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September 14, 2016

Mr. David P. Kwiatkowski
North Carolina Department of
Environmental Quality
Division of Waste Management
Superfund Section
Pre-Regulatory Landfill Unit
1646 Mail Service Center
Raleigh, North Carolina 27699-1646

Subject: Remedial Investigation - Waste Delineation and Media Sampling
Bud Holding Company
10 and 12 Sharps Airpark Court
Greensboro, Guilford County, North Carolina
Site Identification Number: NONCD0000673
Task Order 673DP-2

Dear Mr. Kwiatkowski:

CDM Smith Inc. (CDM Smith) is pleased to submit this Remedial Investigation - Waste Delineation and Media Sampling report for the Bud Holding Company (site) located in Greensboro, Guilford County, North Carolina, in accordance with Task Order 673DP-2. The investigation was performed in accordance with Task Order 673DP-1 and the Work Plan approved by the North Carolina Department of Environmental Quality's (NCDEQ) Division of Waste Management (DWM) - Superfund Section - Inactive Hazardous Sites Branch (IHSB) - Pre-Regulatory Landfill Unit on August 1, 2016. Sampling and landfill gas (LFG) screening activities were performed in accordance with CDM Smith's Standard Operating Procedures and Quality Assurance manual.

Field activities were completed from August 8-12 and 16-17, 2016, as summarized in the field notes provided in **Appendix A**. Drilling and laboratory services were performed by North Carolina licensed and certified subcontractors. Field activities, sampling results, and Work Plan variances are discussed below.

Surface Water and Sediment Sampling

Surface water and sediment samples SW/SED-1 through -3 were collected on August 8-9, 2016, from locations located along the East Fork Deep River as shown on **Figure 1.** Samples were collected in a downstream-to-upstream order starting with sample location SW/SED-3. The sediment samples were collected from the same location as the surface water samples.

Prior to sample collection, each surface water location was measured for pH, conductivity, temperature, and turbidity using a YSI-63 multi-parameter water quality meter and a Hanna HI 98703 turbidity meter. Both water quality meters were calibrated in accordance with the manufacturer's instructions prior to collecting measurements. Water quality measurements at the time of sample collection are provided in **Table 1**.

Each surface water and sediment sample was analyzed for volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (EPA) Method 8260B, 1,4-dioxane by EPA Method 8260B selective ion monitoring, semi-VOCs (SVOCs) by EPA Method 8270D, total metals (i.e. antimony, arsenic, beryllium, cadmium, chromium, copper, iron, lead, manganese, nickel, selenium, silver, thallium, and zinc) by EPA Method 6020A, mercury by EPA Methods 7470A (surface water) and 7471B (sediment), ammonia by EPA Method 350.1, and nitrate and sulfate by EPA Method 300.0. Tentatively Identified Compounds (TICs) for the 10 largest peaks identified by the 8260B and 8270D analyses were also reported. Per the Work Plan, TICs were only to be reported for all water samples but were reported for all samples collected for this investigation. Additionally, the sediment samples were analyzed for hexavalent chromium using EPA Method 7196A.

The Work Plan stated that metals, with the exception of mercury, would be analyzed using EPA Method 6020B and ammonia would be analyzed using Standard Method (SM) 4500. EPA Method 6020A was used to analyze the surface water and sediment samples for metals and EPA Method 350.1 was used to analyze the samples for ammonia. EPA Method 6020B is an updated version of Method 6020A and includes revised and additional laboratory quality control procedures and terminology revisions. The revised method does not include changes to laboratory method detection or reporting limits. The laboratory method detection and reporting limits are similar for SM 4500 and EPA Method 350.1. These analytical method variances apply to all samples analyzed for this investigation.

No VOCs, SVOCs, TICs, or general chemistry analytes (i.e. ammonia, nitrate, and sulfate) were detected in the surface water samples above the 15A NCAC 02B (NC 2B) Surface Water Standards for Class C waters. All surface water samples had detections of mercury above the NC 2B Surface Water Standard. Lead was detected above the NC 2B Surface Water Standard in samples collected from SW-3. Note that mercury and lead were detected in the laboratory quality assurance/quality control method blank. The surface water analytical results are summarized in **Table 2**.

Sediment samples collected from SED-2 had detections of hexavalent chromium, iron, and thallium above the IHSB's Health-Based Residential Preliminary Soil Remediation Goal (PSRG). Hexavalent chromium was also detected above the Residential PSRG in samples collected from SED-3. No VOCs, TICs, or general chemistry analytes were detected above the PSRGs. SVOCs detected above the Residential PSRG along with the locations are summarized below.

- Benzo(a)pyrene: SED-1 through -3
- Benzo(b)fluoranthene: SED-2

The sediment analytical results are summarized in **Table 3**. Surface water and sediment sample results exceeding the standards are provided on **Figure 2**. The laboratory analytical data reports for the surface water and sediment samples are provided in **Appendix B**.

Cover Soil Assessment and Waste Characterization

Soil borings SB-1 through -17 were advanced on August 10-12, 16, 2016, to verify the presence or absence of waste, to determine the cover soil and waste thickness, and to characterize soil and waste. Each boring was advanced to 10 feet below ground surface (bgs) or to the waste and native soil interface if waste was present using hollow-stem auger (HSA) drilling techniques. Split-spoon samples were collected continuously using Standard Penetration Testing to the waste and native soil interface at boring locations where waste was present. A photoionization detector (PID) was used to screen the split-spoon samples for total VOCs. Soil boring locations are provided on Figure 1. Boring logs with PID measurements are provided in **Appendix C**. The lithology of the cover soils and soils mixed with waste was characterized using the Unified Soil Classification System. A summary of the cover soil and waste thickness as well as the type of waste encountered for each boring is provided in **Table 4**.

Cover soil thickness ranged from 0.5 feet at SB-7 to 7 feet at boring locations SB-1 and -3C. Note that boring SB-3C was advanced to delineate the waste boundary as discussed below in the *Waste Boundary Delineation* section of this report. Cover soil thickness for the waste disposal areas is provided on **Figure 3**. Cover soil PID measurements ranged from 5 parts per million (ppm) at SB-3 to 562 ppm at SB-2. These PID measurements were also the lowest and highest measurements observed in waste in comparison to all the waste characterization borings. PID measurements for soil at boring locations where waste was not encountered ranged from 2.6 ppm at SB-17 to 10.5 ppm at SB-4.

Waste encountered at borings SB-1, -2, -3, -7, -8, -9, -10, -14, and -16 consisted of asphalt, brick, fabric, metal, metal wire, nails, plastic, wood, and wood chips. The waste thickness ranged from 1-foot at SB-1 to 19.5 feet at SB-7.

Cover soil and waste characterization samples were collected for laboratory analyses. The cover soil and waste characterization samples were analyzed for the same parameters as the sediment samples, including TICs, using the same analytical methods. Cover soil samples were collected from 6 inches bgs at each boring location where waste was present and cover soil was greater than or equal to 6 inches. Where cover soil was greater than or equal to 2 feet, soil samples were also collected at 18 inches bgs, in addition to the 6 inch sample interval. Soil mixed with waste was collected from the top of waste, mid-boring based on PID readings and visual observation, from the bottom of waste, and from the native soil located beneath waste.

The Work Plan stated that waste characterization samples would be submitted from seven boring locations but samples were only submitted from six locations. Additionally, a native soil sample was not collected from SB-1.

No VOCs, TICs, or general chemistry analytes were detected in the cover soil or waste characterization samples above the Residential PSRGs. Metal and SVOC exceedances were below Industrial PSRGs. Iron was detected in all cover soil samples above the Residential PSRG. Additional metals and SVOCs detected above the Residential PSRGs along with the locations are summarized below. Note that the sample depth (i.e. feet bgs) is provided in parenthesis. Analytical results for the cover soil and waste characterization samples are summarized in **Table 5** and analytes exceeding the Residential PSRGs are provided on **Figure 4**. Laboratory analytical data reports are provided in Appendix B.

Cover Soil Metals Exceeding Residential PSRGs

- Arsenic — SB-1 (0.5 and 1.5), SB-2 (0.5 and 1.5), SB-7 (0.5 and 1.5), SB-8 (0.5 and 1.5), SB-10 (1.5), SB-14 (0.5) and SB-16 (1.5)
- Hexavalent Chromium — SB-1 (0.5 and 1.5), SB-2 (1.5), SB-7 (0.5 and 1.5), SB-8 (0.5 and 1.5), SB-9 (0.5 and 1.5), SB-10 (0.5 and 1.5), SB-14 (0.5 and 1.5), and SB-16 (1.5)
- Manganese — SB-1 (0.5), SB-2 (0.5 and 1.5), SB-3 (0.5 and 1.5), SB-7 (0.5), SB-8 (0.5 and 1.5), SB-9 (0.5 and 1.5), SB-10 (1.5), SB-14 (0.5 and 1.5), and SB-16 (0.5 and 1.5)
- Thallium — SB-1 (0.5)

Cover Soil SVOCs Exceeding Residential PSRGs

- Benzo(a)pyrene — SB-1 (0.5 and 1.5), SB-2 (0.5 and 1.5), SB-7 (0.5 and 1.5), and SB-8 (0.5)
- Benzo(b)fluoranthene — SB-1 (1.5)

Waste Characterization Metals Exceeding Residential PSRGs

- Arsenic — SB-1 (7-8), SB-2 (6-8 and 12.5-14), SB-7 (2-4, 6-8, and 12-14), SB-9 (5, 10, 15, and 18-20), SB-10 (12-14), and SB-14 (2-4 and 22-24)
- Hexavalent Chromium — SB-2 (6-8, 10.5-12.5, and 12.5-14), SB-7 (2-4, 6-8, and 12-14), SB-9 (5, 10, 15, and 18-20), SB-10 (12-14 and 14-16), and SB-14 (2-4, 20-22, and 22-24)
- Iron — Detected in all samples with the exception of SB-7-22 and SB-14-20-22
- Manganese — SB-2 (12.5-14), SB-7 (6-8), SB-3 (0.5 and 1.5), SB-9 (10 and 15), SB-10 (4-6, 14-16, and 18-20), and SB-14 (2-4, 10-12, and 22-24)
- Thallium — SB-9 (10 and 15) and SB-14 (2-4)

Waste Characterization SVOCs Exceeding Residential PSRGs

- Benzo(a)pyrene — SB-2 (6-8 and 10.5-12.5), SB-7 (6-8 and 12-14), and SB-9 (15)

Native soil samples collected from SB-2-12.5-14 and SB-14-22-24 had detections of arsenic, hexavalent chromium, iron, and manganese above their respective Residential PSRG. Hexavalent chromium and iron were detected above their respective Residential PSRG in native soil samples collected from SB-9-18-20. Iron and manganese were detected above their respective Residential PSRG in native soil samples collected from SB-10-18-20.

Waste Boundary Delineation

Following an evaluation of the waste characterization boring data, additional soil borings were advanced on August 16-17, 2016, to delineate the waste boundary. These borings were advanced to the top of waste or 10 feet bgs using HSA drilling techniques. Three separate waste disposal areas were identified. Boring locations and waste boundary delineation results are provided on **Figure 5**. Waste boundary northing and easting coordinates are provided in **Table 6**. A summary of the boring results is provided in Table 4.

Landfill Gas Probe Installation and Screening

Landfill gas probes (LFG) GP-1 through -5 were installed on August 11-12, 2016, as shown on Figure 1. The LFG probes were installed using HSA drilling techniques to 11 feet bgs at the same locations as waste characterization borings SB-5, -6, -7, -13, and -14. Boring logs are provided in Appendix C.

Each LFG probe was constructed with six feet of 1-inch diameter Schedule 40 polyvinyl chloride (PVC) riser flush-threaded to five feet of 0.01-inch machine slotted PVC screen. The annular space was backfilled with a #2 standard sand filter from the base of the borehole to a level of 1-foot above the screen. A 2-foot thick hydrated bentonite seal was installed above the sand filter. The remainder of the borehole annulus was completed with a Portland cement and bentonite grout mixture to land surface. The probes were completed with a locking expansion plug and an identification placard. LFG probe construction details are summarized in **Table 7**.

LFG probes GP-1 through -5 were screened on August 17, 2016, for carbon dioxide, hydrogen sulfide, methane, oxygen, and total VOCs using a GEM 2000 Plus (GEM) and a PID. Water levels were measured at each LFG probe using an electronic water level indicator with an accuracy of 0.01 feet. The GEM and PID were calibrated prior to initiating the screening in accordance with the manufacturer's instructions. Barometric pressure, ambient temperature, and humidity were recorded at the beginning of screening activities. A hygrometer was used to measure humidity and ambient temperature and the GEM was used to measure barometric pressure.

Methane was detected in LFG probes GP-2, -3, and -4 at 0.3, 69.6, and 70.5 percent, respectively. Hydrogen sulfide was detected in GP-1 and -4 at 18 and 3 ppm, respectively. Total VOCs were measured in GP-1, -2, and -5 at 1.1, 1.3, and 2.0 ppm, respectively. Approximately 2 feet of groundwater was measured in GP-2 but no groundwater was measured in the other LFG probes. Groundwater measurements for each landfill gas probe are provided in **Table 8** and the LFG probe screening results are summarized in **Table 9**. **Figure 6** provides a summary of the LFG probe screening results.

Groundwater Investigation

Temporary groundwater monitoring wells TW-1 through -7 were installed on August 8-9, 2016, using HSA drilling techniques. Each well was installed to 25 feet bgs with the exception of TW-2 and -7. These wells were installed to 20 and 24 feet bgs, respectively. Temporary monitoring well locations are provided on Figure 1. Boring logs with PID measurements for each temporary monitoring well are provided in Appendix C.

Each temporary groundwater monitoring well was constructed with 2-inch diameter Schedule 40 PVC riser flush-threaded to 10 feet of 0.01-inch mill slotted Schedule 40 PVC screen. A filter pack consisting of #2 standard sand was installed in the annular space from the base of the borehole to a level of 2 feet above the screen. A bentonite annular seal was installed 2 feet above the filter pack and hydrated using potable water. Following installation, each well was developed to remove suspended solids from the water column until the development water was visually clear. Well construction details are summarized in **Table 10**.

Groundwater samples were collected from the temporary monitoring wells on August 12, 2016, and analyzed for the same parameters as the surface water samples. Prior to sampling, the water level and total depth of each well was measured on August 11, 2016, using an electronic water level indicator with an accuracy of 0.01 feet. Water level measurements are provided in **Table 11** and were used to construct the potentiometric surface map provided on **Figure 7.** Light Detection and Ranging data was obtained from the North Carolina Department of Transportation to roughly estimate groundwater elevations in relation to site topography. Based on the groundwater elevations as shown on Figure 8, the estimated groundwater flow in the surficial aquifer is to the southwest across the site toward the East Fork Deep River.

