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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10775 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 111
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: REMSA, Inc. (RE026)	Project Number: E-18-10-T03P
Address: 124 W. Queens Way	Project Name/Desc: 1614 West Pembroke Avenue
City/ST/Zip: Hampton, VA 23669	PO # / Billing Info: E-18-10-T03P
Tel: (757) 722-0113 Fax:	Reporting Contact: Mike Iwashchenko
Sampler(s) Name, Affiliation (Print): Andrew Gowen	Billing Contact: Mike Iwashchenko
Sampler(s) Signature:	Site Location / Time Zone:

Requested Analyses: 8260B TCL OLM4.2; Inorganic (Ag,Hg) TCL OLM4.2 (Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,Hg,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn)

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C404168

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B TCL OLM4.2	Inorganic (Ag,Hg) TCL OLM4.2	Sample Comments
	SS-1	4-8-14	13:55		SE	5	X	X	
	SS-2	4-8-14	14:14		SE	5	X	X	
	SS-3	4-8-14	14:37		SE	5	X	X	
	Trip Blank				WA	2		X	

Preservation (See Codes) (Combine as necessary)

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
		[signature]	4-8-14 15:00	[signature]	4/9/14 1015
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time

Cooler #'s & Temps on Receipt: C-001 1.9

Condition Upon Receipt: ✓ Acceptable ___ Unacceptable

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

ENCO Laboratories

Accurate. Timely. Responsive. Innovative.

102-A Woodwinds Industrial Court
Cary NC, 27511
Phone: 919.467.3090 FAX: 919.467.3515

Wednesday, May 7, 2014
REMSA, Inc. (RE026)
Attn: Mike Iwashchenko
124 W. Queens Way
Hampton, VA 23669

RE: Laboratory Results for
Project Number: E-18-10-T03P, Project Name/Desc: 1614 West Pembroke Avenue
ENCO Workorder(s): C405030

Dear Mike Iwashchenko,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Friday, April 18, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: GP14-10 **Lab ID: C405030-01** **Sampled: 04/17/14 09:45** **Received: 04/18/14 09:45**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/14/14		04/21/14	13:03	04/23/14 13:38
EPA 7196A	05/17/14	05/05/14	04/28/14	09:07	04/29/14 10:54
EPA 7471B	05/15/14		04/29/14	10:11	04/30/14 16:48
EPA 8015C	05/01/14		04/22/14	14:57	04/22/14 23:49
EPA 8015C	05/01/14	06/02/14	04/23/14	12:43	04/24/14 04:32
EPA 8260B	05/01/14		04/25/14	12:45	04/25/14 20:56
EPA 8270D	05/01/14	06/04/14	04/25/14	07:30	05/06/14 16:41

Client ID: GP14-10 **Lab ID: C405030-02** **Sampled: 04/17/14 10:00** **Received: 04/18/14 09:45**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	04/18/14 10:00		04/18/14	12:21	04/18/14 12:41
EPA 6010C	10/14/14		04/21/14	11:20	04/28/14 14:01
EPA 6020A	10/14/14		04/23/14	11:17	04/29/14 12:00
EPA 7470A	05/15/14		04/29/14	13:00	04/30/14 15:01
EPA 8015C	04/24/14	06/03/14	04/24/14	09:54	04/25/14 17:53
EPA 8015C	05/01/14		04/22/14	16:19	04/23/14 07:36
EPA 8082A	04/17/15	06/01/14	04/22/14	09:29	04/24/14 20:37
EPA 8260B	05/01/14		04/27/14	17:00	04/28/14 05:39
EPA 8270D	04/24/14	06/03/14	04/24/14	18:30	05/05/14 20:21

Client ID: GP14-11 **Lab ID: C405030-03** **Sampled: 04/17/14 10:30** **Received: 04/18/14 09:45**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/14/14		04/21/14	13:03	04/23/14 13:40
EPA 7196A	05/17/14	05/05/14	04/28/14	09:07	04/29/14 10:54
EPA 7471B	05/15/14		04/29/14	10:11	04/30/14 16:51
EPA 8015C	05/01/14		04/22/14	14:57	04/23/14 00:20
EPA 8015C	05/01/14	06/02/14	04/23/14	12:43	04/24/14 05:02
EPA 8081B	05/01/14	06/01/14	04/22/14	11:06	04/23/14 13:05
EPA 8151A	05/01/14	06/01/14	04/22/14	11:50	04/23/14 05:13
EPA 8260B	05/01/14		04/25/14	12:45	04/25/14 21:29
EPA 8270D	05/01/14	06/04/14	04/25/14	07:30	05/06/14 17:09

Client ID: GP14-11 **Lab ID: C405030-04** **Sampled: 04/17/14 11:03** **Received: 04/18/14 09:45**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	04/18/14 11:03		04/18/14	12:21	04/18/14 12:41
EPA 6010C	10/14/14		04/21/14	11:20	04/28/14 14:03
EPA 6020A	10/14/14		04/23/14	11:17	04/29/14 12:21
EPA 7470A	05/15/14		04/29/14	13:00	04/30/14 15:03
EPA 8015C	04/24/14	06/03/14	04/24/14	09:54	04/25/14 18:23
EPA 8015C	05/01/14		04/22/14	16:19	04/23/14 08:07
EPA 8081B	04/24/14	06/01/14	04/22/14	09:12	04/24/14 20:50
EPA 8082A	04/17/15	06/03/14	04/24/14	16:30	04/30/14 03:09
EPA 8151A	04/24/14	06/02/14	04/23/14	07:00	04/28/14 19:46
EPA 8260B	05/01/14		04/28/14	11:19	04/29/14 08:56
EPA 8270D	04/24/14	06/03/14	04/24/14	18:30	05/05/14 20:50

Client ID: GP14-9 **Lab ID: C405030-05** **Sampled: 04/17/14 08:50** **Received: 04/18/14 09:45**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	05/17/14	05/05/14	04/28/14	09:07	04/29/14 10:54
EPA 7471B	05/15/14		04/29/14	10:11	04/30/14 16:54
EPA 8015C	05/01/14		04/22/14	14:57	04/23/14 00:51
EPA 8015C	05/01/14	06/02/14	04/23/14	12:43	04/24/14 05:31
EPA 8260B	05/01/14		04/25/14	12:45	04/25/14 22:02
EPA 8270D	05/01/14	06/04/14	04/25/14	07:30	05/06/14 17:37

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: GP14-9 **Lab ID: C405030-05RE1** **Sampled: 04/17/14 08:50** **Received: 04/18/14 09:45**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/14/14		04/21/14	13:03	04/23/14 14:03

Client ID: GP14-9 **Lab ID: C405030-06** **Sampled: 04/17/14 10:45** **Received: 04/18/14 09:45**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	04/18/14 10:45		04/18/14	12:21	04/18/14 12:41
EPA 6010C	10/14/14		04/21/14	11:20	04/28/14 14:05
EPA 6020A	10/14/14		04/23/14	11:17	04/29/14 12:25
EPA 7470A	05/15/14		04/29/14	13:00	04/30/14 15:05
EPA 8015C	04/24/14	06/03/14	04/24/14	09:54	04/25/14 18:53
EPA 8015C	05/01/14		04/22/14	16:19	04/23/14 08:38
EPA 8082A	04/17/15	06/03/14	04/24/14	16:30	04/30/14 03:35
EPA 8260B	05/01/14		04/27/14	17:00	04/28/14 06:09
EPA 8270D	04/24/14	06/03/14	04/24/14	18:30	05/05/14 21:20

Client ID: GP14-8 **Lab ID: C405030-07** **Sampled: 04/17/14 11:00** **Received: 04/18/14 09:45**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/14/14		04/21/14	11:20	04/28/14 14:15
EPA 6020A	10/14/14		04/23/14	11:17	04/29/14 12:29
EPA 7470A	05/15/14		04/29/14	13:00	04/30/14 15:08
EPA 8015C	04/24/14	06/03/14	04/24/14	09:54	04/25/14 19:22
EPA 8082A	04/17/15	06/03/14	04/24/14	16:30	04/30/14 03:48
EPA 8270D	04/24/14	06/03/14	04/24/14	18:30	05/05/14 21:49

Client ID: GP14-7 **Lab ID: C405030-08** **Sampled: 04/17/14 08:50** **Received: 04/18/14 09:45**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	04/18/14 08:50		04/18/14	12:21	04/18/14 12:41
EPA 6010C	10/14/14		04/21/14	11:20	04/28/14 14:18
EPA 6020A	10/14/14		04/23/14	11:17	04/29/14 12:33
EPA 7470A	05/15/14		04/29/14	13:00	04/30/14 15:10
EPA 8015C	04/24/14	06/03/14	04/24/14	09:54	04/25/14 20:21
EPA 8082A	04/17/15	06/03/14	04/24/14	16:30	04/30/14 04:02

Client ID: Trip Blank **Lab ID: C405030-09** **Sampled: 04/17/14 08:50** **Received: 04/18/14 09:45**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	05/01/14		04/27/14	17:00	04/28/14 05:10

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SAMPLE DETECTION SUMMARY

Client ID: GP14-10 **Lab ID: C405030-01**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
2-Butanone	0.0035	J	0.0026	0.0074	mg/kg dry	EPA 8260B	
Acetone	0.014		0.0025	0.0074	mg/kg dry	EPA 8260B	
Aluminum - Total	5250		2.58	12.3	mg/kg dry	EPA 6010C	
Antimony - Total	1.17	J	0.135	1.23	mg/kg dry	EPA 6010C	
Arsenic - Total	4.30		0.123	0.615	mg/kg dry	EPA 6010C	
Barium - Total	58.1		0.123	0.615	mg/kg dry	EPA 6010C	
Beryllium - Total	0.234		0.0148	0.0615	mg/kg dry	EPA 6010C	
Cadmium - Total	0.841		0.0118	0.0615	mg/kg dry	EPA 6010C	
Calcium - Total	1720	B	6.89	30.8	mg/kg dry	EPA 6010C	QB-01
Chromium - Total	14.5		0.123	0.615	mg/kg dry	EPA 6010C	
Cobalt - Total	1.39		0.123	0.615	mg/kg dry	EPA 6010C	
Copper - Total	54.4		0.234	0.615	mg/kg dry	EPA 6010C	
DRO (C10-C28)	94		2.1	4.1	mg/kg dry	EPA 8015C	
Iron - Total	4740	B	0.591	3.08	mg/kg dry	EPA 6010C	QB-01
Lead - Total	257		0.148	0.615	mg/kg dry	EPA 6010C	
Magnesium - Total	317	B	0.800	30.8	mg/kg dry	EPA 6010C	QB-01
Manganese - Total	100		0.123	0.615	mg/kg dry	EPA 6010C	
Mercury - Total	0.185		0.00849	0.0295	mg/kg dry	EPA 7471B	
Nickel - Total	7.05		0.443	3.08	mg/kg dry	EPA 6010C	
Potassium - Total	265		4.92	30.8	mg/kg dry	EPA 6010C	
Selenium - Total	0.415	J	0.123	0.615	mg/kg dry	EPA 6010C	
Sodium - Total	35.9		7.38	30.8	mg/kg dry	EPA 6010C	
Vanadium - Total	13.4		0.123	0.615	mg/kg dry	EPA 6010C	
Zinc - Total	178		1.35	3.08	mg/kg dry	EPA 6010C	

Client ID: GP14-10 **Lab ID: C405030-02**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	11		1.2	5.0	ug/L	EPA 8260B	
Aluminum - Total	28300		29.0	100	ug/L	EPA 6010C	
Arsenic - Total	8.21	J	5.40	10.0	ug/L	EPA 6010C	
Barium - Total	138		1.00	10.0	ug/L	EPA 6010C	
Beryllium - Total	0.650	J	0.100	1.00	ug/L	EPA 6010C	
Cadmium - Total	0.640	J	0.360	1.00	ug/L	EPA 6010C	
Calcium - Total	137000		39.0	100	ug/L	EPA 6010C	
Chromium - Total	48.3		1.40	10.0	ug/L	EPA 6010C	
Cobalt - Total	5.99	JD	1.00	10.0	ug/L	EPA 6020A	
Copper - Total	61.7		1.60	10.0	ug/L	EPA 6010C	
DRO (C10-C28)	0.077	J	0.060	0.10	mg/L	EPA 8015C	
Iron - Total	30900		22.0	50.0	ug/L	EPA 6010C	
Lead - Total	85.1		2.10	10.0	ug/L	EPA 6010C	
Magnesium - Total	20200		23.0	100	ug/L	EPA 6010C	
Manganese - Total	553		1.10	10.0	ug/L	EPA 6010C	
Nickel - Total	14.7		1.80	10.0	ug/L	EPA 6010C	
Potassium - Total	4500		150	500	ug/L	EPA 6010C	
Sodium - Total	13300		400	500	ug/L	EPA 6010C	
Vanadium - Total	56.9		1.40	10.0	ug/L	EPA 6010C	
Zinc - Total	125		3.80	10.0	ug/L	EPA 6010C	

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SAMPLE DETECTION SUMMARY

Client ID: GP14-11 **Lab ID: C405030-03**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	9340		2.86	13.6	mg/kg dry	EPA 6010C	
Antimony - Total	0.385	J	0.150	1.36	mg/kg dry	EPA 6010C	
Arsenic - Total	4.08		0.136	0.682	mg/kg dry	EPA 6010C	
Barium - Total	52.5		0.136	0.682	mg/kg dry	EPA 6010C	
Beryllium - Total	0.315		0.0164	0.0682	mg/kg dry	EPA 6010C	
Cadmium - Total	0.268		0.0131	0.0682	mg/kg dry	EPA 6010C	
Calcium - Total	2200	B	7.64	34.1	mg/kg dry	EPA 6010C	QB-01
Chromium - Total	10.5		0.136	0.682	mg/kg dry	EPA 6010C	
Cobalt - Total	1.54		0.136	0.682	mg/kg dry	EPA 6010C	
Copper - Total	16.1		0.259	0.682	mg/kg dry	EPA 6010C	
DRO (C10-C28)	270		2.3	4.5	mg/kg dry	EPA 8015C	
Iron - Total	5230	B	0.655	3.41	mg/kg dry	EPA 6010C	QB-01
Lead - Total	56.2		0.164	0.682	mg/kg dry	EPA 6010C	
Magnesium - Total	588	B	0.886	34.1	mg/kg dry	EPA 6010C	QB-01
Manganese - Total	41.7		0.136	0.682	mg/kg dry	EPA 6010C	
Mercury - Total	0.0602		0.00941	0.0327	mg/kg dry	EPA 7471B	
Nickel - Total	4.84		0.491	3.41	mg/kg dry	EPA 6010C	
Potassium - Total	400		5.45	34.1	mg/kg dry	EPA 6010C	
Silver - Total	0.220	J	0.136	0.682	mg/kg dry	EPA 6010C	
Sodium - Total	35.2		8.18	34.1	mg/kg dry	EPA 6010C	
Vanadium - Total	17.9		0.136	0.682	mg/kg dry	EPA 6010C	
Zinc - Total	45.8		1.50	3.41	mg/kg dry	EPA 6010C	

Client ID: GP14-11 **Lab ID: C405030-04**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	13		1.2	5.0	ug/L	EPA 8260B	
Aluminum - Total	5390		29.0	100	ug/L	EPA 6010C	
Barium - Total	46.6		1.00	10.0	ug/L	EPA 6010C	
Beryllium - Total	0.438	J	0.100	1.00	ug/L	EPA 6010C	
Calcium - Total	24800		39.0	100	ug/L	EPA 6010C	
Chromium - Total	7.92	J	1.40	10.0	ug/L	EPA 6010C	
Cobalt - Total	1.29	JD	1.00	10.0	ug/L	EPA 6020A	R-05
Copper - Total	3.14	J	1.60	10.0	ug/L	EPA 6010C	
Iron - Total	6610		22.0	50.0	ug/L	EPA 6010C	
Lead - Total	4.42	J	2.10	10.0	ug/L	EPA 6010C	
Magnesium - Total	4480		23.0	100	ug/L	EPA 6010C	
Manganese - Total	80.8		1.10	10.0	ug/L	EPA 6010C	
Nickel - Total	4.45	J	1.80	10.0	ug/L	EPA 6010C	
Potassium - Total	2910		150	500	ug/L	EPA 6010C	
Sodium - Total	5730		400	500	ug/L	EPA 6010C	
Vanadium - Total	13.1		1.40	10.0	ug/L	EPA 6010C	
Zinc - Total	10.7		3.80	10.0	ug/L	EPA 6010C	

Client ID: GP14-9 **Lab ID: C405030-05**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
2-Butanone	0.0035	J	0.0023	0.0063	mg/kg dry	EPA 8260B	
Acetone	0.014		0.0021	0.0063	mg/kg dry	EPA 8260B	
DRO (C10-C28)	230		2.1	4.1	mg/kg dry	EPA 8015C	
Mercury - Total	0.184		0.00789	0.0274	mg/kg dry	EPA 7471B	

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SAMPLE DETECTION SUMMARY

Client ID: GP14-9 **Lab ID:** C405030-05RE1

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	4160	D	5.28	25.1	mg/kg dry	EPA 6010C	R-01
Antimony - Total	2.03	JD	0.277	2.51	mg/kg dry	EPA 6010C	R-01
Arsenic - Total	3.30	D	0.251	1.26	mg/kg dry	EPA 6010C	R-01
Barium - Total	40.8	D	0.251	1.26	mg/kg dry	EPA 6010C	R-01
Beryllium - Total	0.200	D	0.0302	0.126	mg/kg dry	EPA 6010C	R-01
Cadmium - Total	1.02	D	0.0241	0.126	mg/kg dry	EPA 6010C	R-01
Calcium - Total	15800	BD	14.1	62.9	mg/kg dry	EPA 6010C	QB-01, R-01
Chromium - Total	10.2	D	0.251	1.26	mg/kg dry	EPA 6010C	R-01
Cobalt - Total	2.13	D	0.251	1.26	mg/kg dry	EPA 6010C	R-01
Copper - Total	42.2	D	0.478	1.26	mg/kg dry	EPA 6010C	R-01
Iron - Total	14000	BD	1.21	6.29	mg/kg dry	EPA 6010C	QB-01
Lead - Total	176	D	0.302	1.26	mg/kg dry	EPA 6010C	R-01
Magnesium - Total	462	BD	1.63	62.9	mg/kg dry	EPA 6010C	QB-01, R-01
Manganese - Total	81.8	D	0.251	1.26	mg/kg dry	EPA 6010C	R-01
Nickel - Total	13.1	D	0.905	6.29	mg/kg dry	EPA 6010C	R-01
Potassium - Total	218	D	10.1	62.9	mg/kg dry	EPA 6010C	R-01
Sodium - Total	130	D	15.1	62.9	mg/kg dry	EPA 6010C	R-01
Vanadium - Total	8.96	D	0.251	1.26	mg/kg dry	EPA 6010C	R-01
Zinc - Total	199	D	2.77	6.29	mg/kg dry	EPA 6010C	R-01

Client ID: GP14-9 **Lab ID:** C405030-06

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	10		1.2	5.0	ug/L	EPA 8260B	
Aluminum - Total	37600		29.0	100	ug/L	EPA 6010C	
Antimony - Total	3.99	JD	2.20	20.0	ug/L	EPA 6020A	R-05
Arsenic - Total	17.3		5.40	10.0	ug/L	EPA 6010C	
Barium - Total	318		1.00	10.0	ug/L	EPA 6010C	
Beryllium - Total	1.27		0.100	1.00	ug/L	EPA 6010C	
Cadmium - Total	5.92		0.360	1.00	ug/L	EPA 6010C	
Calcium - Total	89300		39.0	100	ug/L	EPA 6010C	
Chromium - Total	80.1		1.40	10.0	ug/L	EPA 6010C	
Cobalt - Total	12.7	D	1.00	10.0	ug/L	EPA 6020A	R-05
Copper - Total	70.4		1.60	10.0	ug/L	EPA 6010C	
DRO (C10-C28)	0.16		0.060	0.10	mg/L	EPA 8015C	
GRO (C6-C10)	0.011	J	0.011	0.055	mg/L	EPA 8015C	
Iron - Total	56900		22.0	50.0	ug/L	EPA 6010C	
Lead - Total	158		2.10	10.0	ug/L	EPA 6010C	
Magnesium - Total	17500		23.0	100	ug/L	EPA 6010C	
Manganese - Total	806		1.10	10.0	ug/L	EPA 6010C	
Mercury - Total	0.227		0.170	0.200	ug/L	EPA 7470A	
Nickel - Total	25.9		1.80	10.0	ug/L	EPA 6010C	
Potassium - Total	8180		150	500	ug/L	EPA 6010C	
Silver - Total	3.26	J	1.90	10.0	ug/L	EPA 6010C	
Sodium - Total	26500		400	500	ug/L	EPA 6010C	
Vanadium - Total	139		1.40	10.0	ug/L	EPA 6010C	
Zinc - Total	394		3.80	10.0	ug/L	EPA 6010C	

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SAMPLE DETECTION SUMMARY

Client ID: GP14-8 **Lab ID: C405030-07**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	25600		29.0	100	ug/L	EPA 6010C	
Arsenic - Total	95.5		5.40	10.0	ug/L	EPA 6010C	
Barium - Total	115		1.00	10.0	ug/L	EPA 6010C	
Beryllium - Total	1.18		0.100	1.00	ug/L	EPA 6010C	
Calcium - Total	90100		39.0	100	ug/L	EPA 6010C	
Chromium - Total	59.6		1.40	10.0	ug/L	EPA 6010C	
Cobalt - Total	48.7	D	1.00	10.0	ug/L	EPA 6020A	R-05
Copper - Total	24.3		1.60	10.0	ug/L	EPA 6010C	
DRO (C10-C28)	0.15		0.060	0.10	mg/L	EPA 8015C	
Iron - Total	118000		22.0	50.0	ug/L	EPA 6010C	
Lead - Total	42.3		2.10	10.0	ug/L	EPA 6010C	
Magnesium - Total	20200		23.0	100	ug/L	EPA 6010C	
Manganese - Total	1650		1.10	10.0	ug/L	EPA 6010C	
Nickel - Total	58.2		1.80	10.0	ug/L	EPA 6010C	
Potassium - Total	4610		150	500	ug/L	EPA 6010C	
Silver - Total	2.81	J	1.90	10.0	ug/L	EPA 6010C	
Sodium - Total	42300		400	500	ug/L	EPA 6010C	
Vanadium - Total	109		1.40	10.0	ug/L	EPA 6010C	
Zinc - Total	150		3.80	10.0	ug/L	EPA 6010C	

Client ID: GP14-7 **Lab ID: C405030-08**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	11800		29.0	100	ug/L	EPA 6010C	
Arsenic - Total	5.56	J	5.40	10.0	ug/L	EPA 6010C	
Barium - Total	83.0		1.00	10.0	ug/L	EPA 6010C	
Beryllium - Total	0.823	J	0.100	1.00	ug/L	EPA 6010C	
Cadmium - Total	1.49		0.360	1.00	ug/L	EPA 6010C	
Calcium - Total	53400		39.0	100	ug/L	EPA 6010C	
Chromium - Total	25.3		1.40	10.0	ug/L	EPA 6010C	
Cobalt - Total	13.0	D	1.00	10.0	ug/L	EPA 6020A	R-05
Copper - Total	37.3		1.60	10.0	ug/L	EPA 6010C	
DRO (C10-C28)	0.42		0.060	0.10	mg/L	EPA 8015C	
Iron - Total	63200		22.0	50.0	ug/L	EPA 6010C	
Lead - Total	106		2.10	10.0	ug/L	EPA 6010C	
Magnesium - Total	12700		23.0	100	ug/L	EPA 6010C	
Manganese - Total	848		1.10	10.0	ug/L	EPA 6010C	
Nickel - Total	22.7		1.80	10.0	ug/L	EPA 6010C	
Potassium - Total	3500		150	500	ug/L	EPA 6010C	
Sodium - Total	38100		400	500	ug/L	EPA 6010C	
Vanadium - Total	31.7		1.40	10.0	ug/L	EPA 6010C	
Zinc - Total	525		3.80	10.0	ug/L	EPA 6010C	

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ANALYTICAL RESULTS

Description:	GP14-10	**Lab Sample ID:**	C405030-01	**Received:**	04/18/14 09:45
Matrix:	Soil	**Sampled:**	04/17/14 09:45	**Work Order:**	C405030
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian	**% Solids:**	81.27

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	1.5	U	mg/kg dry	1	1.5	5.9	4D22036	EPA 8015C	04/22/14 23:49	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*8.9*	*1*	*10.8*	*82 %*	*59-168*	*4D22036*	*EPA 8015C*	*04/22/14 23:49*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**94**		mg/kg dry	1	2.1	4.1	4D23014	EPA 8015C	04/24/14 04:32	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*2.2*	*1*	*2.05*	*105 %*	*51-138*	*4D23014*	*EPA 8015C*	*04/24/14 04:32*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**5250**		mg/kg dry	1	2.58	12.3	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Antimony [7440-36-0]	**1.17**	J	mg/kg dry	1	0.135	1.23	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Arsenic [7440-38-2]^	**4.30**		mg/kg dry	1	0.123	0.615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Barium [7440-39-3]^	**58.1**		mg/kg dry	1	0.123	0.615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Beryllium [7440-41-7]	**0.234**		mg/kg dry	1	0.0148	0.0615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Cadmium [7440-43-9]^	**0.841**		mg/kg dry	1	0.0118	0.0615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Calcium [7440-70-2]	**1720**	B	mg/kg dry	1	6.89	30.8	4D21024	EPA 6010C	04/23/14 13:38	JDH	QB-01
Chromium [7440-47-3]^	**14.5**		mg/kg dry	1	0.123	0.615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Cobalt [7440-48-4]	**1.39**		mg/kg dry	1	0.123	0.615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Copper [7440-50-8]	**54.4**		mg/kg dry	1	0.234	0.615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Iron [7439-89-6]	**4740**	B	mg/kg dry	1	0.591	3.08	4D21024	EPA 6010C	04/23/14 13:38	JDH	QB-01
Lead [7439-92-1]^	**257**		mg/kg dry	1	0.148	0.615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Magnesium [7439-95-4]	**317**	B	mg/kg dry	1	0.800	30.8	4D21024	EPA 6010C	04/23/14 13:38	JDH	QB-01
Manganese [7439-96-5]	**100**		mg/kg dry	1	0.123	0.615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Mercury [7439-97-6]^	**0.185**		mg/kg dry	1	0.00849	0.0295	4D29012	EPA 7471B	04/30/14 16:48	T1D	
Nickel [7440-02-0]	**7.05**		mg/kg dry	1	0.443	3.08	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Potassium [7440-09-7]	**265**		mg/kg dry	1	4.92	30.8	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Selenium [7782-49-2]^	**0.415**	J	mg/kg dry	1	0.123	0.615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Silver [7440-22-4]^	0.123	U	mg/kg dry	1	0.123	0.615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Sodium [7440-23-5]	**35.9**		mg/kg dry	1	7.38	30.8	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Thallium [7440-28-0]	0.123	U	mg/kg dry	1	0.123	0.615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Vanadium [7440-62-2]^	**13.4**		mg/kg dry	1	0.123	0.615	4D21024	EPA 6010C	04/23/14 13:38	JDH	
Zinc [7440-66-6]^	**178**		mg/kg dry	1	1.35	3.08	4D21024	EPA 6010C	04/23/14 13:38	JDH	

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ANALYTICAL RESULTS

Description: GP14-10	**Lab Sample ID:** C405030-01	**Received:** 04/18/14 09:45
Matrix: Soil	**Sampled:** 04/17/14 09:45	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 81.27

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
1,1-Dichloroethane [75-34-3]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
1,1-Dichloroethene [75-35-4]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0013	U	mg/kg dry	1	0.0013	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
1,2-Dibromoethane [106-93-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
1,2-Dichloroethane [107-06-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
1,2-Dichloropropane [78-87-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
2-Butanone [78-93-3]^	**0.0035**	J	mg/kg dry	1	0.0026	0.0074	4D25025	EPA 8260B	04/25/14 20:56	KAT	
2-Hexanone [591-78-6]^	0.0013	U	mg/kg dry	1	0.0013	0.0074	4D25025	EPA 8260B	04/25/14 20:56	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0021	U	mg/kg dry	1	0.0021	0.0074	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Acetone [67-64-1]^	**0.014**		mg/kg dry	1	0.0025	0.0074	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Benzene [71-43-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Bromochloromethane [74-97-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Bromodichloromethane [75-27-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Bromoform [75-25-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Bromomethane [74-83-9]^	0.0013	U	mg/kg dry	1	0.0013	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Carbon disulfide [75-15-0]^	0.0031	U	mg/kg dry	1	0.0031	0.0074	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Carbon Tetrachloride [56-23-5]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Chlorobenzene [108-90-7]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Chloroethane [75-00-3]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Chloroform [67-66-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Chloromethane [74-87-3]^	0.0010	U	mg/kg dry	1	0.0010	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
cis-1,2-Dichloroethene [156-59-2]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
cis-1,3-Dichloropropene [10061-01-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Cyclohexane [110-82-7]^	0.0008	U	mg/kg dry	1	0.0008	0.0029	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Dibromochloromethane [124-48-1]^	0.0004	U	mg/kg dry	1	0.0004	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Ethylbenzene [100-41-4]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Freon 113 [76-13-1]^	0.0009	U	mg/kg dry	1	0.0009	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Isopropylbenzene [98-82-8]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Methyl acetate [79-20-9]^	0.0024	U	mg/kg dry	1	0.0024	0.0029	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Methyl cyclohexane [108-87-2]^	0.0008	U	mg/kg dry	1	0.0008	0.0029	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Methylene Chloride [75-09-2]^	0.0010	U	mg/kg dry	1	0.0010	0.0029	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Styrene [100-42-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Tetrachloroethene [127-18-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Toluene [108-88-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0010	U	mg/kg dry	1	0.0010	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Trichloroethene [79-01-6]^	0.0007	U	mg/kg dry	1	0.0007	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Trichlorofluoromethane [75-69-4]^	0.0008	U	mg/kg dry	1	0.0008	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	
Vinyl chloride [75-01-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0015	4D25025	EPA 8260B	04/25/14 20:56	KAT	

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ANALYTICAL RESULTS

Description: GP14-10	**Lab Sample ID:** C405030-01	**Received:** 04/18/14 09:45
Matrix: Soil	**Sampled:** 04/17/14 09:45	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 81.27

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7]^	0.0015	U	mg/kg dry	1	0.0015	0.0029	4D25025	EPA 8260B	04/25/14 20:56	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.065*	*1*	*0.0736*	*89 %*	*71-126*	*4D25025*	*EPA 8260B*	*04/25/14 20:56*	*KAT*	
Dibromofluoromethane	*0.064*	*1*	*0.0736*	*88 %*	*72-133*	*4D25025*	*EPA 8260B*	*04/25/14 20:56*	*KAT*	
Toluene-d8	*0.064*	*1*	*0.0736*	*87 %*	*80-123*	*4D25025*	*EPA 8260B*	*04/25/14 20:56*	*KAT*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.45	UD	mg/kg dry	5	0.45	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2,4,5-Trichlorophenol [95-95-4]^	0.41	UD	mg/kg dry	5	0.41	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2,4,6-Trichlorophenol [88-06-2]^	0.92	UD	mg/kg dry	5	0.92	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2,4-Dichlorophenol [120-83-2]^	1.5	UD	mg/kg dry	5	1.5	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2,4-Dimethylphenol [105-67-9]^	1.4	UD	mg/kg dry	5	1.4	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2,4-Dinitrophenol [51-28-5]^	0.55	UD	mg/kg dry	5	0.55	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2,4-Dinitrotoluene [121-14-2]^	0.98	UD	mg/kg dry	5	0.98	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2,6-Dinitrotoluene [606-20-2]^	1.1	UD	mg/kg dry	5	1.1	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2-Chloronaphthalene [91-58-7]^	0.60	UD	mg/kg dry	5	0.60	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2-Chlorophenol [95-57-8]^	1.4	UD	mg/kg dry	5	1.4	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2-Methyl-4,6-dinitrophenol [534-52-1]^	1.7	UD	mg/kg dry	5	1.7	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
2-Methylnaphthalene [91-57-6]^	0.74	UD	mg/kg dry	5	0.74	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2-Methylphenol [95-48-7]^	0.68	UD	mg/kg dry	5	0.68	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2-Nitroaniline [88-74-4]^	0.52	UD	mg/kg dry	5	0.52	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
2-Nitrophenol [88-75-5]^	1.6	UD	mg/kg dry	5	1.6	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
3 & 4-Methylphenol [108-39-4/106-44-5]^	1.5	UD	mg/kg dry	5	1.5	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
3,3'-Dichlorobenzidine [91-94-1]^	1.3	UD	mg/kg dry	5	1.3	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QL-02, QM-07, R-01
3-Nitroaniline [99-09-2]^	0.49	UD	mg/kg dry	5	0.49	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
4-Bromophenyl-phenylether [101-55-3]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
4-Chloro-3-methylphenol [59-50-7]^	1.7	UD	mg/kg dry	5	1.7	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
4-Chloroaniline [106-47-8]^	0.40	UD	mg/kg dry	5	0.40	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
4-Chlorophenyl-phenylether [7005-72-3]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
4-Nitroaniline [100-01-6]^	1.6	UD	mg/kg dry	5	1.6	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
4-Nitrophenol [100-02-7]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Acenaphthene [83-32-9]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Acenaphthylene [208-96-8]^	0.74	UD	mg/kg dry	5	0.74	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Acetophenone [98-86-2]^	0.86	UD	mg/kg dry	5	0.86	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Anthracene [120-12-7]^	0.92	UD	mg/kg dry	5	0.92	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
Atrazine [1912-24-9]^	0.46	UD	mg/kg dry	5	0.46	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Benzaldehyde [100-52-7]^	1.7	UD	mg/kg dry	5	1.7	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
Benzo(a)anthracene [56-55-3]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
Benzo(a)pyrene [50-32-8]^	0.48	UD	mg/kg dry	5	0.48	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01

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ANALYTICAL RESULTS

Description: GP14-10	**Lab Sample ID:** C405030-01	**Received:** 04/18/14 09:45
Matrix: Soil	**Sampled:** 04/17/14 09:45	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 81.27

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Benzo(b)fluoranthene [205-99-2]^	0.68	UD	mg/kg dry	5	0.68	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
Benzo(g,h,i)perylene [191-24-2]^	0.98	UD	mg/kg dry	5	0.98	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QL-02, QV-01, R-01
Benzo(k)fluoranthene [207-08-9]^	0.68	UD	mg/kg dry	5	0.68	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QL-02, QM-07, R-01
Bis(2-chloroethoxy)methane [111-91-1]^	0.92	UD	mg/kg dry	5	0.92	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QV-01, R-01
Bis(2-chloroethyl)ether [111-44-4]^	0.86	UD	mg/kg dry	5	0.86	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Bis(2-chloroisopropyl)ether [108-60-1]^	0.61	UD	mg/kg dry	5	0.61	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
Butylbenzylphthalate [85-68-7]^	0.86	UD	mg/kg dry	5	0.86	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Caprolactam [105-60-2]^	1.8	UD	mg/kg dry	5	1.8	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, QV-01, R-01
Carbazole [86-74-8]^	0.74	UD	mg/kg dry	5	0.74	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Chrysene [218-01-9]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
Dibenzo(a,h)anthracene [53-70-3]^	0.86	UD	mg/kg dry	5	0.86	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
Dibenzofuran [132-64-9]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Diethylphthalate [84-66-2]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Dimethylphthalate [131-11-3]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Di-n-butylphthalate [84-74-2]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Di-n-octylphthalate [117-84-0]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Fluoranthene [206-44-0]^	0.68	UD	mg/kg dry	5	0.68	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
Fluorene [86-73-7]	0.86	UD	mg/kg dry	5	0.86	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Hexachlorobenzene [118-74-1]^	0.74	UD	mg/kg dry	5	0.74	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Hexachlorobutadiene [87-68-3]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Hexachlorocyclopentadiene [77-47-4]^	0.92	UD	mg/kg dry	5	0.92	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
Hexachloroethane [67-72-1]^	0.62	UD	mg/kg dry	5	0.62	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.86	UD	mg/kg dry	5	0.86	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Isophorone [78-59-1]^	1.0	UD	mg/kg dry	5	1.0	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Naphthalene [91-20-3]^	0.74	UD	mg/kg dry	5	0.74	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Nitrobenzene [98-95-3]^	0.92	UD	mg/kg dry	5	0.92	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
N-Nitroso-di-n-propylamine [621-64-7]^	0.92	UD	mg/kg dry	5	0.92	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	1.4	UD	mg/kg dry	5	1.4	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Pentachlorophenol [87-86-5]^	1.3	UD	mg/kg dry	5	1.3	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Phenanthrene [85-01-8]^	0.80	UD	mg/kg dry	5	0.80	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01
Phenol [108-95-2]^	0.61	UD	mg/kg dry	5	0.61	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	R-01
Pyrene [129-00-0]^	0.68	UD	mg/kg dry	5	0.68	2.0	4D25007	EPA 8270D	05/06/14 16:41	jfi	QM-07, R-01

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.2*	*5*	*2.06*	*60 %*	*23-137*	*4D25007*	*EPA 8270D*	*05/06/14 16:41*	*jfi*	*R-01*
2-Fluorobiphenyl	*1.4*	*5*	*2.06*	*70 %*	*29-119*	*4D25007*	*EPA 8270D*	*05/06/14 16:41*	*jfi*	*R-01*

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ANALYTICAL RESULTS

Description:	GP14-10	**Lab Sample ID:**	C405030-01	**Received:**	04/18/14 09:45
Matrix:	Soil	**Sampled:**	04/17/14 09:45	**Work Order:**	C405030
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian	**% Solids:**	81.27

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2-Fluorophenol	*1.5*	*5*	*2.06*	*71 %*	*20-124*		*4D25007*	*EPA 8270D*	*05/06/14 16:41*	*jfi*	*R-01*
Nitrobenzene-d5	*1.2*	*5*	*2.06*	*56 %*	*17-126*		*4D25007*	*EPA 8270D*	*05/06/14 16:41*	*jfi*	*R-01*
Phenol-d5	*1.5*	*5*	*2.06*	*73 %*	*15-131*		*4D25007*	*EPA 8270D*	*05/06/14 16:41*	*jfi*	*R-01*
Terphenyl-d14	*1.9*	*5*	*2.06*	*93 %*	*60-120*		*4D25007*	*EPA 8270D*	*05/06/14 16:41*	*jfi*	*R-01*

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.18	U	mg/kg dry	1	0.18	1.2	4D28005	EPA 7196A	04/29/14 10:54	RMM	

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ANALYTICAL RESULTS

Description: GP14-10 | **Lab Sample ID:** C405030-02 | **Received:** 04/18/14 09:45

Matrix: Ground Water | **Sampled:** 04/17/14 10:00 | **Work Order:** C405030

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Acetone [67-64-1]^	**11**		ug/L	1	1.2	5.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
m,p-Xylenes [108-38-3/106-42-3]	0.17	U	ug/L	1	0.17	2.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.16	U	ug/L	1	0.16	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	

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ANALYTICAL RESULTS

Description: GP14-10 | **Lab Sample ID:** C405030-02 | **Received:** 04/18/14 09:45

Matrix: Ground Water | **Sampled:** 04/17/14 10:00 | **Work Order:** C405030

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4D27002	EPA 8260B	04/28/14 05:39	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*94 %*	*51-122*	*4D27002*	*EPA 8260B*	*04/28/14 05:39*	*MSZ*	
Dibromofluoromethane	*58*	*1*	*50.0*	*115 %*	*68-117*	*4D27002*	*EPA 8260B*	*04/28/14 05:39*	*MSZ*	
Toluene-d8	*56*	*1*	*50.0*	*112 %*	*67-127*	*4D27002*	*EPA 8260B*	*04/28/14 05:39*	*MSZ*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2,4,5-Trichlorophenol [95-95-4]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2,4,6-Trichlorophenol [88-06-2]^	1.1	U	ug/L	1	1.1	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2,4-Dichlorophenol [120-83-2]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2,4-Dimethylphenol [105-67-9]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2,4-Dinitrophenol [51-28-5]^	2.6	U	ug/L	1	2.6	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2,4-Dinitrotoluene [121-14-2]^	2.4	U	ug/L	1	2.4	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2,6-Dinitrotoluene [606-20-2]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2-Chloronaphthalene [91-58-7]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2-Chlorophenol [95-57-8]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]	2.9	U	ug/L	1	2.9	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2-Methylnaphthalene [91-57-6]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2-Methylphenol [95-48-7]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2-Nitroaniline [88-74-4]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
2-Nitrophenol [88-75-5]^	1.1	U	ug/L	1	1.1	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]	1.6	U	ug/L	1	1.6	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
3-Nitroaniline [99-09-2]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
4-Bromophenyl-phenylether [101-55-3]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
4-Chloro-3-methylphenol [59-50-7]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
4-Chloroaniline [106-47-8]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	1.6	U	ug/L	1	1.6	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
4-Nitrophenol [100-02-7]^	2.0	U	ug/L	1	2.0	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Acenaphthene [83-32-9]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Acenaphthylene [208-96-8]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Acetophenone [98-86-2]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Anthracene [120-12-7]^	1.6	U	ug/L	1	1.6	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Atrazine [1912-24-9]	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	QV-01
Benzaldehyde [100-52-7]	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	QV-02
Benzo(a)anthracene [56-55-3]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Benzo(a)pyrene [50-32-8]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Benzo(b)fluoranthene [205-99-2]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Benzo(g,h,i)perylene [191-24-2]^	2.4	U	ug/L	1	2.4	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Benzo(k)fluoranthene [207-08-9]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	

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ANALYTICAL RESULTS

Description: GP14-10 | **Lab Sample ID:** C405030-02 | **Received:** 04/18/14 09:45
Matrix: Ground Water | **Sampled:** 04/17/14 10:00 | **Work Order:** C405030
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethoxy)methane [111-91-1]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	1.7	U	ug/L	1	1.7	5.0	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Butylbenzylphthalate [85-68-7]^	2.0	U	ug/L	1	2.0	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Caprolactam [105-60-2]	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Carbazole [86-74-8]^	2.5	U	ug/L	1	2.5	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Chrysene [218-01-9]^	2.0	U	ug/L	1	2.0	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	2.3	U	ug/L	1	2.3	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Dibenzofuran [132-64-9]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Diethylphthalate [84-66-2]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Dimethylphthalate [131-11-3]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Di-n-butylphthalate [84-74-2]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Di-n-octylphthalate [117-84-0]^	3.1	U	ug/L	1	3.1	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Fluoranthene [206-44-0]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Fluorene [86-73-7]^	1.7	U	ug/L	1	1.7	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Hexachlorobenzene [118-74-1]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Hexachlorobutadiene [87-68-3]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Hexachlorocyclopentadiene [77-47-4]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Hexachloroethane [67-72-1]^	1.1	U	ug/L	1	1.1	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	2.2	U	ug/L	1	2.2	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Isophorone [78-59-1]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Naphthalene [91-20-3]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Nitrobenzene [98-95-3]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Pentachlorophenol [87-86-5]^	1.8	U	ug/L	1	1.8	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Phenanthrene [85-01-8]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Phenol [108-95-2]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	
Pyrene [129-00-0]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 20:21	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*97*	*1*	*100*	*97 %*	*10-179*	*4D23029*	*EPA 8270D*	*05/05/14 20:21*	*DFM*	
2-Fluorobiphenyl	*41*	*1*	*50.0*	*82 %*	*10-149*	*4D23029*	*EPA 8270D*	*05/05/14 20:21*	*DFM*	
2-Fluorophenol	*50*	*1*	*100*	*50 %*	*10-110*	*4D23029*	*EPA 8270D*	*05/05/14 20:21*	*DFM*	
Nitrobenzene-d5	*37*	*1*	*50.0*	*75 %*	*10-149*	*4D23029*	*EPA 8270D*	*05/05/14 20:21*	*DFM*	
Phenol-d5	*43*	*1*	*100*	*43 %*	*10-88*	*4D23029*	*EPA 8270D*	*05/05/14 20:21*	*DFM*	
Terphenyl-d14	*42*	*1*	*50.0*	*84 %*	*10-188*	*4D23029*	*EPA 8270D*	*05/05/14 20:21*	*DFM*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.43	U	ug/L	1	0.43	0.50	4D22014	EPA 8082A	04/24/14 20:37	MWC	
PCB-1221 [11104-28-2]^	0.37	U	ug/L	1	0.37	0.50	4D22014	EPA 8082A	04/24/14 20:37	MWC	
PCB-1232 [11141-16-5]^	0.45	U	ug/L	1	0.45	0.50	4D22014	EPA 8082A	04/24/14 20:37	MWC	
PCB-1248 [12672-29-6]^	0.014	U	ug/L	1	0.014	0.50	4D22014	EPA 8082A	04/24/14 20:37	MWC	
PCB-1254 [11097-69-1]^	0.37	U	ug/L	1	0.37	0.50	4D22014	EPA 8082A	04/24/14 20:37	MWC	
PCB-1260 [11096-82-5]^	0.45	U	ug/L	1	0.45	0.50	4D22014	EPA 8082A	04/24/14 20:37	MWC	

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ANALYTICAL RESULTS

Description: GP14-10 | **Lab Sample ID:** C405030-02 | **Received:** 04/18/14 09:45
Matrix: Ground Water | **Sampled:** 04/17/14 10:00 | **Work Order:** C405030
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.2*	*1*	*1.00*	*122 %*	*45-151*	*4D22014*	*EPA 8082A*	*04/24/14 20:37*	*MWC*	
Decachlorobiphenyl	*1.0*	*1*	*1.00*	*101 %*	*42-159*	*4D22014*	*EPA 8082A*	*04/24/14 20:37*	*MWC*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	0.011	U	mg/L	1	0.011	0.055	4D22042	EPA 8015C	04/23/14 07:36	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*0.0858*	*1*	*0.100*	*86 %*	*70-130*	*4D22042*	*EPA 8015C*	*04/23/14 07:36*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**0.077**	J	mg/L	1	0.060	0.10	4D24010	EPA 8015C	04/25/14 17:53	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*0.056*	*1*	*0.0526*	*107 %*	*41-126*	*4D24010*	*EPA 8015C*	*04/25/14 17:53*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	0.170	U	ug/L	1	0.170	0.200	4D29022	EPA 7470A	04/30/14 15:01	T1D	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]^	**28300**		ug/L	1	29.0	100	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Antimony [7440-36-0]^	2.20	UD	ug/L	10	2.20	20.0	4D23017	EPA 6020A	04/29/14 12:00	VLO	
Arsenic [7440-38-2]^	**8.21**	J	ug/L	1	5.40	10.0	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Barium [7440-39-3]^	**138**		ug/L	1	1.00	10.0	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Beryllium [7440-41-7]^	**0.650**	J	ug/L	1	0.100	1.00	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Cadmium [7440-43-9]^	**0.640**	J	ug/L	1	0.360	1.00	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Calcium [7440-70-2]^	**137000**		ug/L	1	39.0	100	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Chromium [7440-47-3]^	**48.3**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Cobalt [7440-48-4]^	**5.99**	JD	ug/L	10	1.00	10.0	4D23017	EPA 6020A	04/29/14 12:00	VLO	
Copper [7440-50-8]^	**61.7**		ug/L	1	1.60	10.0	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Iron [7439-89-6]^	**30900**		ug/L	1	22.0	50.0	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Lead [7439-92-1]^	**85.1**		ug/L	1	2.10	10.0	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Magnesium [7439-95-4]^	**20200**		ug/L	1	23.0	100	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Manganese [7439-96-5]^	**553**		ug/L	1	1.10	10.0	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Nickel [7440-02-0]^	**14.7**		ug/L	1	1.80	10.0	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Potassium [7440-09-7]^	**4500**		ug/L	1	150	500	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Selenium [7782-49-2]^	5.00	U	ug/L	1	5.00	10.0	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Silver [7440-22-4]^	1.90	U	ug/L	1	1.90	10.0	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Sodium [7440-23-5]^	**13300**		ug/L	1	400	500	4D21018	EPA 6010C	04/28/14 14:01	JDH	
Thallium [7440-28-0]^	1.10	UD	ug/L	10	1.10	10.0	4D23017	EPA 6020A	04/29/14 12:00	VLO	
Vanadium [7440-62-2]^	**56.9**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 14:01	JDH	

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ANALYTICAL RESULTS

Description:	GP14-10	**Lab Sample ID:**	C405030-02	**Received:**	04/18/14 09:45
Matrix:	Ground Water	**Sampled:**	04/17/14 10:00	**Work Order:**	C405030
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian		

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Zinc [7440-66-6]^	**125**		ug/L	1	3.80	10.0	4D21018	EPA 6010C	04/28/14 14:01	JDH	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.0088	U	mg/L	1	0.0088	0.010	4D18026	EPA 7196A	04/18/14 12:41	CV	Q

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ANALYTICAL RESULTS

Description: GP14-11	**Lab Sample ID:** C405030-03	**Received:** 04/18/14 09:45
Matrix: Soil	**Sampled:** 04/17/14 10:30	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 73.33

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.00098	U	mg/kg dry	1	0.00098	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
4,4'-DDE [72-55-9]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
4,4'-DDT [50-29-3]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Aldrin [309-00-2]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
alpha-BHC [319-84-6]^	0.0016	U	mg/kg dry	1	0.0016	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
beta-BHC [319-85-7]^	0.0023	U	mg/kg dry	1	0.0023	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Chlordane-alpha [5103-71-9]^	0.00085	U	mg/kg dry	1	0.00085	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Chlordane-gamma [5566-34-7]^	0.00098	U	mg/kg dry	1	0.00098	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
delta-BHC [319-86-8]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Dieldrin [60-57-1]^	0.0010	U	mg/kg dry	1	0.0010	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Endosulfan I [959-98-8]^	0.0010	U	mg/kg dry	1	0.0010	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Endosulfan II [33213-65-9]^	0.0013	U	mg/kg dry	1	0.0013	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Endosulfan sulfate [1031-07-8]^	0.0014	U	mg/kg dry	1	0.0014	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Endrin [72-20-8]^	0.0010	U	mg/kg dry	1	0.0010	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Endrin aldehyde [7421-93-4]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Endrin ketone [53494-70-5]^	0.0010	U	mg/kg dry	1	0.0010	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
gamma-BHC [58-89-9]^	0.0015	U	mg/kg dry	1	0.0015	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Heptachlor [76-44-8]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Heptachlor epoxide [1024-57-3]^	0.0010	U	mg/kg dry	1	0.0010	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Methoxychlor [72-43-5]^	0.0013	U	mg/kg dry	1	0.0013	0.0023	4D22022	EPA 8081B	04/23/14 13:05	MWC	
Toxaphene [8001-35-2]^	0.014	U	mg/kg dry	1	0.014	0.023	4D22022	EPA 8081B	04/23/14 13:05	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.045*	*1*	*0.0455*	*99 %*	*59-137*	*4D22022*	*EPA 8081B*	*04/23/14 13:05*	*MWC*	
Decachlorobiphenyl	*0.041*	*1*	*0.0455*	*90 %*	*60-140*	*4D22022*	*EPA 8081B*	*04/23/14 13:05*	*MWC*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	1.7	U	mg/kg dry	1	1.7	6.5	4D22036	EPA 8015C	04/23/14 00:20	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*12*	*1*	*11.8*	*100 %*	*59-168*	*4D22036*	*EPA 8015C*	*04/23/14 00:20*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**270**		mg/kg dry	1	2.3	4.5	4D23014	EPA 8015C	04/24/14 05:02	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*1.9*	*1*	*2.27*	*83 %*	*51-138*	*4D23014*	*EPA 8015C*	*04/24/14 05:02*	*MWC*	

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ANALYTICAL RESULTS

Description: GP14-11	**Lab Sample ID:** C405030-03	**Received:** 04/18/14 09:45
Matrix: Soil	**Sampled:** 04/17/14 10:30	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 73.33

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**9340**		mg/kg dry	1	2.86	13.6	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Antimony [7440-36-0]	**0.385**	J	mg/kg dry	1	0.150	1.36	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Arsenic [7440-38-2]^	**4.08**		mg/kg dry	1	0.136	0.682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Barium [7440-39-3]^	**52.5**		mg/kg dry	1	0.136	0.682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Beryllium [7440-41-7]	**0.315**		mg/kg dry	1	0.0164	0.0682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Cadmium [7440-43-9]^	**0.268**		mg/kg dry	1	0.0131	0.0682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Calcium [7440-70-2]	**2200**	B	mg/kg dry	1	7.64	34.1	4D21024	EPA 6010C	04/23/14 13:40	JDH	QB-01
Chromium [7440-47-3]^	**10.5**		mg/kg dry	1	0.136	0.682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Cobalt [7440-48-4]	**1.54**		mg/kg dry	1	0.136	0.682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Copper [7440-50-8]	**16.1**		mg/kg dry	1	0.259	0.682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Iron [7439-89-6]	**5230**	B	mg/kg dry	1	0.655	3.41	4D21024	EPA 6010C	04/23/14 13:40	JDH	QB-01
Lead [7439-92-1]^	**56.2**		mg/kg dry	1	0.164	0.682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Magnesium [7439-95-4]	**588**	B	mg/kg dry	1	0.886	34.1	4D21024	EPA 6010C	04/23/14 13:40	JDH	QB-01
Manganese [7439-96-5]	**41.7**		mg/kg dry	1	0.136	0.682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Mercury [7439-97-6]^	**0.0602**		mg/kg dry	1	0.00941	0.0327	4D29012	EPA 7471B	04/30/14 16:51	T1D	
Nickel [7440-02-0]	**4.84**		mg/kg dry	1	0.491	3.41	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Potassium [7440-09-7]	**400**		mg/kg dry	1	5.45	34.1	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Selenium [7782-49-2]^	0.136	U	mg/kg dry	1	0.136	0.682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Silver [7440-22-4]^	**0.220**	J	mg/kg dry	1	0.136	0.682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Sodium [7440-23-5]	**35.2**		mg/kg dry	1	8.18	34.1	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Thallium [7440-28-0]	0.136	U	mg/kg dry	1	0.136	0.682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Vanadium [7440-62-2]^	**17.9**		mg/kg dry	1	0.136	0.682	4D21024	EPA 6010C	04/23/14 13:40	JDH	
Zinc [7440-66-6]^	**45.8**		mg/kg dry	1	1.50	3.41	4D21024	EPA 6010C	04/23/14 13:40	JDH	

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
1,1-Dichloroethane [75-34-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
1,1-Dichloroethene [75-35-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0010	U	mg/kg dry	1	0.0010	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
1,2-Dibromoethane [106-93-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
1,2-Dichloroethane [107-06-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
1,2-Dichloropropane [78-87-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
2-Butanone [78-93-3]^	0.0020	U	mg/kg dry	1	0.0020	0.0056	4D25025	EPA 8260B	04/25/14 21:29	KAT	
2-Hexanone [591-78-6]^	0.0010	U	mg/kg dry	1	0.0010	0.0056	4D25025	EPA 8260B	04/25/14 21:29	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0016	U	mg/kg dry	1	0.0016	0.0056	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Acetone [67-64-1]^	0.0019	U	mg/kg dry	1	0.0019	0.0056	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Benzene [71-43-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Bromochloromethane [74-97-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Bromodichloromethane [75-27-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Bromoform [75-25-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	

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ANALYTICAL RESULTS

Description: GP14-11	**Lab Sample ID:** C405030-03	**Received:** 04/18/14 09:45
Matrix: Soil	**Sampled:** 04/17/14 10:30	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 73.33

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bromomethane [74-83-9]^	0.0010	U	mg/kg dry	1	0.0010	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Carbon disulfide [75-15-0]^	0.0024	U	mg/kg dry	1	0.0024	0.0056	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Carbon Tetrachloride [56-23-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Chlorobenzene [108-90-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Chloroethane [75-00-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Chloroform [67-66-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Chloromethane [74-87-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
cis-1,2-Dichloroethene [156-59-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
cis-1,3-Dichloropropene [10061-01-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Cyclohexane [110-82-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0022	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Ethylbenzene [100-41-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Freon 113 [76-13-1]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Isopropylbenzene [98-82-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Methyl acetate [79-20-9]^	0.0018	U	mg/kg dry	1	0.0018	0.0022	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Methyl cyclohexane [108-87-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0022	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Methylene Chloride [75-09-2]^	0.0008	U	mg/kg dry	1	0.0008	0.0022	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Styrene [100-42-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Tetrachloroethene [127-18-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Toluene [108-88-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Trichloroethene [79-01-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Trichlorofluoromethane [75-69-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Vinyl chloride [75-01-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4D25025	EPA 8260B	04/25/14 21:29	KAT	
Xylenes (Total) [1330-20-7]^	0.0011	U	mg/kg dry	1	0.0011	0.0022	4D25025	EPA 8260B	04/25/14 21:29	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.055*	*1*	*0.0561*	*99 %*	*71-126*	*4D25025*	*EPA 8260B*	*04/25/14 21:29*	*KAT*	
Dibromofluoromethane	*0.050*	*1*	*0.0561*	*89 %*	*72-133*	*4D25025*	*EPA 8260B*	*04/25/14 21:29*	*KAT*	
Toluene-d8	*0.052*	*1*	*0.0561*	*92 %*	*80-123*	*4D25025*	*EPA 8260B*	*04/25/14 21:29*	*KAT*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.50	UD	mg/kg dry	5	0.50	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2,4,5-Trichlorophenol [95-95-4]^	0.45	UD	mg/kg dry	5	0.45	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2,4,6-Trichlorophenol [88-06-2]^	1.0	UD	mg/kg dry	5	1.0	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2,4-Dichlorophenol [120-83-2]^	1.7	UD	mg/kg dry	5	1.7	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2,4-Dimethylphenol [105-67-9]^	1.6	UD	mg/kg dry	5	1.6	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2,4-Dinitrophenol [51-28-5]^	0.61	UD	mg/kg dry	5	0.61	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2,4-Dinitrotoluene [121-14-2]^	1.1	UD	mg/kg dry	5	1.1	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2,6-Dinitrotoluene [606-20-2]^	1.2	UD	mg/kg dry	5	1.2	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2-Chloronaphthalene [91-58-7]^	0.67	UD	mg/kg dry	5	0.67	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2-Chlorophenol [95-57-8]^	1.6	UD	mg/kg dry	5	1.6	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2-Methyl-4,6-dinitrophenol [534-52-1]^	1.9	UD	mg/kg dry	5	1.9	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01

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ANALYTICAL RESULTS

Description: GP14-11	**Lab Sample ID:** C405030-03	**Received:** 04/18/14 09:45
Matrix: Soil	**Sampled:** 04/17/14 10:30	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 73.33

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2-Methylnaphthalene [91-57-6]^	0.82	UD	mg/kg dry	5	0.82	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2-Methylphenol [95-48-7]^	0.75	UD	mg/kg dry	5	0.75	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2-Nitroaniline [88-74-4]^	0.58	UD	mg/kg dry	5	0.58	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
2-Nitrophenol [88-75-5]^	1.8	UD	mg/kg dry	5	1.8	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
3 & 4-Methylphenol [108-39-4/106-44-5]^	1.7	UD	mg/kg dry	5	1.7	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
3,3'-Dichlorobenzidine [91-94-1]^	1.4	UD	mg/kg dry	5	1.4	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
3-Nitroaniline [99-09-2]^	0.55	UD	mg/kg dry	5	0.55	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
4-Bromophenyl-phenylether [101-55-3]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
4-Chloro-3-methylphenol [59-50-7]^	1.9	UD	mg/kg dry	5	1.9	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
4-Chloroaniline [106-47-8]^	0.44	UD	mg/kg dry	5	0.44	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
4-Chlorophenyl-phenylether [7005-72-3]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
4-Nitroaniline [100-01-6]^	1.8	UD	mg/kg dry	5	1.8	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
4-Nitrophenol [100-02-7]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Acenaphthene [83-32-9]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Acenaphthylene [208-96-8]^	0.82	UD	mg/kg dry	5	0.82	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Acetophenone [98-86-2]^	0.95	UD	mg/kg dry	5	0.95	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Anthracene [120-12-7]^	1.0	UD	mg/kg dry	5	1.0	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Atrazine [1912-24-9]^	0.50	UD	mg/kg dry	5	0.50	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Benzaldehyde [100-52-7]^	1.8	UD	mg/kg dry	5	1.8	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Benzo(a)anthracene [56-55-3]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Benzo(a)pyrene [50-32-8]^	0.53	UD	mg/kg dry	5	0.53	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Benzo(b)fluoranthene [205-99-2]^	0.75	UD	mg/kg dry	5	0.75	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Benzo(g,h,i)perylene [191-24-2]^	1.1	UD	mg/kg dry	5	1.1	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	QL-02, QV-01, R-01
Benzo(k)fluoranthene [207-08-9]^	0.75	UD	mg/kg dry	5	0.75	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	QL-02, R-01
Bis(2-chloroethoxy)methane [111-91-1]^	1.0	UD	mg/kg dry	5	1.0	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	QV-01, R-01
Bis(2-chloroethyl)ether [111-44-4]^	0.95	UD	mg/kg dry	5	0.95	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Bis(2-chloroisopropyl)ether [108-60-1]^	0.68	UD	mg/kg dry	5	0.68	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Butylbenzylphthalate [85-68-7]^	0.95	UD	mg/kg dry	5	0.95	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Caprolactam [105-60-2]^	2.0	UD	mg/kg dry	5	2.0	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	QV-01, R-01
Carbazole [86-74-8]^	0.82	UD	mg/kg dry	5	0.82	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Chrysene [218-01-9]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Dibenzo(a,h)anthracene [53-70-3]^	0.95	UD	mg/kg dry	5	0.95	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Dibenzofuran [132-64-9]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Diethylphthalate [84-66-2]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Dimethylphthalate [131-11-3]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Di-n-butylphthalate [84-74-2]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Di-n-octylphthalate [117-84-0]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Fluoranthene [206-44-0]^	0.75	UD	mg/kg dry	5	0.75	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Fluorene [86-73-7]	0.95	UD	mg/kg dry	5	0.95	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Hexachlorobenzene [118-74-1]^	0.82	UD	mg/kg dry	5	0.82	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Hexachlorobutadiene [87-68-3]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Hexachlorocyclopentadiene [77-47-4]^	1.0	UD	mg/kg dry	5	1.0	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Hexachloroethane [67-72-1]^	0.68	UD	mg/kg dry	5	0.68	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01

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ANALYTICAL RESULTS

Description: GP14-11	**Lab Sample ID:** C405030-03	**Received:** 04/18/14 09:45
Matrix: Soil	**Sampled:** 04/17/14 10:30	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 73.33

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.95	UD	mg/kg dry	5	0.95	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Isophorone [78-59-1]^	1.2	UD	mg/kg dry	5	1.2	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Naphthalene [91-20-3]^	0.82	UD	mg/kg dry	5	0.82	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Nitrobenzene [98-95-3]^	1.0	UD	mg/kg dry	5	1.0	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
N-Nitroso-di-n-propylamine [621-64-7]^	1.0	UD	mg/kg dry	5	1.0	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	1.6	UD	mg/kg dry	5	1.6	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Pentachlorophenol [87-86-5]^	1.4	UD	mg/kg dry	5	1.4	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Phenanthrene [85-01-8]^	0.89	UD	mg/kg dry	5	0.89	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Phenol [108-95-2]^	0.68	UD	mg/kg dry	5	0.68	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01
Pyrene [129-00-0]^	0.75	UD	mg/kg dry	5	0.75	2.3	4D25007	EPA 8270D	05/06/14 17:09	jfi	R-01

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.6*	*5*	*2.27*	*71 %*	*23-137*	*4D25007*	*EPA 8270D*	*05/06/14 17:09*	*jfi*	*R-01*
2-Fluorobiphenyl	*1.7*	*5*	*2.27*	*77 %*	*29-119*	*4D25007*	*EPA 8270D*	*05/06/14 17:09*	*jfi*	*R-01*
2-Fluorophenol	*1.5*	*5*	*2.27*	*68 %*	*20-124*	*4D25007*	*EPA 8270D*	*05/06/14 17:09*	*jfi*	*R-01*
Nitrobenzene-d5	*1.2*	*5*	*2.27*	*53 %*	*17-126*	*4D25007*	*EPA 8270D*	*05/06/14 17:09*	*jfi*	*R-01*
Phenol-d5	*1.6*	*5*	*2.27*	*72 %*	*15-131*	*4D25007*	*EPA 8270D*	*05/06/14 17:09*	*jfi*	*R-01*
Terphenyl-d14	*2.5*	*5*	*2.27*	*112 %*	*60-120*	*4D25007*	*EPA 8270D*	*05/06/14 17:09*	*jfi*	*R-01*

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0034	U	mg/kg dry	1	0.0034	0.014	4D21020	EPA 8151A	04/23/14 05:13	RGG	
2,4,5-TP (Silvex) [93-72-1]^	0.0064	U	mg/kg dry	1	0.0064	0.014	4D21020	EPA 8151A	04/23/14 05:13	RGG	
2,4-D [94-75-7]^	0.014	U	mg/kg dry	1	0.014	0.014	4D21020	EPA 8151A	04/23/14 05:13	RGG	
2,4-DB [94-82-6]^	0.0067	U	mg/kg dry	1	0.0067	0.014	4D21020	EPA 8151A	04/23/14 05:13	RGG	
Dalapon [75-99-0]^	0.0068	U	mg/kg dry	1	0.0068	0.014	4D21020	EPA 8151A	04/23/14 05:13	RGG	
Dicamba [1918-00-9]^	0.0031	U	mg/kg dry	1	0.0031	0.014	4D21020	EPA 8151A	04/23/14 05:13	RGG	
Dichlorprop [120-36-5]^	0.0038	U	mg/kg dry	1	0.0038	0.014	4D21020	EPA 8151A	04/23/14 05:13	RGG	
Dinoseb [88-85-7]^	0.0057	U	mg/kg dry	1	0.0057	0.014	4D21020	EPA 8151A	04/23/14 05:13	RGG	
MCPA [94-74-6]^	0.71	U	mg/kg dry	1	0.71	1.4	4D21020	EPA 8151A	04/23/14 05:13	RGG	
MCPP [93-65-2]^	0.72	U	mg/kg dry	1	0.72	1.4	4D21020	EPA 8151A	04/23/14 05:13	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*0.036*	*1*	*0.0545*	*67 %*	*39-174*	*4D21020*	*EPA 8151A*	*04/23/14 05:13*	*RGG*	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.20	U	mg/kg dry	1	0.20	1.4	4D28005	EPA 7196A	04/29/14 10:54	RMM	

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ANALYTICAL RESULTS

Description: GP14-11 | **Lab Sample ID:** C405030-04 | **Received:** 04/18/14 09:45

Matrix: Ground Water | **Sampled:** 04/17/14 11:03 | **Work Order:** C405030

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Acetone [67-64-1]^	**13**		ug/L	1	1.2	5.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
m,p-Xylenes [108-38-3/106-42-3]	0.17	U	ug/L	1	0.17	2.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.16	U	ug/L	1	0.16	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	

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ANALYTICAL RESULTS

Description: GP14-11 | **Lab Sample ID:** C405030-04 | **Received:** 04/18/14 09:45

Matrix: Ground Water | **Sampled:** 04/17/14 11:03 | **Work Order:** C405030

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4D28024	EPA 8260B	04/29/14 08:56	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*46*	*1*	*50.0*	*93 %*	*51-122*	*4D28024*	*EPA 8260B*	*04/29/14 08:56*	*MSZ*	
Dibromofluoromethane	*53*	*1*	*50.0*	*106 %*	*68-117*	*4D28024*	*EPA 8260B*	*04/29/14 08:56*	*MSZ*	
Toluene-d8	*53*	*1*	*50.0*	*106 %*	*67-127*	*4D28024*	*EPA 8260B*	*04/29/14 08:56*	*MSZ*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2,4,5-Trichlorophenol [95-95-4]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2,4,6-Trichlorophenol [88-06-2]^	1.1	U	ug/L	1	1.1	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2,4-Dichlorophenol [120-83-2]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2,4-Dimethylphenol [105-67-9]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2,4-Dinitrophenol [51-28-5]^	2.6	U	ug/L	1	2.6	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2,4-Dinitrotoluene [121-14-2]^	2.4	U	ug/L	1	2.4	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2,6-Dinitrotoluene [606-20-2]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2-Chloronaphthalene [91-58-7]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2-Chlorophenol [95-57-8]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]	2.9	U	ug/L	1	2.9	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2-Methylnaphthalene [91-57-6]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2-Methylphenol [95-48-7]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2-Nitroaniline [88-74-4]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
2-Nitrophenol [88-75-5]^	1.1	U	ug/L	1	1.1	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]	1.6	U	ug/L	1	1.6	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
3-Nitroaniline [99-09-2]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
4-Bromophenyl-phenylether [101-55-3]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
4-Chloro-3-methylphenol [59-50-7]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
4-Chloroaniline [106-47-8]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	1.6	U	ug/L	1	1.6	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
4-Nitrophenol [100-02-7]^	2.0	U	ug/L	1	2.0	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Acenaphthene [83-32-9]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Acenaphthylene [208-96-8]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Acetophenone [98-86-2]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Anthracene [120-12-7]^	1.6	U	ug/L	1	1.6	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Atrazine [1912-24-9]	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	QV-01
Benzaldehyde [100-52-7]	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	QV-02
Benzo(a)anthracene [56-55-3]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Benzo(a)pyrene [50-32-8]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Benzo(b)fluoranthene [205-99-2]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Benzo(g,h,i)perylene [191-24-2]^	2.4	U	ug/L	1	2.4	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Benzo(k)fluoranthene [207-08-9]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	

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ANALYTICAL RESULTS

Description: GP14-11 | **Lab Sample ID:** C405030-04 | **Received:** 04/18/14 09:45
Matrix: Ground Water | **Sampled:** 04/17/14 11:03 | **Work Order:** C405030
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethoxy)methane [111-91-1]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	1.7	U	ug/L	1	1.7	5.0	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Butylbenzylphthalate [85-68-7]^	2.0	U	ug/L	1	2.0	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Caprolactam [105-60-2]	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Carbazole [86-74-8]^	2.5	U	ug/L	1	2.5	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Chrysene [218-01-9]^	2.0	U	ug/L	1	2.0	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	2.3	U	ug/L	1	2.3	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Dibenzofuran [132-64-9]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Diethylphthalate [84-66-2]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Dimethylphthalate [131-11-3]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Di-n-butylphthalate [84-74-2]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Di-n-octylphthalate [117-84-0]^	3.1	U	ug/L	1	3.1	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Fluoranthene [206-44-0]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Fluorene [86-73-7]^	1.7	U	ug/L	1	1.7	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Hexachlorobenzene [118-74-1]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Hexachlorobutadiene [87-68-3]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Hexachlorocyclopentadiene [77-47-4]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Hexachloroethane [67-72-1]^	1.1	U	ug/L	1	1.1	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	2.2	U	ug/L	1	2.2	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Isophorone [78-59-1]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Naphthalene [91-20-3]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Nitrobenzene [98-95-3]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Pentachlorophenol [87-86-5]^	1.8	U	ug/L	1	1.8	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Phenanthrene [85-01-8]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Phenol [108-95-2]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	
Pyrene [129-00-0]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 20:50	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*92*	*1*	*100*	*92 %*	*10-179*	*4D23029*	*EPA 8270D*	*05/05/14 20:50*	*DFM*	
2-Fluorobiphenyl	*36*	*1*	*50.0*	*73 %*	*10-149*	*4D23029*	*EPA 8270D*	*05/05/14 20:50*	*DFM*	
2-Fluorophenol	*43*	*1*	*100*	*43 %*	*10-110*	*4D23029*	*EPA 8270D*	*05/05/14 20:50*	*DFM*	
Nitrobenzene-d5	*32*	*1*	*50.0*	*65 %*	*10-149*	*4D23029*	*EPA 8270D*	*05/05/14 20:50*	*DFM*	
Phenol-d5	*37*	*1*	*100*	*37 %*	*10-88*	*4D23029*	*EPA 8270D*	*05/05/14 20:50*	*DFM*	
Terphenyl-d14	*45*	*1*	*50.0*	*91 %*	*10-188*	*4D23029*	*EPA 8270D*	*05/05/14 20:50*	*DFM*	

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.044	U	ug/L	1	0.044	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
4,4'-DDE [72-55-9]^	0.048	U	ug/L	1	0.048	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
4,4'-DDT [50-29-3]^	0.049	U	ug/L	1	0.049	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Aldrin [309-00-2]^	0.041	U	ug/L	1	0.041	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
alpha-BHC [319-84-6]^	0.036	U	ug/L	1	0.036	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
beta-BHC [319-85-7]^	0.036	U	ug/L	1	0.036	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	

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ANALYTICAL RESULTS

Description: GP14-11	**Lab Sample ID:** C405030-04	**Received:** 04/18/14 09:45
Matrix: Ground Water	**Sampled:** 04/17/14 11:03	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Chlordane-alpha [5103-71-9]^	0.048	U	ug/L	1	0.048	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Chlordane-gamma [5566-34-7]^	0.042	U	ug/L	1	0.042	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
delta-BHC [319-86-8]^	0.048	U	ug/L	1	0.048	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Dieldrin [60-57-1]^	0.045	U	ug/L	1	0.045	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Endosulfan I [959-98-8]^	0.045	U	ug/L	1	0.045	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Endosulfan II [33213-65-9]^	0.036	U	ug/L	1	0.036	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Endosulfan sulfate [1031-07-8]^	0.032	U	ug/L	1	0.032	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Endrin [72-20-8]^	0.041	U	ug/L	1	0.041	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Endrin aldehyde [7421-93-4]^	0.042	U	ug/L	1	0.042	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Endrin ketone [53494-70-5]^	0.039	U	ug/L	1	0.039	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
gamma-BHC [58-89-9]^	0.034	U	ug/L	1	0.034	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Heptachlor [76-44-8]^	0.030	U	ug/L	1	0.030	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Heptachlor epoxide [1024-57-3]^	0.037	U	ug/L	1	0.037	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Methoxychlor [72-43-5]^	0.025	U	ug/L	1	0.025	0.050	4D22011	EPA 8081B	04/24/14 20:50	MWC	
Toxaphene [8001-35-2]^	0.22	U	ug/L	1	0.22	0.50	4D22011	EPA 8081B	04/24/14 20:50	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.88*	*1*	*1.00*	*88 %*	*44-134*	*4D22011*	*EPA 8081B*	*04/24/14 20:50*	*MWC*	
Decachlorobiphenyl	*0.84*	*1*	*1.00*	*84 %*	*37-149*	*4D22011*	*EPA 8081B*	*04/24/14 20:50*	*MWC*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.43	U	ug/L	1	0.43	0.50	4D24031	EPA 8082A	04/30/14 03:09	MWC	
PCB-1221 [11104-28-2]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/30/14 03:09	MWC	
PCB-1232 [11141-16-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/30/14 03:09	MWC	
PCB-1248 [12672-29-6]^	0.014	U	ug/L	1	0.014	0.50	4D24031	EPA 8082A	04/30/14 03:09	MWC	
PCB-1254 [11097-69-1]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/30/14 03:09	MWC	
PCB-1260 [11096-82-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/30/14 03:09	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.2*	*1*	*1.00*	*116 %*	*45-151*	*4D24031*	*EPA 8082A*	*04/30/14 03:09*	*MWC*	
Decachlorobiphenyl	*0.92*	*1*	*1.00*	*92 %*	*42-159*	*4D24031*	*EPA 8082A*	*04/30/14 03:09*	*MWC*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	0.011	U	mg/L	1	0.011	0.055	4D22042	EPA 8015C	04/23/14 08:07	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*0.0967*	*1*	*0.100*	*97 %*	*70-130*	*4D22042*	*EPA 8015C*	*04/23/14 08:07*	*manag*	

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ANALYTICAL RESULTS

Description: GP14-11 | **Lab Sample ID:** C405030-04 | **Received:** 04/18/14 09:45
Matrix: Ground Water | **Sampled:** 04/17/14 11:03 | **Work Order:** C405030
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	0.060	U	mg/L	1	0.060	0.10	4D24010	EPA 8015C	04/25/14 18:23	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*0.060*	*1*	*0.0526*	*113 %*	*41-126*	*4D24010*	*EPA 8015C*	*04/25/14 18:23*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	0.170	U	ug/L	1	0.170	0.200	4D29022	EPA 7470A	04/30/14 15:03	T1D	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]^	**5390**		ug/L	1	29.0	100	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Antimony [7440-36-0]^	2.20	UD	ug/L	10	2.20	20.0	4D23017	EPA 6020A	04/29/14 12:21	VLO	R-05
Arsenic [7440-38-2]^	5.40	U	ug/L	1	5.40	10.0	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Barium [7440-39-3]^	**46.6**		ug/L	1	1.00	10.0	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Beryllium [7440-41-7]^	**0.438**	J	ug/L	1	0.100	1.00	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Cadmium [7440-43-9]^	0.360	U	ug/L	1	0.360	1.00	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Calcium [7440-70-2]^	**24800**		ug/L	1	39.0	100	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Chromium [7440-47-3]^	**7.92**	J	ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Cobalt [7440-48-4]^	**1.29**	JD	ug/L	10	1.00	10.0	4D23017	EPA 6020A	04/29/14 12:21	VLO	R-05
Copper [7440-50-8]^	**3.14**	J	ug/L	1	1.60	10.0	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Iron [7439-89-6]^	**6610**		ug/L	1	22.0	50.0	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Lead [7439-92-1]^	**4.42**	J	ug/L	1	2.10	10.0	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Magnesium [7439-95-4]^	**4480**		ug/L	1	23.0	100	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Manganese [7439-96-5]^	**80.8**		ug/L	1	1.10	10.0	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Nickel [7440-02-0]^	**4.45**	J	ug/L	1	1.80	10.0	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Potassium [7440-09-7]^	**2910**		ug/L	1	150	500	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Selenium [7782-49-2]^	5.00	U	ug/L	1	5.00	10.0	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Silver [7440-22-4]^	1.90	U	ug/L	1	1.90	10.0	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Sodium [7440-23-5]^	**5730**		ug/L	1	400	500	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Thallium [7440-28-0]^	1.10	UD	ug/L	10	1.10	10.0	4D23017	EPA 6020A	04/29/14 12:21	VLO	R-05
Vanadium [7440-62-2]^	**13.1**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 14:03	JDH	
Zinc [7440-66-6]^	**10.7**		ug/L	1	3.80	10.0	4D21018	EPA 6010C	04/28/14 14:03	JDH	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.0088	U	mg/L	1	0.0088	0.010	4D18026	EPA 7196A	04/18/14 12:41	CV	Q

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ANALYTICAL RESULTS

Description: GP14-11 | **Lab Sample ID:** C405030-04 | **Received:** 04/18/14 09:45

Matrix: Ground Water | **Sampled:** 04/17/14 11:03 | **Work Order:** C405030

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.26	U	ug/L	1	0.26	0.50	4D23001	EPA 8151A	04/28/14 19:46	RGG	
2,4,5-TP (Silvex) [93-72-1]^	0.21	U	ug/L	1	0.21	0.50	4D23001	EPA 8151A	04/28/14 19:46	RGG	
2,4-D [94-75-7]^	0.27	U	ug/L	1	0.27	0.50	4D23001	EPA 8151A	04/28/14 19:46	RGG	
2,4-DB [94-82-6]^	0.32	U	ug/L	1	0.32	0.50	4D23001	EPA 8151A	04/28/14 19:46	RGG	
Dalapon [75-99-0]^	0.49	U	ug/L	1	0.49	0.50	4D23001	EPA 8151A	04/28/14 19:46	RGG	
Dicamba [1918-00-9]^	0.17	U	ug/L	1	0.17	0.50	4D23001	EPA 8151A	04/28/14 19:46	RGG	
Dichlorprop [120-36-5]^	0.18	U	ug/L	1	0.18	0.50	4D23001	EPA 8151A	04/28/14 19:46	RGG	
Dinoseb [88-85-7]^	0.32	U	ug/L	1	0.32	0.50	4D23001	EPA 8151A	04/28/14 19:46	RGG	
MCPA [94-74-6]^	17	U	ug/L	1	17	50	4D23001	EPA 8151A	04/28/14 19:46	RGG	
MCPP [93-65-2]^	7.4	U	ug/L	1	7.4	50	4D23001	EPA 8151A	04/28/14 19:46	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*1.6*	*1*	*2.02*	*81 %*	*68-139*	*4D23001*	*EPA 8151A*	*04/28/14 19:46*	*RGG*	

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ANALYTICAL RESULTS

Description:	GP14-9	**Lab Sample ID:**	C405030-05	**Received:**	04/18/14 09:45
Matrix:	Soil	**Sampled:**	04/17/14 08:50	**Work Order:**	C405030
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian	**% Solids:**	79.54

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	2.1	U	mg/kg dry	1	2.1	8.1	4D22036	EPA 8015C	04/23/14 00:51	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*14*	*1*	*14.7*	*94 %*	*59-168*	*4D22036*	*EPA 8015C*	*04/23/14 00:51*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**230**		mg/kg dry	1	2.1	4.1	4D23014	EPA 8015C	04/24/14 05:31	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*1.9*	*1*	*2.10*	*90 %*	*51-138*	*4D23014*	*EPA 8015C*	*04/24/14 05:31*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**4160**	D	mg/kg dry	2	5.28	25.1	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Antimony [7440-36-0]	**2.03**	JD	mg/kg dry	2	0.277	2.51	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Arsenic [7440-38-2]^	**3.30**	D	mg/kg dry	2	0.251	1.26	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Barium [7440-39-3]^	**40.8**	D	mg/kg dry	2	0.251	1.26	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Beryllium [7440-41-7]	**0.200**	D	mg/kg dry	2	0.0302	0.126	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Cadmium [7440-43-9]^	**1.02**	D	mg/kg dry	2	0.0241	0.126	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Calcium [7440-70-2]	**15800**	BD	mg/kg dry	2	14.1	62.9	4D21024	EPA 6010C	04/23/14 14:03	JDH	QB-01, R-01
Chromium [7440-47-3]^	**10.2**	D	mg/kg dry	2	0.251	1.26	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Cobalt [7440-48-4]	**2.13**	D	mg/kg dry	2	0.251	1.26	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Copper [7440-50-8]	**42.2**	D	mg/kg dry	2	0.478	1.26	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Iron [7439-89-6]	**14000**	BD	mg/kg dry	2	1.21	6.29	4D21024	EPA 6010C	04/23/14 14:03	JDH	QB-01
Lead [7439-92-1]^	**176**	D	mg/kg dry	2	0.302	1.26	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Magnesium [7439-95-4]	**462**	BD	mg/kg dry	2	1.63	62.9	4D21024	EPA 6010C	04/23/14 14:03	JDH	QB-01, R-01
Manganese [7439-96-5]	**81.8**	D	mg/kg dry	2	0.251	1.26	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Mercury [7439-97-6]^	**0.184**		mg/kg dry	1	0.00789	0.0274	4D29012	EPA 7471B	04/30/14 16:54	T1D	
Nickel [7440-02-0]	**13.1**	D	mg/kg dry	2	0.905	6.29	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Potassium [7440-09-7]	**218**	D	mg/kg dry	2	10.1	62.9	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Selenium [7782-49-2]^	0.251	UD	mg/kg dry	2	0.251	1.26	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Silver [7440-22-4]^	0.251	UD	mg/kg dry	2	0.251	1.26	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Sodium [7440-23-5]	**130**	D	mg/kg dry	2	15.1	62.9	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Thallium [7440-28-0]	0.251	UD	mg/kg dry	2	0.251	1.26	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Vanadium [7440-62-2]^	**8.96**	D	mg/kg dry	2	0.251	1.26	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01
Zinc [7440-66-6]^	**199**	D	mg/kg dry	2	2.77	6.29	4D21024	EPA 6010C	04/23/14 14:03	JDH	R-01

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ANALYTICAL RESULTS

Description: GP14-9	**Lab Sample ID:** C405030-05	**Received:** 04/18/14 09:45
Matrix: Soil	**Sampled:** 04/17/14 08:50	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 79.54

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
1,1-Dichloroethane [75-34-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
1,1-Dichloroethene [75-35-4]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0011	U	mg/kg dry	1	0.0011	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
1,2-Dibromoethane [106-93-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
1,2-Dichloroethane [107-06-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
1,2-Dichloropropane [78-87-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
2-Butanone [78-93-3]^	**0.0035**	J	mg/kg dry	1	0.0023	0.0063	4D25025	EPA 8260B	04/25/14 22:02	KAT	
2-Hexanone [591-78-6]^	0.0011	U	mg/kg dry	1	0.0011	0.0063	4D25025	EPA 8260B	04/25/14 22:02	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0018	U	mg/kg dry	1	0.0018	0.0063	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Acetone [67-64-1]^	**0.014**		mg/kg dry	1	0.0021	0.0063	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Benzene [71-43-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Bromochloromethane [74-97-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Bromodichloromethane [75-27-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Bromoform [75-25-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Bromomethane [74-83-9]^	0.0011	U	mg/kg dry	1	0.0011	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Carbon disulfide [75-15-0]^	0.0026	U	mg/kg dry	1	0.0026	0.0063	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Carbon Tetrachloride [56-23-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Chlorobenzene [108-90-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Chloroethane [75-00-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Chloroform [67-66-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Chloromethane [74-87-3]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
cis-1,2-Dichloroethene [156-59-2]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
cis-1,3-Dichloropropene [10061-01-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Cyclohexane [110-82-7]^	0.0007	U	mg/kg dry	1	0.0007	0.0025	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Ethylbenzene [100-41-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Freon 113 [76-13-1]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Isopropylbenzene [98-82-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Methyl acetate [79-20-9]^	0.0020	U	mg/kg dry	1	0.0020	0.0025	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Methyl cyclohexane [108-87-2]^	0.0007	U	mg/kg dry	1	0.0007	0.0025	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Methylene Chloride [75-09-2]^	0.0009	U	mg/kg dry	1	0.0009	0.0025	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Styrene [100-42-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Tetrachloroethene [127-18-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Toluene [108-88-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0009	U	mg/kg dry	1	0.0009	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Trichloroethene [79-01-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Trichlorofluoromethane [75-69-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	
Vinyl chloride [75-01-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 22:02	KAT	

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ANALYTICAL RESULTS

Description: GP14-9	**Lab Sample ID:** C405030-05	**Received:** 04/18/14 09:45
Matrix: Soil	**Sampled:** 04/17/14 08:50	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 79.54

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7]^	0.0012	U	mg/kg dry	1	0.0012	0.0025	4D25025	EPA 8260B	04/25/14 22:02	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.059*	*1*	*0.0631*	*93 %*	*71-126*	*4D25025*	*EPA 8260B*	*04/25/14 22:02*	*KAT*	
Dibromofluoromethane	*0.057*	*1*	*0.0631*	*90 %*	*72-133*	*4D25025*	*EPA 8260B*	*04/25/14 22:02*	*KAT*	
Toluene-d8	*0.058*	*1*	*0.0631*	*92 %*	*80-123*	*4D25025*	*EPA 8260B*	*04/25/14 22:02*	*KAT*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.46	UD	mg/kg dry	5	0.46	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2,4,5-Trichlorophenol [95-95-4]^	0.42	UD	mg/kg dry	5	0.42	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2,4,6-Trichlorophenol [88-06-2]^	0.94	UD	mg/kg dry	5	0.94	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2,4-Dichlorophenol [120-83-2]^	1.6	UD	mg/kg dry	5	1.6	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2,4-Dimethylphenol [105-67-9]^	1.4	UD	mg/kg dry	5	1.4	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2,4-Dinitrophenol [51-28-5]^	0.56	UD	mg/kg dry	5	0.56	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2,4-Dinitrotoluene [121-14-2]^	1.0	UD	mg/kg dry	5	1.0	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2,6-Dinitrotoluene [606-20-2]^	1.1	UD	mg/kg dry	5	1.1	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2-Chloronaphthalene [91-58-7]^	0.62	UD	mg/kg dry	5	0.62	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2-Chlorophenol [95-57-8]^	1.4	UD	mg/kg dry	5	1.4	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2-Methyl-4,6-dinitrophenol [534-52-1]^	1.8	UD	mg/kg dry	5	1.8	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2-Methylnaphthalene [91-57-6]^	0.75	UD	mg/kg dry	5	0.75	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2-Methylphenol [95-48-7]^	0.69	UD	mg/kg dry	5	0.69	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2-Nitroaniline [88-74-4]^	0.53	UD	mg/kg dry	5	0.53	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
2-Nitrophenol [88-75-5]^	1.6	UD	mg/kg dry	5	1.6	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
3 & 4-Methylphenol [108-39-4/106-44-5]^	1.6	UD	mg/kg dry	5	1.6	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
3,3'-Dichlorobenzidine [91-94-1]^	1.3	UD	mg/kg dry	5	1.3	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
3-Nitroaniline [99-09-2]^	0.50	UD	mg/kg dry	5	0.50	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
4-Bromophenyl-phenylether [101-55-3]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
4-Chloro-3-methylphenol [59-50-7]^	1.8	UD	mg/kg dry	5	1.8	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
4-Chloroaniline [106-47-8]^	0.41	UD	mg/kg dry	5	0.41	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
4-Chlorophenyl-phenylether [7005-72-3]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
4-Nitroaniline [100-01-6]^	1.6	UD	mg/kg dry	5	1.6	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
4-Nitrophenol [100-02-7]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Acenaphthene [83-32-9]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Acenaphthylene [208-96-8]^	0.75	UD	mg/kg dry	5	0.75	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Acetophenone [98-86-2]^	0.88	UD	mg/kg dry	5	0.88	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Anthracene [120-12-7]^	0.94	UD	mg/kg dry	5	0.94	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Atrazine [1912-24-9]^	0.47	UD	mg/kg dry	5	0.47	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Benzaldehyde [100-52-7]^	1.7	UD	mg/kg dry	5	1.7	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Benzo(a)anthracene [56-55-3]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Benzo(a)pyrene [50-32-8]^	0.49	UD	mg/kg dry	5	0.49	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Benzo(b)fluoranthene [205-99-2]^	0.69	UD	mg/kg dry	5	0.69	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Benzo(g,h,i)perylene [191-24-2]^	1.0	UD	mg/kg dry	5	1.0	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	QL-02, QV-01, R-01
Benzo(k)fluoranthene [207-08-9]^	0.69	UD	mg/kg dry	5	0.69	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	QL-02, R-01

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ANALYTICAL RESULTS

Description: GP14-9	**Lab Sample ID:** C405030-05	**Received:** 04/18/14 09:45
Matrix: Soil	**Sampled:** 04/17/14 08:50	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 79.54

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethoxy)methane [111-91-1]^	0.94	UD	mg/kg dry	5	0.94	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	QV-01, R-01
Bis(2-chloroethyl)ether [111-44-4]^	0.88	UD	mg/kg dry	5	0.88	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Bis(2-chloroisopropyl)ether [108-60-1]^	0.62	UD	mg/kg dry	5	0.62	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Butylbenzylphthalate [85-68-7]^	0.88	UD	mg/kg dry	5	0.88	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Caprolactam [105-60-2]^	1.9	UD	mg/kg dry	5	1.9	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	QV-01, R-01
Carbazole [86-74-8]^	0.75	UD	mg/kg dry	5	0.75	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Chrysene [218-01-9]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Dibenzo(a,h)anthracene [53-70-3]^	0.88	UD	mg/kg dry	5	0.88	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Dibenzofuran [132-64-9]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Diethylphthalate [84-66-2]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Dimethylphthalate [131-11-3]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Di-n-butylphthalate [84-74-2]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Di-n-octylphthalate [117-84-0]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Fluoranthene [206-44-0]^	0.69	UD	mg/kg dry	5	0.69	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Fluorene [86-73-7]	0.88	UD	mg/kg dry	5	0.88	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Hexachlorobenzene [118-74-1]^	0.75	UD	mg/kg dry	5	0.75	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Hexachlorobutadiene [87-68-3]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Hexachlorocyclopentadiene [77-47-4]^	0.94	UD	mg/kg dry	5	0.94	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Hexachloroethane [67-72-1]^	0.63	UD	mg/kg dry	5	0.63	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.88	UD	mg/kg dry	5	0.88	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Isophorone [78-59-1]^	1.1	UD	mg/kg dry	5	1.1	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Naphthalene [91-20-3]^	0.75	UD	mg/kg dry	5	0.75	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Nitrobenzene [98-95-3]^	0.94	UD	mg/kg dry	5	0.94	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
N-Nitroso-di-n-propylamine [621-64-7]^	0.94	UD	mg/kg dry	5	0.94	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	1.4	UD	mg/kg dry	5	1.4	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Pentachlorophenol [87-86-5]^	1.3	UD	mg/kg dry	5	1.3	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Phenanthrene [85-01-8]^	0.82	UD	mg/kg dry	5	0.82	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Phenol [108-95-2]^	0.62	UD	mg/kg dry	5	0.62	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01
Pyrene [129-00-0]^	0.69	UD	mg/kg dry	5	0.69	2.1	4D25007	EPA 8270D	05/06/14 17:37	jfi	R-01

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.4*	*5*	*2.10*	*68 %*	*23-137*	*4D25007*	*EPA 8270D*	*05/06/14 17:37*	*jfi*	*R-01*
2-Fluorobiphenyl	*1.2*	*5*	*2.10*	*55 %*	*29-119*	*4D25007*	*EPA 8270D*	*05/06/14 17:37*	*jfi*	*R-01*
2-Fluorophenol	*0.91*	*5*	*2.10*	*44 %*	*20-124*	*4D25007*	*EPA 8270D*	*05/06/14 17:37*	*jfi*	*R-01*
Nitrobenzene-d5	*0.67*	*5*	*2.10*	*32 %*	*17-126*	*4D25007*	*EPA 8270D*	*05/06/14 17:37*	*jfi*	*R-01*
Phenol-d5	*1.1*	*5*	*2.10*	*52 %*	*15-131*	*4D25007*	*EPA 8270D*	*05/06/14 17:37*	*jfi*	*R-01*
Terphenyl-d14	*1.9*	*5*	*2.10*	*91 %*	*60-120*	*4D25007*	*EPA 8270D*	*05/06/14 17:37*	*jfi*	*R-01*

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.19	U	mg/kg dry	1	0.19	1.3	4D28005	EPA 7196A	04/29/14 10:54	RMM	

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ANALYTICAL RESULTS

Description: GP14-9 | **Lab Sample ID:** C405030-06 | **Received:** 04/18/14 09:45

Matrix: Ground Water | **Sampled:** 04/17/14 10:45 | **Work Order:** C405030

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Acetone [67-64-1]^	**10**		ug/L	1	1.2	5.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
m,p-Xylenes [108-38-3/106-42-3]	0.17	U	ug/L	1	0.17	2.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.16	U	ug/L	1	0.16	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	

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ANALYTICAL RESULTS

Description: GP14-9 | **Lab Sample ID:** C405030-06 | **Received:** 04/18/14 09:45
Matrix: Ground Water | **Sampled:** 04/17/14 10:45 | **Work Order:** C405030
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4D27002	EPA 8260B	04/28/14 06:09	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*93 %*	*51-122*	*4D27002*	*EPA 8260B*	*04/28/14 06:09*	*MSZ*	
Dibromofluoromethane	*57*	*1*	*50.0*	*114 %*	*68-117*	*4D27002*	*EPA 8260B*	*04/28/14 06:09*	*MSZ*	
Toluene-d8	*55*	*1*	*50.0*	*110 %*	*67-127*	*4D27002*	*EPA 8260B*	*04/28/14 06:09*	*MSZ*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2,4,5-Trichlorophenol [95-95-4]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2,4,6-Trichlorophenol [88-06-2]^	1.1	U	ug/L	1	1.1	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2,4-Dichlorophenol [120-83-2]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2,4-Dimethylphenol [105-67-9]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2,4-Dinitrophenol [51-28-5]^	2.6	U	ug/L	1	2.6	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2,4-Dinitrotoluene [121-14-2]^	2.4	U	ug/L	1	2.4	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2,6-Dinitrotoluene [606-20-2]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2-Chloronaphthalene [91-58-7]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2-Chlorophenol [95-57-8]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]	2.9	U	ug/L	1	2.9	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2-Methylnaphthalene [91-57-6]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2-Methylphenol [95-48-7]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2-Nitroaniline [88-74-4]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
2-Nitrophenol [88-75-5]^	1.1	U	ug/L	1	1.1	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]	1.6	U	ug/L	1	1.6	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
3-Nitroaniline [99-09-2]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
4-Bromophenyl-phenylether [101-55-3]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
4-Chloro-3-methylphenol [59-50-7]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
4-Chloroaniline [106-47-8]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	1.6	U	ug/L	1	1.6	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
4-Nitrophenol [100-02-7]^	2.0	U	ug/L	1	2.0	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Acenaphthene [83-32-9]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Acenaphthylene [208-96-8]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Acetophenone [98-86-2]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Anthracene [120-12-7]^	1.6	U	ug/L	1	1.6	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Atrazine [1912-24-9]	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	QV-01
Benzaldehyde [100-52-7]	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	QV-02
Benzo(a)anthracene [56-55-3]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Benzo(a)pyrene [50-32-8]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Benzo(b)fluoranthene [205-99-2]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Benzo(g,h,i)perylene [191-24-2]^	2.4	U	ug/L	1	2.4	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Benzo(k)fluoranthene [207-08-9]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	

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ANALYTICAL RESULTS

Description: GP14-9 | **Lab Sample ID:** C405030-06 | **Received:** 04/18/14 09:45
Matrix: Ground Water | **Sampled:** 04/17/14 10:45 | **Work Order:** C405030
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethoxy)methane [111-91-1]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	1.7	U	ug/L	1	1.7	5.0	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Butylbenzylphthalate [85-68-7]^	2.0	U	ug/L	1	2.0	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Caprolactam [105-60-2]	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Carbazole [86-74-8]^	2.5	U	ug/L	1	2.5	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Chrysene [218-01-9]^	2.0	U	ug/L	1	2.0	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	2.3	U	ug/L	1	2.3	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Dibenzofuran [132-64-9]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Diethylphthalate [84-66-2]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Dimethylphthalate [131-11-3]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Di-n-butylphthalate [84-74-2]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Di-n-octylphthalate [117-84-0]^	3.1	U	ug/L	1	3.1	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Fluoranthene [206-44-0]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Fluorene [86-73-7]^	1.7	U	ug/L	1	1.7	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Hexachlorobenzene [118-74-1]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Hexachlorobutadiene [87-68-3]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Hexachlorocyclopentadiene [77-47-4]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Hexachloroethane [67-72-1]^	1.1	U	ug/L	1	1.1	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	2.2	U	ug/L	1	2.2	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Isophorone [78-59-1]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Naphthalene [91-20-3]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Nitrobenzene [98-95-3]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Pentachlorophenol [87-86-5]^	1.8	U	ug/L	1	1.8	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Phenanthrene [85-01-8]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Phenol [108-95-2]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	
Pyrene [129-00-0]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 21:20	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*100*	*1*	*100*	*104 %*	*10-179*	*4D23029*	*EPA 8270D*	*05/05/14 21:20*	*DFM*	
2-Fluorobiphenyl	*40*	*1*	*50.0*	*81 %*	*10-149*	*4D23029*	*EPA 8270D*	*05/05/14 21:20*	*DFM*	
2-Fluorophenol	*56*	*1*	*100*	*56 %*	*10-110*	*4D23029*	*EPA 8270D*	*05/05/14 21:20*	*DFM*	
Nitrobenzene-d5	*39*	*1*	*50.0*	*78 %*	*10-149*	*4D23029*	*EPA 8270D*	*05/05/14 21:20*	*DFM*	
Phenol-d5	*53*	*1*	*100*	*53 %*	*10-88*	*4D23029*	*EPA 8270D*	*05/05/14 21:20*	*DFM*	
Terphenyl-d14	*43*	*1*	*50.0*	*86 %*	*10-188*	*4D23029*	*EPA 8270D*	*05/05/14 21:20*	*DFM*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.43	U	ug/L	1	0.43	0.50	4D24031	EPA 8082A	04/30/14 03:35	MWC	
PCB-1221 [11104-28-2]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/30/14 03:35	MWC	
PCB-1232 [11141-16-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/30/14 03:35	MWC	
PCB-1248 [12672-29-6]^	0.014	U	ug/L	1	0.014	0.50	4D24031	EPA 8082A	04/30/14 03:35	MWC	
PCB-1254 [11097-69-1]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/30/14 03:35	MWC	
PCB-1260 [11096-82-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/30/14 03:35	MWC	

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ANALYTICAL RESULTS

Description: GP14-9 | **Lab Sample ID:** C405030-06 | **Received:** 04/18/14 09:45
Matrix: Ground Water | **Sampled:** 04/17/14 10:45 | **Work Order:** C405030
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.98*	*1*	*1.00*	*98 %*	*45-151*	*4D24031*	*EPA 8082A*	*04/30/14 03:35*	*MWC*	
Decachlorobiphenyl	*0.77*	*1*	*1.00*	*77 %*	*42-159*	*4D24031*	*EPA 8082A*	*04/30/14 03:35*	*MWC*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	**0.011**	J	mg/L	1	0.011	0.055	4D22042	EPA 8015C	04/23/14 08:38	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*0.0925*	*1*	*0.100*	*92 %*	*70-130*	*4D22042*	*EPA 8015C*	*04/23/14 08:38*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**0.16**		mg/L	1	0.060	0.10	4D24010	EPA 8015C	04/25/14 18:53	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*0.055*	*1*	*0.0526*	*104 %*	*41-126*	*4D24010*	*EPA 8015C*	*04/25/14 18:53*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	**0.227**		ug/L	1	0.170	0.200	4D29022	EPA 7470A	04/30/14 15:05	T1D	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]^	**37600**		ug/L	1	29.0	100	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Antimony [7440-36-0]^	**3.99**	JD	ug/L	10	2.20	20.0	4D23017	EPA 6020A	04/29/14 12:25	VLO	R-05
Arsenic [7440-38-2]^	**17.3**		ug/L	1	5.40	10.0	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Barium [7440-39-3]^	**318**		ug/L	1	1.00	10.0	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Beryllium [7440-41-7]^	**1.27**		ug/L	1	0.100	1.00	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Cadmium [7440-43-9]^	**5.92**		ug/L	1	0.360	1.00	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Calcium [7440-70-2]^	**89300**		ug/L	1	39.0	100	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Chromium [7440-47-3]^	**80.1**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Cobalt [7440-48-4]^	**12.7**	D	ug/L	10	1.00	10.0	4D23017	EPA 6020A	04/29/14 12:25	VLO	R-05
Copper [7440-50-8]^	**70.4**		ug/L	1	1.60	10.0	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Iron [7439-89-6]^	**56900**		ug/L	1	22.0	50.0	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Lead [7439-92-1]^	**158**		ug/L	1	2.10	10.0	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Magnesium [7439-95-4]^	**17500**		ug/L	1	23.0	100	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Manganese [7439-96-5]^	**806**		ug/L	1	1.10	10.0	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Nickel [7440-02-0]^	**25.9**		ug/L	1	1.80	10.0	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Potassium [7440-09-7]^	**8180**		ug/L	1	150	500	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Selenium [7782-49-2]^	5.00	U	ug/L	1	5.00	10.0	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Silver [7440-22-4]^	**3.26**	J	ug/L	1	1.90	10.0	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Sodium [7440-23-5]^	**26500**		ug/L	1	400	500	4D21018	EPA 6010C	04/28/14 14:05	JDH	
Thallium [7440-28-0]^	1.10	UD	ug/L	10	1.10	10.0	4D23017	EPA 6020A	04/29/14 12:25	VLO	R-05
Vanadium [7440-62-2]^	**139**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 14:05	JDH	

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ANALYTICAL RESULTS

Description: GP14-9 | **Lab Sample ID:** C405030-06 | **Received:** 04/18/14 09:45

Matrix: Ground Water | **Sampled:** 04/17/14 10:45 | **Work Order:** C405030

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Zinc [7440-66-6]^	**394**		ug/L	1	3.80	10.0	4D21018	EPA 6010C	04/28/14 14:05	JDH	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.0088	U	mg/L	1	0.0088	0.010	4D18026	EPA 7196A	04/18/14 12:41	CV	Q

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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ANALYTICAL RESULTS

Description: GP14-8 **Lab Sample ID:** C405030-07 **Received:** 04/18/14 09:45
Matrix: Ground Water **Sampled:** 04/17/14 11:00 **Work Order:** C405030
Project: 1614 West Pembroke Avenue **Sampled By:** Dan Christian

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2,4,5-Trichlorophenol [95-95-4]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2,4,6-Trichlorophenol [88-06-2]^	1.1	U	ug/L	1	1.1	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2,4-Dichlorophenol [120-83-2]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2,4-Dimethylphenol [105-67-9]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2,4-Dinitrophenol [51-28-5]^	2.6	U	ug/L	1	2.6	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2,4-Dinitrotoluene [121-14-2]^	2.4	U	ug/L	1	2.4	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2,6-Dinitrotoluene [606-20-2]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2-Chloronaphthalene [91-58-7]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2-Chlorophenol [95-57-8]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]	2.9	U	ug/L	1	2.9	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2-Methylnaphthalene [91-57-6]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2-Methylphenol [95-48-7]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2-Nitroaniline [88-74-4]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
2-Nitrophenol [88-75-5]^	1.1	U	ug/L	1	1.1	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]	1.6	U	ug/L	1	1.6	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
3-Nitroaniline [99-09-2]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
4-Bromophenyl-phenylether [101-55-3]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
4-Chloro-3-methylphenol [59-50-7]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
4-Chloroaniline [106-47-8]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	1.6	U	ug/L	1	1.6	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
4-Nitrophenol [100-02-7]^	2.0	U	ug/L	1	2.0	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Acenaphthene [83-32-9]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Acenaphthylene [208-96-8]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Acetophenone [98-86-2]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Anthracene [120-12-7]^	1.6	U	ug/L	1	1.6	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Atrazine [1912-24-9]	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	QV-01
Benzaldehyde [100-52-7]	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	QV-02
Benzo(a)anthracene [56-55-3]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Benzo(a)pyrene [50-32-8]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Benzo(b)fluoranthene [205-99-2]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Benzo(g,h,i)perylene [191-24-2]^	2.4	U	ug/L	1	2.4	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Benzo(k)fluoranthene [207-08-9]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Bis(2-chloroethoxy)methane [111-91-1]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	1.7	U	ug/L	1	1.7	5.0	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Butylbenzylphthalate [85-68-7]^	2.0	U	ug/L	1	2.0	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Caprolactam [105-60-2]	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Carbazole [86-74-8]^	2.5	U	ug/L	1	2.5	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Chrysene [218-01-9]^	2.0	U	ug/L	1	2.0	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	2.3	U	ug/L	1	2.3	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Dibenzofuran [132-64-9]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Diethylphthalate [84-66-2]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Dimethylphthalate [131-11-3]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Di-n-butylphthalate [84-74-2]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	

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ANALYTICAL RESULTS

Description: GP14-8	**Lab Sample ID:** C405030-07	**Received:** 04/18/14 09:45
Matrix: Ground Water	**Sampled:** 04/17/14 11:00	**Work Order:** C405030
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Di-n-octylphthalate [117-84-0]^	3.1	U	ug/L	1	3.1	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Fluoranthene [206-44-0]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Fluorene [86-73-7]^	1.7	U	ug/L	1	1.7	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Hexachlorobenzene [118-74-1]^	1.0	U	ug/L	1	1.0	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Hexachlorobutadiene [87-68-3]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Hexachlorocyclopentadiene [77-47-4]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Hexachloroethane [67-72-1]^	1.1	U	ug/L	1	1.1	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	2.2	U	ug/L	1	2.2	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Isophorone [78-59-1]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Naphthalene [91-20-3]^	1.3	U	ug/L	1	1.3	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Nitrobenzene [98-95-3]^	1.2	U	ug/L	1	1.2	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	1.5	U	ug/L	1	1.5	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Pentachlorophenol [87-86-5]^	1.8	U	ug/L	1	1.8	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Phenanthrene [85-01-8]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Phenol [108-95-2]^	1.4	U	ug/L	1	1.4	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	
Pyrene [129-00-0]^	2.1	U	ug/L	1	2.1	10	4D23029	EPA 8270D	05/05/14 21:49	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*120*	*1*	*100*	*121 %*	*10-179*	*4D23029*	*EPA 8270D*	*05/05/14 21:49*	*DFM*	
2-Fluorobiphenyl	*46*	*1*	*50.0*	*93 %*	*10-149*	*4D23029*	*EPA 8270D*	*05/05/14 21:49*	*DFM*	
2-Fluorophenol	*61*	*1*	*100*	*61 %*	*10-110*	*4D23029*	*EPA 8270D*	*05/05/14 21:49*	*DFM*	
Nitrobenzene-d5	*44*	*1*	*50.0*	*89 %*	*10-149*	*4D23029*	*EPA 8270D*	*05/05/14 21:49*	*DFM*	
Phenol-d5	*54*	*1*	*100*	*54 %*	*10-88*	*4D23029*	*EPA 8270D*	*05/05/14 21:49*	*DFM*	
Terphenyl-d14	*50*	*1*	*50.0*	*101 %*	*10-188*	*4D23029*	*EPA 8270D*	*05/05/14 21:49*	*DFM*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.43	U	ug/L	1	0.43	0.50	4D24031	EPA 8082A	04/30/14 03:48	MWC	
PCB-1221 [11104-28-2]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/30/14 03:48	MWC	
PCB-1232 [11141-16-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/30/14 03:48	MWC	
PCB-1248 [12672-29-6]^	0.014	U	ug/L	1	0.014	0.50	4D24031	EPA 8082A	04/30/14 03:48	MWC	
PCB-1254 [11097-69-1]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/30/14 03:48	MWC	
PCB-1260 [11096-82-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/30/14 03:48	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.83*	*1*	*1.00*	*83 %*	*45-151*	*4D24031*	*EPA 8082A*	*04/30/14 03:48*	*MWC*	
Decachlorobiphenyl	*0.42*	*1*	*1.00*	*42 %*	*42-159*	*4D24031*	*EPA 8082A*	*04/30/14 03:48*	*MWC*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**0.15**		mg/L	1	0.060	0.10	4D24010	EPA 8015C	04/25/14 19:22	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*0.053*	*1*	*0.0526*	*101 %*	*41-126*	*4D24010*	*EPA 8015C*	*04/25/14 19:22*	*MWC*	

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ANALYTICAL RESULTS

Description: GP14-8 | **Lab Sample ID:** C405030-07 | **Received:** 04/18/14 09:45

Matrix: Ground Water | **Sampled:** 04/17/14 11:00 | **Work Order:** C405030

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	0.170	U	ug/L	1	0.170	0.200	4D29022	EPA 7470A	04/30/14 15:08	T1D	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]^	**25600**		ug/L	1	29.0	100	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Antimony [7440-36-0]^	2.20	UD	ug/L	10	2.20	20.0	4D23017	EPA 6020A	04/29/14 12:29	VLO	R-05
Arsenic [7440-38-2]^	**95.5**		ug/L	1	5.40	10.0	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Barium [7440-39-3]^	**115**		ug/L	1	1.00	10.0	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Beryllium [7440-41-7]^	**1.18**		ug/L	1	0.100	1.00	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Cadmium [7440-43-9]^	0.360	U	ug/L	1	0.360	1.00	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Calcium [7440-70-2]^	**90100**		ug/L	1	39.0	100	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Chromium [7440-47-3]^	**59.6**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Cobalt [7440-48-4]^	**48.7**	D	ug/L	10	1.00	10.0	4D23017	EPA 6020A	04/29/14 12:29	VLO	R-05
Copper [7440-50-8]^	**24.3**		ug/L	1	1.60	10.0	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Iron [7439-89-6]^	**118000**		ug/L	1	22.0	50.0	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Lead [7439-92-1]^	**42.3**		ug/L	1	2.10	10.0	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Magnesium [7439-95-4]^	**20200**		ug/L	1	23.0	100	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Manganese [7439-96-5]^	**1650**		ug/L	1	1.10	10.0	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Nickel [7440-02-0]^	**58.2**		ug/L	1	1.80	10.0	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Potassium [7440-09-7]^	**4610**		ug/L	1	150	500	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Selenium [7782-49-2]^	5.00	U	ug/L	1	5.00	10.0	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Silver [7440-22-4]^	**2.81**	J	ug/L	1	1.90	10.0	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Sodium [7440-23-5]^	**42300**		ug/L	1	400	500	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Thallium [7440-28-0]^	1.10	UD	ug/L	10	1.10	10.0	4D23017	EPA 6020A	04/29/14 12:29	VLO	R-05
Vanadium [7440-62-2]^	**109**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 14:15	JDH	
Zinc [7440-66-6]^	**150**		ug/L	1	3.80	10.0	4D21018	EPA 6010C	04/28/14 14:15	JDH	

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ANALYTICAL RESULTS

Description: GP14-7 | **Lab Sample ID:** C405030-08 | **Received:** 04/18/14 09:45
Matrix: Ground Water | **Sampled:** 04/17/14 08:50 | **Work Order:** C405030
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.43	U	ug/L	1	0.43	0.50	4D24031	EPA 8082A	04/30/14 04:02	MWC	
PCB-1221 [11104-28-2]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/30/14 04:02	MWC	
PCB-1232 [11141-16-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/30/14 04:02	MWC	
PCB-1248 [12672-29-6]^	0.014	U	ug/L	1	0.014	0.50	4D24031	EPA 8082A	04/30/14 04:02	MWC	
PCB-1254 [11097-69-1]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/30/14 04:02	MWC	
PCB-1260 [11096-82-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/30/14 04:02	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.90*	*1*	*1.00*	*90 %*	*45-151*	*4D24031*	*EPA 8082A*	*04/30/14 04:02*	*MWC*	
Decachlorobiphenyl	*0.51*	*1*	*1.00*	*51 %*	*42-159*	*4D24031*	*EPA 8082A*	*04/30/14 04:02*	*MWC*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**0.42**		mg/L	1	0.060	0.10	4D24010	EPA 8015C	04/25/14 20:21	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*0.053*	*1*	*0.0526*	*100 %*	*41-126*	*4D24010*	*EPA 8015C*	*04/25/14 20:21*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	0.170	U	ug/L	1	0.170	0.200	4D29022	EPA 7470A	04/30/14 15:10	T1D	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]^	**11800**		ug/L	1	29.0	100	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Antimony [7440-36-0]^	2.20	UD	ug/L	10	2.20	20.0	4D23017	EPA 6020A	04/29/14 12:33	VLO	R-05
Arsenic [7440-38-2]^	**5.56**	J	ug/L	1	5.40	10.0	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Barium [7440-39-3]^	**83.0**		ug/L	1	1.00	10.0	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Beryllium [7440-41-7]^	**0.823**	J	ug/L	1	0.100	1.00	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Cadmium [7440-43-9]^	**1.49**		ug/L	1	0.360	1.00	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Calcium [7440-70-2]^	**53400**		ug/L	1	39.0	100	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Chromium [7440-47-3]^	**25.3**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Cobalt [7440-48-4]^	**13.0**	D	ug/L	10	1.00	10.0	4D23017	EPA 6020A	04/29/14 12:33	VLO	R-05
Copper [7440-50-8]^	**37.3**		ug/L	1	1.60	10.0	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Iron [7439-89-6]^	**63200**		ug/L	1	22.0	50.0	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Lead [7439-92-1]^	**106**		ug/L	1	2.10	10.0	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Magnesium [7439-95-4]^	**12700**		ug/L	1	23.0	100	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Manganese [7439-96-5]^	**848**		ug/L	1	1.10	10.0	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Nickel [7440-02-0]^	**22.7**		ug/L	1	1.80	10.0	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Potassium [7440-09-7]^	**3500**		ug/L	1	150	500	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Selenium [7782-49-2]^	5.00	U	ug/L	1	5.00	10.0	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Silver [7440-22-4]^	1.90	U	ug/L	1	1.90	10.0	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Sodium [7440-23-5]^	**38100**		ug/L	1	400	500	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Thallium [7440-28-0]^	1.10	UD	ug/L	10	1.10	10.0	4D23017	EPA 6020A	04/29/14 12:33	VLO	R-05
Vanadium [7440-62-2]^	**31.7**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 14:18	JDH	
Zinc [7440-66-6]^	**525**		ug/L	1	3.80	10.0	4D21018	EPA 6010C	04/28/14 14:18	JDH	

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ANALYTICAL RESULTS

Description:	GP14-7	**Lab Sample ID:**	C405030-08	**Received:**	04/18/14 09:45
Matrix:	Ground Water	**Sampled:**	04/17/14 08:50	**Work Order:**	C405030
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian		

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.0088	U	mg/L	1	0.0088	0.010	4D18026	EPA 7196A	04/18/14 12:41	CV	Q

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ANALYTICAL RESULTS

Description: Trip Blank | **Lab Sample ID:** C405030-09 | **Received:** 04/18/14 09:45
Matrix: Water | **Sampled:** 04/17/14 08:50 | **Work Order:** C405030
Project: 1614 West Pembroke Avenue | **Sampled By:** ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Acetone [67-64-1]^	1.2	U	ug/L	1	1.2	5.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
m,p-Xylenes [108-38-3/106-42-3]	0.17	U	ug/L	1	0.17	2.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.16	U	ug/L	1	0.16	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	

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ANALYTICAL RESULTS

Description: Trip Blank | **Lab Sample ID:** C405030-09 | **Received:** 04/18/14 09:45

Matrix: Water | **Sampled:** 04/17/14 08:50 | **Work Order:** C405030

Project: 1614 West Pembroke Avenue | **Sampled By:** ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4D27002	EPA 8260B	04/28/14 05:10	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*94 %*	*51-122*	*4D27002*	*EPA 8260B*	*04/28/14 05:10*	*MSZ*	
Dibromofluoromethane	*58*	*1*	*50.0*	*117 %*	*68-117*	*4D27002*	*EPA 8260B*	*04/28/14 05:10*	*MSZ*	
Toluene-d8	*56*	*1*	*50.0*	*111 %*	*67-127*	*4D27002*	*EPA 8260B*	*04/28/14 05:10*	*MSZ*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D27002 - EPA 5030B_MS

Blank (4D27002-BLK1) Prepared: 04/27/2014 17:00 Analyzed: 04/27/2014 19:43

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.012	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Cyclohexane	0.36	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Freon 113	0.35	U	1.0	ug/L							
Isopropylbenzene	0.14	U	1.0	ug/L							
m,p-Xylenes	0.17	U	2.0	ug/L							
Methyl acetate	0.51	U	1.0	ug/L							
Methyl cyclohexane	0.54	U	1.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.16	U	1.0	ug/L							
o-Xylene	0.065	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D27002 - EPA 5030B_MS - Continued

Blank (4D27002-BLK1) Continued Prepared: 04/27/2014 17:00 Analyzed: 04/27/2014 19:43

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*96*	*51-122*			
Dibromofluoromethane	*55*			*ug/L*	*50.0*		*110*	*68-117*			
Toluene-d8	*55*			*ug/L*	*50.0*		*110*	*67-127*			

LCS (4D27002-BS1) Prepared: 04/27/2014 17:00 Analyzed: 04/27/2014 20:13

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0		95	75-133			
Benzene	18		1.0	ug/L	20.0		92	81-134			
Chlorobenzene	19		1.0	ug/L	20.0		94	83-117			
Cyclohexane	23		1.0	ug/L	20.0		115	0-200			
Methyl acetate	25		1.0	ug/L	20.0		126	0-200			
Methyl cyclohexane	20		1.0	ug/L	20.0		100	0-200			
Toluene	16		1.0	ug/L	20.0		82	71-118			
Trichloroethene	18		1.0	ug/L	20.0		92	74-119			
4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*98*	*51-122*			
Dibromofluoromethane	*54*			*ug/L*	*50.0*		*108*	*68-117*			
Toluene-d8	*55*			*ug/L*	*50.0*		*110*	*67-127*			

Matrix Spike (4D27002-MS1) Prepared: 04/27/2014 17:00 Analyzed: 04/27/2014 20:43

Source: C405290-05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.21 U	98	75-133			
Benzene	19		1.0	ug/L	20.0	0.15 U	95	81-134			
Chlorobenzene	19		1.0	ug/L	20.0	0.17 U	93	83-117			
Cyclohexane	25		1.0	ug/L	20.0	0.36 U	124	0-200			
Methyl acetate	25		1.0	ug/L	20.0	0.51 U	127	0-200			
Methyl cyclohexane	22		1.0	ug/L	20.0	0.54 U	109	0-200			
Toluene	17		1.0	ug/L	20.0	0.14 U	83	71-118			
Trichloroethene	19		1.0	ug/L	20.0	0.15 U	94	74-119			
4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*95*	*51-122*			
Dibromofluoromethane	*55*			*ug/L*	*50.0*		*109*	*68-117*			
Toluene-d8	*54*			*ug/L*	*50.0*		*108*	*67-127*			

Matrix Spike Dup (4D27002-MSD1) Prepared: 04/27/2014 17:00 Analyzed: 04/27/2014 21:13

Source: C405290-05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	18		1.0	ug/L	20.0	0.21 U	92	75-133	6	20	
Benzene	18		1.0	ug/L	20.0	0.15 U	89	81-134	6	17	
Chlorobenzene	18		1.0	ug/L	20.0	0.17 U	91	83-117	2	16	
Cyclohexane	23		1.0	ug/L	20.0	0.36 U	117	0-200	6	50	
Methyl acetate	25		1.0	ug/L	20.0	0.51 U	123	0-200	3	50	
Methyl cyclohexane	20		1.0	ug/L	20.0	0.54 U	98	0-200	10	50	
Toluene	16		1.0	ug/L	20.0	0.14 U	80	71-118	4	17	

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D27002 - EPA 5030B_MS - Continued

Matrix Spike Dup (4D27002-MSD1) Continued Prepared: 04/27/2014 17:00 Analyzed: 04/27/2014 21:13

Source: C405290-05

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichloroethene	18		1.0	ug/L	20.0	0.15 U	90	74-119	5	22	
4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*96*	*51-122*			
Dibromofluoromethane	*54*			*ug/L*	*50.0*		*108*	*68-117*			
Toluene-d8	*54*			*ug/L*	*50.0*		*108*	*67-127*			

Batch 4D28024 - EPA 5030B_MS

Blank (4D28024-BLK1) Prepared: 04/28/2014 11:19 Analyzed: 04/28/2014 23:28

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.012	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Cyclohexane	0.36	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Freon 113	0.35	U	1.0	ug/L							
Isopropylbenzene	0.14	U	1.0	ug/L							
m,p-Xylenes	0.17	U	2.0	ug/L							
Methyl acetate	0.51	U	1.0	ug/L							

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D28024 - EPA 5030B_MS - Continued

Blank (4D28024-BLK1) Continued Prepared: 04/28/2014 11:19 Analyzed: 04/28/2014 23:28

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Methyl cyclohexane	0.54	U	1.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.16	U	1.0	ug/L							
o-Xylene	0.065	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*95*	*51-122*			
Dibromofluoromethane	*56*			*ug/L*	*50.0*		*112*	*68-117*			
Toluene-d8	*55*			*ug/L*	*50.0*		*109*	*67-127*			

LCS (4D28024-BS1) Prepared: 04/28/2014 11:19 Analyzed: 04/28/2014 23:58

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	21		1.0	ug/L	20.0		103	75-133			
Benzene	20		1.0	ug/L	20.0		102	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		103	83-117			
Cyclohexane	24		1.0	ug/L	20.0		120	0-200			
Methyl acetate	26		1.0	ug/L	20.0		128	0-200			
Methyl cyclohexane	22		1.0	ug/L	20.0		108	0-200			
Toluene	18		1.0	ug/L	20.0		90	71-118			
Trichloroethene	20		1.0	ug/L	20.0		101	74-119			
4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*97*	*51-122*			
Dibromofluoromethane	*55*			*ug/L*	*50.0*		*111*	*68-117*			
Toluene-d8	*55*			*ug/L*	*50.0*		*109*	*67-127*			

Matrix Spike (4D28024-MS1) Prepared: 04/28/2014 11:19 Analyzed: 04/29/2014 00:27

Source: C405290-08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.21 U	109	75-133			
Benzene	21		1.0	ug/L	20.0	0.15 U	106	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.17 U	105	83-117			
Cyclohexane	25		1.0	ug/L	20.0	0.36 U	123	0-200			
Methyl acetate	25		1.0	ug/L	20.0	0.51 U	123	0-200			
Methyl cyclohexane	21		1.0	ug/L	20.0	0.54 U	105	0-200			
Toluene	18		1.0	ug/L	20.0	0.14 U	92	71-118			
Trichloroethene	21		1.0	ug/L	20.0	0.15 U	105	74-119			
4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*98*	*51-122*			
Dibromofluoromethane	*54*			*ug/L*	*50.0*		*108*	*68-117*			
Toluene-d8	*54*			*ug/L*	*50.0*		*108*	*67-127*			

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D28024 - EPA 5030B_MS - Continued

Matrix Spike Dup (4D28024-MSD1) Prepared: 04/28/2014 11:19 Analyzed: 04/29/2014 00:57

Source: C405290-08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	21		1.0	ug/L	20.0	0.21 U	104	75-133	5	20	
Benzene	20		1.0	ug/L	20.0	0.15 U	100	81-134	6	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	99	83-117	6	16	
Cyclohexane	23		1.0	ug/L	20.0	0.36 U	114	0-200	8	50	
Methyl acetate	24		1.0	ug/L	20.0	0.51 U	120	0-200	2	50	
Methyl cyclohexane	20		1.0	ug/L	20.0	0.54 U	99	0-200	6	50	
Toluene	18		1.0	ug/L	20.0	0.14 U	88	71-118	4	17	
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	99	74-119	6	22	
4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*93*	*51-122*			
Dibromofluoromethane	*53*			*ug/L*	*50.0*		*105*	*68-117*			
Toluene-d8	*53*			*ug/L*	*50.0*		*105*	*67-127*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D23029 - EPA 3510C_MS

Blank (4D23029-BLK1) Prepared: 04/23/2014 20:10 Analyzed: 04/29/2014 15:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1'-Biphenyl	1.5	U	10	ug/L							
2,4,5-Trichlorophenol	1.0	U	10	ug/L							
2,4,6-Trichlorophenol	1.1	U	10	ug/L							
2,4-Dichlorophenol	1.4	U	10	ug/L							
2,4-Dimethylphenol	1.3	U	10	ug/L							
2,4-Dinitrophenol	2.6	U	10	ug/L							
2,4-Dinitrotoluene	2.4	U	10	ug/L							
2,6-Dinitrotoluene	1.5	U	10	ug/L							
2-Chloronaphthalene	1.0	U	10	ug/L							
2-Chlorophenol	1.2	U	10	ug/L							
2-Methyl-4,6-dinitrophenol	2.9	U	10	ug/L							
2-Methylnaphthalene	1.5	U	10	ug/L							
2-Methylphenol	1.4	U	10	ug/L							
2-Nitroaniline	1.5	U	10	ug/L							
2-Nitrophenol	1.1	U	10	ug/L							
3 & 4-Methylphenol	1.6	U	10	ug/L							
3,3'-Dichlorobenzidine	3.3	U	10	ug/L							
3-Nitroaniline	2.1	U	10	ug/L							
4-Bromophenyl-phenylether	1.0	U	10	ug/L							
4-Chloro-3-methylphenol	1.5	U	10	ug/L							
4-Chloroaniline	1.2	U	10	ug/L							
4-Chlorophenyl-phenylether	1.6	U	10	ug/L							
4-Nitroaniline	3.2	U	10	ug/L							
4-Nitrophenol	2.0	U	10	ug/L							
Acenaphthene	1.4	U	10	ug/L							
Acenaphthylene	1.2	U	10	ug/L							
Acetophenone	1.3	U	10	ug/L							
Anthracene	1.6	U	10	ug/L							
Atrazine	1.5	U	10	ug/L							QV-01
Benzaldehyde	1.4	U	10	ug/L							QV-02

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D23029 - EPA 3510C_MS - Continued

Blank (4D23029-BLK1) Continued Prepared: 04/23/2014 20:10 Analyzed: 04/29/2014 15:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)anthracene	1.3	U	10	ug/L							
Benzo(a)pyrene	1.3	U	10	ug/L							
Benzo(b)fluoranthene	1.0	U	10	ug/L							
Benzo(g,h,i)perylene	2.4	U	10	ug/L							
Benzo(k)fluoranthene	1.3	U	10	ug/L							
Bis(2-chloroethoxy)methane	1.4	U	10	ug/L							
Bis(2-chloroethyl)ether	1.2	U	10	ug/L							
Bis(2-chloroisopropyl)ether	1.3	U	10	ug/L							
Bis(2-ethylhexyl)phthalate	1.7	U	5.0	ug/L							
Butylbenzylphthalate	2.0	U	10	ug/L							
Caprolactam	1.3	U	10	ug/L							
Carbazole	2.5	U	10	ug/L							
Chrysene	2.0	U	10	ug/L							
Dibenzo(a,h)anthracene	2.3	U	10	ug/L							
Dibenzofuran	1.4	U	10	ug/L							
Diethylphthalate	2.1	U	10	ug/L							
Dimethylphthalate	1.4	U	10	ug/L							
Di-n-butylphthalate	1.5	U	10	ug/L							
Di-n-octylphthalate	3.1	U	10	ug/L							
Fluoranthene	2.1	U	10	ug/L							
Fluorene	1.7	U	10	ug/L							
Hexachlorobenzene	1.0	U	10	ug/L							
Hexachlorobutadiene	1.2	U	10	ug/L							
Hexachlorocyclopentadiene	1.3	U	10	ug/L							
Hexachloroethane	1.1	U	10	ug/L							
Indeno(1,2,3-cd)pyrene	2.2	U	10	ug/L							
Isophorone	1.3	U	10	ug/L							
Naphthalene	1.3	U	10	ug/L							
Nitrobenzene	1.2	U	10	ug/L							
N-Nitroso-di-n-propylamine	1.5	U	10	ug/L							
N-nitrosodiphenylamine/Diphenylamine	2.1	U	10	ug/L							
Pentachlorophenol	1.8	U	10	ug/L							
Phenanthrene	1.4	U	10	ug/L							
Phenol	1.4	U	10	ug/L							
Pyrene	2.1	U	10	ug/L							
2,4,6-Tribromophenol	*89*			*ug/L*	*100*		*89*	*10-179*			
2-Fluorobiphenyl	*42*			*ug/L*	*50.0*		*83*	*10-149*			
2-Fluorophenol	*54*			*ug/L*	*100*		*54*	*10-110*			
Nitrobenzene-d5	*40*			*ug/L*	*50.0*		*80*	*10-149*			
Phenol-d5	*45*			*ug/L*	*100*		*45*	*10-88*			
Terphenyl-d14	*39*			*ug/L*	*50.0*		*78*	*10-188*			

LCS (4D23029-BS1) Prepared: 04/23/2014 20:10 Analyzed: 04/29/2014 16:29

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	38		10	ug/L	50.0		76	67-132			
2-Chlorophenol	35		10	ug/L	50.0		70	40-109			
4-Chloro-3-methylphenol	37		10	ug/L	50.0		75	58-121			
4-Nitrophenol	26		10	ug/L	50.0		52	33-105			

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D23029 - EPA 3510C_MS - Continued

LCS (4D23029-BS1) Continued Prepared: 04/23/2014 20:10 Analyzed: 04/29/2014 16:29

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	35		10	ug/L	50.0		70	43-118			
N-Nitroso-di-n-propylamine	37		10	ug/L	50.0		73	48-126			
Pentachlorophenol	30		10	ug/L	50.0		61	51-135			
Phenol	24		10	ug/L	50.0		48	19-78			
Pyrene	35		10	ug/L	50.0		70	65-134			
2,4,6-Tribromophenol	*91*			*ug/L*	*100*		*91*	*10-179*			
2-Fluorobiphenyl	*39*			*ug/L*	*50.0*		*79*	*10-149*			
2-Fluorophenol	*50*			*ug/L*	*100*		*50*	*10-110*			
Nitrobenzene-d5	*39*			*ug/L*	*50.0*		*78*	*10-149*			
Phenol-d5	*42*			*ug/L*	*100*		*42*	*10-88*			
Terphenyl-d14	*36*			*ug/L*	*50.0*		*72*	*10-188*			

Matrix Spike (4D23029-MS1) Prepared: 04/23/2014 20:10 Analyzed: 04/29/2014 16:59

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	42		10	ug/L	50.0	2.4 U	84	67-132			
2-Chlorophenol	36		10	ug/L	50.0	1.2 U	72	40-109			
4-Chloro-3-methylphenol	41		10	ug/L	50.0	1.5 U	83	58-121			
4-Nitrophenol	28		10	ug/L	50.0	2.0 U	55	33-105			
Acenaphthene	36		10	ug/L	50.0	1.4 U	73	43-118			
N-Nitroso-di-n-propylamine	39		10	ug/L	50.0	1.5 U	79	48-126			
Pentachlorophenol	39		10	ug/L	50.0	1.8 U	79	51-135			
Phenol	25		10	ug/L	50.0	1.4 U	50	19-78			
Pyrene	38		10	ug/L	50.0	2.1 U	75	65-134			
2,4,6-Tribromophenol	*99*			*ug/L*	*100*		*99*	*10-179*			
2-Fluorobiphenyl	*39*			*ug/L*	*50.0*		*78*	*10-149*			
2-Fluorophenol	*50*			*ug/L*	*100*		*50*	*10-110*			
Nitrobenzene-d5	*40*			*ug/L*	*50.0*		*80*	*10-149*			
Phenol-d5	*42*			*ug/L*	*100*		*42*	*10-88*			
Terphenyl-d14	*38*			*ug/L*	*50.0*		*75*	*10-188*			

Matrix Spike Dup (4D23029-MSD1) Prepared: 04/23/2014 20:10 Analyzed: 04/29/2014 17:29

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	42		10	ug/L	50.0	2.4 U	83	67-132	1	17	
2-Chlorophenol	34		10	ug/L	50.0	1.2 U	69	40-109	5	22	
4-Chloro-3-methylphenol	39		10	ug/L	50.0	1.5 U	78	58-121	6	22	
4-Nitrophenol	28		10	ug/L	50.0	2.0 U	55	33-105	0	27	
Acenaphthene	35		10	ug/L	50.0	1.4 U	69	43-118	5	21	
N-Nitroso-di-n-propylamine	37		10	ug/L	50.0	1.5 U	75	48-126	6	23	
Pentachlorophenol	36		10	ug/L	50.0	1.8 U	71	51-135	10	11	
Phenol	24		10	ug/L	50.0	1.4 U	48	19-78	5	18	
Pyrene	38		10	ug/L	50.0	2.1 U	76	65-134	2	16	
2,4,6-Tribromophenol	*94*			*ug/L*	*100*		*94*	*10-179*			
2-Fluorobiphenyl	*37*			*ug/L*	*50.0*		*75*	*10-149*			
2-Fluorophenol	*47*			*ug/L*	*100*		*47*	*10-110*			
Nitrobenzene-d5	*38*			*ug/L*	*50.0*		*76*	*10-149*			
Phenol-d5	*41*			*ug/L*	*100*		*41*	*10-88*			

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D23029 - EPA 3510C_MS - Continued

Matrix Spike Dup (4D23029-MSD1) Continued Prepared: 04/23/2014 20:10 Analyzed: 04/29/2014 17:29

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Terphenyl-d14	*39*			*ug/L*	*50.0*		*77*	*10-188*			

Organochlorine Pesticides by GC - Quality Control

Batch 4D22011 - EPA 3510C

Blank (4D22011-BLK1) Prepared: 04/22/2014 09:12 Analyzed: 04/24/2014 12:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	**1.3**		0.050	ug/L							
4,4'-DDE	**0.14**		0.050	ug/L							
4,4'-DDT	**1.3**		0.050	ug/L							
Aldrin	**0.27**		0.050	ug/L							
alpha-BHC	0.036	U	0.050	ug/L							
beta-BHC	**0.049**	**J**	0.050	ug/L							
Chlordane-alpha	0.048	U	0.050	ug/L							
Chlordane-gamma	0.042	U	0.050	ug/L							
delta-BHC	**0.36**		0.050	ug/L							
Dieldrin	**0.55**		0.050	ug/L							
Endosulfan I	**0.10**		0.050	ug/L							
Endosulfan II	**0.43**		0.050	ug/L							
Endosulfan sulfate	0.032	U	0.050	ug/L							
Endrin	**0.16**		0.050	ug/L							
Endrin aldehyde	**0.61**		0.050	ug/L							
Endrin ketone	**0.34**		0.050	ug/L							
gamma-BHC	**0.11**		0.050	ug/L							
Heptachlor	**0.22**		0.050	ug/L							
Heptachlor epoxide	0.037	U	0.050	ug/L							
Methoxychlor	**0.087**		0.050	ug/L							
Toxaphene	0.22	U	0.50	ug/L							
2,4,5,6-TCMX	*11*			*ug/L*	*1.00*		*NR*	*44-134*			
Decachlorobiphenyl	*0.055*			*ug/L*	*1.00*		*6*	*37-149*			

Blank (4D22011-BLK2) Prepared: 04/22/2014 09:12 Analyzed: 04/25/2014 13:00

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.044	U	0.050	ug/L							
4,4'-DDE	0.048	U	0.050	ug/L							
4,4'-DDT	0.049	U	0.050	ug/L							
Aldrin	0.041	U	0.050	ug/L							
alpha-BHC	0.036	U	0.050	ug/L							
beta-BHC	0.036	U	0.050	ug/L							
Chlordane-alpha	0.048	U	0.050	ug/L							
Chlordane-gamma	0.042	U	0.050	ug/L							
delta-BHC	0.048	U	0.050	ug/L							
Dieldrin	0.045	U	0.050	ug/L							
Endosulfan I	0.045	U	0.050	ug/L							
Endosulfan II	0.036	U	0.050	ug/L							
Endosulfan sulfate	0.032	U	0.050	ug/L							

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QUALITY CONTROL DATA

Organochlorine Pesticides by GC - Quality Control

Batch 4D22011 - EPA 3510C - Continued

Blank (4D22011-BLK2) Continued Prepared: 04/22/2014 09:12 Analyzed: 04/25/2014 13:00

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Endrin	0.041	U	0.050	ug/L							
Endrin aldehyde	0.042	U	0.050	ug/L							
Endrin ketone	0.039	U	0.050	ug/L							
gamma-BHC	0.034	U	0.050	ug/L							
Heptachlor	0.030	U	0.050	ug/L							
Heptachlor epoxide	0.037	U	0.050	ug/L							
Methoxychlor	0.025	U	0.050	ug/L							
Toxaphene	0.22	U	0.50	ug/L							
2,4,5,6-TCMX	*0.85*			*ug/L*	*1.00*		*85*	*44-134*			
Decachlorobiphenyl	*0.94*			*ug/L*	*1.00*		*94*	*37-149*			

LCS (4D22011-BS1) Prepared: 04/22/2014 09:12 Analyzed: 04/24/2014 12:57

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	92	B	0.050	ug/L	1.00		NR	37-139			
Dieldrin	90	B	0.050	ug/L	1.00		NR	46-132			
Endrin	92	B	0.050	ug/L	1.00		NR	43-133			
2,4,5,6-TCMX	*84*			*ug/L*	*1.00*		*NR*	*44-134*			
Decachlorobiphenyl	*79*			*ug/L*	*1.00*		*NR*	*37-149*			

LCS (4D22011-BS2) Prepared: 04/22/2014 09:12 Analyzed: 04/25/2014 14:37

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.91	B	0.050	ug/L	1.00		91	37-139			
Dieldrin	0.92	B	0.050	ug/L	1.00		92	46-132			
Endrin	0.94	B	0.050	ug/L	1.00		94	43-133			
2,4,5,6-TCMX	*0.81*			*ug/L*	*1.00*		*81*	*44-134*			
Decachlorobiphenyl	*0.89*			*ug/L*	*1.00*		*89*	*37-149*			

Matrix Spike (4D22011-MS1) Prepared: 04/22/2014 09:12 Analyzed: 04/24/2014 13:11

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	14	B	0.050	ug/L	1.00	0.049 U	NR	37-139			
Dieldrin	13	B	0.050	ug/L	1.00	0.045 U	NR	46-132			
Endrin	13	B	0.050	ug/L	1.00	0.041 U	NR	43-133			
2,4,5,6-TCMX	*12*			*ug/L*	*1.00*		*NR*	*44-134*			
Decachlorobiphenyl	*11*			*ug/L*	*1.00*		*NR*	*37-149*			

Matrix Spike (4D22011-MS2) Prepared: 04/22/2014 09:12 Analyzed: 04/25/2014 13:27

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.97	B	0.050	ug/L	1.00	0.049 U	97	37-139			
Dieldrin	0.82	B	0.050	ug/L	1.00	0.045 U	82	46-132			
Endrin	0.84	B	0.050	ug/L	1.00	0.041 U	84	43-133			
2,4,5,6-TCMX	*0.76*			*ug/L*	*1.00*		*76*	*44-134*			
Decachlorobiphenyl	*0.80*			*ug/L*	*1.00*		*80*	*37-149*			

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QUALITY CONTROL DATA

Organochlorine Pesticides by GC - Quality Control

Batch 4D22011 - EPA 3510C - Continued

Matrix Spike Dup (4D22011-MSD2) Prepared: 04/22/2014 09:12 Analyzed: 04/25/2014 13:40

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.95	B	0.050	ug/L	1.00	0.049 U	95	37-139	2	26	
Dieldrin	0.79	B	0.050	ug/L	1.00	0.045 U	79	46-132	4	27	
Endrin	0.83	B	0.050	ug/L	1.00	0.041 U	83	43-133	1	26	
2,4,5,6-TCMX	*0.97*			*ug/L*	*1.00*		*97*	*44-134*			
Decachlorobiphenyl	*1.0*			*ug/L*	*1.00*		*103*	*37-149*			

Batch 4D22022 - EPA 3550C

Blank (4D22022-BLK1) Prepared: 04/22/2014 11:06 Analyzed: 04/23/2014 11:32

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.00072	U	0.0017	mg/kg wet							
4,4'-DDE	0.00077	U	0.0017	mg/kg wet							
4,4'-DDT	0.00080	U	0.0017	mg/kg wet							
Aldrin	0.00081	U	0.0017	mg/kg wet							
alpha-BHC	0.0012	U	0.0017	mg/kg wet							
beta-BHC	0.0017	U	0.0017	mg/kg wet							
Chlordane-alpha	0.00062	U	0.0017	mg/kg wet							
Chlordane-gamma	0.00072	U	0.0017	mg/kg wet							
delta-BHC	0.00084	U	0.0017	mg/kg wet							
Dieldrin	0.00076	U	0.0017	mg/kg wet							
Endosulfan I	0.00076	U	0.0017	mg/kg wet							
Endosulfan II	0.00096	U	0.0017	mg/kg wet							
Endosulfan sulfate	0.0010	U	0.0017	mg/kg wet							
Endrin	0.00076	U	0.0017	mg/kg wet							
Endrin aldehyde	0.00080	U	0.0017	mg/kg wet							
Endrin ketone	0.00075	U	0.0017	mg/kg wet							
gamma-BHC	0.0011	U	0.0017	mg/kg wet							
Heptachlor	0.00079	U	0.0017	mg/kg wet							
Heptachlor epoxide	0.00075	U	0.0017	mg/kg wet							
Methoxychlor	0.00098	U	0.0017	mg/kg wet							
Toxaphene	0.010	U	0.017	mg/kg wet							
2,4,5,6-TCMX	*0.032*			*mg/kg wet*	*0.0333*		*97*	*59-137*			
Decachlorobiphenyl	*0.030*			*mg/kg wet*	*0.0333*		*90*	*60-140*			

LCS (4D22022-BS1) Prepared: 04/22/2014 11:06 Analyzed: 04/23/2014 11:46

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.033		0.0017	mg/kg wet	0.0333		99	38-142			
Dieldrin	0.032		0.0017	mg/kg wet	0.0333		97	51-129			
Endrin	0.033		0.0017	mg/kg wet	0.0333		99	51-126			
2,4,5,6-TCMX	*0.030*			*mg/kg wet*	*0.0333*		*91*	*59-137*			
Decachlorobiphenyl	*0.029*			*mg/kg wet*	*0.0333*		*87*	*60-140*			

Matrix Spike (4D22022-MS1) Prepared: 04/22/2014 11:06 Analyzed: 04/23/2014 11:59

Source: C404171-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.041		0.0020	mg/kg dry	0.0396	0.00095 U	104	38-142			

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QUALITY CONTROL DATA

Organochlorine Pesticides by GC - Quality Control

Batch 4D22022 - EPA 3550C - Continued

Matrix Spike (4D22022-MS1) Continued Prepared: 04/22/2014 11:06 Analyzed: 04/23/2014 11:59

Source: C404171-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dieldrin	0.038		0.0020	mg/kg dry	0.0396	0.00090 U	96	51-129			
Endrin	0.039		0.0020	mg/kg dry	0.0396	0.00090 U	99	51-126			
2,4,5,6-TCMX	*0.035*			*mg/kg dry*	*0.0396*		*89*	*59-137*			
Decachlorobiphenyl	*0.034*			*mg/kg dry*	*0.0396*		*85*	*60-140*			

Matrix Spike Dup (4D22022-MSD1) Prepared: 04/22/2014 11:06 Analyzed: 04/23/2014 12:12

Source: C404171-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.045		0.0020	mg/kg dry	0.0396	0.00095 U	115	38-142	10	42	
Dieldrin	0.042		0.0020	mg/kg dry	0.0396	0.00090 U	105	51-129	9	40	
Endrin	0.043		0.0020	mg/kg dry	0.0396	0.00090 U	109	51-126	9	33	
2,4,5,6-TCMX	*0.040*			*mg/kg dry*	*0.0396*		*100*	*59-137*			
Decachlorobiphenyl	*0.038*			*mg/kg dry*	*0.0396*		*96*	*60-140*			

Polychlorinated Biphenyls by GC - Quality Control

Batch 4D22014 - EPA 3510C

Blank (4D22014-BLK1) Prepared: 04/22/2014 09:29 Analyzed: 04/24/2014 12:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.43	U	0.50	ug/L							
PCB-1221	0.37	U	0.50	ug/L							
PCB-1232	0.45	U	0.50	ug/L							
PCB-1248	0.014	U	0.50	ug/L							
PCB-1254	0.37	U	0.50	ug/L							
PCB-1260	0.45	U	0.50	ug/L							
2,4,5,6-TCMX	*0.85*			*ug/L*	*1.00*		*85*	*45-151*			
Decachlorobiphenyl	*0.94*			*ug/L*	*1.00*		*94*	*42-159*			

LCS (4D22014-BS1) Prepared: 04/22/2014 09:29 Analyzed: 04/24/2014 13:37

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	11		0.50	ug/L	10.0		113	66-149			
PCB-1260	11		0.50	ug/L	10.0		107	64-150			
2,4,5,6-TCMX	*1.6*			*ug/L*	*1.00*		*162*	*45-151*			*QS-03*
Decachlorobiphenyl	*1.4*			*ug/L*	*1.00*		*136*	*42-159*			

Matrix Spike (4D22014-MS1) Prepared: 04/22/2014 09:29 Analyzed: 04/24/2014 13:51

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	17		0.50	ug/L	10.0	0.43 U	171	66-149			QM-07
PCB-1260	13		0.50	ug/L	10.0	0.45 U	126	64-150			
2,4,5,6-TCMX	*1.1*			*ug/L*	*1.00*		*109*	*45-151*			
Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*111*	*42-159*			

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QUALITY CONTROL DATA

Polychlorinated Biphenyls by GC - Quality Control

Batch 4D22014 - EPA 3510C - Continued

Matrix Spike Dup (4D22014-MSD1) Prepared: 04/22/2014 09:29 Analyzed: 04/24/2014 14:04

Source: C404428-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	17		0.50	ug/L	10.0	0.43 U	166	66-149	3	21	QM-07
PCB-1260	12		0.50	ug/L	10.0	0.45 U	121	64-150	4	18	
2,4,5,6-TCMX	*1.2*			*ug/L*	*1.00*		*120*	*45-151*			
Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*109*	*42-159*			

Batch 4D24031 - EPA 3510C

Blank (4D24031-BLK1) Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 20:52

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.43	U	0.50	ug/L							
PCB-1221	0.37	U	0.50	ug/L							
PCB-1232	0.45	U	0.50	ug/L							
PCB-1248	0.014	U	0.50	ug/L							
PCB-1254	0.37	U	0.50	ug/L							
PCB-1260	0.45	U	0.50	ug/L							
2,4,5,6-TCMX	*0.85*			*ug/L*	*1.00*		*85*	*45-151*			
Decachlorobiphenyl	*0.62*			*ug/L*	*1.00*		*62*	*42-159*			

LCS (4D24031-BS1) Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 21:06

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	10		0.50	ug/L	10.0		103	66-149			
PCB-1260	9.4		0.50	ug/L	10.0		94	64-150			
2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*104*	*45-151*			
Decachlorobiphenyl	*0.92*			*ug/L*	*1.00*		*92*	*42-159*			

Matrix Spike (4D24031-MS1) Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 21:19

Source: C404864-03

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	11		0.50	ug/L	10.0	0.43 U	107	66-149			
PCB-1260	9.9		0.50	ug/L	10.0	0.45 U	99	64-150			
2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*103*	*45-151*			
Decachlorobiphenyl	*0.90*			*ug/L*	*1.00*		*90*	*42-159*			

Matrix Spike Dup (4D24031-MSD1) Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 21:32

Source: C404864-03

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	11		0.50	ug/L	10.0	0.43 U	107	66-149	0.3	21	
PCB-1260	10		0.50	ug/L	10.0	0.45 U	103	64-150	4	18	
2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*101*	*45-151*			
Decachlorobiphenyl	*0.90*			*ug/L*	*1.00*		*90*	*42-159*			

Gasoline Range Organics by GC - Quality Control

Batch 4D22036 - EPA 5035

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Gasoline Range Organics by GC - Quality Control

Batch 4D22036 - EPA 5035 - Continued

Blank (4D22036-BLK1) Prepared: 04/22/2014 14:57 Analyzed: 04/22/2014 18:06

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	1.4	U	5.5	mg/kg wet							
2,5-Dibromotoluene	*13*			*mg/kg wet*	*10.0*		*129*	*59-168*			

LCS (4D22036-BS1) Prepared: 04/22/2014 14:57 Analyzed: 04/22/2014 17:35

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	50		5.5	mg/kg wet	50.0		100	51-115			
2,5-Dibromotoluene	*13*			*mg/kg wet*	*10.0*		*134*	*59-168*			

Matrix Spike (4D22036-MS1) Prepared: 04/22/2014 14:57 Analyzed: 04/22/2014 18:37

Source: C405167-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	48		5.5	mg/kg wet	50.0	1.4 U	96	45-162			
2,5-Dibromotoluene	*11*			*mg/kg wet*	*10.0*		*114*	*59-168*			

Matrix Spike Dup (4D22036-MSD1) Prepared: 04/22/2014 14:57 Analyzed: 04/22/2014 19:09

Source: C405167-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	48		5.5	mg/kg wet	50.0	1.4 U	96	45-162	0.3	24	
2,5-Dibromotoluene	*11*			*mg/kg wet*	*10.0*		*115*	*59-168*			

Batch 4D22042 - EPA 5030B

Blank (4D22042-BLK1) Prepared: 04/22/2014 16:19 Analyzed: 04/23/2014 02:25

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.011	U	0.055	mg/L							
2,5-Dibromotoluene	*0.103*			*mg/L*	*0.100*		*103*	*70-130*			

LCS (4D22042-BS1) Prepared: 04/22/2014 16:19 Analyzed: 04/23/2014 01:54

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.482		0.055	mg/L	0.500		96	58-152			
2,5-Dibromotoluene	*0.103*			*mg/L*	*0.100*		*103*	*70-130*			

Matrix Spike (4D22042-MS1) Prepared: 04/22/2014 16:19 Analyzed: 04/23/2014 02:56

Source: C405167-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.469		0.055	mg/L	0.500	0.014	91	20-185			
2,5-Dibromotoluene	*0.103*			*mg/L*	*0.100*		*103*	*70-130*			

Matrix Spike Dup (4D22042-MSD1) Prepared: 04/22/2014 16:19 Analyzed: 04/23/2014 03:27

Source: C405167-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.486		0.055	mg/L	0.500	0.014	94	20-185	4	26	

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QUALITY CONTROL DATA

Gasoline Range Organics by GC - Quality Control

Batch 4D22042 - EPA 5030B - Continued

Matrix Spike Dup (4D22042-MSD1) Continued Prepared: 04/22/2014 16:19 Analyzed: 04/23/2014 03:27

Source: C405167-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,5-Dibromotoluene	*0.103*			*mg/L*	*0.100*		*103*	*70-130*			

Diesel Range Organics by GC - Quality Control

Batch 4D23014 - EPA 3550C

Blank (4D23014-BLK1) Prepared: 04/23/2014 10:43 Analyzed: 04/23/2014 21:39

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	1.7	U	3.3	mg/kg wet							
o-Terphenyl	*1.6*			*mg/kg wet*	*1.67*		*98*	*51-138*			

LCS (4D23014-BS1) Prepared: 04/23/2014 10:43 Analyzed: 04/23/2014 22:09

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	29		3.3	mg/kg wet	33.3		87	37-116			
o-Terphenyl	*1.9*			*mg/kg wet*	*1.67*		*116*	*51-138*			

Matrix Spike (4D23014-MS1) Prepared: 04/23/2014 10:43 Analyzed: 04/23/2014 22:38

Source: C405132-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	34		3.8	mg/kg dry	38.3	3.2	80	37-116			
o-Terphenyl	*2.1*			*mg/kg dry*	*1.91*		*108*	*51-138*			

Matrix Spike Dup (4D23014-MSD1) Prepared: 04/23/2014 10:43 Analyzed: 04/23/2014 23:08

Source: C405132-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	38		3.8	mg/kg dry	38.3	3.2	90	37-116	11	45	
o-Terphenyl	*2.4*			*mg/kg dry*	*1.91*		*126*	*51-138*			

Batch 4D24010 - EPA 3510C

Blank (4D24010-BLK1) Prepared: 04/24/2014 09:54 Analyzed: 04/25/2014 11:28

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.060	U	0.10	mg/L							
o-Terphenyl	*0.053*			*mg/L*	*0.0500*		*106*	*41-126*			

LCS (4D24010-BS1) Prepared: 04/24/2014 09:54 Analyzed: 04/25/2014 11:58

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.53		0.10	mg/L	1.00		53	10-108			
o-Terphenyl	*0.050*			*mg/L*	*0.0500*		*100*	*41-126*			

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QUALITY CONTROL DATA

Diesel Range Organics by GC - Quality Control

Batch 4D24010 - EPA 3510C - Continued

Matrix Spike (4D24010-MS1) Prepared: 04/24/2014 09:54 Analyzed: 04/25/2014 12:27

Source: C405167-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.49		0.10	mg/L	1.00	0.060 U	49	10-108			
o-Terphenyl	*0.045*			*mg/L*	*0.0500*		*90*	*41-126*			

Matrix Spike Dup (4D24010-MSD1) Prepared: 04/24/2014 09:54 Analyzed: 04/25/2014 12:57

Source: C405167-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.50		0.10	mg/L	1.00	0.060 U	50	10-108	1	25	
o-Terphenyl	*0.046*			*mg/L*	*0.0500*		*92*	*41-126*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B

Blank (4D21024-BLK1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 11:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2.10	U	10.0	mg/kg wet							
Antimony	0.110	U	1.00	mg/kg wet							
Arsenic	0.100	U	0.500	mg/kg wet							
Barium	0.100	U	0.500	mg/kg wet							
Beryllium	0.0120	U	0.0500	mg/kg wet							
Cadmium	0.00960	U	0.0500	mg/kg wet							
Calcium	**6.23**	**J**	25.0	mg/kg wet							
Chromium	0.100	U	0.500	mg/kg wet							
Cobalt	0.100	U	0.500	mg/kg wet							
Copper	0.190	U	0.500	mg/kg wet							
Iron	**0.729**	**J**	2.50	mg/kg wet							
Lead	0.120	U	0.500	mg/kg wet							
Magnesium	**1.72**	**J**	25.0	mg/kg wet							
Manganese	0.100	U	0.500	mg/kg wet							
Nickel	0.360	U	2.50	mg/kg wet							
Potassium	4.00	U	25.0	mg/kg wet							
Selenium	0.100	U	0.500	mg/kg wet							
Silver	0.100	U	0.500	mg/kg wet							
Sodium	6.00	U	25.0	mg/kg wet							
Thallium	0.100	U	0.500	mg/kg wet							
Vanadium	0.100	U	0.500	mg/kg wet							
Zinc	1.10	U	2.50	mg/kg wet							

LCS (4D21024-BS1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 11:48

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	91.6		10.0	mg/kg wet	100		92	80-120			
Antimony	8.46		1.00	mg/kg wet	10.0		85	80-120			
Arsenic	8.74		0.500	mg/kg wet	10.0		87	80-120			
Barium	9.02		0.500	mg/kg wet	10.0		90	80-120			
Beryllium	0.936		0.0500	mg/kg wet	1.00		94	80-120			
Cadmium	0.896		0.0500	mg/kg wet	1.00		90	80-120			

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B - Continued

LCS (4D21024-BS1) Continued Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 11:48

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Calcium	97.1	B	25.0	mg/kg wet	100		97	80-120			
Chromium	9.19		0.500	mg/kg wet	10.0		92	80-120			
Cobalt	9.14		0.500	mg/kg wet	10.0		91	80-120			
Copper	9.13		0.500	mg/kg wet	10.0		91	80-120			
Iron	46.7	B	2.50	mg/kg wet	50.0		93	80-120			
Lead	8.94		0.500	mg/kg wet	10.0		89	80-120			
Magnesium	94.2	B	25.0	mg/kg wet	100		94	80-120			
Manganese	9.27		0.500	mg/kg wet	10.0		93	80-120			
Nickel	9.20		2.50	mg/kg wet	10.0		92	80-120			
Potassium	452		25.0	mg/kg wet	500		90	80-120			
Selenium	8.72		0.500	mg/kg wet	10.0		87	80-120			
Silver	9.59		0.500	mg/kg wet	10.0		96	80-120			
Sodium	458		25.0	mg/kg wet	500		92	80-120			
Thallium	8.95		0.500	mg/kg wet	10.0		89	80-120			
Vanadium	9.41		0.500	mg/kg wet	10.0		94	80-120			
Zinc	9.09		2.50	mg/kg wet	10.0		91	80-120			

Matrix Spike (4D21024-MS1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:29

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	6970		12.3	mg/kg dry	124	4350	NR	75-125			QM-05
Antimony	6.87		1.23	mg/kg dry	12.4	0.409	52	75-125			QM-05
Arsenic	12.2		0.613	mg/kg dry	12.4	1.94	83	75-125			
Barium	53.8		0.613	mg/kg dry	12.4	41.7	98	75-125			
Beryllium	1.50		0.0613	mg/kg dry	1.24	0.325	95	75-125			
Cadmium	1.17		0.0613	mg/kg dry	1.24	0.0275	92	75-125			
Calcium	1110	B	30.7	mg/kg dry	124	1080	30	75-125			QM-05
Chromium	14.8		0.613	mg/kg dry	12.4	3.83	88	75-125			
Cobalt	13.0		0.613	mg/kg dry	12.4	1.42	93	75-125			
Copper	13.6		0.613	mg/kg dry	12.4	2.23	92	75-125			
Iron	4650	B	3.07	mg/kg dry	61.9	4710	NR	75-125			QM-05
Lead	31.4		0.613	mg/kg dry	12.4	46.9	NR	75-125			QM-05
Magnesium	474	B	30.7	mg/kg dry	124	364	89	75-125			
Manganese	163		0.613	mg/kg dry	12.4	159	37	75-125			QM-05
Nickel	13.0		3.07	mg/kg dry	12.4	0.930	97	75-125			
Potassium	859		30.7	mg/kg dry	619	295	91	75-125			
Selenium	10.1		0.613	mg/kg dry	12.4	0.123 U	82	75-125			
Silver	11.2		0.613	mg/kg dry	12.4	0.123 U	90	75-125			
Sodium	563		30.7	mg/kg dry	619	10.1	89	75-125			
Thallium	8.44		0.613	mg/kg dry	12.4	0.123 U	68	75-125			QM-05
Vanadium	20.4		0.613	mg/kg dry	12.4	8.80	94	75-125			
Zinc	43.5		3.07	mg/kg dry	12.4	30.6	105	75-125			

Matrix Spike Dup (4D21024-MSD1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:31

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	7100		12.3	mg/kg dry	123	4350	NR	75-125	2	20	QM-05
Antimony	7.29		1.23	mg/kg dry	12.3	0.409	56	75-125	6	20	QM-05
Arsenic	12.5		0.613	mg/kg dry	12.3	1.94	86	75-125	2	20	

QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B - Continued

Matrix Spike Dup (4D21024-MSD1) Continued Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:31

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Barium	56.3		0.613	mg/kg dry	12.3	41.7	119	75-125	4	20	
Beryllium	1.53		0.0613	mg/kg dry	1.23	0.325	98	75-125	2	20	
Cadmium	1.18		0.0613	mg/kg dry	1.23	0.0275	94	75-125	1	20	
Calcium	1100	B	30.7	mg/kg dry	123	1080	20	75-125	1	20	QM-05
Chromium	15.0		0.613	mg/kg dry	12.3	3.83	91	75-125	2	20	
Cobalt	13.3		0.613	mg/kg dry	12.3	1.42	97	75-125	2	20	
Copper	13.9		0.613	mg/kg dry	12.3	2.23	95	75-125	2	20	
Iron	4880	B	3.07	mg/kg dry	61.3	4710	269	75-125	5	20	QM-05
Lead	31.2		0.613	mg/kg dry	12.3	46.9	NR	75-125	0.4	20	QM-05
Magnesium	432	B	30.7	mg/kg dry	123	364	55	75-125	9	20	QM-05
Manganese	169		0.613	mg/kg dry	12.3	159	83	75-125	3	20	
Nickel	13.3		3.07	mg/kg dry	12.3	0.930	101	75-125	2	20	
Potassium	866		30.7	mg/kg dry	613	295	93	75-125	0.8	20	
Selenium	10.6		0.613	mg/kg dry	12.3	0.123 U	86	75-125	5	20	
Silver	11.5		0.613	mg/kg dry	12.3	0.123 U	93	75-125	2	20	
Sodium	553		30.7	mg/kg dry	613	10.1	89	75-125	2	20	
Thallium	8.85		0.613	mg/kg dry	12.3	0.123 U	72	75-125	5	20	QM-05
Vanadium	21.0		0.613	mg/kg dry	12.3	8.80	100	75-125	3	20	
Zinc	45.6		3.07	mg/kg dry	12.3	30.6	122	75-125	5	20	

Post Spike (4D21024-PS1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:33

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	73.4		0.200	mg/L	2.00	73.1	17	80-120			QM-08
Antimony	0.189		0.0200	mg/L	0.200	0.00688	91	80-120			
Arsenic	0.216		0.0100	mg/L	0.200	0.0327	91	80-120			
Barium	0.871		0.0100	mg/L	0.200	0.701	85	80-120			
Beryllium	0.0235		0.00100	mg/L	0.0200	0.00546	90	80-120			
Cadmium	0.0192		0.00100	mg/L	0.0200	0.000463	94	80-120			
Calcium	20.3	B	0.500	mg/L	2.00	18.1	109	80-120			
Chromium	0.242		0.0100	mg/L	0.200	0.0643	89	80-120			
Cobalt	0.211		0.0100	mg/L	0.200	0.0238	94	80-120			
Copper	0.219		0.0100	mg/L	0.200	0.0375	91	80-120			
Iron	78.6	B	0.0500	mg/L	1.00	79.2	NR	80-120			QM-08
Lead	0.962		0.0100	mg/L	0.200	0.789	87	80-120			
Magnesium	7.74	B	0.500	mg/L	2.00	6.11	81	80-120			
Manganese	2.79		0.0100	mg/L	0.200	2.67	64	80-120			QM-08
Nickel	0.204		0.0500	mg/L	0.200	0.0156	94	80-120			
Potassium	14.1		0.500	mg/L	10.0	4.95	92	80-120			
Selenium	0.182		0.0100	mg/L	0.200	0.00118	91	80-120			
Silver	0.182		0.0100	mg/L	0.200	-0.00250	92	80-120			
Sodium	9.24		0.500	mg/L	10.0	0.170	91	80-120			
Thallium	0.142		0.0100	mg/L	0.200	-0.0437	93	80-120			
Vanadium	0.331		0.0100	mg/L	0.200	0.148	92	80-120			
Zinc	0.685		0.0500	mg/L	0.200	0.513	86	80-120			

Batch 4D29012 - EPA 7471B

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D29012 - EPA 7471B - Continued

Blank (4D29012-BLK1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:21

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.00690	U	0.0240	mg/kg wet							

LCS (4D29012-BS1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:23

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.635		0.0240	mg/kg wet	0.600		106	80-120			

Matrix Spike (4D29012-MS1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:27

Source: C404171-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.738		0.0273	mg/kg dry	0.641	0.0345	110	80-120			

Matrix Spike Dup (4D29012-MSD1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:29

Source: C404171-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.804		0.0273	mg/kg dry	0.684	0.0345	113	80-120	9	20	

Post Spike (4D29012-PS1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:32

Source: C404171-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.90		0.200	ug/L	5.00	0.244	113	75-125			

Batch 4D29022 - EPA 7470A

Blank (4D29022-BLK1) Prepared: 04/29/2014 13:00 Analyzed: 04/30/2014 14:22

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.170	U	0.200	ug/L							

LCS (4D29022-BS1) Prepared: 04/29/2014 13:00 Analyzed: 04/30/2014 14:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.13		0.200	ug/L	5.00		103	80-120			

Matrix Spike (4D29022-MS1) Prepared: 04/29/2014 13:00 Analyzed: 04/30/2014 14:29

Source: C403875-05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	6.03		0.200	ug/L	5.00	0.170 U	121	75-125			

Matrix Spike Dup (4D29022-MSD1) Prepared: 04/29/2014 13:00 Analyzed: 04/30/2014 14:31

Source: C403875-05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.85		0.200	ug/L	5.00	0.170 U	117	75-125	3	25	

Post Spike (4D29022-PS1) Prepared: 04/29/2014 13:00 Analyzed: 04/30/2014 14:33

Source: C403875-05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D29022 - EPA 7470A - Continued

Post Spike (4D29022-PS1) Continued Prepared: 04/29/2014 13:00 Analyzed: 04/30/2014 14:33

Source: C403875-05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.89		0.200	ug/L	5.00	-0.0100	98	75-125			

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21018 - EPA 3005A

Blank (4D21018-BLK1) Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 12:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	29.0	U	100	ug/L							
Arsenic	5.40	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Calcium	39.0	U	100	ug/L							
Chromium	1.40	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Iron	22.0	U	50.0	ug/L							
Lead	2.10	U	10.0	ug/L							
Magnesium	23.0	U	100	ug/L							
Manganese	1.10	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Potassium	150	U	500	ug/L							
Selenium	5.00	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Sodium	400	U	500	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (4D21018-BS1) Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 12:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2150		100	ug/L	2000		108	80-120			
Arsenic	213		10.0	ug/L	200		107	80-120			
Barium	214		10.0	ug/L	200		107	80-120			
Beryllium	22.1		1.00	ug/L	20.0		110	80-120			
Cadmium	21.3		1.00	ug/L	20.0		106	80-120			
Calcium	2160		100	ug/L	2000		108	80-120			
Chromium	212		10.0	ug/L	200		106	80-120			
Copper	212		10.0	ug/L	200		106	80-120			
Iron	1090		50.0	ug/L	1000		109	80-120			
Lead	211		10.0	ug/L	200		105	80-120			
Magnesium	2130		100	ug/L	2000		107	80-120			
Manganese	217		10.0	ug/L	200		108	80-120			
Nickel	215		10.0	ug/L	200		107	80-120			
Potassium	10700		500	ug/L	10000		107	80-120			
Selenium	210		10.0	ug/L	200		105	80-120			
Silver	224		10.0	ug/L	200		112	80-120			
Sodium	10400		500	ug/L	10000		104	80-120			

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QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21018 - EPA 3005A - Continued

LCS (4D21018-BS1) Continued Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 12:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vanadium	218		10.0	ug/L	200		109	80-120			
Zinc	210		10.0	ug/L	200		105	80-120			

Matrix Spike (4D21018-MS1) Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 12:58

Source: C403094-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2620		100	ug/L	2000	247	119	75-125			
Arsenic	220		10.0	ug/L	200	5.40 U	110	75-125			
Barium	247		10.0	ug/L	200	34.1	107	75-125			
Beryllium	21.9		1.00	ug/L	20.0	0.100 U	109	75-125			
Cadmium	21.3		1.00	ug/L	20.0	0.360 U	107	75-125			
Calcium	5710		100	ug/L	2000	3630	104	75-125			
Chromium	214		10.0	ug/L	200	1.40 U	107	75-125			
Copper	212		10.0	ug/L	200	1.60 U	106	75-125			
Iron	4680		50.0	ug/L	1000	3690	99	75-125			
Lead	217		10.0	ug/L	200	2.10 U	109	75-125			
Magnesium	3430		100	ug/L	2000	1290	107	75-125			
Manganese	1040		10.0	ug/L	200	855	92	75-125			
Nickel	219		10.0	ug/L	200	2.15	108	75-125			
Potassium	12700		500	ug/L	10000	2120	106	75-125			
Selenium	217		10.0	ug/L	200	5.00 U	108	75-125			
Silver	219		10.0	ug/L	200	1.90 U	110	75-125			
Sodium	15400		500	ug/L	10000	5050	104	75-125			
Vanadium	219		10.0	ug/L	200	1.41	109	75-125			
Zinc	219		10.0	ug/L	200	6.71	106	75-125			

Matrix Spike Dup (4D21018-MSD1) Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 13:09

Source: C403094-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2680		100	ug/L	2000	247	122	75-125	2	20	
Arsenic	228		10.0	ug/L	200	5.40 U	114	75-125	3	20	
Barium	252		10.0	ug/L	200	34.1	109	75-125	2	20	
Beryllium	22.5		1.00	ug/L	20.0	0.100 U	112	75-125	3	20	
Cadmium	21.9		1.00	ug/L	20.0	0.360 U	109	75-125	3	20	
Calcium	5800		100	ug/L	2000	3630	108	75-125	2	20	
Chromium	218		10.0	ug/L	200	1.40 U	109	75-125	2	20	
Copper	216		10.0	ug/L	200	1.60 U	108	75-125	2	20	
Iron	4750		50.0	ug/L	1000	3690	106	75-125	2	20	
Lead	222		10.0	ug/L	200	2.10 U	111	75-125	2	20	
Magnesium	3530		100	ug/L	2000	1290	112	75-125	3	20	
Manganese	1050		10.0	ug/L	200	855	100	75-125	2	20	
Nickel	224		10.0	ug/L	200	2.15	111	75-125	2	20	
Potassium	12900		500	ug/L	10000	2120	108	75-125	2	20	
Selenium	221		10.0	ug/L	200	5.00 U	110	75-125	2	20	
Silver	224		10.0	ug/L	200	1.90 U	112	75-125	2	20	
Sodium	15600		500	ug/L	10000	5050	106	75-125	1	20	
Vanadium	224		10.0	ug/L	200	1.41	112	75-125	2	20	
Zinc	224		10.0	ug/L	200	6.71	109	75-125	2	20	

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QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21018 - EPA 3005A - Continued

Post Spike (4D21018-PS1) Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 13:11

Source: C403094-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2.24		0.100	mg/L	2.00	0.247	99	80-120			
Arsenic	0.201		0.0100	mg/L	0.200	-0.000421	101	80-120			
Barium	0.230		0.0100	mg/L	0.200	0.0341	98	80-120			
Beryllium	0.0199		0.00100	mg/L	0.0200	5.43E-5	99	80-120			
Cadmium	0.0197		0.00100	mg/L	0.0200	9.58E-5	98	80-120			
Calcium	5.45		0.100	mg/L	2.00	3.63	91	80-120			
Chromium	0.198		0.0100	mg/L	0.200	0.000467	99	80-120			
Copper	0.195		0.0100	mg/L	0.200	0.000809	97	80-120			
Iron	4.48		0.0500	mg/L	1.00	3.69	79	80-120			QM-08
Lead	0.198		0.0100	mg/L	0.200	-0.000303	99	80-120			
Magnesium	3.25		0.100	mg/L	2.00	1.29	98	80-120			
Manganese	0.998		0.0100	mg/L	0.200	0.855	71	80-120			QM-08
Nickel	0.201		0.0100	mg/L	0.200	0.00215	99	80-120			
Potassium	11.7		0.500	mg/L	10.0	2.12	96	80-120			
Selenium	0.197		0.0100	mg/L	0.200	0.00395	96	80-120			
Silver	0.202		0.0100	mg/L	0.200	0.000692	100	80-120			
Sodium	14.5		0.500	mg/L	10.0	5.05	94	80-120			
Vanadium	0.201		0.0100	mg/L	0.200	0.00141	100	80-120			
Zinc	0.202		0.0100	mg/L	0.200	0.00671	98	80-120			

Batch 4D23017 - EPA 3005A

Blank (4D23017-BLK1) Prepared: 04/23/2014 11:17 Analyzed: 04/29/2014 11:02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Cobalt	0.100	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (4D23017-BS1) Prepared: 04/23/2014 11:17 Analyzed: 04/29/2014 11:06

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	201		2.00	ug/L	200		100	80-120			
Cobalt	190		1.00	ug/L	200		95	80-120			
Thallium	200		1.00	ug/L	200		100	80-120			

Matrix Spike (4D23017-MS1) Prepared: 04/23/2014 11:17 Analyzed: 04/29/2014 11:27

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	217		2.00	ug/L	200	0.220 U	109	75-125			
Cobalt	200		1.00	ug/L	200	5.26	98	75-125			
Thallium	199		1.00	ug/L	200	0.110 U	100	75-125			

Matrix Spike Dup (4D23017-MSD1) Prepared: 04/23/2014 11:17 Analyzed: 04/29/2014 11:31

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	213		2.00	ug/L	200	0.220 U	107	75-125	2	20	
Cobalt	197		1.00	ug/L	200	5.26	96	75-125	2	20	

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QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D23017 - EPA 3005A - Continued

Matrix Spike Dup (4D23017-MSD1) Continued Prepared: 04/23/2014 11:17 Analyzed: 04/29/2014 11:31

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Thallium	197		1.00	ug/L	200	0.110 U	99	75-125	1	20	

Post Spike (4D23017-PS1) Prepared: 04/23/2014 11:17 Analyzed: 04/29/2014 11:35

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	200		2.00	ug/L	200	-0.358	100	80-120			
Cobalt	188		1.00	ug/L	200	5.26	92	80-120			
Thallium	189		1.00	ug/L	200	0.0198	95	80-120			

Classical Chemistry Parameters - Quality Control

Batch 4D18026 - NO PREP

Blank (4D18026-BLK1) Prepared: 04/18/2014 12:21 Analyzed: 04/18/2014 12:41

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.0088	U	0.010	mg/L							

LCS (4D18026-BS1) Prepared: 04/18/2014 12:21 Analyzed: 04/18/2014 12:41

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.25		0.010	mg/L	0.249		100	80-120			

Matrix Spike (4D18026-MS1) Prepared: 04/18/2014 12:21 Analyzed: 04/18/2014 12:41

Source: C405030-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.0088	U	0.010	mg/L	0.249	0.0088 U		75-125			QM-05

Matrix Spike Dup (4D18026-MSD1) Prepared: 04/18/2014 12:21 Analyzed: 04/18/2014 12:41

Source: C405030-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.0088	U	0.010	mg/L	0.249	0.0088 U		75-125		20	QM-05

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D25025 - EPA 5030B_MS

Blank (4D25025-BLK1) Prepared: 04/25/2014 12:45 Analyzed: 04/25/2014 14:58

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.0004	U	0.0010	mg/kg wet							
1,1,2,2-Tetrachloroethane	0.0003	U	0.0010	mg/kg wet							
1,1,2-Trichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethene	0.0006	U	0.0010	mg/kg wet							
1,2,4-Trichlorobenzene	0.0008	U	0.0010	mg/kg wet							
1,2-Dibromo-3-chloropropane	0.0006	U	0.0010	mg/kg wet							
1,2-Dibromoethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D25025 - EPA 5030B_MS - Continued

Blank (4D25025-BLK1) Continued Prepared: 04/25/2014 12:45 Analyzed: 04/25/2014 14:58

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dichloroethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichloropropane	0.0006	U	0.0010	mg/kg wet							
1,3-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
1,4-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
2-Butanone	0.0018	U	0.0050	mg/kg wet							
2-Hexanone	0.0009	U	0.0050	mg/kg wet							
4-Methyl-2-pentanone	0.0014	U	0.0050	mg/kg wet							
Acetone	0.0017	U	0.0050	mg/kg wet							
Benzene	0.0004	U	0.0010	mg/kg wet							
Bromochloromethane	0.0004	U	0.0010	mg/kg wet							
Bromodichloromethane	0.0004	U	0.0010	mg/kg wet							
Bromoform	0.0003	U	0.0010	mg/kg wet							
Bromomethane	0.0009	U	0.0010	mg/kg wet							
Carbon disulfide	0.0021	U	0.0050	mg/kg wet							
Carbon Tetrachloride	0.0006	U	0.0010	mg/kg wet							
Chlorobenzene	0.0005	U	0.0010	mg/kg wet							
Chloroethane	0.0005	U	0.0010	mg/kg wet							
Chloroform	0.0004	U	0.0010	mg/kg wet							
Chloromethane	0.0006	U	0.0010	mg/kg wet							
cis-1,2-Dichloroethene	0.0005	U	0.0010	mg/kg wet							
cis-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Cyclohexane	0.0005	U	0.0020	mg/kg wet							
Dibromochloromethane	0.0003	U	0.0010	mg/kg wet							
Dichlorodifluoromethane	0.0006	U	0.0010	mg/kg wet							
Ethylbenzene	0.0006	U	0.0010	mg/kg wet							
Freon 113	0.0006	U	0.0010	mg/kg wet							
Isopropylbenzene	0.0005	U	0.0010	mg/kg wet							
Methyl acetate	0.0016	U	0.0020	mg/kg wet							
Methyl cyclohexane	0.0005	U	0.0020	mg/kg wet							
Methylene Chloride	0.0007	U	0.0020	mg/kg wet							
Methyl-tert-Butyl Ether	0.0003	U	0.0010	mg/kg wet							
Styrene	0.0004	U	0.0010	mg/kg wet							
Tetrachloroethene	0.0005	U	0.0010	mg/kg wet							
Toluene	0.0005	U	0.0010	mg/kg wet							
trans-1,2-Dichloroethene	0.0007	U	0.0010	mg/kg wet							
trans-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Trichloroethene	0.0005	U	0.0010	mg/kg wet							
Trichlorofluoromethane	0.0005	U	0.0010	mg/kg wet							
Vinyl chloride	0.0004	U	0.0010	mg/kg wet							
Xylenes (Total)	0.0010	U	0.0020	mg/kg wet							
4-Bromofluorobenzene	*0.045*			*mg/kg wet*	*0.0500*		*91*	*71-126*			
Dibromofluoromethane	*0.041*			*mg/kg wet*	*0.0500*		*82*	*72-133*			
Toluene-d8	*0.042*			*mg/kg wet*	*0.0500*		*85*	*80-123*			

LCS (4D25025-BS1) Prepared: 04/25/2014 12:45 Analyzed: 04/25/2014 13:20

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.022		0.0010	mg/kg wet	0.0200		109	61-124			
Benzene	0.019		0.0010	mg/kg wet	0.0200		95	59-133			

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D25025 - EPA 5030B_MS - Continued

LCS (4D25025-BS1) Continued Prepared: 04/25/2014 12:45 Analyzed: 04/25/2014 13:20

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorobenzene	0.019		0.0010	mg/kg wet	0.0200		95	69-121			
Toluene	0.019		0.0010	mg/kg wet	0.0200		95	66-119			
Trichloroethene	0.020		0.0010	mg/kg wet	0.0200		100	71-122			
4-Bromofluorobenzene	*0.045*			*mg/kg wet*	*0.0500*		*91*	*71-126*			
Dibromofluoromethane	*0.043*			*mg/kg wet*	*0.0500*		*86*	*72-133*			
Toluene-d8	*0.043*			*mg/kg wet*	*0.0500*		*86*	*80-123*			

Matrix Spike (4D25025-MS1) Prepared: 04/25/2014 12:45 Analyzed: 04/25/2014 13:53

Source: A402351-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.042		0.0020	mg/kg dry	0.0401	0.0012 U	105	61-124			
Benzene	0.035		0.0020	mg/kg dry	0.0401	0.0008 U	87	59-133			
Chlorobenzene	0.031		0.0020	mg/kg dry	0.0401	0.0010 U	78	69-121			
Toluene	0.034		0.0020	mg/kg dry	0.0401	0.0009 U	84	66-119			
Trichloroethene	0.037		0.0020	mg/kg dry	0.0401	0.0010 U	93	71-122			
4-Bromofluorobenzene	*0.099*			*mg/kg dry*	*0.100*		*99*	*71-126*			
Dibromofluoromethane	*0.092*			*mg/kg dry*	*0.100*		*91*	*72-133*			
Toluene-d8	*0.093*			*mg/kg dry*	*0.100*		*93*	*80-123*			

Matrix Spike Dup (4D25025-MSD1) Prepared: 04/25/2014 12:45 Analyzed: 04/25/2014 14:25

Source: A402351-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.039		0.0017	mg/kg dry	0.0360	0.0011 U	107	61-124	9	23	
Benzene	0.030		0.0017	mg/kg dry	0.0360	0.0007 U	84	59-133	14	19	
Chlorobenzene	0.028		0.0017	mg/kg dry	0.0360	0.0008 U	77	69-121	12	18	
Toluene	0.030		0.0017	mg/kg dry	0.0360	0.0008 U	83	66-119	12	21	
Trichloroethene	0.034		0.0017	mg/kg dry	0.0360	0.0009 U	94	71-122	9	26	
4-Bromofluorobenzene	*0.087*			*mg/kg dry*	*0.0900*		*96*	*71-126*			
Dibromofluoromethane	*0.081*			*mg/kg dry*	*0.0900*		*90*	*72-133*			
Toluene-d8	*0.084*			*mg/kg dry*	*0.0900*		*93*	*80-123*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D25007 - EPA 3550C_MS

Blank (4D25007-BLK1) Prepared: 04/25/2014 07:30 Analyzed: 05/06/2014 15:40

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1'-Biphenyl	0.073	U	0.33	mg/kg wet							
2,4,5-Trichlorophenol	0.067	U	0.33	mg/kg wet							
2,4,6-Trichlorophenol	0.15	U	0.33	mg/kg wet							
2,4-Dichlorophenol	0.25	U	0.33	mg/kg wet							
2,4-Dimethylphenol	0.23	U	0.33	mg/kg wet							
2,4-Dinitrophenol	0.089	U	0.33	mg/kg wet							
2,4-Dinitrotoluene	0.16	U	0.33	mg/kg wet							
2,6-Dinitrotoluene	0.18	U	0.33	mg/kg wet							
2-Chloronaphthalene	0.098	U	0.33	mg/kg wet							
2-Chlorophenol	0.23	U	0.33	mg/kg wet							

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D25007 - EPA 3550C_MS - Continued

Blank (4D25007-BLK1) Continued Prepared: 04/25/2014 07:30 Analyzed: 05/06/2014 15:40

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Methyl-4,6-dinitrophenol	0.28	U	0.33	mg/kg wet							
2-Methylnaphthalene	0.12	U	0.33	mg/kg wet							
2-Methylphenol	0.11	U	0.33	mg/kg wet							
2-Nitroaniline	0.085	U	0.33	mg/kg wet							
2-Nitrophenol	0.26	U	0.33	mg/kg wet							
3 & 4-Methylphenol	0.25	U	0.33	mg/kg wet							
3,3'-Dichlorobenzidine	0.21	U	0.33	mg/kg wet							
3-Nitroaniline	0.080	U	0.33	mg/kg wet							
4-Bromophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Chloro-3-methylphenol	0.28	U	0.33	mg/kg wet							
4-Chloroaniline	0.065	U	0.33	mg/kg wet							
4-Chlorophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Nitroaniline	0.26	U	0.33	mg/kg wet							
4-Nitrophenol	0.13	U	0.33	mg/kg wet							
Acenaphthene	0.13	U	0.33	mg/kg wet							
Acenaphthylene	0.12	U	0.33	mg/kg wet							
Acetophenone	0.14	U	0.33	mg/kg wet							
Anthracene	0.15	U	0.33	mg/kg wet							
Atrazine	0.074	U	0.33	mg/kg wet							
Benzaldehyde	0.27	U	0.33	mg/kg wet							
Benzo(a)anthracene	0.13	U	0.33	mg/kg wet							
Benzo(a)pyrene	0.078	U	0.33	mg/kg wet							
Benzo(b)fluoranthene	0.11	U	0.33	mg/kg wet							
Benzo(g,h,i)perylene	0.16	U	0.33	mg/kg wet							
Benzo(k)fluoranthene	0.11	U	0.33	mg/kg wet							
Bis(2-chloroethoxy)methane	0.15	U	0.33	mg/kg wet							
Bis(2-chloroethyl)ether	0.14	U	0.33	mg/kg wet							
Bis(2-chloroisopropyl)ether	0.099	U	0.33	mg/kg wet							
Bis(2-ethylhexyl)phthalate	0.13	U	0.33	mg/kg wet							
Butylbenzylphthalate	0.14	U	0.33	mg/kg wet							
Caprolactam	0.30	U	0.33	mg/kg wet							
Carbazole	0.12	U	0.33	mg/kg wet							
Chrysene	0.13	U	0.33	mg/kg wet							
Dibenzo(a,h)anthracene	0.14	U	0.33	mg/kg wet							
Dibenzofuran	0.13	U	0.33	mg/kg wet							
Diethylphthalate	0.13	U	0.33	mg/kg wet							
Dimethylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-butylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-octylphthalate	0.13	U	0.33	mg/kg wet							
Fluoranthene	0.11	U	0.33	mg/kg wet							
Fluorene	0.14	U	0.33	mg/kg wet							
Hexachlorobenzene	0.12	U	0.33	mg/kg wet							
Hexachlorobutadiene	0.13	U	0.33	mg/kg wet							
Hexachlorocyclopentadiene	0.15	U	0.33	mg/kg wet							
Hexachloroethane	0.10	U	0.33	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.14	U	0.33	mg/kg wet							
Isophorone	0.17	U	0.33	mg/kg wet							
Naphthalene	0.12	U	0.33	mg/kg wet							
Nitrobenzene	0.15	U	0.33	mg/kg wet							

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D25007 - EPA 3550C_MS - Continued

Blank (4D25007-BLK1) Continued Prepared: 04/25/2014 07:30 Analyzed: 05/06/2014 15:40

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
N-Nitroso-di-n-propylamine	0.15	U	0.33	mg/kg wet							
N-nitrosodiphenylamine/Diphenylamine	0.23	U	0.33	mg/kg wet							
Pentachlorophenol	0.21	U	0.33	mg/kg wet							
Phenanthrene	0.13	U	0.33	mg/kg wet							
Phenol	0.099	U	0.33	mg/kg wet							
Pyrene	0.11	U	0.33	mg/kg wet							
2,4,6-Tribromophenol	*1.3*			*mg/kg wet*	*1.67*		*78*	*23-137*			
2-Fluorobiphenyl	*1.3*			*mg/kg wet*	*1.67*		*80*	*29-119*			
2-Fluorophenol	*1.2*			*mg/kg wet*	*1.67*		*71*	*20-124*			
Nitrobenzene-d5	*1.0*			*mg/kg wet*	*1.67*		*61*	*17-126*			
Phenol-d5	*1.2*			*mg/kg wet*	*1.67*		*73*	*15-131*			
Terphenyl-d14	*1.7*			*mg/kg wet*	*1.67*		*101*	*60-120*			

LCS (4D25007-BS1) Prepared: 04/25/2014 07:30 Analyzed: 05/06/2014 16:13

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.8		0.33	mg/kg wet	1.67		105	54-125			
2-Chlorophenol	1.4		0.33	mg/kg wet	1.67		83	50-105			
4-Chloro-3-methylphenol	1.5		0.33	mg/kg wet	1.67		89	55-106			
4-Nitrophenol	1.2		0.33	mg/kg wet	1.67		75	30-124			
Acenaphthene	1.4		0.33	mg/kg wet	1.67		85	49-111			
N-Nitroso-di-n-propylamine	1.3		0.33	mg/kg wet	1.67		75	52-126			
Pentachlorophenol	1.6		0.33	mg/kg wet	1.67		99	10-101			
Phenol	1.4		0.33	mg/kg wet	1.67		85	28-121			
Pyrene	1.6		0.33	mg/kg wet	1.67		98	66-115			
2,4,6-Tribromophenol	*1.7*			*mg/kg wet*	*1.67*		*102*	*23-137*			
2-Fluorobiphenyl	*1.4*			*mg/kg wet*	*1.67*		*82*	*29-119*			
2-Fluorophenol	*1.3*			*mg/kg wet*	*1.67*		*78*	*20-124*			
Nitrobenzene-d5	*1.1*			*mg/kg wet*	*1.67*		*68*	*17-126*			
Phenol-d5	*1.3*			*mg/kg wet*	*1.67*		*76*	*15-131*			
Terphenyl-d14	*1.7*			*mg/kg wet*	*1.67*		*103*	*60-120*			

Matrix Spike (4D25007-MS1) Prepared: 04/25/2014 07:30 Analyzed: 05/06/2014 18:05

Source: C405030-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.8	JD	2.0	mg/kg dry	2.04	0.98 U	86	54-125			
2-Chlorophenol	1.6	JD	2.0	mg/kg dry	2.04	1.4 U	79	50-105			
4-Chloro-3-methylphenol	1.7	JD	2.0	mg/kg dry	2.04	1.7 U	85	55-106			
4-Nitrophenol	0.80	UD	2.0	mg/kg dry	2.04	0.80 U		30-124			QM-07
Acenaphthene	1.7	JD	2.0	mg/kg dry	2.04	0.80 U	84	49-111			
N-Nitroso-di-n-propylamine	1.5	JD	2.0	mg/kg dry	2.04	0.92 U	74	52-126			
Pentachlorophenol	1.3	JD	2.0	mg/kg dry	2.04	1.3 U	66	10-101			
Phenol	1.7	JD	2.0	mg/kg dry	2.04	0.61 U	83	28-121			
Pyrene	2.7	D	2.0	mg/kg dry	2.04	0.68 U	135	66-115			QM-07
2,4,6-Tribromophenol	*1.8*			*mg/kg dry*	*2.04*		*87*	*23-137*			
2-Fluorobiphenyl	*1.6*			*mg/kg dry*	*2.04*		*79*	*29-119*			
2-Fluorophenol	*1.5*			*mg/kg dry*	*2.04*		*71*	*20-124*			
Nitrobenzene-d5	*1.2*			*mg/kg dry*	*2.04*		*61*	*17-126*			

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D25007 - EPA 3550C_MS - Continued

Matrix Spike (4D25007-MS1) Continued Prepared: 04/25/2014 07:30 Analyzed: 05/06/2014 18:05

Source: C405030-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Phenol-d5	*1.5*			*mg/kg dry*	*2.04*		*73*	*15-131*			
Terphenyl-d14	*1.9*			*mg/kg dry*	*2.04*		*94*	*60-120*			

Matrix Spike Dup (4D25007-MSD1) Prepared: 04/25/2014 07:30 Analyzed: 05/06/2014 18:33

Source: C405030-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.8	JD	2.0	mg/kg dry	2.05	0.98 U	90	54-125	5	23	
2-Chlorophenol	1.8	JD	2.0	mg/kg dry	2.05	1.4 U	86	50-105	9	27	
4-Chloro-3-methylphenol	1.9	JD	2.0	mg/kg dry	2.05	1.7 U	91	55-106	8	28	
4-Nitrophenol	1.2	JD	2.0	mg/kg dry	2.05	0.80 U	59	30-124		35	
Acenaphthene	1.7	JD	2.0	mg/kg dry	2.05	0.80 U	84	49-111	0.8	27	
N-Nitroso-di-n-propylamine	1.7	JD	2.0	mg/kg dry	2.05	0.92 U	84	52-126	12	24	
Pentachlorophenol	1.4	JD	2.0	mg/kg dry	2.05	1.3 U	67	10-101	2	26	
Phenol	1.8	JD	2.0	mg/kg dry	2.05	0.61 U	90	28-121	9	32	
Pyrene	2.5	D	2.0	mg/kg dry	2.05	0.68 U	120	66-115	11	28	QM-07
2,4,6-Tribromophenol	*1.8*			*mg/kg dry*	*2.05*		*88*	*23-137*			
2-Fluorobiphenyl	*1.7*			*mg/kg dry*	*2.05*		*81*	*29-119*			
2-Fluorophenol	*1.6*			*mg/kg dry*	*2.05*		*80*	*20-124*			
Nitrobenzene-d5	*1.4*			*mg/kg dry*	*2.05*		*66*	*17-126*			
Phenol-d5	*1.6*			*mg/kg dry*	*2.05*		*80*	*15-131*			
Terphenyl-d14	*2.1*			*mg/kg dry*	*2.05*		*104*	*60-120*			

Chlorinated Herbicides by GC - Quality Control

Batch 4D21020 - EPA 3550C

Blank (4D21020-BLK1) Prepared: 04/21/2014 14:30 Analyzed: 04/23/2014 01:46

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.0025	U	0.010	mg/kg wet							
2,4,5-TP (Silvex)	0.0047	U	0.010	mg/kg wet							
2,4-D	0.0099	U	0.010	mg/kg wet							
2,4-DB	0.0049	U	0.010	mg/kg wet							
Dalapon	0.0050	U	0.010	mg/kg wet							
Dicamba	0.0023	U	0.010	mg/kg wet							
Dichlorprop	0.0028	U	0.010	mg/kg wet							
Dinoseb	0.0042	U	0.010	mg/kg wet							
MCPA	0.52	U	1.0	mg/kg wet							
MCPP	0.53	U	1.0	mg/kg wet							
2,4-DCAA	*0.036*			*mg/kg wet*	*0.0400*		*90*	*39-174*			

LCS (4D21020-BS1) Prepared: 04/21/2014 14:30 Analyzed: 04/23/2014 02:12

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.026		0.010	mg/kg wet	0.0400		65	27-141			
2,4,5-TP (Silvex)	0.029		0.010	mg/kg wet	0.0400		73	45-135			
2,4-D	0.030		0.010	mg/kg wet	0.0400		76	35-121			
2,4-DB	0.030		0.010	mg/kg wet	0.0400		76	34-160			

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QUALITY CONTROL DATA

Chlorinated Herbicides by GC - Quality Control

Batch 4D21020 - EPA 3550C - Continued

LCS (4D21020-BS1) Continued Prepared: 04/21/2014 14:30 Analyzed: 04/23/2014 02:12

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dalapon	0.035		0.010	mg/kg wet	0.0400		87	20-136			
Dicamba	0.028		0.010	mg/kg wet	0.0400		70	47-129			
Dichlorprop	0.027		0.010	mg/kg wet	0.0400		66	27-147			
Dinoseb	0.0062	J	0.010	mg/kg wet	0.0400		15	10-41			
MCPA	3.1		1.0	mg/kg wet	4.00		78	56-137			
MCPP	3.8		1.0	mg/kg wet	4.00		94	15-183			
2,4-DCAA	*0.036*			*mg/kg wet*	*0.0400*		*89*	*39-174*			

Matrix Spike (4D21020-MS1) Prepared: 04/21/2014 14:30 Analyzed: 04/23/2014 02:38

Source: A402120-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.033		0.012	mg/kg dry	0.0493	0.0031 U	68	27-141			
2,4,5-TP (Silvex)	0.037		0.012	mg/kg dry	0.0493	0.0058 U	74	45-135			
2,4-D	0.039		0.012	mg/kg dry	0.0493	0.012 U	79	35-121			
2,4-DB	0.035		0.012	mg/kg dry	0.0493	0.0060 U	70	34-160			
Dalapon	0.050		0.012	mg/kg dry	0.0493	0.0062 U	100	20-136			
Dicamba	0.037		0.012	mg/kg dry	0.0493	0.0028 U	74	47-129			
Dichlorprop	0.037		0.012	mg/kg dry	0.0493	0.0035 U	75	27-147			
Dinoseb	0.015		0.012	mg/kg dry	0.0493	0.0052 U	31	10-41			
MCPA	4.6		1.2	mg/kg dry	4.93	0.64 U	92	56-137			
MCPP	5.1		1.2	mg/kg dry	4.93	0.65 U	103	15-183			
2,4-DCAA	*0.046*			*mg/kg dry*	*0.0493*		*94*	*39-174*			

Matrix Spike Dup (4D21020-MSD1) Prepared: 04/21/2014 14:30 Analyzed: 04/23/2014 03:04

Source: A402120-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.034		0.012	mg/kg dry	0.0493	0.0031 U	70	27-141	3	27	
2,4,5-TP (Silvex)	0.037		0.012	mg/kg dry	0.0493	0.0058 U	75	45-135	0.8	23	
2,4-D	0.039		0.012	mg/kg dry	0.0493	0.012 U	80	35-121	1	43	
2,4-DB	0.038		0.012	mg/kg dry	0.0493	0.0060 U	77	34-160	9	47	
Dalapon	0.041		0.012	mg/kg dry	0.0493	0.0062 U	82	20-136	20	50	
Dicamba	0.036		0.012	mg/kg dry	0.0493	0.0028 U	73	47-129	2	50	
Dichlorprop	0.039		0.012	mg/kg dry	0.0493	0.0035 U	78	27-147	5	50	
Dinoseb	0.024		0.012	mg/kg dry	0.0493	0.0052 U	49	10-41	47	50	QM-07
MCPA	3.7		1.2	mg/kg dry	4.93	0.64 U	75	56-137	20	42	
MCPP	5.3		1.2	mg/kg dry	4.93	0.65 U	107	15-183	4	50	
2,4-DCAA	*0.047*			*mg/kg dry*	*0.0493*		*95*	*39-174*			

Batch 4D23001 - EPA 3510C

Blank (4D23001-BLK1) Prepared: 04/23/2014 07:00 Analyzed: 04/28/2014 15:21

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.26	U	0.50	ug/L							
2,4,5-TP (Silvex)	0.21	U	0.50	ug/L							
2,4-D	0.27	U	0.50	ug/L							
2,4-DB	0.32	U	0.50	ug/L							
Dalapon	0.49	U	0.50	ug/L							

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QUALITY CONTROL DATA

Chlorinated Herbicides by GC - Quality Control

Batch 4D23001 - EPA 3510C - Continued

Blank (4D23001-BLK1) Continued Prepared: 04/23/2014 07:00 Analyzed: 04/28/2014 15:21

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dicamba	0.17	U	0.50	ug/L							
Dichlorprop	0.18	U	0.50	ug/L							
Dinoseb	0.32	U	0.50	ug/L							
MCPA	17	U	50	ug/L							
MCPP	7.4	U	50	ug/L							
2,4-DCAA	*2.0*			*ug/L*	*2.00*		*99*	*68-139*			

LCS (4D23001-BS1) Prepared: 04/23/2014 07:00 Analyzed: 04/28/2014 15:47

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	1.6		0.50	ug/L	2.00		82	67-113			
2,4,5-TP (Silvex)	1.8		0.50	ug/L	2.00		92	70-114			
2,4-D	1.6		0.50	ug/L	2.00		82	37-129			
2,4-DB	2.3		0.50	ug/L	2.00		117	49-144			
Dalapon	1.9		0.50	ug/L	2.00		97	18-121			
Dicamba	1.7		0.50	ug/L	2.00		86	36-143			
Dichlorprop	1.8		0.50	ug/L	2.00		89	38-145			
Dinoseb	1.6		0.50	ug/L	2.00		79	10-140			
MCPA	150		50	ug/L	200		76	32-150			
MCPP	220		50	ug/L	200		111	70-128			
2,4-DCAA	*1.8*			*ug/L*	*2.00*		*89*	*68-139*			

Matrix Spike (4D23001-MS1) Prepared: 04/23/2014 07:00 Analyzed: 04/28/2014 16:14

Source: A402315-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	1.5		0.50	ug/L	2.01	0.26 U	77	67-113			
2,4,5-TP (Silvex)	1.6		0.50	ug/L	2.01	0.21 U	81	70-114			
2,4-D	1.5		0.50	ug/L	2.01	0.27 U	75	37-129			
2,4-DB	1.9		0.50	ug/L	2.01	0.32 U	93	49-144			
Dalapon	1.5		0.50	ug/L	2.01	0.49 U	73	18-121			
Dicamba	1.5		0.50	ug/L	2.01	0.17 U	75	36-143			
Dichlorprop	1.4		0.50	ug/L	2.01	0.18 U	72	38-145			
Dinoseb	2.0		0.50	ug/L	2.01	0.32 U	98	10-140			
MCPA	230		50	ug/L	201	17 U	113	32-150			
MCPP	200		50	ug/L	201	7.4 U	100	70-128			
2,4-DCAA	*1.8*			*ug/L*	*2.01*		*88*	*68-139*			

Matrix Spike Dup (4D23001-MSD1) Prepared: 04/23/2014 07:00 Analyzed: 04/28/2014 16:40

Source: A402315-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	1.4		0.50	ug/L	2.00	0.26 U	71	67-113	8	21	
2,4,5-TP (Silvex)	1.5		0.50	ug/L	2.00	0.21 U	75	70-114	9	15	
2,4-D	1.4		0.50	ug/L	2.00	0.27 U	71	37-129	6	33	
2,4-DB	1.6		0.50	ug/L	2.00	0.32 U	81	49-144	15	36	
Dalapon	1.8		0.50	ug/L	2.00	0.49 U	90	18-121	20	49	
Dicamba	1.4		0.50	ug/L	2.00	0.17 U	71	36-143	6	24	
Dichlorprop	1.5		0.50	ug/L	2.00	0.18 U	74	38-145	2	37	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Chlorinated Herbicides by GC - Quality Control

Batch 4D23001 - EPA 3510C - Continued

Matrix Spike Dup (4D23001-MSD1) Continued Prepared: 04/23/2014 07:00 Analyzed: 04/28/2014 16:40

Source: A402315-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dinoseb	1.8		0.50	ug/L	2.00	0.32 U	88	10-140	12	50	
MCPA	220		50	ug/L	200	17 U	110	32-150	3	26	
MCPP	190		50	ug/L	200	7.4 U	95	70-128	6	48	
2,4-DCAA	*1.7*			*ug/L*	*2.00*		*87*	*68-139*			

Classical Chemistry Parameters - Quality Control

Batch 4D28005 - NO PREP

Blank (4D28005-BLK1) Prepared: 04/28/2014 09:07 Analyzed: 04/29/2014 10:54

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.15	U	1.0	mg/kg wet							

LCS (4D28005-BS1) Prepared: 04/28/2014 09:07 Analyzed: 04/29/2014 10:54

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	10		1.0	mg/kg wet	10.0		104	84-124			

Matrix Spike (4D28005-MS1) Prepared: 04/28/2014 09:07 Analyzed: 04/29/2014 10:54

Source: C405030-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	10		1.2	mg/kg dry	12.4	0.18 U	85	84-124			

Matrix Spike Dup (4D28005-MSD1) Prepared: 04/28/2014 09:07 Analyzed: 04/29/2014 10:54

Source: C405030-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	10		1.2	mg/kg dry	12.2	0.18 U	84	84-124	2	11	

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FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence (85% or greater confidence) to make a "tentative identification".
Q	Analysis performed outside of method - specified holding time.
QB-01	The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact of the deviation.
QL-02	The associated laboratory control sample exhibited high bias; since the result is ND, the impact on data quality is minimal.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-08	Post-digestion spike did not meet method requirements due to confirmed matrix effects (dilution test).
QS-03	Surrogate recovery outside acceptance limits
QV-01	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.
QV-02	The associated continuing calibration verification standard exhibited low bias; the reported result should be considered to be a minimum estimate.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
R-05	The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.