Prior to sample collection, each temporary monitoring well was purged. Water quality measurements of pH, conductivity, and temperature were collected while purging using a YSI-63 multi-parameter water quality meter and Hanna HI 98703 turbidity meter. Each water quality meter was calibrated in accordance with the manufacturer's instructions prior to initiating sampling activities. Following stabilization of the purge parameters, groundwater samples were collected using low-flow sampling techniques. The water quality measurements at the time of sample collection are presented in Table 11.

No VOCs, SVOCs, or TICs were detected in the groundwater samples above the 15A NCAC 02L .0202 (NC 2L) Groundwater Quality Standards. Iron and manganese were detected in all samples above their respective NC 2L Standard. Chromium was detected in samples collected from TW-7 above the NC 2L Standard. Ammonia was detected above the Groundwater Protection Standard in samples collected from TW-5 and -7. Analytical results are summarized in **Table 12** and analytes exceeding the standards are provided on **Figure 8**. The laboratory analytical data reports are provided in Appendix B.

Following sample collection, each temporary monitoring well was abandoned on August 17, 2016. The wells were abandoned by pulling the PVC riser and screen followed by filling the remaining annular space with a Portland cement and bentonite grout mixture to land surface.

Background Soil Sampling

Background soil samples were collected from BG-1 through -3 on August 16, 2016. The background soil sample locations were determined based on an evaluation of the data from the waste characterization borings and are the same locations where waste characterization borings SB-4, -12, and -17 were proposed as shown on Figure 1.

Each background soil boring was advanced using HSA drilling techniques. Split-spoon samples were collected continuously to characterize the lithology and were screened with a PID. Soil samples were collected at 6 inches, 18 inches, 5 feet, 10 feet, 15 feet, and 20 feet bgs. The Work Plan did not include the 20-foot sample interval but that was added based on an evaluation of the investigation data. Each background soil sample was analyzed for total metals (i.e. antimony, arsenic, beryllium, cadmium, chromium, copper, iron, lead, manganese, nickel, selenium, silver, thallium, and zinc) by EPA Method 6020A, mercury by EPA Method 7471B, ammonia by EPA Method 350.1, nitrate and sulfate by EPA Method 300.0, and hexavalent chromium by EPA Method 7196A.

No general chemistry analytes were detected in the background soil samples above the Residential PSRGs. The metals listed below were detected above the Residential or Industrial PSRGs. Note that the depth the samples were collected is provided in the sample code. The analytical results are summarized in **Table 13.** The laboratory analytical data report is provided in Appendix B.

Residential PSRG Exceedances

- Arsenic BG-1-5, BG-2-5, and BG-3-5
- Hexavalent Chromium BG-1-0.5, BG-1-1.5, BG-1-10, BG-1-15, BG-2-20, and BG-3-15
- Iron Detected in all background soil samples with the exception of BG-2-20
- Manganese Detected in all background soil samples with the exception of BG-2-15, BG-2-20, and BG-3-0.5
- Thallium BG-2-5 and BG-3-5

Industrial PSRG Exceedances

- Manganese BG-2-5

Survey

All borings and the surface water and sediment sample locations were surveyed for northing and easting using a handheld Global Positioning System (GPS) unit. Survey coordinates for the borings and surface water and sediment sample locations are provided in their respective tables. The GPS coordinates were reported in decimal degrees to the seventh order using the North American Datum of 1983 with accuracy in the thousandths of a meter following differential correction. Latitude and longitude coordinates were also reported for each survey location using the World Geodetic System 1984 format.

Survey coordinates for the waste disposal boundaries start with the northernmost point of the northern waste area and proceed in a clockwise direction for each area. The coordinates were collected approximately every 50 feet and are provided in Table 6.

Quality Control/Quality Assurance

Upon collection all samples were labeled and placed in a chilled cooler. Standard chain-of-custody procedures were followed to document the handling of the samples. Sample coolers were shipped daily to the laboratory. The laboratory analytical results were evaluated by CDM Smith to determine the validity of the data and were determined to be useable. The laboratory data evaluation is provided in Appendix B.

The analytical results were reported to the laboratory specific method detection limit (MDL) and are quantifiable at or below the practical quantification limit. Analytical results above the MDL but below the practical quantification limit were qualified as estimated or “J” flags. “B” flags were also reported and indicate that the analyte was detected in the method blank.

Duplicate samples were collected daily from each media during sampling activities for laboratory quality control with the exception of the surface water and sediment samples. The surface water and sediment sampling was completed in 2-days and only one duplicate sample set was collected from

each media. The duplicate samples were analyzed for the same parameters as the primary samples. The following duplicate samples were collected:

- One surface water and sediment sample (SW/SED-3);
- Three soil samples from the waste characterization borings (SB-2-10.5-12.5, SB-10-4-6, and SB-14-10-12);
- One groundwater sample from the temporary monitoring wells (TW-1); and
- One background soil sample (BG-1-10).

In general, the relative percent different (RPD) between the parent and duplicate samples showed good laboratory precision. The RPD results for several analytes widely varied indicating potential influence from the homogeneity of the matrix, turbidity, sampling or laboratory procedures, or laboratory instrumentation.

An equipment rinsate blank was collected from the stainless steel scoop and bowl used to collect sediment samples to verify decontamination of the sampling equipment was achieved. Distilled water was used to collect the equipment rinsate blank and the samples were analyzed for the same parameters as the surface water samples. The equipment rinsate blank had a “B” flag detection of mercury above the NC 2B standard. Eight trip blanks were analyzed for VOCs for quality control. Acetone, a common laboratory contaminant, was detected as a “J” flag below the NC 2L Standard in the trip blank submitted with the background soil samples.

Investigative-Derived Waste

Investigative-derived waste (IDW) generated during drilling and sampling activities consisted of soil, rock, waste, and water generated from decontamination, well development and well purging activities. IDW from the waste characterization borings was screened with a PID and deemed non-hazardous. Waste and cover soil cuttings were used to backfill the borings. Cover soils were stockpiled separately from the waste cuttings to ensure the cover soil remained free of waste. Hydrated bentonite chips were used for backfill in instances where there was not enough soil or waste cuttings to complete backfilling flush with the adjacent land elevation.

Soil cuttings from the waste characterization borings that were converted to LFG probes and temporary groundwater monitoring wells were deemed non-hazardous based on PID measurements and spread on the ground surface. Waste cuttings from the LFG probes and temporary groundwater monitoring wells were placed in a trash bag due to the low volume and disposed of by the drilling subcontractor. Soil cuttings from the background soil sample borings were spread on the ground surface. Development and purge water from the temporary monitoring wells was discharged directly to the ground, adjacent and downgradient to the well.

Decontamination activities were completed within the waste disposal area. HSAs and tooling were decontaminated between each waste characterization boring using high-pressured potable water. Split-spoon samplers were decontaminated between each sample interval using potable water and a detergent. Sediment sampling equipment was decontaminated between each location using a brush

and potable water. Spent personal protective equipment and sampling supplies were assumed to be non-hazardous and disposed of by CDM Smith or the drilling subcontractor.

Report Certification

The report certification as specified in the *Inactive Hazardous Sites Program, Guidelines for Addressing Pre-Regulatory Landfills & Dumps, November 2015* is provided in **Appendix D**.

Sole Use Statement

This report is solely intended for use by the NCDEQ for the services that were performed in accordance with CDM Smith's proposal dated July 29, 2016, as authorized by NCDEQ Task Order 673DP-2 dated September 1, 2016.

If you have any questions or require further explanation, please do not hesitate to call me at (919) 325-3569 or by email to colonemf@cdmsmith.com.

Very truly yours,

Mathew F. Colone, P.G.
CDM Smith Inc.

cc: Aaron Weispfenning, CDM Smith
Daniel Forbes, CDM Smith

Tables

Table 1
Water Quality Measurements - Surface Water
Bud Holding Company
Guilford County, North Carolina

Surface Water Location	Northing	Easting	Latitude	Longitude	pH (S.U.)	Conductivity (µS/cm)	Temperature (degrees Celsius)	Turbidity (NTUs)
SW-1	851026.26	1716125.22	36.08448	79.96071	6.83	371	24.0	8.5
SW-2	850797.81	1716389.43	36.08386	79.95981	6.96	617	23.3	8.0
SW-3	850562.34	1716518.15	36.08322	79.95936	7.62	226	68.9	10.0

Notes:

1. Surface water measurements and samples were collected on August 8-9, 2016.
2. S.U. - Standard Units
3. µS/cm - Microsiemens per centimeter
4. NTUs - Nephelometric Turbidity Units

Table 2a
Detected Surface Water Constituents - Metals
Bud Holding Company
Guilford County, North Carolina

Surface Water Sample Code	Sample Date	Antimony	Arsenic	Beryllium	Cadmium	Chromium [6]	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
North Carolina 2B Freshwater Aquatic Life, Human Health, or Water Supply Standard		**5.6*** **	**10** **	**6.5* **	**0.15* **	**24* **	**2.7* **	**NS**	**0.54* **	**NS**	**0.012* **	**16* **	**5* **	**0.06* **	**0.24*** **	**36* **
SW-1	9-Aug-16	0.35 B	--	--	--	--	1.9 B	500 B	0.32 B	31 B	0.060 B	--	--	--	--	5.0 B
SW-2	8-Aug-16	0.59 B	--	--	--	--	1.0 B	510 B	0.38 B	33 B	0.040 B	--	--	--	--	4.8 B
SW-3	8-Aug-16	0.67 B	--	--	--	--	1.5 B	560 B	0.74 B	31 B	0.056 B	--	--	--	--	5.4 B
SW-3 (dup)	8-Aug-16	0.64 B	--	--	--	--	1.6 B	570 B	0.42 B	31 B	0.10 B	--	--	--	--	4.3 B
Rinsate Blank	9-Aug-16	--	--	--	--	--	0.51 B	--	--	0.73 B	0.043 B	--	--	--	--	2.1 B

Notes:

1. All units are in micrograms per liter (parts per billion).
2. * - Freshwater Aquatic Life Standard
3. ** - Human Health Standard
4. *** - Water Supply Standard
5. NS - No Standard
6. [6] - A Standard for total chromium has not been established. The value provided is for chromium (III).
7. Standards obtained from 15A NCAC 02B (North Carolina 2B) or are National Criteria per the U.S. Environmental Protection Agency (June 2016).
8. dup - Duplicate sample
9. B - Analyte detected in the method blank.

	- Concentration exceeds the North Carolina 2B Freshwater Aquatic Life, Human Health, or Water Supply Standard.
--	- Indicates the result is below the detection limit.

Table 2b
Detected Surface Water Constituents -
Volatile and Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

		Volatile Organic Compounds		Tentatively Identified Semi-Volatile Organic Compounds			
Surface Water Sample Code	**Sample Date**	**Acetone**	**2-Butanone**	**6-Octadecenoic acid, (Z)-**	**Benzophenone**	**Diethyltoluamide**	**Unknown**
North Carolina 2B Freshwater Aquatic Life or Water Supply Standard		**2,000***	**20,000****	**NS**	**NS**	**NS**	**NS**
SW-1	9-Aug-16	2.2	--	--	--	--	--
SW-2	8-Aug-16	6.0	--	--	--	--	--
SW-3	8-Aug-16	2.1	--	3.2	--	--	--
SW-3 (dup)	8-Aug-16	--	--	--	--	--	2.4
Rinsate Blank	9-Aug-16	5.2	2.2	--	7.0	4.5	2.3

Notes:

1. All units are in micrograms per liter (parts per billion).
2. * - Freshwater Aquatic Life Standard
3. ** - Water Supply Standard
4. NS - No Standard
5. dup - Duplicate sample
6. Standards obtained from 15A NCAC 02B (North Carolina 2B) or are National Criteria per the U.S. Environmental Protection Agency (June 2016).

-- - Indicates the result is below the detection limit.

Table 2c
Detected Surface Water Constituents - General Chemistry
Bud Holding Company
Guilford County, North Carolina

Surface Water Sample Code	Sample Date	Ammonia	Nitrate	Sulfate
North Carolina 2B Water Supply Standard		**NS**	**2,700**	**250**
SW-1	9-Aug-16	--	0.29	0.89
SW-2	8-Aug-16	--	0.30	1.9
SW-3	8-Aug-16	--	0.27	2.0
SW-3 (dup)	8-Aug-16	--	0.27	2.0
Rinsate Blank	9-Aug-16	--	5.4	--

Notes:

1. All units are in milligrams per liter (parts per million).
2. NS - No Standard
3. Standards obtained from section 15A NCAC 02B (North Carolina 2B) or are National Criteria per the U.S. Environmental Protection Agency (June 2016).
4. dup - Duplicate sample

-- - Indicates the result is below the detection limit.

Table 3a
Detected Sediment Constituents - Metals
Bud Holding Company
Guilford County, North Carolina

Sediment Sample Code	Sample Date	Antimony	Arsenic	Beryllium	Cadmium	Chromium [4]	Hexavalent Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
Health-Based Residential PSRG [3]		**6.2**	**0.68**	**32**	**14.2**	**24,000**	**0.3**	**620**	**11,000**	**400**	**360**	**2.2**	**300**	**78**	**78**	**0.156**	**4,600**
Health-Based Industrial PSRG [3]		**94**	**3.0**	**460**	**196**	**100,000**	**6.3**	**9,400**	**100,000**	**800**	**5,200**	**3.13**	**4,400**	**1,160**	**1,160**	**2.4**	**70,000**
SED-1	9-Aug-16	0.021 B	--	0.18	0.0053	4.0	--	1.8 B	4,300 B	1.8 B	140	--	1.6 B	--	--	0.044	9.9 B
SED-2	8-Aug-16	0.066 B	--	0.92	0.045	16	0.48	19 B	18,000 B	10 B	300	0.057 B	7.5 B	--	--	0.27	66 B
SED-3	8-Aug-16	0.065 B	--	0.37	0.015	6.3	0.49	3.1 B	6,500 B	3.9 B	170	0.022 B	2.5 B	--	--	0.087	15 B
SED-3 (dup)	8-Aug-16	0.024 B	0.047	0.26	0.013	4.9	--	2.7 B	5,200 B	2.4 B	190	0.033 B	2.1 B	--	--	0.079	15 B

Notes:

1. All units are in milligrams per kilogram (parts per million)
2. dup - duplicate sample
3. [3] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016
4. [4] - A PSRG for total chromium has not been established. The values provided are for chromium (III).
5. B - Analyte detected in the method blank.