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ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 211
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: REMSA, Inc. (RE026)	Project Number: 518-10-T03P
Address: 124 W. Queens Way	Project Name/Desc: 1614 West Pembroke Ave
City/ST/Zip: Hampton, VA 23669	PO # / Billing Info: 518-10-T03P
Tel: 757-722-0113 / Fax:	Reporting Contact: Mike Smashchenko
Sampler(s) Name, Affiliation (Print): Dan Christian	Billing Contact: Mike Smashchenko
Sampler(s) Signature:	Facility # (if required):

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C405030

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	TPH-GRO 8015	TPH-DRO 8015	VOCs 8260B	SVOCs 8270D	TAL 6010C / 7471B soil / 7470A GW	Hex Chrome 7196A soil / 7196D GW	PCBs 8082A	TCL Pest/Herb 8081B / 8151A			Sample Comments
	GPW-9	4-17-14	8:50	Grab	SO	6	X	X	X	X	X	X					
	GPW-9	4-17-14	10:45	Grab	GW	10	X	X	X	X	X	X	X				
	GPW-8	4-17-14	11:00	Grab	GW	~~3~~ 4	X	X		X	X		X				
	GPW-7	4-17-14	8:50	Grab	GW	4	X	X		X	X	X	X				
	Trip Blank					4											

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
			4-17-14 3:00 PM		4-18-14 9:45
Comments		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: 2.0°C		Condition Upon Receipt: ✓ Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments)

Preservation: **I**-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 211
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(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: REMSA, Inc. (RE026)	Project Number: E18-10-T03P
Address: 124 W. Queens Way	Project Name/Desc: 1614 West Pembroke Ave.
City/ST/Zip: Hampton, VA 23669	PO # / Billing Info: E18-10-T03P
Tel: 757-722-0113 / Fax:	Reporting Contact: Mike Tuskchenko
Sampler(s) Name, Affiliation (Print): Dan Christian	Billing Contact: Mike Tuskchenko
Sampler(s) Signature:	Facility # (if required):

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due ___/___/___

Lab Workorder: C405030

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	TPH-GRO 8015	TPH-DRO 8015	VOCs 8260B	SVOCs 8270D	TAL 6010C/7470A/7471B/7196A/7196A/3500CR-P	PCBs 8082A	TCL Pest/Herb 8151A			Sample Comments
	GP14-10	4-17-14	9:45	Grab	SO	6	X	X	X	X	X	X		~~X~~ DZL		No Pest/Herb
	GP14-10	4-17-14	10:00	Grab	GW	10	X	X	X	X	X	X	X	~~X~~		No Pest/Herb
	GP14-11	4-17-14	10:30	Grab	SO	7	X	X	X	X	X	X		X		
	GP14-11	4-17-14	11:03	Grab	GW	11	X	X	X	X	X	X	X	X		
						34	<-- Total # of Containers									

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time 4-17-14 3:00pm	Received By	Date/Time 4-18-14 9:45
Comments		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: 2.0°C		Condition Upon Receipt: ✓ Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments)

Preservation: **I**-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

ENCO Laboratories

Accurate. Timely. Responsive. Innovative.

102-A Woodwinds Industrial Court
Cary NC, 27511
Phone: 919.467.3090 FAX: 919.467.3515

Thursday, May 1, 2014
REMSA, Inc. (RE026)
Attn: Mike Iwashchenko
124 W. Queens Way
Hampton, VA 23669

RE: Laboratory Results for
Project Number: E-18-10-T03P, Project Name/Desc: 1614 West Pembroke Avenue
ENCO Workorder(s): C404865

Dear Mike Iwashchenko,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Monday, April 14, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

www.encolabs.com

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: GP14-2 **Lab ID: C404865-05** **Sampled: 04/10/14 12:50** **Received: 04/14/14 08:35**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/07/14		04/21/14	13:03	04/23/14 13:36
EPA 7196A	05/10/14	04/28/14	04/21/14	12:06	04/22/14 15:05
EPA 7471B	05/08/14		04/24/14	10:31	04/24/14 22:43
EPA 8015C	04/24/14		04/15/14	09:19	04/16/14 01:23
EPA 8015C	04/24/14	05/31/14	04/21/14	09:35	04/22/14 22:51
EPA 8260B	04/24/14		04/17/14	14:28	04/17/14 23:01
EPA 8270D	04/24/14	05/28/14	04/18/14	12:30	04/28/14 12:35

Client ID: GP14-2 **Lab ID: C404865-06** **Sampled: 04/10/14 10:35** **Received: 04/14/14 08:35**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8015C	04/24/14		04/16/14	08:40	04/16/14 21:32
EPA 8260B	04/24/14		04/23/14	00:00	04/23/14 16:28

Client ID: GP14-2 **Lab ID: C404865-06RE1** **Sampled: 04/10/14 10:35** **Received: 04/14/14 08:35**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8270D	04/17/14	05/27/14	04/17/14	15:45	04/24/14 18:22

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SAMPLE DETECTION SUMMARY

Client ID: GP14-2 **Lab ID: C404865-05**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	0.032		0.0017	0.0051	mg/kg dry	EPA 8260B	
Aluminum - Total	5160		2.46	11.7	mg/kg dry	EPA 6010C	
Arsenic - Total	3.73		0.117	0.585	mg/kg dry	EPA 6010C	
Barium - Total	16.8		0.117	0.585	mg/kg dry	EPA 6010C	
Beryllium - Total	0.359		0.0140	0.0585	mg/kg dry	EPA 6010C	
Bis(2-ethylhexyl)phthalate	0.37	J	0.15	0.39	mg/kg dry	EPA 8270D	
Calcium - Total	398	B	6.55	29.3	mg/kg dry	EPA 6010C	QB-01
Chromium - Total	10.1		0.117	0.585	mg/kg dry	EPA 6010C	
Cobalt - Total	0.931		0.117	0.585	mg/kg dry	EPA 6010C	
Copper - Total	4.89		0.222	0.585	mg/kg dry	EPA 6010C	
DRO (C10-C28)	42		2.0	3.9	mg/kg dry	EPA 8015C	
Ethylbenzene	0.0016		0.0006	0.0010	mg/kg dry	EPA 8260B	
Fluoranthene	0.13	J	0.13	0.39	mg/kg dry	EPA 8270D	
Iron - Total	3280	B	0.562	2.93	mg/kg dry	EPA 6010C	QB-01
Lead - Total	7.00		0.140	0.585	mg/kg dry	EPA 6010C	
Magnesium - Total	361	B	0.761	29.3	mg/kg dry	EPA 6010C	QB-01
Manganese - Total	8.48		0.117	0.585	mg/kg dry	EPA 6010C	
Nickel - Total	2.86	J	0.421	2.93	mg/kg dry	EPA 6010C	
Potassium - Total	450		4.68	29.3	mg/kg dry	EPA 6010C	
Silver - Total	0.321	J	0.117	0.585	mg/kg dry	EPA 6010C	
Sodium - Total	26.3	J	7.02	29.3	mg/kg dry	EPA 6010C	
Vanadium - Total	23.9		0.117	0.585	mg/kg dry	EPA 6010C	
Xylenes (Total)	0.0018	J	0.0010	0.0020	mg/kg dry	EPA 8260B	
Zinc - Total	10.5		1.29	2.93	mg/kg dry	EPA 6010C	

Client ID: GP14-2 **Lab ID: C404865-06**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
2-Butanone	4.5	J	1.3	5.0	ug/L	EPA 8260B	
Acetone	110		1.2	5.0	ug/L	EPA 8260B	
Ethylbenzene	3.4		0.13	1.0	ug/L	EPA 8260B	
GRO (C6-C10)	0.067		0.011	0.055	mg/L	EPA 8015C	
m,p-Xylenes	2.1		0.17	2.0	ug/L	EPA 8260B	
o-Xylene	1.6		0.065	1.0	ug/L	EPA 8260B	
Xylenes (Total)	3.6		0.45	3.0	ug/L	EPA 8260B	

Client ID: GP14-2 **Lab ID: C404865-06RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Naphthalene	1.6	J	1.3	10	ug/L	EPA 8270D	

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ANALYTICAL RESULTS

Description:	GP14-2	**Lab Sample ID:**	C404865-05	**Received:**	04/14/14 08:35
Matrix:	Soil	**Sampled:**	04/10/14 12:50	**Work Order:**	C404865
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian	**% Solids:**	85.45

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	1.4	U	mg/kg dry	1	1.4	5.6	4D15004	EPA 8015C	04/16/14 01:23	REF	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*9.8*	*1*	*10.2*	*97 %*	*59-168*	*4D15004*	*EPA 8015C*	*04/16/14 01:23*	*REF*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**42**		mg/kg dry	1	2.0	3.9	4D21008	EPA 8015C	04/22/14 22:51	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*1.9*	*1*	*1.95*	*97 %*	*51-138*	*4D21008*	*EPA 8015C*	*04/22/14 22:51*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**5160**		mg/kg dry	1	2.46	11.7	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Antimony [7440-36-0]	0.129	U	mg/kg dry	1	0.129	1.17	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Arsenic [7440-38-2]^	**3.73**		mg/kg dry	1	0.117	0.585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Barium [7440-39-3]^	**16.8**		mg/kg dry	1	0.117	0.585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Beryllium [7440-41-7]	**0.359**		mg/kg dry	1	0.0140	0.0585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Cadmium [7440-43-9]^	0.0112	U	mg/kg dry	1	0.0112	0.0585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Calcium [7440-70-2]	**398**	B	mg/kg dry	1	6.55	29.3	4D21024	EPA 6010C	04/23/14 13:36	JDH	QB-01
Chromium [7440-47-3]^	**10.1**		mg/kg dry	1	0.117	0.585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Cobalt [7440-48-4]	**0.931**		mg/kg dry	1	0.117	0.585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Copper [7440-50-8]	**4.89**		mg/kg dry	1	0.222	0.585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Iron [7439-89-6]	**3280**	B	mg/kg dry	1	0.562	2.93	4D21024	EPA 6010C	04/23/14 13:36	JDH	QB-01
Lead [7439-92-1]^	**7.00**		mg/kg dry	1	0.140	0.585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Magnesium [7439-95-4]	**361**	B	mg/kg dry	1	0.761	29.3	4D21024	EPA 6010C	04/23/14 13:36	JDH	QB-01
Manganese [7439-96-5]	**8.48**		mg/kg dry	1	0.117	0.585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Mercury [7439-97-6]^	0.00807	U	mg/kg dry	1	0.00807	0.0281	4D24020	EPA 7471B	04/24/14 22:43	T1D	
Nickel [7440-02-0]	**2.86**	J	mg/kg dry	1	0.421	2.93	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Potassium [7440-09-7]	**450**		mg/kg dry	1	4.68	29.3	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Selenium [7782-49-2]^	0.117	U	mg/kg dry	1	0.117	0.585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Silver [7440-22-4]^	**0.321**	J	mg/kg dry	1	0.117	0.585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Sodium [7440-23-5]	**26.3**	J	mg/kg dry	1	7.02	29.3	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Thallium [7440-28-0]	0.117	U	mg/kg dry	1	0.117	0.585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Vanadium [7440-62-2]^	**23.9**		mg/kg dry	1	0.117	0.585	4D21024	EPA 6010C	04/23/14 13:36	JDH	
Zinc [7440-66-6]^	**10.5**		mg/kg dry	1	1.29	2.93	4D21024	EPA 6010C	04/23/14 13:36	JDH	

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ANALYTICAL RESULTS

Description: GP14-2	**Lab Sample ID:** C404865-05	**Received:** 04/14/14 08:35
Matrix: Soil	**Sampled:** 04/10/14 12:50	**Work Order:** C404865
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 85.45

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
1,1,2-Trichloroethane [79-00-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
1,1-Dichloroethane [75-34-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
1,1-Dichloroethene [75-35-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
1,2,4-Trichlorobenzene [120-82-1]^	0.0009	U	mg/kg dry	1	0.0009	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
1,2-Dibromoethane [106-93-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
1,2-Dichlorobenzene [95-50-1]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
1,2-Dichloroethane [107-06-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
1,2-Dichloropropane [78-87-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
1,3-Dichlorobenzene [541-73-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
1,4-Dichlorobenzene [106-46-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
2-Butanone [78-93-3]^	0.0018	U	mg/kg dry	1	0.0018	0.0051	4D17014	EPA 8260B	04/17/14 23:01	kat	
2-Hexanone [591-78-6]^	0.0009	U	mg/kg dry	1	0.0009	0.0051	4D17014	EPA 8260B	04/17/14 23:01	kat	
4-Methyl-2-pentanone [108-10-1]^	0.0014	U	mg/kg dry	1	0.0014	0.0051	4D17014	EPA 8260B	04/17/14 23:01	kat	
Acetone [67-64-1]^	**0.032**		mg/kg dry	1	0.0017	0.0051	4D17014	EPA 8260B	04/17/14 23:01	kat	
Benzene [71-43-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Bromochloromethane [74-97-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Bromodichloromethane [75-27-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Bromoform [75-25-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Bromomethane [74-83-9]^	0.0009	U	mg/kg dry	1	0.0009	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Carbon disulfide [75-15-0]^	0.0021	U	mg/kg dry	1	0.0021	0.0051	4D17014	EPA 8260B	04/17/14 23:01	kat	
Carbon Tetrachloride [56-23-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Chlorobenzene [108-90-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Chloroethane [75-00-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Chloroform [67-66-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Chloromethane [74-87-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
cis-1,2-Dichloroethene [156-59-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
cis-1,3-Dichloropropene [10061-01-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Cyclohexane [110-82-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0020	4D17014	EPA 8260B	04/17/14 23:01	kat	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Dichlorodifluoromethane [75-71-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Ethylbenzene [100-41-4]^	**0.0016**		mg/kg dry	1	0.0006	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Freon 113 [76-13-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Isopropylbenzene [98-82-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Methyl acetate [79-20-9]^	0.0016	U	mg/kg dry	1	0.0016	0.0020	4D17014	EPA 8260B	04/17/14 23:01	kat	
Methyl cyclohexane [108-87-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0020	4D17014	EPA 8260B	04/17/14 23:01	kat	
Methylene Chloride [75-09-2]^	0.0007	U	mg/kg dry	1	0.0007	0.0020	4D17014	EPA 8260B	04/17/14 23:01	kat	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Styrene [100-42-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Tetrachloroethene [127-18-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Toluene [108-88-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
trans-1,2-Dichloroethene [156-60-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
trans-1,3-Dichloropropene [10061-02-6]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Trichloroethene [79-01-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Trichlorofluoromethane [75-69-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	
Vinyl chloride [75-01-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D17014	EPA 8260B	04/17/14 23:01	kat	

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ANALYTICAL RESULTS

Description: GP14-2	**Lab Sample ID:** C404865-05	**Received:** 04/14/14 08:35
Matrix: Soil	**Sampled:** 04/10/14 12:50	**Work Order:** C404865
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 85.45

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7]^	**0.0018**	J	mg/kg dry	1	0.0010	0.0020	4D17014	EPA 8260B	04/17/14 23:01	kat	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.052*	*1*	*0.0511*	*102 %*	*71-126*	*4D17014*	*EPA 8260B*	*04/17/14 23:01*	*kat*	
Dibromofluoromethane	*0.049*	*1*	*0.0511*	*96 %*	*72-133*	*4D17014*	*EPA 8260B*	*04/17/14 23:01*	*kat*	
Toluene-d8	*0.048*	*1*	*0.0511*	*93 %*	*80-123*	*4D17014*	*EPA 8260B*	*04/17/14 23:01*	*kat*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.085	U	mg/kg dry	1	0.085	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2,4,5-Trichlorophenol [95-95-4]^	0.078	U	mg/kg dry	1	0.078	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2,4,6-Trichlorophenol [88-06-2]^	0.18	U	mg/kg dry	1	0.18	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2,4-Dichlorophenol [120-83-2]^	0.29	U	mg/kg dry	1	0.29	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2,4-Dimethylphenol [105-67-9]^	0.27	U	mg/kg dry	1	0.27	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2,4-Dinitrophenol [51-28-5]^	0.10	U	mg/kg dry	1	0.10	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2,4-Dinitrotoluene [121-14-2]^	0.19	U	mg/kg dry	1	0.19	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2,6-Dinitrotoluene [606-20-2]^	0.21	U	mg/kg dry	1	0.21	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2-Chloronaphthalene [91-58-7]^	0.11	U	mg/kg dry	1	0.11	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2-Chlorophenol [95-57-8]^	0.27	U	mg/kg dry	1	0.27	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.33	U	mg/kg dry	1	0.33	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2-Methylnaphthalene [91-57-6]^	0.14	U	mg/kg dry	1	0.14	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2-Methylphenol [95-48-7]^	0.13	U	mg/kg dry	1	0.13	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2-Nitroaniline [88-74-4]^	0.099	U	mg/kg dry	1	0.099	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
2-Nitrophenol [88-75-5]^	0.30	U	mg/kg dry	1	0.30	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.29	U	mg/kg dry	1	0.29	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
3,3'-Dichlorobenzidine [91-94-1]^	0.25	U	mg/kg dry	1	0.25	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	QL-02
3-Nitroaniline [99-09-2]^	0.094	U	mg/kg dry	1	0.094	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
4-Bromophenyl-phenylether [101-55-3]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
4-Chloro-3-methylphenol [59-50-7]^	0.33	U	mg/kg dry	1	0.33	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
4-Chloroaniline [106-47-8]^	0.076	U	mg/kg dry	1	0.076	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
4-Chlorophenyl-phenylether [7005-72-3]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
4-Nitroaniline [100-01-6]^	0.30	U	mg/kg dry	1	0.30	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
4-Nitrophenol [100-02-7]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	J-05
Acenaphthene [83-32-9]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Acenaphthylene [208-96-8]^	0.14	U	mg/kg dry	1	0.14	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Acetophenone [98-86-2]^	0.16	U	mg/kg dry	1	0.16	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Anthracene [120-12-7]^	0.18	U	mg/kg dry	1	0.18	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Atrazine [1912-24-9]^	0.087	U	mg/kg dry	1	0.087	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Benzaldehyde [100-52-7]^	0.32	U	mg/kg dry	1	0.32	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Benzo(a)anthracene [56-55-3]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Benzo(a)pyrene [50-32-8]^	0.091	U	mg/kg dry	1	0.091	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.13	U	mg/kg dry	1	0.13	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.19	U	mg/kg dry	1	0.19	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	QV-01
Benzo(k)fluoranthene [207-08-9]^	0.13	U	mg/kg dry	1	0.13	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Bis(2-chloroethoxy)methane [111-91-1]^	0.18	U	mg/kg dry	1	0.18	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	QL-02
Bis(2-chloroethyl)ether [111-44-4]^	0.16	U	mg/kg dry	1	0.16	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Bis(2-chloroisopropyl)ether [108-60-1]^	0.12	U	mg/kg dry	1	0.12	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	

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ANALYTICAL RESULTS

Description: GP14-2	**Lab Sample ID:** C404865-05	**Received:** 04/14/14 08:35
Matrix: Soil	**Sampled:** 04/10/14 12:50	**Work Order:** C404865
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 85.45

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-ethylhexyl)phthalate [117-81-7]^	**0.37**	J	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Butylbenzylphthalate [85-68-7]^	0.16	U	mg/kg dry	1	0.16	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Caprolactam [105-60-2]^	0.35	U	mg/kg dry	1	0.35	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	QV-01
Carbazole [86-74-8]^	0.14	U	mg/kg dry	1	0.14	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Chrysene [218-01-9]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.16	U	mg/kg dry	1	0.16	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Dibenzofuran [132-64-9]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Diethylphthalate [84-66-2]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Dimethylphthalate [131-11-3]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Di-n-butylphthalate [84-74-2]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Di-n-octylphthalate [117-84-0]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Fluoranthene [206-44-0]^	**0.13**	J	mg/kg dry	1	0.13	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Fluorene [86-73-7]	0.16	U	mg/kg dry	1	0.16	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Hexachlorobenzene [118-74-1]^	0.14	U	mg/kg dry	1	0.14	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Hexachlorobutadiene [87-68-3]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Hexachlorocyclopentadiene [77-47-4]^	0.18	U	mg/kg dry	1	0.18	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Hexachloroethane [67-72-1]^	0.12	U	mg/kg dry	1	0.12	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.16	U	mg/kg dry	1	0.16	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Isophorone [78-59-1]^	0.20	U	mg/kg dry	1	0.20	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Naphthalene [91-20-3]^	0.14	U	mg/kg dry	1	0.14	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Nitrobenzene [98-95-3]^	0.18	U	mg/kg dry	1	0.18	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
N-Nitroso-di-n-propylamine [621-64-7]^	0.18	U	mg/kg dry	1	0.18	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.27	U	mg/kg dry	1	0.27	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Pentachlorophenol [87-86-5]^	0.25	U	mg/kg dry	1	0.25	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	QL-02
Phenanthrene [85-01-8]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Phenol [108-95-2]^	0.12	U	mg/kg dry	1	0.12	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	
Pyrene [129-00-0]^	0.13	U	mg/kg dry	1	0.13	0.39	4D18034	EPA 8270D	04/28/14 12:35	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.8*	*1*	*1.95*	*92 %*	*23-137*	*4D18034*	*EPA 8270D*	*04/28/14 12:35*	*jfi*	
2-Fluorobiphenyl	*1.3*	*1*	*1.95*	*69 %*	*29-119*	*4D18034*	*EPA 8270D*	*04/28/14 12:35*	*jfi*	
2-Fluorophenol	*1.5*	*1*	*1.95*	*76 %*	*20-124*	*4D18034*	*EPA 8270D*	*04/28/14 12:35*	*jfi*	
Nitrobenzene-d5	*1.1*	*1*	*1.95*	*58 %*	*17-126*	*4D18034*	*EPA 8270D*	*04/28/14 12:35*	*jfi*	
Phenol-d5	*1.5*	*1*	*1.95*	*78 %*	*15-131*	*4D18034*	*EPA 8270D*	*04/28/14 12:35*	*jfi*	
Terphenyl-d14	*1.8*	*1*	*1.95*	*92 %*	*60-120*	*4D18034*	*EPA 8270D*	*04/28/14 12:35*	*jfi*	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.18	U	mg/kg dry	1	0.18	1.2	4D21022	EPA 7196A	04/22/14 15:05	RMM	

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ANALYTICAL RESULTS

Description: GP14-2 | **Lab Sample ID:** C404865-06 | **Received:** 04/14/14 08:35

Matrix: Ground Water | **Sampled:** 04/10/14 10:35 | **Work Order:** C404865

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
2-Butanone [78-93-3]^	**4.5**	J	ug/L	1	1.3	5.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Acetone [67-64-1]^	**110**		ug/L	1	1.2	5.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Ethylbenzene [100-41-4]^	**3.4**		ug/L	1	0.13	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
m,p-Xylenes [108-38-3/106-42-3]	**2.1**		ug/L	1	0.17	2.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.16	U	ug/L	1	0.16	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
o-Xylene [95-47-6]^	**1.6**		ug/L	1	0.065	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	

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ANALYTICAL RESULTS

Description: GP14-2 | **Lab Sample ID:** C404865-06 | **Received:** 04/14/14 08:35

Matrix: Ground Water | **Sampled:** 04/10/14 10:35 | **Work Order:** C404865

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	
Xylenes (Total) [1330-20-7]^	**3.6**		ug/L	1	0.45	3.0	4D23021	EPA 8260B	04/23/14 16:28	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*51*	*1*	*50.0*	*103 %*	*51-122*	*4D23021*	*EPA 8260B*	*04/23/14 16:28*	*MSZ*	
Dibromofluoromethane	*52*	*1*	*50.0*	*104 %*	*68-117*	*4D23021*	*EPA 8260B*	*04/23/14 16:28*	*MSZ*	
Toluene-d8	*51*	*1*	*50.0*	*102 %*	*67-127*	*4D23021*	*EPA 8260B*	*04/23/14 16:28*	*MSZ*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2,4,5-Trichlorophenol [95-95-4]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2,4,6-Trichlorophenol [88-06-2]^	1.1	U	ug/L	1	1.1	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2,4-Dichlorophenol [120-83-2]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2,4-Dimethylphenol [105-67-9]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2,4-Dinitrophenol [51-28-5]^	2.6	U	ug/L	1	2.6	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2,4-Dinitrotoluene [121-14-2]^	2.4	U	ug/L	1	2.4	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2,6-Dinitrotoluene [606-20-2]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2-Chloronaphthalene [91-58-7]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2-Chlorophenol [95-57-8]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]	2.9	U	ug/L	1	2.9	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2-Methylnaphthalene [91-57-6]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2-Methylphenol [95-48-7]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2-Nitroaniline [88-74-4]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
2-Nitrophenol [88-75-5]^	1.1	U	ug/L	1	1.1	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]	1.6	U	ug/L	1	1.6	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
3-Nitroaniline [99-09-2]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
4-Bromophenyl-phenylether [101-55-3]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
4-Chloro-3-methylphenol [59-50-7]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
4-Chloroaniline [106-47-8]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	1.6	U	ug/L	1	1.6	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
4-Nitrophenol [100-02-7]^	2.0	U	ug/L	1	2.0	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Acenaphthene [83-32-9]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Acenaphthylene [208-96-8]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Acetophenone [98-86-2]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Anthracene [120-12-7]^	1.6	U	ug/L	1	1.6	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Atrazine [1912-24-9]	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	QV-01
Benzaldehyde [100-52-7]	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	QV-02
Benzo(a)anthracene [56-55-3]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Benzo(a)pyrene [50-32-8]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Benzo(b)fluoranthene [205-99-2]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Benzo(g,h,i)perylene [191-24-2]^	2.4	U	ug/L	1	2.4	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Benzo(k)fluoranthene [207-08-9]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	

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ANALYTICAL RESULTS

Description: GP14-2 | **Lab Sample ID:** C404865-06 | **Received:** 04/14/14 08:35
Matrix: Ground Water | **Sampled:** 04/10/14 10:35 | **Work Order:** C404865
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethoxy)methane [111-91-1]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	1.7	U	ug/L	1	1.7	5.0	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Butylbenzylphthalate [85-68-7]^	2.0	U	ug/L	1	2.0	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Caprolactam [105-60-2]	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Carbazole [86-74-8]^	2.5	U	ug/L	1	2.5	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Chrysene [218-01-9]^	2.0	U	ug/L	1	2.0	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	2.3	U	ug/L	1	2.3	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Dibenzofuran [132-64-9]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Diethylphthalate [84-66-2]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Dimethylphthalate [131-11-3]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Di-n-butylphthalate [84-74-2]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Di-n-octylphthalate [117-84-0]^	3.1	U	ug/L	1	3.1	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Fluoranthene [206-44-0]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Fluorene [86-73-7]^	1.7	U	ug/L	1	1.7	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Hexachlorobenzene [118-74-1]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Hexachlorobutadiene [87-68-3]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Hexachlorocyclopentadiene [77-47-4]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Hexachloroethane [67-72-1]^	1.1	U	ug/L	1	1.1	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	2.2	U	ug/L	1	2.2	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Isophorone [78-59-1]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Naphthalene [91-20-3]^	**1.6**	J	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Nitrobenzene [98-95-3]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Pentachlorophenol [87-86-5]^	1.8	U	ug/L	1	1.8	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Phenanthrene [85-01-8]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Phenol [108-95-2]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	
Pyrene [129-00-0]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 18:22	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*100*	*1*	*100*	*100 %*	*10-179*	*4D16027*	*EPA 8270D*	*04/24/14 18:22*	*DFM*	
2-Fluorobiphenyl	*37*	*1*	*50.0*	*74 %*	*10-149*	*4D16027*	*EPA 8270D*	*04/24/14 18:22*	*DFM*	
2-Fluorophenol	*47*	*1*	*100*	*47 %*	*10-110*	*4D16027*	*EPA 8270D*	*04/24/14 18:22*	*DFM*	
Nitrobenzene-d5	*40*	*1*	*50.0*	*80 %*	*10-149*	*4D16027*	*EPA 8270D*	*04/24/14 18:22*	*DFM*	
Phenol-d5	*40*	*1*	*100*	*40 %*	*10-88*	*4D16027*	*EPA 8270D*	*04/24/14 18:22*	*DFM*	
Terphenyl-d14	*38*	*1*	*50.0*	*75 %*	*10-188*	*4D16027*	*EPA 8270D*	*04/24/14 18:22*	*DFM*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	**0.067**		mg/L	1	0.011	0.055	4D16006	EPA 8015C	04/16/14 21:32	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*0.0988*	*1*	*0.100*	*99 %*	*70-130*	*4D16006*	*EPA 8015C*	*04/16/14 21:32*	*manag*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D23021 - EPA 5030B_MS

Blank (4D23021-BLK1) Prepared: 04/23/2014 00:00 Analyzed: 04/23/2014 13:00

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.012	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Cyclohexane	0.36	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Freon 113	0.35	U	1.0	ug/L							
Isopropylbenzene	0.14	U	1.0	ug/L							
m,p-Xylenes	0.17	U	2.0	ug/L							
Methyl acetate	0.51	U	1.0	ug/L							
Methyl cyclohexane	0.54	U	1.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.16	U	1.0	ug/L							
o-Xylene	0.065	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D23021 - EPA 5030B_MS - Continued

Blank (4D23021-BLK1) Continued Prepared: 04/23/2014 00:00 Analyzed: 04/23/2014 13:00

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
4-Bromofluorobenzene	*52*			*ug/L*	*50.0*		*104*	*51-122*			
Dibromofluoromethane	*53*			*ug/L*	*50.0*		*106*	*68-117*			
Toluene-d8	*50*			*ug/L*	*50.0*		*100*	*67-127*			

LCS (4D23021-BS1) Prepared: 04/23/2014 00:00 Analyzed: 04/23/2014 13:29

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	24		1.0	ug/L	20.0		118	75-133			
Benzene	21		1.0	ug/L	20.0		104	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		102	83-117			
Cyclohexane	21		1.0	ug/L	20.0		103	0-200			
Methyl acetate	22		1.0	ug/L	20.0		111	0-200			
Methyl cyclohexane	19		1.0	ug/L	20.0		93	0-200			
Toluene	18		1.0	ug/L	20.0		90	71-118			
Trichloroethene	21		1.0	ug/L	20.0		106	74-119			
4-Bromofluorobenzene	*58*			*ug/L*	*50.0*		*115*	*51-122*			
Dibromofluoromethane	*53*			*ug/L*	*50.0*		*106*	*68-117*			
Toluene-d8	*50*			*ug/L*	*50.0*		*99*	*67-127*			

Matrix Spike (4D23021-MS1) Prepared: 04/23/2014 00:00 Analyzed: 04/23/2014 13:59

Source: C404957-11

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	25		1.0	ug/L	20.0	0.21 U	124	75-133			
Benzene	20		1.0	ug/L	20.0	0.15 U	98	81-134			
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	101	83-117			
Cyclohexane	22		1.0	ug/L	20.0	0.36 U	108	0-200			
Methyl acetate	20		1.0	ug/L	20.0	0.51 U	101	0-200			
Methyl cyclohexane	17		1.0	ug/L	20.0	0.54 U	87	0-200			
Toluene	17		1.0	ug/L	20.0	0.14 U	85	71-118			
Trichloroethene	21		1.0	ug/L	20.0	0.15 U	103	74-119			
4-Bromofluorobenzene	*56*			*ug/L*	*50.0*		*112*	*51-122*			
Dibromofluoromethane	*50*			*ug/L*	*50.0*		*101*	*68-117*			
Toluene-d8	*49*			*ug/L*	*50.0*		*99*	*67-127*			

Matrix Spike Dup (4D23021-MSD1) Prepared: 04/23/2014 00:00 Analyzed: 04/23/2014 14:29

Source: C404957-11

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	24		1.0	ug/L	20.0	0.21 U	118	75-133	5	20	
Benzene	20		1.0	ug/L	20.0	0.15 U	99	81-134	1	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	100	83-117	2	16	
Cyclohexane	19		1.0	ug/L	20.0	0.36 U	97	0-200	11	50	
Methyl acetate	22		1.0	ug/L	20.0	0.51 U	109	0-200	8	50	
Methyl cyclohexane	20		1.0	ug/L	20.0	0.54 U	100	0-200	14	50	
Toluene	17		1.0	ug/L	20.0	0.14 U	84	71-118	2	17	

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D23021 - EPA 5030B_MS - Continued

Matrix Spike Dup (4D23021-MSD1) Continued Prepared: 04/23/2014 00:00 Analyzed: 04/23/2014 14:29

Source: C404957-11

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichloroethene	22		1.0	ug/L	20.0	0.15 U	108	74-119	4	22	
4-Bromofluorobenzene	*56*			*ug/L*	*50.0*		*112*	*51-122*			
Dibromofluoromethane	*51*			*ug/L*	*50.0*		*102*	*68-117*			
Toluene-d8	*52*			*ug/L*	*50.0*		*105*	*67-127*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D16027 - EPA 3510C_MS

Blank (4D16027-BLK1) Prepared: 04/16/2014 16:00 Analyzed: 04/23/2014 15:11

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1'-Biphenyl	1.5	U	10	ug/L							
2,4,5-Trichlorophenol	1.0	U	10	ug/L							
2,4,6-Trichlorophenol	1.1	U	10	ug/L							
2,4-Dichlorophenol	1.4	U	10	ug/L							
2,4-Dimethylphenol	1.3	U	10	ug/L							
2,4-Dinitrophenol	2.6	U	10	ug/L							
2,4-Dinitrotoluene	2.4	U	10	ug/L							
2,6-Dinitrotoluene	1.5	U	10	ug/L							
2-Chloronaphthalene	1.0	U	10	ug/L							
2-Chlorophenol	1.2	U	10	ug/L							
2-Methyl-4,6-dinitrophenol	2.9	U	10	ug/L							
2-Methylnaphthalene	1.5	U	10	ug/L							
2-Methylphenol	1.4	U	10	ug/L							
2-Nitroaniline	1.5	U	10	ug/L							
2-Nitrophenol	1.1	U	10	ug/L							
3 & 4-Methylphenol	1.6	U	10	ug/L							
3,3'-Dichlorobenzidine	3.3	U	10	ug/L							
3-Nitroaniline	2.1	U	10	ug/L							
4-Bromophenyl-phenylether	1.0	U	10	ug/L							
4-Chloro-3-methylphenol	1.5	U	10	ug/L							
4-Chloroaniline	1.2	U	10	ug/L							
4-Chlorophenyl-phenylether	1.6	U	10	ug/L							
4-Nitroaniline	3.2	U	10	ug/L							
4-Nitrophenol	2.0	U	10	ug/L							
Acenaphthene	1.4	U	10	ug/L							
Acenaphthylene	1.2	U	10	ug/L							
Acetophenone	1.3	U	10	ug/L							
Anthracene	1.6	U	10	ug/L							
Atrazine	1.5	U	10	ug/L							QV-01
Benzaldehyde	1.4	U	10	ug/L							QV-02
Benzo(a)anthracene	1.3	U	10	ug/L							
Benzo(a)pyrene	1.3	U	10	ug/L							
Benzo(b)fluoranthene	1.0	U	10	ug/L							
Benzo(g,h,i)perylene	2.4	U	10	ug/L							
Benzo(k)fluoranthene	1.3	U	10	ug/L							
Bis(2-chloroethoxy)methane	1.4	U	10	ug/L							
Bis(2-chloroethyl)ether	1.2	U	10	ug/L							

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D16027 - EPA 3510C_MS - Continued

Blank (4D16027-BLK1) Continued Prepared: 04/16/2014 16:00 Analyzed: 04/23/2014 15:11

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Bis(2-chloroisopropyl)ether	1.3	U	10	ug/L							
Bis(2-ethylhexyl)phthalate	1.7	U	5.0	ug/L							
Butylbenzylphthalate	2.0	U	10	ug/L							
Caprolactam	1.3	U	10	ug/L							
Carbazole	2.5	U	10	ug/L							
Chrysene	2.0	U	10	ug/L							
Dibenzo(a,h)anthracene	2.3	U	10	ug/L							
Dibenzofuran	1.4	U	10	ug/L							
Diethylphthalate	2.1	U	10	ug/L							
Dimethylphthalate	1.4	U	10	ug/L							
Di-n-butylphthalate	1.5	U	10	ug/L							
Di-n-octylphthalate	3.1	U	10	ug/L							
Fluoranthene	2.1	U	10	ug/L							
Fluorene	1.7	U	10	ug/L							
Hexachlorobenzene	1.0	U	10	ug/L							
Hexachlorobutadiene	1.2	U	10	ug/L							
Hexachlorocyclopentadiene	1.3	U	10	ug/L							
Hexachloroethane	1.1	U	10	ug/L							
Indeno(1,2,3-cd)pyrene	2.2	U	10	ug/L							
Isophorone	1.3	U	10	ug/L							
Naphthalene	1.3	U	10	ug/L							
Nitrobenzene	1.2	U	10	ug/L							
N-Nitroso-di-n-propylamine	1.5	U	10	ug/L							
N-nitrosodiphenylamine/Diphenylamine	2.1	U	10	ug/L							
Pentachlorophenol	1.8	U	10	ug/L							
Phenanthrene	1.4	U	10	ug/L							
Phenol	1.4	U	10	ug/L							
Pyrene	2.1	U	10	ug/L							
2,4,6-Tribromophenol	*89*			*ug/L*	*100*		*89*	*10-179*			
2-Fluorobiphenyl	*43*			*ug/L*	*50.0*		*85*	*10-149*			
2-Fluorophenol	*56*			*ug/L*	*100*		*56*	*10-110*			
Nitrobenzene-d5	*42*			*ug/L*	*50.0*		*83*	*10-149*			
Phenol-d5	*46*			*ug/L*	*100*		*46*	*10-88*			
Terphenyl-d14	*44*			*ug/L*	*50.0*		*88*	*10-188*			

LCS (4D16027-BS1) Prepared: 04/16/2014 16:00 Analyzed: 04/23/2014 16:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	44		10	ug/L	50.0		89	67-132			
2-Chlorophenol	41		10	ug/L	50.0		82	40-109			
4-Chloro-3-methylphenol	43		10	ug/L	50.0		86	58-121			
4-Nitrophenol	29		10	ug/L	50.0		57	33-105			
Acenaphthene	41		10	ug/L	50.0		81	43-118			
N-Nitroso-di-n-propylamine	44		10	ug/L	50.0		87	48-126			
Pentachlorophenol	37		10	ug/L	50.0		75	51-135			
Phenol	28		10	ug/L	50.0		56	19-78			
Pyrene	45		10	ug/L	50.0		91	65-134			
2,4,6-Tribromophenol	*100*			*ug/L*	*100*		*102*	*10-179*			

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D16027 - EPA 3510C_MS - Continued

LCS (4D16027-BS1) Continued Prepared: 04/16/2014 16:00 Analyzed: 04/23/2014 16:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Fluorobiphenyl	*46*			*ug/L*	*50.0*		*92*	*10-149*			
2-Fluorophenol	*63*			*ug/L*	*100*		*63*	*10-110*			
Nitrobenzene-d5	*46*			*ug/L*	*50.0*		*92*	*10-149*			
Phenol-d5	*51*			*ug/L*	*100*		*51*	*10-88*			
Terphenyl-d14	*47*			*ug/L*	*50.0*		*94*	*10-188*			

Matrix Spike (4D16027-MS1) Prepared: 04/16/2014 16:00 Analyzed: 04/23/2014 16:49

Source: C404957-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	46		10	ug/L	50.0	2.4 U	93	67-132			
2-Chlorophenol	43		10	ug/L	50.0	1.2 U	85	40-109			
4-Chloro-3-methylphenol	44		10	ug/L	50.0	1.5 U	88	58-121			
4-Nitrophenol	32		10	ug/L	50.0	2.0 U	64	33-105			
Acenaphthene	42		10	ug/L	50.0	1.4 U	84	43-118			
N-Nitroso-di-n-propylamine	45		10	ug/L	50.0	1.5 U	91	48-126			
Pentachlorophenol	39		10	ug/L	50.0	1.8 U	78	51-135			
Phenol	32		10	ug/L	50.0	1.4 U	64	19-78			
Pyrene	44		10	ug/L	50.0	2.1 U	89	65-134			
2,4,6-Tribromophenol	*100*			*ug/L*	*100*		*101*	*10-179*			
2-Fluorobiphenyl	*44*			*ug/L*	*50.0*		*88*	*10-149*			
2-Fluorophenol	*64*			*ug/L*	*100*		*64*	*10-110*			
Nitrobenzene-d5	*44*			*ug/L*	*50.0*		*88*	*10-149*			
Phenol-d5	*56*			*ug/L*	*100*		*56*	*10-88*			
Terphenyl-d14	*45*			*ug/L*	*50.0*		*90*	*10-188*			

Matrix Spike Dup (4D16027-MSD1) Prepared: 04/16/2014 16:00 Analyzed: 04/23/2014 17:19

Source: C404957-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	46		10	ug/L	50.0	2.4 U	93	67-132	0.09	17	
2-Chlorophenol	43		10	ug/L	50.0	1.2 U	85	40-109	0.09	22	
4-Chloro-3-methylphenol	44		10	ug/L	50.0	1.5 U	88	58-121	0.3	22	
4-Nitrophenol	31		10	ug/L	50.0	2.0 U	61	33-105	5	27	
Acenaphthene	42		10	ug/L	50.0	1.4 U	85	43-118	1	21	
N-Nitroso-di-n-propylamine	46		10	ug/L	50.0	1.5 U	92	48-126	2	23	
Pentachlorophenol	37		10	ug/L	50.0	1.8 U	75	51-135	4	11	
Phenol	31		10	ug/L	50.0	1.4 U	61	19-78	4	18	
Pyrene	47		10	ug/L	50.0	2.1 U	94	65-134	5	16	
2,4,6-Tribromophenol	*100*			*ug/L*	*100*		*101*	*10-179*			
2-Fluorobiphenyl	*44*			*ug/L*	*50.0*		*89*	*10-149*			
2-Fluorophenol	*64*			*ug/L*	*100*		*64*	*10-110*			
Nitrobenzene-d5	*46*			*ug/L*	*50.0*		*91*	*10-149*			
Phenol-d5	*53*			*ug/L*	*100*		*53*	*10-88*			
Terphenyl-d14	*47*			*ug/L*	*50.0*		*95*	*10-188*			

Gasoline Range Organics by GC - Quality Control

Batch 4D15004 - EPA 5035

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Gasoline Range Organics by GC - Quality Control

Batch 4D15004 - EPA 5035 - Continued

Blank (4D15004-BLK1) Prepared: 04/15/2014 09:19 Analyzed: 04/15/2014 14:29

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	1.4	U	5.5	mg/kg wet							
2,5-Dibromotoluene	*12*			*mg/kg wet*	*10.0*		*116*	*59-168*			

LCS (4D15004-BS1) Prepared: 04/15/2014 09:19 Analyzed: 04/15/2014 13:58

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	51		5.5	mg/kg wet	50.0		102	51-115			
2,5-Dibromotoluene	*12*			*mg/kg wet*	*10.0*		*118*	*59-168*			

Matrix Spike (4D15004-MS1) Prepared: 04/15/2014 09:19 Analyzed: 04/15/2014 15:00

Source: C404864-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	52		5.5	mg/kg wet	50.0	1.4 U	105	45-162			
2,5-Dibromotoluene	*11*			*mg/kg wet*	*10.0*		*113*	*59-168*			

Matrix Spike Dup (4D15004-MSD1) Prepared: 04/15/2014 09:19 Analyzed: 04/15/2014 15:32

Source: C404864-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	52		5.5	mg/kg wet	50.0	1.4 U	104	45-162	0.3	24	
2,5-Dibromotoluene	*12*			*mg/kg wet*	*10.0*		*117*	*59-168*			

Diesel Range Organics by GC - Quality Control

Batch 4D21008 - EPA 3550C

Blank (4D21008-BLK1) Prepared: 04/21/2014 09:35 Analyzed: 04/21/2014 22:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	1.7	U	3.3	mg/kg wet							
o-Terphenyl	*1.9*			*mg/kg wet*	*1.67*		*111*	*51-138*			

LCS (4D21008-BS1) Prepared: 04/21/2014 09:35 Analyzed: 04/21/2014 23:18

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	32		3.3	mg/kg wet	33.3		95	37-116			
o-Terphenyl	*2.0*			*mg/kg wet*	*1.67*		*122*	*51-138*			

Matrix Spike (4D21008-MS1) Prepared: 04/21/2014 09:35 Analyzed: 04/21/2014 23:48

Source: C404170-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	34		3.9	mg/kg dry	39.5	2.0 U	87	37-116			
o-Terphenyl	*2.1*			*mg/kg dry*	*1.97*		*107*	*51-138*			

Matrix Spike Dup (4D21008-MSD1) Prepared: 04/21/2014 09:35 Analyzed: 04/22/2014 00:19

Source: C404170-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

QUALITY CONTROL DATA

Diesel Range Organics by GC - Quality Control

Batch 4D21008 - EPA 3550C - Continued

Matrix Spike Dup (4D21008-MSD1) Continued Prepared: 04/21/2014 09:35 Analyzed: 04/22/2014 00:19

Source: C404170-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	37		3.9	mg/kg dry	39.5	2.0 U	95	37-116	8	45	
o-Terphenyl	*2.3*			*mg/kg dry*	*1.97*		*119*	*51-138*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B

Blank (4D21024-BLK1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 11:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2.10	U	10.0	mg/kg wet							
Antimony	0.110	U	1.00	mg/kg wet							
Arsenic	0.100	U	0.500	mg/kg wet							
Barium	0.100	U	0.500	mg/kg wet							
Beryllium	0.0120	U	0.0500	mg/kg wet							
Cadmium	0.00960	U	0.0500	mg/kg wet							
Calcium	**6.23**	**J**	25.0	mg/kg wet							
Chromium	0.100	U	0.500	mg/kg wet							
Cobalt	0.100	U	0.500	mg/kg wet							
Copper	0.190	U	0.500	mg/kg wet							
Iron	**0.729**	**J**	2.50	mg/kg wet							
Lead	0.120	U	0.500	mg/kg wet							
Magnesium	**1.72**	**J**	25.0	mg/kg wet							
Manganese	0.100	U	0.500	mg/kg wet							
Nickel	0.360	U	2.50	mg/kg wet							
Potassium	4.00	U	25.0	mg/kg wet							
Selenium	0.100	U	0.500	mg/kg wet							
Silver	0.100	U	0.500	mg/kg wet							
Sodium	6.00	U	25.0	mg/kg wet							
Thallium	0.100	U	0.500	mg/kg wet							
Vanadium	0.100	U	0.500	mg/kg wet							
Zinc	1.10	U	2.50	mg/kg wet							

LCS (4D21024-BS1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 11:48

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	91.6		10.0	mg/kg wet	100		92	80-120			
Antimony	8.46		1.00	mg/kg wet	10.0		85	80-120			
Arsenic	8.74		0.500	mg/kg wet	10.0		87	80-120			
Barium	9.02		0.500	mg/kg wet	10.0		90	80-120			
Beryllium	0.936		0.0500	mg/kg wet	1.00		94	80-120			
Cadmium	0.896		0.0500	mg/kg wet	1.00		90	80-120			
Calcium	97.1	B	25.0	mg/kg wet	100		97	80-120			
Chromium	9.19		0.500	mg/kg wet	10.0		92	80-120			
Cobalt	9.14		0.500	mg/kg wet	10.0		91	80-120			
Copper	9.13		0.500	mg/kg wet	10.0		91	80-120			
Iron	46.7	B	2.50	mg/kg wet	50.0		93	80-120			
Lead	8.94		0.500	mg/kg wet	10.0		89	80-120			
Magnesium	94.2	B	25.0	mg/kg wet	100		94	80-120			

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B - Continued

LCS (4D21024-BS1) Continued Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 11:48

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Manganese	9.27		0.500	mg/kg wet	10.0		93	80-120			
Nickel	9.20		2.50	mg/kg wet	10.0		92	80-120			
Potassium	452		25.0	mg/kg wet	500		90	80-120			
Selenium	8.72		0.500	mg/kg wet	10.0		87	80-120			
Silver	9.59		0.500	mg/kg wet	10.0		96	80-120			
Sodium	458		25.0	mg/kg wet	500		92	80-120			
Thallium	8.95		0.500	mg/kg wet	10.0		89	80-120			
Vanadium	9.41		0.500	mg/kg wet	10.0		94	80-120			
Zinc	9.09		2.50	mg/kg wet	10.0		91	80-120			

Matrix Spike (4D21024-MS1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:29

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	6970		12.3	mg/kg dry	124	4350	NR	75-125			QM-05
Antimony	6.87		1.23	mg/kg dry	12.4	0.409	52	75-125			QM-05
Arsenic	12.2		0.613	mg/kg dry	12.4	1.94	83	75-125			
Barium	53.8		0.613	mg/kg dry	12.4	41.7	98	75-125			
Beryllium	1.50		0.0613	mg/kg dry	1.24	0.325	95	75-125			
Cadmium	1.17		0.0613	mg/kg dry	1.24	0.0275	92	75-125			
Calcium	1110	B	30.7	mg/kg dry	124	1080	30	75-125			QM-05
Chromium	14.8		0.613	mg/kg dry	12.4	3.83	88	75-125			
Cobalt	13.0		0.613	mg/kg dry	12.4	1.42	93	75-125			
Copper	13.6		0.613	mg/kg dry	12.4	2.23	92	75-125			
Iron	4650	B	3.07	mg/kg dry	61.9	4710	NR	75-125			QM-05
Lead	31.4		0.613	mg/kg dry	12.4	46.9	NR	75-125			QM-05
Magnesium	474	B	30.7	mg/kg dry	124	364	89	75-125			
Manganese	163		0.613	mg/kg dry	12.4	159	37	75-125			QM-05
Nickel	13.0		3.07	mg/kg dry	12.4	0.930	97	75-125			
Potassium	859		30.7	mg/kg dry	619	295	91	75-125			
Selenium	10.1		0.613	mg/kg dry	12.4	0.123 U	82	75-125			
Silver	11.2		0.613	mg/kg dry	12.4	0.123 U	90	75-125			
Sodium	563		30.7	mg/kg dry	619	10.1	89	75-125			
Thallium	8.44		0.613	mg/kg dry	12.4	0.123 U	68	75-125			QM-05
Vanadium	20.4		0.613	mg/kg dry	12.4	8.80	94	75-125			
Zinc	43.5		3.07	mg/kg dry	12.4	30.6	105	75-125			

Matrix Spike Dup (4D21024-MSD1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:31

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	7100		12.3	mg/kg dry	123	4350	NR	75-125	2	20	QM-05
Antimony	7.29		1.23	mg/kg dry	12.3	0.409	56	75-125	6	20	QM-05
Arsenic	12.5		0.613	mg/kg dry	12.3	1.94	86	75-125	2	20	
Barium	56.3		0.613	mg/kg dry	12.3	41.7	119	75-125	4	20	
Beryllium	1.53		0.0613	mg/kg dry	1.23	0.325	98	75-125	2	20	
Cadmium	1.18		0.0613	mg/kg dry	1.23	0.0275	94	75-125	1	20	
Calcium	1100	B	30.7	mg/kg dry	123	1080	20	75-125	1	20	QM-05
Chromium	15.0		0.613	mg/kg dry	12.3	3.83	91	75-125	2	20	
Cobalt	13.3		0.613	mg/kg dry	12.3	1.42	97	75-125	2	20	
Copper	13.9		0.613	mg/kg dry	12.3	2.23	95	75-125	2	20	

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B - Continued

Matrix Spike Dup (4D21024-MSD1) Continued Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:31

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron	4880	B	3.07	mg/kg dry	61.3	4710	269	75-125	5	20	QM-05
Lead	31.2		0.613	mg/kg dry	12.3	46.9	NR	75-125	0.4	20	QM-05
Magnesium	432	B	30.7	mg/kg dry	123	364	55	75-125	9	20	QM-05
Manganese	169		0.613	mg/kg dry	12.3	159	83	75-125	3	20	
Nickel	13.3		3.07	mg/kg dry	12.3	0.930	101	75-125	2	20	
Potassium	866		30.7	mg/kg dry	613	295	93	75-125	0.8	20	
Selenium	10.6		0.613	mg/kg dry	12.3	0.123 U	86	75-125	5	20	
Silver	11.5		0.613	mg/kg dry	12.3	0.123 U	93	75-125	2	20	
Sodium	553		30.7	mg/kg dry	613	10.1	89	75-125	2	20	
Thallium	8.85		0.613	mg/kg dry	12.3	0.123 U	72	75-125	5	20	QM-05
Vanadium	21.0		0.613	mg/kg dry	12.3	8.80	100	75-125	3	20	
Zinc	45.6		3.07	mg/kg dry	12.3	30.6	122	75-125	5	20	

Post Spike (4D21024-PS1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:33

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	73.4		0.200	mg/L	2.00	73.1	17	80-120			QM-08
Antimony	0.189		0.0200	mg/L	0.200	0.00688	91	80-120			
Arsenic	0.216		0.0100	mg/L	0.200	0.0327	91	80-120			
Barium	0.871		0.0100	mg/L	0.200	0.701	85	80-120			
Beryllium	0.0235		0.00100	mg/L	0.0200	0.00546	90	80-120			
Cadmium	0.0192		0.00100	mg/L	0.0200	0.000463	94	80-120			
Calcium	20.3	B	0.500	mg/L	2.00	18.1	109	80-120			
Chromium	0.242		0.0100	mg/L	0.200	0.0643	89	80-120			
Cobalt	0.211		0.0100	mg/L	0.200	0.0238	94	80-120			
Copper	0.219		0.0100	mg/L	0.200	0.0375	91	80-120			
Iron	78.6	B	0.0500	mg/L	1.00	79.2	NR	80-120			QM-08
Lead	0.962		0.0100	mg/L	0.200	0.789	87	80-120			
Magnesium	7.74	B	0.500	mg/L	2.00	6.11	81	80-120			
Manganese	2.79		0.0100	mg/L	0.200	2.67	64	80-120			QM-08
Nickel	0.204		0.0500	mg/L	0.200	0.0156	94	80-120			
Potassium	14.1		0.500	mg/L	10.0	4.95	92	80-120			
Selenium	0.182		0.0100	mg/L	0.200	0.00118	91	80-120			
Silver	0.182		0.0100	mg/L	0.200	-0.00250	92	80-120			
Sodium	9.24		0.500	mg/L	10.0	0.170	91	80-120			
Thallium	0.142		0.0100	mg/L	0.200	-0.0437	93	80-120			
Vanadium	0.331		0.0100	mg/L	0.200	0.148	92	80-120			
Zinc	0.685		0.0500	mg/L	0.200	0.513	86	80-120			

Batch 4D24020 - EPA 7471B

Blank (4D24020-BLK1) Prepared: 04/24/2014 10:31 Analyzed: 04/24/2014 22:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.00690	U	0.0240	mg/kg wet							

LCS (4D24020-BS1) Prepared: 04/24/2014 10:31 Analyzed: 04/24/2014 22:07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D24020 - EPA 7471B - Continued

LCS (4D24020-BS1) Continued Prepared: 04/24/2014 10:31 Analyzed: 04/24/2014 22:07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.618		0.0240	mg/kg wet	0.600		103	80-120			

Matrix Spike (4D24020-MS1) Prepared: 04/24/2014 10:31 Analyzed: 04/24/2014 22:11

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.788		0.0294	mg/kg dry	0.712	0.00846 U	111	80-120			

Matrix Spike Dup (4D24020-MSD1) Prepared: 04/24/2014 10:31 Analyzed: 04/24/2014 22:13

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.809		0.0294	mg/kg dry	0.736	0.00846 U	110	80-120	3	20	

Post Spike (4D24020-PS1) Prepared: 04/24/2014 10:31 Analyzed: 04/24/2014 22:15

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.55		0.200	ug/L	5.00	0.00793	111	75-125			

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17014 - EPA 5030B_MS

Blank (4D17014-BLK1) Prepared: 04/17/2014 13:47 Analyzed: 04/17/2014 14:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.0004	U	0.0010	mg/kg wet							
1,1,2,2-Tetrachloroethane	0.0003	U	0.0010	mg/kg wet							
1,1,2-Trichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethene	0.0006	U	0.0010	mg/kg wet							
1,2,4-Trichlorobenzene	0.0008	U	0.0010	mg/kg wet							
1,2-Dibromo-3-chloropropane	0.0006	U	0.0010	mg/kg wet							
1,2-Dibromoethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
1,2-Dichloroethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichloropropane	0.0006	U	0.0010	mg/kg wet							
1,3-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
1,4-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
2-Butanone	0.0018	U	0.0050	mg/kg wet							
2-Hexanone	0.0009	U	0.0050	mg/kg wet							
4-Methyl-2-pentanone	0.0014	U	0.0050	mg/kg wet							
Acetone	0.0017	U	0.0050	mg/kg wet							
Benzene	0.0004	U	0.0010	mg/kg wet							
Bromochloromethane	0.0004	U	0.0010	mg/kg wet							
Bromodichloromethane	0.0004	U	0.0010	mg/kg wet							
Bromoform	0.0003	U	0.0010	mg/kg wet							
Bromomethane	0.0009	U	0.0010	mg/kg wet							
Carbon disulfide	0.0021	U	0.0050	mg/kg wet							
Carbon Tetrachloride	0.0006	U	0.0010	mg/kg wet							
Chlorobenzene	0.0005	U	0.0010	mg/kg wet							

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17014 - EPA 5030B_MS - Continued

Blank (4D17014-BLK1) Continued Prepared: 04/17/2014 13:47 Analyzed: 04/17/2014 14:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloroethane	0.0005	U	0.0010	mg/kg wet							
Chloroform	0.0004	U	0.0010	mg/kg wet							
Chloromethane	0.0006	U	0.0010	mg/kg wet							
cis-1,2-Dichloroethene	0.0005	U	0.0010	mg/kg wet							
cis-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Cyclohexane	0.0005	U	0.0020	mg/kg wet							
Dibromochloromethane	0.0003	U	0.0010	mg/kg wet							
Dichlorodifluoromethane	0.0006	U	0.0010	mg/kg wet							
Ethylbenzene	0.0006	U	0.0010	mg/kg wet							
Freon 113	0.0006	U	0.0010	mg/kg wet							
Isopropylbenzene	0.0005	U	0.0010	mg/kg wet							
Methyl acetate	0.0016	U	0.0020	mg/kg wet							
Methyl cyclohexane	0.0005	U	0.0020	mg/kg wet							
Methylene Chloride	0.0007	U	0.0020	mg/kg wet							
Methyl-tert-Butyl Ether	0.0003	U	0.0010	mg/kg wet							
Styrene	0.0004	U	0.0010	mg/kg wet							
Tetrachloroethene	0.0005	U	0.0010	mg/kg wet							
Toluene	0.0005	U	0.0010	mg/kg wet							
trans-1,2-Dichloroethene	0.0007	U	0.0010	mg/kg wet							
trans-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Trichloroethene	0.0005	U	0.0010	mg/kg wet							
Trichlorofluoromethane	0.0005	U	0.0010	mg/kg wet							
Vinyl chloride	0.0004	U	0.0010	mg/kg wet							
Xylenes (Total)	0.0010	U	0.0020	mg/kg wet							
4-Bromofluorobenzene	*0.049*			*mg/kg wet*	*0.0500*		*98*	*71-126*			
Dibromofluoromethane	*0.048*			*mg/kg wet*	*0.0500*		*97*	*72-133*			
Toluene-d8	*0.046*			*mg/kg wet*	*0.0500*		*92*	*80-123*			

LCS (4D17014-BS1) Prepared & Analyzed: 04/17/2014 12:43

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.018		0.0010	mg/kg wet	0.0200		89	61-124			
Benzene	0.019		0.0010	mg/kg wet	0.0200		95	59-133			
Chlorobenzene	0.019		0.0010	mg/kg wet	0.0200		94	69-121			
Toluene	0.019		0.0010	mg/kg wet	0.0200		93	66-119			
Trichloroethene	0.021		0.0010	mg/kg wet	0.0200		104	71-122			
4-Bromofluorobenzene	*0.051*			*mg/kg wet*	*0.0500*		*101*	*71-126*			
Dibromofluoromethane	*0.049*			*mg/kg wet*	*0.0500*		*98*	*72-133*			
Toluene-d8	*0.047*			*mg/kg wet*	*0.0500*		*94*	*80-123*			

LCS Dup (4D17014-BSD1) Prepared & Analyzed: 04/17/2014 13:15

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.019		0.0010	mg/kg wet	0.0200		95	61-124	6	23	
Benzene	0.018		0.0010	mg/kg wet	0.0200		90	59-133	6	19	
Chlorobenzene	0.018		0.0010	mg/kg wet	0.0200		91	69-121	3	18	
Toluene	0.018		0.0010	mg/kg wet	0.0200		89	66-119	4	21	
Trichloroethene	0.018		0.0010	mg/kg wet	0.0200		90	71-122	14	26	

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17014 - EPA 5030B_MS - Continued

LCS Dup (4D17014-BSD1) Continued Prepared & Analyzed: 04/17/2014 13:15

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4-Bromofluorobenzene	*0.053*			*mg/kg wet*	*0.0500*		*107*	*71-126*			
Dibromofluoromethane	*0.049*			*mg/kg wet*	*0.0500*		*97*	*72-133*			
Toluene-d8	*0.046*			*mg/kg wet*	*0.0500*		*93*	*80-123*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D18034 - EPA 3550C_MS

Blank (4D18034-BLK1) Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 10:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1'-Biphenyl	0.073	U	0.33	mg/kg wet							
2,4,5-Trichlorophenol	0.067	U	0.33	mg/kg wet							
2,4,6-Trichlorophenol	0.15	U	0.33	mg/kg wet							
2,4-Dichlorophenol	0.25	U	0.33	mg/kg wet							
2,4-Dimethylphenol	0.23	U	0.33	mg/kg wet							
2,4-Dinitrophenol	0.089	U	0.33	mg/kg wet							
2,4-Dinitrotoluene	0.16	U	0.33	mg/kg wet							
2,6-Dinitrotoluene	0.18	U	0.33	mg/kg wet							
2-Chloronaphthalene	0.098	U	0.33	mg/kg wet							
2-Chlorophenol	0.23	U	0.33	mg/kg wet							
2-Methyl-4,6-dinitrophenol	0.28	U	0.33	mg/kg wet							
2-Methylnaphthalene	0.12	U	0.33	mg/kg wet							
2-Methylphenol	0.11	U	0.33	mg/kg wet							
2-Nitroaniline	0.085	U	0.33	mg/kg wet							
2-Nitrophenol	0.26	U	0.33	mg/kg wet							
3 & 4-Methylphenol	0.25	U	0.33	mg/kg wet							
3,3'-Dichlorobenzidine	0.21	U	0.33	mg/kg wet							
3-Nitroaniline	0.080	U	0.33	mg/kg wet							
4-Bromophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Chloro-3-methylphenol	0.28	U	0.33	mg/kg wet							
4-Chloroaniline	0.065	U	0.33	mg/kg wet							
4-Chlorophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Nitroaniline	0.26	U	0.33	mg/kg wet							
4-Nitrophenol	0.13	U	0.33	mg/kg wet							
Acenaphthene	0.13	U	0.33	mg/kg wet							
Acenaphthylene	0.12	U	0.33	mg/kg wet							
Acetophenone	0.14	U	0.33	mg/kg wet							
Anthracene	0.15	U	0.33	mg/kg wet							
Atrazine	0.074	U	0.33	mg/kg wet							
Benzaldehyde	0.27	U	0.33	mg/kg wet							
Benzo(a)anthracene	0.13	U	0.33	mg/kg wet							
Benzo(a)pyrene	0.078	U	0.33	mg/kg wet							
Benzo(b)fluoranthene	0.11	U	0.33	mg/kg wet							
Benzo(g,h,i)perylene	0.16	U	0.33	mg/kg wet							
Benzo(k)fluoranthene	0.11	U	0.33	mg/kg wet							
Bis(2-chloroethoxy)methane	0.15	U	0.33	mg/kg wet							
Bis(2-chloroethyl)ether	0.14	U	0.33	mg/kg wet							
Bis(2-chloroisopropyl)ether	0.099	U	0.33	mg/kg wet							
Bis(2-ethylhexyl)phthalate	0.13	U	0.33	mg/kg wet							

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D18034 - EPA 3550C_MS - Continued

Blank (4D18034-BLK1) Continued Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 10:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Butylbenzylphthalate	0.14	U	0.33	mg/kg wet							
Caprolactam	0.30	U	0.33	mg/kg wet							
Carbazole	0.12	U	0.33	mg/kg wet							
Chrysene	0.13	U	0.33	mg/kg wet							
Dibenzo(a,h)anthracene	0.14	U	0.33	mg/kg wet							
Dibenzofuran	0.13	U	0.33	mg/kg wet							
Diethylphthalate	0.13	U	0.33	mg/kg wet							
Dimethylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-butylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-octylphthalate	0.13	U	0.33	mg/kg wet							
Fluoranthene	0.11	U	0.33	mg/kg wet							
Fluorene	0.14	U	0.33	mg/kg wet							
Hexachlorobenzene	0.12	U	0.33	mg/kg wet							
Hexachlorobutadiene	0.13	U	0.33	mg/kg wet							
Hexachlorocyclopentadiene	0.15	U	0.33	mg/kg wet							
Hexachloroethane	0.10	U	0.33	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.14	U	0.33	mg/kg wet							
Isophorone	0.17	U	0.33	mg/kg wet							
Naphthalene	0.12	U	0.33	mg/kg wet							
Nitrobenzene	0.15	U	0.33	mg/kg wet							
N-Nitroso-di-n-propylamine	0.15	U	0.33	mg/kg wet							
N-nitrosodiphenylamine/Diphenylamine	0.23	U	0.33	mg/kg wet							
Pentachlorophenol	0.21	U	0.33	mg/kg wet							
Phenanthrene	0.13	U	0.33	mg/kg wet							
Phenol	0.099	U	0.33	mg/kg wet							
Pyrene	0.11	U	0.33	mg/kg wet							
2,4,6-Tribromophenol	*1.4*			*mg/kg wet*	*1.67*		*85*	*23-137*			
2-Fluorobiphenyl	*1.5*			*mg/kg wet*	*1.67*		*90*	*29-119*			
2-Fluorophenol	*1.5*			*mg/kg wet*	*1.67*		*88*	*20-124*			
Nitrobenzene-d5	*1.2*			*mg/kg wet*	*1.67*		*74*	*17-126*			
Phenol-d5	*1.5*			*mg/kg wet*	*1.67*		*89*	*15-131*			
Terphenyl-d14	*1.7*			*mg/kg wet*	*1.67*		*102*	*60-120*			

LCS (4D18034-BS1) Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 11:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.8		0.33	mg/kg wet	1.67		107	54-125			
2-Chlorophenol	1.6		0.33	mg/kg wet	1.67		97	50-105			
4-Chloro-3-methylphenol	1.6		0.33	mg/kg wet	1.67		97	55-106			
4-Nitrophenol	1.4		0.33	mg/kg wet	1.67		82	30-124			
Acenaphthene	1.5		0.33	mg/kg wet	1.67		90	49-111			
N-Nitroso-di-n-propylamine	1.6		0.33	mg/kg wet	1.67		95	52-126			
Pentachlorophenol	1.8		0.33	mg/kg wet	1.67		108	10-101			QL-02
Phenol	1.6		0.33	mg/kg wet	1.67		98	28-121			
Pyrene	1.7		0.33	mg/kg wet	1.67		100	66-115			
2,4,6-Tribromophenol	*1.8*			*mg/kg wet*	*1.67*		*107*	*23-137*			
2-Fluorobiphenyl	*1.5*			*mg/kg wet*	*1.67*		*91*	*29-119*			
2-Fluorophenol	*1.5*			*mg/kg wet*	*1.67*		*91*	*20-124*			

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D18034 - EPA 3550C_MS - Continued

LCS (4D18034-BS1) Continued Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 11:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrobenzene-d5	*1.3*			*mg/kg wet*	*1.67*		*80*	*17-126*			
Phenol-d5	*1.5*			*mg/kg wet*	*1.67*		*90*	*15-131*			
Terphenyl-d14	*1.8*			*mg/kg wet*	*1.67*		*108*	*60-120*			

Matrix Spike (4D18034-MS1) Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 12:24

Source: A402224-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.7	D	0.72	mg/kg dry	1.83	0.35 U	93	54-125			
2-Chlorophenol	1.1	D	0.72	mg/kg dry	1.83	0.50 U	61	50-105			
4-Chloro-3-methylphenol	1.5	D	0.72	mg/kg dry	1.83	0.61 U	85	55-106			
4-Nitrophenol	1.3	D	0.72	mg/kg dry	1.83	0.29 U	72	30-124			
Acenaphthene	1.4	D	0.72	mg/kg dry	1.83	0.29 U	78	49-111			
N-Nitroso-di-n-propylamine	1.1	D	0.72	mg/kg dry	1.83	0.33 U	61	52-126			
Pentachlorophenol	1.9	D	0.72	mg/kg dry	1.83	0.46 U	103	10-101			QM-07
Phenol	1.2	D	0.72	mg/kg dry	1.83	0.22 U	67	28-121			
Pyrene	1.8	D	0.72	mg/kg dry	1.83	0.24 U	100	66-115			
2,4,6-Tribromophenol	*1.8*			*mg/kg dry*	*1.83*		*98*	*23-137*			
2-Fluorobiphenyl	*1.3*			*mg/kg dry*	*1.83*		*70*	*29-119*			
2-Fluorophenol	*1.0*			*mg/kg dry*	*1.83*		*56*	*20-124*			
Nitrobenzene-d5	*0.92*			*mg/kg dry*	*1.83*		*50*	*17-126*			
Phenol-d5	*1.1*			*mg/kg dry*	*1.83*		*61*	*15-131*			
Terphenyl-d14	*1.8*			*mg/kg dry*	*1.83*		*100*	*60-120*			

Matrix Spike Dup (4D18034-MSD1) Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 12:52

Source: A402224-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.8	D	0.72	mg/kg dry	1.83	0.35 U	99	54-125	6	23	
2-Chlorophenol	1.3	D	0.72	mg/kg dry	1.83	0.50 U	71	50-105	16	27	
4-Chloro-3-methylphenol	1.7	D	0.72	mg/kg dry	1.83	0.61 U	92	55-106	8	28	
4-Nitrophenol	1.4	D	0.72	mg/kg dry	1.83	0.29 U	77	30-124	6	35	
Acenaphthene	1.5	D	0.72	mg/kg dry	1.83	0.29 U	83	49-111	6	27	
N-Nitroso-di-n-propylamine	1.3	D	0.72	mg/kg dry	1.83	0.33 U	72	52-126	15	24	
Pentachlorophenol	2.1	D	0.72	mg/kg dry	1.83	0.46 U	117	10-101	13	26	QM-07
Phenol	1.4	D	0.72	mg/kg dry	1.83	0.22 U	75	28-121	12	32	
Pyrene	1.9	D	0.72	mg/kg dry	1.83	0.24 U	104	66-115	4	28	
2,4,6-Tribromophenol	*2.0*			*mg/kg dry*	*1.83*		*107*	*23-137*			
2-Fluorobiphenyl	*1.4*			*mg/kg dry*	*1.83*		*76*	*29-119*			
2-Fluorophenol	*1.2*			*mg/kg dry*	*1.83*		*65*	*20-124*			
Nitrobenzene-d5	*1.1*			*mg/kg dry*	*1.83*		*58*	*17-126*			
Phenol-d5	*1.3*			*mg/kg dry*	*1.83*		*70*	*15-131*			
Terphenyl-d14	*1.9*			*mg/kg dry*	*1.83*		*103*	*60-120*			

Classical Chemistry Parameters - Quality Control

Batch 4D21022 - NO PREP

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Classical Chemistry Parameters - Quality Control

Batch 4D21022 - NO PREP - Continued

Blank (4D21022-BLK1) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.15	U	1.0	mg/kg wet							

LCS (4D21022-BS1) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	10		1.0	mg/kg wet	10.0		103	84-124			

Matrix Spike (4D21022-MS1) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Source: A402181-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.18	U	1.2	mg/kg dry	12.2	0.18 U		84-124			QM-14

Matrix Spike (4D21022-MS2) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Source: A402181-01RE1

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	55		6.3	mg/kg dry	63.3	0.95 U	87	84-124			QM-14

Matrix Spike Dup (4D21022-MSD1) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Source: A402181-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.18	U	1.2	mg/kg dry	12.2	0.18 U		84-124		11	QM-14

Matrix Spike Dup (4D21022-MSD2) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Source: A402181-01RE1

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	56		6.3	mg/kg dry	63.3	0.95 U	88	84-124	1	11	QM-14

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FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence (85% or greater confidence) to make a "tentative identification".
J-05	Result estimated, calibration verification standard failed with low bias.
QB-01	The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact of the deviation.
QL-02	The associated laboratory control sample exhibited high bias; since the result is ND, the impact on data quality is minimal.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-08	Post-digestion spike did not meet method requirements due to confirmed matrix effects (dilution test).
QM-14	Confirmed matrix effects
QV-01	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.
QV-02	The associated continuing calibration verification standard exhibited low bias; the reported result should be considered to be a minimum estimate.

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 211
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: REMSA, Inc. (RE026)	Project Number: E14-10-T03P
Address: 124 W. Queens Way	Project Name/Desc: 1554 West Pembroke Ave
City/ST/Zip: Hampton, VA 23669	PO # / Billing Info: E18-10-T03P
Tel: 722-0113 / Fax:	Reporting Contact: Mike Iwoshchenko
Sampler(s) Name, Affiliation (Print): Don Christian	Billing Contact: Mike Iwoshchenko
Sampler(s) Signature:	Facility # (if required):

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C404865

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	TPH-GRO 4015	TPH-DRO 4015	VOCs 8260B	SVOCs 8270D	TAL 6010C/7470A/7471B soil	Hex Chrome 7196A	Hex Chrome 3500CR-D	PCBs 8082A			Sample Comments
	GP54-10	4-10-14	9:15	Grab	GW	10	X	X	X	X	X		X	X			
	GP54-9	4-10-14	10:35	Grab	GW	10	X	X	X	X	X		X	X			
	GP54-9	4-10-14	11:15	Grab	SO	6	X	X	X	X	X	X					
	GP54-2	4-10-14	2:00	Grab	GW	3	X	X		X	X			X			
	GP14-2	4-10-14	12:50	Grab	SO	6	X	X	X	X	X	X					
	GP14-2	4-10-14	1:10	Grab	GW	6	X	X	X	X				X			

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time 4-10-14 3:00	Received By	Date/Time 4-14-14 8:35
Comments		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: 20.3°		Condition Upon Receipt: ✓ Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments)

Preservation: **I**-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

ENCO Laboratories

Accurate. Timely. Responsive. Innovative.

102-A Woodwinds Industrial Court
Cary NC, 27511
Phone: 919.467.3090 FAX: 919.467.3515

Wednesday, May 14, 2014
REMSA, Inc. (RE026)
Attn: Mike Iwashchenko
124 W. Queens Way
Hampton, VA 23669

RE: Laboratory Results for
Project Number: E-18-10-T03P, Project Name/Desc: 1614 West Pembroke Avenue
ENCO Workorder(s): C404753

Dear Mike Iwashchenko,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Friday, April 11, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

www.encolabs.com

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: GP14-3 **Lab ID: C404753-01** **Sampled: 04/10/14 13:35** **Received: 04/11/14 09:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7471B	05/08/14		04/24/14	10:31	04/24/14 22:28
EPA 8015C	04/24/14		04/15/14	09:19	04/15/14 22:48
EPA 8015C	04/24/14	05/31/14	04/21/14	09:35	04/22/14 19:53
EPA 8260B	04/24/14		04/17/14	14:38	04/18/14 08:22

Client ID: GP14-3 **Lab ID: C404753-01RE1** **Sampled: 04/10/14 13:35** **Received: 04/11/14 09:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/07/14		04/21/14	13:03	04/23/14 13:58
EPA 7196A	05/10/14	04/28/14	04/21/14	12:06	04/22/14 15:05
EPA 8270D	04/24/14	05/28/14	04/18/14	12:30	04/28/14 13:32

Client ID: GP14-1 **Lab ID: C404753-02** **Sampled: 04/10/14 11:45** **Received: 04/11/14 09:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	05/10/14	04/28/14	04/21/14	12:06	04/22/14 15:05
EPA 7471B	05/08/14		04/24/14	10:31	04/24/14 22:31
EPA 8015C	04/24/14		04/15/14	09:19	04/15/14 23:19
EPA 8015C	04/24/14	05/31/14	04/21/14	09:35	04/22/14 20:52
EPA 8260B	04/24/14		04/17/14	14:38	04/18/14 08:56

Client ID: GP14-1 **Lab ID: C404753-02RE1** **Sampled: 04/10/14 11:45** **Received: 04/11/14 09:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/07/14		04/21/14	13:03	04/23/14 14:00
EPA 8270D	04/24/14	05/28/14	04/18/14	12:30	04/28/14 14:01

Client ID: GP14-3 **Lab ID: C404753-05** **Sampled: 04/10/14 13:55** **Received: 04/11/14 09:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	04/11/14 13:55		04/11/14	10:55	04/11/14 11:17
EPA 6010C	10/07/14		04/15/14	15:12	04/22/14 12:18
EPA 6020A	10/07/14		04/15/14	15:16	04/21/14 13:04
EPA 7470A	05/08/14		04/16/14	10:45	04/17/14 15:04
EPA 8015C	04/17/14	05/27/14	04/17/14	09:58	04/18/14 05:55
EPA 8015C	04/24/14		04/16/14	08:40	04/16/14 18:26
EPA 8082A	04/10/15	06/03/14	04/24/14	16:30	04/30/14 00:11
EPA 8260B	04/24/14		04/21/14	13:35	04/22/14 01:31

Client ID: GP14-3 **Lab ID: C404753-05RE1** **Sampled: 04/10/14 13:55** **Received: 04/11/14 09:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8270D	04/17/14	05/27/14	04/17/14	15:45	04/24/14 16:52

Client ID: GP14-1 **Lab ID: C404753-06** **Sampled: 04/10/14 12:10** **Received: 04/11/14 09:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	04/11/14 12:10		04/11/14	10:55	04/11/14 11:17
EPA 6020A	10/07/14		04/15/14	15:16	04/21/14 13:17
EPA 7470A	05/08/14		04/16/14	10:45	04/17/14 15:07
EPA 8015C	04/17/14	05/27/14	04/17/14	09:58	04/18/14 06:54
EPA 8015C	04/24/14		04/16/14	08:40	04/16/14 18:57
EPA 8082A	04/10/15	06/03/14	04/24/14	16:30	04/30/14 00:24
EPA 8260B	04/24/14		04/21/14	13:35	04/22/14 02:00

Client ID: GP14-1 **Lab ID: C404753-06RE1** **Sampled: 04/10/14 12:10** **Received: 04/11/14 09:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/07/14		04/15/14	15:12	04/22/14 15:43
EPA 8270D	04/17/14	05/27/14	04/17/14	15:45	04/24/14 17:22

Client ID: Trip Blank **Lab ID: C404753-10** **Sampled: 04/10/14 09:25** **Received: 04/11/14 09:30**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	04/24/14		04/21/14	13:35	04/22/14 03:29

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SAMPLE DETECTION SUMMARY

Client ID: GP14-3 **Lab ID: C404753-01**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
DRO (C10-C28)	320		2.1	4.0	mg/kg dry	EPA 8015C	
Mercury - Total	0.143		0.00762	0.0265	mg/kg dry	EPA 7471B	

Client ID: GP14-3 **Lab ID: C404753-01RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	5410	D	5.10	24.3	mg/kg dry	EPA 6010C	R-01
Antimony - Total	13.9	D	0.267	2.43	mg/kg dry	EPA 6010C	R-01
Arsenic - Total	3.62	D	0.243	1.22	mg/kg dry	EPA 6010C	R-01
Barium - Total	103	D	0.243	1.22	mg/kg dry	EPA 6010C	R-01
Benzo(a)anthracene	0.34	JD	0.32	0.80	mg/kg dry	EPA 8270D	R-01
Benzo(a)pyrene	0.33	JD	0.19	0.80	mg/kg dry	EPA 8270D	R-01
Benzo(b)fluoranthene	0.52	JD	0.27	0.80	mg/kg dry	EPA 8270D	R-01
Beryllium - Total	0.227	D	0.0292	0.122	mg/kg dry	EPA 6010C	R-01
Bis(2-ethylhexyl)phthalate	5.1	D	0.32	0.80	mg/kg dry	EPA 8270D	R-01
Cadmium - Total	1.95	D	0.0233	0.122	mg/kg dry	EPA 6010C	R-01
Calcium - Total	5560	BD	13.6	60.8	mg/kg dry	EPA 6010C	QB-01, R-01
Chromium - Total	22.0	D	0.243	1.22	mg/kg dry	EPA 6010C	R-01
Chrysene	0.36	JD	0.32	0.80	mg/kg dry	EPA 8270D	R-01
Cobalt - Total	4.21	D	0.243	1.22	mg/kg dry	EPA 6010C	R-01
Copper - Total	92.3	D	0.462	1.22	mg/kg dry	EPA 6010C	R-01
Fluoranthene	0.53	JD	0.27	0.80	mg/kg dry	EPA 8270D	R-01
Iron - Total	14100	BD	1.17	6.08	mg/kg dry	EPA 6010C	QB-01
Lead - Total	303	D	0.292	1.22	mg/kg dry	EPA 6010C	R-01
Magnesium - Total	1220	BD	1.58	60.8	mg/kg dry	EPA 6010C	QB-01, R-01
Manganese - Total	122	D	0.243	1.22	mg/kg dry	EPA 6010C	R-01
Nickel - Total	23.1	D	0.875	6.08	mg/kg dry	EPA 6010C	R-01
Potassium - Total	428	D	9.72	60.8	mg/kg dry	EPA 6010C	R-01
Pyrene	0.45	JD	0.27	0.80	mg/kg dry	EPA 8270D	R-01
Sodium - Total	98.5	D	14.6	60.8	mg/kg dry	EPA 6010C	R-01
Vanadium - Total	14.5	D	0.243	1.22	mg/kg dry	EPA 6010C	R-01
Zinc - Total	431	D	2.67	6.08	mg/kg dry	EPA 6010C	R-01

Client ID: GP14-1 **Lab ID: C404753-02**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
2-Butanone	0.030		0.0012	0.0034	mg/kg dry	EPA 8260B	
Acetone	0.096		0.0011	0.0034	mg/kg dry	EPA 8260B	
Carbon disulfide	0.0017	J	0.0014	0.0034	mg/kg dry	EPA 8260B	
DRO (C10-C28)	380		2.1	4.2	mg/kg dry	EPA 8015C	
Mercury - Total	0.309		0.00869	0.0302	mg/kg dry	EPA 7471B	
Methyl cyclohexane	0.0006	J	0.0003	0.0013	mg/kg dry	EPA 8260B	

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SAMPLE DETECTION SUMMARY

Client ID: GP14-1 **Lab ID: C404753-02RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acenaphthene	0.46	JD	0.33	0.83	mg/kg dry	EPA 8270D	R-01
Aluminum - Total	11300	D	5.29	25.2	mg/kg dry	EPA 6010C	R-01
Antimony - Total	3.06	D	0.277	2.52	mg/kg dry	EPA 6010C	R-01
Arsenic - Total	5.53	D	0.252	1.26	mg/kg dry	EPA 6010C	R-01
Barium - Total	104	D	0.252	1.26	mg/kg dry	EPA 6010C	R-01
Benzo(a)pyrene	0.20	JD	0.20	0.83	mg/kg dry	EPA 8270D	R-01
Benzo(b)fluoranthene	0.33	JD	0.28	0.83	mg/kg dry	EPA 8270D	R-01
Beryllium - Total	0.400	D	0.0302	0.126	mg/kg dry	EPA 6010C	R-01
Bis(2-ethylhexyl)phthalate	0.80	JD	0.33	0.83	mg/kg dry	EPA 8270D	R-01
Cadmium - Total	2.64	D	0.0242	0.126	mg/kg dry	EPA 6010C	R-01
Calcium - Total	11500	BD	14.1	63.0	mg/kg dry	EPA 6010C	QB-01, R-01
Chromium - Total	24.6	D	0.252	1.26	mg/kg dry	EPA 6010C	R-01
Cobalt - Total	3.59	D	0.252	1.26	mg/kg dry	EPA 6010C	R-01
Copper - Total	42.8	D	0.479	1.26	mg/kg dry	EPA 6010C	R-01
Fluoranthene	0.33	JD	0.28	0.83	mg/kg dry	EPA 8270D	R-01
Iron - Total	19300	BD	1.21	6.30	mg/kg dry	EPA 6010C	QB-01
Lead - Total	327	D	0.302	1.26	mg/kg dry	EPA 6010C	R-01
Magnesium - Total	891	BD	1.64	63.0	mg/kg dry	EPA 6010C	R-01, QB-01
Manganese - Total	117	D	0.252	1.26	mg/kg dry	EPA 6010C	R-01
Nickel - Total	17.8	D	0.907	6.30	mg/kg dry	EPA 6010C	R-01
Potassium - Total	337	D	10.1	63.0	mg/kg dry	EPA 6010C	R-01
Pyrene	0.28	JD	0.28	0.83	mg/kg dry	EPA 8270D	R-01
Sodium - Total	126	D	15.1	63.0	mg/kg dry	EPA 6010C	R-01
Vanadium - Total	14.4	D	0.252	1.26	mg/kg dry	EPA 6010C	R-01
Zinc - Total	371	D	2.77	6.30	mg/kg dry	EPA 6010C	R-01

Client ID: GP14-3 **Lab ID: C404753-05**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	13		1.2	5.0	ug/L	EPA 8260B	
Aluminum - Total	5500		29.0	100	ug/L	EPA 6010C	
Barium - Total	29.9		1.00	10.0	ug/L	EPA 6010C	
Benzene	0.45	J	0.15	1.0	ug/L	EPA 8260B	
Beryllium - Total	2.04		0.100	1.00	ug/L	EPA 6010C	
Calcium - Total	31700		39.0	100	ug/L	EPA 6010C	
Chromium - Total	2.38	J	1.40	10.0	ug/L	EPA 6010C	
Cobalt - Total	7.32	JD	1.00	10.0	ug/L	EPA 6020A	R-01
DRO (C10-C28)	0.84		0.060	0.10	mg/L	EPA 8015C	
Ethylbenzene	0.61	J	0.13	1.0	ug/L	EPA 8260B	
GRO (C6-C10)	0.107		0.011	0.055	mg/L	EPA 8015C	
Iron - Total	75800		22.0	50.0	ug/L	EPA 6010C	
Lead - Total	9.23	J	2.10	10.0	ug/L	EPA 6010C	
m,p-Xylenes	5.9		0.17	2.0	ug/L	EPA 8260B	
Magnesium - Total	6980		23.0	100	ug/L	EPA 6010C	
Manganese - Total	178		1.10	10.0	ug/L	EPA 6010C	
Methyl-tert-Butyl Ether	70		0.16	1.0	ug/L	EPA 8260B	
Nickel - Total	4.46	J	1.80	10.0	ug/L	EPA 6010C	
Potassium - Total	1130		150	500	ug/L	EPA 6010C	
Sodium - Total	14600		400	500	ug/L	EPA 6010C	
Vanadium - Total	5.91	J	1.40	10.0	ug/L	EPA 6010C	
Xylenes (Total)	5.9		0.45	3.0	ug/L	EPA 8260B	
Zinc - Total	95.6		3.80	10.0	ug/L	EPA 6010C	

Client ID: GP14-1 **Lab ID: C404753-06**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	38		1.2	5.0	ug/L	EPA 8260B	
Cobalt - Total	71.4	D	1.00	10.0	ug/L	EPA 6020A	R-01
DRO (C10-C28)	0.52		0.060	0.10	mg/L	EPA 8015C	
Hexavalent Chromium	0.022		0.0088	0.010	mg/L	EPA 7196A	
Mercury - Total	1.75		0.170	0.200	ug/L	EPA 7470A	
Methyl-tert-Butyl Ether	1.2		0.16	1.0	ug/L	EPA 8260B	

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SAMPLE DETECTION SUMMARY

Client ID: GP14-1 **Lab ID:** C404753-06RE1

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acenaphthene	4.3	J	1.4	10	ug/L	EPA 8270D	
Aluminum - Total	129000	D	58.0	200	ug/L	EPA 6010C	R-01
Arsenic - Total	52.8	D	10.8	20.0	ug/L	EPA 6010C	R-01
Barium - Total	1730	D	2.00	20.0	ug/L	EPA 6010C	R-01
Beryllium - Total	16.0	D	0.200	2.00	ug/L	EPA 6010C	R-01
Cadmium - Total	24.4	D	0.720	2.00	ug/L	EPA 6010C	R-01
Calcium - Total	328000	D	78.0	200	ug/L	EPA 6010C	R-01
Chromium - Total	294	D	2.80	20.0	ug/L	EPA 6010C	R-01
Copper - Total	637	D	3.20	20.0	ug/L	EPA 6010C	R-01
Iron - Total	275000	D	44.0	100	ug/L	EPA 6010C	
Lead - Total	3940	D	4.20	20.0	ug/L	EPA 6010C	R-01
Magnesium - Total	50800	D	46.0	200	ug/L	EPA 6010C	R-01
Manganese - Total	2990	D	2.20	20.0	ug/L	EPA 6010C	R-01
Nickel - Total	259	D	3.60	20.0	ug/L	EPA 6010C	R-01
Potassium - Total	14800	D	300	1000	ug/L	EPA 6010C	R-01
Sodium - Total	45600	D	800	1000	ug/L	EPA 6010C	R-01
Vanadium - Total	245	D	2.80	20.0	ug/L	EPA 6010C	R-01
Zinc - Total	6420	D	7.60	20.0	ug/L	EPA 6010C	R-01

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ANALYTICAL RESULTS

Description:	GP14-3	**Lab Sample ID:**	C404753-01	**Received:**	04/11/14 09:30
Matrix:	Soil	**Sampled:**	04/10/14 13:35	**Work Order:**	C404753
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian	**% Solids:**	82.30

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	1.7	U	mg/kg dry	1	1.7	6.7	4D15004	EPA 8015C	04/15/14 22:48	REF	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*12*	*1*	*11.6*	*100 %*	*59-168*	*4D15004*	*EPA 8015C*	*04/15/14 22:48*	*REF*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**320**		mg/kg dry	1	2.1	4.0	4D21008	EPA 8015C	04/22/14 19:53	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*1.7*	*1*	*2.03*	*82 %*	*51-138*	*4D21008*	*EPA 8015C*	*04/22/14 19:53*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**5410**	D	mg/kg dry	2	5.10	24.3	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Antimony [7440-36-0]	**13.9**	D	mg/kg dry	2	0.267	2.43	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Arsenic [7440-38-2]^	**3.62**	D	mg/kg dry	2	0.243	1.22	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Barium [7440-39-3]^	**103**	D	mg/kg dry	2	0.243	1.22	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Beryllium [7440-41-7]	**0.227**	D	mg/kg dry	2	0.0292	0.122	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Cadmium [7440-43-9]^	**1.95**	D	mg/kg dry	2	0.0233	0.122	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Calcium [7440-70-2]	**5560**	BD	mg/kg dry	2	13.6	60.8	4D21024	EPA 6010C	04/23/14 13:58	JDH	QB-01, R-01
Chromium [7440-47-3]^	**22.0**	D	mg/kg dry	2	0.243	1.22	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Cobalt [7440-48-4]	**4.21**	D	mg/kg dry	2	0.243	1.22	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Copper [7440-50-8]	**92.3**	D	mg/kg dry	2	0.462	1.22	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Iron [7439-89-6]	**14100**	BD	mg/kg dry	2	1.17	6.08	4D21024	EPA 6010C	04/23/14 13:58	JDH	QB-01
Lead [7439-92-1]^	**303**	D	mg/kg dry	2	0.292	1.22	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Magnesium [7439-95-4]	**1220**	BD	mg/kg dry	2	1.58	60.8	4D21024	EPA 6010C	04/23/14 13:58	JDH	QB-01, R-01
Manganese [7439-96-5]	**122**	D	mg/kg dry	2	0.243	1.22	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Mercury [7439-97-6]^	**0.143**		mg/kg dry	1	0.00762	0.0265	4D24020	EPA 7471B	04/24/14 22:28	T1D	
Nickel [7440-02-0]	**23.1**	D	mg/kg dry	2	0.875	6.08	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Potassium [7440-09-7]	**428**	D	mg/kg dry	2	9.72	60.8	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Selenium [7782-49-2]^	0.243	UD	mg/kg dry	2	0.243	1.22	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Silver [7440-22-4]^	0.243	UD	mg/kg dry	2	0.243	1.22	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Sodium [7440-23-5]	**98.5**	D	mg/kg dry	2	14.6	60.8	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Thallium [7440-28-0]	0.243	UD	mg/kg dry	2	0.243	1.22	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Vanadium [7440-62-2]^	**14.5**	D	mg/kg dry	2	0.243	1.22	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01
Zinc [7440-66-6]^	**431**	D	mg/kg dry	2	2.67	6.08	4D21024	EPA 6010C	04/23/14 13:58	JDH	R-01

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ANALYTICAL RESULTS

Description: GP14-3	**Lab Sample ID:** C404753-01	**Received:** 04/11/14 09:30
Matrix: Soil	**Sampled:** 04/10/14 13:35	**Work Order:** C404753
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 82.30