	- Concentration exceeds Residential PSRG
--	- Indicates the result is below the detection limit

Table 3b
Detected Sediment Constituents - Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

		VOC	Tentatively Identified VOC
Sediment Sample Code	**Sample Date**	**Acetone**	**Unknown Alkane**
Health-Based Residential PSRG [3]		**12,200**	**NS**
Health-Based Industrial PSRG [3]		**100,000**	**NS**
SED-1	9-Aug-16	--	0.0085
SED-2	8-Aug-16	0.045 B	--
SED-3	8-Aug-16	--	--
SED-3 (dup)	8-Aug-16	--	--

Notes:

1. All units are in milligrams per kilogram (parts per million).
2. dup - Duplicate Sample
3. [3] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016
4. VOC - Volatile Organic Compound
5. B - Analyte deteceted in the method blank.

-- - Indicates the result is below the detection limit.

Table 3c
Detected Sediment Constituents -
Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

		Semi-Volatile Organic Compounds													Tentatively Identified Semi-Volatile Organic Compounds														
Sediment Sample Code	**Sample Date**	**Anthracene**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Benzo(g,h,i)perylene**	**Bis(2-Ethylhexyl)phthalate**	**Carbazole**	**Chrysene**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Phenanthrene**	**Pyrene**	**2-Propanone, 1-chloro-**	**6-Octadecenoic acid, (Z)-**	**9-Octadecenoic acid, (E)-**	**9-Hexadecenoic acid**	**n-Hexadecanoic acid**	**Benzo(e)pyrene**	**Friedelan-3-one**	**Heptacosane**	**Heptadecane, 9-octyl-**	**Hexadecanoic acid, butyl ester**	**Octadecanoic acid**	**Squalene**	**Tetradecane**	**Unknown 1**	**Unknown 2**
Health-Based Residential PSRG [4]		**3,600**	**0.16**	**0.016**	**0.16**	**1.6**	**NS**	**39**	**NS**	**16**	**480**	**0.16**	**NS**	**360**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG [4]		**46,000**	**2.9**	**0.29**	**2.9**	**29**	**NS**	**160**	**NS**	**290**	**6,000**	**2.9**	**NS**	**4,600**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SED-1	9-Aug-16	0.0069	0.04	0.044	0.06	0.025	0.019	--	--	0.049	0.11	0.02	0.045	0.079	0.091	--	0.63	--	0.14	--	--	--	--	--	--	--	--	0.45	--
SED-2	8-Aug-16	0.013	0.11	0.15	0.22	0.093	0.13	0.028	0.032	0.21	0.39	0.12	0.13	0.28	0.21	--	0.96	0.19	0.64	0.14	--	0.15	0.47	0.14	0.29	0.18	0.15	0.69	0.14
SED-3	8-Aug-16	0.023	0.09	0.079	0.096	0.05	0.045	--	--	0.1	0.19	0.044	0.087	0.14	0.099	0.45	--	0.096	0.24	--	0.11	--	--	--	0.096	--	--	0.49	--
SED-3 (dup)	8-Aug-16	--	0.011	0.021	0.032	0.014	0.019	--	--	0.022	0.047	0.017	0.02	0.036	0.12	--	--	--	0.16	--	--	--	--	--	--	--	--	0.55	--

Notes:

1. All units are in milligrams per kilogram (parts per million).
2. dup - Duplicate Sample
3. NS - No Standard
4. [4] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016

	- Concentration exceeds Residential PSRG
--	- Indicates the result is below the detection limit.

Table 3d
Detected Sediment Constituents - General Chemistry
Bud Holding Company
Guilford County, North Carolina

Sediment Sample Code	Sample Date	Ammonia	Nitrate	Sulfate
Health-Based Residential PSRG [(4)]		**NS**	**26,000**	**NS**
Health-Based Industrial PSRG [(4)]		**NS**	**100,000**	**NS**
SED-1	9-Aug-16	0.25	0.040	--
SED-2	8-Aug-16	13	0.15	--
SED-3	8-Aug-16	0.30	0.046	--
SED-3 (dup)	8-Aug-16	0.23	0.044	--

Notes:

1. All units are in milligrams per kilogram (parts per million).
2. dup - Duplicate Sample
3. NS - No Standard
4. [(4)] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016

-- - Indicates the result is below the detection limit.

Table 4
Cover Soil and Waste Characterization Boring Summary
Bud Holding Company
Guilford County, North Carolina

Waste Delineation Boring Code	Northing	Easting	Latitude	Longitude	Estimated Cover Soil Thickness (feet)	Estimated Waste Thickness (feet)	Total VOCs Measured in Cover Soil/Waste (ppm)	Waste Present (Yes/No)	Waste Description
SB-1	851076.34	1716387.84	36.08463	79.95982	7.0	1.0	8.5 (3)	Yes	Brick
SB-1A	851087.59	1716380.63	36.08466	79.95985	5.0	--(7)	0	Yes	Rubber, wire
SB-1B	851103.16	1716362.26	36.08470	79.95991	NA	--	5.7 (2)	No	--
SB-2	851149.06	1716523.06	36.08483	79.95937	6.0	6.5	562 (3)	Yes	Wood chips, metal, metal wire
SB-2A	851161.87	1716523.55	36.08487	79.95936	NA	--	0 (2)	No	--
SB-2B	851121.20	1716474.52	36.08475	79.95953	5.0	--(7)	0	Yes	Wood chips, metal wire
SB-2C	851134.38	1716474.30	36.08479	79.95953	5.0	--(7)	58 (3)	Yes	Rubber, metal, wire, plastic
SB-2D	851139.32	1716464.01	36.08480	79.95956	5.0	--(7)	1.0	Yes	Nail, metal, glass
SB-2E	851099.52	1716421.86	36.08469	79.95971	5.0	--(7)	0.2	Yes	Brick
SB-3	851236.62	1716641.02	36.08507	79.95897	6.0	3.0	5.0 (3)	Yes	Asphalt, wood chips, fabric
SB-3A	851230.11	1716629.30	36.08506	79.95901	5.0	--(7)	3.5	Yes	Brick, plastic
SB-3B	851272.17	1716630.78	36.08517	79.95900	NA	--	0 (2)	No	--
SB-3C	851213.69	1716599.76	36.08501	79.95911	7.0	--(7)	16.0	Yes	Metal, plastic
SB-3D	851181.50	1716576.31	36.08492	79.95919	NA	--	0 (2)	No	--
SB-3E	851219.76	1716636.81	36.08503	79.95898	NA	--	0 (2)	No	--
SB-4/BG-1	851327.23	1716870.82	36.08533	79.95819	NA	--	10.5 (2)	No	--
SB-5	851205.18	1716825.33	36.08499	79.95834	NA	--	6.5 (2)	No	--
SB-6	851126.10	1716647.28	36.08477	79.95894	NA	--	7.8 (2)	No	--
SB-6A	851107.23	1716577.56	36.08472	79.95918	3.0	--(7)	0	Yes	Metal
SB-6B	851110.86	1716586.88	36.08473	79.95915	NA	--	0	No	--
SB-7	851073.80	1716465.89	36.08462	79.95956	0.5	19.5	10.6 (3)	Yes	Asphalt, wood chips, wood, brick, plastic
SB-8	850983.69	1716337.44	36.08437	79.95999	2.0	18.0	6.2 (3)	Yes	Plastic, wood chips
SB-8A	850975.90	1716326.97	36.08435	79.96002	3.0	--(7)	3.6	Yes	Plastic
SB-8B	850966.67	1716322.17	36.08432	79.96004	NA	--	0	No	--
SB-9	850919.07	1716429.34	36.08420	79.95967	4.0	12.0	11.1 (3)	Yes	Wood, nails, plastic
SB-9A	850912.10	1716421.33	36.08418	79.95970	NA	--	1.6 (2)	No	--
SB-10	851001.02	1716585.41	36.08443	79.95915	4.0	12.0	7.2 (3)	Yes	Wood chips, wood
SB-10A	850943.46	1716642.05	36.08427	79.95896	NA	--	0	No	--

Table 4
Cover Soil and Waste Characterization Boring Summary
Bud Holding Company
Guilford County, North Carolina

Waste Delineation Boring Code	Northing	Easting	Latitude	Longitude	Estimated Cover Soil Thickness (feet)	Estimated Waste Thickness (feet)	Total VOCs Measured in Cover Soil/Waste (ppm)	Waste Present (Yes/No)	Waste Description
SB-10B	850938.35	1716621.69	36.08425	79.95902	NA	--	0	No	--
SB-10C	850936.70	1716604.02	36.08425	79.95908	6.0	--(7)	0	Yes	Wood chips
SB-11	851072.90	1716811.54	36.08463	79.95839	NA	--	6.4 (2)	No	--
SB-12/BG-2	851176.38	1716915.41	36.08492	79.95804	NA	--	6.5 (2)	No	--
SB-13	850948.26	1716733.86	36.08428	79.95865	NA	--	10.2 (2)	No	--
SB-14	850889.36	1716579.62	36.08412	79.95917	2.0	14.0	6.4 (3)	Yes	Asphalt, wood chips, plastic
SB-14A	850869.98	1716580.40	36.08407	79.95916	NA	--	1 (2)	No	--
SB-14B	850858.68	1716639.76	36.08404	79.95896	NA	--	0.4 (2)	No	--
SB-14C	850870.40	1716651.56	36.08407	79.95892	NA	--	0.9 (2)	No	--
SB-14D	850882.61	1716665.50	36.08410	79.95887	3.0	--(7)	0.3 (3)	Yes	Ashpalt, plastic
SB-15	850800.17	1716510.35	36.08387	79.95940	NA	--	4.6 (2)	No	--
SB-15A	850819.78	1716526.52	36.08393	79.95934	4.0	--(7)	0.1 (3)	Yes	Glass, wood chips
SB-16	850815.96	1716690.71	36.08392	79.95879	2.0	17.0	11 (3)	Yes	Wood chips, metal
SB-16A	850826.12	1716673.86	36.08395	79.95884	NA	--	0	No	--
SB-16B	850798.06	1716689.91	36.08387	79.95879	NA	--	0	No	--
SB-16C	850815.07	1716712.24	36.08392	79.95871	NA	--	0	No	--
SB-17/BG-3	850905.36	1716865.11	36.08417	79.95820	NA	--	2.6 (2)	No	--

Notes:

1. Waste delineation and background soil borings (BG) were advanced from August 10-12 and 16-17, 2016.
2. (2) - Total volatile organic compounds (VOCs) measured in soil.
3. (3) - Total VOCs measured in cover soil and waste.
4. No VOCs were detcted in the cover soil borings with the exception of those noted in the table.
5. ppm - parts per million
6. -- No waste present.
7. (7) - No estimated waste thickness, boring was only used to determine the presence of waste.
8. NA - Not Applicable
9. Northing and Easting Coordinates - North American Datum 1983 State Plane Feet North Carolina
10. Latitude and Longitude Coordinates - World Geodetic System 1984

Table 5a
Detected Cover Soil and Waste Characterization Boring Constituents - Metals
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Antimony	Arsenic	Beryllium	Cadmium	Chromium [4]	Hexavalent Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
Health-Based Residential PSRG [3]		**6.2**	**0.68**	**32**	**14.2**	**24,000**	**0.3**	**620**	**11,000**	**400**	**360**	**2.2**	**300**	**78**	**78**	**0.156**	**4,600**
Health-Based Industrial PSRG [3]		**94**	**3.0**	**460**	**196**	**100,000**	**6.3**	**9,400**	**100,000**	**800**	**5,200**	**3.13**	**4,400**	**1,160**	**1,160**	**2.4**	**70,000**
SB-1-0.5	10-Aug-16	0.022 B	1.9	0.64	0.091	66 B	1.3	47 B	40,000	23 B	660 B	0.036	25 B	0.56	--	0.16 B	47 B
SB-1-1.5	10-Aug-16	--	1.3	0.20	0.098	39 B	0.61	28 B	25,000	25 B	170 B	0.059	11 B	0.43	--	0.11 B	67 B
SB-1-7-8	10-Aug-16	--	1.1	0.60	--	41 B	--	71 B	40,000	12 B	230 B	--	16 B	--	--	0.065 B	24 B
SB-2-0.5	10-Aug-16	0.12 B	1.7	0.29	0.16	27	--	27 B	20,000 B	59 B	360 B	0.047	10 B	--	--	0.088	55 B
SB-2-1.5	10-Aug-16	0.049 B	0.88	0.48	0.097	42	0.69	44 B	31,000 B	19 B	440 B	0.028	19 B	--	--	0.074	48 B
SB-2-6-8	10-Aug-16	0.057 B	0.81	0.36	0.11	21	3.3	24 B	20,000 B	16 B	270 B	--	9.0 B	--	--	0.045	32 B
SB-2-10.5-12.5	10-Aug-16	0.029 B	0.60	0.38	--	29	0.36	24 B	21,000 B	9.8 B	220 B	0.034	12 B	--	--	0.063	17 B
SB-2-10.5-12.5 (dup)	10-Aug-16	0.027 B	0.75	0.35	0.081	36	0.35	47 B	24,000 B	13 B	290 B	0.0072	21 B	--	--	0.048	33 B
SB-2-12.5-14	10-Aug-16	0.021 B	1.2	0.45	--	22	0.80	17 B	33,000 B	18 B	820 B	0.037	6.1 B	0.47	--	0.13	13 B
SB-3-0.5	12-Aug-16	0.051 B		0.43	0.025	35	--	30 B	25,000 B	5.0 B	440 B	--	20 B	--	--	0.054	42 B
SB-3-1.5	12-Aug-16	0.025 B	0.59	0.33	--	35	--	30 B	23,000 B	4.6 B	450 B	--	20 B	--	--	0.052	38 B
SB-7-0.5	11-Aug-16	--	1.3	0.24	0.27	32	0.60	38	32,000	51	490	0.054	14	--	--	0.10	890
SB-7-1.5	11-Aug-16	--	2.2	0.27	0.25	87	0.82	34	37,000	49	320	0.24	13	0.63	--	0.098	88
SB-7-2-4	11-Aug-16	--	0.97	0.18	0.033	20	0.72	17	18,000	9.4	260	0.047	6.8	--	--	0.065	21
SB-7-6-8	11-Aug-16	--	2.4	0.23	0.092	50	0.44	41	39,000	22	360	0.031	17	0.47	--	0.098	78
SB-7-12-14	11-Aug-16	--	0.95	0.18	0.012	21	1.0	19	22,000	5.8	73	0.022	5.7	0.25	--	0.093	23
SB-7-22	11-Aug-16	--	--	0.29	--	15	--	17	8,800	5.6	69	--	7.9	--	--	0.066	15
SB-8-0.5	10-Aug-16	0.031 B	1.4	0.34	0.031	41	0.49	31 B	34,000 B	9.3 B	370 B	0.027	17 B	--	--	0.095	33 B
SB-8-1.5	10-Aug-16	0.076 B	1.7	0.73	0.15	54	0.38	53 B	32,000 B	34 B	370 B	0.098	20 B	--	--	0.081	68 B
SB-9-0.5	10-Aug-16	0.029 B	--	0.36	0.035	29	0.73	36 B	28,000 B	7.4 B	380 B	0.012	15 B	--	--	0.074	36 B
SB-9-1.5	10-Aug-16	0.026 B	0.45	0.38	0.038	37	0.39 B	40 B	33,000 B	9.3 B	560 B	0.025	25 B	--	--	0.11	52 B
SB-9-5	11-Aug-16	0.039	1.2	0.33	0.078	42	0.75	40	30,000	20	320	0.035	14.0	--	--	0.10	56
SB-9-10	11-Aug-16	--	1.2	0.29	0.18	25	0.98	51	32,000	22	490	0.054	14	--	--	0.18	44
SB-9-15	11-Aug-16	--	1.1	0.37	0.29	39	1.4	39	32,000	33	1,000	0.054	15	0.51	--	0.16	64
SB-9-18-20	11-Aug-16	--	--	0.71	--	24	1.0	8.9	11,000	11	110	0.0091	8.2	--	--	0.13	22
SB-10-0.5	12-Aug-16	0.058 B	--	0.29	0.029	16	0.35	17 B	15,000 B	2.8 B	300 B	--	10 B	--	--	0.040	39 B
SB-10-1.5	12-Aug-16	0.11 B	1.1	0.48	--	54	0.37	20 B	28,000 B	9.0 B	500 B	--	12 B	--	--	0.061	37 B
SB-10-4-6	12-Aug-16	0.039 B	--	0.99	--	48.0	--	61 B	44,000 B	9.9 B	910 B	--	27 B	--	--	0.088	63 B
SB-10-4-6 (dup)	12-Aug-16	0.023 B	--	0.97	0.071	33.0	--	49 B	39,000 B	8.0 B	840 B	--	19 B	--	--	0.071	54 B
SB-10-12-14	12-Aug-16	0.024 B	0.71	0.56	0.039	24.0	0.66	20 B	19,000 B	12 B	240 B	--	11 B	--	--	0.14	28 B
SB-10-14-16	12-Aug-16	0.027 B	--	0.87	0.027	30.0	0.61	30 B	26,000 B	9.2 B	550 B	0.0095	32 B	--	0.026	0.059	43 B
SB-10-18-20	12-Aug-16	0.028 B	--	0.41	--	13.0	--	6.8 B	13,000 B	10 B	830 B	--	3.5 B	--	0.023	0.098	8.8 B