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0002	U	mg/kg dry	1	0.0002	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0002	U	mg/kg dry	1	0.0002	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
1,1,2-Trichloroethane [79-00-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
1,1-Dichloroethane [75-34-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
1,1-Dichloroethene [75-35-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
1,2,4-Trichlorobenzene [120-82-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0004	U	mg/kg dry	1	0.0004	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
1,2-Dibromoethane [106-93-4]^	0.0002	U	mg/kg dry	1	0.0002	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
1,2-Dichlorobenzene [95-50-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
1,2-Dichloroethane [107-06-2]^	0.0002	U	mg/kg dry	1	0.0002	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
1,2-Dichloropropane [78-87-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
1,3-Dichlorobenzene [541-73-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
1,4-Dichlorobenzene [106-46-7]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
2-Butanone [78-93-3]^	0.0012	U	mg/kg dry	1	0.0012	0.0032	4D17022	EPA 8260B	04/18/14 08:22	kat	
2-Hexanone [591-78-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0032	4D17022	EPA 8260B	04/18/14 08:22	kat	
4-Methyl-2-pentanone [108-10-1]^	0.0009	U	mg/kg dry	1	0.0009	0.0032	4D17022	EPA 8260B	04/18/14 08:22	kat	
Acetone [67-64-1]^	0.0011	U	mg/kg dry	1	0.0011	0.0032	4D17022	EPA 8260B	04/18/14 08:22	kat	
Benzene [71-43-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Bromochloromethane [74-97-5]^	0.0002	U	mg/kg dry	1	0.0002	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Bromodichloromethane [75-27-4]^	0.0002	U	mg/kg dry	1	0.0002	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Bromoform [75-25-2]^	0.0002	U	mg/kg dry	1	0.0002	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Bromomethane [74-83-9]^	0.0006	U	mg/kg dry	1	0.0006	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Carbon disulfide [75-15-0]^	0.0014	U	mg/kg dry	1	0.0014	0.0032	4D17022	EPA 8260B	04/18/14 08:22	kat	
Carbon Tetrachloride [56-23-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Chlorobenzene [108-90-7]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Chloroethane [75-00-3]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Chloroform [67-66-3]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Chloromethane [74-87-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
cis-1,2-Dichloroethene [156-59-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
cis-1,3-Dichloropropene [10061-01-5]^	0.0002	U	mg/kg dry	1	0.0002	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Cyclohexane [110-82-7]^	0.0003	U	mg/kg dry	1	0.0003	0.0013	4D17022	EPA 8260B	04/18/14 08:22	kat	
Dibromochloromethane [124-48-1]^	0.0002	U	mg/kg dry	1	0.0002	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Dichlorodifluoromethane [75-71-8]^	0.0004	U	mg/kg dry	1	0.0004	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Ethylbenzene [100-41-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Freon 113 [76-13-1]^	0.0004	U	mg/kg dry	1	0.0004	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Isopropylbenzene [98-82-8]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Methyl acetate [79-20-9]^	0.0010	U	mg/kg dry	1	0.0010	0.0013	4D17022	EPA 8260B	04/18/14 08:22	kat	
Methyl cyclohexane [108-87-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0013	4D17022	EPA 8260B	04/18/14 08:22	kat	
Methylene Chloride [75-09-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D17022	EPA 8260B	04/18/14 08:22	kat	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0002	U	mg/kg dry	1	0.0002	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Styrene [100-42-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Tetrachloroethene [127-18-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Toluene [108-88-3]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
trans-1,2-Dichloroethene [156-60-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
trans-1,3-Dichloropropene [10061-02-6]^	0.0002	U	mg/kg dry	1	0.0002	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Trichloroethene [79-01-6]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Trichlorofluoromethane [75-69-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	
Vinyl chloride [75-01-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0006	4D17022	EPA 8260B	04/18/14 08:22	kat	

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ANALYTICAL RESULTS

Description: GP14-3	**Lab Sample ID:** C404753-01	**Received:** 04/11/14 09:30
Matrix: Soil	**Sampled:** 04/10/14 13:35	**Work Order:** C404753
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 82.30

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D17022	EPA 8260B	04/18/14 08:22	kat	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.031*	*1*	*0.0322*	*96 %*	*71-126*	*4D17022*	*EPA 8260B*	*04/18/14 08:22*	*kat*	
Dibromofluoromethane	*0.030*	*1*	*0.0322*	*94 %*	*72-133*	*4D17022*	*EPA 8260B*	*04/18/14 08:22*	*kat*	
Toluene-d8	*0.028*	*1*	*0.0322*	*87 %*	*80-123*	*4D17022*	*EPA 8260B*	*04/18/14 08:22*	*kat*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.18	UD	mg/kg dry	2	0.18	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2,4,5-Trichlorophenol [95-95-4]^	0.16	UD	mg/kg dry	2	0.16	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2,4,6-Trichlorophenol [88-06-2]^	0.36	UD	mg/kg dry	2	0.36	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2,4-Dichlorophenol [120-83-2]^	0.61	UD	mg/kg dry	2	0.61	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2,4-Dimethylphenol [105-67-9]^	0.56	UD	mg/kg dry	2	0.56	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2,4-Dinitrophenol [51-28-5]^	0.22	UD	mg/kg dry	2	0.22	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2,4-Dinitrotoluene [121-14-2]^	0.39	UD	mg/kg dry	2	0.39	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2,6-Dinitrotoluene [606-20-2]^	0.44	UD	mg/kg dry	2	0.44	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2-Chloronaphthalene [91-58-7]^	0.24	UD	mg/kg dry	2	0.24	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2-Chlorophenol [95-57-8]^	0.56	UD	mg/kg dry	2	0.56	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.68	UD	mg/kg dry	2	0.68	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2-Methylnaphthalene [91-57-6]^	0.29	UD	mg/kg dry	2	0.29	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2-Methylphenol [95-48-7]^	0.27	UD	mg/kg dry	2	0.27	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2-Nitroaniline [88-74-4]^	0.21	UD	mg/kg dry	2	0.21	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
2-Nitrophenol [88-75-5]^	0.63	UD	mg/kg dry	2	0.63	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.61	UD	mg/kg dry	2	0.61	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
3,3'-Dichlorobenzidine [91-94-1]^	0.51	UD	mg/kg dry	2	0.51	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	QL-02, R-01
3-Nitroaniline [99-09-2]^	0.19	UD	mg/kg dry	2	0.19	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
4-Bromophenyl-phenylether [101-55-3]^	0.32	UD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
4-Chloro-3-methylphenol [59-50-7]^	0.68	UD	mg/kg dry	2	0.68	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
4-Chloroaniline [106-47-8]^	0.16	UD	mg/kg dry	2	0.16	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
4-Chlorophenyl-phenylether [7005-72-3]^	0.32	UD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
4-Nitroaniline [100-01-6]^	0.63	UD	mg/kg dry	2	0.63	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
4-Nitrophenol [100-02-7]^	0.32	UD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	J-05, R-01
Acenaphthene [83-32-9]^	0.32	UD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Acenaphthylene [208-96-8]^	0.29	UD	mg/kg dry	2	0.29	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Acetophenone [98-86-2]^	0.34	UD	mg/kg dry	2	0.34	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Anthracene [120-12-7]^	0.36	UD	mg/kg dry	2	0.36	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Atrazine [1912-24-9]^	0.18	UD	mg/kg dry	2	0.18	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Benzaldehyde [100-52-7]^	0.66	UD	mg/kg dry	2	0.66	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Benzo(a)anthracene [56-55-3]^	**0.34**	JD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Benzo(a)pyrene [50-32-8]^	**0.33**	JD	mg/kg dry	2	0.19	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Benzo(b)fluoranthene [205-99-2]^	**0.52**	JD	mg/kg dry	2	0.27	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Benzo(g,h,i)perylene [191-24-2]^	0.39	UD	mg/kg dry	2	0.39	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	QV-01, R-01
Benzo(k)fluoranthene [207-08-9]^	0.27	UD	mg/kg dry	2	0.27	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Bis(2-chloroethoxy)methane [111-91-1]^	0.36	UD	mg/kg dry	2	0.36	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	QL-02, R-01

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ANALYTICAL RESULTS

Description: GP14-3	**Lab Sample ID:** C404753-01	**Received:** 04/11/14 09:30
Matrix: Soil	**Sampled:** 04/10/14 13:35	**Work Order:** C404753
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 82.30

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethyl)ether [111-44-4]^	0.34	UD	mg/kg dry	2	0.34	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Bis(2-chloroisopropyl)ether [108-60-1]^	0.24	UD	mg/kg dry	2	0.24	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Bis(2-ethylhexyl)phthalate [117-81-7]^	**5.1**	D	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Butylbenzylphthalate [85-68-7]^	0.34	UD	mg/kg dry	2	0.34	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Caprolactam [105-60-2]^	0.73	UD	mg/kg dry	2	0.73	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	QV-01, R-01
Carbazole [86-74-8]^	0.29	UD	mg/kg dry	2	0.29	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Chrysene [218-01-9]^	**0.36**	JD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Dibenzo(a,h)anthracene [53-70-3]^	0.34	UD	mg/kg dry	2	0.34	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Dibenzofuran [132-64-9]^	0.32	UD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Diethylphthalate [84-66-2]^	0.32	UD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Dimethylphthalate [131-11-3]^	0.32	UD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Di-n-butylphthalate [84-74-2]^	0.32	UD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Di-n-octylphthalate [117-84-0]^	0.32	UD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Fluoranthene [206-44-0]^	**0.53**	JD	mg/kg dry	2	0.27	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Fluorene [86-73-7]	0.34	UD	mg/kg dry	2	0.34	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Hexachlorobenzene [118-74-1]^	0.29	UD	mg/kg dry	2	0.29	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Hexachlorobutadiene [87-68-3]^	0.32	UD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Hexachlorocyclopentadiene [77-47-4]^	0.36	UD	mg/kg dry	2	0.36	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Hexachloroethane [67-72-1]^	0.24	UD	mg/kg dry	2	0.24	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.34	UD	mg/kg dry	2	0.34	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Isophorone [78-59-1]^	0.41	UD	mg/kg dry	2	0.41	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Naphthalene [91-20-3]^	0.29	UD	mg/kg dry	2	0.29	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Nitrobenzene [98-95-3]^	0.36	UD	mg/kg dry	2	0.36	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
N-Nitroso-di-n-propylamine [621-64-7]^	0.36	UD	mg/kg dry	2	0.36	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.56	UD	mg/kg dry	2	0.56	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Pentachlorophenol [87-86-5]^	0.51	UD	mg/kg dry	2	0.51	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	QL-02, R-01
Phenanthrene [85-01-8]^	0.32	UD	mg/kg dry	2	0.32	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Phenol [108-95-2]^	0.24	UD	mg/kg dry	2	0.24	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01
Pyrene [129-00-0]^	**0.45**	JD	mg/kg dry	2	0.27	0.80	4D18034	EPA 8270D	04/28/14 13:32	jfi	R-01

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.9*	*2*	*2.03*	*93 %*	*23-137*	*4D18034*	*EPA 8270D*	*04/28/14 13:32*	*jfi*	*R-01*
2-Fluorobiphenyl	*1.7*	*2*	*2.03*	*84 %*	*29-119*	*4D18034*	*EPA 8270D*	*04/28/14 13:32*	*jfi*	*R-01*
2-Fluorophenol	*1.7*	*2*	*2.03*	*84 %*	*20-124*	*4D18034*	*EPA 8270D*	*04/28/14 13:32*	*jfi*	*R-01*
Nitrobenzene-d5	*1.4*	*2*	*2.03*	*69 %*	*17-126*	*4D18034*	*EPA 8270D*	*04/28/14 13:32*	*jfi*	*R-01*
Phenol-d5	*1.8*	*2*	*2.03*	*87 %*	*15-131*	*4D18034*	*EPA 8270D*	*04/28/14 13:32*	*jfi*	*R-01*
Terphenyl-d14	*1.9*	*2*	*2.03*	*93 %*	*60-120*	*4D18034*	*EPA 8270D*	*04/28/14 13:32*	*jfi*	*R-01*

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.93	U	mg/kg dry	1	0.93	6.2	4D21022	EPA 7196A	04/22/14 15:05	RMM	R-01

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ANALYTICAL RESULTS

Description:	GP14-1	**Lab Sample ID:**	C404753-02	**Received:**	04/11/14 09:30
Matrix:	Soil	**Sampled:**	04/10/14 11:45	**Work Order:**	C404753
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian	**% Solids:**	79.40

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	1.3	U	mg/kg dry	1	1.3	5.2	4D15004	EPA 8015C	04/15/14 23:19	REF	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*7.9*	*1*	*9.37*	*84 %*	*59-168*	*4D15004*	*EPA 8015C*	*04/15/14 23:19*	*REF*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**380**		mg/kg dry	1	2.1	4.2	4D21008	EPA 8015C	04/22/14 20:52	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*1.9*	*1*	*2.10*	*92 %*	*51-138*	*4D21008*	*EPA 8015C*	*04/22/14 20:52*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**11300**	D	mg/kg dry	2	5.29	25.2	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Antimony [7440-36-0]	**3.06**	D	mg/kg dry	2	0.277	2.52	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Arsenic [7440-38-2]^	**5.53**	D	mg/kg dry	2	0.252	1.26	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Barium [7440-39-3]^	**104**	D	mg/kg dry	2	0.252	1.26	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Beryllium [7440-41-7]	**0.400**	D	mg/kg dry	2	0.0302	0.126	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Cadmium [7440-43-9]^	**2.64**	D	mg/kg dry	2	0.0242	0.126	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Calcium [7440-70-2]	**11500**	BD	mg/kg dry	2	14.1	63.0	4D21024	EPA 6010C	04/23/14 14:00	JDH	QB-01, R-01
Chromium [7440-47-3]^	**24.6**	D	mg/kg dry	2	0.252	1.26	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Cobalt [7440-48-4]	**3.59**	D	mg/kg dry	2	0.252	1.26	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Copper [7440-50-8]	**42.8**	D	mg/kg dry	2	0.479	1.26	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Iron [7439-89-6]	**19300**	BD	mg/kg dry	2	1.21	6.30	4D21024	EPA 6010C	04/23/14 14:00	JDH	QB-01
Lead [7439-92-1]^	**327**	D	mg/kg dry	2	0.302	1.26	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Magnesium [7439-95-4]	**891**	BD	mg/kg dry	2	1.64	63.0	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01, QB-01
Manganese [7439-96-5]	**117**	D	mg/kg dry	2	0.252	1.26	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Mercury [7439-97-6]^	**0.309**		mg/kg dry	1	0.00869	0.0302	4D24020	EPA 7471B	04/24/14 22:31	T1D	
Nickel [7440-02-0]	**17.8**	D	mg/kg dry	2	0.907	6.30	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Potassium [7440-09-7]	**337**	D	mg/kg dry	2	10.1	63.0	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Selenium [7782-49-2]^	0.252	UD	mg/kg dry	2	0.252	1.26	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Silver [7440-22-4]^	0.252	UD	mg/kg dry	2	0.252	1.26	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Sodium [7440-23-5]	**126**	D	mg/kg dry	2	15.1	63.0	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Thallium [7440-28-0]	0.252	UD	mg/kg dry	2	0.252	1.26	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Vanadium [7440-62-2]^	**14.4**	D	mg/kg dry	2	0.252	1.26	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01
Zinc [7440-66-6]^	**371**	D	mg/kg dry	2	2.77	6.30	4D21024	EPA 6010C	04/23/14 14:00	JDH	R-01

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ANALYTICAL RESULTS

Description: GP14-1	**Lab Sample ID:** C404753-02	**Received:** 04/11/14 09:30
Matrix: Soil	**Sampled:** 04/10/14 11:45	**Work Order:** C404753
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 79.40

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0002	U	mg/kg dry	1	0.0002	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0002	U	mg/kg dry	1	0.0002	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
1,1,2-Trichloroethane [79-00-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
1,1-Dichloroethane [75-34-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
1,1-Dichloroethene [75-35-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
1,2,4-Trichlorobenzene [120-82-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
1,2-Dibromoethane [106-93-4]^	0.0002	U	mg/kg dry	1	0.0002	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
1,2-Dichlorobenzene [95-50-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
1,2-Dichloroethane [107-06-2]^	0.0002	U	mg/kg dry	1	0.0002	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
1,2-Dichloropropane [78-87-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
1,3-Dichlorobenzene [541-73-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
1,4-Dichlorobenzene [106-46-7]^	0.0003	U	mg/kg dry	1	0.0003	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
2-Butanone [78-93-3]^	**0.030**		mg/kg dry	1	0.0012	0.0034	4D17022	EPA 8260B	04/18/14 08:56	kat	
2-Hexanone [591-78-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0034	4D17022	EPA 8260B	04/18/14 08:56	kat	
4-Methyl-2-pentanone [108-10-1]^	0.0009	U	mg/kg dry	1	0.0009	0.0034	4D17022	EPA 8260B	04/18/14 08:56	kat	
Acetone [67-64-1]^	**0.096**		mg/kg dry	1	0.0011	0.0034	4D17022	EPA 8260B	04/18/14 08:56	kat	
Benzene [71-43-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Bromochloromethane [74-97-5]^	0.0002	U	mg/kg dry	1	0.0002	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Bromodichloromethane [75-27-4]^	0.0002	U	mg/kg dry	1	0.0002	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Bromoform [75-25-2]^	0.0002	U	mg/kg dry	1	0.0002	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Bromomethane [74-83-9]^	0.0006	U	mg/kg dry	1	0.0006	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Carbon disulfide [75-15-0]^	**0.0017**	J	mg/kg dry	1	0.0014	0.0034	4D17022	EPA 8260B	04/18/14 08:56	kat	
Carbon Tetrachloride [56-23-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Chlorobenzene [108-90-7]^	0.0003	U	mg/kg dry	1	0.0003	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Chloroethane [75-00-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Chloroform [67-66-3]^	0.0003	U	mg/kg dry	1	0.0003	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Chloromethane [74-87-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
cis-1,2-Dichloroethene [156-59-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
cis-1,3-Dichloropropene [10061-01-5]^	0.0002	U	mg/kg dry	1	0.0002	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Cyclohexane [110-82-7]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D17022	EPA 8260B	04/18/14 08:56	kat	
Dibromochloromethane [124-48-1]^	0.0002	U	mg/kg dry	1	0.0002	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Dichlorodifluoromethane [75-71-8]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Ethylbenzene [100-41-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Freon 113 [76-13-1]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Isopropylbenzene [98-82-8]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Methyl acetate [79-20-9]^	0.0011	U	mg/kg dry	1	0.0011	0.0013	4D17022	EPA 8260B	04/18/14 08:56	kat	
Methyl cyclohexane [108-87-2]^	**0.0006**	J	mg/kg dry	1	0.0003	0.0013	4D17022	EPA 8260B	04/18/14 08:56	kat	
Methylene Chloride [75-09-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4D17022	EPA 8260B	04/18/14 08:56	kat	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0002	U	mg/kg dry	1	0.0002	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Styrene [100-42-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Tetrachloroethene [127-18-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Toluene [108-88-3]^	0.0003	U	mg/kg dry	1	0.0003	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
trans-1,2-Dichloroethene [156-60-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
trans-1,3-Dichloropropene [10061-02-6]^	0.0002	U	mg/kg dry	1	0.0002	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Trichloroethene [79-01-6]^	0.0003	U	mg/kg dry	1	0.0003	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Trichlorofluoromethane [75-69-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	
Vinyl chloride [75-01-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0007	4D17022	EPA 8260B	04/18/14 08:56	kat	

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ANALYTICAL RESULTS

Description:	GP14-1	**Lab Sample ID:**	C404753-02	**Received:**	04/11/14 09:30
Matrix:	Soil	**Sampled:**	04/10/14 11:45	**Work Order:**	C404753
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian	**% Solids:**	79.40

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D17022	EPA 8260B	04/18/14 08:56	kat	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.032*	*1*	*0.0336*	*97 %*	*71-126*	*4D17022*	*EPA 8260B*	*04/18/14 08:56*	*kat*	
Dibromofluoromethane	*0.032*	*1*	*0.0336*	*95 %*	*72-133*	*4D17022*	*EPA 8260B*	*04/18/14 08:56*	*kat*	
Toluene-d8	*0.029*	*1*	*0.0336*	*87 %*	*80-123*	*4D17022*	*EPA 8260B*	*04/18/14 08:56*	*kat*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.18	UD	mg/kg dry	2	0.18	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2,4,5-Trichlorophenol [95-95-4]^	0.17	UD	mg/kg dry	2	0.17	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2,4,6-Trichlorophenol [88-06-2]^	0.38	UD	mg/kg dry	2	0.38	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2,4-Dichlorophenol [120-83-2]^	0.63	UD	mg/kg dry	2	0.63	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2,4-Dimethylphenol [105-67-9]^	0.58	UD	mg/kg dry	2	0.58	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2,4-Dinitrophenol [51-28-5]^	0.22	UD	mg/kg dry	2	0.22	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2,4-Dinitrotoluene [121-14-2]^	0.40	UD	mg/kg dry	2	0.40	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2,6-Dinitrotoluene [606-20-2]^	0.45	UD	mg/kg dry	2	0.45	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2-Chloronaphthalene [91-58-7]^	0.25	UD	mg/kg dry	2	0.25	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2-Chlorophenol [95-57-8]^	0.58	UD	mg/kg dry	2	0.58	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.71	UD	mg/kg dry	2	0.71	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2-Methylnaphthalene [91-57-6]^	0.30	UD	mg/kg dry	2	0.30	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2-Methylphenol [95-48-7]^	0.28	UD	mg/kg dry	2	0.28	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2-Nitroaniline [88-74-4]^	0.21	UD	mg/kg dry	2	0.21	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
2-Nitrophenol [88-75-5]^	0.65	UD	mg/kg dry	2	0.65	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.63	UD	mg/kg dry	2	0.63	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
3,3'-Dichlorobenzidine [91-94-1]^	0.53	UD	mg/kg dry	2	0.53	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	QL-02, R-01
3-Nitroaniline [99-09-2]^	0.20	UD	mg/kg dry	2	0.20	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
4-Bromophenyl-phenylether [101-55-3]^	0.33	UD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
4-Chloro-3-methylphenol [59-50-7]^	0.71	UD	mg/kg dry	2	0.71	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
4-Chloroaniline [106-47-8]^	0.16	UD	mg/kg dry	2	0.16	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
4-Chlorophenyl-phenylether [7005-72-3]^	0.33	UD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
4-Nitroaniline [100-01-6]^	0.65	UD	mg/kg dry	2	0.65	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
4-Nitrophenol [100-02-7]^	0.33	UD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	J-05, R-01
Acenaphthene [83-32-9]^	**0.46**	JD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Acenaphthylene [208-96-8]^	0.30	UD	mg/kg dry	2	0.30	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Acetophenone [98-86-2]^	0.35	UD	mg/kg dry	2	0.35	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Anthracene [120-12-7]^	0.38	UD	mg/kg dry	2	0.38	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Atrazine [1912-24-9]^	0.19	UD	mg/kg dry	2	0.19	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Benzaldehyde [100-52-7]^	0.68	UD	mg/kg dry	2	0.68	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Benzo(a)anthracene [56-55-3]^	0.33	UD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Benzo(a)pyrene [50-32-8]^	**0.20**	JD	mg/kg dry	2	0.20	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Benzo(b)fluoranthene [205-99-2]^	**0.33**	JD	mg/kg dry	2	0.28	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Benzo(g,h,i)perylene [191-24-2]^	0.40	UD	mg/kg dry	2	0.40	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	QV-01, R-01
Benzo(k)fluoranthene [207-08-9]^	0.28	UD	mg/kg dry	2	0.28	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Bis(2-chloroethoxy)methane [111-91-1]^	0.38	UD	mg/kg dry	2	0.38	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	QL-02, R-01

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ANALYTICAL RESULTS

Description: GP14-1	**Lab Sample ID:** C404753-02	**Received:** 04/11/14 09:30
Matrix: Soil	**Sampled:** 04/10/14 11:45	**Work Order:** C404753
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 79.40

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethyl)ether [111-44-4]^	0.35	UD	mg/kg dry	2	0.35	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Bis(2-chloroisopropyl)ether [108-60-1]^	0.25	UD	mg/kg dry	2	0.25	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Bis(2-ethylhexyl)phthalate [117-81-7]^	**0.80**	JD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Butylbenzylphthalate [85-68-7]^	0.35	UD	mg/kg dry	2	0.35	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Caprolactam [105-60-2]^	0.76	UD	mg/kg dry	2	0.76	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	QV-01, R-01
Carbazole [86-74-8]^	0.30	UD	mg/kg dry	2	0.30	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Chrysene [218-01-9]^	0.33	UD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Dibenzo(a,h)anthracene [53-70-3]^	0.35	UD	mg/kg dry	2	0.35	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Dibenzofuran [132-64-9]^	0.33	UD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Diethylphthalate [84-66-2]^	0.33	UD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Dimethylphthalate [131-11-3]^	0.33	UD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Di-n-butylphthalate [84-74-2]^	0.33	UD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Di-n-octylphthalate [117-84-0]^	0.33	UD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Fluoranthene [206-44-0]^	**0.33**	JD	mg/kg dry	2	0.28	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Fluorene [86-73-7]	0.35	UD	mg/kg dry	2	0.35	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Hexachlorobenzene [118-74-1]^	0.30	UD	mg/kg dry	2	0.30	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Hexachlorobutadiene [87-68-3]^	0.33	UD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Hexachlorocyclopentadiene [77-47-4]^	0.38	UD	mg/kg dry	2	0.38	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Hexachloroethane [67-72-1]^	0.25	UD	mg/kg dry	2	0.25	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.35	UD	mg/kg dry	2	0.35	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Isophorone [78-59-1]^	0.43	UD	mg/kg dry	2	0.43	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Naphthalene [91-20-3]^	0.30	UD	mg/kg dry	2	0.30	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Nitrobenzene [98-95-3]^	0.38	UD	mg/kg dry	2	0.38	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
N-Nitroso-di-n-propylamine [621-64-7]^	0.38	UD	mg/kg dry	2	0.38	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.58	UD	mg/kg dry	2	0.58	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Pentachlorophenol [87-86-5]^	0.53	UD	mg/kg dry	2	0.53	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	QL-02, R-01
Phenanthrene [85-01-8]^	0.33	UD	mg/kg dry	2	0.33	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Phenol [108-95-2]^	0.25	UD	mg/kg dry	2	0.25	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01
Pyrene [129-00-0]^	**0.28**	JD	mg/kg dry	2	0.28	0.83	4D18034	EPA 8270D	04/28/14 14:01	jfi	R-01

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*2.2*	*2*	*2.10*	*106 %*	*23-137*	*4D18034*	*EPA 8270D*	*04/28/14 14:01*	*jfi*	*R-01*
2-Fluorobiphenyl	*1.6*	*2*	*2.10*	*76 %*	*29-119*	*4D18034*	*EPA 8270D*	*04/28/14 14:01*	*jfi*	*R-01*
2-Fluorophenol	*1.4*	*2*	*2.10*	*69 %*	*20-124*	*4D18034*	*EPA 8270D*	*04/28/14 14:01*	*jfi*	*R-01*
Nitrobenzene-d5	*1.2*	*2*	*2.10*	*57 %*	*17-126*	*4D18034*	*EPA 8270D*	*04/28/14 14:01*	*jfi*	*R-01*
Phenol-d5	*1.6*	*2*	*2.10*	*77 %*	*15-131*	*4D18034*	*EPA 8270D*	*04/28/14 14:01*	*jfi*	*R-01*
Terphenyl-d14	*2.1*	*2*	*2.10*	*100 %*	*60-120*	*4D18034*	*EPA 8270D*	*04/28/14 14:01*	*jfi*	*R-01*

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.19	U	mg/kg dry	1	0.19	1.3	4D21022	EPA 7196A	04/22/14 15:05	RMM	

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ANALYTICAL RESULTS

Description: GP14-3 | **Lab Sample ID:** C404753-05 | **Received:** 04/11/14 09:30

Matrix: Ground Water | **Sampled:** 04/10/14 13:55 | **Work Order:** C404753

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Acetone [67-64-1]^	**13**		ug/L	1	1.2	5.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Benzene [71-43-2]^	**0.45**	J	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Ethylbenzene [100-41-4]^	**0.61**	J	ug/L	1	0.13	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
m,p-Xylenes [108-38-3/106-42-3]	**5.9**		ug/L	1	0.17	2.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	**70**		ug/L	1	0.16	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	

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ANALYTICAL RESULTS

Description: GP14-3 | **Lab Sample ID:** C404753-05 | **Received:** 04/11/14 09:30

Matrix: Ground Water | **Sampled:** 04/10/14 13:55 | **Work Order:** C404753

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	
Xylenes (Total) [1330-20-7]^	**5.9**		ug/L	1	0.45	3.0	4D21026	EPA 8260B	04/22/14 01:31	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*53*	*1*	*50.0*	*105 %*	*51-122*	*4D21026*	*EPA 8260B*	*04/22/14 01:31*	*MSZ*	
Dibromofluoromethane	*51*	*1*	*50.0*	*103 %*	*68-117*	*4D21026*	*EPA 8260B*	*04/22/14 01:31*	*MSZ*	
Toluene-d8	*52*	*1*	*50.0*	*104 %*	*67-127*	*4D21026*	*EPA 8260B*	*04/22/14 01:31*	*MSZ*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2,4,5-Trichlorophenol [95-95-4]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2,4,6-Trichlorophenol [88-06-2]^	1.1	U	ug/L	1	1.1	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2,4-Dichlorophenol [120-83-2]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2,4-Dimethylphenol [105-67-9]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2,4-Dinitrophenol [51-28-5]^	2.6	U	ug/L	1	2.6	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2,4-Dinitrotoluene [121-14-2]^	2.4	U	ug/L	1	2.4	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2,6-Dinitrotoluene [606-20-2]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2-Chloronaphthalene [91-58-7]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2-Chlorophenol [95-57-8]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]	2.9	U	ug/L	1	2.9	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2-Methylnaphthalene [91-57-6]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2-Methylphenol [95-48-7]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2-Nitroaniline [88-74-4]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
2-Nitrophenol [88-75-5]^	1.1	U	ug/L	1	1.1	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]	1.6	U	ug/L	1	1.6	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
3-Nitroaniline [99-09-2]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
4-Bromophenyl-phenylether [101-55-3]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
4-Chloro-3-methylphenol [59-50-7]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
4-Chloroaniline [106-47-8]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	1.6	U	ug/L	1	1.6	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
4-Nitrophenol [100-02-7]^	2.0	U	ug/L	1	2.0	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Acenaphthene [83-32-9]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Acenaphthylene [208-96-8]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Acetophenone [98-86-2]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Anthracene [120-12-7]^	1.6	U	ug/L	1	1.6	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Atrazine [1912-24-9]	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	QV-01
Benzaldehyde [100-52-7]	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	QV-02
Benzo(a)anthracene [56-55-3]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Benzo(a)pyrene [50-32-8]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Benzo(b)fluoranthene [205-99-2]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Benzo(g,h,i)perylene [191-24-2]^	2.4	U	ug/L	1	2.4	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Benzo(k)fluoranthene [207-08-9]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	

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ANALYTICAL RESULTS

Description: GP14-3 | **Lab Sample ID:** C404753-05 | **Received:** 04/11/14 09:30
Matrix: Ground Water | **Sampled:** 04/10/14 13:55 | **Work Order:** C404753
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethoxy)methane [111-91-1]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	1.7	U	ug/L	1	1.7	5.0	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Butylbenzylphthalate [85-68-7]^	2.0	U	ug/L	1	2.0	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Caprolactam [105-60-2]	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Carbazole [86-74-8]^	2.5	U	ug/L	1	2.5	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Chrysene [218-01-9]^	2.0	U	ug/L	1	2.0	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	2.3	U	ug/L	1	2.3	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Dibenzofuran [132-64-9]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Diethylphthalate [84-66-2]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Dimethylphthalate [131-11-3]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Di-n-butylphthalate [84-74-2]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Di-n-octylphthalate [117-84-0]^	3.1	U	ug/L	1	3.1	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Fluoranthene [206-44-0]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Fluorene [86-73-7]^	1.7	U	ug/L	1	1.7	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Hexachlorobenzene [118-74-1]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Hexachlorobutadiene [87-68-3]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Hexachlorocyclopentadiene [77-47-4]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Hexachloroethane [67-72-1]^	1.1	U	ug/L	1	1.1	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	2.2	U	ug/L	1	2.2	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Isophorone [78-59-1]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Naphthalene [91-20-3]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Nitrobenzene [98-95-3]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Pentachlorophenol [87-86-5]^	1.8	U	ug/L	1	1.8	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Phenanthrene [85-01-8]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Phenol [108-95-2]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	
Pyrene [129-00-0]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 16:52	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*94*	*1*	*100*	*94 %*	*10-179*	*4D16027*	*EPA 8270D*	*04/24/14 16:52*	*DFM*	
2-Fluorobiphenyl	*35*	*1*	*50.0*	*71 %*	*10-149*	*4D16027*	*EPA 8270D*	*04/24/14 16:52*	*DFM*	
2-Fluorophenol	*42*	*1*	*100*	*42 %*	*10-110*	*4D16027*	*EPA 8270D*	*04/24/14 16:52*	*DFM*	
Nitrobenzene-d5	*37*	*1*	*50.0*	*75 %*	*10-149*	*4D16027*	*EPA 8270D*	*04/24/14 16:52*	*DFM*	
Phenol-d5	*34*	*1*	*100*	*34 %*	*10-88*	*4D16027*	*EPA 8270D*	*04/24/14 16:52*	*DFM*	
Terphenyl-d14	*37*	*1*	*50.0*	*74 %*	*10-188*	*4D16027*	*EPA 8270D*	*04/24/14 16:52*	*DFM*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.43	U	ug/L	1	0.43	0.50	4D24031	EPA 8082A	04/30/14 00:11	MWC	
PCB-1221 [11104-28-2]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/30/14 00:11	MWC	
PCB-1232 [11141-16-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/30/14 00:11	MWC	
PCB-1248 [12672-29-6]^	0.014	U	ug/L	1	0.014	0.50	4D24031	EPA 8082A	04/30/14 00:11	MWC	
PCB-1254 [11097-69-1]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/30/14 00:11	MWC	
PCB-1260 [11096-82-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/30/14 00:11	MWC	

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ANALYTICAL RESULTS

Description:	GP14-3	**Lab Sample ID:**	C404753-05	**Received:**	04/11/14 09:30
Matrix:	Ground Water	**Sampled:**	04/10/14 13:55	**Work Order:**	C404753
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian		

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.72*	*1*	*1.00*	*72 %*	*45-151*	*4D24031*	*EPA 8082A*	*04/30/14 00:11*	*MWC*	
Decachlorobiphenyl	*0.81*	*1*	*1.00*	*81 %*	*42-159*	*4D24031*	*EPA 8082A*	*04/30/14 00:11*	*MWC*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	**0.107**		mg/L	1	0.011	0.055	4D16006	EPA 8015C	04/16/14 18:26	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*0.107*	*1*	*0.100*	*107 %*	*70-130*	*4D16006*	*EPA 8015C*	*04/16/14 18:26*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**0.84**		mg/L	1	0.060	0.10	4D17014	EPA 8015C	04/18/14 05:55	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*0.043*	*1*	*0.0526*	*82 %*	*41-126*	*4D17014*	*EPA 8015C*	*04/18/14 05:55*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	0.170	U	ug/L	1	0.170	0.200	4D16019	EPA 7470A	04/17/14 15:04	T1D	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]^	**5500**		ug/L	1	29.0	100	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Antimony [7440-36-0]^	2.20	UD	ug/L	10	2.20	20.0	4D15041	EPA 6020A	04/21/14 13:04	VLO	R-01
Arsenic [7440-38-2]^	5.40	U	ug/L	1	5.40	10.0	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Barium [7440-39-3]^	**29.9**		ug/L	1	1.00	10.0	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Beryllium [7440-41-7]^	**2.04**		ug/L	1	0.100	1.00	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Cadmium [7440-43-9]^	0.360	U	ug/L	1	0.360	1.00	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Calcium [7440-70-2]^	**31700**		ug/L	1	39.0	100	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Chromium [7440-47-3]^	**2.38**	J	ug/L	1	1.40	10.0	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Cobalt [7440-48-4]^	**7.32**	JD	ug/L	10	1.00	10.0	4D15041	EPA 6020A	04/21/14 13:04	VLO	R-01
Copper [7440-50-8]^	1.60	U	ug/L	1	1.60	10.0	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Iron [7439-89-6]^	**75800**		ug/L	1	22.0	50.0	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Lead [7439-92-1]^	**9.23**	J	ug/L	1	2.10	10.0	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Magnesium [7439-95-4]^	**6980**		ug/L	1	23.0	100	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Manganese [7439-96-5]^	**178**		ug/L	1	1.10	10.0	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Nickel [7440-02-0]^	**4.46**	J	ug/L	1	1.80	10.0	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Potassium [7440-09-7]^	**1130**		ug/L	1	150	500	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Selenium [7782-49-2]^	5.00	U	ug/L	1	5.00	10.0	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Silver [7440-22-4]^	1.90	U	ug/L	1	1.90	10.0	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Sodium [7440-23-5]^	**14600**		ug/L	1	400	500	4D15040	EPA 6010C	04/22/14 12:18	JDH	
Thallium [7440-28-0]^	1.10	UD	ug/L	10	1.10	10.0	4D15041	EPA 6020A	04/21/14 13:04	VLO	R-01
Vanadium [7440-62-2]^	**5.91**	J	ug/L	1	1.40	10.0	4D15040	EPA 6010C	04/22/14 12:18	JDH	

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ANALYTICAL RESULTS

Description: GP14-3 | **Lab Sample ID:** C404753-05 | **Received:** 04/11/14 09:30

Matrix: Ground Water | **Sampled:** 04/10/14 13:55 | **Work Order:** C404753

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Zinc [7440-66-6]^	**95.6**		ug/L	1	3.80	10.0	4D15040	EPA 6010C	04/22/14 12:18	JDH	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.0088	U	mg/L	1	0.0088	0.010	4D11039	EPA 7196A	04/11/14 11:17	CV	

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ANALYTICAL RESULTS

Description: GP14-1 | **Lab Sample ID:** C404753-06 | **Received:** 04/11/14 09:30

Matrix: Ground Water | **Sampled:** 04/10/14 12:10 | **Work Order:** C404753

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Acetone [67-64-1]^	**38**		ug/L	1	1.2	5.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
m,p-Xylenes [108-38-3/106-42-3]	0.17	U	ug/L	1	0.17	2.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	**1.2**		ug/L	1	0.16	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	

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ANALYTICAL RESULTS

Description: GP14-1 | **Lab Sample ID:** C404753-06 | **Received:** 04/11/14 09:30

Matrix: Ground Water | **Sampled:** 04/10/14 12:10 | **Work Order:** C404753

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4D21026	EPA 8260B	04/22/14 02:00	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*52*	*1*	*50.0*	*105 %*	*51-122*	*4D21026*	*EPA 8260B*	*04/22/14 02:00*	*MSZ*	
Dibromofluoromethane	*50*	*1*	*50.0*	*100 %*	*68-117*	*4D21026*	*EPA 8260B*	*04/22/14 02:00*	*MSZ*	
Toluene-d8	*51*	*1*	*50.0*	*101 %*	*67-127*	*4D21026*	*EPA 8260B*	*04/22/14 02:00*	*MSZ*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2,4,5-Trichlorophenol [95-95-4]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2,4,6-Trichlorophenol [88-06-2]^	1.1	U	ug/L	1	1.1	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2,4-Dichlorophenol [120-83-2]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2,4-Dimethylphenol [105-67-9]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2,4-Dinitrophenol [51-28-5]^	2.6	U	ug/L	1	2.6	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2,4-Dinitrotoluene [121-14-2]^	2.4	U	ug/L	1	2.4	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2,6-Dinitrotoluene [606-20-2]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2-Chloronaphthalene [91-58-7]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2-Chlorophenol [95-57-8]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]	2.9	U	ug/L	1	2.9	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2-Methylnaphthalene [91-57-6]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2-Methylphenol [95-48-7]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2-Nitroaniline [88-74-4]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
2-Nitrophenol [88-75-5]^	1.1	U	ug/L	1	1.1	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]	1.6	U	ug/L	1	1.6	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
3-Nitroaniline [99-09-2]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
4-Bromophenyl-phenylether [101-55-3]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
4-Chloro-3-methylphenol [59-50-7]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
4-Chloroaniline [106-47-8]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	1.6	U	ug/L	1	1.6	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
4-Nitrophenol [100-02-7]^	2.0	U	ug/L	1	2.0	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Acenaphthene [83-32-9]^	**4.3**	J	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Acenaphthylene [208-96-8]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Acetophenone [98-86-2]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Anthracene [120-12-7]^	1.6	U	ug/L	1	1.6	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Atrazine [1912-24-9]	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	QV-01
Benzaldehyde [100-52-7]	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	QV-02
Benzo(a)anthracene [56-55-3]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Benzo(a)pyrene [50-32-8]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Benzo(b)fluoranthene [205-99-2]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Benzo(g,h,i)perylene [191-24-2]^	2.4	U	ug/L	1	2.4	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Benzo(k)fluoranthene [207-08-9]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	

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ANALYTICAL RESULTS

Description: GP14-1 | **Lab Sample ID:** C404753-06 | **Received:** 04/11/14 09:30
Matrix: Ground Water | **Sampled:** 04/10/14 12:10 | **Work Order:** C404753
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethoxy)methane [111-91-1]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	1.7	U	ug/L	1	1.7	5.0	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Butylbenzylphthalate [85-68-7]^	2.0	U	ug/L	1	2.0	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Caprolactam [105-60-2]	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Carbazole [86-74-8]^	2.5	U	ug/L	1	2.5	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Chrysene [218-01-9]^	2.0	U	ug/L	1	2.0	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	2.3	U	ug/L	1	2.3	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Dibenzofuran [132-64-9]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Diethylphthalate [84-66-2]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Dimethylphthalate [131-11-3]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Di-n-butylphthalate [84-74-2]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Di-n-octylphthalate [117-84-0]^	3.1	U	ug/L	1	3.1	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Fluoranthene [206-44-0]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Fluorene [86-73-7]^	1.7	U	ug/L	1	1.7	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Hexachlorobenzene [118-74-1]^	1.0	U	ug/L	1	1.0	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Hexachlorobutadiene [87-68-3]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Hexachlorocyclopentadiene [77-47-4]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Hexachloroethane [67-72-1]^	1.1	U	ug/L	1	1.1	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	2.2	U	ug/L	1	2.2	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Isophorone [78-59-1]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Naphthalene [91-20-3]^	1.3	U	ug/L	1	1.3	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Nitrobenzene [98-95-3]^	1.2	U	ug/L	1	1.2	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	1.5	U	ug/L	1	1.5	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Pentachlorophenol [87-86-5]^	1.8	U	ug/L	1	1.8	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Phenanthrene [85-01-8]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Phenol [108-95-2]^	1.4	U	ug/L	1	1.4	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	
Pyrene [129-00-0]^	2.1	U	ug/L	1	2.1	10	4D16027	EPA 8270D	04/24/14 17:22	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*100*	*1*	*100*	*100 %*	*10-179*	*4D16027*	*EPA 8270D*	*04/24/14 17:22*	*DFM*	
2-Fluorobiphenyl	*39*	*1*	*50.0*	*77 %*	*10-149*	*4D16027*	*EPA 8270D*	*04/24/14 17:22*	*DFM*	
2-Fluorophenol	*44*	*1*	*100*	*44 %*	*10-110*	*4D16027*	*EPA 8270D*	*04/24/14 17:22*	*DFM*	
Nitrobenzene-d5	*41*	*1*	*50.0*	*81 %*	*10-149*	*4D16027*	*EPA 8270D*	*04/24/14 17:22*	*DFM*	
Phenol-d5	*34*	*1*	*100*	*34 %*	*10-88*	*4D16027*	*EPA 8270D*	*04/24/14 17:22*	*DFM*	
Terphenyl-d14	*40*	*1*	*50.0*	*80 %*	*10-188*	*4D16027*	*EPA 8270D*	*04/24/14 17:22*	*DFM*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.43	U	ug/L	1	0.43	0.50	4D24031	EPA 8082A	04/30/14 00:24	MWC	
PCB-1221 [11104-28-2]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/30/14 00:24	MWC	
PCB-1232 [11141-16-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/30/14 00:24	MWC	
PCB-1248 [12672-29-6]^	0.014	U	ug/L	1	0.014	0.50	4D24031	EPA 8082A	04/30/14 00:24	MWC	
PCB-1254 [11097-69-1]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/30/14 00:24	MWC	
PCB-1260 [11096-82-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/30/14 00:24	MWC	

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ANALYTICAL RESULTS

Description: GP14-1 | **Lab Sample ID:** C404753-06 | **Received:** 04/11/14 09:30
Matrix: Ground Water | **Sampled:** 04/10/14 12:10 | **Work Order:** C404753
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.89*	*1*	*1.00*	*89 %*	*45-151*	*4D24031*	*EPA 8082A*	*04/30/14 00:24*	*MWC*	
Decachlorobiphenyl	*0.91*	*1*	*1.00*	*91 %*	*42-159*	*4D24031*	*EPA 8082A*	*04/30/14 00:24*	*MWC*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	0.011	U	mg/L	1	0.011	0.055	4D16006	EPA 8015C	04/16/14 18:57	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*0.0929*	*1*	*0.100*	*93 %*	*70-130*	*4D16006*	*EPA 8015C*	*04/16/14 18:57*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**0.52**		mg/L	1	0.060	0.10	4D17014	EPA 8015C	04/18/14 06:54	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*0.042*	*1*	*0.0526*	*80 %*	*41-126*	*4D17014*	*EPA 8015C*	*04/18/14 06:54*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	**1.75**		ug/L	1	0.170	0.200	4D16019	EPA 7470A	04/17/14 15:07	T1D	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]^	**129000**	D	ug/L	2	58.0	200	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Antimony [7440-36-0]^	2.20	UD	ug/L	10	2.20	20.0	4D15041	EPA 6020A	04/21/14 13:17	VLO	R-01
Arsenic [7440-38-2]^	**52.8**	D	ug/L	2	10.8	20.0	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Barium [7440-39-3]^	**1730**	D	ug/L	2	2.00	20.0	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Beryllium [7440-41-7]^	**16.0**	D	ug/L	2	0.200	2.00	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Cadmium [7440-43-9]^	**24.4**	D	ug/L	2	0.720	2.00	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Calcium [7440-70-2]^	**328000**	D	ug/L	2	78.0	200	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Chromium [7440-47-3]^	**294**	D	ug/L	2	2.80	20.0	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Cobalt [7440-48-4]^	**71.4**	D	ug/L	10	1.00	10.0	4D15041	EPA 6020A	04/21/14 13:17	VLO	R-01
Copper [7440-50-8]^	**637**	D	ug/L	2	3.20	20.0	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Iron [7439-89-6]^	**275000**	D	ug/L	2	44.0	100	4D15040	EPA 6010C	04/22/14 15:43	JDH	
Lead [7439-92-1]^	**3940**	D	ug/L	2	4.20	20.0	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Magnesium [7439-95-4]^	**50800**	D	ug/L	2	46.0	200	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Manganese [7439-96-5]^	**2990**	D	ug/L	2	2.20	20.0	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Nickel [7440-02-0]^	**259**	D	ug/L	2	3.60	20.0	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Potassium [7440-09-7]^	**14800**	D	ug/L	2	300	1000	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Selenium [7782-49-2]^	10.0	UD	ug/L	2	10.0	20.0	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Silver [7440-22-4]^	3.80	UD	ug/L	2	3.80	20.0	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Sodium [7440-23-5]^	**45600**	D	ug/L	2	800	1000	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01
Thallium [7440-28-0]^	1.10	UD	ug/L	10	1.10	10.0	4D15041	EPA 6020A	04/21/14 13:17	VLO	R-01
Vanadium [7440-62-2]^	**245**	D	ug/L	2	2.80	20.0	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01

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ANALYTICAL RESULTS

Description: GP14-1 | **Lab Sample ID:** C404753-06 | **Received:** 04/11/14 09:30

Matrix: Ground Water | **Sampled:** 04/10/14 12:10 | **Work Order:** C404753

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Zinc [7440-66-6]^	**6420**	D	ug/L	2	7.60	20.0	4D15040	EPA 6010C	04/22/14 15:43	JDH	R-01

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	**0.022**		mg/L	1	0.0088	0.010	4D11039	EPA 7196A	04/11/14 11:17	CV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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ANALYTICAL RESULTS

Description: Trip Blank | **Lab Sample ID:** C404753-10 | **Received:** 04/11/14 09:30

Matrix: Water | **Sampled:** 04/10/14 09:25 | **Work Order:** C404753

Project: 1614 West Pembroke Avenue | **Sampled By:** ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Acetone [67-64-1]^	1.2	U	ug/L	1	1.2	5.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
m,p-Xylenes [108-38-3/106-42-3]	0.17	U	ug/L	1	0.17	2.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.16	U	ug/L	1	0.16	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	

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ANALYTICAL RESULTS

Description: Trip Blank
Matrix: Water
Project: 1614 West Pembroke Avenue
Lab Sample ID: C404753-10
Sampled: 04/10/14 09:25
Sampled By: ENCO
Received: 04/11/14 09:30
Work Order: C404753

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4D21026	EPA 8260B	04/22/14 03:29	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*53*	*1*	*50.0*	*105 %*	*51-122*	*4D21026*	*EPA 8260B*	*04/22/14 03:29*	*MSZ*	
Dibromofluoromethane	*50*	*1*	*50.0*	*100 %*	*68-117*	*4D21026*	*EPA 8260B*	*04/22/14 03:29*	*MSZ*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*4D21026*	*EPA 8260B*	*04/22/14 03:29*	*MSZ*	

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D21026 - EPA 5030B_MS

Blank (4D21026-BLK1) Prepared: 04/21/2014 13:35 Analyzed: 04/21/2014 17:39

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.012	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Cyclohexane	0.36	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Freon 113	0.35	U	1.0	ug/L							
Isopropylbenzene	0.14	U	1.0	ug/L							
m,p-Xylenes	0.17	U	2.0	ug/L							
Methyl acetate	0.51	U	1.0	ug/L							
Methyl cyclohexane	0.54	U	1.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.16	U	1.0	ug/L							
o-Xylene	0.065	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D21026 - EPA 5030B_MS - Continued

Blank (4D21026-BLK1) Continued Prepared: 04/21/2014 13:35 Analyzed: 04/21/2014 17:39

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
4-Bromofluorobenzene	*52*			*ug/L*	*50.0*		*103*	*51-122*			
Dibromofluoromethane	*50*			*ug/L*	*50.0*		*100*	*68-117*			
Toluene-d8	*50*			*ug/L*	*50.0*		*99*	*67-127*			

LCS (4D21026-BS1) Prepared: 04/21/2014 13:35 Analyzed: 04/21/2014 18:08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0		98	75-133			
Benzene	18		1.0	ug/L	20.0		89	81-134			
Chlorobenzene	18		1.0	ug/L	20.0		90	83-117			
Cyclohexane	23		1.0	ug/L	20.0		114	0-200			
Methyl acetate	24		1.0	ug/L	20.0		119	0-200			
Methyl cyclohexane	21		1.0	ug/L	20.0		103	0-200			
Toluene	16		1.0	ug/L	20.0		79	71-118			
Trichloroethene	18		1.0	ug/L	20.0		89	74-119			
4-Bromofluorobenzene	*55*			*ug/L*	*50.0*		*109*	*51-122*			
Dibromofluoromethane	*50*			*ug/L*	*50.0*		*100*	*68-117*			
Toluene-d8	*51*			*ug/L*	*50.0*		*103*	*67-127*			

Matrix Spike (4D21026-MS1) Prepared: 04/21/2014 13:35 Analyzed: 04/21/2014 18:38

Source: C404957-10

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.21 U	101	75-133			
Benzene	18		1.0	ug/L	20.0	0.15 U	88	81-134			
Chlorobenzene	18		1.0	ug/L	20.0	0.17 U	90	83-117			
Cyclohexane	23		1.0	ug/L	20.0	0.36 U	113	0-200			
Methyl acetate	23		1.0	ug/L	20.0	0.51 U	117	0-200			
Methyl cyclohexane	20		1.0	ug/L	20.0	0.54 U	99	0-200			
Toluene	16		1.0	ug/L	20.0	0.14 U	80	71-118			
Trichloroethene	19		1.0	ug/L	20.0	0.15 U	96	74-119			
4-Bromofluorobenzene	*55*			*ug/L*	*50.0*		*111*	*51-122*			
Dibromofluoromethane	*51*			*ug/L*	*50.0*		*103*	*68-117*			
Toluene-d8	*50*			*ug/L*	*50.0*		*100*	*67-127*			

Matrix Spike Dup (4D21026-MSD1) Prepared: 04/21/2014 13:35 Analyzed: 04/21/2014 19:07

Source: C404957-10

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	18		1.0	ug/L	20.0	0.21 U	92	75-133	10	20	
Benzene	17		1.0	ug/L	20.0	0.15 U	87	81-134	2	17	
Chlorobenzene	18		1.0	ug/L	20.0	0.17 U	90	83-117	0.2	16	
Cyclohexane	23		1.0	ug/L	20.0	0.36 U	114	0-200	0.9	50	
Methyl acetate	23		1.0	ug/L	20.0	0.51 U	114	0-200	2	50	
Methyl cyclohexane	19		1.0	ug/L	20.0	0.54 U	96	0-200	3	50	
Toluene	16		1.0	ug/L	20.0	0.14 U	80	71-118	0.3	17	

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D21026 - EPA 5030B_MS - Continued

Matrix Spike Dup (4D21026-MSD1) Continued Prepared: 04/21/2014 13:35 Analyzed: 04/21/2014 19:07

Source: C404957-10

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichloroethene	18		1.0	ug/L	20.0	0.15 U	91	74-119	5	22	
4-Bromofluorobenzene	*56*			*ug/L*	*50.0*		*112*	*51-122*			
Dibromofluoromethane	*50*			*ug/L*	*50.0*		*100*	*68-117*			
Toluene-d8	*51*			*ug/L*	*50.0*		*102*	*67-127*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D16027 - EPA 3510C_MS

Blank (4D16027-BLK1) Prepared: 04/16/2014 16:00 Analyzed: 04/23/2014 15:11

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1'-Biphenyl	1.5	U	10	ug/L							
2,4,5-Trichlorophenol	1.0	U	10	ug/L							
2,4,6-Trichlorophenol	1.1	U	10	ug/L							
2,4-Dichlorophenol	1.4	U	10	ug/L							
2,4-Dimethylphenol	1.3	U	10	ug/L							
2,4-Dinitrophenol	2.6	U	10	ug/L							
2,4-Dinitrotoluene	2.4	U	10	ug/L							
2,6-Dinitrotoluene	1.5	U	10	ug/L							
2-Chloronaphthalene	1.0	U	10	ug/L							
2-Chlorophenol	1.2	U	10	ug/L							
2-Methyl-4,6-dinitrophenol	2.9	U	10	ug/L							
2-Methylnaphthalene	1.5	U	10	ug/L							
2-Methylphenol	1.4	U	10	ug/L							
2-Nitroaniline	1.5	U	10	ug/L							
2-Nitrophenol	1.1	U	10	ug/L							
3 & 4-Methylphenol	1.6	U	10	ug/L							
3,3'-Dichlorobenzidine	3.3	U	10	ug/L							
3-Nitroaniline	2.1	U	10	ug/L							
4-Bromophenyl-phenylether	1.0	U	10	ug/L							
4-Chloro-3-methylphenol	1.5	U	10	ug/L							
4-Chloroaniline	1.2	U	10	ug/L							
4-Chlorophenyl-phenylether	1.6	U	10	ug/L							
4-Nitroaniline	3.2	U	10	ug/L							
4-Nitrophenol	2.0	U	10	ug/L							
Acenaphthene	1.4	U	10	ug/L							
Acenaphthylene	1.2	U	10	ug/L							
Acetophenone	1.3	U	10	ug/L							
Anthracene	1.6	U	10	ug/L							
Atrazine	1.5	U	10	ug/L							QV-01
Benzaldehyde	1.4	U	10	ug/L							QV-02
Benzo(a)anthracene	1.3	U	10	ug/L							
Benzo(a)pyrene	1.3	U	10	ug/L							
Benzo(b)fluoranthene	1.0	U	10	ug/L							
Benzo(g,h,i)perylene	2.4	U	10	ug/L							
Benzo(k)fluoranthene	1.3	U	10	ug/L							
Bis(2-chloroethoxy)methane	1.4	U	10	ug/L							
Bis(2-chloroethyl)ether	1.2	U	10	ug/L							

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D16027 - EPA 3510C_MS - Continued

Blank (4D16027-BLK1) Continued Prepared: 04/16/2014 16:00 Analyzed: 04/23/2014 15:11

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Bis(2-chloroisopropyl)ether	1.3	U	10	ug/L							
Bis(2-ethylhexyl)phthalate	1.7	U	5.0	ug/L							
Butylbenzylphthalate	2.0	U	10	ug/L							
Caprolactam	1.3	U	10	ug/L							
Carbazole	2.5	U	10	ug/L							
Chrysene	2.0	U	10	ug/L							
Dibenzo(a,h)anthracene	2.3	U	10	ug/L							
Dibenzofuran	1.4	U	10	ug/L							
Diethylphthalate	2.1	U	10	ug/L							
Dimethylphthalate	1.4	U	10	ug/L							
Di-n-butylphthalate	1.5	U	10	ug/L							
Di-n-octylphthalate	3.1	U	10	ug/L							
Fluoranthene	2.1	U	10	ug/L							
Fluorene	1.7	U	10	ug/L							
Hexachlorobenzene	1.0	U	10	ug/L							
Hexachlorobutadiene	1.2	U	10	ug/L							
Hexachlorocyclopentadiene	1.3	U	10	ug/L							
Hexachloroethane	1.1	U	10	ug/L							
Indeno(1,2,3-cd)pyrene	2.2	U	10	ug/L							
Isophorone	1.3	U	10	ug/L							
Naphthalene	1.3	U	10	ug/L							
Nitrobenzene	1.2	U	10	ug/L							
N-Nitroso-di-n-propylamine	1.5	U	10	ug/L							
N-nitrosodiphenylamine/Diphenylamine	2.1	U	10	ug/L							
Pentachlorophenol	1.8	U	10	ug/L							
Phenanthrene	1.4	U	10	ug/L							
Phenol	1.4	U	10	ug/L							
Pyrene	2.1	U	10	ug/L							
2,4,6-Tribromophenol	*89*			*ug/L*	*100*		*89*	*10-179*			
2-Fluorobiphenyl	*43*			*ug/L*	*50.0*		*85*	*10-149*			
2-Fluorophenol	*56*			*ug/L*	*100*		*56*	*10-110*			
Nitrobenzene-d5	*42*			*ug/L*	*50.0*		*83*	*10-149*			
Phenol-d5	*46*			*ug/L*	*100*		*46*	*10-88*			
Terphenyl-d14	*44*			*ug/L*	*50.0*		*88*	*10-188*			

LCS (4D16027-BS1) Prepared: 04/16/2014 16:00 Analyzed: 04/23/2014 16:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	44		10	ug/L	50.0		89	67-132			
2-Chlorophenol	41		10	ug/L	50.0		82	40-109			
4-Chloro-3-methylphenol	43		10	ug/L	50.0		86	58-121			
4-Nitrophenol	29		10	ug/L	50.0		57	33-105			
Acenaphthene	41		10	ug/L	50.0		81	43-118			
N-Nitroso-di-n-propylamine	44		10	ug/L	50.0		87	48-126			
Pentachlorophenol	37		10	ug/L	50.0		75	51-135			
Phenol	28		10	ug/L	50.0		56	19-78			
Pyrene	45		10	ug/L	50.0		91	65-134			
2,4,6-Tribromophenol	*100*			*ug/L*	*100*		*102*	*10-179*			

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D16027 - EPA 3510C_MS - Continued

LCS (4D16027-BS1) Continued Prepared: 04/16/2014 16:00 Analyzed: 04/23/2014 16:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Fluorobiphenyl	*46*			*ug/L*	*50.0*		*92*	*10-149*			
2-Fluorophenol	*63*			*ug/L*	*100*		*63*	*10-110*			
Nitrobenzene-d5	*46*			*ug/L*	*50.0*		*92*	*10-149*			
Phenol-d5	*51*			*ug/L*	*100*		*51*	*10-88*			
Terphenyl-d14	*47*			*ug/L*	*50.0*		*94*	*10-188*			

Matrix Spike (4D16027-MS1) Prepared: 04/16/2014 16:00 Analyzed: 04/23/2014 16:49

Source: C404957-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	46		10	ug/L	50.0	2.4 U	93	67-132			
2-Chlorophenol	43		10	ug/L	50.0	1.2 U	85	40-109			
4-Chloro-3-methylphenol	44		10	ug/L	50.0	1.5 U	88	58-121			
4-Nitrophenol	32		10	ug/L	50.0	2.0 U	64	33-105			
Acenaphthene	42		10	ug/L	50.0	1.4 U	84	43-118			
N-Nitroso-di-n-propylamine	45		10	ug/L	50.0	1.5 U	91	48-126			
Pentachlorophenol	39		10	ug/L	50.0	1.8 U	78	51-135			
Phenol	32		10	ug/L	50.0	1.4 U	64	19-78			
Pyrene	44		10	ug/L	50.0	2.1 U	89	65-134			
2,4,6-Tribromophenol	*100*			*ug/L*	*100*		*101*	*10-179*			
2-Fluorobiphenyl	*44*			*ug/L*	*50.0*		*88*	*10-149*			
2-Fluorophenol	*64*			*ug/L*	*100*		*64*	*10-110*			
Nitrobenzene-d5	*44*			*ug/L*	*50.0*		*88*	*10-149*			
Phenol-d5	*56*			*ug/L*	*100*		*56*	*10-88*			
Terphenyl-d14	*45*			*ug/L*	*50.0*		*90*	*10-188*			

Matrix Spike Dup (4D16027-MSD1) Prepared: 04/16/2014 16:00 Analyzed: 04/23/2014 17:19

Source: C404957-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	46		10	ug/L	50.0	2.4 U	93	67-132	0.09	17	
2-Chlorophenol	43		10	ug/L	50.0	1.2 U	85	40-109	0.09	22	
4-Chloro-3-methylphenol	44		10	ug/L	50.0	1.5 U	88	58-121	0.3	22	
4-Nitrophenol	31		10	ug/L	50.0	2.0 U	61	33-105	5	27	
Acenaphthene	42		10	ug/L	50.0	1.4 U	85	43-118	1	21	
N-Nitroso-di-n-propylamine	46		10	ug/L	50.0	1.5 U	92	48-126	2	23	
Pentachlorophenol	37		10	ug/L	50.0	1.8 U	75	51-135	4	11	
Phenol	31		10	ug/L	50.0	1.4 U	61	19-78	4	18	
Pyrene	47		10	ug/L	50.0	2.1 U	94	65-134	5	16	
2,4,6-Tribromophenol	*100*			*ug/L*	*100*		*101*	*10-179*			
2-Fluorobiphenyl	*44*			*ug/L*	*50.0*		*89*	*10-149*			
2-Fluorophenol	*64*			*ug/L*	*100*		*64*	*10-110*			
Nitrobenzene-d5	*46*			*ug/L*	*50.0*		*91*	*10-149*			
Phenol-d5	*53*			*ug/L*	*100*		*53*	*10-88*			
Terphenyl-d14	*47*			*ug/L*	*50.0*		*95*	*10-188*			

Polychlorinated Biphenyls by GC - Quality Control

Batch 4D24031 - EPA 3510C

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QUALITY CONTROL DATA

Polychlorinated Biphenyls by GC - Quality Control

Batch 4D24031 - EPA 3510C - Continued

Blank (4D24031-BLK1) Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 20:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.43	U	0.50	ug/L							
PCB-1221	0.37	U	0.50	ug/L							
PCB-1232	0.45	U	0.50	ug/L							
PCB-1248	0.014	U	0.50	ug/L							
PCB-1254	0.37	U	0.50	ug/L							
PCB-1260	0.45	U	0.50	ug/L							
2,4,5,6-TCMX	*0.85*			*ug/L*	*1.00*		*85*	*45-151*			
Decachlorobiphenyl	*0.62*			*ug/L*	*1.00*		*62*	*42-159*			

LCS (4D24031-BS1) Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 21:06

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	10		0.50	ug/L	10.0		103	66-149			
PCB-1260	9.4		0.50	ug/L	10.0		94	64-150			
2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*104*	*45-151*			
Decachlorobiphenyl	*0.92*			*ug/L*	*1.00*		*92*	*42-159*			

Matrix Spike (4D24031-MS1) Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 21:19

Source: C404864-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	11		0.50	ug/L	10.0	0.43 U	107	66-149			
PCB-1260	9.9		0.50	ug/L	10.0	0.45 U	99	64-150			
2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*103*	*45-151*			
Decachlorobiphenyl	*0.90*			*ug/L*	*1.00*		*90*	*42-159*			

Matrix Spike Dup (4D24031-MSD1) Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 21:32

Source: C404864-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	11		0.50	ug/L	10.0	0.43 U	107	66-149	0.3	21	
PCB-1260	10		0.50	ug/L	10.0	0.45 U	103	64-150	4	18	
2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*101*	*45-151*			
Decachlorobiphenyl	*0.90*			*ug/L*	*1.00*		*90*	*42-159*			

Gasoline Range Organics by GC - Quality Control

Batch 4D15004 - EPA 5035

Blank (4D15004-BLK1) Prepared: 04/15/2014 09:19 Analyzed: 04/15/2014 14:29

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	1.4	U	5.5	mg/kg wet							
2,5-Dibromotoluene	*12*			*mg/kg wet*	*10.0*		*116*	*59-168*			

LCS (4D15004-BS1) Prepared: 04/15/2014 09:19 Analyzed: 04/15/2014 13:58

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	51		5.5	mg/kg wet	50.0		102	51-115			

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QUALITY CONTROL DATA

Gasoline Range Organics by GC - Quality Control

Batch 4D15004 - EPA 5035 - Continued

LCS (4D15004-BS1) Continued Prepared: 04/15/2014 09:19 Analyzed: 04/15/2014 13:58

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,5-Dibromotoluene	*12*			*mg/kg wet*	*10.0*		*118*	*59-168*			

Matrix Spike (4D15004-MS1) Prepared: 04/15/2014 09:19 Analyzed: 04/15/2014 15:00

Source: C404864-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	52		5.5	mg/kg wet	50.0	1.4 U	105	45-162			
2,5-Dibromotoluene	*11*			*mg/kg wet*	*10.0*		*113*	*59-168*			

Matrix Spike Dup (4D15004-MSD1) Prepared: 04/15/2014 09:19 Analyzed: 04/15/2014 15:32

Source: C404864-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	52		5.5	mg/kg wet	50.0	1.4 U	104	45-162	0.3	24	
2,5-Dibromotoluene	*12*			*mg/kg wet*	*10.0*		*117*	*59-168*			

Batch 4D16006 - EPA 5030B

Blank (4D16006-BLK1) Prepared: 04/16/2014 08:40 Analyzed: 04/16/2014 11:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.011	U	0.055	mg/L							
2,5-Dibromotoluene	*0.102*			*mg/L*	*0.100*		*102*	*70-130*			

LCS (4D16006-BS1) Prepared: 04/16/2014 08:40 Analyzed: 04/16/2014 11:13

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.492		0.055	mg/L	0.500		98	58-152			
2,5-Dibromotoluene	*0.102*			*mg/L*	*0.100*		*102*	*70-130*			

Matrix Spike (4D16006-MS1) Prepared: 04/16/2014 08:40 Analyzed: 04/16/2014 12:15

Source: C404864-08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.506		0.055	mg/L	0.500	0.011	99	20-185			
2,5-Dibromotoluene	*0.112*			*mg/L*	*0.100*		*112*	*70-130*			

Matrix Spike Dup (4D16006-MSD1) Prepared: 04/16/2014 08:40 Analyzed: 04/16/2014 12:46

Source: C404864-08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.514		0.055	mg/L	0.500	0.011	101	20-185	2	26	
2,5-Dibromotoluene	*0.102*			*mg/L*	*0.100*		*102*	*70-130*			

Diesel Range Organics by GC - Quality Control

Batch 4D17014 - EPA 3510C

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QUALITY CONTROL DATA

Diesel Range Organics by GC - Quality Control

Batch 4D17014 - EPA 3510C - Continued

Blank (4D17014-BLK1) Prepared: 04/17/2014 09:58 Analyzed: 04/18/2014 03:57

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.060	U	0.10	mg/L							
o-Terphenyl	*0.049*			*mg/L*	*0.0500*		*98*	*41-126*			

LCS (4D17014-BS1) Prepared: 04/17/2014 09:58 Analyzed: 04/18/2014 04:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.50		0.10	mg/L	1.00		50	10-108			
o-Terphenyl	*0.044*			*mg/L*	*0.0500*		*89*	*41-126*			

Matrix Spike (4D17014-MS1) Prepared: 04/17/2014 09:58 Analyzed: 04/18/2014 04:56

Source: C404957-06

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.46		0.10	mg/L	1.00	0.099	36	10-108			
o-Terphenyl	*0.040*			*mg/L*	*0.0500*		*81*	*41-126*			

Matrix Spike Dup (4D17014-MSD1) Prepared: 04/17/2014 09:58 Analyzed: 04/18/2014 05:26

Source: C404957-06

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.52		0.10	mg/L	1.00	0.099	42	10-108	12	25	
o-Terphenyl	*0.041*			*mg/L*	*0.0500*		*83*	*41-126*			

Batch 4D21008 - EPA 3550C

Blank (4D21008-BLK1) Prepared: 04/21/2014 09:35 Analyzed: 04/21/2014 22:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	1.7	U	3.3	mg/kg wet							
o-Terphenyl	*1.9*			*mg/kg wet*	*1.67*		*111*	*51-138*			

LCS (4D21008-BS1) Prepared: 04/21/2014 09:35 Analyzed: 04/21/2014 23:18

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	32		3.3	mg/kg wet	33.3		95	37-116			
o-Terphenyl	*2.0*			*mg/kg wet*	*1.67*		*122*	*51-138*			

Matrix Spike (4D21008-MS1) Prepared: 04/21/2014 09:35 Analyzed: 04/21/2014 23:48

Source: C404170-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	34		3.9	mg/kg dry	39.5	2.0 U	87	37-116			
o-Terphenyl	*2.1*			*mg/kg dry*	*1.97*		*107*	*51-138*			

Matrix Spike Dup (4D21008-MSD1) Prepared: 04/21/2014 09:35 Analyzed: 04/22/2014 00:19

Source: C404170-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	37		3.9	mg/kg dry	39.5	2.0 U	95	37-116	8	45	

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QUALITY CONTROL DATA

Diesel Range Organics by GC - Quality Control

Batch 4D21008 - EPA 3550C - Continued

Matrix Spike Dup (4D21008-MSD1) Continued Prepared: 04/21/2014 09:35 Analyzed: 04/22/2014 00:19

Source: C404170-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
o-Terphenyl	*2.3*			*mg/kg dry*	*1.97*		*119*	*51-138*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D16019 - EPA 7470A

Blank (4D16019-BLK1) Prepared: 04/16/2014 10:45 Analyzed: 04/17/2014 14:31

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.170	U	0.200	ug/L							

LCS (4D16019-BS1) Prepared: 04/16/2014 10:45 Analyzed: 04/17/2014 14:33

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.57		0.200	ug/L	5.00		91	80-120			

Matrix Spike (4D16019-MS1) Prepared: 04/16/2014 10:45 Analyzed: 04/17/2014 14:38

Source: C404102-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.13		0.200	ug/L	5.00	0.170 U	83	75-125			

Matrix Spike Dup (4D16019-MSD1) Prepared: 04/16/2014 10:45 Analyzed: 04/17/2014 14:40

Source: C404102-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	3.82		0.200	ug/L	5.00	0.170 U	76	75-125	8	25	

Post Spike (4D16019-PS1) Prepared: 04/16/2014 10:45 Analyzed: 04/17/2014 14:42

Source: C404102-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	3.09		0.200	ug/L	5.00	-0.0310	62	75-125			QM-08

Batch 4D21024 - EPA 3050B

Blank (4D21024-BLK1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 11:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2.10	U	10.0	mg/kg wet							
Antimony	0.110	U	1.00	mg/kg wet							
Arsenic	0.100	U	0.500	mg/kg wet							
Barium	0.100	U	0.500	mg/kg wet							
Beryllium	0.0120	U	0.0500	mg/kg wet							
Cadmium	0.00960	U	0.0500	mg/kg wet							
Calcium	**6.23**	**J**	25.0	mg/kg wet							
Chromium	0.100	U	0.500	mg/kg wet							
Cobalt	0.100	U	0.500	mg/kg wet							
Copper	0.190	U	0.500	mg/kg wet							
Iron	**0.729**	**J**	2.50	mg/kg wet							
Lead	0.120	U	0.500	mg/kg wet							

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B - Continued

Blank (4D21024-BLK1) Continued Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 11:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Magnesium	**1.72**	**J**	25.0	mg/kg wet							
Manganese	0.100	U	0.500	mg/kg wet							
Nickel	0.360	U	2.50	mg/kg wet							
Potassium	4.00	U	25.0	mg/kg wet							
Selenium	0.100	U	0.500	mg/kg wet							
Silver	0.100	U	0.500	mg/kg wet							
Sodium	6.00	U	25.0	mg/kg wet							
Thallium	0.100	U	0.500	mg/kg wet							
Vanadium	0.100	U	0.500	mg/kg wet							
Zinc	1.10	U	2.50	mg/kg wet							

LCS (4D21024-BS1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 11:48

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	91.6		10.0	mg/kg wet	100		92	80-120			
Antimony	8.46		1.00	mg/kg wet	10.0		85	80-120			
Arsenic	8.74		0.500	mg/kg wet	10.0		87	80-120			
Barium	9.02		0.500	mg/kg wet	10.0		90	80-120			
Beryllium	0.936		0.0500	mg/kg wet	1.00		94	80-120			
Cadmium	0.896		0.0500	mg/kg wet	1.00		90	80-120			
Calcium	97.1	B	25.0	mg/kg wet	100		97	80-120			
Chromium	9.19		0.500	mg/kg wet	10.0		92	80-120			
Cobalt	9.14		0.500	mg/kg wet	10.0		91	80-120			
Copper	9.13		0.500	mg/kg wet	10.0		91	80-120			
Iron	46.7	B	2.50	mg/kg wet	50.0		93	80-120			
Lead	8.94		0.500	mg/kg wet	10.0		89	80-120			
Magnesium	94.2	B	25.0	mg/kg wet	100		94	80-120			
Manganese	9.27		0.500	mg/kg wet	10.0		93	80-120			
Nickel	9.20		2.50	mg/kg wet	10.0		92	80-120			
Potassium	452		25.0	mg/kg wet	500		90	80-120			
Selenium	8.72		0.500	mg/kg wet	10.0		87	80-120			
Silver	9.59		0.500	mg/kg wet	10.0		96	80-120			
Sodium	458		25.0	mg/kg wet	500		92	80-120			
Thallium	8.95		0.500	mg/kg wet	10.0		89	80-120			
Vanadium	9.41		0.500	mg/kg wet	10.0		94	80-120			
Zinc	9.09		2.50	mg/kg wet	10.0		91	80-120			

Matrix Spike (4D21024-MS1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:29

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	6970		12.3	mg/kg dry	124	4350	NR	75-125			QM-05
Antimony	6.87		1.23	mg/kg dry	12.4	0.409	52	75-125			QM-05
Arsenic	12.2		0.613	mg/kg dry	12.4	1.94	83	75-125			
Barium	53.8		0.613	mg/kg dry	12.4	41.7	98	75-125			
Beryllium	1.50		0.0613	mg/kg dry	1.24	0.325	95	75-125			
Cadmium	1.17		0.0613	mg/kg dry	1.24	0.0275	92	75-125			
Calcium	1110	B	30.7	mg/kg dry	124	1080	30	75-125			QM-05
Chromium	14.8		0.613	mg/kg dry	12.4	3.83	88	75-125			
Cobalt	13.0		0.613	mg/kg dry	12.4	1.42	93	75-125			

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B - Continued

Matrix Spike (4D21024-MS1) Continued Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:29

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Copper	13.6		0.613	mg/kg dry	12.4	2.23	92	75-125			
Iron	4650	B	3.07	mg/kg dry	61.9	4710	NR	75-125			QM-05
Lead	31.4		0.613	mg/kg dry	12.4	46.9	NR	75-125			QM-05
Magnesium	474	B	30.7	mg/kg dry	124	364	89	75-125			
Manganese	163		0.613	mg/kg dry	12.4	159	37	75-125			QM-05
Nickel	13.0		3.07	mg/kg dry	12.4	0.930	97	75-125			
Potassium	859		30.7	mg/kg dry	619	295	91	75-125			
Selenium	10.1		0.613	mg/kg dry	12.4	0.123 U	82	75-125			
Silver	11.2		0.613	mg/kg dry	12.4	0.123 U	90	75-125			
Sodium	563		30.7	mg/kg dry	619	10.1	89	75-125			
Thallium	8.44		0.613	mg/kg dry	12.4	0.123 U	68	75-125			QM-05
Vanadium	20.4		0.613	mg/kg dry	12.4	8.80	94	75-125			
Zinc	43.5		3.07	mg/kg dry	12.4	30.6	105	75-125			

Matrix Spike Dup (4D21024-MSD1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:31

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	7100		12.3	mg/kg dry	123	4350	NR	75-125	2	20	QM-05
Antimony	7.29		1.23	mg/kg dry	12.3	0.409	56	75-125	6	20	QM-05
Arsenic	12.5		0.613	mg/kg dry	12.3	1.94	86	75-125	2	20	
Barium	56.3		0.613	mg/kg dry	12.3	41.7	119	75-125	4	20	
Beryllium	1.53		0.0613	mg/kg dry	1.23	0.325	98	75-125	2	20	
Cadmium	1.18		0.0613	mg/kg dry	1.23	0.0275	94	75-125	1	20	
Calcium	1100	B	30.7	mg/kg dry	123	1080	20	75-125	1	20	QM-05
Chromium	15.0		0.613	mg/kg dry	12.3	3.83	91	75-125	2	20	
Cobalt	13.3		0.613	mg/kg dry	12.3	1.42	97	75-125	2	20	
Copper	13.9		0.613	mg/kg dry	12.3	2.23	95	75-125	2	20	
Iron	4880	B	3.07	mg/kg dry	61.3	4710	269	75-125	5	20	QM-05
Lead	31.2		0.613	mg/kg dry	12.3	46.9	NR	75-125	0.4	20	QM-05
Magnesium	432	B	30.7	mg/kg dry	123	364	55	75-125	9	20	QM-05
Manganese	169		0.613	mg/kg dry	12.3	159	83	75-125	3	20	
Nickel	13.3		3.07	mg/kg dry	12.3	0.930	101	75-125	2	20	
Potassium	866		30.7	mg/kg dry	613	295	93	75-125	0.8	20	
Selenium	10.6		0.613	mg/kg dry	12.3	0.123 U	86	75-125	5	20	
Silver	11.5		0.613	mg/kg dry	12.3	0.123 U	93	75-125	2	20	
Sodium	553		30.7	mg/kg dry	613	10.1	89	75-125	2	20	
Thallium	8.85		0.613	mg/kg dry	12.3	0.123 U	72	75-125	5	20	QM-05
Vanadium	21.0		0.613	mg/kg dry	12.3	8.80	100	75-125	3	20	
Zinc	45.6		3.07	mg/kg dry	12.3	30.6	122	75-125	5	20	

Post Spike (4D21024-PS1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:33

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	73.4		0.200	mg/L	2.00	73.1	17	80-120			QM-08
Antimony	0.189		0.0200	mg/L	0.200	0.00688	91	80-120			
Arsenic	0.216		0.0100	mg/L	0.200	0.0327	91	80-120			
Barium	0.871		0.0100	mg/L	0.200	0.701	85	80-120			
Beryllium	0.0235		0.00100	mg/L	0.0200	0.00546	90	80-120			
Cadmium	0.0192		0.00100	mg/L	0.0200	0.000463	94	80-120			

QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B - Continued

Post Spike (4D21024-PS1) Continued Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:33

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Calcium	20.3	B	0.500	mg/L	2.00	18.1	109	80-120			
Chromium	0.242		0.0100	mg/L	0.200	0.0643	89	80-120			
Cobalt	0.211		0.0100	mg/L	0.200	0.0238	94	80-120			
Copper	0.219		0.0100	mg/L	0.200	0.0375	91	80-120			
Iron	78.6	B	0.0500	mg/L	1.00	79.2	NR	80-120			QM-08
Lead	0.962		0.0100	mg/L	0.200	0.789	87	80-120			
Magnesium	7.74	B	0.500	mg/L	2.00	6.11	81	80-120			
Manganese	2.79		0.0100	mg/L	0.200	2.67	64	80-120			QM-08
Nickel	0.204		0.0500	mg/L	0.200	0.0156	94	80-120			
Potassium	14.1		0.500	mg/L	10.0	4.95	92	80-120			
Selenium	0.182		0.0100	mg/L	0.200	0.00118	91	80-120			
Silver	0.182		0.0100	mg/L	0.200	-0.00250	92	80-120			
Sodium	9.24		0.500	mg/L	10.0	0.170	91	80-120			
Thallium	0.142		0.0100	mg/L	0.200	-0.0437	93	80-120			
Vanadium	0.331		0.0100	mg/L	0.200	0.148	92	80-120			
Zinc	0.685		0.0500	mg/L	0.200	0.513	86	80-120			

Batch 4D24020 - EPA 7471B

Blank (4D24020-BLK1) Prepared: 04/24/2014 10:31 Analyzed: 04/24/2014 22:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.00690	U	0.0240	mg/kg wet							

LCS (4D24020-BS1) Prepared: 04/24/2014 10:31 Analyzed: 04/24/2014 22:07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.618		0.0240	mg/kg wet	0.600		103	80-120			

Matrix Spike (4D24020-MS1) Prepared: 04/24/2014 10:31 Analyzed: 04/24/2014 22:11

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.788		0.0294	mg/kg dry	0.712	0.00846 U	111	80-120			

Matrix Spike Dup (4D24020-MSD1) Prepared: 04/24/2014 10:31 Analyzed: 04/24/2014 22:13

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.809		0.0294	mg/kg dry	0.736	0.00846 U	110	80-120	3	20	

Post Spike (4D24020-PS1) Prepared: 04/24/2014 10:31 Analyzed: 04/24/2014 22:15

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.55		0.200	ug/L	5.00	0.00793	111	75-125			

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D15040 - EPA 3005A

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D15040 - EPA 3005A - Continued

Blank (4D15040-BLK1) Prepared: 04/15/2014 15:12 Analyzed: 04/22/2014 10:17

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	29.0	U	100	ug/L							
Arsenic	5.40	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Calcium	39.0	U	100	ug/L							
Chromium	1.40	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Iron	22.0	U	50.0	ug/L							
Lead	2.10	U	10.0	ug/L							
Magnesium	23.0	U	100	ug/L							
Manganese	1.10	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Potassium	150	U	500	ug/L							
Selenium	5.00	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Sodium	400	U	500	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (4D15040-BS1) Prepared: 04/15/2014 15:12 Analyzed: 04/22/2014 10:20

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2020		100	ug/L	2000		101	80-120			
Arsenic	203		10.0	ug/L	200		102	80-120			
Barium	204		10.0	ug/L	200		102	80-120			
Beryllium	21.1		1.00	ug/L	20.0		106	80-120			
Cadmium	20.1		1.00	ug/L	20.0		100	80-120			
Calcium	2050		100	ug/L	2000		102	80-120			
Chromium	205		10.0	ug/L	200		102	80-120			
Copper	204		10.0	ug/L	200		102	80-120			
Iron	1040		50.0	ug/L	1000		104	80-120			
Lead	205		10.0	ug/L	200		103	80-120			
Magnesium	2070		100	ug/L	2000		104	80-120			
Manganese	210		10.0	ug/L	200		105	80-120			
Nickel	206		10.0	ug/L	200		103	80-120			
Potassium	10200		500	ug/L	10000		102	80-120			
Selenium	207		10.0	ug/L	200		103	80-120			
Silver	217		10.0	ug/L	200		109	80-120			
Sodium	9890		500	ug/L	10000		99	80-120			
Vanadium	210		10.0	ug/L	200		105	80-120			
Zinc	205		10.0	ug/L	200		102	80-120			

Matrix Spike (4D15040-MS1) Prepared: 04/15/2014 15:12 Analyzed: 04/22/2014 10:26

Source: C404100-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	17700		100	ug/L	2000	9160	425	75-125			QM-05
Arsenic	205		10.0	ug/L	200	5.40 U	102	75-125			
Barium	283		10.0	ug/L	200	71.9	106	75-125			

QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D15040 - EPA 3005A - Continued

Matrix Spike (4D15040-MS1) Continued Prepared: 04/15/2014 15:12 Analyzed: 04/22/2014 10:26

Source: C404100-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Beryllium	22.2		1.00	ug/L	20.0	1.51	104	75-125			
Cadmium	20.3		1.00	ug/L	20.0	0.360 U	102	75-125			
Calcium	4330		100	ug/L	2000	2320	100	75-125			
Chromium	221		10.0	ug/L	200	16.9	102	75-125			
Copper	205		10.0	ug/L	200	5.32	100	75-125			
Iron	9530		50.0	ug/L	1000	7130	241	75-125			QM-05
Lead	212		10.0	ug/L	200	5.68	103	75-125			
Magnesium	5090		100	ug/L	2000	2720	118	75-125			
Manganese	280		10.0	ug/L	200	71.3	104	75-125			
Nickel	227		10.0	ug/L	200	15.7	106	75-125			
Potassium	12300		500	ug/L	10000	2010	102	75-125			
Selenium	210		10.0	ug/L	200	5.00 U	105	75-125			
Silver	207		10.0	ug/L	200	1.90 U	104	75-125			
Sodium	18000		500	ug/L	10000	8200	98	75-125			
Vanadium	217		10.0	ug/L	200	10.3	103	75-125			
Zinc	244		10.0	ug/L	200	33.9	105	75-125			

Matrix Spike Dup (4D15040-MSD1) Prepared: 04/15/2014 15:12 Analyzed: 04/22/2014 10:29

Source: C404100-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	17400		100	ug/L	2000	9160	412	75-125	1	20	QM-05
Arsenic	210		10.0	ug/L	200	5.40 U	105	75-125	2	20	
Barium	279		10.0	ug/L	200	71.9	104	75-125	1	20	
Beryllium	21.8		1.00	ug/L	20.0	1.51	102	75-125	2	20	
Cadmium	20.1		1.00	ug/L	20.0	0.360 U	101	75-125	0.8	20	
Calcium	4260		100	ug/L	2000	2320	97	75-125	2	20	
Chromium	216		10.0	ug/L	200	16.9	100	75-125	2	20	
Copper	202		10.0	ug/L	200	5.32	98	75-125	2	20	
Iron	9390		50.0	ug/L	1000	7130	227	75-125	2	20	QM-05
Lead	209		10.0	ug/L	200	5.68	101	75-125	2	20	
Magnesium	4990		100	ug/L	2000	2720	113	75-125	2	20	
Manganese	275		10.0	ug/L	200	71.3	102	75-125	2	20	
Nickel	225		10.0	ug/L	200	15.7	105	75-125	0.9	20	
Potassium	12100		500	ug/L	10000	2010	101	75-125	2	20	
Selenium	205		10.0	ug/L	200	5.00 U	103	75-125	3	20	
Silver	206		10.0	ug/L	200	1.90 U	103	75-125	0.5	20	
Sodium	17500		500	ug/L	10000	8200	93	75-125	3	20	
Vanadium	214		10.0	ug/L	200	10.3	102	75-125	2	20	
Zinc	241		10.0	ug/L	200	33.9	104	75-125	1	20	

Post Spike (4D15040-PS1) Prepared: 04/15/2014 15:12 Analyzed: 04/22/2014 10:31

Source: C404100-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	15.2		0.100	mg/L	2.00	9.16	300	80-120			QM-08
Arsenic	0.193		0.0100	mg/L	0.200	-0.00106	97	80-120			
Barium	0.261		0.0100	mg/L	0.200	0.0719	94	80-120			
Beryllium	0.0212		0.00100	mg/L	0.0200	0.00151	98	80-120			
Cadmium	0.0185		0.00100	mg/L	0.0200	-0.000191	93	80-120			
Calcium	4.23		0.100	mg/L	2.00	2.32	95	80-120			

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QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D15040 - EPA 3005A - Continued

Post Spike (4D15040-PS1) Continued Prepared: 04/15/2014 15:12 Analyzed: 04/22/2014 10:31

Source: C404100-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chromium	0.210		0.0100	mg/L	0.200	0.0169	96	80-120			
Copper	0.195		0.0100	mg/L	0.200	0.00532	95	80-120			
Iron	9.31		0.0500	mg/L	1.00	7.13	218	80-120			QM-08
Lead	0.196		0.0100	mg/L	0.200	0.00568	95	80-120			
Magnesium	4.84		0.100	mg/L	2.00	2.72	106	80-120			
Manganese	0.268		0.0100	mg/L	0.200	0.0713	98	80-120			
Nickel	0.205		0.0100	mg/L	0.200	0.0157	95	80-120			
Potassium	11.6		0.500	mg/L	10.0	2.01	95	80-120			
Selenium	0.194		0.0100	mg/L	0.200	0.00150	96	80-120			
Silver	0.200		0.0100	mg/L	0.200	0.000253	100	80-120			
Sodium	17.2		0.500	mg/L	10.0	8.20	90	80-120			
Vanadium	0.207		0.0100	mg/L	0.200	0.0103	98	80-120			
Zinc	0.223		0.0100	mg/L	0.200	0.0339	94	80-120			

Batch 4D15041 - EPA 3005A

Blank (4D15041-BLK1) Prepared: 04/15/2014 15:16 Analyzed: 04/21/2014 11:11

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Cobalt	0.100	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (4D15041-BS1) Prepared: 04/15/2014 15:16 Analyzed: 04/21/2014 11:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	206		2.00	ug/L	200		103	80-120			
Cobalt	189		1.00	ug/L	200		94	80-120			
Thallium	214		1.00	ug/L	200		107	80-120			

Matrix Spike (4D15041-MS1) Prepared: 04/15/2014 15:16 Analyzed: 04/21/2014 11:35

Source: C404100-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	204		2.00	ug/L	200	1.16	102	75-125			
Cobalt	194		1.00	ug/L	200	0.471	97	75-125			
Thallium	212		1.00	ug/L	200	0.110 U	106	75-125			

Matrix Spike Dup (4D15041-MSD1) Prepared: 04/15/2014 15:16 Analyzed: 04/21/2014 11:39

Source: C404100-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	199		2.00	ug/L	200	1.16	99	75-125	2	20	
Cobalt	189		1.00	ug/L	200	0.471	94	75-125	2	20	
Thallium	207		1.00	ug/L	200	0.110 U	104	75-125	2	20	

Post Spike (4D15041-PS1) Prepared: 04/15/2014 15:16 Analyzed: 04/21/2014 11:43

Source: C404100-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	198		2.00	ug/L	200	1.16	98	80-120			

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QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D15041 - EPA 3005A - Continued

Post Spike (4D15041-PS1) Continued Prepared: 04/15/2014 15:16 Analyzed: 04/21/2014 11:43

Source: C404100-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cobalt	187		1.00	ug/L	200	0.471	93	80-120			
Thallium	203		1.00	ug/L	200	0.0881	101	80-120			

Classical Chemistry Parameters - Quality Control

Batch 4D11039 - NO PREP

Blank (4D11039-BLK1) Prepared: 04/11/2014 10:55 Analyzed: 04/11/2014 11:17

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.0088	U	0.010	mg/L							

LCS (4D11039-BS1) Prepared: 04/11/2014 10:55 Analyzed: 04/11/2014 11:17

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.25		0.010	mg/L	0.249		99	80-120			

Matrix Spike (4D11039-MS1) Prepared: 04/11/2014 10:55 Analyzed: 04/11/2014 11:17

Source: C404753-05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.0088	U	0.010	mg/L	0.249	0.0088 U		75-125			QM-05

Matrix Spike Dup (4D11039-MSD1) Prepared: 04/11/2014 10:55 Analyzed: 04/11/2014 11:17

Source: C404753-05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.0088	U	0.010	mg/L	0.249	0.0088 U		75-125		20	QM-05

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17022 - EPA 5030B_MS

Blank (4D17022-BLK1) Prepared: 04/17/2014 14:38 Analyzed: 04/18/2014 02:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.0004	U	0.0010	mg/kg wet							
1,1,2,2-Tetrachloroethane	0.0003	U	0.0010	mg/kg wet							
1,1,2-Trichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethene	0.0006	U	0.0010	mg/kg wet							
1,2,4-Trichlorobenzene	0.0008	U	0.0010	mg/kg wet							
1,2-Dibromo-3-chloropropane	0.0006	U	0.0010	mg/kg wet							
1,2-Dibromoethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
1,2-Dichloroethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichloropropane	0.0006	U	0.0010	mg/kg wet							
1,3-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
1,4-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
2-Butanone	0.0018	U	0.0050	mg/kg wet							
2-Hexanone	0.0009	U	0.0050	mg/kg wet							

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17022 - EPA 5030B_MS - Continued

Blank (4D17022-BLK1) Continued Prepared: 04/17/2014 14:38 Analyzed: 04/18/2014 02:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4-Methyl-2-pentanone	0.0014	U	0.0050	mg/kg wet							
Acetone	0.0017	U	0.0050	mg/kg wet							
Benzene	0.0004	U	0.0010	mg/kg wet							
Bromochloromethane	0.0004	U	0.0010	mg/kg wet							
Bromodichloromethane	0.0004	U	0.0010	mg/kg wet							
Bromoform	0.0003	U	0.0010	mg/kg wet							
Bromomethane	0.0009	U	0.0010	mg/kg wet							
Carbon disulfide	0.0021	U	0.0050	mg/kg wet							
Carbon Tetrachloride	0.0006	U	0.0010	mg/kg wet							
Chlorobenzene	0.0005	U	0.0010	mg/kg wet							
Chloroethane	0.0005	U	0.0010	mg/kg wet							
Chloroform	0.0004	U	0.0010	mg/kg wet							
Chloromethane	0.0006	U	0.0010	mg/kg wet							
cis-1,2-Dichloroethene	0.0005	U	0.0010	mg/kg wet							
cis-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Cyclohexane	0.0005	U	0.0020	mg/kg wet							
Dibromochloromethane	0.0003	U	0.0010	mg/kg wet							
Dichlorodifluoromethane	0.0006	U	0.0010	mg/kg wet							
Ethylbenzene	0.0006	U	0.0010	mg/kg wet							
Freon 113	0.0006	U	0.0010	mg/kg wet							
Isopropylbenzene	0.0005	U	0.0010	mg/kg wet							
Methyl acetate	0.0016	U	0.0020	mg/kg wet							
Methyl cyclohexane	0.0005	U	0.0020	mg/kg wet							
Methylene Chloride	0.0007	U	0.0020	mg/kg wet							
Methyl-tert-Butyl Ether	0.0003	U	0.0010	mg/kg wet							
Styrene	0.0004	U	0.0010	mg/kg wet							
Tetrachloroethene	0.0005	U	0.0010	mg/kg wet							
Toluene	0.0005	U	0.0010	mg/kg wet							
trans-1,2-Dichloroethene	0.0007	U	0.0010	mg/kg wet							
trans-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Trichloroethene	0.0005	U	0.0010	mg/kg wet							
Trichlorofluoromethane	0.0005	U	0.0010	mg/kg wet							
Vinyl chloride	0.0004	U	0.0010	mg/kg wet							
Xylenes (Total)	0.0010	U	0.0020	mg/kg wet							
4-Bromofluorobenzene	*0.050*			*mg/kg wet*	*0.0500*		*100*	*71-126*			
Dibromofluoromethane	*0.048*			*mg/kg wet*	*0.0500*		*97*	*72-133*			
Toluene-d8	*0.045*			*mg/kg wet*	*0.0500*		*89*	*80-123*			

LCS (4D17022-BS1) Prepared: 04/17/2014 14:38 Analyzed: 04/18/2014 00:38

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.017		0.0010	mg/kg wet	0.0200		84	61-124			
Benzene	0.018		0.0010	mg/kg wet	0.0200		88	59-133			
Chlorobenzene	0.016		0.0010	mg/kg wet	0.0200		82	69-121			
Toluene	0.016		0.0010	mg/kg wet	0.0200		80	66-119			
Trichloroethene	0.017		0.0010	mg/kg wet	0.0200		84	71-122			
4-Bromofluorobenzene	*0.051*			*mg/kg wet*	*0.0500*		*101*	*71-126*			
Dibromofluoromethane	*0.048*			*mg/kg wet*	*0.0500*		*95*	*72-133*			

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17022 - EPA 5030B_MS - Continued

LCS (4D17022-BS1) Continued Prepared: 04/17/2014 14:38 Analyzed: 04/18/2014 00:38

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Toluene-d8	*0.047*			*mg/kg wet*	*0.0500*		*94*	*80-123*			

LCS Dup (4D17022-BSD1) Prepared: 04/17/2014 14:38 Analyzed: 04/18/2014 01:12

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.019		0.0010	mg/kg wet	0.0200		94	61-124	10	23	
Benzene	0.019		0.0010	mg/kg wet	0.0200		97	59-133	10	19	
Chlorobenzene	0.019		0.0010	mg/kg wet	0.0200		95	69-121	15	18	
Toluene	0.019		0.0010	mg/kg wet	0.0200		95	66-119	17	21	
Trichloroethene	0.020		0.0010	mg/kg wet	0.0200		102	71-122	19	26	
4-Bromofluorobenzene	*0.044*			*mg/kg wet*	*0.0500*		*87*	*71-126*			
Dibromofluoromethane	*0.042*			*mg/kg wet*	*0.0500*		*85*	*72-133*			
Toluene-d8	*0.043*			*mg/kg wet*	*0.0500*		*85*	*80-123*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D17008 - EPA 3550C_MS

Blank (4D17008-BLK1) Prepared: 04/17/2014 09:41 Analyzed: 04/17/2014 16:20

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1'-Biphenyl	0.073	U	0.33	mg/kg wet							
2,4,5-Trichlorophenol	0.067	U	0.33	mg/kg wet							
2,4,6-Trichlorophenol	0.15	U	0.33	mg/kg wet							
2,4-Dichlorophenol	0.25	U	0.33	mg/kg wet							
2,4-Dimethylphenol	0.23	U	0.33	mg/kg wet							
2,4-Dinitrophenol	0.089	U	0.33	mg/kg wet							
2,4-Dinitrotoluene	0.16	U	0.33	mg/kg wet							
2,6-Dinitrotoluene	0.18	U	0.33	mg/kg wet							
2-Chloronaphthalene	0.098	U	0.33	mg/kg wet							
2-Chlorophenol	0.23	U	0.33	mg/kg wet							
2-Methyl-4,6-dinitrophenol	0.28	U	0.33	mg/kg wet							
2-Methylnaphthalene	0.12	U	0.33	mg/kg wet							
2-Methylphenol	0.11	U	0.33	mg/kg wet							
2-Nitroaniline	0.085	U	0.33	mg/kg wet							
2-Nitrophenol	0.26	U	0.33	mg/kg wet							
3 & 4-Methylphenol	0.25	U	0.33	mg/kg wet							
3,3'-Dichlorobenzidine	0.21	U	0.33	mg/kg wet							
3-Nitroaniline	0.080	U	0.33	mg/kg wet							
4-Bromophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Chloro-3-methylphenol	0.28	U	0.33	mg/kg wet							
4-Chloroaniline	0.065	U	0.33	mg/kg wet							
4-Chlorophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Nitroaniline	0.26	U	0.33	mg/kg wet							
4-Nitrophenol	0.13	U	0.33	mg/kg wet							
Acenaphthene	0.13	U	0.33	mg/kg wet							
Acenaphthylene	0.12	U	0.33	mg/kg wet							
Acetophenone	0.14	U	0.33	mg/kg wet							
Anthracene	0.15	U	0.33	mg/kg wet							

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D17008 - EPA 3550C_MS - Continued

Blank (4D17008-BLK1) Continued Prepared: 04/17/2014 09:41 Analyzed: 04/17/2014 16:20

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Atrazine	0.074	U	0.33	mg/kg wet							
Benzaldehyde	0.27	U	0.33	mg/kg wet							
Benzo(a)anthracene	0.13	U	0.33	mg/kg wet							
Benzo(a)pyrene	0.078	U	0.33	mg/kg wet							
Benzo(b)fluoranthene	0.11	U	0.33	mg/kg wet							
Benzo(g,h,i)perylene	0.16	U	0.33	mg/kg wet							
Benzo(k)fluoranthene	0.11	U	0.33	mg/kg wet							
Bis(2-chloroethoxy)methane	0.15	U	0.33	mg/kg wet							
Bis(2-chloroethyl)ether	0.14	U	0.33	mg/kg wet							
Bis(2-chloroisopropyl)ether	0.099	U	0.33	mg/kg wet							
Bis(2-ethylhexyl)phthalate	0.13	U	0.33	mg/kg wet							
Butylbenzylphthalate	0.14	U	0.33	mg/kg wet							
Caprolactam	0.30	U	0.33	mg/kg wet							
Carbazole	0.12	U	0.33	mg/kg wet							
Chrysene	0.13	U	0.33	mg/kg wet							
Dibenzo(a,h)anthracene	0.14	U	0.33	mg/kg wet							
Dibenzofuran	0.13	U	0.33	mg/kg wet							
Diethylphthalate	0.13	U	0.33	mg/kg wet							
Dimethylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-butylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-octylphthalate	0.13	U	0.33	mg/kg wet							
Fluoranthene	0.11	U	0.33	mg/kg wet							
Fluorene	0.14	U	0.33	mg/kg wet							
Hexachlorobenzene	0.12	U	0.33	mg/kg wet							
Hexachlorobutadiene	0.13	U	0.33	mg/kg wet							
Hexachlorocyclopentadiene	0.15	U	0.33	mg/kg wet							
Hexachloroethane	0.10	U	0.33	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.14	U	0.33	mg/kg wet							
Isophorone	0.17	U	0.33	mg/kg wet							
Naphthalene	0.12	U	0.33	mg/kg wet							
Nitrobenzene	0.15	U	0.33	mg/kg wet							
N-Nitroso-di-n-propylamine	0.15	U	0.33	mg/kg wet							
N-nitrosodiphenylamine/Diphenylamine	0.23	U	0.33	mg/kg wet							
Pentachlorophenol	0.21	U	0.33	mg/kg wet							
Phenanthrene	0.13	U	0.33	mg/kg wet							
Phenol	0.099	U	0.33	mg/kg wet							
Pyrene	0.11	U	0.33	mg/kg wet							
2,4,6-Tribromophenol	*1.0*			*mg/kg wet*	*1.67*		*63*	*23-137*			
2-Fluorobiphenyl	*1.1*			*mg/kg wet*	*1.67*		*68*	*29-119*			
2-Fluorophenol	*0.98*			*mg/kg wet*	*1.67*		*59*	*20-124*			
Nitrobenzene-d5	*0.75*			*mg/kg wet*	*1.67*		*45*	*17-126*			
Phenol-d5	*1.1*			*mg/kg wet*	*1.67*		*66*	*15-131*			
Terphenyl-d14	*1.7*			*mg/kg wet*	*1.67*		*101*	*60-120*			

LCS (4D17008-BS1) Prepared: 04/17/2014 09:41 Analyzed: 04/17/2014 16:48

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	2.1		0.33	mg/kg wet	1.67		127	54-125			QL-02
2-Chlorophenol	1.8		0.33	mg/kg wet	1.67		108	50-105			QL-02

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D17008 - EPA 3550C_MS - Continued

LCS (4D17008-BS1) Continued Prepared: 04/17/2014 09:41 Analyzed: 04/17/2014 16:48

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4-Chloro-3-methylphenol	1.8		0.33	mg/kg wet	1.67		110	55-106			QL-02
4-Nitrophenol	1.4		0.33	mg/kg wet	1.67		86	30-124			
Acenaphthene	1.7		0.33	mg/kg wet	1.67		99	49-111			
N-Nitroso-di-n-propylamine	1.6		0.33	mg/kg wet	1.67		98	52-126			
Pentachlorophenol	1.5		0.33	mg/kg wet	1.67		90	10-101			
Phenol	1.8		0.33	mg/kg wet	1.67		109	28-121			
Pyrene	1.7		0.33	mg/kg wet	1.67		104	66-115			
2,4,6-Tribromophenol	*1.9*			*mg/kg wet*	*1.67*		*117*	*23-137*			
2-Fluorobiphenyl	*1.6*			*mg/kg wet*	*1.67*		*97*	*29-119*			
2-Fluorophenol	*1.7*			*mg/kg wet*	*1.67*		*102*	*20-124*			
Nitrobenzene-d5	*1.5*			*mg/kg wet*	*1.67*		*88*	*17-126*			
Phenol-d5	*1.6*			*mg/kg wet*	*1.67*		*97*	*15-131*			
Terphenyl-d14	*1.9*			*mg/kg wet*	*1.67*		*113*	*60-120*			

Matrix Spike (4D17008-MS1) Prepared: 04/17/2014 09:41 Analyzed: 04/17/2014 17:16

Source: A402181-04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.9		0.39	mg/kg dry	1.92	0.19 U	100	54-125			
2-Chlorophenol	1.4		0.39	mg/kg dry	1.92	0.27 U	71	50-105			
4-Chloro-3-methylphenol	1.6		0.39	mg/kg dry	1.92	0.33 U	83	55-106			
4-Nitrophenol	1.4		0.39	mg/kg dry	1.92	0.15 U	70	30-124			
Acenaphthene	1.4		0.39	mg/kg dry	1.92	0.15 U	72	49-111			
N-Nitroso-di-n-propylamine	1.3		0.39	mg/kg dry	1.92	0.18 U	66	52-126			
Pentachlorophenol	1.5		0.39	mg/kg dry	1.92	0.25 U	78	10-101			
Phenol	1.4		0.39	mg/kg dry	1.92	0.12 U	74	28-121			
Pyrene	1.7		0.39	mg/kg dry	1.92	0.13 U	89	66-115			
2,4,6-Tribromophenol	*1.7*			*mg/kg dry*	*1.92*		*89*	*23-137*			
2-Fluorobiphenyl	*1.2*			*mg/kg dry*	*1.92*		*60*	*29-119*			
2-Fluorophenol	*1.3*			*mg/kg dry*	*1.92*		*67*	*20-124*			
Nitrobenzene-d5	*1.1*			*mg/kg dry*	*1.92*		*55*	*17-126*			
Phenol-d5	*1.3*			*mg/kg dry*	*1.92*		*65*	*15-131*			
Terphenyl-d14	*1.7*			*mg/kg dry*	*1.92*		*91*	*60-120*			

Matrix Spike Dup (4D17008-MSD1) Prepared: 04/17/2014 09:41 Analyzed: 04/17/2014 17:44

Source: A402181-04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	2.1		0.39	mg/kg dry	1.94	0.19 U	110	54-125	10	23	
2-Chlorophenol	1.7		0.39	mg/kg dry	1.94	0.27 U	90	50-105	24	27	
4-Chloro-3-methylphenol	1.9		0.39	mg/kg dry	1.94	0.33 U	96	55-106	15	28	
4-Nitrophenol	1.5		0.39	mg/kg dry	1.94	0.15 U	76	30-124	9	35	
Acenaphthene	1.7		0.39	mg/kg dry	1.94	0.15 U	87	49-111	19	27	
N-Nitroso-di-n-propylamine	1.6		0.39	mg/kg dry	1.94	0.18 U	80	52-126	21	24	
Pentachlorophenol	1.8		0.39	mg/kg dry	1.94	0.25 U	92	10-101	17	26	
Phenol	1.8		0.39	mg/kg dry	1.94	0.12 U	92	28-121	23	32	
Pyrene	1.8		0.39	mg/kg dry	1.94	0.13 U	95	66-115	7	28	
2,4,6-Tribromophenol	*2.0*			*mg/kg dry*	*1.94*		*102*	*23-137*			
2-Fluorobiphenyl	*1.6*			*mg/kg dry*	*1.94*		*80*	*29-119*			
2-Fluorophenol	*1.6*			*mg/kg dry*	*1.94*		*84*	*20-124*			

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D17008 - EPA 3550C_MS - Continued

Matrix Spike Dup (4D17008-MSD1) Continued Prepared: 04/17/2014 09:41 Analyzed: 04/17/2014 17:44

Source: A402181-04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrobenzene-d5	*1.4*			*mg/kg dry*	*1.94*		*70*	*17-126*			
Phenol-d5	*1.6*			*mg/kg dry*	*1.94*		*82*	*15-131*			
Terphenyl-d14	*1.9*			*mg/kg dry*	*1.94*		*99*	*60-120*			

Batch 4D18034 - EPA 3550C_MS

Blank (4D18034-BLK1) Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 10:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1'-Biphenyl	0.073	U	0.33	mg/kg wet							
2,4,5-Trichlorophenol	0.067	U	0.33	mg/kg wet							
2,4,6-Trichlorophenol	0.15	U	0.33	mg/kg wet							
2,4-Dichlorophenol	0.25	U	0.33	mg/kg wet							
2,4-Dimethylphenol	0.23	U	0.33	mg/kg wet							
2,4-Dinitrophenol	0.089	U	0.33	mg/kg wet							
2,4-Dinitrotoluene	0.16	U	0.33	mg/kg wet							
2,6-Dinitrotoluene	0.18	U	0.33	mg/kg wet							
2-Chloronaphthalene	0.098	U	0.33	mg/kg wet							
2-Chlorophenol	0.23	U	0.33	mg/kg wet							
2-Methyl-4,6-dinitrophenol	0.28	U	0.33	mg/kg wet							
2-Methylnaphthalene	0.12	U	0.33	mg/kg wet							
2-Methylphenol	0.11	U	0.33	mg/kg wet							
2-Nitroaniline	0.085	U	0.33	mg/kg wet							
2-Nitrophenol	0.26	U	0.33	mg/kg wet							
3 & 4-Methylphenol	0.25	U	0.33	mg/kg wet							
3,3'-Dichlorobenzidine	0.21	U	0.33	mg/kg wet							
3-Nitroaniline	0.080	U	0.33	mg/kg wet							
4-Bromophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Chloro-3-methylphenol	0.28	U	0.33	mg/kg wet							
4-Chloroaniline	0.065	U	0.33	mg/kg wet							
4-Chlorophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Nitroaniline	0.26	U	0.33	mg/kg wet							
4-Nitrophenol	0.13	U	0.33	mg/kg wet							
Acenaphthene	0.13	U	0.33	mg/kg wet							
Acenaphthylene	0.12	U	0.33	mg/kg wet							
Acetophenone	0.14	U	0.33	mg/kg wet							
Anthracene	0.15	U	0.33	mg/kg wet							
Atrazine	0.074	U	0.33	mg/kg wet							
Benzaldehyde	0.27	U	0.33	mg/kg wet							
Benzo(a)anthracene	0.13	U	0.33	mg/kg wet							
Benzo(a)pyrene	0.078	U	0.33	mg/kg wet							
Benzo(b)fluoranthene	0.11	U	0.33	mg/kg wet							
Benzo(g,h,i)perylene	0.16	U	0.33	mg/kg wet							
Benzo(k)fluoranthene	0.11	U	0.33	mg/kg wet							
Bis(2-chloroethoxy)methane	0.15	U	0.33	mg/kg wet							
Bis(2-chloroethyl)ether	0.14	U	0.33	mg/kg wet							
Bis(2-chloroisopropyl)ether	0.099	U	0.33	mg/kg wet							
Bis(2-ethylhexyl)phthalate	0.13	U	0.33	mg/kg wet							
Butylbenzylphthalate	0.14	U	0.33	mg/kg wet							

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D18034 - EPA 3550C_MS - Continued

Blank (4D18034-BLK1) Continued Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 10:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Caprolactam	0.30	U	0.33	mg/kg wet							
Carbazole	0.12	U	0.33	mg/kg wet							
Chrysene	0.13	U	0.33	mg/kg wet							
Dibenzo(a,h)anthracene	0.14	U	0.33	mg/kg wet							
Dibenzofuran	0.13	U	0.33	mg/kg wet							
Diethylphthalate	0.13	U	0.33	mg/kg wet							
Dimethylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-butylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-octylphthalate	0.13	U	0.33	mg/kg wet							
Fluoranthene	0.11	U	0.33	mg/kg wet							
Fluorene	0.14	U	0.33	mg/kg wet							
Hexachlorobenzene	0.12	U	0.33	mg/kg wet							
Hexachlorobutadiene	0.13	U	0.33	mg/kg wet							
Hexachlorocyclopentadiene	0.15	U	0.33	mg/kg wet							
Hexachloroethane	0.10	U	0.33	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.14	U	0.33	mg/kg wet							
Isophorone	0.17	U	0.33	mg/kg wet							
Naphthalene	0.12	U	0.33	mg/kg wet							
Nitrobenzene	0.15	U	0.33	mg/kg wet							
N-Nitroso-di-n-propylamine	0.15	U	0.33	mg/kg wet							
N-nitrosodiphenylamine/Diphenylamine	0.23	U	0.33	mg/kg wet							
Pentachlorophenol	0.21	U	0.33	mg/kg wet							
Phenanthrene	0.13	U	0.33	mg/kg wet							
Phenol	0.099	U	0.33	mg/kg wet							
Pyrene	0.11	U	0.33	mg/kg wet							
2,4,6-Tribromophenol	*1.4*			*mg/kg wet*	*1.67*		*85*	*23-137*			
2-Fluorobiphenyl	*1.5*			*mg/kg wet*	*1.67*		*90*	*29-119*			
2-Fluorophenol	*1.5*			*mg/kg wet*	*1.67*		*88*	*20-124*			
Nitrobenzene-d5	*1.2*			*mg/kg wet*	*1.67*		*74*	*17-126*			
Phenol-d5	*1.5*			*mg/kg wet*	*1.67*		*89*	*15-131*			
Terphenyl-d14	*1.7*			*mg/kg wet*	*1.67*		*102*	*60-120*			

LCS (4D18034-BS1) Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 11:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.8		0.33	mg/kg wet	1.67		107	54-125			
2-Chlorophenol	1.6		0.33	mg/kg wet	1.67		97	50-105			
4-Chloro-3-methylphenol	1.6		0.33	mg/kg wet	1.67		97	55-106			
4-Nitrophenol	1.4		0.33	mg/kg wet	1.67		82	30-124			
Acenaphthene	1.5		0.33	mg/kg wet	1.67		90	49-111			
N-Nitroso-di-n-propylamine	1.6		0.33	mg/kg wet	1.67		95	52-126			
Pentachlorophenol	1.8		0.33	mg/kg wet	1.67		108	10-101			QL-02
Phenol	1.6		0.33	mg/kg wet	1.67		98	28-121			
Pyrene	1.7		0.33	mg/kg wet	1.67		100	66-115			
2,4,6-Tribromophenol	*1.8*			*mg/kg wet*	*1.67*		*107*	*23-137*			
2-Fluorobiphenyl	*1.5*			*mg/kg wet*	*1.67*		*91*	*29-119*			
2-Fluorophenol	*1.5*			*mg/kg wet*	*1.67*		*91*	*20-124*			
Nitrobenzene-d5	*1.3*			*mg/kg wet*	*1.67*		*80*	*17-126*			

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D18034 - EPA 3550C_MS - Continued

LCS (4D18034-BS1) Continued Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 11:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Phenol-d5	*1.5*			*mg/kg wet*	*1.67*		*90*	*15-131*			
Terphenyl-d14	*1.8*			*mg/kg wet*	*1.67*		*108*	*60-120*			

Matrix Spike (4D18034-MS1) Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 12:24

Source: A402224-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.7	D	0.72	mg/kg dry	1.83	0.35 U	93	54-125			
2-Chlorophenol	1.1	D	0.72	mg/kg dry	1.83	0.50 U	61	50-105			
4-Chloro-3-methylphenol	1.5	D	0.72	mg/kg dry	1.83	0.61 U	85	55-106			
4-Nitrophenol	1.3	D	0.72	mg/kg dry	1.83	0.29 U	72	30-124			
Acenaphthene	1.4	D	0.72	mg/kg dry	1.83	0.29 U	78	49-111			
N-Nitroso-di-n-propylamine	1.1	D	0.72	mg/kg dry	1.83	0.33 U	61	52-126			
Pentachlorophenol	1.9	D	0.72	mg/kg dry	1.83	0.46 U	103	10-101			QM-07
Phenol	1.2	D	0.72	mg/kg dry	1.83	0.22 U	67	28-121			
Pyrene	1.8	D	0.72	mg/kg dry	1.83	0.24 U	100	66-115			
2,4,6-Tribromophenol	*1.8*			*mg/kg dry*	*1.83*		*98*	*23-137*			
2-Fluorobiphenyl	*1.3*			*mg/kg dry*	*1.83*		*70*	*29-119*			
2-Fluorophenol	*1.0*			*mg/kg dry*	*1.83*		*56*	*20-124*			
Nitrobenzene-d5	*0.92*			*mg/kg dry*	*1.83*		*50*	*17-126*			
Phenol-d5	*1.1*			*mg/kg dry*	*1.83*		*61*	*15-131*			
Terphenyl-d14	*1.8*			*mg/kg dry*	*1.83*		*100*	*60-120*			

Matrix Spike Dup (4D18034-MSD1) Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 12:52

Source: A402224-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.8	D	0.72	mg/kg dry	1.83	0.35 U	99	54-125	6	23	
2-Chlorophenol	1.3	D	0.72	mg/kg dry	1.83	0.50 U	71	50-105	16	27	
4-Chloro-3-methylphenol	1.7	D	0.72	mg/kg dry	1.83	0.61 U	92	55-106	8	28	
4-Nitrophenol	1.4	D	0.72	mg/kg dry	1.83	0.29 U	77	30-124	6	35	
Acenaphthene	1.5	D	0.72	mg/kg dry	1.83	0.29 U	83	49-111	6	27	
N-Nitroso-di-n-propylamine	1.3	D	0.72	mg/kg dry	1.83	0.33 U	72	52-126	15	24	
Pentachlorophenol	2.1	D	0.72	mg/kg dry	1.83	0.46 U	117	10-101	13	26	QM-07
Phenol	1.4	D	0.72	mg/kg dry	1.83	0.22 U	75	28-121	12	32	
Pyrene	1.9	D	0.72	mg/kg dry	1.83	0.24 U	104	66-115	4	28	
2,4,6-Tribromophenol	*2.0*			*mg/kg dry*	*1.83*		*107*	*23-137*			
2-Fluorobiphenyl	*1.4*			*mg/kg dry*	*1.83*		*76*	*29-119*			
2-Fluorophenol	*1.2*			*mg/kg dry*	*1.83*		*65*	*20-124*			
Nitrobenzene-d5	*1.1*			*mg/kg dry*	*1.83*		*58*	*17-126*			
Phenol-d5	*1.3*			*mg/kg dry*	*1.83*		*70*	*15-131*			
Terphenyl-d14	*1.9*			*mg/kg dry*	*1.83*		*103*	*60-120*			

Classical Chemistry Parameters - Quality Control

Batch 4D21022 - NO PREP

Blank (4D21022-BLK1) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

QUALITY CONTROL DATA

Classical Chemistry Parameters - Quality Control

Batch 4D21022 - NO PREP - Continued

Blank (4D21022-BLK1) Continued Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.15	U	1.0	mg/kg wet							

LCS (4D21022-BS1) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	10		1.0	mg/kg wet	10.0		103	84-124			

Matrix Spike (4D21022-MS1) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Source: C404753-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.18	U	1.2	mg/kg dry	12.2	0.18 U		84-124			QM-14

Matrix Spike (4D21022-MS2) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Source: C404753-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	55		6.3	mg/kg dry	63.3	0.95 U	87	84-124			QM-14

Matrix Spike Dup (4D21022-MSD1) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Source: C404753-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.18	U	1.2	mg/kg dry	12.2	0.18 U		84-124		11	QM-14

Matrix Spike Dup (4D21022-MSD2) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Source: C404753-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	56		6.3	mg/kg dry	63.3	0.95 U	88	84-124	1	11	QM-14

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence (85% or greater confidence) to make a "tentative identification".
J-05	Result estimated, calibration verification standard failed with low bias.
QB-01	The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact of the deviation.
QL-02	The associated laboratory control sample exhibited high bias; since the result is ND, the impact on data quality is minimal.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-08	Post-digestion spike did not meet method requirements due to confirmed matrix effects (dilution test).
QM-14	Confirmed matrix effects
QV-01	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.
QV-02	The associated continuing calibration verification standard exhibited low bias; the reported result should be considered to be a minimum estimate.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 211
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: REMSA, Inc. (RE026)	Project Number: G18-10-T03P
Address: 124 W. Queens Way	Project Name/Desc: 1554 West Pembroke Ave.
City/ST/Zip: Hampton, VA 23669	PO # / Billing Info: G18-10-T03P
Tel: 757-722-0113 Fax:	Reporting Contact: Mike Iwashchenko
Sampler(s) Name, Affiliation (Print): Dan Christian	Billing Contact: Mike Iwashchenko
Sampler(s) Signature: [signature]	Facility # (if required):

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C404753

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	TPH-GRO 8015	TPH-DRO 8015	VOCs 8260B	SVOCs 8270D	TAL 6010C/7471B soil 7470A gw	Hex Chrom 7196A	Hex Chrom 3500 CR-D	PCBs 8082A			Sample Comments
	GP54-4	4-10-14	11:30	Grab	GW	10	X	X	X	X	X		X	X			
	GP54-4	4-10-14	9:25	Grab	SO	6	X	X	X	X	X	X					
	GP54-1	4-10-14	9:55	Grab	SO	6	X	X	X	X	X	X					
	GP54-1	4-10-14	11:45	Grab	GW	10	X	X	X	X	X		X	X			
	GP54-6	4-10-14	12:55	Grab	GW	4	X	X		X	X		X	X			

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
		[signature]	4-10-14 3:00	[signature]	4-11-14 9:30
		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time

Comments: GP54-6 Sample Being Reported with w/o C404170 [signature]

Cooler #'s & Temps on Receipt: 3.1°C

Condition Upon Receipt: ✓ Acceptable ___ Unacceptable

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: REMSA, Inc. CRE026	Project Number: E18-10-T03P
Address: 124 W. Queens Way	Project Name/Desc: 1554 West Pembroke Ave.
City/ST/Zip: Hampton, VA 23669	PO # / Billing Info: E18-10-T03P
Tel: 757-722-0113 Fax:	Reporting Contact: Mike Iwashchenko
Sampler(s) Name, Affiliation (Print): Don Christian	Billing Contact: Mike Iwashchenko
Sampler(s) Signature:	Site Location / Time Zone:

Requested Analyses: TPH-GRO 8015; TPH-DRO 8015; VOCs 8260B; SVOCs 8270D; TAL 6010C/7470B 7470A; Hex Chrome 7196A; Hex Chrome 3500 CrD; PCBs 8082A

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C404753

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	TPH-GRO 8015	TPH-DRO 8015	VOCs 8260B	SVOCs 8270D	TAL 6010C/7470B 7470A	Hex Chrome 7196A	Hex Chrome 3500 CrD	PCBs 8082A			Sample Comments
	GP14-3	4-10-11	1:35	Grab	SO	6	X	X	X	X	X	X					
	GP14-3	4-10-11	1:55	↓	GW	10	X	X	X	X	X		X	X			
	GP14-1	4-10-11	11:45		SO	6	X	X	X	X	X	X					
	GP14-1	4-10-11	12:10		GW	10	X	X	X	X	X		X	X			
	GP54-11	4-10-11	9:45	✓	GW	2					X		X				
	Trip Blank					4											
	Jul 4-11-14																

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time 4-10-14 3:00	Received By	Date/Time 4-11-14 9:30
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: 3.7 C		Condition Upon Receipt: ✓ Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **DW**-Drinking Water **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments)

Preservation: **I**-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

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ENCO Laboratories

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102-A Woodwinds Industrial Court
Cary NC, 27511
Phone: 919.467.3090 FAX: 919.467.3515

Thursday, May 1, 2014
REMSA, Inc. (RE026)
Attn: Mike Iwashchenko
124 W. Queens Way
Hampton, VA 23669

RE: Laboratory Results for
Project Number: E-18-10-T03P, Project Name/Desc: 1614 West Pembroke Avenue
ENCO Workorder(s): C404181

Dear Mike Iwashchenko,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Wednesday, April 9, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

www.encolabs.com

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: SW-1 **Lab ID: C404181-01** **Sampled: 04/08/14 14:44** **Received: 04/09/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	04/09/14 14:44		04/09/14	11:29	04/09/14 12:03
EPA 6010C	10/05/14		04/14/14	14:11	04/16/14 14:17
EPA 6020A	10/05/14		04/14/14	14:17	04/16/14 12:13
EPA 7470A	05/06/14		04/10/14	11:18	04/14/14 12:47
EPA 8082A	04/08/15	06/01/14	04/22/14	09:29	04/24/14 16:25
EPA 8260B	04/22/14		04/17/14	14:54	04/18/14 17:09
EPA 8270D	04/15/14	05/24/14	04/14/14	15:30	04/21/14 23:37

Client ID: Trip Blank **Lab ID: C404181-02** **Sampled: 04/08/14 14:44** **Received: 04/09/14 10:15**

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	04/22/14	04/17/14 14:54	04/18/14 18:37

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SAMPLE DETECTION SUMMARY

Client ID: SW-1 **Lab ID:** C404181-01

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	2090		29.0	100	ug/L	EPA 6010C	
Antimony - Total	1.91	J	0.220	2.00	ug/L	EPA 6020A	
Barium - Total	101		1.00	10.0	ug/L	EPA 6010C	
Cadmium - Total	2.68		0.360	1.00	ug/L	EPA 6010C	
Calcium - Total	97900		39.0	100	ug/L	EPA 6010C	
Chromium - Total	5.53	J	1.40	10.0	ug/L	EPA 6010C	
Cobalt - Total	3.07		0.100	1.00	ug/L	EPA 6020A	
Copper - Total	66.6		1.60	10.0	ug/L	EPA 6010C	
Iron - Total	4370		22.0	50.0	ug/L	EPA 6010C	
Lead - Total	72.4		2.10	10.0	ug/L	EPA 6010C	
Magnesium - Total	12100		23.0	100	ug/L	EPA 6010C	
Manganese - Total	1180		1.10	10.0	ug/L	EPA 6010C	
Mercury - Total	0.299		0.170	0.200	ug/L	EPA 7470A	
Nickel - Total	23.7		1.80	10.0	ug/L	EPA 6010C	
Potassium - Total	14100		150	500	ug/L	EPA 6010C	
Silver - Total	2.49	JB	1.90	10.0	ug/L	EPA 6010C	J-01
Sodium - Total	26100		400	500	ug/L	EPA 6010C	
Vanadium - Total	5.33	J	1.40	10.0	ug/L	EPA 6010C	
Zinc - Total	451		3.80	10.0	ug/L	EPA 6010C	

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ANALYTICAL RESULTS

Description: SW-1 | **Lab Sample ID:** C404181-01 | **Received:** 04/09/14 10:15

Matrix: Ground Water | **Sampled:** 04/08/14 14:44 | **Work Order:** C404181

Project: 1614 West Pembroke Avenue | **Sampled By:** Andrew Gowen

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Acetone [67-64-1]^	1.2	U	ug/L	1	1.2	5.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
m,p-Xylenes [108-38-3/106-42-3]	0.17	U	ug/L	1	0.17	2.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.16	U	ug/L	1	0.16	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	

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ANALYTICAL RESULTS

Description: SW-1 | **Lab Sample ID:** C404181-01 | **Received:** 04/09/14 10:15
Matrix: Ground Water | **Sampled:** 04/08/14 14:44 | **Work Order:** C404181
Project: 1614 West Pembroke Avenue | **Sampled By:** Andrew Gowen

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4D17035	EPA 8260B	04/18/14 17:09	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*52*	*1*	*50.0*	*104 %*	*51-122*	*4D17035*	*EPA 8260B*	*04/18/14 17:09*	*MSZ*	
Dibromofluoromethane	*52*	*1*	*50.0*	*104 %*	*68-117*	*4D17035*	*EPA 8260B*	*04/18/14 17:09*	*MSZ*	
Toluene-d8	*50*	*1*	*50.0*	*101 %*	*67-127*	*4D17035*	*EPA 8260B*	*04/18/14 17:09*	*MSZ*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]	1.5	U	ug/L	1	1.5	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2,4,5-Trichlorophenol [95-95-4]^	1.0	U	ug/L	1	1.0	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2,4,6-Trichlorophenol [88-06-2]^	1.1	U	ug/L	1	1.1	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2,4-Dichlorophenol [120-83-2]^	1.4	U	ug/L	1	1.4	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2,4-Dimethylphenol [105-67-9]^	1.3	U	ug/L	1	1.3	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2,4-Dinitrophenol [51-28-5]^	2.6	U	ug/L	1	2.6	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2,4-Dinitrotoluene [121-14-2]^	2.4	U	ug/L	1	2.4	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2,6-Dinitrotoluene [606-20-2]^	1.5	U	ug/L	1	1.5	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2-Chloronaphthalene [91-58-7]^	1.0	U	ug/L	1	1.0	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2-Chlorophenol [95-57-8]^	1.2	U	ug/L	1	1.2	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]	2.9	U	ug/L	1	2.9	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2-Methylnaphthalene [91-57-6]^	1.5	U	ug/L	1	1.5	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2-Methylphenol [95-48-7]^	1.4	U	ug/L	1	1.4	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
2-Nitroaniline [88-74-4]^	1.5	U	ug/L	1	1.5	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	QV-01
2-Nitrophenol [88-75-5]^	1.1	U	ug/L	1	1.1	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]	1.6	U	ug/L	1	1.6	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
3-Nitroaniline [99-09-2]^	2.1	U	ug/L	1	2.1	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
4-Bromophenyl-phenylether [101-55-3]^	1.0	U	ug/L	1	1.0	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
4-Chloro-3-methylphenol [59-50-7]^	1.5	U	ug/L	1	1.5	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
4-Chloroaniline [106-47-8]^	1.2	U	ug/L	1	1.2	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	1.6	U	ug/L	1	1.6	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
4-Nitrophenol [100-02-7]^	2.0	U	ug/L	1	2.0	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Acenaphthene [83-32-9]^	1.4	U	ug/L	1	1.4	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Acenaphthylene [208-96-8]^	1.2	U	ug/L	1	1.2	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Acetophenone [98-86-2]^	1.3	U	ug/L	1	1.3	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Anthracene [120-12-7]^	1.6	U	ug/L	1	1.6	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Atrazine [1912-24-9]	1.5	U	ug/L	1	1.5	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Benzaldehyde [100-52-7]	1.4	U	ug/L	1	1.4	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	QV-02
Benzo(a)anthracene [56-55-3]^	1.3	U	ug/L	1	1.3	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Benzo(a)pyrene [50-32-8]^	1.3	U	ug/L	1	1.3	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Benzo(b)fluoranthene [205-99-2]^	1.0	U	ug/L	1	1.0	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Benzo(g,h,i)perylene [191-24-2]^	2.4	U	ug/L	1	2.4	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Benzo(k)fluoranthene [207-08-9]^	1.3	U	ug/L	1	1.3	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	

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ANALYTICAL RESULTS

Description: SW-1 | **Lab Sample ID:** C404181-01 | **Received:** 04/09/14 10:15
Matrix: Ground Water | **Sampled:** 04/08/14 14:44 | **Work Order:** C404181
Project: 1614 West Pembroke Avenue | **Sampled By:** Andrew Gowen

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethoxy)methane [111-91-1]^	1.4	U	ug/L	1	1.4	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	1.2	U	ug/L	1	1.2	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	1.3	U	ug/L	1	1.3	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	1.7	U	ug/L	1	1.7	5.0	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Butylbenzylphthalate [85-68-7]^	2.0	U	ug/L	1	2.0	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Caprolactam [105-60-2]	1.3	U	ug/L	1	1.3	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Carbazole [86-74-8]^	2.5	U	ug/L	1	2.5	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Chrysene [218-01-9]^	2.0	U	ug/L	1	2.0	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	2.3	U	ug/L	1	2.3	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Dibenzofuran [132-64-9]^	1.4	U	ug/L	1	1.4	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Diethylphthalate [84-66-2]^	2.1	U	ug/L	1	2.1	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Dimethylphthalate [131-11-3]^	1.4	U	ug/L	1	1.4	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Di-n-butylphthalate [84-74-2]^	1.5	U	ug/L	1	1.5	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Di-n-octylphthalate [117-84-0]^	3.1	U	ug/L	1	3.1	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Fluoranthene [206-44-0]^	2.1	U	ug/L	1	2.1	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Fluorene [86-73-7]^	1.7	U	ug/L	1	1.7	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Hexachlorobenzene [118-74-1]^	1.0	U	ug/L	1	1.0	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Hexachlorobutadiene [87-68-3]^	1.2	U	ug/L	1	1.2	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Hexachlorocyclopentadiene [77-47-4]^	1.3	U	ug/L	1	1.3	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Hexachloroethane [67-72-1]^	1.1	U	ug/L	1	1.1	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	2.2	U	ug/L	1	2.2	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Isophorone [78-59-1]^	1.3	U	ug/L	1	1.3	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Naphthalene [91-20-3]^	1.3	U	ug/L	1	1.3	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Nitrobenzene [98-95-3]^	1.2	U	ug/L	1	1.2	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	1.5	U	ug/L	1	1.5	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	2.1	U	ug/L	1	2.1	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Pentachlorophenol [87-86-5]^	1.8	U	ug/L	1	1.8	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Phenanthrene [85-01-8]^	1.4	U	ug/L	1	1.4	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Phenol [108-95-2]^	1.4	U	ug/L	1	1.4	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	
Pyrene [129-00-0]^	2.1	U	ug/L	1	2.1	10	4D14029	EPA 8270D	04/21/14 23:37	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*100*	*1*	*100*	*100 %*	*10-179*	*4D14029*	*EPA 8270D*	*04/21/14 23:37*	*DFM*	
2-Fluorobiphenyl	*44*	*1*	*50.0*	*88 %*	*10-149*	*4D14029*	*EPA 8270D*	*04/21/14 23:37*	*DFM*	
2-Fluorophenol	*47*	*1*	*100*	*47 %*	*10-110*	*4D14029*	*EPA 8270D*	*04/21/14 23:37*	*DFM*	
Nitrobenzene-d5	*45*	*1*	*50.0*	*89 %*	*10-149*	*4D14029*	*EPA 8270D*	*04/21/14 23:37*	*DFM*	
Phenol-d5	*40*	*1*	*100*	*40 %*	*10-88*	*4D14029*	*EPA 8270D*	*04/21/14 23:37*	*DFM*	
Terphenyl-d14	*33*	*1*	*50.0*	*66 %*	*10-188*	*4D14029*	*EPA 8270D*	*04/21/14 23:37*	*DFM*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.43	U	ug/L	1	0.43	0.50	4D22014	EPA 8082A	04/24/14 16:25	MWC	
PCB-1221 [11104-28-2]^	0.37	U	ug/L	1	0.37	0.50	4D22014	EPA 8082A	04/24/14 16:25	MWC	
PCB-1232 [11141-16-5]^	0.45	U	ug/L	1	0.45	0.50	4D22014	EPA 8082A	04/24/14 16:25	MWC	
PCB-1248 [12672-29-6]^	0.014	U	ug/L	1	0.014	0.50	4D22014	EPA 8082A	04/24/14 16:25	MWC	
PCB-1254 [11097-69-1]^	0.37	U	ug/L	1	0.37	0.50	4D22014	EPA 8082A	04/24/14 16:25	MWC	
PCB-1260 [11096-82-5]^	0.45	U	ug/L	1	0.45	0.50	4D22014	EPA 8082A	04/24/14 16:25	MWC	

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ANALYTICAL RESULTS

Description: SW-1 | **Lab Sample ID:** C404181-01 | **Received:** 04/09/14 10:15
Matrix: Ground Water | **Sampled:** 04/08/14 14:44 | **Work Order:** C404181
Project: 1614 West Pembroke Avenue | **Sampled By:** Andrew Gowen

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.2*	*1*	*1.00*	*121 %*	*45-151*	*4D22014*	*EPA 8082A*	*04/24/14 16:25*	*MWC*	
Decachlorobiphenyl	*1.0*	*1*	*1.00*	*102 %*	*42-159*	*4D22014*	*EPA 8082A*	*04/24/14 16:25*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	**0.299**		ug/L	1	0.170	0.200	4D10025	EPA 7470A	04/14/14 12:47	T1D	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]^	**2090**		ug/L	1	29.0	100	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Antimony [7440-36-0]^	**1.91**	J	ug/L	1	0.220	2.00	4D14033	EPA 6020A	04/16/14 12:13	VLO	
Arsenic [7440-38-2]^	5.40	U	ug/L	1	5.40	10.0	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Barium [7440-39-3]^	**101**		ug/L	1	1.00	10.0	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Beryllium [7440-41-7]^	0.100	U	ug/L	1	0.100	1.00	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Cadmium [7440-43-9]^	**2.68**		ug/L	1	0.360	1.00	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Calcium [7440-70-2]^	**97900**		ug/L	1	39.0	100	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Chromium [7440-47-3]^	**5.53**	J	ug/L	1	1.40	10.0	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Cobalt [7440-48-4]^	**3.07**		ug/L	1	0.100	1.00	4D14033	EPA 6020A	04/16/14 12:13	VLO	
Copper [7440-50-8]^	**66.6**		ug/L	1	1.60	10.0	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Iron [7439-89-6]^	**4370**		ug/L	1	22.0	50.0	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Lead [7439-92-1]^	**72.4**		ug/L	1	2.10	10.0	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Magnesium [7439-95-4]^	**12100**		ug/L	1	23.0	100	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Manganese [7439-96-5]^	**1180**		ug/L	1	1.10	10.0	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Nickel [7440-02-0]^	**23.7**		ug/L	1	1.80	10.0	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Potassium [7440-09-7]^	**14100**		ug/L	1	150	500	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Selenium [7782-49-2]^	5.00	U	ug/L	1	5.00	10.0	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Silver [7440-22-4]^	**2.49**	JB	ug/L	1	1.90	10.0	4D14032	EPA 6010C	04/16/14 14:17	JDH	J-01
Sodium [7440-23-5]^	**26100**		ug/L	1	400	500	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Thallium [7440-28-0]^	0.110	U	ug/L	1	0.110	1.00	4D14033	EPA 6020A	04/16/14 12:13	VLO	
Vanadium [7440-62-2]^	**5.33**	J	ug/L	1	1.40	10.0	4D14032	EPA 6010C	04/16/14 14:17	JDH	
Zinc [7440-66-6]^	**451**		ug/L	1	3.80	10.0	4D14032	EPA 6010C	04/16/14 14:17	JDH	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.0088	U	mg/L	1	0.0088	0.010	4D09034	EPA 7196A	04/09/14 12:03	CV	

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ANALYTICAL RESULTS

Description: Trip Blank | **Lab Sample ID:** C404181-02 | **Received:** 04/09/14 10:15
Matrix: Water | **Sampled:** 04/08/14 14:44 | **Work Order:** C404181
Project: 1614 West Pembroke Avenue | **Sampled By:** ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Acetone [67-64-1]^	1.2	U	ug/L	1	1.2	5.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
m,p-Xylenes [108-38-3/106-42-3]	0.17	U	ug/L	1	0.17	2.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.16	U	ug/L	1	0.16	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	

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ANALYTICAL RESULTS

Description: Trip Blank
Matrix: Water
Project: 1614 West Pembroke Avenue

Lab Sample ID: C404181-02
Sampled: 04/08/14 14:44
Sampled By: ENCO

Received: 04/09/14 10:15
Work Order: C404181

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4D17035	EPA 8260B	04/18/14 18:37	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*51*	*1*	*50.0*	*101 %*	*51-122*	*4D17035*	*EPA 8260B*	*04/18/14 18:37*	*MSZ*	
Dibromofluoromethane	*52*	*1*	*50.0*	*103 %*	*68-117*	*4D17035*	*EPA 8260B*	*04/18/14 18:37*	*MSZ*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*4D17035*	*EPA 8260B*	*04/18/14 18:37*	*MSZ*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17035 - EPA 5030B_MS

Blank (4D17035-BLK1) Prepared: 04/17/2014 14:54 Analyzed: 04/18/2014 12:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.012	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Cyclohexane	0.36	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Freon 113	0.35	U	1.0	ug/L							
Isopropylbenzene	0.14	U	1.0	ug/L							
m,p-Xylenes	0.17	U	2.0	ug/L							
Methyl acetate	0.51	U	1.0	ug/L							
Methyl cyclohexane	0.54	U	1.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.16	U	1.0	ug/L							
o-Xylene	0.065	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17035 - EPA 5030B_MS - Continued

Blank (4D17035-BLK1) Continued Prepared: 04/17/2014 14:54 Analyzed: 04/18/2014 12:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
4-Bromofluorobenzene	*51*			*ug/L*	*50.0*		*102*	*51-122*			
Dibromofluoromethane	*50*			*ug/L*	*50.0*		*101*	*68-117*			
Toluene-d8	*52*			*ug/L*	*50.0*		*104*	*67-127*			

LCS (4D17035-BS1) Prepared: 04/17/2014 14:54 Analyzed: 04/18/2014 13:13

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0		116	75-133			
Benzene	20		1.0	ug/L	20.0		98	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		103	83-117			
Cyclohexane	21		1.0	ug/L	20.0		107	0-200			
Methyl acetate	21		1.0	ug/L	20.0		104	0-200			
Methyl cyclohexane	19		1.0	ug/L	20.0		95	0-200			
Toluene	19		1.0	ug/L	20.0		94	71-118			
Trichloroethene	20		1.0	ug/L	20.0		100	74-119			
4-Bromofluorobenzene	*57*			*ug/L*	*50.0*		*114*	*51-122*			
Dibromofluoromethane	*51*			*ug/L*	*50.0*		*102*	*68-117*			
Toluene-d8	*51*			*ug/L*	*50.0*		*101*	*67-127*			

Matrix Spike (4D17035-MS1) Prepared: 04/17/2014 14:54 Analyzed: 04/18/2014 13:43

Source: C404957-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.21 U	117	75-133			
Benzene	20		1.0	ug/L	20.0	0.15 U	102	81-134			
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	99	83-117			
Cyclohexane	21		1.0	ug/L	20.0	0.36 U	107	0-200			
Methyl acetate	20		1.0	ug/L	20.0	0.51 U	98	0-200			
Methyl cyclohexane	19		1.0	ug/L	20.0	0.54 U	96	0-200			
Toluene	18		1.0	ug/L	20.0	0.14 U	92	71-118			
Trichloroethene	22		1.0	ug/L	20.0	0.15 U	110	74-119			
4-Bromofluorobenzene	*56*			*ug/L*	*50.0*		*112*	*51-122*			
Dibromofluoromethane	*51*			*ug/L*	*50.0*		*101*	*68-117*			
Toluene-d8	*52*			*ug/L*	*50.0*		*104*	*67-127*			

Matrix Spike Dup (4D17035-MSD1) Prepared: 04/17/2014 14:54 Analyzed: 04/18/2014 14:12

Source: C404957-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.21 U	116	75-133	0.3	20	
Benzene	19		1.0	ug/L	20.0	0.15 U	97	81-134	5	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	102	83-117	3	16	
Cyclohexane	20		1.0	ug/L	20.0	0.36 U	102	0-200	4	50	
Methyl acetate	18		1.0	ug/L	20.0	0.51 U	91	0-200	8	50	
Methyl cyclohexane	18		1.0	ug/L	20.0	0.54 U	88	0-200	9	50	
Toluene	18		1.0	ug/L	20.0	0.14 U	91	71-118	1	17	

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D17035 - EPA 5030B_MS - Continued

Matrix Spike Dup (4D17035-MSD1) Continued Prepared: 04/17/2014 14:54 Analyzed: 04/18/2014 14:12

Source: C404957-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	100	74-119	9	22	
4-Bromofluorobenzene	*56*			*ug/L*	*50.0*		*113*	*51-122*			
Dibromofluoromethane	*50*			*ug/L*	*50.0*		*101*	*68-117*			
Toluene-d8	*50*			*ug/L*	*50.0*		*101*	*67-127*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D14029 - EPA 3510C_MS

Blank (4D14029-BLK1) Prepared: 04/14/2014 15:30 Analyzed: 04/21/2014 18:07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1'-Biphenyl	1.5	U	10	ug/L							
2,4,5-Trichlorophenol	1.0	U	10	ug/L							
2,4,6-Trichlorophenol	1.1	U	10	ug/L							
2,4-Dichlorophenol	1.4	U	10	ug/L							
2,4-Dimethylphenol	1.3	U	10	ug/L							
2,4-Dinitrophenol	2.6	U	10	ug/L							
2,4-Dinitrotoluene	2.4	U	10	ug/L							
2,6-Dinitrotoluene	1.5	U	10	ug/L							
2-Chloronaphthalene	1.0	U	10	ug/L							
2-Chlorophenol	1.2	U	10	ug/L							
2-Methyl-4,6-dinitrophenol	2.9	U	10	ug/L							
2-Methylnaphthalene	1.5	U	10	ug/L							
2-Methylphenol	1.4	U	10	ug/L							
2-Nitroaniline	1.5	U	10	ug/L							QV-01
2-Nitrophenol	1.1	U	10	ug/L							
3 & 4-Methylphenol	1.6	U	10	ug/L							
3,3'-Dichlorobenzidine	3.3	U	10	ug/L							
3-Nitroaniline	2.1	U	10	ug/L							
4-Bromophenyl-phenylether	1.0	U	10	ug/L							
4-Chloro-3-methylphenol	1.5	U	10	ug/L							
4-Chloroaniline	1.2	U	10	ug/L							
4-Chlorophenyl-phenylether	1.6	U	10	ug/L							
4-Nitroaniline	3.2	U	10	ug/L							
4-Nitrophenol	2.0	U	10	ug/L							
Acenaphthene	1.4	U	10	ug/L							
Acenaphthylene	1.2	U	10	ug/L							
Acetophenone	1.3	U	10	ug/L							
Anthracene	1.6	U	10	ug/L							
Atrazine	1.5	U	10	ug/L							
Benzaldehyde	1.4	U	10	ug/L							QV-02
Benzo(a)anthracene	1.3	U	10	ug/L							
Benzo(a)pyrene	1.3	U	10	ug/L							
Benzo(b)fluoranthene	1.0	U	10	ug/L							
Benzo(g,h,i)perylene	2.4	U	10	ug/L							
Benzo(k)fluoranthene	1.3	U	10	ug/L							
Bis(2-chloroethoxy)methane	1.4	U	10	ug/L							
Bis(2-chloroethyl)ether	1.2	U	10	ug/L							

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D14029 - EPA 3510C_MS - Continued

Blank (4D14029-BLK1) Continued Prepared: 04/14/2014 15:30 Analyzed: 04/21/2014 18:07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Bis(2-chloroisopropyl)ether	1.3	U	10	ug/L							
Bis(2-ethylhexyl)phthalate	1.7	U	5.0	ug/L							
Butylbenzylphthalate	2.0	U	10	ug/L							
Caprolactam	1.3	U	10	ug/L							
Carbazole	2.5	U	10	ug/L							
Chrysene	2.0	U	10	ug/L							
Dibenzo(a,h)anthracene	2.3	U	10	ug/L							
Dibenzofuran	1.4	U	10	ug/L							
Diethylphthalate	2.1	U	10	ug/L							
Dimethylphthalate	1.4	U	10	ug/L							
Di-n-butylphthalate	1.5	U	10	ug/L							
Di-n-octylphthalate	3.1	U	10	ug/L							
Fluoranthene	2.1	U	10	ug/L							
Fluorene	1.7	U	10	ug/L							
Hexachlorobenzene	1.0	U	10	ug/L							
Hexachlorobutadiene	1.2	U	10	ug/L							
Hexachlorocyclopentadiene	1.3	U	10	ug/L							
Hexachloroethane	1.1	U	10	ug/L							
Indeno(1,2,3-cd)pyrene	2.2	U	10	ug/L							
Isophorone	1.3	U	10	ug/L							
Naphthalene	1.3	U	10	ug/L							
Nitrobenzene	1.2	U	10	ug/L							
N-Nitroso-di-n-propylamine	1.5	U	10	ug/L							
N-nitrosodiphenylamine/Diphenylamine	2.1	U	10	ug/L							
Pentachlorophenol	1.8	U	10	ug/L							
Phenanthrene	1.4	U	10	ug/L							
Phenol	1.4	U	10	ug/L							
Pyrene	2.1	U	10	ug/L							
2,4,6-Tribromophenol	*87*			*ug/L*	*100*		*87*	*10-179*			
2-Fluorobiphenyl	*42*			*ug/L*	*50.0*		*83*	*10-149*			
2-Fluorophenol	*59*			*ug/L*	*100*		*59*	*10-110*			
Nitrobenzene-d5	*43*			*ug/L*	*50.0*		*87*	*10-149*			
Phenol-d5	*55*			*ug/L*	*100*		*55*	*10-88*			
Terphenyl-d14	*35*			*ug/L*	*50.0*		*70*	*10-188*			

LCS (4D14029-BS1) Prepared: 04/14/2014 15:30 Analyzed: 04/21/2014 18:37

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	47		10	ug/L	50.0		94	67-132			
2-Chlorophenol	43		10	ug/L	50.0		86	40-109			
4-Chloro-3-methylphenol	45		10	ug/L	50.0		91	58-121			
4-Nitrophenol	37		10	ug/L	50.0		73	33-105			
Acenaphthene	41		10	ug/L	50.0		82	43-118			
N-Nitroso-di-n-propylamine	46		10	ug/L	50.0		93	48-126			
Pentachlorophenol	37		10	ug/L	50.0		75	51-135			
Phenol	33		10	ug/L	50.0		67	19-78			
Pyrene	41		10	ug/L	50.0		82	65-134			
2,4,6-Tribromophenol	*100*			*ug/L*	*100*		*105*	*10-179*			

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D14029 - EPA 3510C_MS - Continued

LCS (4D14029-BS1) Continued Prepared: 04/14/2014 15:30 Analyzed: 04/21/2014 18:37

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Fluorobiphenyl	*43*			*ug/L*	*50.0*		*87*	*10-149*			
2-Fluorophenol	*63*			*ug/L*	*100*		*63*	*10-110*			
Nitrobenzene-d5	*45*			*ug/L*	*50.0*		*90*	*10-149*			
Phenol-d5	*60*			*ug/L*	*100*		*60*	*10-88*			
Terphenyl-d14	*42*			*ug/L*	*50.0*		*84*	*10-188*			

Matrix Spike (4D14029-MS1) Prepared: 04/14/2014 15:30 Analyzed: 04/21/2014 19:07

Source: C404644-10

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	46		10	ug/L	50.0	2.4 U	92	67-132			
2-Chlorophenol	38		10	ug/L	50.0	1.2 U	76	40-109			
4-Chloro-3-methylphenol	44		10	ug/L	50.0	1.5 U	89	58-121			
4-Nitrophenol	34		10	ug/L	50.0	2.0 U	69	33-105			
Acenaphthene	39		10	ug/L	50.0	1.4 U	79	43-118			
N-Nitroso-di-n-propylamine	42		10	ug/L	50.0	1.5 U	85	48-126			
Pentachlorophenol	36		10	ug/L	50.0	1.8 U	72	51-135			
Phenol	29		10	ug/L	50.0	1.4 U	57	19-78			
Pyrene	40		10	ug/L	50.0	2.1 U	81	65-134			
2,4,6-Tribromophenol	*100*			*ug/L*	*100*		*103*	*10-179*			
2-Fluorobiphenyl	*41*			*ug/L*	*50.0*		*82*	*10-149*			
2-Fluorophenol	*54*			*ug/L*	*100*		*54*	*10-110*			
Nitrobenzene-d5	*41*			*ug/L*	*50.0*		*81*	*10-149*			
Phenol-d5	*50*			*ug/L*	*100*		*50*	*10-88*			
Terphenyl-d14	*41*			*ug/L*	*50.0*		*82*	*10-188*			

Matrix Spike Dup (4D14029-MSD1) Prepared: 04/14/2014 15:30 Analyzed: 04/21/2014 19:37

Source: C404644-10

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	46		10	ug/L	50.0	2.4 U	91	67-132	0.5	17	
2-Chlorophenol	42		10	ug/L	50.0	1.2 U	83	40-109	9	22	
4-Chloro-3-methylphenol	45		10	ug/L	50.0	1.5 U	90	58-121	1	22	
4-Nitrophenol	34		10	ug/L	50.0	2.0 U	68	33-105	0.5	27	
Acenaphthene	40		10	ug/L	50.0	1.4 U	81	43-118	3	21	
N-Nitroso-di-n-propylamine	45		10	ug/L	50.0	1.5 U	90	48-126	6	23	
Pentachlorophenol	35		10	ug/L	50.0	1.8 U	70	51-135	3	11	
Phenol	33		10	ug/L	50.0	1.4 U	65	19-78	13	18	
Pyrene	39		10	ug/L	50.0	2.1 U	78	65-134	4	16	
2,4,6-Tribromophenol	*100*			*ug/L*	*100*		*104*	*10-179*			
2-Fluorobiphenyl	*44*			*ug/L*	*50.0*		*88*	*10-149*			
2-Fluorophenol	*63*			*ug/L*	*100*		*63*	*10-110*			
Nitrobenzene-d5	*45*			*ug/L*	*50.0*		*90*	*10-149*			
Phenol-d5	*59*			*ug/L*	*100*		*59*	*10-88*			
Terphenyl-d14	*40*			*ug/L*	*50.0*		*80*	*10-188*			

Polychlorinated Biphenyls by GC - Quality Control

Batch 4D22014 - EPA 3510C

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Polychlorinated Biphenyls by GC - Quality Control

Batch 4D22014 - EPA 3510C - Continued

Blank (4D22014-BLK1) Prepared: 04/22/2014 09:29 Analyzed: 04/24/2014 12:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.43	U	0.50	ug/L							
PCB-1221	0.37	U	0.50	ug/L							
PCB-1232	0.45	U	0.50	ug/L							
PCB-1248	0.014	U	0.50	ug/L							
PCB-1254	0.37	U	0.50	ug/L							
PCB-1260	0.45	U	0.50	ug/L							
2,4,5,6-TCMX	*0.85*			*ug/L*	*1.00*		*85*	*45-151*			
Decachlorobiphenyl	*0.94*			*ug/L*	*1.00*		*94*	*42-159*			

LCS (4D22014-BS1) Prepared: 04/22/2014 09:29 Analyzed: 04/24/2014 13:37

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	11		0.50	ug/L	10.0		113	66-149			
PCB-1260	11		0.50	ug/L	10.0		107	64-150			
2,4,5,6-TCMX	*1.6*			*ug/L*	*1.00*		*162*	*45-151*			*QS-03*
Decachlorobiphenyl	*1.4*			*ug/L*	*1.00*		*136*	*42-159*			

Matrix Spike (4D22014-MS1) Prepared: 04/22/2014 09:29 Analyzed: 04/24/2014 13:51

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	17		0.50	ug/L	10.0	0.43 U	171	66-149			QM-07
PCB-1260	13		0.50	ug/L	10.0	0.45 U	126	64-150			
2,4,5,6-TCMX	*1.1*			*ug/L*	*1.00*		*109*	*45-151*			
Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*111*	*42-159*			

Matrix Spike Dup (4D22014-MSD1) Prepared: 04/22/2014 09:29 Analyzed: 04/24/2014 14:04

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	17		0.50	ug/L	10.0	0.43 U	166	66-149	3	21	QM-07
PCB-1260	12		0.50	ug/L	10.0	0.45 U	121	64-150	4	18	
2,4,5,6-TCMX	*1.2*			*ug/L*	*1.00*		*120*	*45-151*			
Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*109*	*42-159*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D10025 - EPA 7470A

Blank (4D10025-BLK1) Prepared: 04/10/2014 11:18 Analyzed: 04/14/2014 12:00

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.170	U	0.200	ug/L							

Blank (4D10025-BLK2) Prepared: 04/10/2014 11:18 Analyzed: 04/14/2014 12:15

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	3.40	U	4.00	ug/L							

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D10025 - EPA 7470A - Continued

LCS (4D10025-BS1) Prepared: 04/10/2014 11:18 Analyzed: 04/14/2014 12:02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.50		0.200	ug/L	5.00		110	80-120			

Matrix Spike (4D10025-MS1) Prepared: 04/10/2014 11:18 Analyzed: 04/14/2014 12:06

Source: C402367-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.50		0.200	ug/L	5.00	0.170 U	110	75-125			

Matrix Spike Dup (4D10025-MSD1) Prepared: 04/10/2014 11:18 Analyzed: 04/14/2014 12:09

Source: C402367-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.44		0.200	ug/L	5.00	0.170 U	109	75-125	1	25	

Post Spike (4D10025-PS1) Prepared: 04/10/2014 11:18 Analyzed: 04/14/2014 12:11

Source: C402367-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.13		0.200	ug/L	5.00	0.00300	103	75-125			

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D14032 - EPA 3005A

Blank (4D14032-BLK1) Prepared: 04/14/2014 14:11 Analyzed: 04/16/2014 12:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	29.0	U	100	ug/L							
Arsenic	5.40	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Calcium	39.0	U	100	ug/L							
Chromium	1.40	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Iron	22.0	U	50.0	ug/L							
Lead	2.10	U	10.0	ug/L							
Magnesium	23.0	U	100	ug/L							
Manganese	1.10	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Potassium	150	U	500	ug/L							
Selenium	5.00	U	10.0	ug/L							
Silver	**2.01**	**J**	10.0	ug/L							
Sodium	400	U	500	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (4D14032-BS1) Prepared: 04/14/2014 14:11 Analyzed: 04/16/2014 13:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2120		100	ug/L	2000		106	80-120			

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D14032 - EPA 3005A - Continued

LCS (4D14032-BS1) Continued Prepared: 04/14/2014 14:11 Analyzed: 04/16/2014 13:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	216		10.0	ug/L	200		108	80-120			
Barium	223		10.0	ug/L	200		111	80-120			
Beryllium	21.7		1.00	ug/L	20.0		108	80-120			
Cadmium	22.2		1.00	ug/L	20.0		111	80-120			
Calcium	2150		100	ug/L	2000		108	80-120			
Chromium	213		10.0	ug/L	200		107	80-120			
Copper	211		10.0	ug/L	200		105	80-120			
Iron	1130		50.0	ug/L	1000		113	80-120			
Lead	216		10.0	ug/L	200		108	80-120			
Magnesium	2150		100	ug/L	2000		108	80-120			
Manganese	217		10.0	ug/L	200		109	80-120			
Nickel	226		10.0	ug/L	200		113	80-120			
Potassium	10700		500	ug/L	10000		107	80-120			
Selenium	218		10.0	ug/L	200		109	80-120			
Silver	221	B	10.0	ug/L	200		110	80-120			
Sodium	10600		500	ug/L	10000		106	80-120			
Vanadium	217		10.0	ug/L	200		109	80-120			
Zinc	224		10.0	ug/L	200		112	80-120			

Matrix Spike (4D14032-MS1) Prepared: 04/14/2014 14:11 Analyzed: 04/16/2014 13:12

Source: C404102-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2480		100	ug/L	2000	236	112	75-125			
Arsenic	290		10.0	ug/L	200	80.0	105	75-125			
Barium	311		10.0	ug/L	200	106	103	75-125			
Beryllium	21.1		1.00	ug/L	20.0	0.100 U	105	75-125			
Cadmium	20.9		1.00	ug/L	20.0	0.360 U	105	75-125			
Calcium	11600		100	ug/L	2000	9920	86	75-125			
Chromium	205		10.0	ug/L	200	1.40 U	102	75-125			
Copper	220		10.0	ug/L	200	10.8	105	75-125			
Iron	221000	E	50.0	ug/L	1000	232000	NR	75-125			QM-16
Lead	215		10.0	ug/L	200	8.07	103	75-125			
Magnesium	16300		100	ug/L	2000	14500	90	75-125			
Manganese	27700		10.0	ug/L	200	28900	NR	75-125			QM-05
Nickel	218		10.0	ug/L	200	1.80 U	109	75-125			
Potassium	11700		500	ug/L	10000	942	108	75-125			
Selenium	239		10.0	ug/L	200	27.0	106	75-125			
Silver	221	B	10.0	ug/L	200	4.83	108	75-125			
Sodium	12100		500	ug/L	10000	1310	108	75-125			
Vanadium	197		10.0	ug/L	200	1.40 U	98	75-125			
Zinc	226		10.0	ug/L	200	14.4	106	75-125			

Matrix Spike Dup (4D14032-MSD1) Prepared: 04/14/2014 14:11 Analyzed: 04/16/2014 13:25

Source: C404102-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2610		100	ug/L	2000	236	119	75-125	5	20	
Arsenic	286		10.0	ug/L	200	80.0	103	75-125	1	20	
Barium	314		10.0	ug/L	200	106	104	75-125	0.7	20	
Beryllium	21.1		1.00	ug/L	20.0	0.100 U	106	75-125	0.08	20	

QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D14032 - EPA 3005A - Continued

Matrix Spike Dup (4D14032-MSD1) Continued Prepared: 04/14/2014 14:11 Analyzed: 04/16/2014 13:25

Source: C404102-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cadmium	20.7		1.00	ug/L	20.0	0.360 U	104	75-125	0.8	20	
Calcium	11800		100	ug/L	2000	9920	95	75-125	2	20	
Chromium	205		10.0	ug/L	200	1.40 U	102	75-125	0.002	20	
Copper	220		10.0	ug/L	200	10.8	105	75-125	0.08	20	
Iron	223000	E	50.0	ug/L	1000	232000	NR	75-125	1	20	QM-16
Lead	213		10.0	ug/L	200	8.07	103	75-125	0.6	20	
Magnesium	16600		100	ug/L	2000	14500	107	75-125	2	20	
Manganese	27900		10.0	ug/L	200	28900	NR	75-125	0.7	20	QM-05
Nickel	216		10.0	ug/L	200	1.80 U	108	75-125	0.6	20	
Potassium	11900		500	ug/L	10000	942	109	75-125	1	20	
Selenium	230		10.0	ug/L	200	27.0	102	75-125	4	20	
Silver	221	B	10.0	ug/L	200	4.83	108	75-125	0.02	20	
Sodium	12100		500	ug/L	10000	1310	108	75-125	0.07	20	
Vanadium	197		10.0	ug/L	200	1.40 U	98	75-125	0.2	20	
Zinc	226		10.0	ug/L	200	14.4	106	75-125	0.09	20	

Post Spike (4D14032-PS1) Prepared: 04/14/2014 14:11 Analyzed: 04/16/2014 13:28

Source: C404102-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2.29		0.100	mg/L	2.00	0.236	103	80-120			
Arsenic	0.273		0.0100	mg/L	0.200	0.0800	97	80-120			
Barium	0.301		0.0100	mg/L	0.200	0.106	98	80-120			
Beryllium	0.0194		0.00100	mg/L	0.0200	6.06E-5	97	80-120			
Cadmium	0.0195		0.00100	mg/L	0.0200	-0.00106	103	80-120			
Calcium	11.8		0.100	mg/L	2.00	9.92	96	80-120			
Chromium	0.191		0.0100	mg/L	0.200	-0.00376	97	80-120			
Copper	0.206		0.0100	mg/L	0.200	0.0108	98	80-120			
Iron	228		0.0500	mg/L	1.00	232	NR	80-120			QM-08, QM-16
Lead	0.200		0.0100	mg/L	0.200	0.00807	96	80-120			
Magnesium	16.9		0.100	mg/L	2.00	14.5	122	80-120			QM-08
Manganese	28.7		0.0100	mg/L	0.200	28.9	NR	80-120			QM-08
Nickel	0.202		0.0100	mg/L	0.200	0.00155	100	80-120			
Potassium	10.9		0.500	mg/L	10.0	0.942	100	80-120			
Selenium	0.223		0.0100	mg/L	0.200	0.0270	98	80-120			
Silver	0.206	B	0.0100	mg/L	0.200	0.00483	100	80-120			
Sodium	11.3		0.500	mg/L	10.0	1.31	100	80-120			
Vanadium	0.182		0.0100	mg/L	0.200	-0.0148	99	80-120			
Zinc	0.212		0.0100	mg/L	0.200	0.0144	99	80-120			

Batch 4D14033 - EPA 3005A

Blank (4D14033-BLK1) Prepared: 04/14/2014 14:17 Analyzed: 04/16/2014 11:11

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Cobalt	0.100	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D14033 - EPA 3005A - Continued

LCS (4D14033-BS1) Prepared: 04/14/2014 14:17 Analyzed: 04/16/2014 11:15

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	199		2.00	ug/L	200		100	80-120			
Cobalt	184		1.00	ug/L	200		92	80-120			
Thallium	206		1.00	ug/L	200		103	80-120			

Matrix Spike (4D14033-MS1) Prepared: 04/14/2014 14:17 Analyzed: 04/16/2014 11:23

Source: C404082-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	209	D	20.0	ug/L	200	4.31	102	75-125			
Cobalt	189	D	10.0	ug/L	200	18.8	85	75-125			
Thallium	203	D	10.0	ug/L	200	1.23	101	75-125			

Matrix Spike Dup (4D14033-MSD1) Prepared: 04/14/2014 14:17 Analyzed: 04/16/2014 11:27

Source: C404082-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	210	D	20.0	ug/L	200	4.31	103	75-125	0.3	20	
Cobalt	192	D	10.0	ug/L	200	18.8	86	75-125	2	20	
Thallium	203	D	10.0	ug/L	200	1.23	101	75-125	0.1	20	

Post Spike (4D14033-PS1) Prepared: 04/14/2014 14:17 Analyzed: 04/16/2014 11:31

Source: C404170-09

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	194		2.00	ug/L	200	0.299	97	80-120			
Cobalt	198		1.00	ug/L	200	58.4	70	80-120			QM-08
Thallium	106		1.00	ug/L	200	0.520	53	80-120			QM-08

Classical Chemistry Parameters - Quality Control

Batch 4D09034 - NO PREP

Blank (4D09034-BLK1) Prepared: 04/09/2014 11:29 Analyzed: 04/09/2014 12:03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.0088	U	0.010	mg/L							

LCS (4D09034-BS1) Prepared: 04/09/2014 11:29 Analyzed: 04/09/2014 12:03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.25		0.010	mg/L	0.249		99	80-120			

Matrix Spike (4D09034-MS1) Prepared: 04/09/2014 12:40 Analyzed: 04/09/2014 13:06

Source: C404180-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.21		0.010	mg/L	0.249	0.020	77	75-125			

Matrix Spike Dup (4D09034-MSD1) Prepared: 04/09/2014 12:40 Analyzed: 04/09/2014 13:06

Source: C404180-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.20		0.010	mg/L	0.249	0.020	73	75-125	5	20	QM-05

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence (85% or greater confidence) to make a "tentative identification".
J-01	Result is estimated due to positive results in the associated method blank.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-08	Post-digestion spike did not meet method requirements due to confirmed matrix effects (dilution test).
QM-16	Matrix spike recovery could not be calculated due to high concentrations of analyte in source sample.
QS-03	Surrogate recovery outside acceptance limits
QV-01	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.
QV-02	The associated continuing calibration verification standard exhibited low bias; the reported result should be considered to be a minimum estimate.

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 111
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

www.encolabs.com

Client Name: REMSA, Inc. (RE026)	Project Number: E-18-10-T03P
Address: 124 W. Queens Way	Project Name/Desc: 1614 West Pembroke Avenue
City/ST/Zip: Hampton, VA 23669	PO # / Billing Info: E-18-10-T03P
Tel: (757) 722-0113 Fax:	Reporting Contact: Mike Iwashchenko
Sampler(s) Name, Affiliation (Print): Andrew Gowen	Billing Contact: Mike Iwashchenko
Sampler(s) Signature:	Site Location / Time Zone:

Requested Analyses

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C404181

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8082A,8270D TCL OLM4.2	8260B TCL OLM4.2	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Ti,V,Zn	CrVI	Hg						Sample Comments
	SW-1	4-8-14	17:44		GW	7	X	X	X	X	X						
	Trip Blank				WA	2		X									

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
		[signature]	4-8-14 15:00	[signature]	4/9/14 1015
Comments/Special Reporting Requirements		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: Blue 1.9		Condition Upon Receipt: ✓ Acceptable ___ Unacceptable	

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

ENCO Laboratories

Accurate. Timely. Responsive. Innovative.

102-A Woodwinds Industrial Court
Cary NC, 27511
Phone: 919.467.3090 FAX: 919.467.3515

Friday, May 2, 2014
REMSA, Inc. (RE026)
Attn: Mike Iwashchenko
124 W. Queens Way
Hampton, VA 23669

RE: Laboratory Results for
Project Number: E-18-10-T03P, Project Name/Desc: 1614 West Pembroke Avenue
ENCO Workorder(s): C404171

Dear Mike Iwashchenko,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, April 17, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Chuck Smith

Project Manager

Enclosure(s)

www.encolabs.com

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: GP14-4 **Lab ID: C404171-01** **Sampled: 04/16/14 11:00** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	04/17/14 11:00		04/17/14	14:13	04/17/14 14:30
EPA 6010C	10/13/14		04/21/14	11:20	04/28/14 13:51
EPA 7470A	05/14/14		04/24/14	12:42	04/25/14 13:45
EPA 8015C	04/23/14	06/01/14	04/22/14	12:00	04/23/14 17:07
EPA 8015C	04/30/14		04/22/14	16:19	04/23/14 05:01
EPA 8082A	04/16/15	06/03/14	04/24/14	16:30	04/29/14 23:18
EPA 8260B	04/30/14		04/24/14	13:32	04/25/14 07:11

Client ID: GP14-4 **Lab ID: C404171-01RE1** **Sampled: 04/16/14 11:00** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6020A	10/13/14		04/18/14	10:05	04/22/14 13:28
EPA 8270D	04/23/14	05/29/14	04/19/14	12:45	04/25/14 17:24

Client ID: GP14-4 **Lab ID: C404171-02** **Sampled: 04/16/14 10:30** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/13/14		04/21/14	13:03	04/23/14 12:38
EPA 7196A	05/16/14	04/28/14	04/21/14	12:06	04/22/14 15:05
EPA 7471B	05/14/14		04/29/14	10:11	04/30/14 16:25
EPA 8015C	04/30/14	05/31/14	04/21/14	02:35	04/22/14 09:56
EPA 8015C	04/30/14		04/22/14	14:57	04/22/14 20:11
EPA 8260B	04/30/14		04/25/14	12:45	04/25/14 18:13
EPA 8270D	04/30/14	05/28/14	04/18/14	12:30	04/28/14 11:39

Client ID: GP14-5 **Lab ID: C404171-03** **Sampled: 04/16/14 11:20** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/13/14		04/21/14	13:03	04/23/14 12:40
EPA 7196A	05/16/14	04/28/14	04/21/14	12:06	04/22/14 15:05
EPA 7471B	05/14/14		04/29/14	10:11	04/30/14 16:36
EPA 8015C	04/30/14	05/31/14	04/21/14	02:35	04/22/14 10:25
EPA 8015C	04/30/14		04/22/14	14:57	04/22/14 20:42
EPA 8081B	04/30/14	06/01/14	04/22/14	11:06	04/23/14 12:25
EPA 8151A	04/30/14	05/31/14	04/21/14	14:30	04/23/14 04:47
EPA 8260B	04/30/14		04/25/14	12:45	04/25/14 18:46
EPA 8270D	04/30/14	05/28/14	04/18/14	12:30	04/28/14 12:07

Client ID: GP14-5 **Lab ID: C404171-04** **Sampled: 04/16/14 11:45** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	04/17/14 11:45	04/23/14	04/17/14	14:13	04/17/14 14:30
EPA 6010C	10/13/14		04/21/14	11:20	04/28/14 13:54
EPA 7470A	05/14/14		04/24/14	12:42	04/25/14 13:48
EPA 8015C	04/23/14	06/01/14	04/22/14	12:00	04/23/14 18:06
EPA 8015C	04/30/14		04/22/14	16:19	04/23/14 05:32
EPA 8081B	04/23/14	06/01/14	04/22/14	09:12	04/24/14 17:44
EPA 8082A	04/16/15	06/01/14	04/22/14	09:29	04/24/14 17:44
EPA 8151A	04/23/14	05/31/14	04/21/14	10:14	04/23/14 19:02
EPA 8260B	04/30/14		04/24/14	13:32	04/25/14 07:41
EPA 8270D	04/23/14	05/29/14	04/19/14	12:45	04/24/14 22:22

Client ID: GP14-5 **Lab ID: C404171-04RE1** **Sampled: 04/16/14 11:45** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6020A	10/13/14		04/18/14	10:05	04/22/14 13:32
EPA 8151A	04/23/14	06/08/14	04/29/14	17:00	04/30/14 22:22

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: GP14-7 **Lab ID: C404171-05** **Sampled: 04/16/14 13:20** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8015C	04/30/14		04/22/14	16:19	04/23/14 06:03
EPA 8260B	04/30/14		04/24/14	13:32	04/25/14 08:11
EPA 8270D	04/23/14	05/29/14	04/19/14	12:45	04/24/14 22:52

Client ID: GP14-6 **Lab ID: C404171-06** **Sampled: 04/16/14 12:25** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	04/17/14 12:25		04/17/14	14:13	04/17/14 14:30
EPA 6010C	10/13/14		04/21/14	11:20	04/28/14 13:56
EPA 7470A	05/14/14		04/24/14	12:42	04/25/14 13:50
EPA 8015C	04/23/14	06/01/14	04/22/14	12:00	04/23/14 18:35
EPA 8015C	04/30/14		04/22/14	16:19	04/23/14 06:34
EPA 8082A	04/16/15	06/03/14	04/24/14	16:30	04/29/14 23:31
EPA 8260B	04/30/14		04/24/14	13:32	04/25/14 08:40

Client ID: GP14-6 **Lab ID: C404171-06RE1** **Sampled: 04/16/14 12:25** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6020A	10/13/14		04/18/14	10:05	04/22/14 13:36
EPA 8270D	04/23/14	05/29/14	04/19/14	12:45	04/25/14 17:54

Client ID: GP14-6 **Lab ID: C404171-07** **Sampled: 04/16/14 11:58** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/13/14		04/21/14	13:03	04/23/14 12:43
EPA 7196A	05/16/14	04/28/14	04/21/14	12:06	04/22/14 15:05
EPA 7471B	05/14/14		04/29/14	10:11	04/30/14 16:38
EPA 8015C	04/30/14		04/22/14	14:57	04/22/14 21:13
EPA 8015C	04/30/14	06/02/14	04/23/14	12:43	04/24/14 03:04
EPA 8260B	04/30/14		04/25/14	12:45	04/25/14 19:18
EPA 8270D	04/30/14	05/28/14	04/18/14	12:30	04/28/14 14:30

Client ID: GP14-6 **Lab ID: C404171-07RE1** **Sampled: 04/16/14 11:58** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8270D	04/30/14	05/28/14	04/18/14	12:30	04/29/14 20:29

Client ID: GP14-7 **Lab ID: C404171-08** **Sampled: 04/16/14 12:50** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	05/16/14	04/28/14	04/21/14	12:06	04/22/14 15:05
EPA 8015C	04/30/14		04/22/14	14:57	04/22/14 21:44
EPA 8260B	04/30/14		04/25/14	12:45	04/25/14 19:51
EPA 8270D	04/30/14	05/28/14	04/18/14	12:30	04/28/14 15:31

Client ID: GP14-7 **Lab ID: C404171-08RE1** **Sampled: 04/16/14 12:50** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/13/14		04/21/14	13:03	04/23/14 13:51
EPA 7471B	05/14/14		04/29/14	10:11	04/30/14 17:25
EPA 8015C	04/30/14	06/02/14	04/23/14	12:43	04/24/14 12:49
EPA 8270D	04/30/14	05/28/14	04/18/14	12:30	04/29/14 21:25

Client ID: GP14-8 **Lab ID: C404171-09** **Sampled: 04/16/14 14:00** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	04/17/14 14:00		04/17/14	14:13	04/17/14 14:30
EPA 8015C	04/30/14		04/22/14	16:19	04/23/14 07:05
EPA 8260B	04/30/14		04/25/14	14:46	04/25/14 22:54

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: GP14-2 **Lab ID: C404171-10** **Sampled: 04/16/14 11:00** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	04/17/14 11:00	04/23/14	04/17/14	14:13	04/17/14 14:30
EPA 6010C	10/13/14		04/21/14	11:20	04/28/14 13:58
EPA 7470A	05/14/14		04/24/14	12:42	04/25/14 13:52
EPA 8015C	04/23/14	06/01/14	04/22/14	12:00	04/23/14 19:05
EPA 8082A	04/16/15	06/03/14	04/24/14	16:30	04/29/14 23:57

Client ID: GP14-2 **Lab ID: C404171-10RE1** **Sampled: 04/16/14 11:00** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6020A	10/13/14		04/18/14	10:05	04/22/14 13:40

Client ID: GP14-8 **Lab ID: C404171-11** **Sampled: 04/16/14 13:20** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 7196A	05/16/14	04/28/14	04/21/14	12:06	04/22/14 15:05
EPA 7471B	05/14/14		04/29/14	10:11	04/30/14 16:46
EPA 8015C	04/30/14		04/22/14	14:57	04/22/14 22:15
EPA 8015C	04/30/14	06/02/14	04/23/14	12:43	04/24/14 04:03
EPA 8260B	04/30/14		04/25/14	12:45	04/25/14 20:23
EPA 8270D	04/30/14	05/28/14	04/18/14	12:30	04/28/14 14:58

Client ID: GP14-8 **Lab ID: C404171-11RE1** **Sampled: 04/16/14 13:20** **Received: 04/17/14 10:15**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	10/13/14		04/21/14	13:03	04/23/14 13:54
EPA 8270D	04/30/14	05/28/14	04/18/14	12:30	04/29/14 20:57

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SAMPLE DETECTION SUMMARY

Client ID: GP14-4 **Lab ID:** C404171-01

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	16		1.2	5.0	ug/L	EPA 8260B	
Aluminum - Total	22900		29.0	100	ug/L	EPA 6010C	
Barium - Total	94.4		1.00	10.0	ug/L	EPA 6010C	
Beryllium - Total	0.593	J	0.100	1.00	ug/L	EPA 6010C	
Calcium - Total	112000		39.0	100	ug/L	EPA 6010C	
Chromium - Total	31.2		1.40	10.0	ug/L	EPA 6010C	
Copper - Total	13.9		1.60	10.0	ug/L	EPA 6010C	
DRO (C10-C28)	0.14		0.075	0.12	mg/L	EPA 8015C	
GRO (C6-C10)	0.013	J	0.011	0.055	mg/L	EPA 8015C	
Iron - Total	15800		22.0	50.0	ug/L	EPA 6010C	
Lead - Total	33.5		2.10	10.0	ug/L	EPA 6010C	
Magnesium - Total	14200		23.0	100	ug/L	EPA 6010C	
Manganese - Total	66.7		1.10	10.0	ug/L	EPA 6010C	
Nickel - Total	12.1		1.80	10.0	ug/L	EPA 6010C	
Potassium - Total	3140		150	500	ug/L	EPA 6010C	
Sodium - Total	4870		400	500	ug/L	EPA 6010C	
Trichlorofluoromethane	1.5		0.24	1.0	ug/L	EPA 8260B	
Vanadium - Total	46.8		1.40	10.0	ug/L	EPA 6010C	
Zinc - Total	44.7		3.80	10.0	ug/L	EPA 6010C	

Client ID: GP14-4 **Lab ID:** C404171-01RE1

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Cobalt - Total	3.80	JD	2.00	20.0	ug/L	EPA 6020A	R-01

Client ID: GP14-4 **Lab ID:** C404171-02

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	10700		2.39	11.4	mg/kg dry	EPA 6010C	
Antimony - Total	0.542	J	0.125	1.14	mg/kg dry	EPA 6010C	
Arsenic - Total	1.44		0.114	0.570	mg/kg dry	EPA 6010C	
Barium - Total	42.0		0.114	0.570	mg/kg dry	EPA 6010C	
Beryllium - Total	0.228		0.0137	0.0570	mg/kg dry	EPA 6010C	
Cadmium - Total	0.0252	J	0.0109	0.0570	mg/kg dry	EPA 6010C	
Calcium - Total	1500	B	6.38	28.5	mg/kg dry	EPA 6010C	QB-01
Chromium - Total	9.69		0.114	0.570	mg/kg dry	EPA 6010C	
Cobalt - Total	1.27		0.114	0.570	mg/kg dry	EPA 6010C	
Copper - Total	4.24		0.216	0.570	mg/kg dry	EPA 6010C	
DRO (C10-C28)	3.8		1.9	3.8	mg/kg dry	EPA 8015C	
Iron - Total	3840	B	0.547	2.85	mg/kg dry	EPA 6010C	QB-01
Lead - Total	10.6		0.137	0.570	mg/kg dry	EPA 6010C	
Magnesium - Total	434	B	0.741	28.5	mg/kg dry	EPA 6010C	QB-01
Manganese - Total	10.5		0.114	0.570	mg/kg dry	EPA 6010C	
Mercury - Total	0.0345		0.00694	0.0241	mg/kg dry	EPA 7471B	
Nickel - Total	3.51		0.410	2.85	mg/kg dry	EPA 6010C	
Potassium - Total	333		4.56	28.5	mg/kg dry	EPA 6010C	
Silver - Total	0.130	J	0.114	0.570	mg/kg dry	EPA 6010C	
Sodium - Total	34.4		6.84	28.5	mg/kg dry	EPA 6010C	
Trichlorofluoromethane	0.018		0.0005	0.0010	mg/kg dry	EPA 8260B	
Vanadium - Total	15.2		0.114	0.570	mg/kg dry	EPA 6010C	
Zinc - Total	13.0		1.25	2.85	mg/kg dry	EPA 6010C	

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SAMPLE DETECTION SUMMARY

Client ID: GP14-5 **Lab ID: C404171-03**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	0.0047		0.0014	0.0040	mg/kg dry	EPA 8260B	
Aluminum - Total	11000		2.49	11.9	mg/kg dry	EPA 6010C	
Arsenic - Total	1.48		0.119	0.593	mg/kg dry	EPA 6010C	
Barium - Total	54.3		0.119	0.593	mg/kg dry	EPA 6010C	
Beryllium - Total	0.207		0.0142	0.0593	mg/kg dry	EPA 6010C	
Calcium - Total	790	B	6.65	29.7	mg/kg dry	EPA 6010C	QB-01
Chromium - Total	10.6		0.119	0.593	mg/kg dry	EPA 6010C	
Cobalt - Total	1.23		0.119	0.593	mg/kg dry	EPA 6010C	
Copper - Total	3.33		0.225	0.593	mg/kg dry	EPA 6010C	
DRO (C10-C28)	6.1		2.0	3.9	mg/kg dry	EPA 8015C	
Iron - Total	4220	B	0.570	2.97	mg/kg dry	EPA 6010C	QB-01
Lead - Total	11.0		0.142	0.593	mg/kg dry	EPA 6010C	
Magnesium - Total	367	B	0.771	29.7	mg/kg dry	EPA 6010C	QB-01
Manganese - Total	7.60		0.119	0.593	mg/kg dry	EPA 6010C	
Mercury - Total	0.0506		0.00819	0.0285	mg/kg dry	EPA 7471B	
Nickel - Total	3.20		0.427	2.97	mg/kg dry	EPA 6010C	
Potassium - Total	255		4.75	29.7	mg/kg dry	EPA 6010C	
Selenium - Total	0.369	J	0.119	0.593	mg/kg dry	EPA 6010C	
Sodium - Total	81.3		7.12	29.7	mg/kg dry	EPA 6010C	
Vanadium - Total	16.8		0.119	0.593	mg/kg dry	EPA 6010C	
Zinc - Total	9.07		1.31	2.97	mg/kg dry	EPA 6010C	

Client ID: GP14-5 **Lab ID: C404171-04**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	15		1.2	5.0	ug/L	EPA 8260B	
Aluminum - Total	93100		29.0	100	ug/L	EPA 6010C	
Arsenic - Total	25.2		5.40	10.0	ug/L	EPA 6010C	
Barium - Total	352		1.00	10.0	ug/L	EPA 6010C	
Beryllium - Total	5.05		0.100	1.00	ug/L	EPA 6010C	
Cadmium - Total	0.669	J	0.360	1.00	ug/L	EPA 6010C	
Calcium - Total	78400		39.0	100	ug/L	EPA 6010C	
Chromium - Total	130		1.40	10.0	ug/L	EPA 6010C	
Copper - Total	76.2		1.60	10.0	ug/L	EPA 6010C	
Iron - Total	61600		22.0	50.0	ug/L	EPA 6010C	
Lead - Total	104		2.10	10.0	ug/L	EPA 6010C	
Magnesium - Total	14500		23.0	100	ug/L	EPA 6010C	
Manganese - Total	270		1.10	10.0	ug/L	EPA 6010C	
Nickel - Total	43.7		1.80	10.0	ug/L	EPA 6010C	
Potassium - Total	7700		150	500	ug/L	EPA 6010C	
Silver - Total	2.53	J	1.90	10.0	ug/L	EPA 6010C	
Sodium - Total	12800		400	500	ug/L	EPA 6010C	
Vanadium - Total	216		1.40	10.0	ug/L	EPA 6010C	
Zinc - Total	180		3.80	10.0	ug/L	EPA 6010C	

Client ID: GP14-5 **Lab ID: C404171-04RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Cobalt - Total	15.2	JD	2.00	20.0	ug/L	EPA 6020A	R-01

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SAMPLE DETECTION SUMMARY

Client ID: GP14-7 **Lab ID: C404171-05**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1'-Biphenyl	2.3	J	1.5	10	ug/L	EPA 8270D	
2,4-Dimethylphenol	2.4	J	1.3	10	ug/L	EPA 8270D	
2-Methylnaphthalene	15		1.5	10	ug/L	EPA 8270D	
2-Methylphenol	1.5	J	1.4	10	ug/L	EPA 8270D	
3 & 4-Methylphenol	2.4	J	1.6	10	ug/L	EPA 8270D	
Acenaphthene	23		1.4	10	ug/L	EPA 8270D	
Acetone	24		1.2	5.0	ug/L	EPA 8260B	
Anthracene	5.0	J	1.6	10	ug/L	EPA 8270D	
Benzene	8.9		0.15	1.0	ug/L	EPA 8260B	
Carbazole	30		2.5	10	ug/L	EPA 8270D	
Dibenzofuran	16		1.4	10	ug/L	EPA 8270D	
Ethylbenzene	20		0.13	1.0	ug/L	EPA 8260B	
Fluoranthene	2.6	J	2.1	10	ug/L	EPA 8270D	
Fluorene	23		1.7	10	ug/L	EPA 8270D	
GRO (C6-C10)	1.06		0.011	0.055	mg/L	EPA 8015C	
Isopropylbenzene	4.5		0.14	1.0	ug/L	EPA 8260B	
m,p-Xylenes	130		0.17	2.0	ug/L	EPA 8260B	
Methyl-tert-Butyl Ether	10		0.16	1.0	ug/L	EPA 8260B	
Naphthalene	50		1.3	10	ug/L	EPA 8270D	
o-Xylene	62		0.065	1.0	ug/L	EPA 8260B	
Phenanthrene	19		1.4	10	ug/L	EPA 8270D	
Toluene	23		0.14	1.0	ug/L	EPA 8260B	
Xylenes (Total)	200		0.45	3.0	ug/L	EPA 8260B	

Client ID: GP14-6 **Lab ID: C404171-06**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	18		1.2	5.0	ug/L	EPA 8260B	
Aluminum - Total	4940		29.0	100	ug/L	EPA 6010C	
Arsenic - Total	9.90	J	5.40	10.0	ug/L	EPA 6010C	
Barium - Total	45.8		1.00	10.0	ug/L	EPA 6010C	
Beryllium - Total	0.129	J	0.100	1.00	ug/L	EPA 6010C	
Calcium - Total	52200		39.0	100	ug/L	EPA 6010C	
Chromium - Total	8.06	J	1.40	10.0	ug/L	EPA 6010C	
Copper - Total	2.19	J	1.60	10.0	ug/L	EPA 6010C	
DRO (C10-C28)	0.39		0.073	0.12	mg/L	EPA 8015C	
GRO (C6-C10)	0.014	J	0.011	0.055	mg/L	EPA 8015C	
Iron - Total	78800		22.0	50.0	ug/L	EPA 6010C	
Lead - Total	9.08	J	2.10	10.0	ug/L	EPA 6010C	
m,p-Xylenes	0.46	J	0.17	2.0	ug/L	EPA 8260B	
Magnesium - Total	14000		23.0	100	ug/L	EPA 6010C	
Manganese - Total	554		1.10	10.0	ug/L	EPA 6010C	
Methyl-tert-Butyl Ether	8.2		0.16	1.0	ug/L	EPA 8260B	
Nickel - Total	4.93	J	1.80	10.0	ug/L	EPA 6010C	
Potassium - Total	1680		150	500	ug/L	EPA 6010C	
Sodium - Total	32200		400	500	ug/L	EPA 6010C	
Vanadium - Total	12.8		1.40	10.0	ug/L	EPA 6010C	
Xylenes (Total)	0.46	J	0.45	3.0	ug/L	EPA 8260B	
Zinc - Total	23.7		3.80	10.0	ug/L	EPA 6010C	

Client ID: GP14-6 **Lab ID: C404171-06RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Cobalt - Total	3.23	JD	2.00	20.0	ug/L	EPA 6020A	R-01
Thallium - Total	3.66	JD	2.20	20.0	ug/L	EPA 6020A	R-01

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SAMPLE DETECTION SUMMARY

Client ID: GP14-6 **Lab ID: C404171-07**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
2-Butanone	0.0057	J	0.0023	0.0064	mg/kg dry	EPA 8260B	
Acetone	0.028		0.0022	0.0064	mg/kg dry	EPA 8260B	
Aluminum - Total	3000		2.67	12.7	mg/kg dry	EPA 6010C	
Antimony - Total	1.98		0.140	1.27	mg/kg dry	EPA 6010C	
Arsenic - Total	3.73		0.127	0.636	mg/kg dry	EPA 6010C	
Barium - Total	49.4		0.127	0.636	mg/kg dry	EPA 6010C	
Benzo(a)anthracene	0.72	JD	0.33	0.84	mg/kg dry	EPA 8270D	R-01
Beryllium - Total	0.147		0.0153	0.0636	mg/kg dry	EPA 6010C	
Cadmium - Total	0.772		0.0122	0.0636	mg/kg dry	EPA 6010C	
Calcium - Total	24200	B	7.12	31.8	mg/kg dry	EPA 6010C	QB-01
Chromium - Total	9.61		0.127	0.636	mg/kg dry	EPA 6010C	
Chrysene	0.80	JD	0.33	0.84	mg/kg dry	EPA 8270D	R-01
Cobalt - Total	2.07		0.127	0.636	mg/kg dry	EPA 6010C	
Copper - Total	21.5		0.242	0.636	mg/kg dry	EPA 6010C	
DRO (C10-C28)	260		2.2	4.2	mg/kg dry	EPA 8015C	
Fluoranthene	1.4	D	0.28	0.84	mg/kg dry	EPA 8270D	R-01
Iron - Total	9680	B	0.611	3.18	mg/kg dry	EPA 6010C	QB-01
Lead - Total	86.2		0.153	0.636	mg/kg dry	EPA 6010C	
Magnesium - Total	1000	B	0.827	31.8	mg/kg dry	EPA 6010C	QB-01
Manganese - Total	64.6		0.127	0.636	mg/kg dry	EPA 6010C	
Mercury - Total	0.165		0.00878	0.0305	mg/kg dry	EPA 7471B	
Methyl-tert-Butyl Ether	0.0075		0.0003	0.0013	mg/kg dry	EPA 8260B	
Nickel - Total	6.46		0.458	3.18	mg/kg dry	EPA 6010C	
Phenanthrene	0.75	JD	0.33	0.84	mg/kg dry	EPA 8270D	R-01
Potassium - Total	557		5.09	31.8	mg/kg dry	EPA 6010C	
Pyrene	1.2	D	0.28	0.84	mg/kg dry	EPA 8270D	R-01
Sodium - Total	217		7.63	31.8	mg/kg dry	EPA 6010C	
Vanadium - Total	8.77		0.127	0.636	mg/kg dry	EPA 6010C	
Zinc - Total	175		1.40	3.18	mg/kg dry	EPA 6010C	

Client ID: GP14-6 **Lab ID: C404171-07RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Benzo(a)pyrene	0.68	JD	0.50	2.1	mg/kg dry	EPA 8270D	R-01
Benzo(b)fluoranthene	0.89	JD	0.70	2.1	mg/kg dry	EPA 8270D	R-01

Client ID: GP14-7 **Lab ID: C404171-08**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1'-Biphenyl	12	JD	7.1	32	mg/kg dry	EPA 8270D	
2-Methylnaphthalene	56	D	12	32	mg/kg dry	EPA 8270D	
Acenaphthene	130	D	13	32	mg/kg dry	EPA 8270D	
Acetone	0.079		0.0020	0.0060	mg/kg dry	EPA 8260B	
Anthracene	220	D	15	32	mg/kg dry	EPA 8270D	
Benzene	0.013		0.0005	0.0012	mg/kg dry	EPA 8260B	
Bis(2-ethylhexyl)phthalate	25	JD	13	32	mg/kg dry	EPA 8270D	
Carbazole	120	D	12	32	mg/kg dry	EPA 8270D	
Dibenzofuran	120	D	13	32	mg/kg dry	EPA 8270D	
Ethylbenzene	0.0019		0.0007	0.0012	mg/kg dry	EPA 8260B	
Fluorene	210	D	14	32	mg/kg dry	EPA 8270D	
GRO (C6-C10)	12		1.5	5.9	mg/kg dry	EPA 8015C	
Isopropylbenzene	0.0052		0.0006	0.0012	mg/kg dry	EPA 8260B	
Methyl-tert-Butyl Ether	0.024		0.0003	0.0012	mg/kg dry	EPA 8260B	
Naphthalene	98	D	12	32	mg/kg dry	EPA 8270D	
Toluene	0.0037		0.0006	0.0012	mg/kg dry	EPA 8260B	
Xylenes (Total)	0.026		0.0012	0.0024	mg/kg dry	EPA 8260B	

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SAMPLE DETECTION SUMMARY

Client ID: GP14-7 **Lab ID: C404171-08RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	5290	D	4.53	21.6	mg/kg dry	EPA 6010C	R-01
Antimony - Total	5.70	D	0.237	2.16	mg/kg dry	EPA 6010C	R-01
Arsenic - Total	0.395	JD	0.216	1.08	mg/kg dry	EPA 6010C	R-01
Barium - Total	57.1	D	0.216	1.08	mg/kg dry	EPA 6010C	R-01
Benzo(a)anthracene	340	D	63	160	mg/kg dry	EPA 8270D	R-01
Benzo(a)pyrene	260	D	38	160	mg/kg dry	EPA 8270D	R-01
Benzo(b)fluoranthene	440	D	53	160	mg/kg dry	EPA 8270D	R-01
Benzo(k)fluoranthene	150	JD	53	160	mg/kg dry	EPA 8270D	R-01
Cadmium - Total	1.05	D	0.0207	0.108	mg/kg dry	EPA 6010C	R-01
Calcium - Total	5620	BD	12.1	53.9	mg/kg dry	EPA 6010C	QB-01, R-01
Chromium - Total	12.9	D	0.216	1.08	mg/kg dry	EPA 6010C	R-01
Chrysene	330	D	63	160	mg/kg dry	EPA 8270D	R-01
Cobalt - Total	4.09	D	0.216	1.08	mg/kg dry	EPA 6010C	R-01
Copper - Total	35.0	D	0.410	1.08	mg/kg dry	EPA 6010C	R-01
DRO (C10-C28)	7300	D	140	270	mg/kg dry	EPA 8015C	
Fluoranthene	840	D	53	160	mg/kg dry	EPA 8270D	R-01
Indeno(1,2,3-cd)pyrene	82	JD	68	160	mg/kg dry	EPA 8270D	R-01
Iron - Total	13700	BD	1.03	5.39	mg/kg dry	EPA 6010C	QB-01
Lead - Total	153	D	0.259	1.08	mg/kg dry	EPA 6010C	R-01
Magnesium - Total	3040	BD	1.40	53.9	mg/kg dry	EPA 6010C	QB-01, R-01
Manganese - Total	259	D	0.216	1.08	mg/kg dry	EPA 6010C	R-01
Mercury - Total	1.98	D	0.0372	0.129	mg/kg dry	EPA 7471B	
Nickel - Total	13.9	D	0.776	5.39	mg/kg dry	EPA 6010C	R-01
Phenanthrene	830	D	63	160	mg/kg dry	EPA 8270D	R-01
Potassium - Total	1330	D	8.62	53.9	mg/kg dry	EPA 6010C	R-01
Pyrene	600	D	53	160	mg/kg dry	EPA 8270D	R-01
Sodium - Total	118	D	12.9	53.9	mg/kg dry	EPA 6010C	R-01
Vanadium - Total	37.2	D	0.216	1.08	mg/kg dry	EPA 6010C	R-01
Zinc - Total	305	D	2.37	5.39	mg/kg dry	EPA 6010C	R-01

Client ID: GP14-8 **Lab ID: C404171-09**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acetone	23		1.2	5.0	ug/L	EPA 8260B	
Methyl-tert-Butyl Ether	1.6		0.16	1.0	ug/L	EPA 8260B	

Client ID: GP14-2 **Lab ID: C404171-10**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	44700		29.0	100	ug/L	EPA 6010C	
Arsenic - Total	20.0		5.40	10.0	ug/L	EPA 6010C	
Barium - Total	415		1.00	10.0	ug/L	EPA 6010C	
Beryllium - Total	2.40		0.100	1.00	ug/L	EPA 6010C	
Cadmium - Total	2.94		0.360	1.00	ug/L	EPA 6010C	
Calcium - Total	82600		39.0	100	ug/L	EPA 6010C	
Chromium - Total	77.2		1.40	10.0	ug/L	EPA 6010C	
Copper - Total	77.3		1.60	10.0	ug/L	EPA 6010C	
DRO (C10-C28)	0.59		0.072	0.12	mg/L	EPA 8015C	
Iron - Total	123000		22.0	50.0	ug/L	EPA 6010C	
Lead - Total	404		2.10	10.0	ug/L	EPA 6010C	
Magnesium - Total	19400		23.0	100	ug/L	EPA 6010C	
Manganese - Total	533		1.10	10.0	ug/L	EPA 6010C	
Nickel - Total	49.2		1.80	10.0	ug/L	EPA 6010C	
Potassium - Total	5290		150	500	ug/L	EPA 6010C	
Sodium - Total	29600		400	500	ug/L	EPA 6010C	
Vanadium - Total	93.2		1.40	10.0	ug/L	EPA 6010C	
Zinc - Total	738		3.80	10.0	ug/L	EPA 6010C	