Table 5a
Detected Cover Soil and Waste Characterization Boring Constituents - Metals
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Antimony	Arsenic	Beryllium	Cadmium	Chromium [4]	Hexavalent Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
Health-Based Residential PSRG [3]		**6.2**	**0.68**	**32**	**14.2**	**24,000**	**0.3**	**620**	**11,000**	**400**	**360**	**2.2**	**300**	**78**	**78**	**0.156**	**4,600**
Health-Based Industrial PSRG [3]		**94**	**3.0**	**460**	**196**	**100,000**	**6.3**	**9,400**	**100,000**	**800**	**5,200**	**3.13**	**4,400**	**1,160**	**1,160**	**2.4**	**70,000**
SB-14-0.5	11-Aug-16	--	0.69	0.89	0.035	49	0.39	51	42,000	7.7	540	--	43	--	--	0.13	48
SB-14-1.5	11-Aug-16	0.031	--	1.1	--	37	0.38	52	39,000	8.6	540	0.012	22	--	--	0.078	41
SB-14-2-4	11-Aug-16	0.041	1.3	0.40	--	35	0.83	44	43,000	16	520	0.057	18	--	--	0.18	31
SB-14-10-12	11-Aug-16	--	--	1.6	0.047	26	--	48	30,000	7.4	700	--	19	--	--	0.049	54
SB-14-10-12 (dup)	11-Aug-16	--	--	0.71	0.033	27	0.44	55	34,000	10	510	--	20	--	--	0.053	55
SB-14-20-22	11-Aug-16	--	--	0.24	--	13	0.61	7.6	7,400	3.3	63	--	6.4	--	--	0.036	10
SB-14-22-24	11-Aug-16	--	0.68	0.41	0.058	24	0.62	21	17,000	18	450	0.031	10	0.56	--	0.11	29
SB-16-0.5	16-Aug-16	0.024 B	0.43	0.57	--	58	--	63	35,000 B	4.6 B	380	--	28	0.26	--	0.043	49
SB-16-1.5	16-Aug-16	0.036 B	0.75	0.92	0.038	27	0.90 B	59	36,000 B	18 B	410	--	13	0.6	--	0.066	37

Notes:

1. All units are in milligrams per kilogram (parts per million)
2. dup - duplicate sample
3. [3] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016
4. [4] - A PSRG for total chromium has not been established. The values provided are for chromium (III).
5. B - Analyte detected in the method blank.

	- Concentration exceeds Residential PSRG
--	- Indicates the result is below the detection limit.

Table 5b
Detected Cover Soil and Waste Characterization Boring Constituents - Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Volatile Organic Compounds									
		1,4-Dichlorobenzene	2-Butanone	Acetone	Carbon Disulfide	Carbon tetrachloride	Chlorobenzene	Ethylbenzene	Methyl Acetate	Methyl acetate	Toluene
Health-Based Residential PSRG (4)		**2.60**	**5,400**	**12,200**	**154**	**0.65**	**56.0**	**5.80**	**NS**	**15,600**	**818**
Health-Based Industrial PSRG (4)		**11.0**	**38,000**	**100,000**	**700**	**2.90**	**260.0**	**25.0**	**NS**	**29,000**	**818**
SB-1-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--
SB-1-1.5	10-Aug-16	--	0.012	0.093	--	--	--	--	--	--	--
SB-1-7-8	10-Aug-16	--	0.008	0.074	--	--	--	--	--	--	--
SB-2-0.5	10-Aug-16	--	--	--	--	--	--	--	0.0093	--	--
SB-2-1.5	10-Aug-16	--	--	0.0049	--	--	--	--	--	--	--
SB-2-6-8	10-Aug-16	--	0.014	0.097	--	--	--	--	--	--	--
SB-2-10.5-12.5	10-Aug-16	--	0.01	0.094	--	--	--	--	--	--	--
SB-2-10.5-12.5 (dup)	10-Aug-16	--	0.0073	0.084	--	--	--	--	--	--	--
SB-2-12.5-14	10-Aug-16	--	0.017	0.14	--	--	--	--	--	--	--
SB-3-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--
SB-3-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--
SB-7-0.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--
SB-7-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--
SB-7-2-4	11-Aug-16	--	0.011	0.077	--	--	--	--	--	--	--
SB-7-6-8	11-Aug-16	--	0.015	0.13	--	--	--	--	--	--	--
SB-7-12-14	11-Aug-16	--	0.01	0.086	--	--	--	--	--	--	0.0061
SB-7-22	11-Aug-16	--	--	0.039	--	--	--	--	--	--	--
SB-8-0.5	10-Aug-16	--	--	0.038	--	--	--	--	--	--	--
SB-8-1.5	10-Aug-16	--	0.014	0.098	--	--	--	--	--	--	--
SB-9-0.5	10-Aug-16	--	0.0072	0.057	--	--	--	--	--	--	--
SB-9-1.5	10-Aug-16	--	0.0051	0.052	--	--	--	--	--	--	--
SB-9-5	11-Aug-16	--	0.0092	0.077	--	--	--	--	--	--	--
SB-9-10	11-Aug-16	0.0090	0.022	0.17	--	--	0.017	--	--	--	--
SB-9-15	11-Aug-16	--	0.012	0.1	0.0035	--	0.058	--	--	--	--
SB-9-18-20	11-Aug-16	--	0.011	0.07	--	--	0.011	--	--	--	--
SB-10-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--
SB-10-1.5	12-Aug-16	--	--	0.011	--	--	--	--	--	--	--
SB-10-4-6	12-Aug-16	--	0.0059	0.052	--	--	--	--	--	--	--
SB-10-4-6 (dup)	12-Aug-16	--	0.03	0.21	--	--	--	--	--	--	--
SB-10-12-14	12-Aug-16	--	0.017	0.11	--	--	--	--	--	--	--
SB-10-14-16	12-Aug-16	--	0.0083	0.063	0.0022	--	--	--	--	--	--
SB-10-18-20	12-Aug-16	--	0.026	0.15	--	--	--	--	--	--	--

Table 5b
Detected Cover Soil and Waste Characterization Boring Constituents - Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Volatile Organic Compounds									
		1,4-Dichlorobenzene	2-Butanone	Acetone	Carbon Disulfide	Carbon tetrachloride	Chlorobenzene	Ethylbenzene	Methyl Acetate	Methyl acetate	Toluene
Health-Based Residential PSRG [(4)]		**2.60**	**5,400**	**12,200**	**154**	**0.65**	**56.0**	**5.80**	**NS**	**15,600**	**818**
Health-Based Industrial PSRG [(4)]		**11.0**	**38,000**	**100,000**	**700**	**2.90**	**260.0**	**25.0**	**NS**	**29,000**	**818**
SB-14-0.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--
SB-14-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--
SB-14-2-4	11-Aug-16	--	--	0.018	--	--	--	--	--	--	--
SB-14-10-12	11-Aug-16	--	--	0.026	--	--	--	--	--	--	--
SB-14-10-12 (dup)	11-Aug-16	--	0.0039	0.037	--	--	--	--	--	--	--
SB-14-20-22	11-Aug-16	--	0.011	0.082	--		--	--	--	--	--
SB-14-22-24	11-Aug-16	--	0.034	0.29	--	--	--	0.0049	--	0.0050	--
SB-16-0.5	16-Aug-16	--	--	0.0095	--	--	--	--	--	--	--
SB-16-1.5	16-Aug-16	--	--	--	--	0.0064	--	--	--	--	--

Notes:

1. All units are in milligrams per kilogram (parts per million).
2. dup - Duplicate Sample
3. NS - No Standard
4. [(4)] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016

-- - Indicates the result is below detection limits.

Table 5c
Detected Cover Soil and Waste Characterization Boring Constituents - Tentatively Identified-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Volatile Organic Compounds																			
		1R-.alpha.-Pinene	1-Hexanol	2-Nonanone	2-Pentanone	3-Menthene	3-Octanone	4-Octene, 2,6-dimethyl-, [S-(Z)]-	.beta.-Pinene	Bicyclo[2.2.1]heptane, 2,2,3-trimethyl-	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	Camphene	Cyclobutane, methyl-	Cyclohexene, 1-methyl-4-(1-methylethylid	Cyclopentane	Cyclotetrasiloxane, octamethyl-	Hexanal	Tricyclo[2.2.1.0(2,6)]heptane, 17,7-tri	Unknown Alkane 1	Unknown Alkane 2	Unknown 1
Health-Based Residential PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-1-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1-7-8	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-1.5	10-Aug-16	--	0.0043	--	--	--	0.042	--	--	--	--	--	--	--	--	--	0.0042	--	--	--	--
SB-2-6-8	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-10.5-12.5	10-Aug-16	0.013	--	--	--		--	--	--	--	--	--	--	--	--	0.0045	--	--	0.21	0.024	--
SB-2-10.5-12.5 (dup)	10-Aug-16	0.061	--	--	--	0.0052	--	--	--	--	--	0.011	--	--	--	--	--	--	0.12	0.013	0.0070
SB-2-12.5-14	10-Aug-16	0.18	--	--	--	0.0080	--	--	0.014	--	--	0.026	--	--	--	--	--	--	0.028	0.014	--
SB-3-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-3-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-0.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-2-4	11-Aug-16	--	--	--	0.0040	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-6-8	11-Aug-16	--	--	--	--	--	--	--	0.0062	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-12-14	11-Aug-16	--	--	0.0038	--	--	--	--	0.0052	--	--	0.0052	--	--	--	--	--	--	--	--	--
SB-7-22	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	0.031	--	--	--	--	--	--	--	--
SB-8-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-8-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-10	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-15	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-18-20	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-4-6	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-4-6 (dup)	12-Aug-16	--	--	--	--	--	--	--	--	0.029	--	--	--	--	0.017	--	--	--	--	--	0.013

Table 5c
Detected Cover Soil and Waste Characterization Boring Constituents - Tentatively Identified-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Volatile Organic Compounds																			
		1R-.alpha.-Pinene	1-Hexanol	2-Nonanone	2-Pentanone	3-Menthene	3-Octanone	4-Octene, 2,6-dimethyl-, [S-(Z)]-	.beta.-Pinene	Bicyclo[2.2.1]heptane, 2,2,3-trimethyl-	Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	Camphene	Cyclobutane, methyl-	Cyclohexene, 1-methyl-4-(1-methylethylid	Cyclopentane	Cyclotetrasiloxane, octamethyl-	Hexanal	Tricyclo[2.2.1.0(2,6)]heptane, 17,7-tri	Unknown Alkane 1	Unknown Alkane 2	Unknown 1
Health-Based Residential PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-10-12-14	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	0.013	--	--	--	--	--	
SB-10-14-16	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0041
SB-10-18-20	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-0.5	11-Aug-16	0.0061	--	--	--	--	--	--	0.018	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-2-4	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-10-12	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-10-12 (dup)	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-20-22	11-Aug-16	0.061	--	--	--	--	--	--	0.023	--	--	0.026	--	--	--	--	--	--	--	--	--
SB-14-22-24	11-Aug-16	--	--	--	--	--	--	0.012	--	--	0.043	--	--	0.0086	--	--	--	0.081	--	--	--
SB-16-0.5	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-16-1.5	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0054	--	--	--	--	--

Notes:

1. All units are in milligrams per kilogram (parts p
2. dup - Duplicate Sample
3. NS - No Standard
4. (4) - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016

-- - Indicates the result is below detection limits.

Table 5d
Detected Cover Soil and Waste Characterization Boring Constituents - Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Semi-Volatile Organic Compounds															
		Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Bis(2-Ethylhexyl)phthalate	Caprolactam	Chrysene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	3+4-Methylphenol	Phenanthrene	Pyrene
Health-Based Residential PSRG [(4)]		**NS**	**3,600**	**0.16**	**0.016**	**0.16**	**1.6**	**NS**	**39**	**NS**	**16**	**1,260**	**480**	**0.16**	**126**	**NS**	**360**
Health-Based Industrial PSRG [(4)]		**NS**	**46,000**	**2.9**	**0.29**	**2.9**	**29**	**NS**	**160**	**NS**	**290**	**16,400**	**6,000**	**2.9**	**1,640**	**NS**	**4,600**
SB-1-0.5	10-Aug-16	--	--	0.02	0.026	0.032	0.013	0.017	--	--	0.024	0.019	0.034	0.015	--	0.0095	0.028
SB-1-1.5	10-Aug-16	0.012	0.025	0.12	0.15	0.22	0.083	0.041	0.031	--	0.13	--	0.25	0.045	--	0.086	0.22
SB-1-7-8	10-Aug-16	--	--	--	--	0.021	--	--	--	--	--	--	--	--	--	--	0.011
SB-2-12.5-14	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-22	11-Aug-16	--	--	--	--	--	--	--	--	--	--	0.017	--	--	--	--	--
SB-8-0.5	10-Aug-16	0.019	0.0067	0.029	0.057	0.066	0.02	0.028	0.024	--	0.028	--	0.036	0.023	--	0.01	0.083
SB-8-1.5	10-Aug-16	--	--	0.0072	0.0064	0.0069	0.0028	0.0034	--	--	0.0047	--	0.0063	0.0029	--	0.0030	0.0094
SB-9-0.5	10-Aug-16	--	--	0.0056	0.0046	0.0057	--	--	--	--	0.0035	--	0.0066	--	--	0.0029	0.0061
SB-9-1.5	10-Aug-16	0.0032	--	0.011	0.015	0.019	0.0082	0.0069	0.026	0.033	0.013	--	0.018	0.0073	--	0.0060	0.02
SB-9-5	11-Aug-16	--	--	0.0059	0.0055	0.009	--	0.0028	--	--	--	--	0.0062	--	--	--	0.0084
SB-9-10	11-Aug-16	--	--	--	--	0.067	--	--	--	--	0.03	--	0.03	--	--	0.025	0.045
SB-9-15	11-Aug-16	--	--	0.045	0.045	0.086	0.028	0.021	0.025	--	0.054	--	0.097	0.021	--	0.027	0.071
SB-9-18-20	11-Aug-16	--	--	--	--	--	--	--	--	--	--	0.022	--	--	--	--	--
SB-10-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5d
Detected Cover Soil and Waste Characterization Boring Constituents - Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Semi-Volatile Organic Compounds															
		Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Bis(2-Ethylhexyl)phthalate	Caprolactam	Chrysene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	3+4-Methylphenol	Phenanthrene	Pyrene
Health-Based Residential PSRG [(4)]		**NS**	**3,600**	**0.16**	**0.016**	**0.16**	**1.6**	**NS**	**39**	**NS**	**16**	**1,260**	**480**	**0.16**	**126**	**NS**	**360**
Health-Based Industrial PSRG [(4)]		**NS**	**46,000**	**2.9**	**0.29**	**2.9**	**29**	**NS**	**160**	**NS**	**290**	**16,400**	**6,000**	**2.9**	**1,640**	**NS**	**4,600**
SB-10-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-4-6	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	0.0013	--	--	--	--
SB-10-4-6 (dup)	12-Aug-16	--	--	0.0062	0.0045	0.0084	--	0.0053	--	--	0.0044	--	0.008	--	--	--	0.0071
SB-10-12-14	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-14-16	12-Aug-16	--	--	0.0042	--	--	--	--	--	--	0.0039		0.0041	--	--	--	0.0036
SB-10-18-20	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-0.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-2-4	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-10-12	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-10-12 (dup)	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-20-22	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-22-24	11-Aug-16	--	--	0.0070	0.0066	0.015	--	--	0.039	--	0.0078	--	0.033	--	0.028	0.0073	0.014
SB-16-0.5	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-16-1.5	16-Aug-16	--	--	--	0.0037	0.0061	--	0.0043	--	--	--	--	0.0063	0.0036	--	--	0.0048

Notes:

1. All units are in milligrams per kilogram (parts per million).
2. dup - Duplicate Sample
3. NS - No Standard
4. [(4)] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016

	- Concentration exceeds Residential PSRG
--	- Indicates the result is below detection limits.

Table 5e
Detected Cover Soil and Waste Characterization Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds																									
		1-Chloroeicosane	1-Cyclohexene, 1,3,3-trimethyl-2-(1-meth	1-Docosene	1-Heneicosanol	1-Heptadecanol, acetate	1-Hexadecene	1-Nonadecane	1-Phenanthrenecarboxylic acis, 1,2,3,4,4	1,2,3-Propanetriol, diacetate	1,2,4-Metheno-1H-indene, ocahydro-1,7a-	1,4-Dimethyl-8-isopropylidenetricyclo[5.3.0.0(4,10)]decane	1H-Cyclopenta[1,3]cyclopropa[1,2]benzene	1H-Cyclopropl[e]azulene, decahydro-1,1,7-	1R-.alpha.-Pinene	2,5-Hexanedione	2H-Inden-2-one, 1,4,5,6,7,7a-hexahydro-7	2-Pentanone, 4-hydroxy-4-methyl-	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	2-Propanone, 1-chloro-	3-Bromobenzoic acid, pentadecyl ester	4b, 8-Dimethyl-2-isopropylphenanthrene, 4	4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-d	5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	6-Octadecenoic acid, (Z)-	7H-Furo[3,2-g][1]benzopyran-7-one, 2-(1-	9-Octadecenoic acid, (E)-
Health-Based Residential PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-1-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1	--	--	--	--	--	--	0.51
SB-1-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.6
SB-1-7-8	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-0.5	10-Aug-16	0.32	--	--	--	--	--	--	0.15	--	--	0.24	--	--	--	--	--	--	--	--	--	--	--	--	0.32	--	--
SB-2-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.092	--	--	--	--	--	--	0.49
SB-2-6-8	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.1	--	--
SB-2-10.5-12.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	0.59	--	--
SB-2-10.5-12.5 (dup)	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.096	--	--	--	--	0.83	--	--
SB-2-12.5-14	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	0.093	--	--	--	--	--	--	--
SB-3-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-3-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-0.5	11-Aug-16	--	--	--	0.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.093	--	--	--	--	--
SB-7-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-2-4	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.2
SB-7-6-8	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-12-14	11-Aug-16	--	--	--	--	--	--	--	--	--	2.7	--	0.57	--	--	--	3.2	--	--	--	--	--	--	--	0.85	--	--
SB-7-22	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-8-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.5
SB-8-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--	0.12
SB-9-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.093	--	--	--	--	0.12	--	--
SB-9-1.5	10-Aug-16	--	--	--	--	--	--	--	0.74	--	--	--	--	--	1.4	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.33
SB-9-10	11-Aug-16	--	0.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-15	11-Aug-16	--	--	--	--	0.093	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.16	--
SB-9-18-20	11-Aug-16	--	--	--	--	--	--	0.11	--	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.23
SB-10-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.55	--	--	--	--	--	--	--	--	--