Client ID: GP14-2 **Lab ID: C404171-10RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Cobalt - Total	16.3	JD	2.00	20.0	ug/L	EPA 6020A	R-01

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

SAMPLE DETECTION SUMMARY

Client ID: GP14-8 **Lab ID: C404171-11**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
2-Butanone	0.014		0.0021	0.0059	mg/kg dry	EPA 8260B	
Acenaphthene	0.33	JD	0.31	0.78	mg/kg dry	EPA 8270D	R-01
Acetone	0.052		0.0020	0.0059	mg/kg dry	EPA 8260B	
Anthracene	0.74	JD	0.36	0.78	mg/kg dry	EPA 8270D	R-01
Benzo(a)anthracene	1.0	D	0.31	0.78	mg/kg dry	EPA 8270D	R-01
Bromochloromethane	0.0007	J	0.0004	0.0012	mg/kg dry	EPA 8260B	
Carbazole	0.31	JD	0.28	0.78	mg/kg dry	EPA 8270D	R-01
Chrysene	1.1	D	0.31	0.78	mg/kg dry	EPA 8270D	R-01
DRO (C10-C28)	310		2.0	3.9	mg/kg dry	EPA 8015C	
Fluoranthene	2.4	D	0.26	0.78	mg/kg dry	EPA 8270D	R-01
Fluorene	0.53	JD	0.33	0.78	mg/kg dry	EPA 8270D	R-01
Mercury - Total	0.0886		0.00744	0.0259	mg/kg dry	EPA 7471B	
Phenanthrene	2.3	D	0.31	0.78	mg/kg dry	EPA 8270D	R-01
Pyrene	1.8	D	0.26	0.78	mg/kg dry	EPA 8270D	R-01

Client ID: GP14-8 **Lab ID: C404171-11RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Aluminum - Total	5880	D	4.98	23.7	mg/kg dry	EPA 6010C	R-01
Antimony - Total	4.29	D	0.261	2.37	mg/kg dry	EPA 6010C	R-01
Arsenic - Total	5.74	D	0.237	1.19	mg/kg dry	EPA 6010C	R-01
Barium - Total	128	D	0.237	1.19	mg/kg dry	EPA 6010C	R-01
Benzo(a)pyrene	0.97	JD	0.46	2.0	mg/kg dry	EPA 8270D	R-01
Benzo(b)fluoranthene	1.5	JD	0.65	2.0	mg/kg dry	EPA 8270D	R-01
Beryllium - Total	0.246	D	0.0284	0.119	mg/kg dry	EPA 6010C	R-01
Cadmium - Total	3.44	D	0.0228	0.119	mg/kg dry	EPA 6010C	R-01
Calcium - Total	1660	BD	13.3	59.3	mg/kg dry	EPA 6010C	QB-01, R-01
Chromium - Total	20.3	D	0.237	1.19	mg/kg dry	EPA 6010C	R-01
Cobalt - Total	3.03	D	0.237	1.19	mg/kg dry	EPA 6010C	R-01
Copper - Total	51.3	D	0.450	1.19	mg/kg dry	EPA 6010C	R-01
Iron - Total	17800	BD	1.14	5.93	mg/kg dry	EPA 6010C	QB-01
Lead - Total	218	D	0.284	1.19	mg/kg dry	EPA 6010C	R-01
Magnesium - Total	838	BD	1.54	59.3	mg/kg dry	EPA 6010C	QB-01, R-01
Manganese - Total	65.3	D	0.237	1.19	mg/kg dry	EPA 6010C	R-01
Nickel - Total	22.6	D	0.853	5.93	mg/kg dry	EPA 6010C	R-01
Potassium - Total	261	D	9.48	59.3	mg/kg dry	EPA 6010C	R-01
Selenium - Total	0.703	JD	0.237	1.19	mg/kg dry	EPA 6010C	R-01
Sodium - Total	48.1	JD	14.2	59.3	mg/kg dry	EPA 6010C	R-01
Vanadium - Total	12.5	D	0.237	1.19	mg/kg dry	EPA 6010C	R-01
Zinc - Total	301	D	2.61	5.93	mg/kg dry	EPA 6010C	R-01

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ANALYTICAL RESULTS

Description: GP14-4 | **Lab Sample ID:** C404171-01 | **Received:** 04/17/14 10:15

Matrix: Ground Water | **Sampled:** 04/16/14 11:00 | **Work Order:** C404171

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Acetone [67-64-1]^	**16**		ug/L	1	1.2	5.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
m,p-Xylenes [108-38-3/106-42-3]	0.17	U	ug/L	1	0.17	2.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Methyl-tert-Butyl Ether [1634-04-4]^	0.16	U	ug/L	1	0.16	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	

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ANALYTICAL RESULTS

Description: GP14-4 | **Lab Sample ID:** C404171-01 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 11:00 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Trichlorofluoromethane [75-69-4]^	**1.5**		ug/L	1	0.24	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D24037	EPA 8260B	04/25/14 07:11	REF	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4D24037	EPA 8260B	04/25/14 07:11	REF	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*50*	*1*	*50.0*	*101 %*	*51-122*	*4D24037*	*EPA 8260B*	*04/25/14 07:11*	*REF*	
Dibromofluoromethane	*47*	*1*	*50.0*	*95 %*	*68-117*	*4D24037*	*EPA 8260B*	*04/25/14 07:11*	*REF*	
Toluene-d8	*49*	*1*	*50.0*	*98 %*	*67-127*	*4D24037*	*EPA 8260B*	*04/25/14 07:11*	*REF*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2,4,5-Trichlorophenol [95-95-4]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2,4,6-Trichlorophenol [88-06-2]^	1.1	U	ug/L	1	1.1	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2,4-Dichlorophenol [120-83-2]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2,4-Dimethylphenol [105-67-9]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2,4-Dinitrophenol [51-28-5]^	2.6	U	ug/L	1	2.6	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2,4-Dinitrotoluene [121-14-2]^	2.4	U	ug/L	1	2.4	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2,6-Dinitrotoluene [606-20-2]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2-Chloronaphthalene [91-58-7]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2-Chlorophenol [95-57-8]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]	2.9	U	ug/L	1	2.9	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2-Methylnaphthalene [91-57-6]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2-Methylphenol [95-48-7]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2-Nitroaniline [88-74-4]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
2-Nitrophenol [88-75-5]^	1.1	U	ug/L	1	1.1	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]	1.6	U	ug/L	1	1.6	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
3-Nitroaniline [99-09-2]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
4-Bromophenyl-phenylether [101-55-3]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
4-Chloro-3-methylphenol [59-50-7]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
4-Chloroaniline [106-47-8]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	1.6	U	ug/L	1	1.6	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
4-Nitrophenol [100-02-7]^	2.0	U	ug/L	1	2.0	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Acenaphthene [83-32-9]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Acenaphthylene [208-96-8]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Acetophenone [98-86-2]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Anthracene [120-12-7]^	1.6	U	ug/L	1	1.6	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Atrazine [1912-24-9]	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	QV-01
Benzaldehyde [100-52-7]	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	QV-02
Benzo(a)anthracene [56-55-3]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Benzo(a)pyrene [50-32-8]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Benzo(b)fluoranthene [205-99-2]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Benzo(g,h,i)perylene [191-24-2]^	2.4	U	ug/L	1	2.4	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Benzo(k)fluoranthene [207-08-9]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	

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ANALYTICAL RESULTS

Description: GP14-4 | **Lab Sample ID:** C404171-01 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 11:00 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethoxy)methane [111-91-1]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	1.7	U	ug/L	1	1.7	5.0	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Butylbenzylphthalate [85-68-7]^	2.0	U	ug/L	1	2.0	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Caprolactam [105-60-2]	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Carbazole [86-74-8]^	2.5	U	ug/L	1	2.5	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Chrysene [218-01-9]^	2.0	U	ug/L	1	2.0	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	2.3	U	ug/L	1	2.3	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Dibenzofuran [132-64-9]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Diethylphthalate [84-66-2]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Dimethylphthalate [131-11-3]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Di-n-butylphthalate [84-74-2]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Di-n-octylphthalate [117-84-0]^	3.1	U	ug/L	1	3.1	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Fluoranthene [206-44-0]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Fluorene [86-73-7]^	1.7	U	ug/L	1	1.7	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Hexachlorobenzene [118-74-1]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Hexachlorobutadiene [87-68-3]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Hexachlorocyclopentadiene [77-47-4]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Hexachloroethane [67-72-1]^	1.1	U	ug/L	1	1.1	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	2.2	U	ug/L	1	2.2	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Isophorone [78-59-1]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Naphthalene [91-20-3]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Nitrobenzene [98-95-3]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Pentachlorophenol [87-86-5]^	1.8	U	ug/L	1	1.8	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	QV-02
Phenanthrene [85-01-8]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Phenol [108-95-2]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	
Pyrene [129-00-0]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/25/14 17:24	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*81*	*1*	*100*	*81 %*	*10-179*	*4D18032*	*EPA 8270D*	*04/25/14 17:24*	*DFM*	
2-Fluorobiphenyl	*40*	*1*	*50.0*	*81 %*	*10-149*	*4D18032*	*EPA 8270D*	*04/25/14 17:24*	*DFM*	
2-Fluorophenol	*52*	*1*	*100*	*52 %*	*10-110*	*4D18032*	*EPA 8270D*	*04/25/14 17:24*	*DFM*	
Nitrobenzene-d5	*39*	*1*	*50.0*	*79 %*	*10-149*	*4D18032*	*EPA 8270D*	*04/25/14 17:24*	*DFM*	
Phenol-d5	*49*	*1*	*100*	*49 %*	*10-88*	*4D18032*	*EPA 8270D*	*04/25/14 17:24*	*DFM*	
Terphenyl-d14	*34*	*1*	*50.0*	*69 %*	*10-188*	*4D18032*	*EPA 8270D*	*04/25/14 17:24*	*DFM*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.43	U	ug/L	1	0.43	0.50	4D24031	EPA 8082A	04/29/14 23:18	MWC	
PCB-1221 [11104-28-2]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/29/14 23:18	MWC	
PCB-1232 [11141-16-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/29/14 23:18	MWC	
PCB-1248 [12672-29-6]^	0.014	U	ug/L	1	0.014	0.50	4D24031	EPA 8082A	04/29/14 23:18	MWC	
PCB-1254 [11097-69-1]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/29/14 23:18	MWC	
PCB-1260 [11096-82-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/29/14 23:18	MWC	

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ANALYTICAL RESULTS

Description: GP14-4 | **Lab Sample ID:** C404171-01 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 11:00 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.92*	*1*	*1.00*	*92 %*	*45-151*	*4D24031*	*EPA 8082A*	*04/29/14 23:18*	*MWC*	
Decachlorobiphenyl	*0.89*	*1*	*1.00*	*89 %*	*42-159*	*4D24031*	*EPA 8082A*	*04/29/14 23:18*	*MWC*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	**0.013**	J	mg/L	1	0.011	0.055	4D22042	EPA 8015C	04/23/14 05:01	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*0.105*	*1*	*0.100*	*105 %*	*70-130*	*4D22042*	*EPA 8015C*	*04/23/14 05:01*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**0.14**		mg/L	1	0.075	0.12	4D22007	EPA 8015C	04/23/14 17:07	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*0.058*	*1*	*0.0625*	*93 %*	*41-126*	*4D22007*	*EPA 8015C*	*04/23/14 17:07*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	0.170	U	ug/L	1	0.170	0.200	4D24033	EPA 7470A	04/25/14 13:45	T1D	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]^	**22900**		ug/L	1	29.0	100	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Antimony [7440-36-0]^	4.40	UD	ug/L	20	4.40	40.0	4D18018	EPA 6020A	04/22/14 13:28	VLO	R-01
Arsenic [7440-38-2]^	5.40	U	ug/L	1	5.40	10.0	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Barium [7440-39-3]^	**94.4**		ug/L	1	1.00	10.0	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Beryllium [7440-41-7]^	**0.593**	J	ug/L	1	0.100	1.00	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Cadmium [7440-43-9]^	0.360	U	ug/L	1	0.360	1.00	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Calcium [7440-70-2]^	**112000**		ug/L	1	39.0	100	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Chromium [7440-47-3]^	**31.2**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Cobalt [7440-48-4]^	**3.80**	JD	ug/L	20	2.00	20.0	4D18018	EPA 6020A	04/22/14 13:28	VLO	R-01
Copper [7440-50-8]^	**13.9**		ug/L	1	1.60	10.0	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Iron [7439-89-6]^	**15800**		ug/L	1	22.0	50.0	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Lead [7439-92-1]^	**33.5**		ug/L	1	2.10	10.0	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Magnesium [7439-95-4]^	**14200**		ug/L	1	23.0	100	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Manganese [7439-96-5]^	**66.7**		ug/L	1	1.10	10.0	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Nickel [7440-02-0]^	**12.1**		ug/L	1	1.80	10.0	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Potassium [7440-09-7]^	**3140**		ug/L	1	150	500	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Selenium [7782-49-2]^	5.00	U	ug/L	1	5.00	10.0	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Silver [7440-22-4]^	1.90	U	ug/L	1	1.90	10.0	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Sodium [7440-23-5]^	**4870**		ug/L	1	400	500	4D21018	EPA 6010C	04/28/14 13:51	JDH	
Thallium [7440-28-0]^	2.20	UD	ug/L	20	2.20	20.0	4D18018	EPA 6020A	04/22/14 13:28	VLO	R-01
Vanadium [7440-62-2]^	**46.8**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 13:51	JDH	

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ANALYTICAL RESULTS

Description: GP14-4 | **Lab Sample ID:** C404171-01 | **Received:** 04/17/14 10:15

Matrix: Ground Water | **Sampled:** 04/16/14 11:00 | **Work Order:** C404171

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Zinc [7440-66-6]^	**44.7**		ug/L	1	3.80	10.0	4D21018	EPA 6010C	04/28/14 13:51	JDH	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.0088	U	mg/L	1	0.0088	0.010	4D17030	EPA 7196A	04/17/14 14:30	CV	Q

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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ANALYTICAL RESULTS

Description: GP14-4	**Lab Sample ID:** C404171-02	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 10:30	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 87.76

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	1.6	U	mg/kg dry	1	1.6	6.3	4D22036	EPA 8015C	04/22/14 20:11	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*13*	*1*	*10.9*	*116 %*	*59-168*	*4D22036*	*EPA 8015C*	*04/22/14 20:11*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**3.8**		mg/kg dry	1	1.9	3.8	4D21008	EPA 8015C	04/22/14 09:56	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*2.2*	*1*	*1.90*	*114 %*	*51-138*	*4D21008*	*EPA 8015C*	*04/22/14 09:56*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**10700**		mg/kg dry	1	2.39	11.4	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Antimony [7440-36-0]	**0.542**	J	mg/kg dry	1	0.125	1.14	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Arsenic [7440-38-2]^	**1.44**		mg/kg dry	1	0.114	0.570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Barium [7440-39-3]^	**42.0**		mg/kg dry	1	0.114	0.570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Beryllium [7440-41-7]	**0.228**		mg/kg dry	1	0.0137	0.0570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Cadmium [7440-43-9]^	**0.0252**	J	mg/kg dry	1	0.0109	0.0570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Calcium [7440-70-2]	**1500**	B	mg/kg dry	1	6.38	28.5	4D21024	EPA 6010C	04/23/14 12:38	JDH	QB-01
Chromium [7440-47-3]^	**9.69**		mg/kg dry	1	0.114	0.570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Cobalt [7440-48-4]	**1.27**		mg/kg dry	1	0.114	0.570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Copper [7440-50-8]	**4.24**		mg/kg dry	1	0.216	0.570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Iron [7439-89-6]	**3840**	B	mg/kg dry	1	0.547	2.85	4D21024	EPA 6010C	04/23/14 12:38	JDH	QB-01
Lead [7439-92-1]^	**10.6**		mg/kg dry	1	0.137	0.570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Magnesium [7439-95-4]	**434**	B	mg/kg dry	1	0.741	28.5	4D21024	EPA 6010C	04/23/14 12:38	JDH	QB-01
Manganese [7439-96-5]	**10.5**		mg/kg dry	1	0.114	0.570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Mercury [7439-97-6]^	**0.0345**		mg/kg dry	1	0.00694	0.0241	4D29012	EPA 7471B	04/30/14 16:25	T1D	
Nickel [7440-02-0]	**3.51**		mg/kg dry	1	0.410	2.85	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Potassium [7440-09-7]	**333**		mg/kg dry	1	4.56	28.5	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Selenium [7782-49-2]^	0.114	U	mg/kg dry	1	0.114	0.570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Silver [7440-22-4]^	**0.130**	J	mg/kg dry	1	0.114	0.570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Sodium [7440-23-5]	**34.4**		mg/kg dry	1	6.84	28.5	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Thallium [7440-28-0]	0.114	U	mg/kg dry	1	0.114	0.570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Vanadium [7440-62-2]^	**15.2**		mg/kg dry	1	0.114	0.570	4D21024	EPA 6010C	04/23/14 12:38	JDH	
Zinc [7440-66-6]^	**13.0**		mg/kg dry	1	1.25	2.85	4D21024	EPA 6010C	04/23/14 12:38	JDH	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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ANALYTICAL RESULTS

Description: GP14-4	**Lab Sample ID:** C404171-02	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 10:30	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 87.76

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
1,1-Dichloroethane [75-34-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
1,1-Dichloroethene [75-35-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0009	U	mg/kg dry	1	0.0009	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
1,2-Dibromoethane [106-93-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
1,2-Dichloroethane [107-06-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
1,2-Dichloropropane [78-87-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
2-Butanone [78-93-3]^	0.0018	U	mg/kg dry	1	0.0018	0.0051	4D25025	EPA 8260B	04/25/14 18:13	KAT	
2-Hexanone [591-78-6]^	0.0009	U	mg/kg dry	1	0.0009	0.0051	4D25025	EPA 8260B	04/25/14 18:13	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0014	U	mg/kg dry	1	0.0014	0.0051	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Acetone [67-64-1]^	0.0017	U	mg/kg dry	1	0.0017	0.0051	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Benzene [71-43-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Bromochloromethane [74-97-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Bromodichloromethane [75-27-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Bromoform [75-25-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Bromomethane [74-83-9]^	0.0009	U	mg/kg dry	1	0.0009	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Carbon disulfide [75-15-0]^	0.0021	U	mg/kg dry	1	0.0021	0.0051	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Carbon Tetrachloride [56-23-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Chlorobenzene [108-90-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Chloroethane [75-00-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Chloroform [67-66-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Chloromethane [74-87-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
cis-1,2-Dichloroethene [156-59-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
cis-1,3-Dichloropropene [10061-01-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Cyclohexane [110-82-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0020	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Ethylbenzene [100-41-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Freon 113 [76-13-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Isopropylbenzene [98-82-8]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Methyl acetate [79-20-9]^	0.0016	U	mg/kg dry	1	0.0016	0.0020	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Methyl cyclohexane [108-87-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0020	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Methylene Chloride [75-09-2]^	0.0007	U	mg/kg dry	1	0.0007	0.0020	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Styrene [100-42-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Tetrachloroethene [127-18-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Toluene [108-88-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0003	U	mg/kg dry	1	0.0003	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Trichloroethene [79-01-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Trichlorofluoromethane [75-69-4]^	**0.018**		mg/kg dry	1	0.0005	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	
Vinyl chloride [75-01-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0010	4D25025	EPA 8260B	04/25/14 18:13	KAT	

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ANALYTICAL RESULTS

Description: GP14-4	**Lab Sample ID:** C404171-02	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 10:30	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 87.76

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7]^	0.0010	U	mg/kg dry	1	0.0010	0.0020	4D25025	EPA 8260B	04/25/14 18:13	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.049*	*1*	*0.0508*	*97 %*	*71-126*	*4D25025*	*EPA 8260B*	*04/25/14 18:13*	*KAT*	
Dibromofluoromethane	*0.045*	*1*	*0.0508*	*88 %*	*72-133*	*4D25025*	*EPA 8260B*	*04/25/14 18:13*	*KAT*	
Toluene-d8	*0.047*	*1*	*0.0508*	*93 %*	*80-123*	*4D25025*	*EPA 8260B*	*04/25/14 18:13*	*KAT*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.083	U	mg/kg dry	1	0.083	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2,4,5-Trichlorophenol [95-95-4]^	0.076	U	mg/kg dry	1	0.076	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2,4,6-Trichlorophenol [88-06-2]^	0.17	U	mg/kg dry	1	0.17	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2,4-Dichlorophenol [120-83-2]^	0.28	U	mg/kg dry	1	0.28	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2,4-Dimethylphenol [105-67-9]^	0.26	U	mg/kg dry	1	0.26	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2,4-Dinitrophenol [51-28-5]^	0.10	U	mg/kg dry	1	0.10	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2,4-Dinitrotoluene [121-14-2]^	0.18	U	mg/kg dry	1	0.18	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2,6-Dinitrotoluene [606-20-2]^	0.21	U	mg/kg dry	1	0.21	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2-Chloronaphthalene [91-58-7]^	0.11	U	mg/kg dry	1	0.11	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2-Chlorophenol [95-57-8]^	0.26	U	mg/kg dry	1	0.26	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.32	U	mg/kg dry	1	0.32	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2-Methylnaphthalene [91-57-6]^	0.14	U	mg/kg dry	1	0.14	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2-Methylphenol [95-48-7]^	0.13	U	mg/kg dry	1	0.13	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2-Nitroaniline [88-74-4]^	0.097	U	mg/kg dry	1	0.097	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
2-Nitrophenol [88-75-5]^	0.30	U	mg/kg dry	1	0.30	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.28	U	mg/kg dry	1	0.28	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
3,3'-Dichlorobenzidine [91-94-1]^	0.24	U	mg/kg dry	1	0.24	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	QL-02
3-Nitroaniline [99-09-2]^	0.091	U	mg/kg dry	1	0.091	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
4-Bromophenyl-phenylether [101-55-3]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
4-Chloro-3-methylphenol [59-50-7]^	0.32	U	mg/kg dry	1	0.32	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
4-Chloroaniline [106-47-8]^	0.074	U	mg/kg dry	1	0.074	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
4-Chlorophenyl-phenylether [7005-72-3]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
4-Nitroaniline [100-01-6]^	0.30	U	mg/kg dry	1	0.30	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
4-Nitrophenol [100-02-7]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	J-05
Acenaphthene [83-32-9]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Acenaphthylene [208-96-8]^	0.14	U	mg/kg dry	1	0.14	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Acetophenone [98-86-2]^	0.16	U	mg/kg dry	1	0.16	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Anthracene [120-12-7]^	0.17	U	mg/kg dry	1	0.17	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Atrazine [1912-24-9]^	0.084	U	mg/kg dry	1	0.084	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Benzaldehyde [100-52-7]^	0.31	U	mg/kg dry	1	0.31	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Benzo(a)anthracene [56-55-3]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Benzo(a)pyrene [50-32-8]^	0.089	U	mg/kg dry	1	0.089	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.13	U	mg/kg dry	1	0.13	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.18	U	mg/kg dry	1	0.18	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	QV-01
Benzo(k)fluoranthene [207-08-9]^	0.13	U	mg/kg dry	1	0.13	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Bis(2-chloroethoxy)methane [111-91-1]^	0.17	U	mg/kg dry	1	0.17	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	QL-02
Bis(2-chloroethyl)ether [111-44-4]^	0.16	U	mg/kg dry	1	0.16	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Bis(2-chloroisopropyl)ether [108-60-1]^	0.11	U	mg/kg dry	1	0.11	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	

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ANALYTICAL RESULTS

Description: GP14-4	**Lab Sample ID:** C404171-02	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 10:30	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 87.76

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Butylbenzylphthalate [85-68-7]^	0.16	U	mg/kg dry	1	0.16	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Caprolactam [105-60-2]^	0.34	U	mg/kg dry	1	0.34	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	QV-01
Carbazole [86-74-8]^	0.14	U	mg/kg dry	1	0.14	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Chrysene [218-01-9]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.16	U	mg/kg dry	1	0.16	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Dibenzofuran [132-64-9]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Diethylphthalate [84-66-2]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Dimethylphthalate [131-11-3]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Di-n-butylphthalate [84-74-2]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Di-n-octylphthalate [117-84-0]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Fluoranthene [206-44-0]^	0.13	U	mg/kg dry	1	0.13	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Fluorene [86-73-7]	0.16	U	mg/kg dry	1	0.16	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Hexachlorobenzene [118-74-1]^	0.14	U	mg/kg dry	1	0.14	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Hexachlorobutadiene [87-68-3]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Hexachlorocyclopentadiene [77-47-4]^	0.17	U	mg/kg dry	1	0.17	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Hexachloroethane [67-72-1]^	0.11	U	mg/kg dry	1	0.11	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.16	U	mg/kg dry	1	0.16	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Isophorone [78-59-1]^	0.19	U	mg/kg dry	1	0.19	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Naphthalene [91-20-3]^	0.14	U	mg/kg dry	1	0.14	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Nitrobenzene [98-95-3]^	0.17	U	mg/kg dry	1	0.17	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
N-Nitroso-di-n-propylamine [621-64-7]^	0.17	U	mg/kg dry	1	0.17	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.26	U	mg/kg dry	1	0.26	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Pentachlorophenol [87-86-5]^	0.24	U	mg/kg dry	1	0.24	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	QL-02
Phenanthrene [85-01-8]^	0.15	U	mg/kg dry	1	0.15	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Phenol [108-95-2]^	0.11	U	mg/kg dry	1	0.11	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	
Pyrene [129-00-0]^	0.13	U	mg/kg dry	1	0.13	0.38	4D18034	EPA 8270D	04/28/14 11:39	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.5*	*1*	*1.90*	*81 %*	*23-137*	*4D18034*	*EPA 8270D*	*04/28/14 11:39*	*jfi*	
2-Fluorobiphenyl	*1.3*	*1*	*1.90*	*68 %*	*29-119*	*4D18034*	*EPA 8270D*	*04/28/14 11:39*	*jfi*	
2-Fluorophenol	*1.4*	*1*	*1.90*	*75 %*	*20-124*	*4D18034*	*EPA 8270D*	*04/28/14 11:39*	*jfi*	
Nitrobenzene-d5	*1.2*	*1*	*1.90*	*62 %*	*17-126*	*4D18034*	*EPA 8270D*	*04/28/14 11:39*	*jfi*	
Phenol-d5	*1.5*	*1*	*1.90*	*78 %*	*15-131*	*4D18034*	*EPA 8270D*	*04/28/14 11:39*	*jfi*	
Terphenyl-d14	*1.7*	*1*	*1.90*	*90 %*	*60-120*	*4D18034*	*EPA 8270D*	*04/28/14 11:39*	*jfi*	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.17	U	mg/kg dry	1	0.17	1.1	4D21022	EPA 7196A	04/22/14 15:05	RMM	

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ANALYTICAL RESULTS

Description: GP14-5	**Lab Sample ID:** C404171-03	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 11:20	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 84.27

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.00085	U	mg/kg dry	1	0.00085	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
4,4'-DDE [72-55-9]^	0.00091	U	mg/kg dry	1	0.00091	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
4,4'-DDT [50-29-3]^	0.00095	U	mg/kg dry	1	0.00095	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Aldrin [309-00-2]^	0.00096	U	mg/kg dry	1	0.00096	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
alpha-BHC [319-84-6]^	0.0014	U	mg/kg dry	1	0.0014	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
beta-BHC [319-85-7]^	0.0020	U	mg/kg dry	1	0.0020	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Chlordane-alpha [5103-71-9]^	0.00074	U	mg/kg dry	1	0.00074	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Chlordane-gamma [5566-34-7]^	0.00085	U	mg/kg dry	1	0.00085	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
delta-BHC [319-86-8]^	0.0010	U	mg/kg dry	1	0.0010	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Dieldrin [60-57-1]^	0.00090	U	mg/kg dry	1	0.00090	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Endosulfan I [959-98-8]^	0.00090	U	mg/kg dry	1	0.00090	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Endosulfan II [33213-65-9]^	0.0011	U	mg/kg dry	1	0.0011	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Endosulfan sulfate [1031-07-8]^	0.0012	U	mg/kg dry	1	0.0012	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Endrin [72-20-8]^	0.00090	U	mg/kg dry	1	0.00090	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Endrin aldehyde [7421-93-4]^	0.00095	U	mg/kg dry	1	0.00095	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Endrin ketone [53494-70-5]^	0.00089	U	mg/kg dry	1	0.00089	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
gamma-BHC [58-89-9]^	0.0013	U	mg/kg dry	1	0.0013	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Heptachlor [76-44-8]^	0.00094	U	mg/kg dry	1	0.00094	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Heptachlor epoxide [1024-57-3]^	0.00089	U	mg/kg dry	1	0.00089	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Methoxychlor [72-43-5]^	0.0012	U	mg/kg dry	1	0.0012	0.0020	4D22022	EPA 8081B	04/23/14 12:25	MWC	
Toxaphene [8001-35-2]^	0.012	U	mg/kg dry	1	0.012	0.020	4D22022	EPA 8081B	04/23/14 12:25	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.055*	*1*	*0.0396*	*139 %*	*59-137*	*4D22022*	*EPA 8081B*	*04/23/14 12:25*	*MWC*	*QS-03*
Decachlorobiphenyl	*0.055*	*1*	*0.0396*	*139 %*	*60-140*	*4D22022*	*EPA 8081B*	*04/23/14 12:25*	*MWC*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	1.7	U	mg/kg dry	1	1.7	6.5	4D22036	EPA 8015C	04/22/14 20:42	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*12*	*1*	*11.5*	*106 %*	*59-168*	*4D22036*	*EPA 8015C*	*04/22/14 20:42*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**6.1**		mg/kg dry	1	2.0	3.9	4D21008	EPA 8015C	04/22/14 10:25	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*2.5*	*1*	*1.98*	*124 %*	*51-138*	*4D21008*	*EPA 8015C*	*04/22/14 10:25*	*MWC*	

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ANALYTICAL RESULTS

Description:	GP14-5	**Lab Sample ID:**	C404171-03	**Received:**	04/17/14 10:15
Matrix:	Soil	**Sampled:**	04/16/14 11:20	**Work Order:**	C404171
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian	**% Solids:**	84.27

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**11000**		mg/kg dry	1	2.49	11.9	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Antimony [7440-36-0]	0.131	U	mg/kg dry	1	0.131	1.19	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Arsenic [7440-38-2]^	**1.48**		mg/kg dry	1	0.119	0.593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Barium [7440-39-3]^	**54.3**		mg/kg dry	1	0.119	0.593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Beryllium [7440-41-7]	**0.207**		mg/kg dry	1	0.0142	0.0593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Cadmium [7440-43-9]^	0.0114	U	mg/kg dry	1	0.0114	0.0593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Calcium [7440-70-2]	**790**	B	mg/kg dry	1	6.65	29.7	4D21024	EPA 6010C	04/23/14 12:40	JDH	QB-01
Chromium [7440-47-3]^	**10.6**		mg/kg dry	1	0.119	0.593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Cobalt [7440-48-4]	**1.23**		mg/kg dry	1	0.119	0.593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Copper [7440-50-8]	**3.33**		mg/kg dry	1	0.225	0.593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Iron [7439-89-6]	**4220**	B	mg/kg dry	1	0.570	2.97	4D21024	EPA 6010C	04/23/14 12:40	JDH	QB-01
Lead [7439-92-1]^	**11.0**		mg/kg dry	1	0.142	0.593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Magnesium [7439-95-4]	**367**	B	mg/kg dry	1	0.771	29.7	4D21024	EPA 6010C	04/23/14 12:40	JDH	QB-01
Manganese [7439-96-5]	**7.60**		mg/kg dry	1	0.119	0.593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Mercury [7439-97-6]^	**0.0506**		mg/kg dry	1	0.00819	0.0285	4D29012	EPA 7471B	04/30/14 16:36	T1D	
Nickel [7440-02-0]	**3.20**		mg/kg dry	1	0.427	2.97	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Potassium [7440-09-7]	**255**		mg/kg dry	1	4.75	29.7	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Selenium [7782-49-2]^	**0.369**	J	mg/kg dry	1	0.119	0.593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Silver [7440-22-4]^	0.119	U	mg/kg dry	1	0.119	0.593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Sodium [7440-23-5]	**81.3**		mg/kg dry	1	7.12	29.7	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Thallium [7440-28-0]	0.119	U	mg/kg dry	1	0.119	0.593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Vanadium [7440-62-2]^	**16.8**		mg/kg dry	1	0.119	0.593	4D21024	EPA 6010C	04/23/14 12:40	JDH	
Zinc [7440-66-6]^	**9.07**		mg/kg dry	1	1.31	2.97	4D21024	EPA 6010C	04/23/14 12:40	JDH	

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0003	U	mg/kg dry	1	0.0003	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0002	U	mg/kg dry	1	0.0002	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
1,1-Dichloroethane [75-34-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
1,1-Dichloroethene [75-35-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0007	U	mg/kg dry	1	0.0007	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0005	U	mg/kg dry	1	0.0005	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
1,2-Dibromoethane [106-93-4]^	0.0002	U	mg/kg dry	1	0.0002	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
1,2-Dichloroethane [107-06-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
1,2-Dichloropropane [78-87-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0004	U	mg/kg dry	1	0.0004	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0004	U	mg/kg dry	1	0.0004	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
2-Butanone [78-93-3]^	0.0014	U	mg/kg dry	1	0.0014	0.0040	4D25025	EPA 8260B	04/25/14 18:46	KAT	
2-Hexanone [591-78-6]^	0.0007	U	mg/kg dry	1	0.0007	0.0040	4D25025	EPA 8260B	04/25/14 18:46	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0011	U	mg/kg dry	1	0.0011	0.0040	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Acetone [67-64-1]^	**0.0047**		mg/kg dry	1	0.0014	0.0040	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Benzene [71-43-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Bromochloromethane [74-97-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Bromodichloromethane [75-27-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Bromoform [75-25-2]^	0.0002	U	mg/kg dry	1	0.0002	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	

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ANALYTICAL RESULTS

Description: GP14-5	**Lab Sample ID:** C404171-03	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 11:20	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 84.27

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bromomethane [74-83-9]^	0.0007	U	mg/kg dry	1	0.0007	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Carbon disulfide [75-15-0]^	0.0017	U	mg/kg dry	1	0.0017	0.0040	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Carbon Tetrachloride [56-23-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Chlorobenzene [108-90-7]^	0.0004	U	mg/kg dry	1	0.0004	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Chloroethane [75-00-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Chloroform [67-66-3]^	0.0003	U	mg/kg dry	1	0.0003	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Chloromethane [74-87-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
cis-1,2-Dichloroethene [156-59-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
cis-1,3-Dichloropropene [10061-01-5]^	0.0002	U	mg/kg dry	1	0.0002	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Cyclohexane [110-82-7]^	0.0004	U	mg/kg dry	1	0.0004	0.0016	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Dibromochloromethane [124-48-1]^	0.0002	U	mg/kg dry	1	0.0002	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0005	U	mg/kg dry	1	0.0005	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Ethylbenzene [100-41-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Freon 113 [76-13-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Isopropylbenzene [98-82-8]^	0.0004	U	mg/kg dry	1	0.0004	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Methyl acetate [79-20-9]^	0.0013	U	mg/kg dry	1	0.0013	0.0016	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Methyl cyclohexane [108-87-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0016	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Methylene Chloride [75-09-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0016	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0002	U	mg/kg dry	1	0.0002	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Styrene [100-42-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Tetrachloroethene [127-18-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Toluene [108-88-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0002	U	mg/kg dry	1	0.0002	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Trichloroethene [79-01-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Trichlorofluoromethane [75-69-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Vinyl chloride [75-01-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0008	4D25025	EPA 8260B	04/25/14 18:46	KAT	
Xylenes (Total) [1330-20-7]^	0.0008	U	mg/kg dry	1	0.0008	0.0016	4D25025	EPA 8260B	04/25/14 18:46	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.038*	*1*	*0.0397*	*95 %*	*71-126*	*4D25025*	*EPA 8260B*	*04/25/14 18:46*	*KAT*	
Dibromofluoromethane	*0.037*	*1*	*0.0397*	*92 %*	*72-133*	*4D25025*	*EPA 8260B*	*04/25/14 18:46*	*KAT*	
Toluene-d8	*0.036*	*1*	*0.0397*	*90 %*	*80-123*	*4D25025*	*EPA 8260B*	*04/25/14 18:46*	*KAT*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.087	U	mg/kg dry	1	0.087	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2,4,5-Trichlorophenol [95-95-4]^	0.079	U	mg/kg dry	1	0.079	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2,4,6-Trichlorophenol [88-06-2]^	0.18	U	mg/kg dry	1	0.18	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2,4-Dichlorophenol [120-83-2]^	0.30	U	mg/kg dry	1	0.30	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2,4-Dimethylphenol [105-67-9]^	0.27	U	mg/kg dry	1	0.27	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2,4-Dinitrophenol [51-28-5]^	0.11	U	mg/kg dry	1	0.11	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2,4-Dinitrotoluene [121-14-2]^	0.19	U	mg/kg dry	1	0.19	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2,6-Dinitrotoluene [606-20-2]^	0.21	U	mg/kg dry	1	0.21	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2-Chloronaphthalene [91-58-7]^	0.12	U	mg/kg dry	1	0.12	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2-Chlorophenol [95-57-8]^	0.27	U	mg/kg dry	1	0.27	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.33	U	mg/kg dry	1	0.33	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	

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ANALYTICAL RESULTS

Description: GP14-5	**Lab Sample ID:** C404171-03	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 11:20	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 84.27

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2-Methylnaphthalene [91-57-6]^	0.14	U	mg/kg dry	1	0.14	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2-Methylphenol [95-48-7]^	0.13	U	mg/kg dry	1	0.13	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2-Nitroaniline [88-74-4]^	0.10	U	mg/kg dry	1	0.10	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
2-Nitrophenol [88-75-5]^	0.31	U	mg/kg dry	1	0.31	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.30	U	mg/kg dry	1	0.30	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
3,3'-Dichlorobenzidine [91-94-1]^	0.25	U	mg/kg dry	1	0.25	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	QL-02
3-Nitroaniline [99-09-2]^	0.095	U	mg/kg dry	1	0.095	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
4-Bromophenyl-phenylether [101-55-3]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
4-Chloro-3-methylphenol [59-50-7]^	0.33	U	mg/kg dry	1	0.33	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
4-Chloroaniline [106-47-8]^	0.077	U	mg/kg dry	1	0.077	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
4-Chlorophenyl-phenylether [7005-72-3]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
4-Nitroaniline [100-01-6]^	0.31	U	mg/kg dry	1	0.31	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
4-Nitrophenol [100-02-7]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	J-05
Acenaphthene [83-32-9]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Acenaphthylene [208-96-8]^	0.14	U	mg/kg dry	1	0.14	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Acetophenone [98-86-2]^	0.17	U	mg/kg dry	1	0.17	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Anthracene [120-12-7]^	0.18	U	mg/kg dry	1	0.18	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Atrazine [1912-24-9]^	0.088	U	mg/kg dry	1	0.088	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Benzaldehyde [100-52-7]^	0.32	U	mg/kg dry	1	0.32	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Benzo(a)anthracene [56-55-3]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Benzo(a)pyrene [50-32-8]^	0.093	U	mg/kg dry	1	0.093	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.13	U	mg/kg dry	1	0.13	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.19	U	mg/kg dry	1	0.19	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	QV-01
Benzo(k)fluoranthene [207-08-9]^	0.13	U	mg/kg dry	1	0.13	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Bis(2-chloroethoxy)methane [111-91-1]^	0.18	U	mg/kg dry	1	0.18	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	QL-02
Bis(2-chloroethyl)ether [111-44-4]^	0.17	U	mg/kg dry	1	0.17	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Bis(2-chloroisopropyl)ether [108-60-1]^	0.12	U	mg/kg dry	1	0.12	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Butylbenzylphthalate [85-68-7]^	0.17	U	mg/kg dry	1	0.17	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Caprolactam [105-60-2]^	0.36	U	mg/kg dry	1	0.36	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	QV-01
Carbazole [86-74-8]^	0.14	U	mg/kg dry	1	0.14	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Chrysene [218-01-9]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.17	U	mg/kg dry	1	0.17	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Dibenzofuran [132-64-9]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Diethylphthalate [84-66-2]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Dimethylphthalate [131-11-3]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Di-n-butylphthalate [84-74-2]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Di-n-octylphthalate [117-84-0]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Fluoranthene [206-44-0]^	0.13	U	mg/kg dry	1	0.13	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Fluorene [86-73-7]	0.17	U	mg/kg dry	1	0.17	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Hexachlorobenzene [118-74-1]^	0.14	U	mg/kg dry	1	0.14	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Hexachlorobutadiene [87-68-3]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Hexachlorocyclopentadiene [77-47-4]^	0.18	U	mg/kg dry	1	0.18	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Hexachloroethane [67-72-1]^	0.12	U	mg/kg dry	1	0.12	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.17	U	mg/kg dry	1	0.17	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Isophorone [78-59-1]^	0.20	U	mg/kg dry	1	0.20	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Naphthalene [91-20-3]^	0.14	U	mg/kg dry	1	0.14	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Nitrobenzene [98-95-3]^	0.18	U	mg/kg dry	1	0.18	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	

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ANALYTICAL RESULTS

Description: GP14-5	**Lab Sample ID:** C404171-03	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 11:20	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 84.27

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
N-Nitroso-di-n-propylamine [621-64-7]^	0.18	U	mg/kg dry	1	0.18	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.27	U	mg/kg dry	1	0.27	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Pentachlorophenol [87-86-5]^	0.25	U	mg/kg dry	1	0.25	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	QL-02
Phenanthrene [85-01-8]^	0.15	U	mg/kg dry	1	0.15	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Phenol [108-95-2]^	0.12	U	mg/kg dry	1	0.12	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	
Pyrene [129-00-0]^	0.13	U	mg/kg dry	1	0.13	0.39	4D18034	EPA 8270D	04/28/14 12:07	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.7*	*1*	*1.98*	*84 %*	*23-137*	*4D18034*	*EPA 8270D*	*04/28/14 12:07*	*jfi*	
2-Fluorobiphenyl	*1.2*	*1*	*1.98*	*61 %*	*29-119*	*4D18034*	*EPA 8270D*	*04/28/14 12:07*	*jfi*	
2-Fluorophenol	*1.6*	*1*	*1.98*	*83 %*	*20-124*	*4D18034*	*EPA 8270D*	*04/28/14 12:07*	*jfi*	
Nitrobenzene-d5	*1.3*	*1*	*1.98*	*68 %*	*17-126*	*4D18034*	*EPA 8270D*	*04/28/14 12:07*	*jfi*	
Phenol-d5	*1.7*	*1*	*1.98*	*88 %*	*15-131*	*4D18034*	*EPA 8270D*	*04/28/14 12:07*	*jfi*	
Terphenyl-d14	*1.8*	*1*	*1.98*	*92 %*	*60-120*	*4D18034*	*EPA 8270D*	*04/28/14 12:07*	*jfi*	

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0030	U	mg/kg dry	1	0.0030	0.012	4D21020	EPA 8151A	04/23/14 04:47	RGG	
2,4,5-TP (Silvex) [93-72-1]^	0.0056	U	mg/kg dry	1	0.0056	0.012	4D21020	EPA 8151A	04/23/14 04:47	RGG	
2,4-D [94-75-7]^	0.012	U	mg/kg dry	1	0.012	0.012	4D21020	EPA 8151A	04/23/14 04:47	RGG	
2,4-DB [94-82-6]^	0.0058	U	mg/kg dry	1	0.0058	0.012	4D21020	EPA 8151A	04/23/14 04:47	RGG	
Dalapon [75-99-0]^	0.0059	U	mg/kg dry	1	0.0059	0.012	4D21020	EPA 8151A	04/23/14 04:47	RGG	
Dicamba [1918-00-9]^	0.0027	U	mg/kg dry	1	0.0027	0.012	4D21020	EPA 8151A	04/23/14 04:47	RGG	
Dichlorprop [120-36-5]^	0.0033	U	mg/kg dry	1	0.0033	0.012	4D21020	EPA 8151A	04/23/14 04:47	RGG	
Dinoseb [88-85-7]^	0.0050	U	mg/kg dry	1	0.0050	0.012	4D21020	EPA 8151A	04/23/14 04:47	RGG	
MCPA [94-74-6]^	0.62	U	mg/kg dry	1	0.62	1.2	4D21020	EPA 8151A	04/23/14 04:47	RGG	
MCPP [93-65-2]^	0.63	U	mg/kg dry	1	0.63	1.2	4D21020	EPA 8151A	04/23/14 04:47	RGG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4-DCAA	*0.038*	*1*	*0.0475*	*80 %*	*39-174*	*4D21020*	*EPA 8151A*	*04/23/14 04:47*	*RGG*	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.18	U	mg/kg dry	1	0.18	1.2	4D21022	EPA 7196A	04/22/14 15:05	RMM	

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ANALYTICAL RESULTS

Description: GP14-5 | **Lab Sample ID:** C404171-04 | **Received:** 04/17/14 10:15

Matrix: Ground Water | **Sampled:** 04/16/14 11:45 | **Work Order:** C404171

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Acetone [67-64-1]^	**15**		ug/L	1	1.2	5.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
m,p-Xylenes [108-38-3/106-42-3]	0.17	U	ug/L	1	0.17	2.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Methyl-tert-Butyl Ether [1634-04-4]^	0.16	U	ug/L	1	0.16	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	

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ANALYTICAL RESULTS

Description: GP14-5 | **Lab Sample ID:** C404171-04 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 11:45 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D24037	EPA 8260B	04/25/14 07:41	REF	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4D24037	EPA 8260B	04/25/14 07:41	REF	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*52*	*1*	*50.0*	*103 %*	*51-122*	*4D24037*	*EPA 8260B*	*04/25/14 07:41*	*REF*	
Dibromofluoromethane	*49*	*1*	*50.0*	*98 %*	*68-117*	*4D24037*	*EPA 8260B*	*04/25/14 07:41*	*REF*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*4D24037*	*EPA 8260B*	*04/25/14 07:41*	*REF*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2,4,5-Trichlorophenol [95-95-4]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2,4,6-Trichlorophenol [88-06-2]^	1.1	U	ug/L	1	1.1	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2,4-Dichlorophenol [120-83-2]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2,4-Dimethylphenol [105-67-9]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2,4-Dinitrophenol [51-28-5]^	2.6	U	ug/L	1	2.6	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2,4-Dinitrotoluene [121-14-2]^	2.4	U	ug/L	1	2.4	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2,6-Dinitrotoluene [606-20-2]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2-Chloronaphthalene [91-58-7]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2-Chlorophenol [95-57-8]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]	2.9	U	ug/L	1	2.9	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2-Methylnaphthalene [91-57-6]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2-Methylphenol [95-48-7]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2-Nitroaniline [88-74-4]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
2-Nitrophenol [88-75-5]^	1.1	U	ug/L	1	1.1	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]	1.6	U	ug/L	1	1.6	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
3-Nitroaniline [99-09-2]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
4-Bromophenyl-phenylether [101-55-3]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
4-Chloro-3-methylphenol [59-50-7]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
4-Chloroaniline [106-47-8]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	1.6	U	ug/L	1	1.6	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
4-Nitrophenol [100-02-7]^	2.0	U	ug/L	1	2.0	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Acenaphthene [83-32-9]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Acenaphthylene [208-96-8]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Acetophenone [98-86-2]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Anthracene [120-12-7]^	1.6	U	ug/L	1	1.6	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Atrazine [1912-24-9]	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	QV-01
Benzaldehyde [100-52-7]	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	QV-02
Benzo(a)anthracene [56-55-3]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Benzo(a)pyrene [50-32-8]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Benzo(b)fluoranthene [205-99-2]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Benzo(g,h,i)perylene [191-24-2]^	2.4	U	ug/L	1	2.4	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Benzo(k)fluoranthene [207-08-9]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	

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ANALYTICAL RESULTS

Description: GP14-5 | **Lab Sample ID:** C404171-04 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 11:45 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethoxy)methane [111-91-1]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	1.7	U	ug/L	1	1.7	5.0	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Butylbenzylphthalate [85-68-7]^	2.0	U	ug/L	1	2.0	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Caprolactam [105-60-2]	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Carbazole [86-74-8]^	2.5	U	ug/L	1	2.5	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Chrysene [218-01-9]^	2.0	U	ug/L	1	2.0	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	2.3	U	ug/L	1	2.3	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Dibenzofuran [132-64-9]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Diethylphthalate [84-66-2]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Dimethylphthalate [131-11-3]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Di-n-butylphthalate [84-74-2]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Di-n-octylphthalate [117-84-0]^	3.1	U	ug/L	1	3.1	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Fluoranthene [206-44-0]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Fluorene [86-73-7]^	1.7	U	ug/L	1	1.7	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Hexachlorobenzene [118-74-1]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Hexachlorobutadiene [87-68-3]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Hexachlorocyclopentadiene [77-47-4]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Hexachloroethane [67-72-1]^	1.1	U	ug/L	1	1.1	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	2.2	U	ug/L	1	2.2	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Isophorone [78-59-1]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Naphthalene [91-20-3]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Nitrobenzene [98-95-3]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Pentachlorophenol [87-86-5]^	1.8	U	ug/L	1	1.8	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Phenanthrene [85-01-8]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Phenol [108-95-2]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	
Pyrene [129-00-0]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/24/14 22:22	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*99*	*1*	*100*	*99 %*	*10-179*	*4D18032*	*EPA 8270D*	*04/24/14 22:22*	*DFM*	
2-Fluorobiphenyl	*41*	*1*	*50.0*	*83 %*	*10-149*	*4D18032*	*EPA 8270D*	*04/24/14 22:22*	*DFM*	
2-Fluorophenol	*52*	*1*	*100*	*52 %*	*10-110*	*4D18032*	*EPA 8270D*	*04/24/14 22:22*	*DFM*	
Nitrobenzene-d5	*41*	*1*	*50.0*	*82 %*	*10-149*	*4D18032*	*EPA 8270D*	*04/24/14 22:22*	*DFM*	
Phenol-d5	*45*	*1*	*100*	*45 %*	*10-88*	*4D18032*	*EPA 8270D*	*04/24/14 22:22*	*DFM*	
Terphenyl-d14	*45*	*1*	*50.0*	*90 %*	*10-188*	*4D18032*	*EPA 8270D*	*04/24/14 22:22*	*DFM*	

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.044	U	ug/L	1	0.044	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
4,4'-DDE [72-55-9]^	0.048	U	ug/L	1	0.048	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
4,4'-DDT [50-29-3]^	0.049	U	ug/L	1	0.049	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Aldrin [309-00-2]^	0.041	U	ug/L	1	0.041	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
alpha-BHC [319-84-6]^	0.036	U	ug/L	1	0.036	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
beta-BHC [319-85-7]^	0.036	U	ug/L	1	0.036	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	

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ANALYTICAL RESULTS

Description: GP14-5 | **Lab Sample ID:** C404171-04 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 11:45 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Chlordane-alpha [5103-71-9]^	0.048	U	ug/L	1	0.048	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Chlordane-gamma [5566-34-7]^	0.042	U	ug/L	1	0.042	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
delta-BHC [319-86-8]^	0.048	U	ug/L	1	0.048	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Dieldrin [60-57-1]^	0.045	U	ug/L	1	0.045	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Endosulfan I [959-98-8]^	0.045	U	ug/L	1	0.045	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Endosulfan II [33213-65-9]^	0.036	U	ug/L	1	0.036	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Endosulfan sulfate [1031-07-8]^	0.032	U	ug/L	1	0.032	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Endrin [72-20-8]^	0.041	U	ug/L	1	0.041	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Endrin aldehyde [7421-93-4]^	0.042	U	ug/L	1	0.042	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Endrin ketone [53494-70-5]^	0.039	U	ug/L	1	0.039	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
gamma-BHC [58-89-9]^	0.034	U	ug/L	1	0.034	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Heptachlor [76-44-8]^	0.030	U	ug/L	1	0.030	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Heptachlor epoxide [1024-57-3]^	0.037	U	ug/L	1	0.037	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Methoxychlor [72-43-5]^	0.025	U	ug/L	1	0.025	0.050	4D22011	EPA 8081B	04/24/14 17:44	MWC	
Toxaphene [8001-35-2]^	0.22	U	ug/L	1	0.22	0.50	4D22011	EPA 8081B	04/24/14 17:44	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*104 %*	*44-134*	*4D22011*	*EPA 8081B*	*04/24/14 17:44*	*MWC*	
Decachlorobiphenyl	*0.54*	*1*	*1.00*	*54 %*	*37-149*	*4D22011*	*EPA 8081B*	*04/24/14 17:44*	*MWC*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.43	U	ug/L	1	0.43	0.50	4D22014	EPA 8082A	04/24/14 17:44	MWC	
PCB-1221 [11104-28-2]^	0.37	U	ug/L	1	0.37	0.50	4D22014	EPA 8082A	04/24/14 17:44	MWC	
PCB-1232 [11141-16-5]^	0.45	U	ug/L	1	0.45	0.50	4D22014	EPA 8082A	04/24/14 17:44	MWC	
PCB-1248 [12672-29-6]^	0.014	U	ug/L	1	0.014	0.50	4D22014	EPA 8082A	04/24/14 17:44	MWC	
PCB-1254 [11097-69-1]^	0.37	U	ug/L	1	0.37	0.50	4D22014	EPA 8082A	04/24/14 17:44	MWC	
PCB-1260 [11096-82-5]^	0.45	U	ug/L	1	0.45	0.50	4D22014	EPA 8082A	04/24/14 17:44	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.78*	*1*	*1.00*	*78 %*	*45-151*	*4D22014*	*EPA 8082A*	*04/24/14 17:44*	*MWC*	
Decachlorobiphenyl	*0.45*	*1*	*1.00*	*45 %*	*42-159*	*4D22014*	*EPA 8082A*	*04/24/14 17:44*	*MWC*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	0.011	U	mg/L	1	0.011	0.055	4D22042	EPA 8015C	04/23/14 05:32	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*0.101*	*1*	*0.100*	*101 %*	*70-130*	*4D22042*	*EPA 8015C*	*04/23/14 05:32*	*manag*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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ANALYTICAL RESULTS

Description: GP14-5 | **Lab Sample ID:** C404171-04 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 11:45 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	0.080	U	mg/L	1	0.080	0.13	4D22007	EPA 8015C	04/23/14 18:06	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*0.052*	*1*	*0.0667*	*79 %*	*41-126*	*4D22007*	*EPA 8015C*	*04/23/14 18:06*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	0.170	U	ug/L	1	0.170	0.200	4D24033	EPA 7470A	04/25/14 13:48	T1D	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]^	**93100**		ug/L	1	29.0	100	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Antimony [7440-36-0]^	4.40	UD	ug/L	20	4.40	40.0	4D18018	EPA 6020A	04/22/14 13:32	VLO	R-01
Arsenic [7440-38-2]^	**25.2**		ug/L	1	5.40	10.0	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Barium [7440-39-3]^	**352**		ug/L	1	1.00	10.0	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Beryllium [7440-41-7]^	**5.05**		ug/L	1	0.100	1.00	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Cadmium [7440-43-9]^	**0.669**	J	ug/L	1	0.360	1.00	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Calcium [7440-70-2]^	**78400**		ug/L	1	39.0	100	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Chromium [7440-47-3]^	**130**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Cobalt [7440-48-4]^	**15.2**	JD	ug/L	20	2.00	20.0	4D18018	EPA 6020A	04/22/14 13:32	VLO	R-01
Copper [7440-50-8]^	**76.2**		ug/L	1	1.60	10.0	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Iron [7439-89-6]^	**61600**		ug/L	1	22.0	50.0	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Lead [7439-92-1]^	**104**		ug/L	1	2.10	10.0	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Magnesium [7439-95-4]^	**14500**		ug/L	1	23.0	100	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Manganese [7439-96-5]^	**270**		ug/L	1	1.10	10.0	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Nickel [7440-02-0]^	**43.7**		ug/L	1	1.80	10.0	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Potassium [7440-09-7]^	**7700**		ug/L	1	150	500	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Selenium [7782-49-2]^	5.00	U	ug/L	1	5.00	10.0	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Silver [7440-22-4]^	**2.53**	J	ug/L	1	1.90	10.0	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Sodium [7440-23-5]^	**12800**		ug/L	1	400	500	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Thallium [7440-28-0]^	2.20	UD	ug/L	20	2.20	20.0	4D18018	EPA 6020A	04/22/14 13:32	VLO	R-01
Vanadium [7440-62-2]^	**216**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 13:54	JDH	
Zinc [7440-66-6]^	**180**		ug/L	1	3.80	10.0	4D21018	EPA 6010C	04/28/14 13:54	JDH	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.0088	U	mg/L	1	0.0088	0.010	4D17030	EPA 7196A	04/17/14 14:30	CV	Q

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ANALYTICAL RESULTS

Description: GP14-5 | **Lab Sample ID:** C404171-04 | **Received:** 04/17/14 10:15

Matrix: Ground Water | **Sampled:** 04/16/14 11:45 | **Work Order:** C404171

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.26	U	ug/L	1	0.26	0.50	4D21009	EPA 8151A	04/23/14 19:02	RGG	
2,4,5-T [93-76-5]^	1.3	U	ug/L	1	1.3	2.5	4D29023	EPA 8151A	04/30/14 22:22	RGG	Q
2,4,5-TP (Silvex) [93-72-1]^	0.21	U	ug/L	1	0.21	0.50	4D21009	EPA 8151A	04/23/14 19:02	RGG	
2,4,5-TP (Silvex) [93-72-1]^	1.0	U	ug/L	1	1.0	2.5	4D29023	EPA 8151A	04/30/14 22:22	RGG	Q
2,4-D [94-75-7]^	0.27	U	ug/L	1	0.27	0.50	4D21009	EPA 8151A	04/23/14 19:02	RGG	
2,4-D [94-75-7]^	1.4	U	ug/L	1	1.4	2.5	4D29023	EPA 8151A	04/30/14 22:22	RGG	Q
2,4-DB [94-82-6]^	0.32	U	ug/L	1	0.32	0.50	4D21009	EPA 8151A	04/23/14 19:02	RGG	
2,4-DB [94-82-6]^	1.6	U	ug/L	1	1.6	2.5	4D29023	EPA 8151A	04/30/14 22:22	RGG	Q
Dalapon [75-99-0]^	0.49	U	ug/L	1	0.49	0.50	4D21009	EPA 8151A	04/23/14 19:02	RGG	
Dalapon [75-99-0]^	2.4	U	ug/L	1	2.4	2.5	4D29023	EPA 8151A	04/30/14 22:22	RGG	Q
Dicamba [1918-00-9]^	0.17	U	ug/L	1	0.17	0.50	4D21009	EPA 8151A	04/23/14 19:02	RGG	
Dicamba [1918-00-9]^	0.85	U	ug/L	1	0.85	2.5	4D29023	EPA 8151A	04/30/14 22:22	RGG	Q
Dichlorprop [120-36-5]^	0.18	U	ug/L	1	0.18	0.50	4D21009	EPA 8151A	04/23/14 19:02	RGG	
Dichlorprop [120-36-5]^	0.90	U	ug/L	1	0.90	2.5	4D29023	EPA 8151A	04/30/14 22:22	RGG	Q
Dinoseb [88-85-7]^	0.32	U	ug/L	1	0.32	0.50	4D21009	EPA 8151A	04/23/14 19:02	RGG	
Dinoseb [88-85-7]^	1.6	U	ug/L	1	1.6	2.5	4D29023	EPA 8151A	04/30/14 22:22	RGG	Q
MCPA [94-74-6]^	17	U	ug/L	1	17	50	4D21009	EPA 8151A	04/23/14 19:02	RGG	
MCPA [94-74-6]^	85	U	ug/L	1	85	250	4D29023	EPA 8151A	04/30/14 22:22	RGG	Q
MCPP [93-65-2]^	7.4	U	ug/L	1	7.4	50	4D21009	EPA 8151A	04/23/14 19:02	RGG	
MCPP [93-65-2]^	37	U	ug/L	1	37	250	4D29023	EPA 8151A	04/30/14 22:22	RGG	Q

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	*Notes*
2,4-DCAA	*0.73*	*1*	*2.00*	*36 %*	*68-139*	*4D21009*	*EPA 8151A*	*04/23/14 19:02*	*RGG*	*QM-14, QS-05*
2,4-DCAA	*15*	*1*	*10.0*	*146 %*	*68-139*	*4D29023*	*EPA 8151A*	*04/30/14 22:22*	*RGG*	*Q*

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ANALYTICAL RESULTS

Description: GP14-7 **Lab Sample ID:** C404171-05 **Received:** 04/17/14 10:15

Matrix: Ground Water **Sampled:** 04/16/14 13:20 **Work Order:** C404171

Project: 1614 West Pembroke Avenue **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Acetone [67-64-1]^	**24**		ug/L	1	1.2	5.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Benzene [71-43-2]^	**8.9**		ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Ethylbenzene [100-41-4]^	**20**		ug/L	1	0.13	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Isopropylbenzene [98-82-8]^	**4.5**		ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
m,p-Xylenes [108-38-3/106-42-3]	**130**		ug/L	1	0.17	2.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Methyl-tert-Butyl Ether [1634-04-4]^	**10**		ug/L	1	0.16	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
o-Xylene [95-47-6]^	**62**		ug/L	1	0.065	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Toluene [108-88-3]^	**23**		ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	

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ANALYTICAL RESULTS

Description: GP14-7 | **Lab Sample ID:** C404171-05 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 13:20 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D24037	EPA 8260B	04/25/14 08:11	REF	
Xylenes (Total) [1330-20-7]^	**200**		ug/L	1	0.45	3.0	4D24037	EPA 8260B	04/25/14 08:11	REF	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*55*	*1*	*50.0*	*110 %*	*51-122*	*4D24037*	*EPA 8260B*	*04/25/14 08:11*	*REF*	
Dibromofluoromethane	*50*	*1*	*50.0*	*100 %*	*68-117*	*4D24037*	*EPA 8260B*	*04/25/14 08:11*	*REF*	
Toluene-d8	*50*	*1*	*50.0*	*101 %*	*67-127*	*4D24037*	*EPA 8260B*	*04/25/14 08:11*	*REF*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]	**2.3**	J	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2,4,5-Trichlorophenol [95-95-4]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2,4,6-Trichlorophenol [88-06-2]^	1.1	U	ug/L	1	1.1	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2,4-Dichlorophenol [120-83-2]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2,4-Dimethylphenol [105-67-9]^	**2.4**	J	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2,4-Dinitrophenol [51-28-5]^	2.6	U	ug/L	1	2.6	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2,4-Dinitrotoluene [121-14-2]^	2.4	U	ug/L	1	2.4	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2,6-Dinitrotoluene [606-20-2]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2-Chloronaphthalene [91-58-7]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2-Chlorophenol [95-57-8]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]	2.9	U	ug/L	1	2.9	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2-Methylnaphthalene [91-57-6]^	**15**		ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2-Methylphenol [95-48-7]^	**1.5**	J	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2-Nitroaniline [88-74-4]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
2-Nitrophenol [88-75-5]^	1.1	U	ug/L	1	1.1	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]	**2.4**	J	ug/L	1	1.6	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
3-Nitroaniline [99-09-2]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
4-Bromophenyl-phenylether [101-55-3]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
4-Chloro-3-methylphenol [59-50-7]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
4-Chloroaniline [106-47-8]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	1.6	U	ug/L	1	1.6	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
4-Nitrophenol [100-02-7]^	2.0	U	ug/L	1	2.0	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Acenaphthene [83-32-9]^	**23**		ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Acenaphthylene [208-96-8]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Acetophenone [98-86-2]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Anthracene [120-12-7]^	**5.0**	J	ug/L	1	1.6	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Atrazine [1912-24-9]	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	QV-01
Benzaldehyde [100-52-7]	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	QV-02
Benzo(a)anthracene [56-55-3]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Benzo(a)pyrene [50-32-8]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Benzo(b)fluoranthene [205-99-2]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Benzo(g,h,i)perylene [191-24-2]^	2.4	U	ug/L	1	2.4	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Benzo(k)fluoranthene [207-08-9]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	

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ANALYTICAL RESULTS

Description: GP14-7 | **Lab Sample ID:** C404171-05 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 13:20 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethoxy)methane [111-91-1]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	1.7	U	ug/L	1	1.7	5.0	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Butylbenzylphthalate [85-68-7]^	2.0	U	ug/L	1	2.0	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Caprolactam [105-60-2]	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Carbazole [86-74-8]^	**30**		ug/L	1	2.5	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Chrysene [218-01-9]^	2.0	U	ug/L	1	2.0	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	2.3	U	ug/L	1	2.3	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Dibenzofuran [132-64-9]^	**16**		ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Diethylphthalate [84-66-2]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Dimethylphthalate [131-11-3]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Di-n-butylphthalate [84-74-2]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Di-n-octylphthalate [117-84-0]^	3.1	U	ug/L	1	3.1	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Fluoranthene [206-44-0]^	**2.6**	J	ug/L	1	2.1	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Fluorene [86-73-7]^	**23**		ug/L	1	1.7	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Hexachlorobenzene [118-74-1]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Hexachlorobutadiene [87-68-3]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Hexachlorocyclopentadiene [77-47-4]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Hexachloroethane [67-72-1]^	1.1	U	ug/L	1	1.1	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	2.2	U	ug/L	1	2.2	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Isophorone [78-59-1]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Naphthalene [91-20-3]^	**50**		ug/L	1	1.3	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Nitrobenzene [98-95-3]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Pentachlorophenol [87-86-5]^	1.8	U	ug/L	1	1.8	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Phenanthrene [85-01-8]^	**19**		ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Phenol [108-95-2]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	
Pyrene [129-00-0]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/24/14 22:52	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*110*	*1*	*100*	*109 %*	*10-179*	*4D18032*	*EPA 8270D*	*04/24/14 22:52*	*DFM*	
2-Fluorobiphenyl	*43*	*1*	*50.0*	*86 %*	*10-149*	*4D18032*	*EPA 8270D*	*04/24/14 22:52*	*DFM*	
2-Fluorophenol	*59*	*1*	*100*	*59 %*	*10-110*	*4D18032*	*EPA 8270D*	*04/24/14 22:52*	*DFM*	
Nitrobenzene-d5	*42*	*1*	*50.0*	*84 %*	*10-149*	*4D18032*	*EPA 8270D*	*04/24/14 22:52*	*DFM*	
Phenol-d5	*55*	*1*	*100*	*55 %*	*10-88*	*4D18032*	*EPA 8270D*	*04/24/14 22:52*	*DFM*	
Terphenyl-d14	*43*	*1*	*50.0*	*85 %*	*10-188*	*4D18032*	*EPA 8270D*	*04/24/14 22:52*	*DFM*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	**1.06**		mg/L	1	0.011	0.055	4D22042	EPA 8015C	04/23/14 06:03	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*0.108*	*1*	*0.100*	*108 %*	*70-130*	*4D22042*	*EPA 8015C*	*04/23/14 06:03*	*manag*	

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ANALYTICAL RESULTS

Description: GP14-6 **Lab Sample ID:** C404171-06 **Received:** 04/17/14 10:15

Matrix: Ground Water **Sampled:** 04/16/14 12:25 **Work Order:** C404171

Project: 1614 West Pembroke Avenue **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Acetone [67-64-1]^	**18**		ug/L	1	1.2	5.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
m,p-Xylenes [108-38-3/106-42-3]	**0.46**	J	ug/L	1	0.17	2.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Methyl-tert-Butyl Ether [1634-04-4]^	**8.2**		ug/L	1	0.16	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	

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ANALYTICAL RESULTS

Description: GP14-6 | **Lab Sample ID:** C404171-06 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 12:25 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D24037	EPA 8260B	04/25/14 08:40	REF	
Xylenes (Total) [1330-20-7]^	**0.46**	J	ug/L	1	0.45	3.0	4D24037	EPA 8260B	04/25/14 08:40	REF	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*53*	*1*	*50.0*	*105 %*	*51-122*	*4D24037*	*EPA 8260B*	*04/25/14 08:40*	*REF*	
Dibromofluoromethane	*48*	*1*	*50.0*	*97 %*	*68-117*	*4D24037*	*EPA 8260B*	*04/25/14 08:40*	*REF*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*67-127*	*4D24037*	*EPA 8260B*	*04/25/14 08:40*	*REF*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2,4,5-Trichlorophenol [95-95-4]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2,4,6-Trichlorophenol [88-06-2]^	1.1	U	ug/L	1	1.1	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2,4-Dichlorophenol [120-83-2]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2,4-Dimethylphenol [105-67-9]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2,4-Dinitrophenol [51-28-5]^	2.6	U	ug/L	1	2.6	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2,4-Dinitrotoluene [121-14-2]^	2.4	U	ug/L	1	2.4	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2,6-Dinitrotoluene [606-20-2]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2-Chloronaphthalene [91-58-7]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2-Chlorophenol [95-57-8]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2-Methyl-4,6-dinitrophenol [534-52-1]	2.9	U	ug/L	1	2.9	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2-Methylnaphthalene [91-57-6]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2-Methylphenol [95-48-7]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2-Nitroaniline [88-74-4]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
2-Nitrophenol [88-75-5]^	1.1	U	ug/L	1	1.1	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
3 & 4-Methylphenol [108-39-4/106-44-5]	1.6	U	ug/L	1	1.6	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
3-Nitroaniline [99-09-2]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
4-Bromophenyl-phenylether [101-55-3]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
4-Chloro-3-methylphenol [59-50-7]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
4-Chloroaniline [106-47-8]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
4-Chlorophenyl-phenylether [7005-72-3]^	1.6	U	ug/L	1	1.6	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
4-Nitrophenol [100-02-7]^	2.0	U	ug/L	1	2.0	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Acenaphthene [83-32-9]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Acenaphthylene [208-96-8]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Acetophenone [98-86-2]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Anthracene [120-12-7]^	1.6	U	ug/L	1	1.6	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Atrazine [1912-24-9]	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	QV-01
Benzaldehyde [100-52-7]	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	QV-02
Benzo(a)anthracene [56-55-3]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Benzo(a)pyrene [50-32-8]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Benzo(b)fluoranthene [205-99-2]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Benzo(g,h,i)perylene [191-24-2]^	2.4	U	ug/L	1	2.4	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Benzo(k)fluoranthene [207-08-9]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	

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ANALYTICAL RESULTS

Description: GP14-6 | **Lab Sample ID:** C404171-06 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 12:25 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Semivolatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethoxy)methane [111-91-1]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Bis(2-chloroethyl)ether [111-44-4]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Bis(2-chloroisopropyl)ether [108-60-1]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Bis(2-ethylhexyl)phthalate [117-81-7]^	1.7	U	ug/L	1	1.7	5.0	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Butylbenzylphthalate [85-68-7]^	2.0	U	ug/L	1	2.0	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Caprolactam [105-60-2]	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Carbazole [86-74-8]^	2.5	U	ug/L	1	2.5	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Chrysene [218-01-9]^	2.0	U	ug/L	1	2.0	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Dibenzo(a,h)anthracene [53-70-3]^	2.3	U	ug/L	1	2.3	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Dibenzofuran [132-64-9]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Diethylphthalate [84-66-2]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Dimethylphthalate [131-11-3]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Di-n-butylphthalate [84-74-2]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Di-n-octylphthalate [117-84-0]^	3.1	U	ug/L	1	3.1	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Fluoranthene [206-44-0]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Fluorene [86-73-7]^	1.7	U	ug/L	1	1.7	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Hexachlorobenzene [118-74-1]^	1.0	U	ug/L	1	1.0	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Hexachlorobutadiene [87-68-3]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Hexachlorocyclopentadiene [77-47-4]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Hexachloroethane [67-72-1]^	1.1	U	ug/L	1	1.1	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5]^	2.2	U	ug/L	1	2.2	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Isophorone [78-59-1]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Naphthalene [91-20-3]^	1.3	U	ug/L	1	1.3	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Nitrobenzene [98-95-3]^	1.2	U	ug/L	1	1.2	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
N-Nitroso-di-n-propylamine [621-64-7]^	1.5	U	ug/L	1	1.5	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Pentachlorophenol [87-86-5]^	1.8	U	ug/L	1	1.8	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	QV-02
Phenanthrene [85-01-8]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Phenol [108-95-2]^	1.4	U	ug/L	1	1.4	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	
Pyrene [129-00-0]^	2.1	U	ug/L	1	2.1	10	4D18032	EPA 8270D	04/25/14 17:54	DFM	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*100*	*1*	*100*	*100 %*	*10-179*	*4D18032*	*EPA 8270D*	*04/25/14 17:54*	*DFM*	
2-Fluorobiphenyl	*40*	*1*	*50.0*	*81 %*	*10-149*	*4D18032*	*EPA 8270D*	*04/25/14 17:54*	*DFM*	
2-Fluorophenol	*58*	*1*	*100*	*58 %*	*10-110*	*4D18032*	*EPA 8270D*	*04/25/14 17:54*	*DFM*	
Nitrobenzene-d5	*41*	*1*	*50.0*	*81 %*	*10-149*	*4D18032*	*EPA 8270D*	*04/25/14 17:54*	*DFM*	
Phenol-d5	*56*	*1*	*100*	*56 %*	*10-88*	*4D18032*	*EPA 8270D*	*04/25/14 17:54*	*DFM*	
Terphenyl-d14	*37*	*1*	*50.0*	*73 %*	*10-188*	*4D18032*	*EPA 8270D*	*04/25/14 17:54*	*DFM*	

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.43	U	ug/L	1	0.43	0.50	4D24031	EPA 8082A	04/29/14 23:31	MWC	
PCB-1221 [11104-28-2]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/29/14 23:31	MWC	
PCB-1232 [11141-16-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/29/14 23:31	MWC	
PCB-1248 [12672-29-6]^	0.014	U	ug/L	1	0.014	0.50	4D24031	EPA 8082A	04/29/14 23:31	MWC	
PCB-1254 [11097-69-1]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/29/14 23:31	MWC	
PCB-1260 [11096-82-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/29/14 23:31	MWC	

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ANALYTICAL RESULTS

Description: GP14-6 | **Lab Sample ID:** C404171-06 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 12:25 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.87*	*1*	*1.00*	*87 %*	*45-151*	*4D24031*	*EPA 8082A*	*04/29/14 23:31*	*MWC*	
Decachlorobiphenyl	*0.88*	*1*	*1.00*	*88 %*	*42-159*	*4D24031*	*EPA 8082A*	*04/29/14 23:31*	*MWC*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	**0.014**	J	mg/L	1	0.011	0.055	4D22042	EPA 8015C	04/23/14 06:34	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*0.101*	*1*	*0.100*	*101 %*	*70-130*	*4D22042*	*EPA 8015C*	*04/23/14 06:34*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**0.39**		mg/L	1	0.073	0.12	4D22007	EPA 8015C	04/23/14 18:35	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*0.058*	*1*	*0.0610*	*95 %*	*41-126*	*4D22007*	*EPA 8015C*	*04/23/14 18:35*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	0.170	U	ug/L	1	0.170	0.200	4D24033	EPA 7470A	04/25/14 13:50	T1D	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]^	**4940**		ug/L	1	29.0	100	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Antimony [7440-36-0]^	4.40	UD	ug/L	20	4.40	40.0	4D18018	EPA 6020A	04/22/14 13:36	VLO	R-01
Arsenic [7440-38-2]^	**9.90**	J	ug/L	1	5.40	10.0	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Barium [7440-39-3]^	**45.8**		ug/L	1	1.00	10.0	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Beryllium [7440-41-7]^	**0.129**	J	ug/L	1	0.100	1.00	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Cadmium [7440-43-9]^	0.360	U	ug/L	1	0.360	1.00	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Calcium [7440-70-2]^	**52200**		ug/L	1	39.0	100	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Chromium [7440-47-3]^	**8.06**	J	ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Cobalt [7440-48-4]^	**3.23**	JD	ug/L	20	2.00	20.0	4D18018	EPA 6020A	04/22/14 13:36	VLO	R-01
Copper [7440-50-8]^	**2.19**	J	ug/L	1	1.60	10.0	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Iron [7439-89-6]^	**78800**		ug/L	1	22.0	50.0	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Lead [7439-92-1]^	**9.08**	J	ug/L	1	2.10	10.0	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Magnesium [7439-95-4]^	**14000**		ug/L	1	23.0	100	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Manganese [7439-96-5]^	**554**		ug/L	1	1.10	10.0	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Nickel [7440-02-0]^	**4.93**	J	ug/L	1	1.80	10.0	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Potassium [7440-09-7]^	**1680**		ug/L	1	150	500	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Selenium [7782-49-2]^	5.00	U	ug/L	1	5.00	10.0	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Silver [7440-22-4]^	1.90	U	ug/L	1	1.90	10.0	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Sodium [7440-23-5]^	**32200**		ug/L	1	400	500	4D21018	EPA 6010C	04/28/14 13:56	JDH	
Thallium [7440-28-0]^	**3.66**	JD	ug/L	20	2.20	20.0	4D18018	EPA 6020A	04/22/14 13:36	VLO	R-01
Vanadium [7440-62-2]^	**12.8**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 13:56	JDH	

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ANALYTICAL RESULTS

Description: GP14-6 | **Lab Sample ID:** C404171-06 | **Received:** 04/17/14 10:15

Matrix: Ground Water | **Sampled:** 04/16/14 12:25 | **Work Order:** C404171

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Zinc [7440-66-6]^	**23.7**		ug/L	1	3.80	10.0	4D21018	EPA 6010C	04/28/14 13:56	JDH	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.0088	U	mg/L	1	0.0088	0.010	4D17030	EPA 7196A	04/17/14 14:30	CV	Q

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ANALYTICAL RESULTS

Description:	GP14-6	**Lab Sample ID:**	C404171-07	**Received:**	04/17/14 10:15
Matrix:	Soil	**Sampled:**	04/16/14 11:58	**Work Order:**	C404171
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian	**% Solids:**	78.61

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	2.3	U	mg/kg dry	1	2.3	9.0	4D22036	EPA 8015C	04/22/14 21:13	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*16*	*1*	*16.4*	*100 %*	*59-168*	*4D22036*	*EPA 8015C*	*04/22/14 21:13*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**260**		mg/kg dry	1	2.2	4.2	4D23014	EPA 8015C	04/24/14 03:04	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*2.3*	*1*	*2.12*	*108 %*	*51-138*	*4D23014*	*EPA 8015C*	*04/24/14 03:04*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**3000**		mg/kg dry	1	2.67	12.7	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Antimony [7440-36-0]	**1.98**		mg/kg dry	1	0.140	1.27	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Arsenic [7440-38-2]^	**3.73**		mg/kg dry	1	0.127	0.636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Barium [7440-39-3]^	**49.4**		mg/kg dry	1	0.127	0.636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Beryllium [7440-41-7]	**0.147**		mg/kg dry	1	0.0153	0.0636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Cadmium [7440-43-9]^	**0.772**		mg/kg dry	1	0.0122	0.0636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Calcium [7440-70-2]	**24200**	B	mg/kg dry	1	7.12	31.8	4D21024	EPA 6010C	04/23/14 12:43	JDH	QB-01
Chromium [7440-47-3]^	**9.61**		mg/kg dry	1	0.127	0.636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Cobalt [7440-48-4]	**2.07**		mg/kg dry	1	0.127	0.636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Copper [7440-50-8]	**21.5**		mg/kg dry	1	0.242	0.636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Iron [7439-89-6]	**9680**	B	mg/kg dry	1	0.611	3.18	4D21024	EPA 6010C	04/23/14 12:43	JDH	QB-01
Lead [7439-92-1]^	**86.2**		mg/kg dry	1	0.153	0.636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Magnesium [7439-95-4]	**1000**	B	mg/kg dry	1	0.827	31.8	4D21024	EPA 6010C	04/23/14 12:43	JDH	QB-01
Manganese [7439-96-5]	**64.6**		mg/kg dry	1	0.127	0.636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Mercury [7439-97-6]^	**0.165**		mg/kg dry	1	0.00878	0.0305	4D29012	EPA 7471B	04/30/14 16:38	T1D	
Nickel [7440-02-0]	**6.46**		mg/kg dry	1	0.458	3.18	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Potassium [7440-09-7]	**557**		mg/kg dry	1	5.09	31.8	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Selenium [7782-49-2]^	0.127	U	mg/kg dry	1	0.127	0.636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Silver [7440-22-4]^	0.127	U	mg/kg dry	1	0.127	0.636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Sodium [7440-23-5]	**217**		mg/kg dry	1	7.63	31.8	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Thallium [7440-28-0]	0.127	U	mg/kg dry	1	0.127	0.636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Vanadium [7440-62-2]^	**8.77**		mg/kg dry	1	0.127	0.636	4D21024	EPA 6010C	04/23/14 12:43	JDH	
Zinc [7440-66-6]^	**175**		mg/kg dry	1	1.40	3.18	4D21024	EPA 6010C	04/23/14 12:43	JDH	

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ANALYTICAL RESULTS

Description: GP14-6	**Lab Sample ID:** C404171-07	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 11:58	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 78.61

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
1,1-Dichloroethane [75-34-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
1,1-Dichloroethene [75-35-4]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0011	U	mg/kg dry	1	0.0011	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
1,2-Dibromoethane [106-93-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
1,2-Dichloroethane [107-06-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
1,2-Dichloropropane [78-87-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
2-Butanone [78-93-3]^	**0.0057**	J	mg/kg dry	1	0.0023	0.0064	4D25025	EPA 8260B	04/25/14 19:18	KAT	
2-Hexanone [591-78-6]^	0.0012	U	mg/kg dry	1	0.0012	0.0064	4D25025	EPA 8260B	04/25/14 19:18	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0018	U	mg/kg dry	1	0.0018	0.0064	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Acetone [67-64-1]^	**0.028**		mg/kg dry	1	0.0022	0.0064	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Benzene [71-43-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Bromochloromethane [74-97-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Bromodichloromethane [75-27-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Bromoform [75-25-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Bromomethane [74-83-9]^	0.0011	U	mg/kg dry	1	0.0011	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Carbon disulfide [75-15-0]^	0.0027	U	mg/kg dry	1	0.0027	0.0064	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Carbon Tetrachloride [56-23-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Chlorobenzene [108-90-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Chloroethane [75-00-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Chloroform [67-66-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Chloromethane [74-87-3]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
cis-1,2-Dichloroethene [156-59-2]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
cis-1,3-Dichloropropene [10061-01-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Cyclohexane [110-82-7]^	0.0007	U	mg/kg dry	1	0.0007	0.0025	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Ethylbenzene [100-41-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Freon 113 [76-13-1]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Isopropylbenzene [98-82-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Methyl acetate [79-20-9]^	0.0020	U	mg/kg dry	1	0.0020	0.0025	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Methyl cyclohexane [108-87-2]^	0.0007	U	mg/kg dry	1	0.0007	0.0025	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Methylene Chloride [75-09-2]^	0.0009	U	mg/kg dry	1	0.0009	0.0025	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	**0.0075**		mg/kg dry	1	0.0003	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Styrene [100-42-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Tetrachloroethene [127-18-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Toluene [108-88-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0009	U	mg/kg dry	1	0.0009	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Trichloroethene [79-01-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Trichlorofluoromethane [75-69-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	
Vinyl chloride [75-01-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4D25025	EPA 8260B	04/25/14 19:18	KAT	

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ANALYTICAL RESULTS

Description:	GP14-6	**Lab Sample ID:**	C404171-07	**Received:**	04/17/14 10:15
Matrix:	Soil	**Sampled:**	04/16/14 11:58	**Work Order:**	C404171
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian	**% Solids:**	78.61

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7]^	0.0013	U	mg/kg dry	1	0.0013	0.0025	4D25025	EPA 8260B	04/25/14 19:18	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.065*	*1*	*0.0661*	*98 %*	*71-126*	*4D25025*	*EPA 8260B*	*04/25/14 19:18*	*KAT*	
Dibromofluoromethane	*0.061*	*1*	*0.0661*	*92 %*	*72-133*	*4D25025*	*EPA 8260B*	*04/25/14 19:18*	*KAT*	
Toluene-d8	*0.061*	*1*	*0.0661*	*92 %*	*80-123*	*4D25025*	*EPA 8260B*	*04/25/14 19:18*	*KAT*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.19	UD	mg/kg dry	2	0.19	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2,4,5-Trichlorophenol [95-95-4]^	0.17	UD	mg/kg dry	2	0.17	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2,4,6-Trichlorophenol [88-06-2]^	0.38	UD	mg/kg dry	2	0.38	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2,4-Dichlorophenol [120-83-2]^	0.64	UD	mg/kg dry	2	0.64	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2,4-Dimethylphenol [105-67-9]^	0.59	UD	mg/kg dry	2	0.59	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2,4-Dinitrophenol [51-28-5]^	0.23	UD	mg/kg dry	2	0.23	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2,4-Dinitrotoluene [121-14-2]^	0.41	UD	mg/kg dry	2	0.41	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2,6-Dinitrotoluene [606-20-2]^	0.46	UD	mg/kg dry	2	0.46	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2-Chloronaphthalene [91-58-7]^	0.25	UD	mg/kg dry	2	0.25	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2-Chlorophenol [95-57-8]^	0.59	UD	mg/kg dry	2	0.59	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.71	UD	mg/kg dry	2	0.71	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2-Methylnaphthalene [91-57-6]^	0.31	UD	mg/kg dry	2	0.31	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2-Methylphenol [95-48-7]^	0.28	UD	mg/kg dry	2	0.28	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2-Nitroaniline [88-74-4]^	0.22	UD	mg/kg dry	2	0.22	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
2-Nitrophenol [88-75-5]^	0.66	UD	mg/kg dry	2	0.66	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.64	UD	mg/kg dry	2	0.64	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
3,3'-Dichlorobenzidine [91-94-1]^	0.53	UD	mg/kg dry	2	0.53	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	QL-02, R-01
3-Nitroaniline [99-09-2]^	0.20	UD	mg/kg dry	2	0.20	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
4-Bromophenyl-phenylether [101-55-3]^	0.33	UD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
4-Chloro-3-methylphenol [59-50-7]^	0.71	UD	mg/kg dry	2	0.71	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
4-Chloroaniline [106-47-8]^	0.17	UD	mg/kg dry	2	0.17	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
4-Chlorophenyl-phenylether [7005-72-3]^	0.33	UD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
4-Nitroaniline [100-01-6]^	0.66	UD	mg/kg dry	2	0.66	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
4-Nitrophenol [100-02-7]^	0.33	UD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	J-05, R-01
Acenaphthene [83-32-9]^	0.33	UD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Acenaphthylene [208-96-8]^	0.31	UD	mg/kg dry	2	0.31	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Acetophenone [98-86-2]^	0.36	UD	mg/kg dry	2	0.36	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Anthracene [120-12-7]^	0.38	UD	mg/kg dry	2	0.38	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Atrazine [1912-24-9]^	0.19	UD	mg/kg dry	2	0.19	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Benzaldehyde [100-52-7]^	0.69	UD	mg/kg dry	2	0.69	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Benzo(a)anthracene [56-55-3]^	**0.72**	JD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Benzo(a)pyrene [50-32-8]^	**0.68**	JD	mg/kg dry	5	0.50	2.1	4D18034	EPA 8270D	04/29/14 20:29	jfi	R-01
Benzo(b)fluoranthene [205-99-2]^	**0.89**	JD	mg/kg dry	5	0.70	2.1	4D18034	EPA 8270D	04/29/14 20:29	jfi	R-01
Benzo(g,h,i)perylene [191-24-2]^	1.0	UD	mg/kg dry	5	1.0	2.1	4D18034	EPA 8270D	04/29/14 20:29	jfi	QV-01, R-01
Benzo(k)fluoranthene [207-08-9]^	0.70	UD	mg/kg dry	5	0.70	2.1	4D18034	EPA 8270D	04/29/14 20:29	jfi	R-01
Bis(2-chloroethoxy)methane [111-91-1]^	0.38	UD	mg/kg dry	2	0.38	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	QL-02, R-01

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ANALYTICAL RESULTS

Description: GP14-6	**Lab Sample ID:** C404171-07	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 11:58	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 78.61

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethyl)ether [111-44-4]^	0.36	UD	mg/kg dry	2	0.36	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Bis(2-chloroisopropyl)ether [108-60-1]^	0.25	UD	mg/kg dry	2	0.25	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.33	UD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Butylbenzylphthalate [85-68-7]^	0.36	UD	mg/kg dry	2	0.36	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Caprolactam [105-60-2]^	0.76	UD	mg/kg dry	2	0.76	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	QV-01, R-01
Carbazole [86-74-8]^	0.31	UD	mg/kg dry	2	0.31	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Chrysene [218-01-9]^	**0.80**	JD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Dibenzo(a,h)anthracene [53-70-3]^	0.89	UD	mg/kg dry	5	0.89	2.1	4D18034	EPA 8270D	04/29/14 20:29	jfi	R-01
Dibenzofuran [132-64-9]^	0.33	UD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Diethylphthalate [84-66-2]^	0.33	UD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Dimethylphthalate [131-11-3]^	0.33	UD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Di-n-butylphthalate [84-74-2]^	0.33	UD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Di-n-octylphthalate [117-84-0]^	0.33	UD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Fluoranthene [206-44-0]^	**1.4**	D	mg/kg dry	2	0.28	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Fluorene [86-73-7]	0.36	UD	mg/kg dry	2	0.36	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Hexachlorobenzene [118-74-1]^	0.31	UD	mg/kg dry	2	0.31	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Hexachlorobutadiene [87-68-3]^	0.33	UD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Hexachlorocyclopentadiene [77-47-4]^	0.38	UD	mg/kg dry	2	0.38	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Hexachloroethane [67-72-1]^	0.25	UD	mg/kg dry	2	0.25	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.89	UD	mg/kg dry	5	0.89	2.1	4D18034	EPA 8270D	04/29/14 20:29	jfi	R-01
Isophorone [78-59-1]^	0.43	UD	mg/kg dry	2	0.43	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Naphthalene [91-20-3]^	0.31	UD	mg/kg dry	2	0.31	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Nitrobenzene [98-95-3]^	0.38	UD	mg/kg dry	2	0.38	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
N-Nitroso-di-n-propylamine [621-64-7]^	0.38	UD	mg/kg dry	2	0.38	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.59	UD	mg/kg dry	2	0.59	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Pentachlorophenol [87-86-5]^	0.53	UD	mg/kg dry	2	0.53	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	QL-02, R-01
Phenanthrene [85-01-8]^	**0.75**	JD	mg/kg dry	2	0.33	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Phenol [108-95-2]^	0.25	UD	mg/kg dry	2	0.25	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01
Pyrene [129-00-0]^	**1.2**	D	mg/kg dry	2	0.28	0.84	4D18034	EPA 8270D	04/28/14 14:30	jfi	R-01

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*2.2*	*2*	*2.12*	*103 %*	*23-137*	*4D18034*	*EPA 8270D*	*04/28/14 14:30*	*jfi*	*R-01*
2-Fluorobiphenyl	*1.6*	*2*	*2.12*	*75 %*	*29-119*	*4D18034*	*EPA 8270D*	*04/28/14 14:30*	*jfi*	*R-01*
2-Fluorophenol	*1.8*	*2*	*2.12*	*85 %*	*20-124*	*4D18034*	*EPA 8270D*	*04/28/14 14:30*	*jfi*	*R-01*
Nitrobenzene-d5	*1.4*	*2*	*2.12*	*67 %*	*17-126*	*4D18034*	*EPA 8270D*	*04/28/14 14:30*	*jfi*	*R-01*
Phenol-d5	*1.8*	*2*	*2.12*	*87 %*	*15-131*	*4D18034*	*EPA 8270D*	*04/28/14 14:30*	*jfi*	*R-01*
Terphenyl-d14	*1.9*	*2*	*2.12*	*90 %*	*60-120*	*4D18034*	*EPA 8270D*	*04/28/14 14:30*	*jfi*	*R-01*

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.19	U	mg/kg dry	1	0.19	1.3	4D21022	EPA 7196A	04/22/14 15:05	RMM	

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ANALYTICAL RESULTS

Description: GP14-7	**Lab Sample ID:** C404171-08	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 12:50	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 92.77

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	**12**		mg/kg dry	1	1.5	5.9	4D22036	EPA 8015C	04/22/14 21:44	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*7.7*	*1*	*10.0*	*77 %*	*59-168*	*4D22036*	*EPA 8015C*	*04/22/14 21:44*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**7300**	D	mg/kg dry	25	140	270	4D23014	EPA 8015C	04/24/14 12:49	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*0.0*	*25*	*1.80*	*%*	*51-138*	*4D23014*	*EPA 8015C*	*04/24/14 12:49*	*MWC*	*QS-04*

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**5290**	D	mg/kg dry	2	4.53	21.6	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Antimony [7440-36-0]	**5.70**	D	mg/kg dry	2	0.237	2.16	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Arsenic [7440-38-2]^	**0.395**	JD	mg/kg dry	2	0.216	1.08	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Barium [7440-39-3]^	**57.1**	D	mg/kg dry	2	0.216	1.08	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Beryllium [7440-41-7]	0.0259	UD	mg/kg dry	2	0.0259	0.108	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Cadmium [7440-43-9]^	**1.05**	D	mg/kg dry	2	0.0207	0.108	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Calcium [7440-70-2]	**5620**	BD	mg/kg dry	2	12.1	53.9	4D21024	EPA 6010C	04/23/14 13:51	JDH	QB-01, R-01
Chromium [7440-47-3]^	**12.9**	D	mg/kg dry	2	0.216	1.08	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Cobalt [7440-48-4]	**4.09**	D	mg/kg dry	2	0.216	1.08	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Copper [7440-50-8]	**35.0**	D	mg/kg dry	2	0.410	1.08	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Iron [7439-89-6]	**13700**	BD	mg/kg dry	2	1.03	5.39	4D21024	EPA 6010C	04/23/14 13:51	JDH	QB-01
Lead [7439-92-1]^	**153**	D	mg/kg dry	2	0.259	1.08	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Magnesium [7439-95-4]	**3040**	BD	mg/kg dry	2	1.40	53.9	4D21024	EPA 6010C	04/23/14 13:51	JDH	QB-01, R-01
Manganese [7439-96-5]	**259**	D	mg/kg dry	2	0.216	1.08	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Mercury [7439-97-6]^	**1.98**	D	mg/kg dry	5	0.0372	0.129	4D29012	EPA 7471B	04/30/14 17:25	T1D	
Nickel [7440-02-0]	**13.9**	D	mg/kg dry	2	0.776	5.39	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Potassium [7440-09-7]	**1330**	D	mg/kg dry	2	8.62	53.9	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Selenium [7782-49-2]^	0.216	UD	mg/kg dry	2	0.216	1.08	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Silver [7440-22-4]^	0.216	UD	mg/kg dry	2	0.216	1.08	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Sodium [7440-23-5]	**118**	D	mg/kg dry	2	12.9	53.9	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Thallium [7440-28-0]	0.216	UD	mg/kg dry	2	0.216	1.08	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Vanadium [7440-62-2]^	**37.2**	D	mg/kg dry	2	0.216	1.08	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01
Zinc [7440-66-6]^	**305**	D	mg/kg dry	2	2.37	5.39	4D21024	EPA 6010C	04/23/14 13:51	JDH	R-01

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ANALYTICAL RESULTS

Description: GP14-7	**Lab Sample ID:** C404171-08	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 12:50	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 92.77

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
1,1-Dichloroethane [75-34-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
1,1-Dichloroethene [75-35-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0010	U	mg/kg dry	1	0.0010	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
1,2-Dibromoethane [106-93-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
1,2-Dichloroethane [107-06-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
1,2-Dichloropropane [78-87-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
2-Butanone [78-93-3]^	0.0022	U	mg/kg dry	1	0.0022	0.0060	4D25025	EPA 8260B	04/25/14 19:51	KAT	
2-Hexanone [591-78-6]^	0.0011	U	mg/kg dry	1	0.0011	0.0060	4D25025	EPA 8260B	04/25/14 19:51	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0017	U	mg/kg dry	1	0.0017	0.0060	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Acetone [67-64-1]^	**0.079**		mg/kg dry	1	0.0020	0.0060	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Benzene [71-43-2]^	**0.013**		mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Bromochloromethane [74-97-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Bromodichloromethane [75-27-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Bromoform [75-25-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Bromomethane [74-83-9]^	0.0011	U	mg/kg dry	1	0.0011	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Carbon disulfide [75-15-0]^	0.0025	U	mg/kg dry	1	0.0025	0.0060	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Carbon Tetrachloride [56-23-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Chlorobenzene [108-90-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Chloroethane [75-00-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Chloroform [67-66-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Chloromethane [74-87-3]^	0.0008	U	mg/kg dry	1	0.0008	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
cis-1,2-Dichloroethene [156-59-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
cis-1,3-Dichloropropene [10061-01-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Cyclohexane [110-82-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0024	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Ethylbenzene [100-41-4]^	**0.0019**		mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Freon 113 [76-13-1]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Isopropylbenzene [98-82-8]^	**0.0052**		mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Methyl acetate [79-20-9]^	0.0019	U	mg/kg dry	1	0.0019	0.0024	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Methyl cyclohexane [108-87-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0024	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Methylene Chloride [75-09-2]^	0.0008	U	mg/kg dry	1	0.0008	0.0024	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	**0.024**		mg/kg dry	1	0.0003	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Styrene [100-42-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Tetrachloroethene [127-18-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Toluene [108-88-3]^	**0.0037**		mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Trichloroethene [79-01-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Trichlorofluoromethane [75-69-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	
Vinyl chloride [75-01-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 19:51	KAT	

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ANALYTICAL RESULTS

Description: GP14-7	**Lab Sample ID:** C404171-08	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 12:50	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 92.77