Table 5e
Detected Cover Soil and Waste Characterization Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds																									
		1-Chloroeicosane	1-Cyclohexene, 1,3,3-trimethyl-2-(1-meth	1-Docosene	1-Heneicosanol	1-Heptadecanol, acetate	1-Hexadecene	1-Nonadecane	1-Phenanthrenecarboxylic acis, 1,2,3,4,4	1,2,3-Propanetriol, diacetate	1,2,4-Metheno-1H-indene, ocahydro-1,7a-	1,4-Dimethyl-8-isopropylidenetricyclo[5.3.0.0(4,10)]decane	1H-Cyclopenta[1,3]cyclopropa[1,2]benzene	1H-Cycloprop[e]azulene, decahydro-1,1,7-	1R-.alpha.-Pinene	2,5-Hexanedione	2H-Inden-2-one, 1,4,5,6,7,7a-hexahydro-7	2-Pentanone, 4-hydroxy-4-methyl-	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	2-Propanone, 1-chloro-	3-Bromobenzoic acid, pentadecyl ester	4b, 8-Dimethyl-2-isopropylphenanthrene, 4	4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-d	5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur	6-Octadecenoic acid, (Z)-	7H-Furo[3,2-g][1]benzopyran-7-one, 2-(1-	9-Octadecenoic acid, (E)-
Health-Based Residential PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-10-4-6	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.47
SB-10-4-6 (dup)	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	0.098	--	--	--	--	--	--	--	--	--	0.21	--	--
SB-10-12-14	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-14-16	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13		0.19	--	--	--	--	--	--
SB-10-18-20	12-Aug-16	--	--	--	--	--	0.14	--	--	--	--	--	--	--	--	--	--	0.68	--	0.097	--	--	--	--	0.26	--	--
SB-14-0.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.42	--	--	--	--	--	--
SB-14-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22	--	--
SB-14-2-4	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.081	--	--	--	--	--	--	--	--
SB-14-10-12	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-10-12 (dup)	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-20-22	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.86
SB-14-22-24	11-Aug-16	--	--	0.49	--	--	--	--	1	--	--	--	--	--	1.1	--	--	--	--	--	--	2.4	0.84	0.4	0.69	--	--
SB-16-0.5	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--	--	--	0.18	--	--
SB-16-1.5	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Detected Cover Soil and Waste Characterization Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds																						
		9-Octadecenamide, (Z)-	9-Octadecenoic acid	9-Oxononanoic acid	10,18-Bisnorabieta-5,7,9(10),11,13-penta	13-Docosenamide, (Z)-	18-Norabietane	28-Nor-17.beta.(H)-hopane	28-Nor-17.alpha.(H)-hopane	Abietic acid	Acridin-9-amine, 1,2,3,4-tetrahyfro-5,8-	.alpha.-Cadinol	.alpha.-Muurolene	Amylene Hydrate	Benzoic acid, 2-hydroxy-, 3-methylbutyl	.beta.-iso-Methyl ionone	.beta.-Sitosterol	Bicyclo[3.1.1]heptane, 6,6-dimethy-2-me	Coprostane	Cyclohexadecane	Cyclohexane, 1-ethenyl-1-methyl-2,4-bis(	Cyclooctadecane, ethyl-	Cyclotetradecane	Decane, 2-methyl-
Health-Based Residential PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-1-0.5	10-Aug-16	--	--	--	--	0.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1-1.5	10-Aug-16	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1-7-8	10-Aug-16	--	--	--	--	0.93	--	1.4	0.74	--	--	--	--	--	--	0.54	--	--	0.45	--	--	--	--	--
SB-2-0.5	10-Aug-16	--	--	--	--	0.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-1.5	10-Aug-16	--	--	--	--	0.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-6-8	10-Aug-16	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-10.5-12.5	10-Aug-16	--	--	--	--	0.47	--	--	--	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	--
SB-2-10.5-12.5 (dup)	10-Aug-16	--	--	--	--	0.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.097
SB-2-12.5-14	10-Aug-16	--	--	--	--	0.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-3-0.5	12-Aug-16	--	--	--	--	0.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-3-1.5	12-Aug-16	--	--	--	--	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-0.5	11-Aug-16	--	--	--	--	0.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-2-4	11-Aug-16	--	--	--	--	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-6-8	11-Aug-16	--	--	--	--	0.5	0.099	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-12-14	11-Aug-16	--	--	--	--	0.88	--	--	--	--	--	0.85	1.8	--	--	--	2	--	--	--	1.6	--	--	--
SB-7-22	11-Aug-16	--	--	--	--	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-8-0.5	10-Aug-16	--	--	--	--	0.86	--	--	--	--	--	--	--	--	0.18	--	--	--	--	--	--	--	--	--
SB-8-1.5	10-Aug-16	--	--	--	--	0.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-0.5	10-Aug-16	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-1.5	10-Aug-16	--	--	--	--	0.45	--	--	--	0.57	--	--	--	--	--	--	--	0.71	--	--	--	--	--	--
SB-9-5	11-Aug-16	--	--	--	--	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-10	11-Aug-16	--	--	--	--	--	--	0.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-15	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	--	--	0.15	--
SB-9-18-20	11-Aug-16	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1	--	--
SB-10-0.5	12-Aug-16	--	--	--	--	0.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-1.5	12-Aug-16	--	--	--	--	0.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Detected Cover Soil and Waste Characterization Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds																						
		9-Octadecenamide, (Z)-	9-Octadecenoic acid	9-Oxononanoic acid	10,18-Bisnorabieta-5,7,9(10),11,13-penta	13-Docosenamide, (Z)-	18-Norabietane	28-Nor-17.beta.(H)-hopane	28-Nor-17.alpha.(H)-hopane	Abietic acid	Acridin-9-amine, 1,2,3,4-tetrahyfro-5,8-	.alpha.-Cadinol	.alpha.-Muurolene	Amylene Hydrate	Benzoic acid, 2-hydroxy-, 3-methylbutyl	.beta.-iso-Methyl ionone	.beta.-Sitosterol	Bicyclo[3.1.1]heptane, 6,6-dimethy-2-me	Coprostane	Cyclohexadecane	Cyclohexane, 1-ethenyl-1-methyl-2,4-bis(	Cyclooctadecane, ethyl-	Cyclotetradecane	Decane, 2-methyl-
Health-Based Residential PSRG [(4)]		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG [(4)]		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-10-4-6	12-Aug-16	--	--	--	--	0.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-4-6 (dup)	12-Aug-16	--	--	--	--	0.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-12-14	12-Aug-16	--	--	--	--	0.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-14-16	12-Aug-16	--	--	--	--	0.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-18-20	12-Aug-16	--	--	--	--	0.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-0.5	11-Aug-16	--	--	0.28	--	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-1.5	11-Aug-16	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-2-4	11-Aug-16	--	--	--	0.2	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-10-12	11-Aug-16	--	--	--	--	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-10-12 (dup)	11-Aug-16	--	--	--	--	0.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-20-22	11-Aug-16	--	--	--	0.11	0.45	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-22-24	11-Aug-16	--	--	--	--	0.51	10	--	--	0.84	0.53	--	--	--	--	--	--	3.2	--	--	--	--	--	--
SB-16-0.5	16-Aug-16	--	0.13	--	--	0.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-16-1.5	16-Aug-16	--	--	--	--	0.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Detected Cover Soil and Waste Characterization Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds																									
		Decane, 3,8-dimethyl-	Diethyltoluamide	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	Dodecane, 2-methyl-8-propyl-	Dodecanoic acid, hexadecyl ester	Docosane	Docosane, 9-butyl-	Eicosane	Eicosane, 10-methyl-	Friedelan-3-one	Guaia-3,9-diene	Heneicosane	Heneicosane, 11-decyl-	Heneicosane, 11-pentyl-	Hentriacontane	Heptacosane	Heptadecane, 2,6,10,15-tetramethyl-	Heptadecane, 9-octyl-	Heptadecanoic acid	Hexadecane	Hexanoic acid	Hexadecanoic acid, butyl ester	Hexadecenoic acid, Z-11-	Hexatriacontane	Homosalate	Humulane-1,6-dien-3-ol
Health-Based Residential PSRG [(4)]		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG [(4)]		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-1-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.098
SB-1-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--	0.23	--	--	--	--	--	--
SB-1-7-8	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-0.5	10-Aug-16	0.2	--	--	--	--	--	--	--	0.15	0.19	--	--	--	--	--	0.23	--	--	--	--	--	--	--	--	--	--
SB-2-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.084	--	--	--	--	--	--	--	--	--
SB-2-6-8	10-Aug-16	--	--	--	--	--	--	--	0.34	--	--	--	--	--	--	--	--	--	--	0.36	0.27	--	--	--	--	--	--
SB-2-10.5-12.5	10-Aug-16	--	0.099	--	--	--	--	0.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-10.5-12.5 (dup)	10-Aug-16	--	--	--	--	--	--	--	--	--	0.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-12.5-14	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-3-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	0.098	--	--	--	--	--	--	--	--	0.12	--	--	--	--
SB-3-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2	--	--	--	--
SB-7-0.5	11-Aug-16	--	--	--	0.1	--	--	--	0.086	--	0.59	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--
SB-7-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.63	--	--	--	--	--	--	--	--	--	--
SB-7-2-4	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	0.36	--	--	--	0.099	--	--	--	--	--	--	--	--	--	--
SB-7-6-8	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.097	--	--	--	--
SB-7-12-14	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-22	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-8-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.43	--
SB-8-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-0.5	10-Aug-16	--	--	--	--	--	--	--	0.09	--	--	--	--	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--
SB-9-1.5	10-Aug-16	--	--	--	--	--	0.29	--	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-5	11-Aug-16	--	0.092	--	--	--	--	--	--	--	--	0.1	--	--	0.17	--	--	--	--	--	--	--	0.16	--	--	--	--
SB-9-10	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-15	11-Aug-16	--	0.097	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	--	--	--	--
SB-9-18-20	11-Aug-16	--	--	--	--	--	0.093	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1	--	0.12	--	--
SB-10-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	--	--	--	--
SB-10-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Detected Cover Soil and Waste Characterization Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds																									
		Decane, 3,8-dimethyl-	Diethyltoluamide	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	Dodecane, 2-methyl-8-propyl-	Dodecanoic acid, hexadecyl ester	Docosane	Docosane, 9-butyl-	Eicosane	Eicosane, 10-methyl-	Friedelan-3-one	Guaia-3,9-diene	Heneicosane	Heneicosane, 11-decyl-	Heneicosane, 11-pentyl-	Hentriacontane	Heptacosane	Heptadecane, 2,6,10,15-tetramethyl-	Heptadecane, 9-octyl-	Heptadecanoic acid	Hexadecane	Hexanoic acid	Hexadecanoic acid, butyl ester	Hexadecenoic acid, Z-11-	Hexatriacontane	Homosalate	Humulane-1,6-dien-3-ol
Health-Based Residential PSRG [(4)]		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG [(4)]		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-10-4-6	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-4-6 (dup)	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.098	--	--	--	--	--	--	--	--	--	--
SB-10-12-14	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-14-16	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	0.085	--	--	--	--	--	--	--	--
SB-10-18-20	12-Aug-16	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12	--	--	--	--	--
SB-14-0.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	0.087	--	--	--	--	--	--	--	--	--	0.11	--	--	--
SB-14-1.5	11-Aug-16	--	--	--	--	--	--	--	0.086	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-2-4	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-10-12	11-Aug-16	--	--	--	--	--	--	--	--	--	0.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-10-12 (dup)	11-Aug-16	--	--	--	--	--	--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	0.26	--	--	--	--
SB-14-20-22	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-22-24	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-16-0.5	16-Aug-16	--	0.078	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-16-1.5	16-Aug-16	--	--	0.082	--	--	--	--	--	--	--	--	--	--	--	0.13	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Detected Cover Soil and Waste Characterization Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds																							
		Behenyl chloride	n-Hexadecanoic acid	Naphthalene, 1,2,3,4-tetrahydro-1,6-dime	Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-	Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	Naphthalene, 1,2,4a,5,8,8a-hexahydro-4,7	Naringenin	Nonadecane	Octacosane	Octadecanoic acid	Octadecanoic acid, butyl ester	Octadecane	Octadecane, 3-methyl	Octadec-9-enoic acid	Oleic Acid	Oxirane, 2-decyl-3-(5-methylhexyl)-, cis	Oxirane, hexadecyl-	Oxybenzone	Pentacosane	Pentadecane, 8-hexyl-	Pentadecanoic acid	Perylene	Phenanthrene, 1-methyl-7-(1-methylethyl)	Phenol, 2,6-dimethoxy-4-(2-propenyl)-
Health-Based Residential PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-1-0.5	10-Aug-16	--	0.29	--	--	--	--	--	--	0.22	0.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1-1.5	10-Aug-16	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.27	--	--	0.4	--	--	--	--	--
SB-1-7-8	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-0.5	10-Aug-16	--	--	--	--	--	--	--	0.18	0.16	0.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-1.5	10-Aug-16	--	0.094	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-6-8	10-Aug-16	--	1.5	--	--	--	--	--	--	--	0.53	--	--	--	--	--	--	--	--	--	--	0.4	--	--	--
SB-2-10.5-12.5	10-Aug-16	--	0.4	--	--	--	--	0.13	--	--	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-10.5-12.5 (dup)	10-Aug-16	--	0.2	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2-12.5-14	10-Aug-16	--	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.091	--
SB-3-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	0.09	--	--	0.17	--	--	--	--	--	--	--	--	--	--
SB-3-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-0.5	11-Aug-16	--	0.1	--	--	--	--	--	--	0.44	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-2-4	11-Aug-16	--	1.4	--	--	--	--	--	--	--	0.35	0.12	--	--	--	--	--	0.13	--	--	--	--	--	--	--
SB-7-6-8	11-Aug-16	--	--	--	--	0.2	--	--	0.093	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-7-12-14	11-Aug-16	--	5.9	1.8	2.3	--	0.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.67
SB-7-22	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-8-0.5	10-Aug-16	--	0.48	--	--	--	--	--	--	--	0.28	--	--	--	--	--	--	--	0.11	--	--	--	--	--	--
SB-8-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-0.5	10-Aug-16	--	0.17	--	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	0.22	0.62	--	--	--	--	--	--	--	--	--	--
SB-9-5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-10	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-15	11-Aug-16	--	--	--	--	--	--	--	--	--	--	0.21	0.17	--	--	--	--	--	--	--	--	--	--	--	--
SB-9-18-20	11-Aug-16	--	0.092	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
SB-10-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	0.11	--	--	--	0.29	--	--	--	--	--	--	--	--	--
SB-10-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Detected Cover Soil and Waste Characterization Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds																							
		Behenyl chloride	n-Hexadecanoic acid	Naphthalene, 1,2,3,4-tetrahydro-1,6-dime	Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-	Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	Naphthalene, 1,2,4a,5,8,8a-hexahydro-4,7	Naringenin	Nonadecane	Octacosane	Octadecanoic acid	Octadecanoic acid, butyl ester	Octadecane	Octadecane, 3-methyl	Octadec-9-enoic acid	Oleic Acid	Oxirane, 2-decyl-3-(5-methylhexyl)-, cis	Oxirane, hexadecyl-	Oxybenzone	Pentacosane	Pentadecane, 8-hexyl-	Pentadecanoic acid	Perylene	Phenanthrene, 1-methyl-7-(1-methylethyl)	Phenol, 2,6-dimethoxy-4-(2-propenyl)-
Health-Based Residential PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-10-4-6	12-Aug-16	--	0.15	--	--	--	--	--	--	--	0.1	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-4-6 (dup)	12-Aug-16	--	0.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-12-14	12-Aug-16	--	--	--	--	--	--	--		0.093	--	--	--	--	--	--	--	--	--	--	0.16	--	--	--	--
SB-10-14-16	12-Aug-16	--	0.17	--	--	0.17	--	--	0.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10-18-20	12-Aug-16	--	0.13	--	--	--	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-0.5	11-Aug-16	--	0.41	--	--	--	--	--	--	0.15	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-1.5	11-Aug-16	--	0.079	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-2-4	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	--	--	--	--	--
SB-14-10-12	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-10-12 (dup)	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-14-20-22	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.088	--	--	--	0.22	--
SB-14-22-24	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	--
SB-16-0.5	16-Aug-16	--	0.3	--	--	--	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-16-1.5	16-Aug-16	--	0.087	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Detected Cover Soil and Waste Characterization Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds																						
		Propane, 2,2-dimethoxy-	Propylene Glycol	R-(-)-1,2-propanediol	Silane, trichlorooctadecyl-	Squalene	Stigmast-4-en-3-one	Stigmasterol, 22,23-dihydro	Tetracosane	Tetracosane, 11-decyl-	Tetradecanoic acid	Tetratetracontane	Tetratricontane	Triacetin	Tricosane	Tricosane, 2-methyl-	Tridecane, 7-propyl-	Tridecanoic acid	Z-5-Nonadecane	Z-12-Pentacosene	Z-14-Nonacosane	Unknown 1	Unknown 2	Unknown 3
Health-Based Residential PSRG [(4)]		**NS**	**100,000**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**100,000**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG [(4)]		**NS**	**100,000**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**100,000**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-1-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.62	--	--
SB-1-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	0.35	--	0.29	--	0.21	--	--	--	--	1.4	0.17	0.28
SB-1-7-8	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.66	0.22	0.23
SB-2-0.5	10-Aug-16	--	--	--	--	--	--	--	0.18	--	--	--	--	--	--	--	--	0.22	--	--	--	0.47	0.34	0.29
SB-2-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.56	0.14	--
SB-2-6-8	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.33	--	--	0.82	0.45	0.66
SB-2-10.5-12.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.68	0.12	0.54
SB-2-10.5-12.5 (dup)	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.081	0.49	0.28
SB-2-12.5-14	10-Aug-16	--	--	--	--	--	--	--	--	0.15	--	--	--	--	--	0.096	--	--	--	--	--	0.25	0.084	--
SB-3-0.5	12-Aug-16	0.1	--	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.57	0.11	--
SB-3-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.52	--	--
SB-7-0.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.35	0.58	0.21	0.1
SB-7-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.52	--	--
SB-7-2-4	11-Aug-16	--	0.12	--	--	0.16	--	0.69	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	0.099	0.1
SB-7-6-8	11-Aug-16	--	--	0.13	--	--	--	--	--	--	0.2	--	--	--	--	--	--	--	--	--	--	0.58	0.086	0.16
SB-7-12-14	11-Aug-16	--	--	--	--	--	--	--	--	--	0.73	--	--	--	--	--	--	--	--	--	--	1	0.51	2.5
SB-7-22	11-Aug-16	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.49	0.67	--
SB-8-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.39	0.27	0.094
SB-8-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.46	--	--
SB-9-0.5	10-Aug-16	--	--	--	--	0.086	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.47	0.087	0.12
SB-9-1.5	10-Aug-16	--	--	--	0.25	--	--	--	0.27	--	--	0.28	--	--	--	--	--	--	--	--	--	0.54	0.48	0.24
SB-9-5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.47	0.09	0.1
SB-9-10	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.47	0.83	0.61
SB-9-15	11-Aug-16	--	--	0.11	0.13	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13	--	1.4	0.45	0.14
SB-9-18-20	11-Aug-16	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.096	0.55	0.14
SB-10-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.65	--	--
SB-10-1.5	12-Aug-16	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Detected Cover Soil and Waste Characterization Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds																						
		Propane, 2,2-dimethoxy-	Propylene Glycol	R-(-)-1,2-propanediol	Silane, trichlorooctadecyl-	Squalene	Stigmast-4-en-3-one	Stigmasterol, 22,23-dihydro	Tetracosane	Tetracosane, 11-decyl-	Tetradecanoic acid	Tetratetracontane	Tetratricontane	Triacetin	Tricosane	Tricosane, 2-methyl-	Tridecane, 7-propyl-	Tridecanoic acid	Z-5-Nonadecane	Z-12-Pentacosene	Z-14-Nonacosane	Unknown 1	Unknown 2	Unknown 3
Health-Based Residential PSRG [(4)]		**NS**	**100,000**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**100,000**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG [(4)]		**NS**	**100,000**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**100,000**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-10-4-6	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.43	--	--
SB-10-4-6 (dup)	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.43	--	--
SB-10-12-14	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.260	--	--
SB-10-14-16	12-Aug-16	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.450	0.091	0.1
SB-10-18-20	12-Aug-16	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.095	0.12	
SB-14-0.5	11-Aug-16	--	0.21	--	--	0.089	--	--	--	--	--	--	--	--	0.081	--	--	--	--	--	--	0.73	0.084	--
SB-14-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	0.085	--	--	--	--	--	--	--	0.38	0.52	0.13
SB-14-2-4	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	0.099	0.13	--	--	--	--	--	--	0.15	0.65	0.11
SB-14-10-12	11-Aug-16	--	0.087	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.61	0.091	0.25
SB-14-10-12 (dup)	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--
SB-14-20-22	11-Aug-16	--	--	--	--	--	--	--	0.088	--	--	--	--	--	--	--	--	--	--	--	--	0.66	0.12	0.13
SB-14-22-24	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.68	--	--	--	--	1	1.9	0.37
SB-16-0.5	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.081	1.3	0.076
SB-16-1.5	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.92	0.088	--

Table 5e
Detected Cover Soil and Waste Characterization Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds										
		Unknown 4	Unknown 5	Unknown 6	Unknown 7	Unknown 8	Unknown 9	Unknown 10	Unknown 11	Unknown 12	Unknown 13	Unknown 14
Health-Based Residential PSRG [(4)]		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG [(4)]		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-1-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-1-1.5	10-Aug-16	0.27	0.21	0.17	0.21	0.22	0.43	0.57	--	--	--	--
SB-1-7-8	10-Aug-16	0.69	0.4	0.49	0.53	0.31	1.3	0.4	0.37	0.29	0.43	0.35
SB-2-0.5	10-Aug-16	0.23	0.14	0.29	--	--	--	--	--	--	--	--
SB-2-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-2-6-8	10-Aug-16	1.2	0.29	0.33	0.29	0.43	4.6	4.8	0.58	--	--	--
SB-2-10.5-12.5	10-Aug-16	0.17	--	--	--	--	--	--	--	--	--	--
SB-2-10.5-12.5 (dup)	10-Aug-16	0.3	--	--	--	--	--	--	--	--	--	--
SB-2-12.5-14	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-3-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-3-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-7-0.5	11-Aug-16	0.18	0.15	0.14	0.18	--	--	--	--	--	--	--
SB-7-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-7-2-4	11-Aug-16	0.46	0.59	0.18	0.14	0.12	0.14	--	--	--	--	--
SB-7-6-8	11-Aug-16	0.099	0.095	--	--	--	--	--	--	--	--	--
SB-7-12-14	11-Aug-16	0.97	0.75	--	--	--	--	--	--	--	--	--
SB-7-22	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-8-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-8-1.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-9-0.5	10-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-9-1.5	10-Aug-16	0.22	0.39	0.45	0.45	0.22	--	--	--	--	--	--
SB-9-5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-9-10	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-9-15	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-9-18-20	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-10-0.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-10-1.5	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Detected Cover Soil and Waste Characterization Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds										
		Unknown 4	Unknown 5	Unknown 6	Unknown 7	Unknown 8	Unknown 9	Unknown 10	Unknown 11	Unknown 12	Unknown 13	Unknown 14
Health-Based Residential PSRG [(4)]		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG [(4)]		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
SB-10-4-6	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-10-4-6 (dup)	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-10-12-14	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-10-14-16	12-Aug-16	0.088	--	--	--	--	--	--	--	--	--	--
SB-10-18-20	12-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-14-0.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-14-1.5	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-14-2-4	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-14-10-12	11-Aug-16	0.42	0.076	--	--	--	--	--	--	--	--	--
SB-14-10-12 (dup)	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-14-20-22	11-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-14-22-24	11-Aug-16	0.54	0.6	0.37	--	--	--	--	--	--	--	--
SB-16-0.5	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--
SB-16-1.5	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--

Notes:

1. All units are in milligrams per kilogram (parts per million).
2. dup - Duplicate Sample
3. NS - No Standard
4. [(4)] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016

	- Concentration exceeds Residential PSRG
*	- Concentration exceeds Industrial PSRG
--	- Indicates the result is below detection limits.

Table 5f
Detected Cover Soil and Waste Characterization Boring Constituents - General Chemistry
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Ammonia	Nitrate	Sulfate
Health-Based Residential PSRG [(4)]		**NS**	**26,000**	**NS**
Health-Based Industrial PSRG [(4)]		**NS**	**100,000**	**NS**
SB-1-0.5	10-Aug-16	1.2	0.18	--
SB-1-1.5	10-Aug-16	2.3	1.6	38
SB-1-7-8	10-Aug-16	1.2	1.0	--
SB-2-0.5	10-Aug-16	0.32	0.082	--
SB-2-1.5	10-Aug-16	0.34	1.3	--
SB-2-6-8	10-Aug-16	7.2	3.2	--
SB-2-10.5-12.5	10-Aug-16	6.1	0.18	--
SB-2-10.5-12.5 (dup)	10-Aug-16	4.4	0.43	--
SB-2-12.5-14	10-Aug-16	35	0.053	--
SB-3-0.5	12-Aug-16	0.7	0.052	--
SB-3-1.5	12-Aug-16	--	--	--
SB-7-0.5	11-Aug-16	0.90	0.39	--
SB-7-1.5	11-Aug-16	0.45	0.81	--
SB-7-2-4	11-Aug-16	6.2	0.53	--
SB-7-6-8	11-Aug-16	15	0.76	--
SB-7-12-14	11-Aug-16	4.5	0.99	--
SB-7-22	11-Aug-16	0.87	0.10	--
SB-8-0.5	10-Aug-16	2.9	0.75	--
SB-8-1.5	10-Aug-16	2.8	0.54	--
SB-9-0.5	10-Aug-16	2.8	0.066	--
SB-9-1.5	10-Aug-16	4.1	0.089	--
SB-9-5	11-Aug-16	18	0.66	--
SB-9-10	11-Aug-16	22	1.2	26
SB-9-15	11-Aug-16	46	1.3	94
SB-9-18-20	11-Aug-16	72	0.10	--
SB-10-0.5	12-Aug-16	0.36 B	0.036	--
SB-10-1.5	12-Aug-16	0.88 B	0.15	--
SB-10-4-6	12-Aug-16	14	0.15	--
SB-10-4-6 (dup)	12-Aug-16	11	0.098	--
SB-10-12-14	12-Aug-16	13	0.099	--
SB-10-14-16	12-Aug-16	33	0.085	--
SB-10-18-20	12-Aug-16	38 B	0.082	--
SB-14-0.5	11-Aug-16	0.47	0.051	--
SB-14-1.5	11-Aug-16	0.56	0.14	--
SB-14-2-4	11-Aug-16	9.1	0.066	--
SB-14-10-12	11-Aug-16	11	0.048	--
SB-14-10-12 (dup)	11-Aug-16	13	0.085	--
SB-14-20-22	11-Aug-16	1.9	0.11	--
SB-14-22-24	11-Aug-16	32	0.19	--
SB-16-0.5	16-Aug-16	0.56	1.2	--
SB-16-1.5	16-Aug-16	1.4	0.47	17

Notes:

1. All units are in milligrams per kilogram (parts per million).
2. dup - Duplicate Sample
3. NS - No Standard
4. [(4)] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016
5. B - Analyte detected in the method blank.

-- - Indicates the result is below the detection limit.

Table 6
Estimated Waste Boundary Coordinates
Bud Holding Company
Guilford County, North Carolina

Location		Northing	Easting	Latitude	Longitude
1	PIN 7815617048	851252.20	1716645.39	36.08512	79.95895
2	PIN 7815617048	851225.70	1716638.26	36.08504	79.95898
3	PIN 7815617048	851196.39	1716599.44	36.08496	79.95911
4	PIN 7815617048	851230.55	1716586.87	36.08506	79.95915
5	PIN 7815614072 - Large Disposal Area	851156.94	1716512.88	36.08485	79.95940
6	PIN 7815614072 - Large Disposal Area	851134.79	1716556.36	36.08479	79.95925
7	PIN 7815614072 - Large Disposal Area	851097.30	1716588.32	36.08469	79.95914
8	PIN 7815614072 - Large Disposal Area	851048.65	1716599.40	36.08456	79.95910
9	PIN 7815614072 - Large Disposal Area	850999.12	1716606.29	36.08442	79.95908
10	PIN 7815614072 - Large Disposal Area	850949.57	1716612.94	36.08429	79.95905
11	PIN 7815614072 - Large Disposal Area	850901.86	1716602.28	36.08415	79.95909
12	PIN 7815614072 - Large Disposal Area	850868.17	1716566.13	36.08406	79.95921
13	PIN 7815614072 - Large Disposal Area	850821.65	1716548.50	36.08393	79.95927
14	PIN 7815614072 - Large Disposal Area	850813.66	1716510.13	36.08391	79.95940
15	PIN 7815614072 - Large Disposal Area	850851.21	1716477.18	36.08401	79.95951
16	PIN 7815614072 - Large Disposal Area	850890.36	1716446.08	36.08412	79.95962
17	PIN 7815614072 - Large Disposal Area	850926.22	1716411.50	36.08422	79.95974
18	PIN 7815614072 - Large Disposal Area	850951.15	1716368.20	36.08428	79.95988
19	PIN 7815614072 - Large Disposal Area	850972.71	1716323.12	36.08434	79.96004
20	PIN 7815614072 - Large Disposal Area	851014.25	1716300.58	36.08445	79.96011
21	PIN 7815614072 - Large Disposal Area	851057.72	1716323.74	36.08457	79.96004
22	PIN 7815614072 - Large Disposal Area	851090.06	1716361.81	36.08466	79.95991
23	PIN 7815614072 - Large Disposal Area	851116.36	1716404.30	36.08474	79.95977
24	PIN 7815614072 - Large Disposal Area	851140.58	1716448.04	36.08481	79.95962
25	PIN 7815614072 - Large Disposal Area	851125.83	1716509.51	36.08477	79.95941
26	PIN 7815614072 - Small Disposal Area	850897.31	1716667.10	36.08414	79.95887
27	PIN 7815614072 - Small Disposal Area	850861.04	1716696.52	36.08404	79.95877
28	PIN 7815614072 - Small Disposal Area	850812.46	1716699.77	36.08391	79.95876
29	PIN 7815614072 - Small Disposal Area	850838.92	1716680.94	36.08398	79.95882
30	PIN 7815614072 - Small Disposal Area	850882.35	1716656.93	36.08410	79.95890

Notes:

1. PIN - Parcel Identification Number
2. Waste boundary locations start with the northernmost point of the northern waste area and proceed in a clockwise direction for each area. Locations are approximately 50 feet apart.
3. Northing and Easting Coordinates - North American Datum 1983 State Plane Feet North Carolina
4. Latitude and Longitude Coordinates - World Geodetic System 1984

Table 7
Landfill Gas Probe Construction Summary
Bud Holding Company
Guilford County, North Carolina

Landfill Gas Probe Code	Completion Date	Northing	Easting	Latitude	Longitude	Drilling Method	Screened Lithology	Total Depth (feet bgs)	Depths (feet bgs)			Borehole Diameter (inches)
									Screen Interval	Filter Interval	Seal Interval	
GP-1	8/12/2016	851205.18	1716825.33	36.08499	79.95834	HSA	Regolith	11.0	6.0 - 11.0	5.0 - 11.0	3.0 - 5.0	3
GP-2	8/11/2016	851126.10	1716647.28	36.08477	79.95894	HSA	Regolith	11.0	6.0 - 11.0	5.0 - 11.0	3.0 - 5.0	3
GP-3	8/11/2016	851073.80	1716465.89	36.08462	79.95956	HSA	Regolith	11.0	6.0 - 11.0	5.0 - 11.0	3.0 - 5.0	3
GP-4	8/11/2016	850889.36	1716579.62	36.08412	79.95917	HSA	Regolith	11.0	6.0 - 11.0	5.0 - 11.0	3.0 - 5.0	3
GP-5	8/11/2016	850948.26	1716733.86	36.08428	79.95865	HSA	Regolith	11.0	6.0 - 11.0	5.0 - 11.0	3.0 - 5.0	3

Notes:

1. bgs - below ground surface
2. HSA - Hollow-stem auger
3. Northing and Easting Coordinates - North American Datum 1983 State Plane Feet North Carolina
4. Latitude and Longitude Coordinates - World Geodetic System 1984
5. Well is a 1-inch diameter Schedule 40 PVC riser flush-threaded to 5 feet of 0.01-inch mill slotted Schedule 40 PVC screen.

Table 8
Landfill Gas Probe Groundwater Measurements
Bud Holding Company
Guilford County, North Carolina

Landfill Gas Probe Code	Date	Depth to Water from Top of Casing (feet)	Screen Interval (feet BTOC)
GP-1	8/17/2016	Dry	9.97 - 14.97
GP-2	8/17/2016	13.07	10.01 - 15.01
GP-3	8/17/2016	Dry	10.01 - 15.01
GP-4	8/17/2016	Dry	10.01 - 15.01
GP-5	8/17/2016	Dry	10.00 - 15.00

Notes:

1. BTOC - below top of casing
2. The screen interval for each probe is based on the depth below top of casing.
   Depth to water was measured from the top of the polyvinylchloride riser.

Table 9
Landfill Gas Probe Screening Measurements
Bud Holdings Company
Guilford County, North Carolina

Landfill Gas Probe Code	Screening Date	Time	Methane			Carbon Dioxide (%)	Oxygen (%)	Hydrogen Sulfide (ppm)	Total VOCs (ppm)
			(%)	(µg/m^3)	LEL (%)				
GP-1	8/17/2016	1340	0	0	0	2.5	11.7	18	1.1
GP-2	8/17/2016	1355	0.3	197,051.6	6.0	8.3	5.3	0	1.3
GP-3	8/17/2016	1402	69.6	45,715,970.5	>100	26.1	0	0	0
GP-4	8/17/2016	1407	70.5	46,307,125.3	>100	26.6	0	3	0
GP-5	8/17/2016	1348	0	0	0	1.1	17.3	0	2.0

Notes:

1. Methane (µg/m^3) was calculated using the following formula: = [((% by volume)*16.04)/24.42]*1,000,000
   Formula variables:
   16.04 grams/mol - the molecular weight of methane
   24.45 - conversion factor that represents the volume of one mole of gas at a temperature of 25° C and a pressure of 1 atmosphere (29.9" of Hg)
   1,000,000 - coversion factor from g to µg
2. LEL - lower explosive limit
3. VOCs - volatile organic compounds
4. ppm - parts per million
5. (%) - percent
6. 8/17/2016 Weather Conditions: Temperature = 91°F, Barometric Pressure = 29.25" Hg, Humidity = 53%

Table 10
Temporary Groundwater Monitoring Well Construction Summary
Bud Holding Company
Guilford County, North Carolina

Temporary Groundwater Well Code	Completion Date	Northing	Easting	Latitude	Longitude	Drilling Method	Screened Lithology	Total Depth (feet bgs)	Depths (feet bgs)			Borehole Diameter (inches)
									Screen Interval	Filter Interval	Seal Interval	
TW-1	8-Aug-16	851030.50	1716296.73	36.08450	79.96013	HSA	Regolith	25.0	15.0 - 25.0	13.0 - 25.0	11.0 - 13.0	4
TW-2	8-Aug-16	851165.51	1716553.32	36.08488	79.95926	HSA	Regolith	20.0	10.0 - 20.0	8.0 - 20.0	6.0 - 8.0	4
TW-3	9-Aug-16	851292.23	1716741.53	36.08523	79.95863	HSA	Regolith	25.0	15.0 - 25.0	13.0 - 25.0	11.0 - 13.0	4
TW-4	9-Aug-16	851120.07	1716821.38	36.08476	79.95835	HSA	Regolith	25.0	15.0 - 25.0	13.0 - 25.0	11.0 - 13.0	4
TW-5	9-Aug-16	851045.97	1716601.07	36.08455	79.95910	HSA	Regolith	25.0	15.0 - 25.0	13.0 - 25.0	11.0 - 13.0	4
TW-6	8-Aug-16	850864.06	1716468.93	36.08405	79.95954	HSA	Regolith	25.0	15.0 - 25.0	13.0 - 25.0	11.0 - 13.0	4
TW-7	9-Aug-16	850894.16	1716782.37	36.08414	79.95848	HSA	Regolith	24.0	14.0 - 24.0	12.0 - 24.0	10.0 - 12.0	4

Notes:

1. bgs - below ground surface
2. Northing and Easting Coordinates - North American Datum 1983 State Plane Feet North Carolina
3. Latitude and Longitude Coordinates - World Geodetic System 1984
4. HSA - Hollow-Stem Auger
5. Each temporary well was constructed of 2-inch diameter Schedule 40 polyvinylchloride (PVC) riser flush-threaded to 10 feet of 0.01-inch mill slotted Schedule 40 PVC screen.