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7]^	**0.026**		mg/kg dry	1	0.0012	0.0024	4D25025	EPA 8260B	04/25/14 19:51	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.061*	*1*	*0.0600*	*102 %*	*71-126*	*4D25025*	*EPA 8260B*	*04/25/14 19:51*	*KAT*	
Dibromofluoromethane	*0.054*	*1*	*0.0600*	*91 %*	*72-133*	*4D25025*	*EPA 8260B*	*04/25/14 19:51*	*KAT*	
Toluene-d8	*0.056*	*1*	*0.0600*	*93 %*	*80-123*	*4D25025*	*EPA 8260B*	*04/25/14 19:51*	*KAT*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	**12**	JD	mg/kg dry	20	7.1	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2,4,5-Trichlorophenol [95-95-4]^	6.5	UD	mg/kg dry	20	6.5	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2,4,6-Trichlorophenol [88-06-2]^	15	UD	mg/kg dry	20	15	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2,4-Dichlorophenol [120-83-2]^	24	UD	mg/kg dry	20	24	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2,4-Dimethylphenol [105-67-9]^	22	UD	mg/kg dry	20	22	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2,4-Dinitrophenol [51-28-5]^	8.6	UD	mg/kg dry	20	8.6	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2,4-Dinitrotoluene [121-14-2]^	16	UD	mg/kg dry	20	16	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2,6-Dinitrotoluene [606-20-2]^	17	UD	mg/kg dry	20	17	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2-Chloronaphthalene [91-58-7]^	9.5	UD	mg/kg dry	20	9.5	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2-Chlorophenol [95-57-8]^	22	UD	mg/kg dry	20	22	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2-Methyl-4,6-dinitrophenol [534-52-1]^	27	UD	mg/kg dry	20	27	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2-Methylnaphthalene [91-57-6]^	**56**	D	mg/kg dry	20	12	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2-Methylphenol [95-48-7]^	11	UD	mg/kg dry	20	11	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2-Nitroaniline [88-74-4]^	8.2	UD	mg/kg dry	20	8.2	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
2-Nitrophenol [88-75-5]^	25	UD	mg/kg dry	20	25	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
3 & 4-Methylphenol [108-39-4/106-44-5]^	24	UD	mg/kg dry	20	24	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
3,3'-Dichlorobenzidine [91-94-1]^	20	UD	mg/kg dry	20	20	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	QL-02
3-Nitroaniline [99-09-2]^	7.8	UD	mg/kg dry	20	7.8	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
4-Bromophenyl-phenylether [101-55-3]^	13	UD	mg/kg dry	20	13	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
4-Chloro-3-methylphenol [59-50-7]^	27	UD	mg/kg dry	20	27	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
4-Chloroaniline [106-47-8]^	6.3	UD	mg/kg dry	20	6.3	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
4-Chlorophenyl-phenylether [7005-72-3]^	13	UD	mg/kg dry	20	13	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
4-Nitroaniline [100-01-6]^	25	UD	mg/kg dry	20	25	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
4-Nitrophenol [100-02-7]^	13	UD	mg/kg dry	20	13	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	J-05
Acenaphthene [83-32-9]^	**130**	D	mg/kg dry	20	13	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Acenaphthylene [208-96-8]^	12	UD	mg/kg dry	20	12	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Acetophenone [98-86-2]^	14	UD	mg/kg dry	20	14	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Anthracene [120-12-7]^	**220**	D	mg/kg dry	20	15	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Atrazine [1912-24-9]^	7.2	UD	mg/kg dry	20	7.2	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Benzaldehyde [100-52-7]^	26	UD	mg/kg dry	20	26	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Benzo(a)anthracene [56-55-3]^	**340**	D	mg/kg dry	100	63	160	4D18034	EPA 8270D	04/29/14 21:25	jfi	R-01
Benzo(a)pyrene [50-32-8]^	**260**	D	mg/kg dry	100	38	160	4D18034	EPA 8270D	04/29/14 21:25	jfi	R-01
Benzo(b)fluoranthene [205-99-2]^	**440**	D	mg/kg dry	100	53	160	4D18034	EPA 8270D	04/29/14 21:25	jfi	R-01
Benzo(g,h,i)perylene [191-24-2]^	78	UD	mg/kg dry	100	78	160	4D18034	EPA 8270D	04/29/14 21:25	jfi	QV-01, R-01
Benzo(k)fluoranthene [207-08-9]^	**150**	JD	mg/kg dry	100	53	160	4D18034	EPA 8270D	04/29/14 21:25	jfi	R-01
Bis(2-chloroethoxy)methane [111-91-1]^	15	UD	mg/kg dry	20	15	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	QL-02
Bis(2-chloroethyl)ether [111-44-4]^	14	UD	mg/kg dry	20	14	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Bis(2-chloroisopropyl)ether [108-60-1]^	9.6	UD	mg/kg dry	20	9.6	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	

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ANALYTICAL RESULTS

Description: GP14-7	**Lab Sample ID:** C404171-08	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 12:50	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 92.77

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-ethylhexyl)phthalate [117-81-7]^	**25**	JD	mg/kg dry	20	13	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Butylbenzylphthalate [85-68-7]^	14	UD	mg/kg dry	20	14	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Caprolactam [105-60-2]^	29	UD	mg/kg dry	20	29	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	QV-01
Carbazole [86-74-8]^	**120**	D	mg/kg dry	20	12	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Chrysene [218-01-9]^	**330**	D	mg/kg dry	100	63	160	4D18034	EPA 8270D	04/29/14 21:25	jfi	R-01
Dibenzo(a,h)anthracene [53-70-3]^	68	UD	mg/kg dry	100	68	160	4D18034	EPA 8270D	04/29/14 21:25	jfi	R-01
Dibenzofuran [132-64-9]^	**120**	D	mg/kg dry	20	13	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Diethylphthalate [84-66-2]^	13	UD	mg/kg dry	20	13	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Dimethylphthalate [131-11-3]^	13	UD	mg/kg dry	20	13	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Di-n-butylphthalate [84-74-2]^	13	UD	mg/kg dry	20	13	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Di-n-octylphthalate [117-84-0]^	13	UD	mg/kg dry	20	13	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Fluoranthene [206-44-0]^	**840**	D	mg/kg dry	100	53	160	4D18034	EPA 8270D	04/29/14 21:25	jfi	R-01
Fluorene [86-73-7]	**210**	D	mg/kg dry	20	14	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Hexachlorobenzene [118-74-1]^	12	UD	mg/kg dry	20	12	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Hexachlorobutadiene [87-68-3]^	13	UD	mg/kg dry	20	13	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Hexachlorocyclopentadiene [77-47-4]^	15	UD	mg/kg dry	20	15	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Hexachloroethane [67-72-1]^	9.7	UD	mg/kg dry	20	9.7	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	**82**	JD	mg/kg dry	100	68	160	4D18034	EPA 8270D	04/29/14 21:25	jfi	R-01
Isophorone [78-59-1]^	16	UD	mg/kg dry	20	16	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Naphthalene [91-20-3]^	**98**	D	mg/kg dry	20	12	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Nitrobenzene [98-95-3]^	15	UD	mg/kg dry	20	15	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
N-Nitroso-di-n-propylamine [621-64-7]^	15	UD	mg/kg dry	20	15	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	22	UD	mg/kg dry	20	22	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Pentachlorophenol [87-86-5]^	20	UD	mg/kg dry	20	20	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	QL-02
Phenanthrene [85-01-8]^	**830**	D	mg/kg dry	100	63	160	4D18034	EPA 8270D	04/29/14 21:25	jfi	R-01
Phenol [108-95-2]^	9.6	UD	mg/kg dry	20	9.6	32	4D18034	EPA 8270D	04/28/14 15:31	jfi	
Pyrene [129-00-0]^	**600**	D	mg/kg dry	100	53	160	4D18034	EPA 8270D	04/29/14 21:25	jfi	R-01

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.16	U	mg/kg dry	1	0.16	1.1	4D21022	EPA 7196A	04/22/14 15:05	RMM	

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ANALYTICAL RESULTS

Description: GP14-8 | **Lab Sample ID:** C404171-09 | **Received:** 04/17/14 10:15

Matrix: Ground Water | **Sampled:** 04/16/14 14:00 | **Work Order:** C404171

Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.12	U	ug/L	1	0.12	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.28	U	ug/L	1	0.28	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,1,2-Trichloroethane [79-00-5]^	0.14	U	ug/L	1	0.14	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,1-Dichloroethane [75-34-3]^	0.13	U	ug/L	1	0.13	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,1-Dichloroethene [75-35-4]^	0.21	U	ug/L	1	0.21	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,2,3-Trichlorobenzene [87-61-6]^	0.012	U	ug/L	1	0.012	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,2,4-Trichlorobenzene [120-82-1]^	0.14	U	ug/L	1	0.14	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.48	U	ug/L	1	0.48	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,2-Dibromoethane [106-93-4]^	0.66	U	ug/L	1	0.66	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,2-Dichlorobenzene [95-50-1]^	0.19	U	ug/L	1	0.19	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,2-Dichloroethane [107-06-2]^	0.21	U	ug/L	1	0.21	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,2-Dichloropropane [78-87-5]^	0.10	U	ug/L	1	0.10	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,3-Dichlorobenzene [541-73-1]^	0.15	U	ug/L	1	0.15	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
1,4-Dichlorobenzene [106-46-7]^	0.19	U	ug/L	1	0.19	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
2-Butanone [78-93-3]^	1.3	U	ug/L	1	1.3	5.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
2-Hexanone [591-78-6]^	0.88	U	ug/L	1	0.88	5.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
4-Methyl-2-pentanone [108-10-1]^	1.1	U	ug/L	1	1.1	5.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Acetone [67-64-1]^	**23**		ug/L	1	1.2	5.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Benzene [71-43-2]^	0.15	U	ug/L	1	0.15	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Bromochloromethane [74-97-5]^	0.48	U	ug/L	1	0.48	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Bromodichloromethane [75-27-4]^	0.17	U	ug/L	1	0.17	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Bromoform [75-25-2]^	0.22	U	ug/L	1	0.22	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Bromomethane [74-83-9]^	0.14	U	ug/L	1	0.14	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Carbon disulfide [75-15-0]^	1.5	U	ug/L	1	1.5	5.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Carbon tetrachloride [56-23-5]^	0.17	U	ug/L	1	0.17	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Chlorobenzene [108-90-7]^	0.17	U	ug/L	1	0.17	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Chloroethane [75-00-3]^	0.23	U	ug/L	1	0.23	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Chloroform [67-66-3]^	0.18	U	ug/L	1	0.18	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Chloromethane [74-87-3]^	0.13	U	ug/L	1	0.13	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
cis-1,2-Dichloroethene [156-59-2]^	0.15	U	ug/L	1	0.15	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
cis-1,3-Dichloropropene [10061-01-5]^	0.20	U	ug/L	1	0.20	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Cyclohexane [110-82-7]	0.36	U	ug/L	1	0.36	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Dibromochloromethane [124-48-1]^	0.17	U	ug/L	1	0.17	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Dichlorodifluoromethane [75-71-8]^	0.20	U	ug/L	1	0.20	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Ethylbenzene [100-41-4]^	0.13	U	ug/L	1	0.13	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Freon 113 [76-13-1]	0.35	U	ug/L	1	0.35	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Isopropylbenzene [98-82-8]^	0.14	U	ug/L	1	0.14	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
m,p-Xylenes [108-38-3/106-42-3]	0.17	U	ug/L	1	0.17	2.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Methyl acetate [79-20-9]	0.51	U	ug/L	1	0.51	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Methyl cyclohexane [108-87-2]	0.54	U	ug/L	1	0.54	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Methylene chloride [75-09-2]^	0.23	U	ug/L	1	0.23	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Methyl-tert-Butyl Ether [1634-04-4]^	**1.6**		ug/L	1	0.16	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
o-Xylene [95-47-6]^	0.065	U	ug/L	1	0.065	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Styrene [100-42-5]^	0.11	U	ug/L	1	0.11	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Tetrachloroethene [127-18-4]^	0.17	U	ug/L	1	0.17	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Toluene [108-88-3]^	0.14	U	ug/L	1	0.14	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
trans-1,2-Dichloroethene [156-60-5]^	0.21	U	ug/L	1	0.21	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
trans-1,3-Dichloropropene [10061-02-6]^	0.15	U	ug/L	1	0.15	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	

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ANALYTICAL RESULTS

Description:	GP14-8	**Lab Sample ID:**	C404171-09	**Received:**	04/17/14 10:15
Matrix:	Ground Water	**Sampled:**	04/16/14 14:00	**Work Order:**	C404171
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian		

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Trichloroethene [79-01-6]^	0.15	U	ug/L	1	0.15	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Trichlorofluoromethane [75-69-4]^	0.24	U	ug/L	1	0.24	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Vinyl chloride [75-01-4]^	0.32	U	ug/L	1	0.32	1.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	
Xylenes (Total) [1330-20-7]^	0.45	U	ug/L	1	0.45	3.0	4D25033	EPA 8260B	04/25/14 22:54	MSZ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*95 %*	*51-122*	*4D25033*	*EPA 8260B*	*04/25/14 22:54*	*MSZ*	
Dibromofluoromethane	*55*	*1*	*50.0*	*110 %*	*68-117*	*4D25033*	*EPA 8260B*	*04/25/14 22:54*	*MSZ*	
Toluene-d8	*55*	*1*	*50.0*	*110 %*	*67-127*	*4D25033*	*EPA 8260B*	*04/25/14 22:54*	*MSZ*	

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	0.011	U	mg/L	1	0.011	0.055	4D22042	EPA 8015C	04/23/14 07:05	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*0.0981*	*1*	*0.100*	*98 %*	*70-130*	*4D22042*	*EPA 8015C*	*04/23/14 07:05*	*manag*	

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.0088	U	mg/L	1	0.0088	0.010	4D17030	EPA 7196A	04/17/14 14:30	CV	Q

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ANALYTICAL RESULTS

Description: GP14-2 | **Lab Sample ID:** C404171-10 | **Received:** 04/17/14 10:15
Matrix: Ground Water | **Sampled:** 04/16/14 11:00 | **Work Order:** C404171
Project: 1614 West Pembroke Avenue | **Sampled By:** Dan Christian

Polychlorinated Biphenyls by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.43	U	ug/L	1	0.43	0.50	4D24031	EPA 8082A	04/29/14 23:57	MWC	
PCB-1221 [11104-28-2]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/29/14 23:57	MWC	
PCB-1232 [11141-16-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/29/14 23:57	MWC	
PCB-1248 [12672-29-6]^	0.014	U	ug/L	1	0.014	0.50	4D24031	EPA 8082A	04/29/14 23:57	MWC	
PCB-1254 [11097-69-1]^	0.37	U	ug/L	1	0.37	0.50	4D24031	EPA 8082A	04/29/14 23:57	MWC	
PCB-1260 [11096-82-5]^	0.45	U	ug/L	1	0.45	0.50	4D24031	EPA 8082A	04/29/14 23:57	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.85*	*1*	*1.00*	*85 %*	*45-151*	*4D24031*	*EPA 8082A*	*04/29/14 23:57*	*MWC*	
Decachlorobiphenyl	*0.91*	*1*	*1.00*	*91 %*	*42-159*	*4D24031*	*EPA 8082A*	*04/29/14 23:57*	*MWC*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**0.59**		mg/L	1	0.072	0.12	4D22007	EPA 8015C	04/23/14 19:05	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*0.053*	*1*	*0.0602*	*88 %*	*41-126*	*4D22007*	*EPA 8015C*	*04/23/14 19:05*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	0.170	U	ug/L	1	0.170	0.200	4D24033	EPA 7470A	04/25/14 13:52	T1D	

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]^	**44700**		ug/L	1	29.0	100	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Antimony [7440-36-0]^	4.40	UD	ug/L	20	4.40	40.0	4D18018	EPA 6020A	04/22/14 13:40	VLO	R-01
Arsenic [7440-38-2]^	**20.0**		ug/L	1	5.40	10.0	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Barium [7440-39-3]^	**415**		ug/L	1	1.00	10.0	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Beryllium [7440-41-7]^	**2.40**		ug/L	1	0.100	1.00	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Cadmium [7440-43-9]^	**2.94**		ug/L	1	0.360	1.00	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Calcium [7440-70-2]^	**82600**		ug/L	1	39.0	100	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Chromium [7440-47-3]^	**77.2**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Cobalt [7440-48-4]^	**16.3**	JD	ug/L	20	2.00	20.0	4D18018	EPA 6020A	04/22/14 13:40	VLO	R-01
Copper [7440-50-8]^	**77.3**		ug/L	1	1.60	10.0	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Iron [7439-89-6]^	**123000**		ug/L	1	22.0	50.0	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Lead [7439-92-1]^	**404**		ug/L	1	2.10	10.0	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Magnesium [7439-95-4]^	**19400**		ug/L	1	23.0	100	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Manganese [7439-96-5]^	**533**		ug/L	1	1.10	10.0	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Nickel [7440-02-0]^	**49.2**		ug/L	1	1.80	10.0	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Potassium [7440-09-7]^	**5290**		ug/L	1	150	500	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Selenium [7782-49-2]^	5.00	U	ug/L	1	5.00	10.0	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Silver [7440-22-4]^	1.90	U	ug/L	1	1.90	10.0	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Sodium [7440-23-5]^	**29600**		ug/L	1	400	500	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Thallium [7440-28-0]^	2.20	UD	ug/L	20	2.20	20.0	4D18018	EPA 6020A	04/22/14 13:40	VLO	R-01
Vanadium [7440-62-2]^	**93.2**		ug/L	1	1.40	10.0	4D21018	EPA 6010C	04/28/14 13:58	JDH	
Zinc [7440-66-6]^	**738**		ug/L	1	3.80	10.0	4D21018	EPA 6010C	04/28/14 13:58	JDH	

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ANALYTICAL RESULTS

Description: GP14-2 **Lab Sample ID:** C404171-10 **Received:** 04/17/14 10:15

Matrix: Ground Water **Sampled:** 04/16/14 11:00 **Work Order:** C404171

Project: 1614 West Pembroke Avenue **Sampled By:** Dan Christian

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.0088	U	mg/L	1	0.0088	0.010	4D17030	EPA 7196A	04/17/14 14:30	CV	Q

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ANALYTICAL RESULTS

Description:	GP14-8	**Lab Sample ID:**	C404171-11	**Received:**	04/17/14 10:15
Matrix:	Soil	**Sampled:**	04/16/14 13:20	**Work Order:**	C404171
Project:	1614 West Pembroke Avenue	**Sampled By:**	Dan Christian	**% Solids:**	84.36

Gasoline Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
GRO (C6-C10) [ECL-0069]^	1.7	U	mg/kg dry	1	1.7	6.5	4D22036	EPA 8015C	04/22/14 22:15	manag	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,5-Dibromotoluene	*11*	*1*	*12.1*	*90 %*	*59-168*	*4D22036*	*EPA 8015C*	*04/22/14 22:15*	*manag*	

Diesel Range Organics by GC

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
DRO (C10-C28) [ECL-0057]^	**310**		mg/kg dry	1	2.0	3.9	4D23014	EPA 8015C	04/24/14 04:03	MWC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
o-Terphenyl	*1.5*	*1*	*1.98*	*73 %*	*51-138*	*4D23014*	*EPA 8015C*	*04/24/14 04:03*	*MWC*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [VELAP 460146]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Aluminum [7429-90-5]	**5880**	D	mg/kg dry	2	4.98	23.7	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Antimony [7440-36-0]	**4.29**	D	mg/kg dry	2	0.261	2.37	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Arsenic [7440-38-2]^	**5.74**	D	mg/kg dry	2	0.237	1.19	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Barium [7440-39-3]^	**128**	D	mg/kg dry	2	0.237	1.19	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Beryllium [7440-41-7]	**0.246**	D	mg/kg dry	2	0.0284	0.119	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Cadmium [7440-43-9]^	**3.44**	D	mg/kg dry	2	0.0228	0.119	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Calcium [7440-70-2]	**1660**	BD	mg/kg dry	2	13.3	59.3	4D21024	EPA 6010C	04/23/14 13:54	JDH	QB-01, R-01
Chromium [7440-47-3]^	**20.3**	D	mg/kg dry	2	0.237	1.19	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Cobalt [7440-48-4]	**3.03**	D	mg/kg dry	2	0.237	1.19	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Copper [7440-50-8]	**51.3**	D	mg/kg dry	2	0.450	1.19	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Iron [7439-89-6]	**17800**	BD	mg/kg dry	2	1.14	5.93	4D21024	EPA 6010C	04/23/14 13:54	JDH	QB-01
Lead [7439-92-1]^	**218**	D	mg/kg dry	2	0.284	1.19	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Magnesium [7439-95-4]	**838**	BD	mg/kg dry	2	1.54	59.3	4D21024	EPA 6010C	04/23/14 13:54	JDH	QB-01, R-01
Manganese [7439-96-5]	**65.3**	D	mg/kg dry	2	0.237	1.19	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Mercury [7439-97-6]^	**0.0886**		mg/kg dry	1	0.00744	0.0259	4D29012	EPA 7471B	04/30/14 16:46	T1D	
Nickel [7440-02-0]	**22.6**	D	mg/kg dry	2	0.853	5.93	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Potassium [7440-09-7]	**261**	D	mg/kg dry	2	9.48	59.3	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Selenium [7782-49-2]^	**0.703**	JD	mg/kg dry	2	0.237	1.19	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Silver [7440-22-4]^	0.237	UD	mg/kg dry	2	0.237	1.19	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Sodium [7440-23-5]	**48.1**	JD	mg/kg dry	2	14.2	59.3	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Thallium [7440-28-0]	0.237	UD	mg/kg dry	2	0.237	1.19	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Vanadium [7440-62-2]^	**12.5**	D	mg/kg dry	2	0.237	1.19	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01
Zinc [7440-66-6]^	**301**	D	mg/kg dry	2	2.61	5.93	4D21024	EPA 6010C	04/23/14 13:54	JDH	R-01

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ANALYTICAL RESULTS

Description: GP14-8	**Lab Sample ID:** C404171-11	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 13:20	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 84.36

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
1,1,2-Trichloroethane [79-00-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
1,1-Dichloroethane [75-34-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
1,1-Dichloroethene [75-35-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
1,2,4-Trichlorobenzene [120-82-1]^	0.0010	U	mg/kg dry	1	0.0010	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
1,2-Dibromoethane [106-93-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
1,2-Dichlorobenzene [95-50-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
1,2-Dichloroethane [107-06-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
1,2-Dichloropropane [78-87-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
1,3-Dichlorobenzene [541-73-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
1,4-Dichlorobenzene [106-46-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
2-Butanone [78-93-3]^	**0.014**		mg/kg dry	1	0.0021	0.0059	4D25025	EPA 8260B	04/25/14 20:23	KAT	
2-Hexanone [591-78-6]^	0.0011	U	mg/kg dry	1	0.0011	0.0059	4D25025	EPA 8260B	04/25/14 20:23	KAT	
4-Methyl-2-pentanone [108-10-1]^	0.0017	U	mg/kg dry	1	0.0017	0.0059	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Acetone [67-64-1]^	**0.052**		mg/kg dry	1	0.0020	0.0059	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Benzene [71-43-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Bromochloromethane [74-97-5]^	**0.0007**	J	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Bromodichloromethane [75-27-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Bromoform [75-25-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Bromomethane [74-83-9]^	0.0011	U	mg/kg dry	1	0.0011	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Carbon disulfide [75-15-0]^	0.0025	U	mg/kg dry	1	0.0025	0.0059	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Carbon Tetrachloride [56-23-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Chlorobenzene [108-90-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Chloroethane [75-00-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Chloroform [67-66-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Chloromethane [74-87-3]^	0.0008	U	mg/kg dry	1	0.0008	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
cis-1,2-Dichloroethene [156-59-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
cis-1,3-Dichloropropene [10061-01-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Cyclohexane [110-82-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0024	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Dichlorodifluoromethane [75-71-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Ethylbenzene [100-41-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Freon 113 [76-13-1]^	0.0007	U	mg/kg dry	1	0.0007	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Isopropylbenzene [98-82-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Methyl acetate [79-20-9]^	0.0019	U	mg/kg dry	1	0.0019	0.0024	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Methyl cyclohexane [108-87-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0024	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Methylene Chloride [75-09-2]^	0.0008	U	mg/kg dry	1	0.0008	0.0024	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Styrene [100-42-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Tetrachloroethene [127-18-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Toluene [108-88-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
trans-1,2-Dichloroethene [156-60-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
trans-1,3-Dichloropropene [10061-02-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Trichloroethene [79-01-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Trichlorofluoromethane [75-69-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	
Vinyl chloride [75-01-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0012	4D25025	EPA 8260B	04/25/14 20:23	KAT	

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ANALYTICAL RESULTS

Description: GP14-8	**Lab Sample ID:** C404171-11	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 13:20	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 84.36

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7]^	0.0012	U	mg/kg dry	1	0.0012	0.0024	4D25025	EPA 8260B	04/25/14 20:23	KAT	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*0.062*	*1*	*0.0648*	*95 %*	*71-126*	*4D25025*	*EPA 8260B*	*04/25/14 20:23*	*KAT*	
Dibromofluoromethane	*0.058*	*1*	*0.0648*	*89 %*	*72-133*	*4D25025*	*EPA 8260B*	*04/25/14 20:23*	*KAT*	
Toluene-d8	*0.060*	*1*	*0.0648*	*93 %*	*80-123*	*4D25025*	*EPA 8260B*	*04/25/14 20:23*	*KAT*	

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1'-Biphenyl [92-52-4]^	0.17	UD	mg/kg dry	2	0.17	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2,4,5-Trichlorophenol [95-95-4]^	0.16	UD	mg/kg dry	2	0.16	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2,4,6-Trichlorophenol [88-06-2]^	0.36	UD	mg/kg dry	2	0.36	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2,4-Dichlorophenol [120-83-2]^	0.59	UD	mg/kg dry	2	0.59	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2,4-Dimethylphenol [105-67-9]^	0.55	UD	mg/kg dry	2	0.55	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2,4-Dinitrophenol [51-28-5]^	0.21	UD	mg/kg dry	2	0.21	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2,4-Dinitrotoluene [121-14-2]^	0.38	UD	mg/kg dry	2	0.38	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2,6-Dinitrotoluene [606-20-2]^	0.43	UD	mg/kg dry	2	0.43	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2-Chloronaphthalene [91-58-7]^	0.23	UD	mg/kg dry	2	0.23	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2-Chlorophenol [95-57-8]^	0.55	UD	mg/kg dry	2	0.55	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.66	UD	mg/kg dry	2	0.66	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2-Methylnaphthalene [91-57-6]^	0.28	UD	mg/kg dry	2	0.28	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2-Methylphenol [95-48-7]^	0.26	UD	mg/kg dry	2	0.26	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2-Nitroaniline [88-74-4]^	0.20	UD	mg/kg dry	2	0.20	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
2-Nitrophenol [88-75-5]^	0.62	UD	mg/kg dry	2	0.62	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.59	UD	mg/kg dry	2	0.59	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
3,3'-Dichlorobenzidine [91-94-1]^	0.50	UD	mg/kg dry	2	0.50	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	QL-02, R-01
3-Nitroaniline [99-09-2]^	0.19	UD	mg/kg dry	2	0.19	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
4-Bromophenyl-phenylether [101-55-3]^	0.31	UD	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
4-Chloro-3-methylphenol [59-50-7]^	0.66	UD	mg/kg dry	2	0.66	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
4-Chloroaniline [106-47-8]^	0.15	UD	mg/kg dry	2	0.15	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
4-Chlorophenyl-phenylether [7005-72-3]^	0.31	UD	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
4-Nitroaniline [100-01-6]^	0.62	UD	mg/kg dry	2	0.62	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
4-Nitrophenol [100-02-7]^	0.31	UD	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	J-05, R-01
Acenaphthene [83-32-9]^	**0.33**	JD	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Acenaphthylene [208-96-8]^	0.28	UD	mg/kg dry	2	0.28	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Acetophenone [98-86-2]^	0.33	UD	mg/kg dry	2	0.33	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Anthracene [120-12-7]^	**0.74**	JD	mg/kg dry	2	0.36	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Atrazine [1912-24-9]^	0.18	UD	mg/kg dry	2	0.18	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Benzaldehyde [100-52-7]^	0.64	UD	mg/kg dry	2	0.64	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Benzo(a)anthracene [56-55-3]^	**1.0**	D	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Benzo(a)pyrene [50-32-8]^	**0.97**	JD	mg/kg dry	5	0.46	2.0	4D18034	EPA 8270D	04/29/14 20:57	jfi	R-01
Benzo(b)fluoranthene [205-99-2]^	**1.5**	JD	mg/kg dry	5	0.65	2.0	4D18034	EPA 8270D	04/29/14 20:57	jfi	R-01
Benzo(g,h,i)perylene [191-24-2]^	0.95	UD	mg/kg dry	5	0.95	2.0	4D18034	EPA 8270D	04/29/14 20:57	jfi	QV-01, R-01
Benzo(k)fluoranthene [207-08-9]^	0.65	UD	mg/kg dry	5	0.65	2.0	4D18034	EPA 8270D	04/29/14 20:57	jfi	R-01
Bis(2-chloroethoxy)methane [111-91-1]^	0.36	UD	mg/kg dry	2	0.36	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	QL-02, R-01

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ANALYTICAL RESULTS

Description: GP14-8	**Lab Sample ID:** C404171-11	**Received:** 04/17/14 10:15
Matrix: Soil	**Sampled:** 04/16/14 13:20	**Work Order:** C404171
Project: 1614 West Pembroke Avenue	**Sampled By:** Dan Christian	**% Solids:** 84.36

Semivolatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [VELAP 460186]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Bis(2-chloroethyl)ether [111-44-4]^	0.33	UD	mg/kg dry	2	0.33	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Bis(2-chloroisopropyl)ether [108-60-1]^	0.23	UD	mg/kg dry	2	0.23	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.31	UD	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Butylbenzylphthalate [85-68-7]^	0.33	UD	mg/kg dry	2	0.33	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Caprolactam [105-60-2]^	0.71	UD	mg/kg dry	2	0.71	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	QV-01, R-01
Carbazole [86-74-8]^	**0.31**	JD	mg/kg dry	2	0.28	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Chrysene [218-01-9]^	**1.1**	D	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Dibenzo(a,h)anthracene [53-70-3]^	0.83	UD	mg/kg dry	5	0.83	2.0	4D18034	EPA 8270D	04/29/14 20:57	jfi	R-01
Dibenzofuran [132-64-9]^	0.31	UD	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Diethylphthalate [84-66-2]^	0.31	UD	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Dimethylphthalate [131-11-3]^	0.31	UD	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Di-n-butylphthalate [84-74-2]^	0.31	UD	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Di-n-octylphthalate [117-84-0]^	0.31	UD	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Fluoranthene [206-44-0]^	**2.4**	D	mg/kg dry	2	0.26	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Fluorene [86-73-7]	**0.53**	JD	mg/kg dry	2	0.33	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Hexachlorobenzene [118-74-1]^	0.28	UD	mg/kg dry	2	0.28	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Hexachlorobutadiene [87-68-3]^	0.31	UD	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Hexachlorocyclopentadiene [77-47-4]^	0.36	UD	mg/kg dry	2	0.36	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Hexachloroethane [67-72-1]^	0.24	UD	mg/kg dry	2	0.24	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.83	UD	mg/kg dry	5	0.83	2.0	4D18034	EPA 8270D	04/29/14 20:57	jfi	R-01
Isophorone [78-59-1]^	0.40	UD	mg/kg dry	2	0.40	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Naphthalene [91-20-3]^	0.28	UD	mg/kg dry	2	0.28	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Nitrobenzene [98-95-3]^	0.36	UD	mg/kg dry	2	0.36	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
N-Nitroso-di-n-propylamine [621-64-7]^	0.36	UD	mg/kg dry	2	0.36	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.55	UD	mg/kg dry	2	0.55	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Pentachlorophenol [87-86-5]^	0.50	UD	mg/kg dry	2	0.50	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	QL-02, R-01
Phenanthrene [85-01-8]^	**2.3**	D	mg/kg dry	2	0.31	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Phenol [108-95-2]^	0.23	UD	mg/kg dry	2	0.23	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01
Pyrene [129-00-0]^	**1.8**	D	mg/kg dry	2	0.26	0.78	4D18034	EPA 8270D	04/28/14 14:58	jfi	R-01

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.5*	*2*	*1.98*	*76 %*	*23-137*	*4D18034*	*EPA 8270D*	*04/28/14 14:58*	*jfi*	*R-01*
2-Fluorobiphenyl	*1.4*	*2*	*1.98*	*68 %*	*29-119*	*4D18034*	*EPA 8270D*	*04/28/14 14:58*	*jfi*	*R-01*
2-Fluorophenol	*1.4*	*2*	*1.98*	*69 %*	*20-124*	*4D18034*	*EPA 8270D*	*04/28/14 14:58*	*jfi*	*R-01*
Nitrobenzene-d5	*1.1*	*2*	*1.98*	*55 %*	*17-126*	*4D18034*	*EPA 8270D*	*04/28/14 14:58*	*jfi*	*R-01*
Phenol-d5	*1.4*	*2*	*1.98*	*72 %*	*15-131*	*4D18034*	*EPA 8270D*	*04/28/14 14:58*	*jfi*	*R-01*
Terphenyl-d14	*1.9*	*2*	*1.98*	*95 %*	*60-120*	*4D18034*	*EPA 8270D*	*04/28/14 14:58*	*jfi*	*R-01*

Classical Chemistry Parameters

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99]	0.18	U	mg/kg dry	1	0.18	1.2	4D21022	EPA 7196A	04/22/14 15:05	RMM	

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D24037 - EPA 5030B_MS

Blank (4D24037-BLK1) Prepared: 04/24/2014 13:32 Analyzed: 04/24/2014 22:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.012	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Cyclohexane	0.36	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Freon 113	0.35	U	1.0	ug/L							
Isopropylbenzene	0.14	U	1.0	ug/L							
m,p-Xylenes	0.17	U	2.0	ug/L							
Methyl acetate	0.51	U	1.0	ug/L							
Methyl cyclohexane	0.54	U	1.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.16	U	1.0	ug/L							
o-Xylene	0.065	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D24037 - EPA 5030B_MS - Continued

Blank (4D24037-BLK1) Continued Prepared: 04/24/2014 13:32 Analyzed: 04/24/2014 22:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
4-Bromofluorobenzene	*52*			*ug/L*	*50.0*		*104*	*51-122*			
Dibromofluoromethane	*49*			*ug/L*	*50.0*		*99*	*68-117*			
Toluene-d8	*50*			*ug/L*	*50.0*		*101*	*67-127*			

LCS (4D24037-BS1) Prepared: 04/24/2014 13:32 Analyzed: 04/24/2014 23:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0		108	75-133			
Benzene	20		1.0	ug/L	20.0		100	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		107	83-117			
Cyclohexane	22		1.0	ug/L	20.0		108	0-200			
Methyl acetate	25		1.0	ug/L	20.0		125	0-200			
Methyl cyclohexane	20		1.0	ug/L	20.0		99	0-200			
Toluene	18		1.0	ug/L	20.0		92	71-118			
Trichloroethene	21		1.0	ug/L	20.0		107	74-119			
4-Bromofluorobenzene	*58*			*ug/L*	*50.0*		*116*	*51-122*			
Dibromofluoromethane	*51*			*ug/L*	*50.0*		*102*	*68-117*			
Toluene-d8	*51*			*ug/L*	*50.0*		*101*	*67-127*			

Matrix Spike (4D24037-MS1) Prepared: 04/24/2014 13:32 Analyzed: 04/24/2014 23:49

Source: C405167-08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.21 U	112	75-133			
Benzene	20		1.0	ug/L	20.0	0.15 U	98	81-134			
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	98	83-117			
Cyclohexane	23		1.0	ug/L	20.0	0.36 U	113	0-200			
Methyl acetate	24		1.0	ug/L	20.0	0.51 U	120	0-200			
Methyl cyclohexane	20		1.0	ug/L	20.0	0.54 U	102	0-200			
Toluene	17		1.0	ug/L	20.0	0.14 U	87	71-118			
Trichloroethene	21		1.0	ug/L	20.0	0.15 U	105	74-119			
4-Bromofluorobenzene	*55*			*ug/L*	*50.0*		*110*	*51-122*			
Dibromofluoromethane	*50*			*ug/L*	*50.0*		*101*	*68-117*			
Toluene-d8	*51*			*ug/L*	*50.0*		*101*	*67-127*			

Matrix Spike Dup (4D24037-MSD1) Prepared: 04/24/2014 13:32 Analyzed: 04/25/2014 00:18

Source: C405167-08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.21 U	109	75-133	3	20	
Benzene	20		1.0	ug/L	20.0	0.15 U	99	81-134	0.8	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	98	83-117	0.6	16	
Cyclohexane	22		1.0	ug/L	20.0	0.36 U	111	0-200	1	50	
Methyl acetate	22		1.0	ug/L	20.0	0.51 U	112	0-200	7	50	
Methyl cyclohexane	21		1.0	ug/L	20.0	0.54 U	107	0-200	5	50	
Toluene	17		1.0	ug/L	20.0	0.14 U	87	71-118	0.5	17	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D24037 - EPA 5030B_MS - Continued

Matrix Spike Dup (4D24037-MSD1) Continued Prepared: 04/24/2014 13:32 Analyzed: 04/25/2014 00:18

Source: C405167-08

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichloroethene	22		1.0	ug/L	20.0	0.15 U	108	74-119	3	22	
4-Bromofluorobenzene	*57*			*ug/L*	*50.0*		*114*	*51-122*			
Dibromofluoromethane	*50*			*ug/L*	*50.0*		*100*	*68-117*			
Toluene-d8	*51*			*ug/L*	*50.0*		*103*	*67-127*			

Batch 4D25033 - EPA 5030B_MS

Blank (4D25033-BLK1) Prepared: 04/25/2014 00:00 Analyzed: 04/25/2014 12:52

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.012	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Cyclohexane	0.36	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Freon 113	0.35	U	1.0	ug/L							
Isopropylbenzene	0.14	U	1.0	ug/L							
m,p-Xylenes	0.17	U	2.0	ug/L							
Methyl acetate	0.51	U	1.0	ug/L							

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D25033 - EPA 5030B_MS - Continued

Blank (4D25033-BLK1) Continued Prepared: 04/25/2014 00:00 Analyzed: 04/25/2014 12:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Methyl cyclohexane	0.54	U	1.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.16	U	1.0	ug/L							
o-Xylene	0.065	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
4-Bromofluorobenzene	*46*			*ug/L*	*50.0*		*91*	*51-122*			
Dibromofluoromethane	*56*			*ug/L*	*50.0*		*111*	*68-117*			
Toluene-d8	*54*			*ug/L*	*50.0*		*109*	*67-127*			

LCS (4D25033-BS1) Prepared: 04/25/2014 00:00 Analyzed: 04/25/2014 13:22

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	21		1.0	ug/L	20.0		106	75-133			
Benzene	21		1.0	ug/L	20.0		103	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		105	83-117			
Cyclohexane	26		1.0	ug/L	20.0		131	0-200			
Methyl acetate	27		1.0	ug/L	20.0		134	0-200			
Methyl cyclohexane	22		1.0	ug/L	20.0		110	0-200			
Toluene	19		1.0	ug/L	20.0		93	71-118			
Trichloroethene	21		1.0	ug/L	20.0		103	74-119			
4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*94*	*51-122*			
Dibromofluoromethane	*54*			*ug/L*	*50.0*		*109*	*68-117*			
Toluene-d8	*53*			*ug/L*	*50.0*		*107*	*67-127*			

Matrix Spike (4D25033-MS1) Prepared: 04/25/2014 00:00 Analyzed: 04/25/2014 13:52

Source: C405290-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.21 U	108	75-133			
Benzene	20		1.0	ug/L	20.0	0.15 U	99	81-134			
Chlorobenzene	21		1.0	ug/L	20.0	0.17 U	105	83-117			
Cyclohexane	27		1.0	ug/L	20.0	0.36 U	134	0-200			
Methyl acetate	28		1.0	ug/L	20.0	0.51 U	139	0-200			
Methyl cyclohexane	23		1.0	ug/L	20.0	0.54 U	113	0-200			
Toluene	18		1.0	ug/L	20.0	0.14 U	92	71-118			
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	98	74-119			
4-Bromofluorobenzene	*46*			*ug/L*	*50.0*		*93*	*51-122*			
Dibromofluoromethane	*54*			*ug/L*	*50.0*		*108*	*68-117*			
Toluene-d8	*53*			*ug/L*	*50.0*		*105*	*67-127*			

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D25033 - EPA 5030B_MS - Continued

Matrix Spike Dup (4D25033-MSD1) Prepared: 04/25/2014 00:00 Analyzed: 04/25/2014 14:22

Source: C405290-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	21		1.0	ug/L	20.0	0.21 U	104	75-133	4	20	
Benzene	19		1.0	ug/L	20.0	0.15 U	96	81-134	4	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	100	83-117	5	16	
Cyclohexane	25		1.0	ug/L	20.0	0.36 U	127	0-200	5	50	
Methyl acetate	26		1.0	ug/L	20.0	0.51 U	130	0-200	7	50	
Methyl cyclohexane	22		1.0	ug/L	20.0	0.54 U	109	0-200	4	50	
Toluene	18		1.0	ug/L	20.0	0.14 U	89	71-118	3	17	
Trichloroethene	19		1.0	ug/L	20.0	0.15 U	95	74-119	3	22	
4-Bromofluorobenzene	*46*			*ug/L*	*50.0*		*92*	*51-122*			
Dibromofluoromethane	*53*			*ug/L*	*50.0*		*106*	*68-117*			
Toluene-d8	*53*			*ug/L*	*50.0*		*105*	*67-127*			

Batch 4D25036 - EPA 5030B_MS

Blank (4D25036-BLK1) Prepared: 04/25/2014 17:28 Analyzed: 04/26/2014 01:53

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.012	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.14	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,3-Dichlorobenzene	0.15	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Cyclohexane	0.36	U	1.0	ug/L							

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D25036 - EPA 5030B_MS - Continued

Blank (4D25036-BLK1) Continued Prepared: 04/25/2014 17:28 Analyzed: 04/26/2014 01:53

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dibromochloromethane	0.17	U	1.0	ug/L							
Dichlorodifluoromethane	0.20	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Freon 113	0.35	U	1.0	ug/L							
Isopropylbenzene	0.14	U	1.0	ug/L							
m,p-Xylenes	0.17	U	2.0	ug/L							
Methyl acetate	0.51	U	1.0	ug/L							
Methyl cyclohexane	0.54	U	1.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.16	U	1.0	ug/L							
o-Xylene	0.065	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*94*	*51-122*			
Dibromofluoromethane	*56*			*ug/L*	*50.0*		*111*	*68-117*			
Toluene-d8	*55*			*ug/L*	*50.0*		*110*	*67-127*			

LCS (4D25036-BS1) Prepared: 04/25/2014 17:28 Analyzed: 04/26/2014 02:23

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0		100	75-133			
Benzene	20		1.0	ug/L	20.0		99	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		100	83-117			
Cyclohexane	24		1.0	ug/L	20.0		122	0-200			
Methyl acetate	29		1.0	ug/L	20.0		144	0-200			
Methyl cyclohexane	19		1.0	ug/L	20.0		97	0-200			
Toluene	18		1.0	ug/L	20.0		89	71-118			
Trichloroethene	19		1.0	ug/L	20.0		96	74-119			
4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*94*	*51-122*			
Dibromofluoromethane	*56*			*ug/L*	*50.0*		*111*	*68-117*			
Toluene-d8	*54*			*ug/L*	*50.0*		*107*	*67-127*			

Matrix Spike (4D25036-MS1) Prepared: 04/25/2014 17:28 Analyzed: 04/26/2014 02:53

Source: C405290-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	21		1.0	ug/L	20.0	0.21 U	103	75-133			
Benzene	20		1.0	ug/L	20.0	0.15 U	99	81-134			
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	100	83-117			
Cyclohexane	25		1.0	ug/L	20.0	0.36 U	123	0-200			
Methyl acetate	28		1.0	ug/L	20.0	0.51 U	138	0-200			
Methyl cyclohexane	21		1.0	ug/L	20.0	0.54 U	103	0-200			

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D25036 - EPA 5030B_MS - Continued

Matrix Spike (4D25036-MS1) Continued Prepared: 04/25/2014 17:28 Analyzed: 04/26/2014 02:53

Source: C405290-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Toluene	18		1.0	ug/L	20.0	0.14 U	89	71-118			
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	98	74-119			
4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*94*	*51-122*			
Dibromofluoromethane	*54*			*ug/L*	*50.0*		*109*	*68-117*			
Toluene-d8	*54*			*ug/L*	*50.0*		*108*	*67-127*			

Matrix Spike Dup (4D25036-MSD1) Prepared: 04/25/2014 17:28 Analyzed: 04/26/2014 03:24

Source: C405290-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.21 U	102	75-133	0.8	20	
Benzene	20		1.0	ug/L	20.0	0.15 U	98	81-134	0.9	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	98	83-117	2	16	
Cyclohexane	26		1.0	ug/L	20.0	0.36 U	131	0-200	6	50	
Methyl acetate	27		1.0	ug/L	20.0	0.51 U	137	0-200	0.3	50	
Methyl cyclohexane	22		1.0	ug/L	20.0	0.54 U	109	0-200	5	50	
Toluene	17		1.0	ug/L	20.0	0.14 U	87	71-118	3	17	
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	99	74-119	1	22	
4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*94*	*51-122*			
Dibromofluoromethane	*54*			*ug/L*	*50.0*		*108*	*68-117*			
Toluene-d8	*55*			*ug/L*	*50.0*		*109*	*67-127*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D18032 - EPA 3510C_MS

Blank (4D18032-BLK1) Prepared: 04/18/2014 14:07 Analyzed: 04/24/2014 18:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1'-Biphenyl	1.5	U	10	ug/L							
2,4,5-Trichlorophenol	1.0	U	10	ug/L							
2,4,6-Trichlorophenol	1.1	U	10	ug/L							
2,4-Dichlorophenol	1.4	U	10	ug/L							
2,4-Dimethylphenol	1.3	U	10	ug/L							
2,4-Dinitrophenol	2.6	U	10	ug/L							
2,4-Dinitrotoluene	2.4	U	10	ug/L							
2,6-Dinitrotoluene	1.5	U	10	ug/L							
2-Chloronaphthalene	1.0	U	10	ug/L							
2-Chlorophenol	1.2	U	10	ug/L							
2-Methyl-4,6-dinitrophenol	2.9	U	10	ug/L							
2-Methylnaphthalene	1.5	U	10	ug/L							
2-Methylphenol	1.4	U	10	ug/L							
2-Nitroaniline	1.5	U	10	ug/L							
2-Nitrophenol	1.1	U	10	ug/L							
3 & 4-Methylphenol	1.6	U	10	ug/L							
3,3'-Dichlorobenzidine	3.3	U	10	ug/L							
3-Nitroaniline	2.1	U	10	ug/L							
4-Bromophenyl-phenylether	1.0	U	10	ug/L							
4-Chloro-3-methylphenol	1.5	U	10	ug/L							
4-Chloroaniline	1.2	U	10	ug/L							

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D18032 - EPA 3510C_MS - Continued

Blank (4D18032-BLK1) Continued Prepared: 04/18/2014 14:07 Analyzed: 04/24/2014 18:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4-Chlorophenyl-phenylether	1.6	U	10	ug/L							
4-Nitroaniline	3.2	U	10	ug/L							
4-Nitrophenol	2.0	U	10	ug/L							
Acenaphthene	1.4	U	10	ug/L							
Acenaphthylene	1.2	U	10	ug/L							
Acetophenone	1.3	U	10	ug/L							
Anthracene	1.6	U	10	ug/L							
Atrazine	1.5	U	10	ug/L							QV-01
Benzaldehyde	1.4	U	10	ug/L							QV-02
Benzo(a)anthracene	1.3	U	10	ug/L							
Benzo(a)pyrene	1.3	U	10	ug/L							
Benzo(b)fluoranthene	1.0	U	10	ug/L							
Benzo(g,h,i)perylene	2.4	U	10	ug/L							
Benzo(k)fluoranthene	1.3	U	10	ug/L							
Bis(2-chloroethoxy)methane	1.4	U	10	ug/L							
Bis(2-chloroethyl)ether	1.2	U	10	ug/L							
Bis(2-chloroisopropyl)ether	1.3	U	10	ug/L							
Bis(2-ethylhexyl)phthalate	1.7	U	5.0	ug/L							
Butylbenzylphthalate	2.0	U	10	ug/L							
Caprolactam	1.3	U	10	ug/L							
Carbazole	2.5	U	10	ug/L							
Chrysene	2.0	U	10	ug/L							
Dibenzo(a,h)anthracene	2.3	U	10	ug/L							
Dibenzofuran	1.4	U	10	ug/L							
Diethylphthalate	2.1	U	10	ug/L							
Dimethylphthalate	1.4	U	10	ug/L							
Di-n-butylphthalate	1.5	U	10	ug/L							
Di-n-octylphthalate	3.1	U	10	ug/L							
Fluoranthene	2.1	U	10	ug/L							
Fluorene	1.7	U	10	ug/L							
Hexachlorobenzene	1.0	U	10	ug/L							
Hexachlorobutadiene	1.2	U	10	ug/L							
Hexachlorocyclopentadiene	1.3	U	10	ug/L							
Hexachloroethane	1.1	U	10	ug/L							
Indeno(1,2,3-cd)pyrene	2.2	U	10	ug/L							
Isophorone	1.3	U	10	ug/L							
Naphthalene	1.3	U	10	ug/L							
Nitrobenzene	1.2	U	10	ug/L							
N-Nitroso-di-n-propylamine	1.5	U	10	ug/L							
N-nitrosodiphenylamine/Diphenylamine	2.1	U	10	ug/L							
Pentachlorophenol	1.8	U	10	ug/L							
Phenanthrene	1.4	U	10	ug/L							
Phenol	1.4	U	10	ug/L							
Pyrene	2.1	U	10	ug/L							
2,4,6-Tribromophenol	*93*			*ug/L*	*100*		*93*	*10-179*			
2-Fluorobiphenyl	*40*			*ug/L*	*50.0*		*80*	*10-149*			
2-Fluorophenol	*57*			*ug/L*	*100*		*57*	*10-110*			
Nitrobenzene-d5	*41*			*ug/L*	*50.0*		*82*	*10-149*			
Phenol-d5	*51*			*ug/L*	*100*		*51*	*10-88*			

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D18032 - EPA 3510C_MS - Continued

Blank (4D18032-BLK1) Continued Prepared: 04/18/2014 14:07 Analyzed: 04/24/2014 18:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Terphenyl-d14	*43*			*ug/L*	*50.0*		*87*	*10-188*			

LCS (4D18032-BS1) Prepared: 04/18/2014 14:07 Analyzed: 04/24/2014 19:22

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	45		10	ug/L	50.0		90	67-132			
2-Chlorophenol	41		10	ug/L	50.0		81	40-109			
4-Chloro-3-methylphenol	44		10	ug/L	50.0		87	58-121			
4-Nitrophenol	29		10	ug/L	50.0		59	33-105			
Acenaphthene	38		10	ug/L	50.0		76	43-118			
N-Nitroso-di-n-propylamine	42		10	ug/L	50.0		84	48-126			
Pentachlorophenol	29		10	ug/L	50.0		58	51-135			
Phenol	31		10	ug/L	50.0		62	19-78			
Pyrene	40		10	ug/L	50.0		80	65-134			
2,4,6-Tribromophenol	*98*			*ug/L*	*100*		*98*	*10-179*			
2-Fluorobiphenyl	*40*			*ug/L*	*50.0*		*79*	*10-149*			
2-Fluorophenol	*62*			*ug/L*	*100*		*62*	*10-110*			
Nitrobenzene-d5	*42*			*ug/L*	*50.0*		*84*	*10-149*			
Phenol-d5	*54*			*ug/L*	*100*		*54*	*10-88*			
Terphenyl-d14	*41*			*ug/L*	*50.0*		*82*	*10-188*			

Matrix Spike (4D18032-MS1) Prepared: 04/18/2014 14:07 Analyzed: 04/24/2014 19:52

Source: C403873-04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	48		10	ug/L	50.0	2.4 U	95	67-132			
2-Chlorophenol	41		10	ug/L	50.0	1.2 U	82	40-109			
4-Chloro-3-methylphenol	47		10	ug/L	50.0	1.5 U	95	58-121			
4-Nitrophenol	34		10	ug/L	50.0	2.0 U	69	33-105			
Acenaphthene	40		10	ug/L	50.0	1.4 U	81	43-118			
N-Nitroso-di-n-propylamine	44		10	ug/L	50.0	1.5 U	88	48-126			
Pentachlorophenol	33		10	ug/L	50.0	1.8 U	65	51-135			
Phenol	31		10	ug/L	50.0	1.4 U	61	19-78			
Pyrene	42		10	ug/L	50.0	2.1 U	83	65-134			
2,4,6-Tribromophenol	*100*			*ug/L*	*100*		*104*	*10-179*			
2-Fluorobiphenyl	*41*			*ug/L*	*50.0*		*81*	*10-149*			
2-Fluorophenol	*61*			*ug/L*	*100*		*61*	*10-110*			
Nitrobenzene-d5	*43*			*ug/L*	*50.0*		*85*	*10-149*			
Phenol-d5	*53*			*ug/L*	*100*		*53*	*10-88*			
Terphenyl-d14	*41*			*ug/L*	*50.0*		*82*	*10-188*			

Matrix Spike Dup (4D18032-MSD1) Prepared: 04/18/2014 14:07 Analyzed: 04/24/2014 20:22

Source: C403873-04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	44		10	ug/L	50.0	2.4 U	87	67-132	9	17	
2-Chlorophenol	40		10	ug/L	50.0	1.2 U	81	40-109	2	22	
4-Chloro-3-methylphenol	46		10	ug/L	50.0	1.5 U	92	58-121	2	22	
4-Nitrophenol	33		10	ug/L	50.0	2.0 U	66	33-105	5	27	
Acenaphthene	39		10	ug/L	50.0	1.4 U	79	43-118	2	21	

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D18032 - EPA 3510C_MS - Continued

Matrix Spike Dup (4D18032-MSD1) Continued Prepared: 04/18/2014 14:07 Analyzed: 04/24/2014 20:22

Source: C403873-04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
N-Nitroso-di-n-propylamine	44		10	ug/L	50.0	1.5 U	88	48-126	1	23	
Pentachlorophenol	34		10	ug/L	50.0	1.8 U	68	51-135	4	11	
Phenol	30		10	ug/L	50.0	1.4 U	60	19-78	2	18	
Pyrene	42		10	ug/L	50.0	2.1 U	83	65-134	0.2	16	
2,4,6-Tribromophenol	*95*			*ug/L*	*100*		*95*	*10-179*			
2-Fluorobiphenyl	*40*			*ug/L*	*50.0*		*80*	*10-149*			
2-Fluorophenol	*58*			*ug/L*	*100*		*58*	*10-110*			
Nitrobenzene-d5	*41*			*ug/L*	*50.0*		*82*	*10-149*			
Phenol-d5	*52*			*ug/L*	*100*		*52*	*10-88*			
Terphenyl-d14	*42*			*ug/L*	*50.0*		*84*	*10-188*			

Organochlorine Pesticides by GC - Quality Control

Batch 4D22011 - EPA 3510C

Blank (4D22011-BLK1) Prepared: 04/22/2014 09:12 Analyzed: 04/24/2014 12:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	**1.3**		0.050	ug/L							
4,4'-DDE	**0.14**		0.050	ug/L							
4,4'-DDT	**1.3**		0.050	ug/L							
Aldrin	**0.27**		0.050	ug/L							
alpha-BHC	0.036	U	0.050	ug/L							
beta-BHC	**0.049**	**J**	0.050	ug/L							
Chlordane-alpha	0.048	U	0.050	ug/L							
Chlordane-gamma	0.042	U	0.050	ug/L							
delta-BHC	**0.36**		0.050	ug/L							
Dieldrin	**0.55**		0.050	ug/L							
Endosulfan I	**0.10**		0.050	ug/L							
Endosulfan II	**0.43**		0.050	ug/L							
Endosulfan sulfate	0.032	U	0.050	ug/L							
Endrin	**0.16**		0.050	ug/L							
Endrin aldehyde	**0.61**		0.050	ug/L							
Endrin ketone	**0.34**		0.050	ug/L							
gamma-BHC	**0.11**		0.050	ug/L							
Heptachlor	**0.22**		0.050	ug/L							
Heptachlor epoxide	0.037	U	0.050	ug/L							
Methoxychlor	**0.087**		0.050	ug/L							
Toxaphene	0.22	U	0.50	ug/L							
2,4,5,6-TCMX	*11*			*ug/L*	*1.00*		*NR*	*44-134*			
Decachlorobiphenyl	*0.055*			*ug/L*	*1.00*		*6*	*37-149*			

Blank (4D22011-BLK2) Prepared: 04/22/2014 09:12 Analyzed: 04/25/2014 13:00

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.044	U	0.050	ug/L							
4,4'-DDE	0.048	U	0.050	ug/L							
4,4'-DDT	0.049	U	0.050	ug/L							
Aldrin	0.041	U	0.050	ug/L							

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QUALITY CONTROL DATA

Organochlorine Pesticides by GC - Quality Control

Batch 4D22011 - EPA 3510C - Continued

Blank (4D22011-BLK2) Continued Prepared: 04/22/2014 09:12 Analyzed: 04/25/2014 13:00

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
alpha-BHC	0.036	U	0.050	ug/L							
beta-BHC	0.036	U	0.050	ug/L							
Chlordane-alpha	0.048	U	0.050	ug/L							
Chlordane-gamma	0.042	U	0.050	ug/L							
delta-BHC	0.048	U	0.050	ug/L							
Dieldrin	0.045	U	0.050	ug/L							
Endosulfan I	0.045	U	0.050	ug/L							
Endosulfan II	0.036	U	0.050	ug/L							
Endosulfan sulfate	0.032	U	0.050	ug/L							
Endrin	0.041	U	0.050	ug/L							
Endrin aldehyde	0.042	U	0.050	ug/L							
Endrin ketone	0.039	U	0.050	ug/L							
gamma-BHC	0.034	U	0.050	ug/L							
Heptachlor	0.030	U	0.050	ug/L							
Heptachlor epoxide	0.037	U	0.050	ug/L							
Methoxychlor	0.025	U	0.050	ug/L							
Toxaphene	0.22	U	0.50	ug/L							
2,4,5,6-TCMX	*0.85*			*ug/L*	*1.00*		*85*	*44-134*			
Decachlorobiphenyl	*0.94*			*ug/L*	*1.00*		*94*	*37-149*			

LCS (4D22011-BS1) Prepared: 04/22/2014 09:12 Analyzed: 04/24/2014 12:57

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	92	B	0.050	ug/L	1.00		NR	37-139			
Dieldrin	90	B	0.050	ug/L	1.00		NR	46-132			
Endrin	92	B	0.050	ug/L	1.00		NR	43-133			
2,4,5,6-TCMX	*84*			*ug/L*	*1.00*		*NR*	*44-134*			
Decachlorobiphenyl	*79*			*ug/L*	*1.00*		*NR*	*37-149*			

LCS (4D22011-BS2) Prepared: 04/22/2014 09:12 Analyzed: 04/25/2014 14:37

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.91	B	0.050	ug/L	1.00		91	37-139			
Dieldrin	0.92	B	0.050	ug/L	1.00		92	46-132			
Endrin	0.94	B	0.050	ug/L	1.00		94	43-133			
2,4,5,6-TCMX	*0.81*			*ug/L*	*1.00*		*81*	*44-134*			
Decachlorobiphenyl	*0.89*			*ug/L*	*1.00*		*89*	*37-149*			

Matrix Spike (4D22011-MS1) Prepared: 04/22/2014 09:12 Analyzed: 04/24/2014 13:11

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	14	B	0.050	ug/L	1.00	0.049 U	NR	37-139			
Dieldrin	13	B	0.050	ug/L	1.00	0.045 U	NR	46-132			
Endrin	13	B	0.050	ug/L	1.00	0.041 U	NR	43-133			
2,4,5,6-TCMX	*12*			*ug/L*	*1.00*		*NR*	*44-134*			
Decachlorobiphenyl	*11*			*ug/L*	*1.00*		*NR*	*37-149*			

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QUALITY CONTROL DATA

Organochlorine Pesticides by GC - Quality Control

Batch 4D22011 - EPA 3510C - Continued

Matrix Spike (4D22011-MS2) Prepared: 04/22/2014 09:12 Analyzed: 04/25/2014 13:27

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.97	B	0.050	ug/L	1.00	0.049 U	97	37-139			
Dieldrin	0.82	B	0.050	ug/L	1.00	0.045 U	82	46-132			
Endrin	0.84	B	0.050	ug/L	1.00	0.041 U	84	43-133			
2,4,5,6-TCMX	*0.76*			*ug/L*	*1.00*		*76*	*44-134*			
Decachlorobiphenyl	*0.80*			*ug/L*	*1.00*		*80*	*37-149*			

Matrix Spike Dup (4D22011-MSD2) Prepared: 04/22/2014 09:12 Analyzed: 04/25/2014 13:40

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.95	B	0.050	ug/L	1.00	0.049 U	95	37-139	2	26	
Dieldrin	0.79	B	0.050	ug/L	1.00	0.045 U	79	46-132	4	27	
Endrin	0.83	B	0.050	ug/L	1.00	0.041 U	83	43-133	1	26	
2,4,5,6-TCMX	*0.97*			*ug/L*	*1.00*		*97*	*44-134*			
Decachlorobiphenyl	*1.0*			*ug/L*	*1.00*		*103*	*37-149*			

Batch 4D22022 - EPA 3550C

Blank (4D22022-BLK1) Prepared: 04/22/2014 11:06 Analyzed: 04/23/2014 11:32

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.00072	U	0.0017	mg/kg wet							
4,4'-DDE	0.00077	U	0.0017	mg/kg wet							
4,4'-DDT	0.00080	U	0.0017	mg/kg wet							
Aldrin	0.00081	U	0.0017	mg/kg wet							
alpha-BHC	0.0012	U	0.0017	mg/kg wet							
beta-BHC	0.0017	U	0.0017	mg/kg wet							
Chlordane-alpha	0.00062	U	0.0017	mg/kg wet							
Chlordane-gamma	0.00072	U	0.0017	mg/kg wet							
delta-BHC	0.00084	U	0.0017	mg/kg wet							
Dieldrin	0.00076	U	0.0017	mg/kg wet							
Endosulfan I	0.00076	U	0.0017	mg/kg wet							
Endosulfan II	0.00096	U	0.0017	mg/kg wet							
Endosulfan sulfate	0.0010	U	0.0017	mg/kg wet							
Endrin	0.00076	U	0.0017	mg/kg wet							
Endrin aldehyde	0.00080	U	0.0017	mg/kg wet							
Endrin ketone	0.00075	U	0.0017	mg/kg wet							
gamma-BHC	0.0011	U	0.0017	mg/kg wet							
Heptachlor	0.00079	U	0.0017	mg/kg wet							
Heptachlor epoxide	0.00075	U	0.0017	mg/kg wet							
Methoxychlor	0.00098	U	0.0017	mg/kg wet							
Toxaphene	0.010	U	0.017	mg/kg wet							
2,4,5,6-TCMX	*0.032*			*mg/kg wet*	*0.0333*		*97*	*59-137*			
Decachlorobiphenyl	*0.030*			*mg/kg wet*	*0.0333*		*90*	*60-140*			

LCS (4D22022-BS1) Prepared: 04/22/2014 11:06 Analyzed: 04/23/2014 11:46

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.033		0.0017	mg/kg wet	0.0333		99	38-142			

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QUALITY CONTROL DATA

Organochlorine Pesticides by GC - Quality Control

Batch 4D22022 - EPA 3550C - Continued

LCS (4D22022-BS1) Continued Prepared: 04/22/2014 11:06 Analyzed: 04/23/2014 11:46

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dieldrin	0.032		0.0017	mg/kg wet	0.0333		97	51-129			
Endrin	0.033		0.0017	mg/kg wet	0.0333		99	51-126			
2,4,5,6-TCMX	*0.030*			*mg/kg wet*	*0.0333*		*91*	*59-137*			
Decachlorobiphenyl	*0.029*			*mg/kg wet*	*0.0333*		*87*	*60-140*			

Matrix Spike (4D22022-MS1) Prepared: 04/22/2014 11:06 Analyzed: 04/23/2014 11:59

Source: C404171-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.041		0.0020	mg/kg dry	0.0396	0.00095 U	104	38-142			
Dieldrin	0.038		0.0020	mg/kg dry	0.0396	0.00090 U	96	51-129			
Endrin	0.039		0.0020	mg/kg dry	0.0396	0.00090 U	99	51-126			
2,4,5,6-TCMX	*0.035*			*mg/kg dry*	*0.0396*		*89*	*59-137*			
Decachlorobiphenyl	*0.034*			*mg/kg dry*	*0.0396*		*85*	*60-140*			

Matrix Spike Dup (4D22022-MSD1) Prepared: 04/22/2014 11:06 Analyzed: 04/23/2014 12:12

Source: C404171-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.045		0.0020	mg/kg dry	0.0396	0.00095 U	115	38-142	10	42	
Dieldrin	0.042		0.0020	mg/kg dry	0.0396	0.00090 U	105	51-129	9	40	
Endrin	0.043		0.0020	mg/kg dry	0.0396	0.00090 U	109	51-126	9	33	
2,4,5,6-TCMX	*0.040*			*mg/kg dry*	*0.0396*		*100*	*59-137*			
Decachlorobiphenyl	*0.038*			*mg/kg dry*	*0.0396*		*96*	*60-140*			

Polychlorinated Biphenyls by GC - Quality Control

Batch 4D22014 - EPA 3510C

Blank (4D22014-BLK1) Prepared: 04/22/2014 09:29 Analyzed: 04/24/2014 12:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.43	U	0.50	ug/L							
PCB-1221	0.37	U	0.50	ug/L							
PCB-1232	0.45	U	0.50	ug/L							
PCB-1248	0.014	U	0.50	ug/L							
PCB-1254	0.37	U	0.50	ug/L							
PCB-1260	0.45	U	0.50	ug/L							
2,4,5,6-TCMX	*0.85*			*ug/L*	*1.00*		*85*	*45-151*			
Decachlorobiphenyl	*0.94*			*ug/L*	*1.00*		*94*	*42-159*			

LCS (4D22014-BS1) Prepared: 04/22/2014 09:29 Analyzed: 04/24/2014 13:37

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	11		0.50	ug/L	10.0		113	66-149			
PCB-1260	11		0.50	ug/L	10.0		107	64-150			
2,4,5,6-TCMX	*1.6*			*ug/L*	*1.00*		*162*	*45-151*			*QS-03*
Decachlorobiphenyl	*1.4*			*ug/L*	*1.00*		*136*	*42-159*			

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QUALITY CONTROL DATA

Polychlorinated Biphenyls by GC - Quality Control

Batch 4D22014 - EPA 3510C - Continued

Matrix Spike (4D22014-MS1) Prepared: 04/22/2014 09:29 Analyzed: 04/24/2014 13:51

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	17		0.50	ug/L	10.0	0.43 U	171	66-149			QM-07
PCB-1260	13		0.50	ug/L	10.0	0.45 U	126	64-150			
2,4,5,6-TCMX	*1.1*			*ug/L*	*1.00*		*109*	*45-151*			
Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*111*	*42-159*			

Matrix Spike Dup (4D22014-MSD1) Prepared: 04/22/2014 09:29 Analyzed: 04/24/2014 14:04

Source: C404428-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	17		0.50	ug/L	10.0	0.43 U	166	66-149	3	21	QM-07
PCB-1260	12		0.50	ug/L	10.0	0.45 U	121	64-150	4	18	
2,4,5,6-TCMX	*1.2*			*ug/L*	*1.00*		*120*	*45-151*			
Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*109*	*42-159*			

Batch 4D24031 - EPA 3510C

Blank (4D24031-BLK1) Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 20:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.43	U	0.50	ug/L							
PCB-1221	0.37	U	0.50	ug/L							
PCB-1232	0.45	U	0.50	ug/L							
PCB-1248	0.014	U	0.50	ug/L							
PCB-1254	0.37	U	0.50	ug/L							
PCB-1260	0.45	U	0.50	ug/L							
2,4,5,6-TCMX	*0.85*			*ug/L*	*1.00*		*85*	*45-151*			
Decachlorobiphenyl	*0.62*			*ug/L*	*1.00*		*62*	*42-159*			

LCS (4D24031-BS1) Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 21:06

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	10		0.50	ug/L	10.0		103	66-149			
PCB-1260	9.4		0.50	ug/L	10.0		94	64-150			
2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*104*	*45-151*			
Decachlorobiphenyl	*0.92*			*ug/L*	*1.00*		*92*	*42-159*			

Matrix Spike (4D24031-MS1) Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 21:19

Source: C404864-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	11		0.50	ug/L	10.0	0.43 U	107	66-149			
PCB-1260	9.9		0.50	ug/L	10.0	0.45 U	99	64-150			
2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*103*	*45-151*			
Decachlorobiphenyl	*0.90*			*ug/L*	*1.00*		*90*	*42-159*			

Matrix Spike Dup (4D24031-MSD1) Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 21:32

Source: C404864-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	11		0.50	ug/L	10.0	0.43 U	107	66-149	0.3	21	

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QUALITY CONTROL DATA

Polychlorinated Biphenyls by GC - Quality Control

Batch 4D24031 - EPA 3510C - Continued

Matrix Spike Dup (4D24031-MSD1) Continued Prepared: 04/24/2014 16:30 Analyzed: 04/29/2014 21:32

Source: C404864-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1260	10		0.50	ug/L	10.0	0.45 U	103	64-150	4	18	
2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*101*	*45-151*			
Decachlorobiphenyl	*0.90*			*ug/L*	*1.00*		*90*	*42-159*			

Gasoline Range Organics by GC - Quality Control

Batch 4D22036 - EPA 5035

Blank (4D22036-BLK1) Prepared: 04/22/2014 14:57 Analyzed: 04/22/2014 18:06

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	1.4	U	5.5	mg/kg wet							
2,5-Dibromotoluene	*13*			*mg/kg wet*	*10.0*		*129*	*59-168*			

LCS (4D22036-BS1) Prepared: 04/22/2014 14:57 Analyzed: 04/22/2014 17:35

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	50		5.5	mg/kg wet	50.0		100	51-115			
2,5-Dibromotoluene	*13*			*mg/kg wet*	*10.0*		*134*	*59-168*			

Matrix Spike (4D22036-MS1) Prepared: 04/22/2014 14:57 Analyzed: 04/22/2014 18:37

Source: C405167-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	48		5.5	mg/kg wet	50.0	1.4 U	96	45-162			
2,5-Dibromotoluene	*11*			*mg/kg wet*	*10.0*		*114*	*59-168*			

Matrix Spike Dup (4D22036-MSD1) Prepared: 04/22/2014 14:57 Analyzed: 04/22/2014 19:09

Source: C405167-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	48		5.5	mg/kg wet	50.0	1.4 U	96	45-162	0.3	24	
2,5-Dibromotoluene	*11*			*mg/kg wet*	*10.0*		*115*	*59-168*			

Batch 4D22042 - EPA 5030B

Blank (4D22042-BLK1) Prepared: 04/22/2014 16:19 Analyzed: 04/23/2014 02:25

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.011	U	0.055	mg/L							
2,5-Dibromotoluene	*0.103*			*mg/L*	*0.100*		*103*	*70-130*			

LCS (4D22042-BS1) Prepared: 04/22/2014 16:19 Analyzed: 04/23/2014 01:54

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.482		0.055	mg/L	0.500		96	58-152			
2,5-Dibromotoluene	*0.103*			*mg/L*	*0.100*		*103*	*70-130*			

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QUALITY CONTROL DATA

Gasoline Range Organics by GC - Quality Control

Batch 4D22042 - EPA 5030B - Continued

Matrix Spike (4D22042-MS1) Prepared: 04/22/2014 16:19 Analyzed: 04/23/2014 02:56

Source: C405167-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.469		0.055	mg/L	0.500	0.014	91	20-185			
2,5-Dibromotoluene	*0.103*			*mg/L*	*0.100*		*103*	*70-130*			

Matrix Spike Dup (4D22042-MSD1) Prepared: 04/22/2014 16:19 Analyzed: 04/23/2014 03:27

Source: C405167-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.486		0.055	mg/L	0.500	0.014	94	20-185	4	26	
2,5-Dibromotoluene	*0.103*			*mg/L*	*0.100*		*103*	*70-130*			

Diesel Range Organics by GC - Quality Control

Batch 4D21008 - EPA 3550C

Blank (4D21008-BLK1) Prepared: 04/21/2014 09:35 Analyzed: 04/21/2014 22:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	1.7	U	3.3	mg/kg wet							
o-Terphenyl	*1.9*			*mg/kg wet*	*1.67*		*111*	*51-138*			

LCS (4D21008-BS1) Prepared: 04/21/2014 09:35 Analyzed: 04/21/2014 23:18

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	32		3.3	mg/kg wet	33.3		95	37-116			
o-Terphenyl	*2.0*			*mg/kg wet*	*1.67*		*122*	*51-138*			

Matrix Spike (4D21008-MS1) Prepared: 04/21/2014 09:35 Analyzed: 04/21/2014 23:48

Source: C404170-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	34		3.9	mg/kg dry	39.5	2.0 U	87	37-116			
o-Terphenyl	*2.1*			*mg/kg dry*	*1.97*		*107*	*51-138*			

Matrix Spike Dup (4D21008-MSD1) Prepared: 04/21/2014 09:35 Analyzed: 04/22/2014 00:19

Source: C404170-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	37		3.9	mg/kg dry	39.5	2.0 U	95	37-116	8	45	
o-Terphenyl	*2.3*			*mg/kg dry*	*1.97*		*119*	*51-138*			

Batch 4D22007 - EPA 3510C

Blank (4D22007-BLK1) Prepared: 04/22/2014 12:00 Analyzed: 04/23/2014 15:08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.060	U	0.10	mg/L							
o-Terphenyl	*0.049*			*mg/L*	*0.0500*		*99*	*41-126*			

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QUALITY CONTROL DATA

Diesel Range Organics by GC - Quality Control

Batch 4D22007 - EPA 3510C - Continued

LCS (4D22007-BS1) Prepared: 04/22/2014 12:00 Analyzed: 04/23/2014 15:38

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.41		0.10	mg/L	1.00		41	10-108			
o-Terphenyl	*0.044*			*mg/L*	*0.0500*		*87*	*41-126*			

Matrix Spike (4D22007-MS1) Prepared: 04/22/2014 12:00 Analyzed: 04/23/2014 16:07

Source: C405072-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.33		0.10	mg/L	1.00	0.060 U	33	10-108			
o-Terphenyl	*0.035*			*mg/L*	*0.0500*		*70*	*41-126*			

Matrix Spike Dup (4D22007-MSD1) Prepared: 04/22/2014 12:00 Analyzed: 04/23/2014 16:37

Source: C405072-07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.52		0.10	mg/L	1.00	0.060 U	52	10-108	43	25	QM-07
o-Terphenyl	*0.050*			*mg/L*	*0.0500*		*100*	*41-126*			

Batch 4D23014 - EPA 3550C

Blank (4D23014-BLK1) Prepared: 04/23/2014 10:43 Analyzed: 04/23/2014 21:39

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	1.7	U	3.3	mg/kg wet							
o-Terphenyl	*1.6*			*mg/kg wet*	*1.67*		*98*	*51-138*			

LCS (4D23014-BS1) Prepared: 04/23/2014 10:43 Analyzed: 04/23/2014 22:09

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	29		3.3	mg/kg wet	33.3		87	37-116			
o-Terphenyl	*1.9*			*mg/kg wet*	*1.67*		*116*	*51-138*			

Matrix Spike (4D23014-MS1) Prepared: 04/23/2014 10:43 Analyzed: 04/23/2014 22:38

Source: C405132-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	34		3.8	mg/kg dry	38.3	3.2	80	37-116			
o-Terphenyl	*2.1*			*mg/kg dry*	*1.91*		*108*	*51-138*			

Matrix Spike Dup (4D23014-MSD1) Prepared: 04/23/2014 10:43 Analyzed: 04/23/2014 23:08

Source: C405132-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	38		3.8	mg/kg dry	38.3	3.2	90	37-116	11	45	
o-Terphenyl	*2.4*			*mg/kg dry*	*1.91*		*126*	*51-138*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B - Continued

Blank (4D21024-BLK1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 11:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2.10	U	10.0	mg/kg wet							
Antimony	0.110	U	1.00	mg/kg wet							
Arsenic	0.100	U	0.500	mg/kg wet							
Barium	0.100	U	0.500	mg/kg wet							
Beryllium	0.0120	U	0.0500	mg/kg wet							
Cadmium	0.00960	U	0.0500	mg/kg wet							
Calcium	**6.23**	**J**	25.0	mg/kg wet							
Chromium	0.100	U	0.500	mg/kg wet							
Cobalt	0.100	U	0.500	mg/kg wet							
Copper	0.190	U	0.500	mg/kg wet							
Iron	**0.729**	**J**	2.50	mg/kg wet							
Lead	0.120	U	0.500	mg/kg wet							
Magnesium	**1.72**	**J**	25.0	mg/kg wet							
Manganese	0.100	U	0.500	mg/kg wet							
Nickel	0.360	U	2.50	mg/kg wet							
Potassium	4.00	U	25.0	mg/kg wet							
Selenium	0.100	U	0.500	mg/kg wet							
Silver	0.100	U	0.500	mg/kg wet							
Sodium	6.00	U	25.0	mg/kg wet							
Thallium	0.100	U	0.500	mg/kg wet							
Vanadium	0.100	U	0.500	mg/kg wet							
Zinc	1.10	U	2.50	mg/kg wet							

LCS (4D21024-BS1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 11:48

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	91.6		10.0	mg/kg wet	100		92	80-120			
Antimony	8.46		1.00	mg/kg wet	10.0		85	80-120			
Arsenic	8.74		0.500	mg/kg wet	10.0		87	80-120			
Barium	9.02		0.500	mg/kg wet	10.0		90	80-120			
Beryllium	0.936		0.0500	mg/kg wet	1.00		94	80-120			
Cadmium	0.896		0.0500	mg/kg wet	1.00		90	80-120			
Calcium	97.1	B	25.0	mg/kg wet	100		97	80-120			
Chromium	9.19		0.500	mg/kg wet	10.0		92	80-120			
Cobalt	9.14		0.500	mg/kg wet	10.0		91	80-120			
Copper	9.13		0.500	mg/kg wet	10.0		91	80-120			
Iron	46.7	B	2.50	mg/kg wet	50.0		93	80-120			
Lead	8.94		0.500	mg/kg wet	10.0		89	80-120			
Magnesium	94.2	B	25.0	mg/kg wet	100		94	80-120			
Manganese	9.27		0.500	mg/kg wet	10.0		93	80-120			
Nickel	9.20		2.50	mg/kg wet	10.0		92	80-120			
Potassium	452		25.0	mg/kg wet	500		90	80-120			
Selenium	8.72		0.500	mg/kg wet	10.0		87	80-120			
Silver	9.59		0.500	mg/kg wet	10.0		96	80-120			
Sodium	458		25.0	mg/kg wet	500		92	80-120			
Thallium	8.95		0.500	mg/kg wet	10.0		89	80-120			
Vanadium	9.41		0.500	mg/kg wet	10.0		94	80-120			
Zinc	9.09		2.50	mg/kg wet	10.0		91	80-120			

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B - Continued

Matrix Spike (4D21024-MS1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:29

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	6970		12.3	mg/kg dry	124	4350	NR	75-125			QM-05
Antimony	6.87		1.23	mg/kg dry	12.4	0.409	52	75-125			QM-05
Arsenic	12.2		0.613	mg/kg dry	12.4	1.94	83	75-125			
Barium	53.8		0.613	mg/kg dry	12.4	41.7	98	75-125			
Beryllium	1.50		0.0613	mg/kg dry	1.24	0.325	95	75-125			
Cadmium	1.17		0.0613	mg/kg dry	1.24	0.0275	92	75-125			
Calcium	1110	B	30.7	mg/kg dry	124	1080	30	75-125			QM-05
Chromium	14.8		0.613	mg/kg dry	12.4	3.83	88	75-125			
Cobalt	13.0		0.613	mg/kg dry	12.4	1.42	93	75-125			
Copper	13.6		0.613	mg/kg dry	12.4	2.23	92	75-125			
Iron	4650	B	3.07	mg/kg dry	61.9	4710	NR	75-125			QM-05
Lead	31.4		0.613	mg/kg dry	12.4	46.9	NR	75-125			QM-05
Magnesium	474	B	30.7	mg/kg dry	124	364	89	75-125			
Manganese	163		0.613	mg/kg dry	12.4	159	37	75-125			QM-05
Nickel	13.0		3.07	mg/kg dry	12.4	0.930	97	75-125			
Potassium	859		30.7	mg/kg dry	619	295	91	75-125			
Selenium	10.1		0.613	mg/kg dry	12.4	0.123 U	82	75-125			
Silver	11.2		0.613	mg/kg dry	12.4	0.123 U	90	75-125			
Sodium	563		30.7	mg/kg dry	619	10.1	89	75-125			
Thallium	8.44		0.613	mg/kg dry	12.4	0.123 U	68	75-125			QM-05
Vanadium	20.4		0.613	mg/kg dry	12.4	8.80	94	75-125			
Zinc	43.5		3.07	mg/kg dry	12.4	30.6	105	75-125			

Matrix Spike Dup (4D21024-MSD1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:31

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	7100		12.3	mg/kg dry	123	4350	NR	75-125	2	20	QM-05
Antimony	7.29		1.23	mg/kg dry	12.3	0.409	56	75-125	6	20	QM-05
Arsenic	12.5		0.613	mg/kg dry	12.3	1.94	86	75-125	2	20	
Barium	56.3		0.613	mg/kg dry	12.3	41.7	119	75-125	4	20	
Beryllium	1.53		0.0613	mg/kg dry	1.23	0.325	98	75-125	2	20	
Cadmium	1.18		0.0613	mg/kg dry	1.23	0.0275	94	75-125	1	20	
Calcium	1100	B	30.7	mg/kg dry	123	1080	20	75-125	1	20	QM-05
Chromium	15.0		0.613	mg/kg dry	12.3	3.83	91	75-125	2	20	
Cobalt	13.3		0.613	mg/kg dry	12.3	1.42	97	75-125	2	20	
Copper	13.9		0.613	mg/kg dry	12.3	2.23	95	75-125	2	20	
Iron	4880	B	3.07	mg/kg dry	61.3	4710	269	75-125	5	20	QM-05
Lead	31.2		0.613	mg/kg dry	12.3	46.9	NR	75-125	0.4	20	QM-05
Magnesium	432	B	30.7	mg/kg dry	123	364	55	75-125	9	20	QM-05
Manganese	169		0.613	mg/kg dry	12.3	159	83	75-125	3	20	
Nickel	13.3		3.07	mg/kg dry	12.3	0.930	101	75-125	2	20	
Potassium	866		30.7	mg/kg dry	613	295	93	75-125	0.8	20	
Selenium	10.6		0.613	mg/kg dry	12.3	0.123 U	86	75-125	5	20	
Silver	11.5		0.613	mg/kg dry	12.3	0.123 U	93	75-125	2	20	
Sodium	553		30.7	mg/kg dry	613	10.1	89	75-125	2	20	
Thallium	8.85		0.613	mg/kg dry	12.3	0.123 U	72	75-125	5	20	QM-05
Vanadium	21.0		0.613	mg/kg dry	12.3	8.80	100	75-125	3	20	
Zinc	45.6		3.07	mg/kg dry	12.3	30.6	122	75-125	5	20	

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21024 - EPA 3050B - Continued

Post Spike (4D21024-PS1) Prepared: 04/21/2014 13:03 Analyzed: 04/23/2014 12:33

Source: C404826-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	73.4		0.200	mg/L	2.00	73.1	17	80-120			QM-08
Antimony	0.189		0.0200	mg/L	0.200	0.00688	91	80-120			
Arsenic	0.216		0.0100	mg/L	0.200	0.0327	91	80-120			
Barium	0.871		0.0100	mg/L	0.200	0.701	85	80-120			
Beryllium	0.0235		0.00100	mg/L	0.0200	0.00546	90	80-120			
Cadmium	0.0192		0.00100	mg/L	0.0200	0.000463	94	80-120			
Calcium	20.3	B	0.500	mg/L	2.00	18.1	109	80-120			
Chromium	0.242		0.0100	mg/L	0.200	0.0643	89	80-120			
Cobalt	0.211		0.0100	mg/L	0.200	0.0238	94	80-120			
Copper	0.219		0.0100	mg/L	0.200	0.0375	91	80-120			
Iron	78.6	B	0.0500	mg/L	1.00	79.2	NR	80-120			QM-08
Lead	0.962		0.0100	mg/L	0.200	0.789	87	80-120			
Magnesium	7.74	B	0.500	mg/L	2.00	6.11	81	80-120			
Manganese	2.79		0.0100	mg/L	0.200	2.67	64	80-120			QM-08
Nickel	0.204		0.0500	mg/L	0.200	0.0156	94	80-120			
Potassium	14.1		0.500	mg/L	10.0	4.95	92	80-120			
Selenium	0.182		0.0100	mg/L	0.200	0.00118	91	80-120			
Silver	0.182		0.0100	mg/L	0.200	-0.00250	92	80-120			
Sodium	9.24		0.500	mg/L	10.0	0.170	91	80-120			
Thallium	0.142		0.0100	mg/L	0.200	-0.0437	93	80-120			
Vanadium	0.331		0.0100	mg/L	0.200	0.148	92	80-120			
Zinc	0.685		0.0500	mg/L	0.200	0.513	86	80-120			

Batch 4D24033 - EPA 7470A

Blank (4D24033-BLK1) Prepared: 04/24/2014 12:42 Analyzed: 04/25/2014 13:09

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.170	U	0.200	ug/L							

LCS (4D24033-BS1) Prepared: 04/24/2014 12:42 Analyzed: 04/25/2014 13:16

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.75		0.200	ug/L	5.00		95	80-120			

Matrix Spike (4D24033-MS1) Prepared: 04/24/2014 12:42 Analyzed: 04/25/2014 13:21

Source: C403093-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.53		0.200	ug/L	5.00	0.170 U	91	75-125			

Matrix Spike Dup (4D24033-MSD1) Prepared: 04/24/2014 12:42 Analyzed: 04/25/2014 13:23

Source: C403093-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.48		0.200	ug/L	5.00	0.170 U	90	75-125	1	25	

Post Spike (4D24033-PS1) Prepared: 04/24/2014 12:42 Analyzed: 04/25/2014 13:25

Source: C403093-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

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QUALITY CONTROL DATA

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4D24033 - EPA 7470A - Continued

Post Spike (4D24033-PS1) Continued Prepared: 04/24/2014 12:42 Analyzed: 04/25/2014 13:25

Source: C403093-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.01		0.200	ug/L	5.00	-0.0430	81	75-125			

Batch 4D29012 - EPA 7471B

Blank (4D29012-BLK1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:21

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.00690	U	0.0240	mg/kg wet							

LCS (4D29012-BS1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:23

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.635		0.0240	mg/kg wet	0.600		106	80-120			

Matrix Spike (4D29012-MS1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:27

Source: C404171-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.738		0.0273	mg/kg dry	0.641	0.0345	110	80-120			

Matrix Spike Dup (4D29012-MSD1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:29

Source: C404171-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.804		0.0273	mg/kg dry	0.684	0.0345	113	80-120	9	20	

Post Spike (4D29012-PS1) Prepared: 04/29/2014 10:11 Analyzed: 04/30/2014 16:32

Source: C404171-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.90		0.200	ug/L	5.00	0.244	113	75-125			

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D18018 - EPA 3005A

Blank (4D18018-BLK1) Prepared: 04/18/2014 10:05 Analyzed: 04/22/2014 11:44

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Cobalt	0.100	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (4D18018-BS1) Prepared: 04/18/2014 10:05 Analyzed: 04/22/2014 11:48

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	209		2.00	ug/L	200		105	80-120			
Cobalt	199		1.00	ug/L	200		99	80-120			
Thallium	218		1.00	ug/L	200		109	80-120			

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QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D18018 - EPA 3005A - Continued

Matrix Spike (4D18018-MS1) Prepared: 04/18/2014 10:05 Analyzed: 04/22/2014 11:56

Source: C404754-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	216		2.00	ug/L	200	1.49	107	75-125			
Cobalt	213		1.00	ug/L	200	1.30	106	75-125			
Thallium	179		1.00	ug/L	200	0.110 U	90	75-125			

Matrix Spike Dup (4D18018-MSD1) Prepared: 04/18/2014 10:05 Analyzed: 04/22/2014 12:18

Source: C404754-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	223		2.00	ug/L	200	1.49	111	75-125	3	20	
Cobalt	213		1.00	ug/L	200	1.30	106	75-125	0.08	20	
Thallium	182		1.00	ug/L	200	0.110 U	91	75-125	2	20	

Post Spike (4D18018-PS1) Prepared: 04/18/2014 10:05 Analyzed: 04/22/2014 12:22

Source: C404754-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	206		2.00	ug/L	200	1.49	102	80-120			
Cobalt	206		1.00	ug/L	200	1.30	102	80-120			
Thallium	175		1.00	ug/L	200	0.0545	88	80-120			

Batch 4D21018 - EPA 3005A

Blank (4D21018-BLK1) Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 12:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	29.0	U	100	ug/L							
Arsenic	5.40	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Calcium	39.0	U	100	ug/L							
Chromium	1.40	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Iron	22.0	U	50.0	ug/L							
Lead	2.10	U	10.0	ug/L							
Magnesium	23.0	U	100	ug/L							
Manganese	1.10	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Potassium	150	U	500	ug/L							
Selenium	5.00	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Sodium	400	U	500	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (4D21018-BS1) Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 12:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2150		100	ug/L	2000		108	80-120			
Arsenic	213		10.0	ug/L	200		107	80-120			

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QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21018 - EPA 3005A - Continued

LCS (4D21018-BS1) Continued Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 12:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Barium	214		10.0	ug/L	200		107	80-120			
Beryllium	22.1		1.00	ug/L	20.0		110	80-120			
Cadmium	21.3		1.00	ug/L	20.0		106	80-120			
Calcium	2160		100	ug/L	2000		108	80-120			
Chromium	212		10.0	ug/L	200		106	80-120			
Copper	212		10.0	ug/L	200		106	80-120			
Iron	1090		50.0	ug/L	1000		109	80-120			
Lead	211		10.0	ug/L	200		105	80-120			
Magnesium	2130		100	ug/L	2000		107	80-120			
Manganese	217		10.0	ug/L	200		108	80-120			
Nickel	215		10.0	ug/L	200		107	80-120			
Potassium	10700		500	ug/L	10000		107	80-120			
Selenium	210		10.0	ug/L	200		105	80-120			
Silver	224		10.0	ug/L	200		112	80-120			
Sodium	10400		500	ug/L	10000		104	80-120			
Vanadium	218		10.0	ug/L	200		109	80-120			
Zinc	210		10.0	ug/L	200		105	80-120			

Matrix Spike (4D21018-MS1) Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 12:58

Source: C403094-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2620		100	ug/L	2000	247	119	75-125			
Arsenic	220		10.0	ug/L	200	5.40 U	110	75-125			
Barium	247		10.0	ug/L	200	34.1	107	75-125			
Beryllium	21.9		1.00	ug/L	20.0	0.100 U	109	75-125			
Cadmium	21.3		1.00	ug/L	20.0	0.360 U	107	75-125			
Calcium	5710		100	ug/L	2000	3630	104	75-125			
Chromium	214		10.0	ug/L	200	1.40 U	107	75-125			
Copper	212		10.0	ug/L	200	1.60 U	106	75-125			
Iron	4680		50.0	ug/L	1000	3690	99	75-125			
Lead	217		10.0	ug/L	200	2.10 U	109	75-125			
Magnesium	3430		100	ug/L	2000	1290	107	75-125			
Manganese	1040		10.0	ug/L	200	855	92	75-125			
Nickel	219		10.0	ug/L	200	2.15	108	75-125			
Potassium	12700		500	ug/L	10000	2120	106	75-125			
Selenium	217		10.0	ug/L	200	5.00 U	108	75-125			
Silver	219		10.0	ug/L	200	1.90 U	110	75-125			
Sodium	15400		500	ug/L	10000	5050	104	75-125			
Vanadium	219		10.0	ug/L	200	1.41	109	75-125			
Zinc	219		10.0	ug/L	200	6.71	106	75-125			

Matrix Spike Dup (4D21018-MSD1) Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 13:09

Source: C403094-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2680		100	ug/L	2000	247	122	75-125	2	20	
Arsenic	228		10.0	ug/L	200	5.40 U	114	75-125	3	20	
Barium	252		10.0	ug/L	200	34.1	109	75-125	2	20	
Beryllium	22.5		1.00	ug/L	20.0	0.100 U	112	75-125	3	20	
Cadmium	21.9		1.00	ug/L	20.0	0.360 U	109	75-125	3	20	

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QUALITY CONTROL DATA

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4D21018 - EPA 3005A - Continued

Matrix Spike Dup (4D21018-MSD1) Continued Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 13:09

Source: C403094-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Calcium	5800		100	ug/L	2000	3630	108	75-125	2	20	
Chromium	218		10.0	ug/L	200	1.40 U	109	75-125	2	20	
Copper	216		10.0	ug/L	200	1.60 U	108	75-125	2	20	
Iron	4750		50.0	ug/L	1000	3690	106	75-125	2	20	
Lead	222		10.0	ug/L	200	2.10 U	111	75-125	2	20	
Magnesium	3530		100	ug/L	2000	1290	112	75-125	3	20	
Manganese	1050		10.0	ug/L	200	855	100	75-125	2	20	
Nickel	224		10.0	ug/L	200	2.15	111	75-125	2	20	
Potassium	12900		500	ug/L	10000	2120	108	75-125	2	20	
Selenium	221		10.0	ug/L	200	5.00 U	110	75-125	2	20	
Silver	224		10.0	ug/L	200	1.90 U	112	75-125	2	20	
Sodium	15600		500	ug/L	10000	5050	106	75-125	1	20	
Vanadium	224		10.0	ug/L	200	1.41	112	75-125	2	20	
Zinc	224		10.0	ug/L	200	6.71	109	75-125	2	20	

Post Spike (4D21018-PS1) Prepared: 04/21/2014 11:20 Analyzed: 04/28/2014 13:11

Source: C403094-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	2.24		0.100	mg/L	2.00	0.247	99	80-120			
Arsenic	0.201		0.0100	mg/L	0.200	-0.000421	101	80-120			
Barium	0.230		0.0100	mg/L	0.200	0.0341	98	80-120			
Beryllium	0.0199		0.00100	mg/L	0.0200	5.43E-5	99	80-120			
Cadmium	0.0197		0.00100	mg/L	0.0200	9.58E-5	98	80-120			
Calcium	5.45		0.100	mg/L	2.00	3.63	91	80-120			
Chromium	0.198		0.0100	mg/L	0.200	0.000467	99	80-120			
Copper	0.195		0.0100	mg/L	0.200	0.000809	97	80-120			
Iron	4.48		0.0500	mg/L	1.00	3.69	79	80-120			QM-08
Lead	0.198		0.0100	mg/L	0.200	-0.000303	99	80-120			
Magnesium	3.25		0.100	mg/L	2.00	1.29	98	80-120			
Manganese	0.998		0.0100	mg/L	0.200	0.855	71	80-120			QM-08
Nickel	0.201		0.0100	mg/L	0.200	0.00215	99	80-120			
Potassium	11.7		0.500	mg/L	10.0	2.12	96	80-120			
Selenium	0.197		0.0100	mg/L	0.200	0.00395	96	80-120			
Silver	0.202		0.0100	mg/L	0.200	0.000692	100	80-120			
Sodium	14.5		0.500	mg/L	10.0	5.05	94	80-120			
Vanadium	0.201		0.0100	mg/L	0.200	0.00141	100	80-120			
Zinc	0.202		0.0100	mg/L	0.200	0.00671	98	80-120			

Classical Chemistry Parameters - Quality Control

Batch 4D17030 - NO PREP

Blank (4D17030-BLK1) Prepared: 04/17/2014 14:13 Analyzed: 04/17/2014 14:30

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.0088	U	0.010	mg/L							

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QUALITY CONTROL DATA

Classical Chemistry Parameters - Quality Control

Batch 4D17030 - NO PREP - Continued

LCS (4D17030-BS1) Prepared: 04/17/2014 14:13 Analyzed: 04/17/2014 14:30

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.26		0.010	mg/L	0.249		106	80-120			

Matrix Spike (4D17030-MS1) Prepared: 04/17/2014 14:13 Analyzed: 04/17/2014 14:30

Source: C404171-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.23		0.010	mg/L	0.249	0.0088 U	91	75-125			

Matrix Spike Dup (4D17030-MSD1) Prepared: 04/17/2014 14:13 Analyzed: 04/17/2014 14:30

Source: C404171-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.23		0.010	mg/L	0.249	0.0088 U	92	75-125	0.5	20	

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D25025 - EPA 5030B_MS

Blank (4D25025-BLK1) Prepared: 04/25/2014 12:45 Analyzed: 04/25/2014 14:58

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.0004	U	0.0010	mg/kg wet							
1,1,2,2-Tetrachloroethane	0.0003	U	0.0010	mg/kg wet							
1,1,2-Trichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethene	0.0006	U	0.0010	mg/kg wet							
1,2,4-Trichlorobenzene	0.0008	U	0.0010	mg/kg wet							
1,2-Dibromo-3-chloropropane	0.0006	U	0.0010	mg/kg wet							
1,2-Dibromoethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
1,2-Dichloroethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichloropropane	0.0006	U	0.0010	mg/kg wet							
1,3-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
1,4-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
2-Butanone	0.0018	U	0.0050	mg/kg wet							
2-Hexanone	0.0009	U	0.0050	mg/kg wet							
4-Methyl-2-pentanone	0.0014	U	0.0050	mg/kg wet							
Acetone	0.0017	U	0.0050	mg/kg wet							
Benzene	0.0004	U	0.0010	mg/kg wet							
Bromochloromethane	0.0004	U	0.0010	mg/kg wet							
Bromodichloromethane	0.0004	U	0.0010	mg/kg wet							
Bromoform	0.0003	U	0.0010	mg/kg wet							
Bromomethane	0.0009	U	0.0010	mg/kg wet							
Carbon disulfide	0.0021	U	0.0050	mg/kg wet							
Carbon Tetrachloride	0.0006	U	0.0010	mg/kg wet							
Chlorobenzene	0.0005	U	0.0010	mg/kg wet							
Chloroethane	0.0005	U	0.0010	mg/kg wet							
Chloroform	0.0004	U	0.0010	mg/kg wet							
Chloromethane	0.0006	U	0.0010	mg/kg wet							
cis-1,2-Dichloroethene	0.0005	U	0.0010	mg/kg wet							
cis-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D25025 - EPA 5030B_MS - Continued

Blank (4D25025-BLK1) Continued Prepared: 04/25/2014 12:45 Analyzed: 04/25/2014 14:58

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cyclohexane	0.0005	U	0.0020	mg/kg wet							
Dibromochloromethane	0.0003	U	0.0010	mg/kg wet							
Dichlorodifluoromethane	0.0006	U	0.0010	mg/kg wet							
Ethylbenzene	0.0006	U	0.0010	mg/kg wet							
Freon 113	0.0006	U	0.0010	mg/kg wet							
Isopropylbenzene	0.0005	U	0.0010	mg/kg wet							
Methyl acetate	0.0016	U	0.0020	mg/kg wet							
Methyl cyclohexane	0.0005	U	0.0020	mg/kg wet							
Methylene Chloride	0.0007	U	0.0020	mg/kg wet							
Methyl-tert-Butyl Ether	0.0003	U	0.0010	mg/kg wet							
Styrene	0.0004	U	0.0010	mg/kg wet							
Tetrachloroethene	0.0005	U	0.0010	mg/kg wet							
Toluene	0.0005	U	0.0010	mg/kg wet							
trans-1,2-Dichloroethene	0.0007	U	0.0010	mg/kg wet							
trans-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Trichloroethene	0.0005	U	0.0010	mg/kg wet							
Trichlorofluoromethane	0.0005	U	0.0010	mg/kg wet							
Vinyl chloride	0.0004	U	0.0010	mg/kg wet							
Xylenes (Total)	0.0010	U	0.0020	mg/kg wet							
4-Bromofluorobenzene	*0.045*			*mg/kg wet*	*0.0500*		*91*	*71-126*			
Dibromofluoromethane	*0.041*			*mg/kg wet*	*0.0500*		*82*	*72-133*			
Toluene-d8	*0.042*			*mg/kg wet*	*0.0500*		*85*	*80-123*			

LCS (4D25025-BS1) Prepared: 04/25/2014 12:45 Analyzed: 04/25/2014 13:20

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.022		0.0010	mg/kg wet	0.0200		109	61-124			
Benzene	0.019		0.0010	mg/kg wet	0.0200		95	59-133			
Chlorobenzene	0.019		0.0010	mg/kg wet	0.0200		95	69-121			
Toluene	0.019		0.0010	mg/kg wet	0.0200		95	66-119			
Trichloroethene	0.020		0.0010	mg/kg wet	0.0200		100	71-122			
4-Bromofluorobenzene	*0.045*			*mg/kg wet*	*0.0500*		*91*	*71-126*			
Dibromofluoromethane	*0.043*			*mg/kg wet*	*0.0500*		*86*	*72-133*			
Toluene-d8	*0.043*			*mg/kg wet*	*0.0500*		*86*	*80-123*			

Matrix Spike (4D25025-MS1) Prepared: 04/25/2014 12:45 Analyzed: 04/25/2014 13:53

Source: A402351-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.042		0.0020	mg/kg dry	0.0401	0.0012 U	105	61-124			
Benzene	0.035		0.0020	mg/kg dry	0.0401	0.0008 U	87	59-133			
Chlorobenzene	0.031		0.0020	mg/kg dry	0.0401	0.0010 U	78	69-121			
Toluene	0.034		0.0020	mg/kg dry	0.0401	0.0009 U	84	66-119			
Trichloroethene	0.037		0.0020	mg/kg dry	0.0401	0.0010 U	93	71-122			
4-Bromofluorobenzene	*0.099*			*mg/kg dry*	*0.100*		*99*	*71-126*			
Dibromofluoromethane	*0.092*			*mg/kg dry*	*0.100*		*91*	*72-133*			
Toluene-d8	*0.093*			*mg/kg dry*	*0.100*		*93*	*80-123*			

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QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 4D25025 - EPA 5030B_MS - Continued

Matrix Spike Dup (4D25025-MSD1) Prepared: 04/25/2014 12:45 Analyzed: 04/25/2014 14:25

Source: A402351-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.039		0.0017	mg/kg dry	0.0360	0.0011 U	107	61-124	9	23	
Benzene	0.030		0.0017	mg/kg dry	0.0360	0.0007 U	84	59-133	14	19	
Chlorobenzene	0.028		0.0017	mg/kg dry	0.0360	0.0008 U	77	69-121	12	18	
Toluene	0.030		0.0017	mg/kg dry	0.0360	0.0008 U	83	66-119	12	21	
Trichloroethene	0.034		0.0017	mg/kg dry	0.0360	0.0009 U	94	71-122	9	26	
4-Bromofluorobenzene	*0.087*			*mg/kg dry*	*0.0900*		*96*	*71-126*			
Dibromofluoromethane	*0.081*			*mg/kg dry*	*0.0900*		*90*	*72-133*			
Toluene-d8	*0.084*			*mg/kg dry*	*0.0900*		*93*	*80-123*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D18034 - EPA 3550C_MS

Blank (4D18034-BLK1) Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 10:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1'-Biphenyl	0.073	U	0.33	mg/kg wet							
2,4,5-Trichlorophenol	0.067	U	0.33	mg/kg wet							
2,4,6-Trichlorophenol	0.15	U	0.33	mg/kg wet							
2,4-Dichlorophenol	0.25	U	0.33	mg/kg wet							
2,4-Dimethylphenol	0.23	U	0.33	mg/kg wet							
2,4-Dinitrophenol	0.089	U	0.33	mg/kg wet							
2,4-Dinitrotoluene	0.16	U	0.33	mg/kg wet							
2,6-Dinitrotoluene	0.18	U	0.33	mg/kg wet							
2-Chloronaphthalene	0.098	U	0.33	mg/kg wet							
2-Chlorophenol	0.23	U	0.33	mg/kg wet							
2-Methyl-4,6-dinitrophenol	0.28	U	0.33	mg/kg wet							
2-Methylnaphthalene	0.12	U	0.33	mg/kg wet							
2-Methylphenol	0.11	U	0.33	mg/kg wet							
2-Nitroaniline	0.085	U	0.33	mg/kg wet							
2-Nitrophenol	0.26	U	0.33	mg/kg wet							
3 & 4-Methylphenol	0.25	U	0.33	mg/kg wet							
3,3'-Dichlorobenzidine	0.21	U	0.33	mg/kg wet							
3-Nitroaniline	0.080	U	0.33	mg/kg wet							
4-Bromophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Chloro-3-methylphenol	0.28	U	0.33	mg/kg wet							
4-Chloroaniline	0.065	U	0.33	mg/kg wet							
4-Chlorophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Nitroaniline	0.26	U	0.33	mg/kg wet							
4-Nitrophenol	0.13	U	0.33	mg/kg wet							
Acenaphthene	0.13	U	0.33	mg/kg wet							
Acenaphthylene	0.12	U	0.33	mg/kg wet							
Acetophenone	0.14	U	0.33	mg/kg wet							
Anthracene	0.15	U	0.33	mg/kg wet							
Atrazine	0.074	U	0.33	mg/kg wet							
Benzaldehyde	0.27	U	0.33	mg/kg wet							
Benzo(a)anthracene	0.13	U	0.33	mg/kg wet							
Benzo(a)pyrene	0.078	U	0.33	mg/kg wet							
Benzo(b)fluoranthene	0.11	U	0.33	mg/kg wet							

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D18034 - EPA 3550C_MS - Continued

Blank (4D18034-BLK1) Continued Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 10:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(g,h,i)perylene	0.16	U	0.33	mg/kg wet							
Benzo(k)fluoranthene	0.11	U	0.33	mg/kg wet							
Bis(2-chloroethoxy)methane	0.15	U	0.33	mg/kg wet							
Bis(2-chloroethyl)ether	0.14	U	0.33	mg/kg wet							
Bis(2-chloroisopropyl)ether	0.099	U	0.33	mg/kg wet							
Bis(2-ethylhexyl)phthalate	0.13	U	0.33	mg/kg wet							
Butylbenzylphthalate	0.14	U	0.33	mg/kg wet							
Caprolactam	0.30	U	0.33	mg/kg wet							
Carbazole	0.12	U	0.33	mg/kg wet							
Chrysene	0.13	U	0.33	mg/kg wet							
Dibenzo(a,h)anthracene	0.14	U	0.33	mg/kg wet							
Dibenzofuran	0.13	U	0.33	mg/kg wet							
Diethylphthalate	0.13	U	0.33	mg/kg wet							
Dimethylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-butylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-octylphthalate	0.13	U	0.33	mg/kg wet							
Fluoranthene	0.11	U	0.33	mg/kg wet							
Fluorene	0.14	U	0.33	mg/kg wet							
Hexachlorobenzene	0.12	U	0.33	mg/kg wet							
Hexachlorobutadiene	0.13	U	0.33	mg/kg wet							
Hexachlorocyclopentadiene	0.15	U	0.33	mg/kg wet							
Hexachloroethane	0.10	U	0.33	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.14	U	0.33	mg/kg wet							
Isophorone	0.17	U	0.33	mg/kg wet							
Naphthalene	0.12	U	0.33	mg/kg wet							
Nitrobenzene	0.15	U	0.33	mg/kg wet							
N-Nitroso-di-n-propylamine	0.15	U	0.33	mg/kg wet							
N-nitrosodiphenylamine/Diphenylamine	0.23	U	0.33	mg/kg wet							
Pentachlorophenol	0.21	U	0.33	mg/kg wet							
Phenanthrene	0.13	U	0.33	mg/kg wet							
Phenol	0.099	U	0.33	mg/kg wet							
Pyrene	0.11	U	0.33	mg/kg wet							
2,4,6-Tribromophenol	*1.4*			*mg/kg wet*	*1.67*		*85*	*23-137*			
2-Fluorobiphenyl	*1.5*			*mg/kg wet*	*1.67*		*90*	*29-119*			
2-Fluorophenol	*1.5*			*mg/kg wet*	*1.67*		*88*	*20-124*			
Nitrobenzene-d5	*1.2*			*mg/kg wet*	*1.67*		*74*	*17-126*			
Phenol-d5	*1.5*			*mg/kg wet*	*1.67*		*89*	*15-131*			
Terphenyl-d14	*1.7*			*mg/kg wet*	*1.67*		*102*	*60-120*			

LCS (4D18034-BS1) Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 11:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.8		0.33	mg/kg wet	1.67		107	54-125			
2-Chlorophenol	1.6		0.33	mg/kg wet	1.67		97	50-105			
4-Chloro-3-methylphenol	1.6		0.33	mg/kg wet	1.67		97	55-106			
4-Nitrophenol	1.4		0.33	mg/kg wet	1.67		82	30-124			
Acenaphthene	1.5		0.33	mg/kg wet	1.67		90	49-111			
N-Nitroso-di-n-propylamine	1.6		0.33	mg/kg wet	1.67		95	52-126			
Pentachlorophenol	1.8		0.33	mg/kg wet	1.67		108	10-101			QL-02

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QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 4D18034 - EPA 3550C_MS - Continued

LCS (4D18034-BS1) Continued Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 11:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Phenol	1.6		0.33	mg/kg wet	1.67		98	28-121			
Pyrene	1.7		0.33	mg/kg wet	1.67		100	66-115			
2,4,6-Tribromophenol	*1.8*			*mg/kg wet*	*1.67*		*107*	*23-137*			
2-Fluorobiphenyl	*1.5*			*mg/kg wet*	*1.67*		*91*	*29-119*			
2-Fluorophenol	*1.5*			*mg/kg wet*	*1.67*		*91*	*20-124*			
Nitrobenzene-d5	*1.3*			*mg/kg wet*	*1.67*		*80*	*17-126*			
Phenol-d5	*1.5*			*mg/kg wet*	*1.67*		*90*	*15-131*			
Terphenyl-d14	*1.8*			*mg/kg wet*	*1.67*		*108*	*60-120*			

Matrix Spike (4D18034-MS1) Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 12:24

Source: A402224-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.7	D	0.72	mg/kg dry	1.83	0.35 U	93	54-125			
2-Chlorophenol	1.1	D	0.72	mg/kg dry	1.83	0.50 U	61	50-105			
4-Chloro-3-methylphenol	1.5	D	0.72	mg/kg dry	1.83	0.61 U	85	55-106			
4-Nitrophenol	1.3	D	0.72	mg/kg dry	1.83	0.29 U	72	30-124			
Acenaphthene	1.4	D	0.72	mg/kg dry	1.83	0.29 U	78	49-111			
N-Nitroso-di-n-propylamine	1.1	D	0.72	mg/kg dry	1.83	0.33 U	61	52-126			
Pentachlorophenol	1.9	D	0.72	mg/kg dry	1.83	0.46 U	103	10-101			QM-07
Phenol	1.2	D	0.72	mg/kg dry	1.83	0.22 U	67	28-121			
Pyrene	1.8	D	0.72	mg/kg dry	1.83	0.24 U	100	66-115			
2,4,6-Tribromophenol	*1.8*			*mg/kg dry*	*1.83*		*98*	*23-137*			
2-Fluorobiphenyl	*1.3*			*mg/kg dry*	*1.83*		*70*	*29-119*			
2-Fluorophenol	*1.0*			*mg/kg dry*	*1.83*		*56*	*20-124*			
Nitrobenzene-d5	*0.92*			*mg/kg dry*	*1.83*		*50*	*17-126*			
Phenol-d5	*1.1*			*mg/kg dry*	*1.83*		*61*	*15-131*			
Terphenyl-d14	*1.8*			*mg/kg dry*	*1.83*		*100*	*60-120*			

Matrix Spike Dup (4D18034-MSD1) Prepared: 04/18/2014 12:30 Analyzed: 04/21/2014 12:52

Source: A402224-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.8	D	0.72	mg/kg dry	1.83	0.35 U	99	54-125	6	23	
2-Chlorophenol	1.3	D	0.72	mg/kg dry	1.83	0.50 U	71	50-105	16	27	
4-Chloro-3-methylphenol	1.7	D	0.72	mg/kg dry	1.83	0.61 U	92	55-106	8	28	
4-Nitrophenol	1.4	D	0.72	mg/kg dry	1.83	0.29 U	77	30-124	6	35	
Acenaphthene	1.5	D	0.72	mg/kg dry	1.83	0.29 U	83	49-111	6	27	
N-Nitroso-di-n-propylamine	1.3	D	0.72	mg/kg dry	1.83	0.33 U	72	52-126	15	24	
Pentachlorophenol	2.1	D	0.72	mg/kg dry	1.83	0.46 U	117	10-101	13	26	QM-07
Phenol	1.4	D	0.72	mg/kg dry	1.83	0.22 U	75	28-121	12	32	
Pyrene	1.9	D	0.72	mg/kg dry	1.83	0.24 U	104	66-115	4	28	
2,4,6-Tribromophenol	*2.0*			*mg/kg dry*	*1.83*		*107*	*23-137*			
2-Fluorobiphenyl	*1.4*			*mg/kg dry*	*1.83*		*76*	*29-119*			
2-Fluorophenol	*1.2*			*mg/kg dry*	*1.83*		*65*	*20-124*			
Nitrobenzene-d5	*1.1*			*mg/kg dry*	*1.83*		*58*	*17-126*			
Phenol-d5	*1.3*			*mg/kg dry*	*1.83*		*70*	*15-131*			
Terphenyl-d14	*1.9*			*mg/kg dry*	*1.83*		*103*	*60-120*			

Chlorinated Herbicides by GC - Quality Control

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QUALITY CONTROL DATA

Chlorinated Herbicides by GC - Quality Control

Batch 4D21009 - EPA 3510C

Blank (4D21009-BLK1) Prepared: 04/21/2014 09:57 Analyzed: 04/23/2014 16:51

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.26	U	0.50	ug/L							
2,4,5-TP (Silvex)	0.21	U	0.50	ug/L							
2,4-D	0.27	U	0.50	ug/L							
2,4-DB	0.32	U	0.50	ug/L							
Dalapon	0.49	U	0.50	ug/L							
Dicamba	0.17	U	0.50	ug/L							
Dichlorprop	0.18	U	0.50	ug/L							
Dinoseb	0.32	U	0.50	ug/L							
MCPA	17	U	50	ug/L							
MCPP	7.4	U	50	ug/L							
2,4-DCAA	*1.7*			*ug/L*	*2.00*		*85*	*68-139*			

LCS (4D21009-BS1) Prepared: 04/21/2014 09:57 Analyzed: 04/23/2014 17:17

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	1.7		0.50	ug/L	2.00		83	67-113			
2,4,5-TP (Silvex)	1.8		0.50	ug/L	2.00		92	70-114			
2,4-D	1.7		0.50	ug/L	2.00		85	37-129			
2,4-DB	1.8		0.50	ug/L	2.00		91	49-144			
Dalapon	2.0		0.50	ug/L	2.00		101	18-121			
Dicamba	1.7		0.50	ug/L	2.00		85	36-143			
Dichlorprop	1.6		0.50	ug/L	2.00		82	38-145			
Dinoseb	1.6		0.50	ug/L	2.00		81	10-140			
MCPA	150		50	ug/L	200		73	32-150			
MCPP	240		50	ug/L	200		122	70-128			
2,4-DCAA	*1.9*			*ug/L*	*2.00*		*93*	*68-139*			

Matrix Spike (4D21009-MS1) Prepared: 04/21/2014 09:57 Analyzed: 04/23/2014 17:43

Source: A402261-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	1.8		0.50	ug/L	2.00	0.26 U	88	67-113			
2,4,5-TP (Silvex)	1.9		0.50	ug/L	2.00	0.21 U	94	70-114			
2,4-D	1.8		0.50	ug/L	2.00	0.27 U	90	37-129			
2,4-DB	1.9		0.50	ug/L	2.00	0.32 U	95	49-144			
Dalapon	2.3		0.50	ug/L	2.00	0.49 U	113	18-121			
Dicamba	1.7		0.50	ug/L	2.00	0.17 U	87	36-143			
Dichlorprop	1.7		0.50	ug/L	2.00	0.18 U	84	38-145			
Dinoseb	1.9		0.50	ug/L	2.00	0.32 U	93	10-140			
MCPA	160		50	ug/L	200	17 U	80	32-150			
MCPP	260		50	ug/L	200	7.4 U	130	70-128			QM-07
2,4-DCAA	*1.9*			*ug/L*	*2.00*		*95*	*68-139*			

Matrix Spike Dup (4D21009-MSD1) Prepared: 04/21/2014 09:57 Analyzed: 04/23/2014 18:09

Source: A402261-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	1.7		0.50	ug/L	2.00	0.26 U	86	67-113	2	21	
2,4,5-TP (Silvex)	1.9		0.50	ug/L	2.00	0.21 U	93	70-114	2	15	

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QUALITY CONTROL DATA

Chlorinated Herbicides by GC - Quality Control

Batch 4D21009 - EPA 3510C - Continued

Matrix Spike Dup (4D21009-MSD1) Continued Prepared: 04/21/2014 09:57 Analyzed: 04/23/2014 18:09

Source: A402261-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-D	1.8		0.50	ug/L	2.00	0.27 U	90	37-129	0.1	33	
2,4-DB	1.8		0.50	ug/L	2.00	0.32 U	92	49-144	3	36	
Dalapon	2.2		0.50	ug/L	2.00	0.49 U	108	18-121	4	49	
Dicamba	1.8		0.50	ug/L	2.00	0.17 U	88	36-143	0.9	24	
Dichlorprop	1.8		0.50	ug/L	2.00	0.18 U	89	38-145	5	37	
Dinoseb	1.8		0.50	ug/L	2.00	0.32 U	91	10-140	2	50	
MCPA	160		50	ug/L	200	17 U	80	32-150	0.1	26	
MCPP	270		50	ug/L	200	7.4 U	134	70-128	3	48	QM-07
2,4-DCAA	*2.0*			*ug/L*	*2.00*		*98*	*68-139*			

Batch 4D21020 - EPA 3550C

Blank (4D21020-BLK1) Prepared: 04/21/2014 14:30 Analyzed: 04/23/2014 01:46

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.0025	U	0.010	mg/kg wet							
2,4,5-TP (Silvex)	0.0047	U	0.010	mg/kg wet							
2,4-D	0.0099	U	0.010	mg/kg wet							
2,4-DB	0.0049	U	0.010	mg/kg wet							
Dalapon	0.0050	U	0.010	mg/kg wet							
Dicamba	0.0023	U	0.010	mg/kg wet							
Dichlorprop	0.0028	U	0.010	mg/kg wet							
Dinoseb	0.0042	U	0.010	mg/kg wet							
MCPA	0.52	U	1.0	mg/kg wet							
MCPP	0.53	U	1.0	mg/kg wet							
2,4-DCAA	*0.036*			*mg/kg wet*	*0.0400*		*90*	*39-174*			

LCS (4D21020-BS1) Prepared: 04/21/2014 14:30 Analyzed: 04/23/2014 02:12

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.026		0.010	mg/kg wet	0.0400		65	27-141			
2,4,5-TP (Silvex)	0.029		0.010	mg/kg wet	0.0400		73	45-135			
2,4-D	0.030		0.010	mg/kg wet	0.0400		76	35-121			
2,4-DB	0.030		0.010	mg/kg wet	0.0400		76	34-160			
Dalapon	0.035		0.010	mg/kg wet	0.0400		87	20-136			
Dicamba	0.028		0.010	mg/kg wet	0.0400		70	47-129			
Dichlorprop	0.027		0.010	mg/kg wet	0.0400		66	27-147			
Dinoseb	0.0062	J	0.010	mg/kg wet	0.0400		15	10-41			
MCPA	3.1		1.0	mg/kg wet	4.00		78	56-137			
MCPP	3.8		1.0	mg/kg wet	4.00		94	15-183			
2,4-DCAA	*0.036*			*mg/kg wet*	*0.0400*		*89*	*39-174*			

Matrix Spike (4D21020-MS1) Prepared: 04/21/2014 14:30 Analyzed: 04/23/2014 02:38

Source: A402120-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.033		0.012	mg/kg dry	0.0493	0.0031 U	68	27-141			
2,4,5-TP (Silvex)	0.037		0.012	mg/kg dry	0.0493	0.0058 U	74	45-135			
2,4-D	0.039		0.012	mg/kg dry	0.0493	0.012 U	79	35-121			

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Chlorinated Herbicides by GC - Quality Control

Batch 4D21020 - EPA 3550C - Continued

Matrix Spike (4D21020-MS1) Continued Prepared: 04/21/2014 14:30 Analyzed: 04/23/2014 02:38

Source: A402120-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-DB	0.035		0.012	mg/kg dry	0.0493	0.0060 U	70	34-160			
Dalapon	0.050		0.012	mg/kg dry	0.0493	0.0062 U	100	20-136			
Dicamba	0.037		0.012	mg/kg dry	0.0493	0.0028 U	74	47-129			
Dichlorprop	0.037		0.012	mg/kg dry	0.0493	0.0035 U	75	27-147			
Dinoseb	0.015		0.012	mg/kg dry	0.0493	0.0052 U	31	10-41			
MCPA	4.6		1.2	mg/kg dry	4.93	0.64 U	92	56-137			
MCPP	5.1		1.2	mg/kg dry	4.93	0.65 U	103	15-183			
2,4-DCAA	*0.046*			*mg/kg dry*	*0.0493*		*94*	*39-174*			

Matrix Spike Dup (4D21020-MSD1) Prepared: 04/21/2014 14:30 Analyzed: 04/23/2014 03:04

Source: A402120-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.034		0.012	mg/kg dry	0.0493	0.0031 U	70	27-141	3	27	
2,4,5-TP (Silvex)	0.037		0.012	mg/kg dry	0.0493	0.0058 U	75	45-135	0.8	23	
2,4-D	0.039		0.012	mg/kg dry	0.0493	0.012 U	80	35-121	1	43	
2,4-DB	0.038		0.012	mg/kg dry	0.0493	0.0060 U	77	34-160	9	47	
Dalapon	0.041		0.012	mg/kg dry	0.0493	0.0062 U	82	20-136	20	50	
Dicamba	0.036		0.012	mg/kg dry	0.0493	0.0028 U	73	47-129	2	50	
Dichlorprop	0.039		0.012	mg/kg dry	0.0493	0.0035 U	78	27-147	5	50	
Dinoseb	0.024		0.012	mg/kg dry	0.0493	0.0052 U	49	10-41	47	50	QM-07
MCPA	3.7		1.2	mg/kg dry	4.93	0.64 U	75	56-137	20	42	
MCPP	5.3		1.2	mg/kg dry	4.93	0.65 U	107	15-183	4	50	
2,4-DCAA	*0.047*			*mg/kg dry*	*0.0493*		*95*	*39-174*			

Batch 4D29023 - EPA 3510C

Blank (4D29023-BLK1) Prepared: 04/29/2014 17:00 Analyzed: 04/30/2014 19:46

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.26	U	0.50	ug/L							
2,4,5-TP (Silvex)	0.21	U	0.50	ug/L							
2,4-D	0.27	U	0.50	ug/L							
2,4-DB	0.32	U	0.50	ug/L							
Dalapon	0.49	U	0.50	ug/L							
Dicamba	0.17	U	0.50	ug/L							
Dichlorprop	0.18	U	0.50	ug/L							
Dinoseb	0.32	U	0.50	ug/L							
MCPA	17	U	50	ug/L							
MCPP	7.4	U	50	ug/L							
2,4-DCAA	*2.1*			*ug/L*	*2.00*		*107*	*68-139*			

LCS (4D29023-BS1) Prepared: 04/29/2014 17:00 Analyzed: 04/30/2014 20:38

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	1.8		0.50	ug/L	2.00		92	67-113			
2,4,5-TP (Silvex)	1.9		0.50	ug/L	2.00		97	70-114			
2,4-D	1.9		0.50	ug/L	2.00		93	37-129			
2,4-DB	1.8		0.50	ug/L	2.00		91	49-144			

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QUALITY CONTROL DATA

Chlorinated Herbicides by GC - Quality Control

Batch 4D29023 - EPA 3510C - Continued

LCS (4D29023-BS1) Continued Prepared: 04/29/2014 17:00 Analyzed: 04/30/2014 20:38

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dalapon	1.2	P	0.50	ug/L	2.00		58	18-121			
Dicamba	1.8		0.50	ug/L	2.00		92	36-143			
Dichlorprop	1.8		0.50	ug/L	2.00		88	38-145			
Dinoseb	1.7		0.50	ug/L	2.00		83	10-140			
MCPA	200		50	ug/L	200		102	32-150			
MCPP	230		50	ug/L	200		116	70-128			
2,4-DCAA	*2.2*			*ug/L*	*2.00*		*108*	*68-139*			

Matrix Spike (4D29023-MS1) Prepared: 04/29/2014 17:00 Analyzed: 04/30/2014 21:04

Source: A402388-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	1.9		0.50	ug/L	2.00	0.26 U	97	67-113			
2,4,5-TP (Silvex)	2.0		0.50	ug/L	2.00	0.21 U	102	70-114			
2,4-D	2.0		0.50	ug/L	2.00	0.27 U	99	37-129			
2,4-DB	1.9		0.50	ug/L	2.00	0.32 U	97	49-144			
Dalapon	1.8	P	0.50	ug/L	2.00	0.49 U	91	18-121			
Dicamba	1.9		0.50	ug/L	2.00	0.17 U	97	36-143			
Dichlorprop	1.9		0.50	ug/L	2.00	0.18 U	95	38-145			
Dinoseb	2.0		0.50	ug/L	2.00	0.32 U	98	10-140			
MCPA	170		50	ug/L	200	17 U	87	32-150			
MCPP	270		50	ug/L	200	7.4 U	134	70-128			QM-07
2,4-DCAA	*2.3*			*ug/L*	*2.00*		*114*	*68-139*			

Matrix Spike Dup (4D29023-MSD1) Prepared: 04/29/2014 17:00 Analyzed: 04/30/2014 21:30

Source: A402388-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	1.8		0.50	ug/L	2.00	0.26 U	90	67-113	8	21	
2,4,5-TP (Silvex)	1.9		0.50	ug/L	2.00	0.21 U	93	70-114	9	15	
2,4-D	1.9		0.50	ug/L	2.00	0.27 U	96	37-129	3	33	
2,4-DB	1.9		0.50	ug/L	2.00	0.32 U	94	49-144	3	36	
Dalapon	1.1	P	0.50	ug/L	2.00	0.49 U	54	18-121	50	49	QM-11
Dicamba	1.7		0.50	ug/L	2.00	0.17 U	84	36-143	14	24	
Dichlorprop	1.9		0.50	ug/L	2.00	0.18 U	94	38-145	2	37	
Dinoseb	1.9		0.50	ug/L	2.00	0.32 U	96	10-140	2	50	
MCPA	170		50	ug/L	200	17 U	86	32-150	2	26	
MCPP	250		50	ug/L	200	7.4 U	127	70-128	5	48	
2,4-DCAA	*2.0*			*ug/L*	*2.00*		*100*	*68-139*			

Classical Chemistry Parameters - Quality Control

Batch 4D21022 - NO PREP

Blank (4D21022-BLK1) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.15	U	1.0	mg/kg wet							

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QUALITY CONTROL DATA

Classical Chemistry Parameters - Quality Control

Batch 4D21022 - NO PREP - Continued

LCS (4D21022-BS1) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	10		1.0	mg/kg wet	10.0		103	84-124			

Matrix Spike (4D21022-MS1) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Source: A402181-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.18	U	1.2	mg/kg dry	12.2	0.18 U		84-124			QM-14

Matrix Spike (4D21022-MS2) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Source: A402181-01RE1

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	55		6.3	mg/kg dry	63.3	0.95 U	87	84-124			QM-14

Matrix Spike Dup (4D21022-MSD1) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Source: A402181-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.18	U	1.2	mg/kg dry	12.2	0.18 U		84-124		11	QM-14

Matrix Spike Dup (4D21022-MSD2) Prepared: 04/21/2014 12:06 Analyzed: 04/22/2014 15:05

Source: A402181-01RE1

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	56		6.3	mg/kg dry	63.3	0.95 U	88	84-124	1	11	QM-14

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FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence (85% or greater confidence) to make a "tentative identification".
J-05	Result estimated, calibration verification standard failed with low bias.
Q	Analysis performed outside of method - specified holding time.
QB-01	The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact of the deviation.
QL-02	The associated laboratory control sample exhibited high bias; since the result is ND, the impact on data quality is minimal.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-08	Post-digestion spike did not meet method requirements due to confirmed matrix effects (dilution test).
QM-11	Precision between duplicate matrix spikes of the same sample was outside acceptance limits.
QM-14	Confirmed matrix effects
QS-03	Surrogate recovery outside acceptance limits
QS-04	Surrogate recovery not calculated. Surrogate diluted out of the calibration range.
QS-05	Surrogate recovery biased low and outside control limits due to suspected matrix effects, as evidenced by sample behavior during sample preparation (emulsion formation, excessive foaming).
QV-01	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.
QV-02	The associated continuing calibration verification standard exhibited low bias; the reported result should be considered to be a minimum estimate.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.

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ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 211
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: REMSA, Inc. (RE026)	Project Number: E18-10-T03P
Address: 124 W. Queens Way	Project Name/Desc: 1614 West Pembroke Ave
City/ST/Zip: Hampton, VA 23669	PO # / Billing Info: E18-10-T03P
Tel: 757-722-0113 / Fax:	Reporting Contact: Mike Inozhenko
Sampler(s) Name, Affiliation (Print): Dan Christian	Billing Contact: Mike Inozhenko
Sampler(s) Signature:	Facility # (if required):

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due ___/___/___

Lab Workorder: C404171

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	TPH-GRO 8015	TPH-DRO 8015	VOCs 8260B	5 VOCs 8270D	TAL 6010C/7471B Soil 7470A GW	Hexchrome 7196A Soil 7199 GRP GW	PCBs 8082A	TCL Pest/Herb 8081B 8151A			Sample Comments
	GP14-4	4-16-14	11:00	Grab	GW	10	X	X	X	X	X	X	X				
	GP14-4	4-16-14	10:30	Grab	SO	6	X	X	X	X	X	X					
	GP14-5	4-16-14	11:45	Grab	GW	11	X	X	X	X	X	X	X	X			
	GP14-5	4-16-14	11:20	Grab	SO	7	X	X	X	X	X	X		X			
	GP14-7	4-16-14	1:20	Grab	GW	6	X	X	X	X			X				
						40											

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time 4-16-14 7:00 PM	Received By	Date/Time 4-17-14 10:15
Comments		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt 2.4C		Condition Upon Receipt: ✓ Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments)

Preservation: **I**-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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Client Name: REMSA, Inc. (RE026)	Project Number: E18-10-T03P
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Tel: 757-722-0113 / Fax:	Reporting Contact: Mike Iwashchenko
Sampler(s) Name, Affiliation (Print): Dan Christian	Billing Contact: Mike Iwashchenko
Sampler(s) Signature: [signature]	Facility # (if required):

Requested Analyses

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

X Standard

___ Expedited

Due ___/___/___

Lab Workorder: C404171

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	TPH-GRO 8015	TPH-DRO 8015	VOCs 8260B	SVOCs 8270D	TAL 6010C/7471B soil 7470A GW	Hex Chrome 7196A soil 7500 CR-D GW	PCBs 8087A	TCL Pest/Herb 8081B 8151A			Sample Comments
	GP14-6	4-16-14	12:25	Grab	GW	10	X	X	X	X	X	X	X				
	GP14-6	4-16-14	11:58	Grab	SO	6	X	X	X	X	X	X					
	GP14-7	4-16-14	12:50	Grab	SO	6	X	X	X	X	X	X					
	GP14-8	4-16-14	1:20	Grab	SO	6	X	X	X	X	X	X					
	GP14-8	4-16-14	2:00	Grab	GW	6 DRC			X			X					
	GP14-2	4-16-14	11:00	Grab	GW	4	X	X		X	X	X	X				
						38	<-- Total # of Containers										

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
		[signature]	4-16-14 3:00 PM	[signature]	4-17-14 10:15
Comments		Relinquished By	Date/Time	Received By	Date/Time
		Relinquished By	Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: 2.1C		Condition Upon Receipt: ✓ Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments)

Preservation: **I**-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

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APPENDIX F

VDEQ Solid Waste Guidance Memorandum

COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
Solid Waste Guidance Memorandum

Subject: Division of Land Protection & Revitalization State-Wide Variance Guidance Memo No. LPR-SW-04-2012
Management and Reuse of Contaminated Media

To: Regional Land Protection & Revitalization Program Managers
Regional Water Program Managers

From: Jeffery Steers
Director, Division of Land Protection and Revitalization

Date: July 17, 2012

Copies: Richard Weeks, James Golden
Air and Water Division Directors
Regional and Deputy Regional Directors

Background: Businesses look continuously to purchase and revitalize former manufacturing facilities, residential sites, parks, and other previously used properties, and to conduct upgrades on currently occupied property. Benefits for businesses include utilization of a site with suitable structure(s) in-place, existing zoning appropriate for industrial/commercial use, lower development costs, and tax incentives. Revitalization and upgrades of these properties helps conserve land that would otherwise be developed, increases revenues for the locality and the Commonwealth, and reduces blight. Many of these properties remain undeveloped because of actual or perceived concerns of contamination or concerns about managing soils on-site with low concentrations of contaminants. Each site needs evaluation to determine if the site is safe to use as-is or if restrictions or remediation is necessary. Many times site improvements may require soil or sediment excavations that require evaluation of costs of the management of the excess media generated at the site. This "Variance" was prepared to allow owners/operators to reuse soils/sediment generated in the Commonwealth, both on-site and off-site, as one option in managing excess media from property upgrades.

Electronic Copy: An electronic copy of this variance is available on DEQ's website at http://www.deq.virginia.gov/ .

Contact Information: Please contact staff within the Division of Land Protection & Revitalization at your local DEQ regional office with any questions regarding the application of this Variance. The DEQ regional offices can be found at the following link: http://www.deq.virginia.gov/Locations.aspx.

Disclaimer: *This document is provided as guidance and, as such, sets forth standard operating*

procedures for the agency. However, it does not mandate any particular method nor does it prohibit any alternative method. If alternative proposals are made, such proposals should be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations. Nothing in this guidance shall relieve the owner or operator from conducting notifications or cleanups as required by DEQ.

I. Introduction

Summary of Management and Reuse of Contaminated Media:

Due to the increasing cost of prime land, the Commonwealth is experiencing a growing need for the redevelopment of previously used and idle properties and upgrades of existing properties. Re-vitalizing these properties frequently requires some form of soil excavation and management. Similarly, material excavated from surface waters during dredging operations is often disposed of at off-site locations, necessitating added soil evaluation procedures and management techniques. Quite often, the soil and dredge media contain contaminants that need to be evaluated for disposal or reuse. The knowledge of the nature of the contamination may be known or is newly discovered during the course of development.

The Virginia Department of Environmental Quality ("DEQ") developed this variance based upon experience with numerous separate site-specific contaminated soil/sediment use plans. Standard contaminant concentration tables are used to allow a quick determination of soil management procedures and options to owners, purchasers and developers. Owners/operators can make more expeditious determinations of media reuse for a site based upon standard considerations with the use of these tables.

Submittals generated from this Variance will not be technically reviewed by DEQ unless necessary. This Variance is meant to be self-implementing to expedite property reuse in a sound manner protective of human health and the environment. Property owners and developers can use this variance to make basic development decisions using standardized tools regarding soil/sediment management without involving DEQ in a regulatory approval process. As per current regulations, contaminated soils and sediment from legacy operations often are not regulated in-situ provided that:

- materials have not been intentionally disposed or spilled onto the soils/sediment;
- materials have not been released from handling operations that are sloppy and do not follow typical industry standards for handling;
- materials are not listed hazardous waste;
- materials are not chemicals that have been released in volumes greater than their respective reportable quantity; and
- the contaminated condition is not considered an open dump, hazard, nuisance, or a threat to public health, public safety, the environment, and natural resources.

Based on the above, DEQ developed a tier-based decision model that provides basic criteria for comparing the level of contamination in media to concentrations that have been determined to be acceptable for human health and the environment.
This variance is not to be used for remediation standards for a site being remediated under other regulatory programs such as Underground Storage Tanks, Resource Conservation and Recovery Act ("RCRA") Corrective action, Voluntary Remediation Program or other programs which have their own cleanup or remediation standards. This

variance may be used to manage excess media at a clean-up site if allowed by the particular remediation program and with any required approval.

II. Authority

Virginia Code §§10.1-1404-1405 authorizes the Department and the DEQ Director to administer the regulations promulgated by the Virginia Waste Management Board ("Board") and vests the powers of the Board with the Director when not in session. The Virginia Solid Waste Management Regulations ("VSWMR" or "Regulation") allows the Director to grant variances to the VSWMR, including 9 Virginia Administrative Code 20-81-710.

III. Definitions

Definitions in the Virginia Waste Management Act and VSWMR apply to this policy. Additional definitions are detailed below.

"Contaminated media" – This includes soil, sediment, and dredged material that that, as a result of a release or human usage, has absorbed or adsorbed physical, chemical, or radiological substances at concentrations above those consistent with nearby undisturbed soil or natural earth materials.

"Dredged material" means material that is excavated or dredged from surface waters (9 VAC 25-210-10).

"Environmental due diligence" – Investigative techniques, including but not limited to visual property inspection, electronic database searches, review of ownership and use history of property, Sanborn maps, environmental questionnaires, analytical testing, environmental testing and audits.

"Generator and Owner/Operator" – The generator is the owner of the property from which the contaminated media is first managed such to make the material subject to regulation. A developer or contractor may be the entity that moves the material, and thus may be a co-generator, but the owner would still be considered a generator.
"Solid waste" and "Hazardous waste" – As defined in 40 CFR 261.2 and 40 CFR 261.3 of the Federal Regulations as adopted by Virginia in 9 VAC 20-60-261. These definitions may be found at the following website:
http://www.access.gpo.gov/nara/cfr/waisidx_09/40cfr261_09.html

"Open dump" - means a site on which any solid waste is placed, discharged, deposited, injected, dumped or spilled so as to present a threat of a release of harmful substances into the environment or present a hazard to human health. A site meeting the Open Dump Criteria in 9VAC20-81-45 may be determined to be an open dump.

"Sensitive Environment" means an area that serves a critical ecological function or that overlies groundwater that is currently used or is reasonably anticipated to be used as a potable source. Sensitive environments include areas that support state or federally recognized rare, threatened, or endangered species; areas characterized by karst topography, caves, or sinkholes; a 25 year floodplain as defined by FEMA and/or local planning officials; and surface waters (streams, creeks, ponds, lakes, rivers, wetlands, springs, etc.).

"Unrestricted upland reuse" – Soils that meet the criteria in Tables 1 and 2 of this Variance.

IV. Hierarchy for Contaminated Media Management

DEQ recognizes that there are various means to manage contaminated media which may be regulated under the VSWMR or exempt under the VSWMR. Additionally, DEQ maintains a hierarchy of contaminated media management as a means to use the least expensive and resource conservative methods that maintain public and environmental health. The order of management options that should be pursued are as follows:

1) Appropriate reuse of contaminated media within the actual excavation project.
2) Appropriate reuse of the contaminated media on the site of the development as allowed under 9 VAC 20-81-95.C.7.d.
3) Reuse of the contaminated media on the site of generation or at another site with comparable contaminants (through the <u>use of this variance</u>).
4) Thermal or biological remediation of the contaminated media followed by reuse - using a DEQ permitted thermal or biological treatment facility.
5) Landfill burial of contaminated media – burial in a permitted sanitary, industrial, or hazardous waste landfill authorized by DEQ (or other states) to receive this material.

V. Relationship with other Regulations

The application of this Variance does not relieve the Generator or Property Owner from complying with other regulations of the Commonwealth, Federal Regulations, or local ordinances. In evaluating contaminated media for use under this Variance, the Generator should determine if the media meets the criteria of a hazardous waste, regulated medical waste, or other appropriate criteria (e.g., petroleum-regulated waste regulated under Article 11 or Article 9). This variance may be used to manage excess media at a clean-up site if allowed by the particular remediation program and with any required approval within the program.

<u>Relation to "Sensitive Environments"</u> – In situations where media will be placed within a sensitive environment specifically within surface waters, the Generator must comply with state regulations as described in the State Water Control Law (§62.1-44, 15:20) and

the Virginia Water Protection Permit Regulation (9 VAC 25-210), and/or applicable federal regulations associated with the Section 404 of the Clean Water Act.

Relation to "Contained-In" Situations - There are certain situations where waste chemicals are released that would classify the resulting containing media as hazardous waste. This classification is determined solely upon the classification of the released chemical and the resulting concentration in the media. In a situation where hazardous wastes have been released, cleanup would be coordinated by DEQ's Hazardous Waste permitting program.

Landfill Mining – This Variance may not be used for situations where permitted landfills are being mined. This activity would be regulated by the Solid Waste Permitting Program.

Corrective Action – This Variance may only be used for cleanup programs regulated by the RCRA Corrective Action program in coordination with the Corrective Action project manager.

VI. Management and Reuse Guidance

This Management and Reuse of Contaminated Media Variance applies to the reuse of contaminated media on-site and the movement and beneficial reuse of contaminated media on other sites. In determining whether media may require extra care during excavation and reuse, the Owner or Generator should perform environmental due diligence for the site. Environmental due diligence involves using the relevant techniques as included in the definition above. Not all of the included techniques need to be used. For example, if environmental audits (including generator knowledge of the nature of the release with appropriate testing) are sufficient to define the nature of the media (e.g. quantity of material, contaminants/concentrations, location, areal extent) then a complete site characterization may not be needed. If environmental due diligence (e.g. through file and document review and staff interviews) demonstrates the potential for contamination, the owner/developer is responsible for conducting proper testing to determine the presence and concentration of any contaminants. The results of the environmental due diligence will dictate the contaminants of concern for the subject property. Environmental due diligence may be initiated at any time during a project when the Owner, developer, or contractor notices that the media being managed appears to be contaminated in some manner. The Owner is, and still remains, responsible for the movement and management of any media generated during development on his property.

The Owner/developer should use adequate sampling and analytical techniques to fully define the contaminants and the extent of contamination. Sampling and analytical methods described in the U.S. Environmental Protection Agency ("EPA")'s SW-846 method papers would be an example of suitable methods to define the contaminants as determined from the environmental due diligence process. These methods may be accessed at http://www.epa.gov/wastes/hazard/testmethods/sw846/. Additionally,

analysis should be performed by a Virginia Environmental Laboratory Accreditation Program laboratory.

The environmental nature of these sites are infinitely variable from small areas of similar contaminant to large sites with varying mixes of different contaminants, media, and media structure (homogenous, heterogeneous, etc). It is the responsibility of the generator to contract with a qualified contractor to recommend appropriate sampling and analytical strategies to accomplish the task of defining the types and extent of contamination. This recommendation should be submitted with appropriate justification, to DEQ along with Appendix A form and accompanying information.

This Variance uses a tiered criteria for reuse. Once the contaminants and concentrations are known, the Owner/developer should utilize the following tables to determine how the media may be used. Table 1 defines media which has contaminant concentrations below which are acceptable for reuse in sensitive environments. Table 2 defines media that has contaminant concentrations below which may be used on residential or sites with other high frequency receptors. Table 3 defines media that has contaminant concentrations below which the media may be used on sites that are restricted to commercial/industrial use. The values on these tables draw from risk calculations and assessment work conducted by DEQ and EPA to calculate risk factors for each of the contaminants. The final contaminant concentrations are generated using exposure scenarios that take into account contaminant toxicity and exposure. The use of these tables is also demonstrated in the attached Figure I which is a diagrammatic flow-chart for use of the contaminated media.

This Variance is proposed as a means to effectively manage contaminated media as fill on-site and on appropriate off-site locations. As such, movement of contaminated media is more suitable and logical from one site of certain contamination to a site with a similar level and type of contamination. Thus, movement of contaminated media from one industrial site to another industrial site of similar contamination would be more favorable than trying to move contaminated media from one site to a newly established industrial location with no documented contamination.

Additionally, there are numerous sites in Virginia that have higher concentrations of metals such as arsenic and lead (e. g., background concentrations) due to natural occurrence. Again, using the discussion above and the principles in the criteria seen below, movement of media with elevated concentrations of contaminants could be moved to a "like" site with similar documented naturally-occurring contaminants and concentrations levels as demonstrated by comparing background at the receiving site. This would include naturally occurring metals that are in concentrations greater than on the attached tables – if the receiving site has similar concentrations. However, anthropogenic contaminated soil exceeding those in the attached tables should not be moved from one site to another site with anthropogenic contamination. The generator/developer may not purposefully mix (or dilute) regulated contaminated media with clean fill to achieve the concentrations as described in the fill-types below.

Table 1–Protection of Sensitive Environments

Table 1 should be used to determine whether the media in question may be used as fill in areas that constitute a sensitive environment either for ecological receptors or a groundwater resource.

A sensitive environment for ecological receptors is an area in which the primary function of the land is to support natural habitat with limited human intervention. This includes, but is not limited to: an area that serves a critical ecological function; an area that supports state or federally recognized rare, threatened, or endangered species; areas characterized by karst topography, caves, or sinkholes; a 25 year floodplain as defined by FEMA and/or local planning officials; and surface waters (streams, creeks, ponds, lakes, rivers, wetlands, etc.) It does not include landscaped and maintained areas on primarily commercial/industrial properties. Contaminants with a maximum concentration exceeding the "Beneficial Fill Ecological Screening Level" on Table 1 will be flagged as a Contaminant of Potential Concern for Ecologically Sensitive Environments. Media with concentrations exceeding these levels should not be placed in or directly adjacent to ecologically sensitive environments.

A sensitive environment for protection of groundwater resources includes areas in which groundwater (including springs) is currently used or is reasonably anticipated to be used as a potable source. For purposes of this guidance, a local ordinance that prohibits the potable use of groundwater may be used to make the "reasonably anticipated" determination. However, groundwater flow direction and velocity must be considered to insure that down gradient receptors not covered by the ordinance are protected. In addition, areas characterized by karst topography, caves or sinkholes are also considered sensitive environments for groundwater protection due to the uncertainty surrounding flow direction and the ability to rapidly transport contaminants. Contaminants with maximum concentrations exceeding the "Beneficial Fill Groundwater Protection Screening Level" on Table 1 will be flagged as a Contaminant of Potential Concern for Groundwater Resources. Media with concentrations exceeding these levels should not be placed in or directly adjacent to sensitive environments for protection of groundwater resources unless placement occurs on the same or adjacent property to where the soil was generated.

Please note that placement of media within a sensitive ecosystem may require additional permits from DEQ and/or the U.S. Army Corps of Engineers. As with any fill project, all State and Local requirements must be followed in terms of notices and Best Management Practices.

For purposes of this Variance contaminated media utilizing Table I standards should use the following setbacks:

- 200 feet separation to any wells, springs, or surface water currently used as a drinking water source.

- 50 feet separation to a cave, sinkhole, , sinking and losing streams, or large flow springs.

Table 2-Protection of Residential and Other High Exposure Frequency Receptors

Table 2 should be used to determine whether the media in question may be used as fill in areas that are currently used or reasonably anticipated to be used as residential housing or for other high exposure frequency purposes. For purposes of this guidance high exposure frequency uses include residential housing, schools, day care, parks, playgrounds, and long term health care facilities. Hotels and motels are not included in this definition. Contaminants with maximum concentrations exceeding the "Beneficial Fill Residential Screening Level" on Table 2 will be flagged as a Contaminant of Potential Concern for Residential Use. Media with concentrations exceeding these levels should not be placed on or directly adjacent to areas with high exposure frequency uses. For contaminants on Table 2 that are based solely on non-carcinogenic effects, the EPA Regional Screening Levels (RSL) have been divided by 10 to account for the potential additivity of toxic effects. For media with fewer than 10 non-carcinogenic contaminants exceeding the Table 2 level, the original RSL may be divided by the number of non-carcinogenic contaminants to derive an adjusted Table 2 level. The intent is to ensure that the hazard index for the managed media does not exceed 1 under a standard residential scenario. If contaminants are present that are not on the attached Table 2, the owner may use EPA's RSL Table that can be found at the link below. The column labeled Resident Soil should be used. RSLs that are based on non-carcinogenic effects should be divided by 10.
http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm

Table 3-Protection of Commercial/Industrial Workers

Table 3 should be used to determine whether the media in question may be used as fill in areas that are restricted to use as commercial/industrial sites. Contaminants with maximum concentrations exceeding the "Beneficial Fill Industrial Screening Level" on Table 3 will be flagged as a Contaminant of Potential Concern for Commercial/Industrial Use. Media with concentrations below these levels may be used on sites that are restricted to commercial/industrial use. Media with concentrations exceeding these levels should not be used as fill but should be managed appropriately as solid or hazardous waste. For contaminants on Table 3 that are based solely on non-carcinogenic effects, the EPA RSLs have been divided by 10 to account for the potential additivity of toxic effects. For media with fewer than 10 non-carcinogenic contaminants exceeding the Table 2 level, the original RSL may be divided by the number of non-carcinogenic contaminants to derive an adjusted Table 3 level. The intent is to ensure that the hazard index for the managed media does not exceed 1 under a standard industrial scenario.

If contaminants are present that are not on the attached Table 2, the owner may use EPA's RSL Table that can be found at the link below. The column labeled Industrial Soil should be used. RSLs that are based on non-carcinogenic effects should be divided by 10.

http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm

The restrictions for use are noted below:

- The owner of the land where the Contaminated Media is deposited must file a declaration of restrictive covenants on the property to ensure that future use of the property is restricted to industrial use. The landowner may file a restriction on the entire property or file a plat identifying the area of the property with the contaminated media and a restriction on that portion of the property. The restriction must be filed regardless of the depth of placement of the media. The restriction must be filed within 90 days of first placement of the media. A template for the restriction is provided in Appendix B.
- 50 feet separation to any off-property residence, health care facility, school, recreational park area, daycare or similar public institution.

Note that some situations will require the use of more than one of these tables. For example, a potential fill site may be planned for residential use in a locality that uses groundwater for drinking. In this case, both the residential screening levels and the groundwater protection screening levels must be met. Another example is a potential industrial site directly adjacent to a surface water body. In this case, both the industrial and the ecological screening level must be met.

Also note that there are some chemicals for which naturally occurring background concentrations are above the screening levels. In this case the background concentration for the receiving site may be substituted for the risk-based screening level. The generator must collect site-specific samples from the receiving site to support the use of background concentrations.

General Restrictions for All Sites/Uses

Additionally, for each of the scenarios described above, the generator shall comply with the following:

- The media used must have been generated from property in the Commonwealth of Virginia.
- The fill material should be suitably stable and of sufficient quality to support vegetation or supplemented with such material if the fill material is to be used as topsoil.
- This material should be placed such that it does not spill or erode onto another property.
- This material should be placed such that it is not deposited into waterways (proper use of Erosion & Sediment Best Management Practices).
- Comply with local ordinances regarding movement/placement of fill soil.
- Comply with standard E&S control practices and BMPs.
- Notification to, and approval of, the landowner where the soil is to be used as fill by use of the form in Appendix A.

- Maintenance of Appendix A document in facility files and submittal of Appendix A notification to DLPR regional office.

VII. Technical Assistance and Compliance Evaluation

Technical assistance regarding use of this Variance is available from your DEQ regional office. You can find the appropriate office by going to the link below: http://www.deq.virginia.gov/Locations.aspx.

Management of any waste material, even the beneficial use of lightly contaminated fill, has the potential for problems to arise if not properly managed. The more comprehensive the environmental due diligence that is conducted prior to the project initiation, the better the chance of a positive outcome. Additionally, proper project planning, to include transportation of the fill, is important.

The intent of this Variance is to provide a self-implementing mechanism for Generators and Owner/Operators to effect proper management of contaminated media and the details to accomplish that are in this Variance. It is the Generator and Owner/operators responsibility and liability to manage this media in a manner consistent with State and Local regulations. If levels are above those identified in the tables for a proposed use, in order to still use the media for that proposed use, the Generators and Owner/Operator would need to apply for an individual variance in accordance with the VSWMR.

DEQ staff will provide an acknowledgement of the information and may complete a cursory completeness review of the submitted information. DEQ will not conduct technical reviews of the submitted Appendix A information unless necessary. Management of contaminated media under this Variance will be considered beneficial and the process will not be regulated as management of a solid waste under the VSWMR so long as these materials are handled in a manner that does not constitute a public nuisance, health hazard or open dump. DEQ retains the obligation and right to investigate any and all fill sites operating under this Variance to the extent allowed by state law, to verify that site operations are as described in the Appendix A submittal and the site operations have not created a public nuisance, open dump, or threat to human health and the environment.

The speculative accumulation provisions of the VSWMR (defined in 9VAC 20-81-10 of the VSWMR) shall apply to accumulated fill stockpiles. At least 75% of any material accumulated must be used within one year of accumulation or it will be subject to regulation in accordance with the VSWMR.

VIII. Collaboration Process

This Variance was developed by a small project team consisting of DEQ Central Office and Regional staff. Additionally, comments from VDOT staff and interested parties in the legal and environmental consulting professions, and the regulated community were solicited and considered in its preparation.

IX. Attachments

- Appendix A – Notification to Property Owner of Contaminated Media Use
- Appendix B – Sample Declaration of Restrictive Covenants
- Figure 1 – Hierarchy for Contaminated Media
- Table 1 – Protection of Ecological Receptors and Groundwater
- Table 2 – Residential and Other High Frequency Receptors
- Table 3 – Restricted (Commercial/Industrial)

APPENDIX A

Contaminated Media Use Form

I, the Generator, certify that the fill material described in the following "Fill Description" has been determined to meet the following Tier classification (circle all that apply):

Level I – Clean Fill with No Restrictions

Level II – Clean Fill with Restrictions

Level III – Commercial/Industrial/Institutional Fill

FILL DESCRIPTION

Address of media origination:

Facility Name:

Facility Owner (Name and Phone number):

General description of contaminant origin including brief list of contaminants of concern (Attach analytical list of contaminants):

Specific location of media to be excavated **(attach as Figures 1 and 2):**

Quantity of media to be excavated and reused:

This fill material is to be used at the following location:

Property Name:

Current Owner of Property (include phone number):

Signature of Property Owner:

Property Address and Tax parcel:

Location of Fill use on property: **(attach as Figures 3 and 4)**

This fill material will be used solely for the purpose of property improvement, construction purposes, or general fill. A copy of the laboratory analyses that confirm the "Level" classification is included with this Appendix.

Date:

Generator Name (print):

Generator Name (signature):

Title:

Address:

Phone:

NOTE: This form is to be retained by the property owner receiving the fill material and the generator of the fill. If a property receives contaminated media as fill under this Guidance from multiple sources, a separate certification is required for each source.

Specifications for Facility Site Maps

Maps must be neat and professional; surveying is not required but recommended. Maps should be to scale and include a street address or bounding addresses and a reference to a specific, permanent, location marker. Two maps each should be submitted for both the excavation site and the deposition site:

1. **General Map**: Map 1 should show where in a locality the property is located (mark the site on the map). The map may be a topographic map or a large enough scale map from an Internet mapping site that at least shows the nearest crossroads;
2. **Specific Location Map**: Map 2 should be specific to the excavation or deposition site itself. If a site map already exists due to remediation processes or a previous environmental site assessment, that map may be used to mark the excavation/deposition area. Copies of plats are also acceptable and encouraged to supplement documentation. Map should contain:
    a. Complete and detailed site map(s) including:
        i. - Scale, north arrow, and legend
        ii. - Location of all buildings, roads, and adjacent properties
        iii. - Location of potential receptors such as drinking water wells, streams, etc.
        iv. – Location of deposition/fill area in relation to items listed in ii and iii.

Specific location of media excavated or to be excavated (attach maps and label Figure 1 – Excavation General Map and Figure 2 – Excavation Specific Location)

Specific location of media deposition (attach maps and label Figure 3 – Deposition General Map and Figure 4 – Deposition Specific Location)

Quantity of media to be excavated: _____cubic yards OR _____ tons
Quantity of media to be reused: _____ cubic yards OR _____ tons
Quantity to be disposed in Solid Waste or CDD Landfill: _____cubic yards OR _____ tons

APPENDIX B

SAMPLE-DECLARATION OF RESTRICTIVE COVENANTS

This Declaration of Restrictive Covenants made as of this ____ day of [month, year], by [owner], owner of the fee simple title to the property hereinafter described, GRANTOR, and by [add names of trustees if any], Trustee, as follows:

ALL THAT certain tract, piece or parcel of land containing a total [amount of acres] acres, lying and being in the City of [name of city], Virginia, and [metes and bounds description of property and/or plat attached].

WHEREAS, [owner] is the fee simple owner of the said property (see deed recorded in Deed Book [Deed Book number], page [page number]); and

[*If the property is subject to a Deed of Trust*:]
WHEREAS, this property is subject to a Deed of Trust of record at Deed Book __, Page __, to _____ and _____, Trustees, to secure a note in the amount of _____ made to _____. The Trustee joins this Declaration to the end that the Deed of Trust shall be subordinate to this Declaration and its terms; and

WHEREAS, in consideration of certain allowances made by the Director of the Virginia Department of Environmental Quality [and consideration offered by Generator, if different], the Grantor has agreed to establish certain irrevocable restrictive covenants limiting the use of certain portions of said property in order to protect human health and the environment;

NOW THEREFORE, for the consideration referred to above, the receipt and legal sufficiency of which is hereby acknowledged by the undersigned, and in order to protect human health and the environment, the undersigned do hereby irrevocably, dedicate, declare and impose the following restrictive covenants to run with the land on the above described property as follows:

> The property shall not be used for residential purposes or for children's (under the age of 16) daycare facilities, schools or playground purposes (although hotels and motels are not prohibited).]

This Declaration of Restrictive Covenants may be modified or released only with the consent of the Director of the Department of Environmental Quality, upon a showing of changed circumstances sufficient to justify the change.

Given under my hand and seal at [name of city], Virginia, on the _____ day of [month, year],

_____
[Name of Owner/Corporation]
By: [Name]

State of _____, County of _____

The foregoing instrument was acknowledged before me this __[date]__ by [name of person acknowledged].

[Notary]

[*If the Owner and Generator are not the same*]

_____

[Name of Generator]

State of _____, County of _____

The foregoing instrument was acknowledged before me this __[date]__ by [name of person acknowledged].

[Notary]

[*If there is a deed of trust*]

_____

[Name], Trustee

State of _____, County of _____

The foregoing instrument was acknowledged before me this __[date]__ by [name of person acknowledged].

[Notary]

[*If there are other encumbrances listed on the Certificate*]

_____

[Name]

State of _____, County of _____

The foregoing instrument was acknowledged before me this __[date]__ by [name of person acknowledged].

[Notary]

Table 1
Protection of Ecological Receptors and Groundwater

Revised 7/13/12

Table 1 Protection of Groundwater and Ecological Receptors	CAS No.	Beneficial Fill Ecological Screening Level mg/kg	Beneficial Fill Groundwater Protection Screening Level SSL (soil to groundwater) DAF 10 mg/kg	Maximum Soil Concentration mg/kg	Contaminant Of Potential Concern for Ecologically Sensitive Environments?	Contaminant of Potential Concern for Groundwater Resources?
TAL Inorganics						
Aluminum	7429-90-5	pH dependent	2.40E+04			
Antimony	7440-36-0	0.27	2.71E+00			
Arsenic	7440-38-2	18	2.91E+00			
Barium	7440-39-3	330	6.22E+02			
Beryllium	7440-41-7	21	3.16E+01			
Cadmium	7440-43-9	0.36	3.76E+00			
Calcium	7440-70-2					
Chromium	7440-47-3	26	1.91E+01			
Cobalt	7440-48-4	13	2.12E-01			
Copper	7440-50-8	28	5.57E+03			
Cyanide	57-12-5	0.005	2.00E+01			
Iron	7439-89-6	pH dependent	2.76E+02			
Lead	7439-92-1	11	1.35E+02			
Magnesium	7439-95-4	4400				
Manganese (nonfood)	7439-96-5	220	2.08E+01			
Mercury, inorganic salts	7487-94-7	0.1				
Mercury	7439-97-6	0.056	1.04E+00			
Methylmercury	22967-92-6	0.00158				
Nickel	7440-02-0	38	1.95E+01			
Potassium	7440-09-7					
Selenium	7782-49-2	0.52	2.55E+00			
Silver	7440-22-4	4.2	5.96E-01			
Sodium	7440-23-5					
Thallium	7440-28-0	0.001	1.42E+00			
Vanadium	7440-62-2	7.8	7.60E+01			
Zinc	7440-66-6	46	2.92E+02			
Other Inorganics						
Perchlorate						
TCL Volatile Organic Compounds (VOCs)						
Acetone	67-64-1	2.5	1.25E+00			
Benzene	71-43-2	0.05	2.46E-02			
Bromochloromethane	74-97-5	3000	1.70E-02			
Bromodichloromethane	75-27-4	0.54	3.50E-01			
Bromoform	75-25-2	15.9	5.15E-01			
Bromomethane	74-83-9	0.235	1.48E-03			
2-Butanone (methyl ethyl ketone)	78-93-3	69.6	5.52E-01			
Carbon disulfide	75-15-0	0.0941	5.49E-01			
Carbon tetrachloride	56-23-5	0.3	7.94E-02			
Chlorobenzene	108-90-7	0.05	1.40E+00			
Chloroethane	75-00-3		5.58E+00			
Chloroform	67-66-3	0.001	3.11E-01			
Chloromethane	74-87-3	10.4	3.92E-02			
Cyclohexane	110-82-7	0.1	7.05E+01			
1,2-Dibromo-3-chloropropane	96-12-8	0.0352	1.09E-03			
Dibromochloromethane	124-48-1	2.05	4.20E-01			
1,2-Dibromoethane	106-93-4	1.23	1.81E-04			
1,2-Dichlorobenzene (ortho)	95-50-1	0.01	2.12E+01			
1,3-Dichlorobenzene (meta)	541-73-1	0.01	2.25E-02			
1,4-Dichlorobenzene (para)	106-46-7	0.01	3.39E+00			
Dichlorodifluoromethane	75-71-8	39.5	5.95E-01			
1,1-Dichloroethane	75-34-3	0.2	7.96E-03			
1,2-Dichloroethane	107-06-2	0.4	1.07E-02			
1,1-Dichloroethene	75-35-4	8.28	4.56E-02			
1,2-Dichloroethene (total)	540-59-0	0.3	5.18E-02			
cis-1,2-Dichloroethene	156-59-2	0.3	2.42E-01			
trans-1,2-Dichloroethene	156-60-5	0.3	4.88E-01			
1,2-Dichloropropane	78-87-5	0.3	1.99E-02			
1,3-Dichloropropene (total)	542-75-6	0.3	1.52E-03			
cis-1,3-Dichloropropene	10061-01-5	0.398	1.66E-03			
trans-1,3-Dichloropropene	10061-02-6	0.398	1.54E-03			
1,4-dioxane	123-91-1	2.05	7.10E-04			
Ethylbenzene	100-41-4	0.05	1.68E+01			
Hexane	110-54-3					
2-Hexanone	591-78-6	12.6	6.45E-03			
Isopropylbenzene (cumene)	98-82-8		5.77E+00			
4-Methyl-2-pentanone (methyl isobutyl ketone)	108-10-1	100	1.64E-01			
Methyl acetate	79-20-9		1.77E+00			
Methyl tert-butyl ether	1634-04-4		2.08E-02			
Methylcyclohexane	108-87-2		5.44E+01			
Methylene chloride	75-09-2	0.3	9.35E-03			
Styrene	100-42-5	0.1	4.89E+00			
1,1,2,2-Tetrachloroethane	79-34-5	0.127	4.38E-04			
Tetrachloroethene	127-18-4	0.01	1.69E-01			
Toluene	108-88-3	0.05	1.15E+01			
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		3.24E+02			
1,2,3-Trichlorobenzene	87-61-6	0.01	6.08E-02			
1,2,4-Trichlorobenzene	120-82-1	0.01	7.21E+00			
1,1,1-Trichloroethane	71-55-6	0.3	1.81E+00			
1,1,2-Trichloroethane	79-00-5	0.3	2.05E-02			
Trichloroethene	79-01-6	0.001	3.86E-02			
Trichlorofluoromethane	75-69-4	16.4	1.74E+00			
Vinyl Chloride	75-01-4	0.01	7.92E-03			
Total Xylenes	1330-20-7	0.05	2.43E+02			
Other VOCs						
n-butylbenzene	104-51-8		1.67E+01			
sec-butylbenzene	135-98-8					
tert-butylbenzene	98-06-6					
isopropyltoluene	99-87-6		8.75E+00			
n-propylbenzene	103-65-1		2.65E+00			
1,1,1,2-tetrachloroethane	630-20-6	0.3	9.99E-03			
1,2,4-trimethylbenzene	95-63-6		1.08E-01			
1,3,5-trimethylbenzene	108-67-8		3.34E-01			
m-xylene	108-38-3		2.62E+02			
o-xylene	95-47-6		2.26E+02			
p-xylene	106-42-3		2.40E+02			
TCL Semivolatile Organic Compounds (SVOCs)						
Acenaphthene	83-32-9	29	1.72E+01			
Acenaphthylene	208-96-8	29	6.63E+01			

Table 1
Protection of Ecological Receptors and Groundwater

Revised 7/13/12

Table 1 Protection of Groundwater and Ecological Receptors	CAS No.	Beneficial Fill Ecological Screening Level mg/kg	Beneficial Fill Groundwater Protection Screening Level SSL (soil to groundwater) DAF 10 mg/kg	Maximum Soil Concentration mg/kg	Contaminant Of Potential Concern for Ecologically Sensitive Environments?	Contaminant of Potential Concern for Groundwater Resources?
Acetophenone	98-86-2	300	4.72E-01			
Anthracene	120-12-7	29	1.85E+02			
Atrazine	1912-24-9	0.00005	6.76E-02			
Benzaldehyde	100-52-7		4.07E-01			
Benzo(a)anthracene	56-55-3	1.1	6.44E-01			
Benzo(a)pyrene	50-32-8	1.1	8.87E+00			
Benzo(b)fluoranthene	205-99-2	1.1	1.82E+00			
Benzo(g,h,i)perylene	191-24-2	1.1	1.94E+04			
Benzo(k)fluoranthene	207-08-9	1.1	1.82E+01			
1,1'-Biphenyl	92-52-4		5.23E-02			
bis(2-Chloroethoxy)methane	111-91-1		6.24E-03			
bis(2-chloroethyl)ether	111-44-4	23.7	2.54E-05			
bis-(2-Ethylhexyl)phthalate	117-81-7	0.925	3.80E+01			
4-Bromophenyl-phenylether	101-55-3					
Butylbenzylphthalate	85-68-7	0.739	5.64E+01			
Caprolactam	105-60-2		8.00E-01			
Carbazole	86-74-8		9.30E-01			
4-Chloro-3-methylphenol	59-50-7	7.95	7.47E+00			
4-Chloroaniline	106-47-8	1.1	1.59E-03			
2-Chloronaphthalene	91-58-7	0.0122	7.00E+00			
2-Chlorophenol	95-57-8	0.01	1.73E-01			
4-Chlorophenyl-phenylether	7005-72-3					
Chrysene	218-01-9	1.1	6.44E+01			
Dibutyl phthalate	84-74-2	0.15	1.76E+02			
Di-n-octylphthalate	117-84-0	70.9				
Dibenzo(a,h)anthracene	53-70-3	1.1	4.27E-01			
Dibenzofuran	132-64-9		3.91E-01			
3,3'-Dichlorobenzidine	91-94-1	0.646	1.87E-02			
2,4-Dichlorophenol	120-83-2	0.003	3.45E-02			
Diethylphthalate	84-66-2	24.8	1.88E+01			
2,4-Dimethylphenol	105-67-9	0.01	3.23E-01			
Dimethylphthalate	131-11-3	200				
4,6-Dinitro-2-methylphenol	534-52-1	0.144	1.36E-04			
2,4-Dinitrophenol	51-28-5	0.0609	3.00E-03			
2,4-Dinitrotoluene	121-14-2	1.28	1.39E-03			
2,6-Dinitrotoluene	606-20-2	0.0328	5.92E-03			
Fluoranthene	206-44-0	1.1	2.78E+02			
Fluorene	86-73-7	29	1.70E+01			
Hexachlorobenzene	118-74-1	0.0025	9.98E+00			
Hexachlorobutadiene	87-68-3	0.0398	7.81E-01			
Hexachlorocyclopentadiene	77-47-4	0.755	2.70E+02			
Hexachloroethane	67-72-1	0.596	3.47E-01			
Indeno(1,2,3-cd)pyrene	193-39-5	1.1	5.15E+00			
Isophorone	78-59-1	139	2.43E-01			
2-Methylnaphthalene	91-57-6	29	1.01E+00			
2-Methylphenol	95-48-7	0.1	4.29E-01			
3-Methylphenol	108-39-4	0.5	4.37E-01			
4-Methylphenol	106-44-5	0.1	8.19E-01			
N-Nitroso-di-n-propylamine	621-64-7	0.544	2.14E-05			
N-Nitrosodiphenylamine	86-30-6	0.545	7.27E-01			
Naphthalene	91-20-3	29	1.49E-02			
2-Nitroaniline	88-74-4	74.1	7.43E-02			
3-Nitroaniline	99-09-2	3.16				
4-Nitroaniline	100-01-6	21.9	7.91E-03			
Nitrobenzene	98-95-3	1.31	5.95E-04			
2-Nitrophenol	88-75-5	1.6				
4-Nitrophenol	100-02-7	0.1				
2,2'-Oxybis(1-chloropropane)	108-60-1		5.41E-03			
Pentachlorophenol	87-86-5	2.1	3.65E-02			
Phenanthrene	85-01-8	29	1.60E+02			
Phenol	108-95-2	0.05	1.19E+00			
Pyrene	129-00-0	1.1	3.27E+01			
1,2,4,5-Tetrachlorobenzene	95-94-3	0.01	3.94E-01			
2,3,4,6-Tetrachlorophenol	58-90-2	0.001	3.05E+00			
2,4,5-Trichlorophenol	95-95-4	0.1	8.62E+00			
2,4,6-Trichlorophenol	88-06-2	0.1	8.36E-02			
Semivolatile Organic Compounds (SVOCs)						
Benzoic Acid	65-85-0		6.00E+00			
TCL Polychlorinated Biphenyls (PCBs)						
Aroclor-1016	12674-11-2		9.60E+00			
Aroclor-1221	11104-28-2		1.25E+00			
Aroclor-1232	11141-16-5		3.10E+00			
Aroclor-1242	53469-21-9		9.60E+00			
Aroclor-1248	12672-29-6		3.73E+01			
Aroclor-1254	11097-69-1		7.36E+01			
Aroclor-1260	11096-82-5		1.45E+02			
Aroclor-1262	37324-23-5		1.45E+02			
Aroclor-1268	11100-14-4		1.45E+02			
Total PCBs	1336-36-3	0.000332				
TCL Pesticides						
Aldrin	309-00-2	0.0025	3.36E-03			
alpha-BHC	319-84-6	0.0025	4.61E-04			
beta-BHC	319-85-7	0.001	1.58E-03			
delta-BHC	319-86-8	9.94	1.51E-03			
gamma-BHC (lindane)	58-89-9	0.00005	1.06E-02			
Chlordane	57-74-9	0.1	1.45E+01			
alpha-Chlordane	5103-71-9	0.1	7.85E-01			
gamma-Chlordane	5103-74-2	0.1	1.63E+00			
4,4'-DDD	72-54-8	0.021	1.39E+01			
4,4'-DDE	72-55-9	0.021	4.71E+00			
4,4'-DDT	50-29-3	0.021	2.14E+01			
Dieldrin	60-57-1	0.0049	4.34E-04			
Endosulfan	115-29-7	0.1	9.97E-01			
Endosulfan I	959-98-8	0.1	1.73E+00			
Endosulfan II	33213-65-9	0.1	1.73E+00			
Endosulfan Sulfate	1031-07-8	0.0358	1.27E+00			
Endrin	72-20-8	0.001	5.89E-01			
Endrin Aldehyde	7421-93-4	0.0105	2.31E-01			
Endrin Ketone	53494-70-5	0.1	7.08E-01			
Heptachlor	76-44-8	0.00598	4.25E-01			
Heptachlor epoxide	1024-57-3	0.1	2.44E+00			

Table 1
Protection of Ecological Receptors and Groundwater

Revised 7/13/12

Table 1 Protection of Groundwater and Ecological Receptors	CAS No.	Beneficial Fill Ecological Screening Level mg/kg	Beneficial Fill Groundwater Protection Screening Level SSL (soil to groundwater) DAF 10 mg/kg	Maximum Soil Concentration mg/kg	Contaminant Of Potential Concern for Ecologically Sensitive Environments?	Contaminant of Potential Concern for Groundwater Resources?
Methoxychlor	72-43-5	0.0199	1.34E+02			
Toxaphene	8001-35-2	0.119	9.86E+00			
Chlorinated dioxins/dibenzofurans (CDDs/CDFs)						
2,3,7,8-TCDD	1746-01-6	1.99E-07	6.09E-03			
2,3,7,8-TCDF	51207-31-9	0.0000386				

Eco=Ecological
SSL=Soil Screening Levels
DAF=Dilution Attenuation Factor
TAL=Target Analyte List
TCL=Target Compound List

Revised 10/16/12

Table 2 (a) Soil: Residential and Other High Frequency Receptors	CAS No.	Beneficial Fill Residential Screening Level (b) mg/kg	Maximum Soil Concentration mg/kg	Contaminant Of Potential Concern for Residential Use?
TAL Inorganics				
Aluminum	7429-90-5	7.70E+03		
Antimony	7440-36-0	3.10E+00		
Arsenic	7440-38-2	3.90E-01		
Barium	7440-39-3	1.50E+03		
Beryllium	7440-41-7	1.60E+01		
Cadmium (food, soil)	7440-43-9	7.00E+00		
Calcium	7440-70-2			
Chromium (based on Chromium VI)	7440-47-3	2.90E-01		
Chromium III	16065-83-1	1.20E+04		
Cobalt	7440-48-4	2.30E+00		
Copper	7440-50-8	3.10E+02		
Cyanide	57-12-5	4.70E+00		
Iron	7439-89-6	5.50E+03		
Lead	7439-92-1	4.00E+02		
Magnesium	7439-95-4			
Manganese (nonfood)	7439-96-5	1.80E+02		
Mercury, inorganic salts	7487-94-7	2.30E+00		
Mercury	7439-97-6	1.00E+00		
Methylmercury	22967-92-6	7.80E-01		
Nickel	7440-02-0	1.50E+02		
Potassium	7440-09-7			
Selenium	7782-49-2	3.90E+01		
Silver	7440-22-4	3.90E+01		
Sodium	7440-23-5			
Thallium	7440-28-0	7.80E-02		
Vanadium	7440-62-2	3.90E+01		
Zinc	7440-66-6	2.30E+03		
Other Inorganics				
Perchlorate		5.50E+00		
TCL Volatile Organic Compounds (VOCs)				
Acetone	67-64-1	6.10E+03		
Benzene	71-43-2	1.10E+00		
Bromochloromethane (based on bromodichloromethane)	74-97-5	1.60E+01		
Bromodichloromethane	75-27-4	2.70E-01		
Bromoform	75-25-2	6.20E+01		
Bromomethane	74-83-9	7.30E-01		
2-Butanone (methyl ethyl ketone)	78-93-3	2.80E+03		
Carbon disulfide	75-15-0	8.20E+01		
Carbon tetrachloride	56-23-5	6.10E-01		
Chlorobenzene	108-90-7	2.90E+01		
Chloroethane	75-00-3	1.50E+03		
Chloroform	67-66-3	2.90E-01		
Chloromethane	74-87-3	1.20E+01		
Cyclohexane	110-82-7	7.00E+02		
1,2-Dibromo-3-chloropropane	96-12-8	5.40E-03		
Dibromochloromethane	124-48-1	6.80E-01		
1,2-Dibromoethane	106-93-4	3.40E-02		
1,2-Dichlorobenzene (ortho)	95-50-1	1.90E+02		
1,3-Dichlorobenzene (meta)(based on 1,4-dichlorobenzene)	541-73-1			
1,4-Dichlorobenzene (para)	106-46-7	2.40E+00		
Dichlorodifluoromethane	75-71-8	9.40E+00		
1,1-Dichloroethane	75-34-3	3.30E+00		
1,2-Dichloroethane	107-06-2	4.30E-01		
1,1-Dichloroethene	75-35-4	2.40E+01		
1,2-Dichloroethene (total)	540-59-0	7.00E+01		
cis-1,2-Dichloroethene	156-59-2	1.60E+01		
trans-1,2-Dichloroethene	156-60-5	1.50E+01		
1,2-Dichloropropane	78-87-5	9.40E-01		
1,3-Dichloropropene (total)	542-75-6	1.70E+00		
cis-1,3-Dichloropropene	10061-01-5	1.70E+00		
trans-1,3-Dichloropropene	10061-02-6	1.70E+00		
1,4-dioxane	123-91-1	4.90E+00		
Ethylbenzene	100-41-4	5.40E+00		
Hexane	110-54-3	5.70E+01		
2-Hexanone	591-78-6	2.10E+01		
Isopropylbenzene (cumene)	98-82-8	2.10E+02		
4-Methyl-2-pentanone (methyl isobutyl ketone)	108-10-1	5.30E+02		
Methyl acetate	79-20-9	7.80E+03		
Methyl tert-butyl ether	1634-04-4	4.30E+01		
Methylcyclohexane (based on cyclohexane)	108-87-2			
Methylene chloride	75-09-2	5.60E+01		
Styrene	100-42-5	6.30E+02		
1,1,2,2-Tetrachloroethane	79-34-5	5.60E-01		
Tetrachloroethene	127-18-4	2.20E+01		
Toluene	108-88-3	5.00E+02		
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	4.30E+03		
1,2,3-Trichlorobenzene	87-61-6	4.90E+00		
1,2,4-Trichlorobenzene **	120-82-1	2.20E+01		
1,1,1-Trichloroethane	71-55-6	8.70E+02		

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Table 2 (a) Soil: Residential and Other High Frequency Receptors	CAS No.	Beneficial Fill Residential Screening Level (b) mg/kg	Maximum Soil Concentration mg/kg	Contaminant Of Potential Concern for Residential Use?
1,1,2-Trichloroethane **	79-00-5	1.10E+00		
Trichloroethene **	79-01-6	9.10E-01		
Trichlorofluoromethane	75-69-4	7.90E+01		
Vinyl Chloride	75-01-4	6.00E-02		
Total Xylenes	1330-20-7	6.30E+01		
Other VOCs				
n-butylbenzene	104-51-8	3.90E+02		
sec-butylbenzene	135-98-8			
tert-butylbenzene	98-06-6			
isopropyltoluene (based on isopropylbenzene)	99-87-6			
n-propylbenzene	103-65-1	3.40E+02		
1,1,1,2-tetrachloroethane	630-20-6	1.90E+00		
1,2,4-trimethylbenzene	95-63-6	6.20E+00		
1,3,5-trimethylbenzene	108-67-8	7.80E+01		
m-xylene	108-38-3	5.90E+01		
o-xylene	95-47-6	6.90E+01		
p-xylene	106-42-3	6.00E+01		
TCL Semivolatile Organic Compounds (SVOCs)				
Acenaphthene	83-32-9	3.40E+02		
Acenaphthylene (based on pyrene)	208-96-8	1.70E+02		
Acetophenone	98-86-2	7.80E+02		
Anthracene	120-12-7	1.70E+03		
Atrazine	1912-24-9	2.10E+00		
Benzaldehyde	100-52-7	7.80E+02		
Benzo(a)anthracene	56-55-3	1.50E-01		
Benzo(a)pyrene	50-32-8	1.50E-02		
Benzo(b)fluoranthene	205-99-2	1.50E-01		
Benzo(g,h,i)perylene (based on pyrene)	191-24-2	1.70E+02		
Benzo(k)fluoranthene	207-08-9	1.50E+00		
1,1'-Biphenyl	92-52-4	5.10E+00		
bis(2-Chloroethoxy)methane	111-91-1	1.80E+01		
bis(2-chloroethyl)ether	111-44-4	2.10E-01		
bis-(2-Ethylhexyl)phthalate	117-81-7	3.50E+01		
4-Bromophenyl-phenylether	101-55-3			
Butylbenzylphthalate	85-68-7	2.60E+02		
Caprolactam	105-60-2	3.10E+03		
Carbazole	86-74-8			
4-Chloro-3-methylphenol	59-50-7	6.10E+02		
4-Chloroaniline	106-47-8	2.40E+00		
2-Chloronaphthalene	91-58-7	6.30E+02		
2-Chlorophenol	95-57-8	3.90E+01		
4-Chlorophenyl-phenylether	7005-72-3			
Chrysene	218-01-9	1.50E+01		
Dibutyl phthalate	84-74-2	6.10E+02		
Di-n-octylphthalate	117-84-0			
Dibenzo(a,h)anthracene	53-70-3	1.50E-02		
Dibenzofuran	132-64-9	7.80E+00		
3,3'-Dichlorobenzidine	91-94-1	1.10E+00		
2,4-Dichlorophenol	120-83-2	1.80E+01		
Diethylphthalate	84-66-2	4.90E+03		
2,4-Dimethylphenol	105-67-9	1.20E+02		
Dimethylphthalate	131-11-3			
4,6-Dinitro-2-methylphenol	534-52-1	4.90E-01		
2,4-Dinitrophenol	51-28-5	1.20E+01		
2,4-Dinitrotoluene	121-14-2	1.60E+00		
2,6-Dinitrotoluene	606-20-2	6.10E+00		
Fluoranthene	206-44-0	2.30E+02		
Fluorene	86-73-7	2.30E+02		
Hexachlorobenzene	118-74-1	3.00E-01		
Hexachlorobutadiene **	87-68-3	6.20E+00		
Hexachlorocyclopentadiene	77-47-4	3.70E+01		
Hexachloroethane **	67-72-1	1.20E+01		
Indeno(1,2,3-cd)pyrene	193-39-5	1.50E-01		
Isophorone	78-59-1	5.10E+02		
2-Methylnaphthalene	91-57-6	2.30E+01		
2-Methylphenol	95-48-7	3.10E+02		
3-Methylphenol	108-39-4	3.10E+02		
4-Methylphenol	106-44-5	6.10E+02		
N-Nitroso-di-n-propylamine	621-64-7	6.90E-02		
N-Nitrosodiphenylamine	86-30-6	9.90E+01		
Naphthalene	91-20-3	3.60E+00		
2-Nitroaniline	88-74-4	6.10E+01		
3-Nitroaniline	99-09-2			
4-Nitroaniline	100-01-6	2.40E+01		
Nitrobenzene	98-95-3	4.80E+00		
2-Nitrophenol	88-75-5			
4-Nitrophenol	100-02-7			
2,2'-Oxybis(1-chloropropane)	108-60-1	4.60E+00		
Pentachlorophenol	87-86-5	8.90E-01		
Phenanthrene (based on pyrene)	85-01-8	1.70E+02		
Phenol	108-95-2	1.80E+03		
Pyrene	129-00-0	1.70E+02		

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Table 2 (a) Soil: Residential and Other High Frequency Receptors	CAS No.	Beneficial Fill Residential Screening Level (b) mg/kg	Maximum Soil Concentration mg/kg	Contaminant Of Potential Concern for Residential Use?
1,2,4,5-Tetrachlorobenzene	95-94-3	1.80E+00		
2,3,4,6-Tetrachlorophenol	58-90-2	1.80E+02		
2,4,5-Trichlorophenol	95-95-4	6.10E+02		
2,4,6-Trichlorophenol **	88-06-2	4.40E+01		
Semivolatile Organic Compounds (SVOCs)				
Benzoic Acid	65-85-0	2.40E+04		
TCL Polychlorinated Biphenyls (PCBs)				
Aroclor-1016	12674-11-2	3.90E-01		
Aroclor-1221	11104-28-2	1.40E-01		
Aroclor-1232	11141-16-5	1.40E-01		
Aroclor-1242	53469-21-9	2.20E-01		
Aroclor-1248	12672-29-6	2.20E-01		
Aroclor-1254 **	11097-69-1	2.20E-01		
Aroclor-1260	11096-82-5	2.20E-01		
Aroclor-1262 (based on Aroclor 1260)	37324-23-5	2.20E-01		
Aroclor-1268 (based on Aroclor 1260)	11100-14-4	2.20E-01		
Total PCBs	1336-36-3	2.20E-01		
TCL Pesticides				
Aldrin	309-00-2	2.90E-02		
alpha-BHC	319-84-6	7.70E-02		
beta-BHC	319-85-7	2.70E-01		
delta-BHC (based on alpha-BHC)	319-86-8	7.70E-02		
gamma-BHC (lindane)	58-89-9	5.20E-01		
Chlordane	12789-03-6	1.60E+00		
alpha-Chlordane	5103-71-9	1.60E+00		
gamma-Chlordane	5103-74-2	1.60E+00		
4,4'-DDD	72-54-8	2.00E+00		
4,4'-DDE	72-55-9	1.40E+00		
4,4'-DDT	50-29-3	1.70E+00		
Dieldrin	60-57-1	3.00E-02		
Endosulfan	115-29-7	3.70E+01		
Endosulfan I (based on Endosulfan)	959-98-8	3.70E+01		
Endosulfan II (based on Endosulfan)	33213-65-9	3.70E+01		
Endosulfan Sulfate (based on Endosulfan)	1031-07-8	3.70E+01		
Endrin	72-20-8	1.80E+00		
Endrin Aldehyde (based on Endrin)	7421-93-4	1.80E+00		
Endrin Ketone (based on Endrin)	53494-70-5	1.80E+00		
Heptachlor	76-44-8	1.10E-01		
Heptachlor epoxide	1024-57-3	5.30E-02		
Methoxychlor	72-43-5	3.10E+01		
Toxaphene	8001-35-2	4.40E-01		
Chlorinated dioxins/dibenzofurans (CDDs/CDFs)				
2,3,7,8-TCDD	1746-01-6	4.50E-06		
2,3,7,8-TCDF	51207-31-9			

(a) Use this table for sites where groundwater use and ecological receptors are not a concern

(b) Based on EPA Regional Screening Level Table Residential Soil; values based on non-carcinogenic effects have been divided by 10

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Table 3 (a) Soil: Restricted (Commercial/Industrial)	CAS No.	Beneficial Fill Industrial Screening Level (b) * mg/kg	Maximum Soil Concentration mg/kg	Contaminant Of Potential Concern for Commercial/ Industrial Use?
TAL Inorganics				
Aluminum	7429-90-5	9.90E+04		
Antimony	7440-36-0	4.10E+01		
Arsenic	7440-38-2	1.60E+00		
Barium	7440-39-3	1.90E+04		
Beryllium	7440-41-7	2.00E+02		
Cadmium (food, soil)	7440-43-9	8.00E+01		
Calcium	7440-70-2			
Chromium (based on Chromium VI)	7440-47-3	5.60E+00		
Chromium III	16065-83-1	1.50E+05		
Cobalt	7440-48-4	3.00E+01		
Copper	7440-50-8	4.10E+03		
Cyanide	57-12-5	6.10E+01		
Iron	7439-89-6	7.20E+04		
Lead	7439-92-1	8.00E+02		
Magnesium	7439-95-4			
Manganese (nonfood)	7439-96-5	2.30E+03		
Mercury (inorganic salts)	7487-94-7	3.10E+01		
Mercury	7439-97-6	4.30E+00		
Methylmercury	22967-92-6	1.00E+01		
Nickel	7440-02-0	2.00E+03		
Potassium	7440-09-7			
Selenium	7782-49-2	5.10E+02		
Silver	7440-22-4	5.10E+02		
Sodium	7440-23-5			
Thallium	7440-28-0	1.00E+00		
Vanadium	7440-62-2	5.20E+02		
Zinc	7440-66-6	3.10E+04		
Other Inorganics				
Perchlorate		7.20E+01		
TCL Volatile Organic Compounds (VOCs)				
Acetone	67-64-1	6.30E+04		
Benzene	71-43-2	5.40E+00		
Bromochloromethane	74-97-5	6.80E+01		
Bromodichloromethane	75-27-4	1.40E+00		
Bromoform	75-25-2	2.20E+02		
Bromomethane	74-83-9	3.20E+00		
2-Butanone (methyl ethyl ketone)	78-93-3	2.00E+04		
Carbon disulfide	75-15-0	3.70E+02		
Carbon tetrachloride	56-23-5	3.00E+00		
Chlorobenzene	108-90-7	1.40E+02		
Chloroethane	75-00-3	6.10E+03		
Chloroform	67-66-3	1.50E+00		
Chloromethane	74-87-3	5.00E+01		
Cyclohexane	110-82-7	2.90E+03		
1,2-Dibromo-3-chloropropane	96-12-8	6.90E-02		
Dibromochloromethane	124-48-1	3.30E+00		
1,2-Dibromoethane	106-93-4	1.70E-01		
1,2-Dichlorobenzene (ortho)	95-50-1	9.80E+02		
1,3-Dichlorobenzene (meta)(based on 1,4-dichlorobenzene)	541-73-1	1.20E+01		
1,4-Dichlorobenzene (para)	106-46-7	1.20E+01		
Dichlorodifluoromethane	75-71-8	4.00E+01		
1,1-Dichloroethane	75-34-3	1.70E+01		
1,2-Dichloroethane	107-06-2	2.20E+00		
1,1-Dichloroethene	75-35-4	1.10E+02		
1,2-Dichloroethene (total)	540-59-0	9.20E+02		
cis-1,2-Dichloroethene	156-59-2	2.00E+02		
trans-1,2-Dichloroethene	156-60-5	6.90E+01		
1,2-Dichloropropane	78-87-5	4.70E+00		
1,3-Dichloropropene (total)	542-75-6	8.30E+00		
cis-1,3-Dichloropropene	10061-01-5	8.30E+00		
trans-1,3-Dichloropropene	10061-02-6	8.30E+00		
1,4-dioxane	123-91-1	1.70E+01		
Ethylbenzene	100-41-4	2.70E+01		
Hexane	110-54-3	2.60E+02		
2-Hexanone	591-78-6	1.40E+02		
Isopropylbenzene (cumene)	98-82-8	1.10E+03		
4-Methyl-2-pentanone (methyl isobutyl ketone)	108-10-1	5.30E+03		
Methyl acetate	79-20-9	1.00E+05		
Methyl tert-butyl ether	1634-04-4	2.20E+02		
Methylcyclohexane (based on Cyclohexane)	108-87-2	2.90E+03		
Methylene chloride	75-09-2	9.60E+02		
Styrene	100-42-5	3.60E+03		
1,1,2,2-Tetrachloroethane	79-34-5	2.80E+00		
Tetrachloroethene	127-18-4	1.10E+02		
Toluene	108-88-3	4.50E+03		
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	1.80E+04		
1,2,3-Trichlorobenzene	87-61-6	4.90E+01		

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Table 3 (a) Soil: Restricted (Commercial/Industrial)	CAS No.	Beneficial Fill Industrial Screening Level (b) * mg/kg	Maximum Soil Concentration mg/kg	Contaminant Of Potential Concern for Commercial/ Industrial Use?
1,2,4-Trichlorobenzene **	120-82-1	9.90E+01		
1,1,1-Trichloroethane	71-55-6	3.80E+03		
1,1,2-Trichloroethane **	79-00-5	5.30E+00		
Trichloroethene **	79-01-6	6.40E+00		
Trichlorofluoromethane	75-69-4	3.40E+02		
Vinyl Chloride	75-01-4	1.70E+00		
Total Xylenes	1330-20-7	2.70E+02		
Other VOCs				
n-butylbenzene	104-51-8	5.10E+03		
sec-butylbenzene	135-98-8			
tert-butylbenzene	98-06-6			
isopropyltoluene (based on isopropylbenzene)	99-87-6	1.10E+03		
n-propylbenzene	103-65-1	2.10E+03		
1,1,1,2-tetrachloroethane	630-20-6	9.30E+00		
1,2,4-trimethylbenzene	95-63-6	2.60E+01		
1,3,5-trimethylbenzene	108-67-8	1.00E+03		
m-xylene	108-38-3	2.50E+02		
o-xylene	95-47-6	3.00E+02		
p-xylene	106-42-3	2.60E+02		
TCL Semivolatile Organic Compounds (SVOCs)				
Acenaphthene	83-32-9	3.30E+03		
Acenaphthylene (based on pyrene)	208-96-8	1.70E+03		
Acetophenone	98-86-2	1.00E+04		
Anthracene	120-12-7	1.70E+04		
Atrazine	1912-24-9	7.50E+00		
Benzaldehyde	100-52-7	1.00E+04		
Benzo(a)anthracene	56-55-3	2.10E+00		
Benzo(a)pyrene	50-32-8	2.10E-01		
Benzo(b)fluoranthene	205-99-2	2.10E+00		
Benzo(g,h,i)perylene (based on pyrene)	191-24-2	1.70E+03		
Benzo(k)fluoranthene	207-08-9	2.10E+01		
1,1'-Biphenyl	92-52-4	2.10E+01		
bis(2-Chloroethoxy)methane	111-91-1	1.80E+02		
bis(2-chloroethyl)ether	111-44-4	1.00E+00		
bis-(2-Ethylhexyl)phthalate	117-81-7	1.20E+02		
4-Bromophenyl-phenylether	101-55-3			
Butylbenzylphthalate	85-68-7	9.10E+02		
Caprolactam	105-60-2	3.10E+04		
Carbazole	86-74-8			
4-Chloro-3-methylphenol	59-50-7	6.20E+03		
4-Chloroaniline	106-47-8	8.60E+00		
2-Chloronaphthalene	91-58-7	8.20E+03		
2-Chlorophenol	95-57-8	5.10E+02		
4-Chlorophenyl-phenylether	7005-72-3			
Chrysene	218-01-9	2.10E+02		
Dibutyl Phthalate	84-74-2	6.20E+03		
Di-n-octylphthalate	117-84-0			
Dibenzo(a,h)anthracene	53-70-3	2.10E-01		
Dibenzofuran	132-64-9	1.00E+02		
3,3'-Dichlorobenzidine	91-94-1	3.80E+00		
2,4-Dichlorophenol	120-83-2	1.80E+02		
Diethylphthalate	84-66-2	4.90E+04		
2,4-Dimethylphenol	105-67-9	1.20E+03		
Dimethylphthalate	131-11-3			
4,6-Dinitro-2-methylphenol	534-52-1	4.90E+00		
2,4-Dinitrophenol	51-28-5	1.20E+02		
2,4-Dinitrotoluene	121-14-2	5.50E+00		
2,6-Dinitrotoluene	606-20-2	6.20E+01		
Fluoranthene	206-44-0	2.20E+03		
Fluorene	86-73-7	2.20E+03		
Hexachlorobenzene	118-74-1	1.10E+00		
Hexachlorobutadiene	87-68-3	2.20E+01		
Hexachlorocyclopentadiene	77-47-4	3.70E+02		
Hexachloroethane **	67-72-1	4.30E+01		
Indeno(1,2,3-cd)pyrene	193-39-5	2.10E+00		
Isophorone	78-59-1	1.80E+03		
2-Methylnaphthalene	91-57-6	2.20E+02		
2-Methylphenol	95-48-7	3.10E+03		
3-Methylphenol	108-39-4	3.10E+03		
4-Methylphenol	106-44-5	6.20E+03		
N-Nitroso-di-n-propylamine	621-64-7	2.50E-01		
N-Nitrosodiphenylamine	86-30-6	3.50E+02		
Naphthalene	91-20-3	1.80E+01		
2-Nitroaniline	88-74-4	6.00E+02		
3-Nitroaniline	99-09-2			
4-Nitroaniline	100-01-6	8.60E+01		
Nitrobenzene	98-95-3	2.40E+01		
2-Nitrophenol	88-75-5			
4-Nitrophenol	100-02-7			
2,2'-Oxybis(1-chloropropane)	108-60-1	2.20E+01		

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Table 3 (a) Soil: Restricted (Commercial/Industrial)	CAS No.	Beneficial Fill Industrial Screening Level (b) * mg/kg	Maximum Soil Concentration mg/kg	Contaminant Of Potential Concern for Commercial/ Industrial Use?
Pentachlorophenol	87-86-5	2.70E+00		
Phenanthrene (based on pyrene)	85-01-8	1.70E+03		
Phenol	108-95-2	1.80E+04		
Pyrene	129-00-0	1.70E+03		
1,2,4,5-Tetrachlorobenzene	95-94-3	1.80E+01		
2,3,4,6-Tetrachlorophenol	58-90-2	1.80E+03		
2,4,5-Trichlorophenol	95-95-4	6.20E+03		
2,4,6-Trichlorophenol **	88-06-2	1.60E+02		
Other SVOCs				
Benzoic Acid	65-85-0	2.50E+05		
TCL Polychlorinated Biphenyls (PCBs)				
Aroclor-1016 **	12674-11-2	2.10E+01		
Aroclor-1221	11104-28-2	5.40E-01		
Aroclor-1232	11141-16-5	5.40E-01		
Aroclor-1242	53469-21-9	7.40E-01		
Aroclor-1248	12672-29-6	7.40E-01		
Aroclor-1254	11097-69-1	7.40E-01		
Aroclor-1260	11096-82-5	7.40E-01		
Aroclor-1262 (based on Aroclor 1260)	37324-23-5	7.40E-01		
Aroclor-1268 (based on Aroclor 1260)	11100-14-4	7.40E-01		
Total PCBs	1336-36-3	7.40E-01		
TCL Pesticides				
Aldrin	309-00-2	1.00E-01		
alpha-BHC	319-84-6	2.70E-01		
beta-BHC	319-85-7	9.60E-01		
delta-BHC (based on alpha-BHC)	319-86-8	2.70E-01		
gamma-BHC (lindane)	58-89-9	2.10E+00		
Chlordane	57-74-9	6.50E+00		
alpha-Chlordane	5103-71-9	6.50E+00		
gamma-Chlordane	5103-74-2	6.50E+00		
4,4'-DDD	72-54-8	7.20E+00		
4,4'-DDE	72-55-9	5.10E+00		
4,4'-DDT	50-29-3	7.00E+00		
Dieldrin	60-57-1	1.10E-01		
Endosulfan	115-29-7	3.70E+02		
Endosulfan I (based on Endosulfan)	959-98-8	3.70E+02		
Endosulfan II (based on Endosulfan)	33213-65-9	3.70E+02		
Endosulfan Sulfate (based on Endosulfan)	1031-07-8	3.70E+02		
Endrin	72-20-8	1.80E+01		
Endrin Aldehyde (based on Endrin)	7421-93-4	1.80E+01		
Endrin Ketone (based on Endrin)	53494-70-5	1.80E+01		
Heptachlor	76-44-8	3.80E-01		
Heptachlor epoxide	1024-57-3	1.90E-01		
Methoxychlor	72-43-5	3.10E+02		
Toxaphene	8001-35-2	1.60E+00		
Chlorinated dioxins/dibenzofurans (CDDs/CDFs)				
2,3,7,8-TCDD	1746-01-6	1.80E-05		
2,3,7,8-TCDF	51207-31-9			

(a) Use this table for sites that are restricted to commercial/industrial use (no residential, day care, schools, play areas)

(b) Based on EPA Regional Screening Level Table Residential Soil; values based on non-carcinogenic effects have been divided by 10

** non-carcinogenic RSL/10 < carcinogenic RSL