Table 11
Water Quality Measurements and Groundwater Elevations
Bud Holding Company
Guilford County, North Carolina

Monitoring Well Code	Water Quality Measurements				Groundwater Elevations				
	pH	Conductivity	Temperature	Turbidity	Ground Elevation[10]	Height of Casing Above Ground	TOC Elevation[11]	Depth to Groundwater	Groundwater Elevation
	(S.U.)	(µS/cm)	(degrees Celsius)	(NTUs)	(feet)	(feet)	(feet)	(feet BTOC)	(feet)
TW-1	6.79	221	17.8	27.1	837	3.34	840.34	20.75	819.59
TW-2	6.83	503	18.0	28.5	838	0.00	838.00	12.78	825.22
TW-3	6.68	634	17.7	24.4	838	0.20	838.20	10.33	827.87
TW-4	6.16	293	17.1	48.7	842	0.00	842.00	14.96	827.04
TW-5	6.50	776	17.1	24.4	840	3.32	843.32	20.77	822.55
TW-6	6.48	316	17.2	43.7	837	3.99	840.99	20.87	820.12
TW-7	6.37	683	17.7	50.6	840	1.50	841.50	19.11	822.39

Notes:

1. Water levels were collected on August 11, 2016.
2. Water quality mesurements and samples were collected on August 11 and 12, 2016.
3. S.U. - Standard Units
4. µS/cm - Microsiemens per centimeter
5. NTUs - Nephelometric Turbidity Units
6. TOC - Top of Casing
7. BTOC - Below Top of Casing
9. Turbidity was measured at the time of sample collection.
10. Ground elevation estimated from Light Detection and Ranging (LIDAR) data.
11. Top of casing elevation estimated from LIDAR data and height of casing above ground surface.

Table 12a
Detected Groundwater Constituents - Metals
Bud Holding Company
Guilford County, North Carolina

Monitoring Well Code	Sample Date	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
North Carolina 2L or Groundwater Protection Standard		**1***	**10**	**4***	**2**	**10**	**1,000**	**300**	**15**	**50**	**1**	**100**	**20**	**20**	**0.2****	**1,000**
TW-1	12-Aug-16	--	--	--	--	--	1.0 B	880 B	0.33 B	300 B	0.038 B	0.81	--	--	--	2.8 B
TW-1 (dup)	12-Aug-16	--	--	--	--	--	1.3 B	1,000 B	0.97 B	300 B	0.056 B	0.79	--	--	--	4.4 B
TW-2	12-Aug-16	--	--	--	0.12	1.0	4.2 B	1,000 B	0.34 B	5,800 B	0.074 B	7.2	--	--	--	7.2 B
TW-3	12-Aug-16	--	--	--	0.052	1.1	1.9	550	0.18	280	0.073	7.8	--	--	--	5.6
TW-4	12-Aug-16	--	--	--	--	2.4	6.4 B	2,300 B	1.6 B	380 B	--	3.7	--	--	--	11 B
TW-5	12-Aug-16	--	--	--	0.076	1.6	5.7 B	4,000 B	1.4 B	1,400 B	0.055 B	3.8	--	--	--	10 B
TW-6	12-Aug-16	--	--	--	--	0.85	1.0 B	12,000 B	0.57 B	1,100 B	--	0.81	--	--	--	7.6 B
TW-7	12-Aug-16	0.38 B	--	0.66	0.098	21	22 B	18,000 B	5.0 B	4,600 B	0.095 B	31	--	--	--	49 B

Notes:

1. All units are in micrograms per liter (parts per billion).
2. dup - duplicate sample
3. * - Groundwater Protection Standard
4. ** - Interim Maximum Allowable Concentration for the Groundwater Protection Standard
5. B - Analyte detected in the method blank.

	- Concentration exceeds the 15A NCAC 02L .0202 or Groundwater Protection Standard.
--	- Indicates the result is below the detection limit.

Table 12b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Monitoring Well Code	Sample Date	VOCs		SVOC	Tentatively Identified Semi-Volatile Organic Compounds								
		2-Butanone	Acetone	bis(2-Ethylhexyl)phthalate	2,4-Dimethylphenol	4-tert-Butylphenyl acetate	6-Octadecenoic acid, (Z)-	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione	9-Octadecenoic acid, (E)-	Bis(3-chloro-1-propyl)(1-chloro-2-propyl)phosphate	Butane, 1,3-dibromo-	Butane, 2-chloro-2-methyl	Butanoic acid
North Carolina 2L Standard		**4,000**	**6,000**	**3**	**100**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
TW-1	11-Aug-16	--	--	--	--	--	--	--	--	--	--	3.5	--
TW-1 (dup)	11-Aug-16	--	4.0	--	--	--	--	--	--	--	--	--	--
TW-2	11-Aug-16	2.1	14	--	--	32	3.0	2.9	--	7.8	9.3	--	--
TW-3	11-Aug-16	--	2.5	--	--	--	--	--	9.9	--	--	--	6.0
TW-4	11-Aug-16	--	2.6	--	--	--	--	--	--	--	--	3.4	--
TW-5	11-Aug-16	--	9.1	--	--	--	8.6	--	--	--	--	3.5	--
TW-6	11-Aug-16	--	3.1	--	--	--	--	--	7.2	--	--	3.3	2.3
TW-7	11-Aug-16	--	15	0.77	--	--	--	--	--	--	--	--	--

Table 12b
Detected Groundwater Constituents - Volatile and Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Monitoring Well Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds												
		Butanoic acid, 3-methyl-	Chloroiodomethane	Diethyltoluamide	Oleic Acid	Oxybenzone	Phenol, 4-(1,1,3,3-tetramethylbutyl)-	Silane, chlorotripropyl-	Unknown 1	Unknown 2	Unknown 3	Unknown 4	Unknown 5	Unknown 6
North Carolina 2L Standard		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
TW-1	11-Aug-16	--	--	--	3.2	--	--	--	--	--	--	--	--	--
TW-1 (dup)	11-Aug-16	--	--	2.2	--	--	--	--	2.7	--	--	--	--	--
TW-2	11-Aug-16	--	--	--	--	2.1	33	20	3.0	2.8	5.0	9.6	17	44
TW-3	11-Aug-16	--	3.6	--	--	--	--	--	3.4	2.5	4.6	--	--	--
TW-4	11-Aug-16	--	--	--	--	--	--	--	3.3	--	--	--	--	--
TW-5	11-Aug-16	--	--	14	--	2.7	--	--	13	15	3.9	5.2	4.8	--
TW-6	11-Aug-16	2.5	--	9.4	--	--	--	--	2.4	--	--	--	--	--
TW-7	11-Aug-16	--	--	11	--	2.0	--	2.2	2.8	2.8	3.3	2.2	--	--

Notes:

1. All units are in micrograms per liter (parts per billion)
2. VOCs - Volatile Organic Compounds
3. SVOC - Semi-Volatile Organic Compound
4. dup - duplicate sample
5. - NS - No Standard

-- - Indicates the result is below the detection limit

Table 12c
Detected Groundwater Constituents - General Chemistry
Bud Holding Company
Guilford County, North Carolina

Monitoring Well Code	Sample Date	Ammonia	Nitrate	Sulfate
North Carolina 2L or Groundwater Protection Standard		**1,500***	**10,000**	**250,000**
TW-1	11-Aug-16	150	440	6,600
TW-1 (dup)	11-Aug-16	140	450	6,700
TW-2	11-Aug-16	55	34	85,000
TW-3	11-Aug-16	--	130	29,000
TW-4	11-Aug-16	800	--	23,000
TW-5	11-Aug-16	2,800	8.6	4,900
TW-6	11-Aug-16	2,400	6.3	1,800
TW-7	11-Aug-16	61	34	7,000

Notes:

1. All units are in micrograms per liter (parts per billion).
2. dup - duplicate sample
3. * - Groundwater Protection Standard

[shaded box] - Concentration exceeds the 15A NCAC 02L .0202 or Groundwater Protection Standard

-- - Indicates the result is below the detection limit.

Table 13a
Detected Background Boring Constituents - Metals
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Antimony	Arsenic	Beryllium	Cadmium	Chromium [4]	Hexavalent Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
Health-Based Residential PSRG [3]		**6.2**	**0.68**	**32**	**14.2**	**24,000**	**0.3**	**620**	**11,000**	**400**	**360**	**2.2**	**300**	**78**	**78**	**0.156**	**4,600**
Health-Based Industrial PSRG [3]		**94**	**3.0**	**460**	**196**	**100,000**	**6.3**	**9,400**	**100,000**	**800**	**5,200**	**3.13**	**4,400**	**1,160**	**1,160**	**2.4**	**70,000**
BG-1-0.5	16-Aug-16	0.021 B	0.55	0.47	0.035	39	0.39	35	23,000 B	5.4 B	420	--	19	0.27	--	0.053	30
BG-1-1.5	16-Aug-16	0.026 B	0.54	0.56	0.051	36	0.49	31	24,000 B	12 B	430	0.011	15	0.28	--	0.07	30
BG-1-5	16-Aug-16	0.036 B	0.71	1.10	0.065	33	--	51	38,000 B	20 B	870	0.0099	17	0.47	--	0.11	38
BG-1-10	16-Aug-16	0.021 B	--	1.3	--	50	0.37	18	30,000 B	16 B	920	--	46	0.29	--	0.089	25
BG-1-10 (dup)	16-Aug-16	0.081 B	0.44	1.5	--	71	0.38	8.8	49,000 B	5.9 B	690	--	91	0.34	--	0.047	47
BG-1-15	16-Aug-16	0.021 B	0.3	2.5	0.031	69	0.51	2.8	41,000 B	11 B	1,500	--	130	0.072	--	0.043	44
BG-1-20	16-Aug-16	0.053 B	--	1.4	0.025	38	--	19	33,000 B	6.1 B	710	--	49	0.069	0.019	0.015	40
BG-2-0.5	16-Aug-16	0.022 B	--	1.4	0.028	29	--	38	25,000 B	12 B	440	--	14	0.22	--	0.025	37
BG-2-1.5	16-Aug-16	0.021 B	0.33	1.7	0.023	28	--	27	31,000 B	12 B	390	--	13	0.23	--	0.025	45
BG-2-5	16-Aug-16	0.048 B	2.1	1.1	0.0077	15	--	42	67,000 B	61 B	14,000*	0.013	3.8	0.56	--	0.81	21
BG-2-10	16-Aug-16	0.020 B	--	1.7	--	7.3	--	30	39,000 B	20 B	770	--	7.2	0.54	--	0.043	62
BG-2-15	16-Aug-16	0.015 B	--	0.78	--	5.6	--	12	13,000 B	20 B	230	--	2.2	0.28	--	0.014	21
BG-2-20	16-Aug-16	0.014 B	--	0.79	--	3.2	0.37	4.5	10,000 B	25 B	190	--	2.5	0.23	--	0.010	20
BG-3-0.5	16-Aug-16	0.013 B	0.32	0.33	--	16	--	27	19,000 B	3.0 B	310	--	9.7	0.19	--	0.044	29
BG-3-1.5	16-Aug-16	0.016 B	0.35	1	--	22	--	36	24,000 B	11 B	530	--	12	0.31	--	0.056	32
BG-3-5	16-Aug-16	0.054 B	1.7	0.8	--	40	--	39	48,000 B	18 B	530	--	12	0.4	--	0.21	24
BG-3-10	16-Aug-16	0.051 B	--	1.6	0.028	59	--	24	32,000 B	10 B	1,100	--	39	0.33	--	0.042	46
BG-3-15	16-Aug-16	0.034 B	--	2.3	--	190	0.75	36	41,000 B	10 B	1,400	--	93	0.26	--	0.021	62
BG-3-20	16-Aug-16	0.037 B	0.37	1.4	0.021	22	--	90	34,000 B	8.9 B	560	--	18	0.22	--	0.015	59

Notes:

1. All units are in milligrams per kilogram (parts per million).
2. dup - duplicate sample
3. [3] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016
4. [4] - A PSRG for total chromium has not been established. The values provided are for chromium (III).
5. B - Analyte detected in the method blank.

	- Concentration exceeds Residential PSRG
*	- Concentration exceeds Industrial PSRG
--	- Indicates the result is below the detection limit.

Table 13b
Detected Background Boring Constituents - Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Volatile Organic Compounds			Tentatively Identified Volatile Organic Compounds					
		Acetone	2-Butanone	Ethylbenzene	1R-.alpha.-Pinene	3-Octanone	4-Undecene, 4-methyl-	Benzene, propyl-	Butane, 2-methyl-	Ethanol
Health-Based Residential PSRG [(4)]		**12,200**	**5,400**	**5.80**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG [(4)]		**100,000**	**38,000**	**25.0**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
BG-1-0.5	16-Aug-16	0.0058	--	--	--	--	--	--	--	--
BG-1-1.5	16-Aug-16	--	--	--	--	--	--	--	--	--
BG-1-5	16-Aug-16	0.160	0.023	0.0027	--	--	0.0054	0.016	--	--
BG-1-10	16-Aug-16	0.089	0.0091	--	0.0063	--	--	--	0.0095	--
BG-1-10 (dup)	16-Aug-16	0.0640	0.0058	--	--	0.011	--	--		0.055
BG-1-15	16-Aug-16	0.025	--	--	--	--	--	--	--	--
BG-1-20	16-Aug-16	0.018	--	--	--	--	--	--	--	--
BG-2-0.5	16-Aug-16	--	--	--	--	--	--	--	--	--
BG-2-1.5	16-Aug-16	--	--	--	--	--	--	--	--	--
BG-2-5	16-Aug-16	0.013	--	--	--	--	--	--	--	--
BG-2-10	16-Aug-16	0.011	--	--	--	--	--	--	--	--
BG-2-15	16-Aug-16	0.0085	--	--	--	--	--	--	--	--
BG-2-20	16-Aug-16	0.013	--	--	--	--	--	--	--	--
BG-3-0.5	16-Aug-16	--	--	--	--	--	--	--	--	--
BG-3-1.5	16-Aug-16	0.012	--	--	--	--	--	--	--	--
BG-3-5	16-Aug-16	0.014	--	--	--	--	--	--	--	--
BG-3-10	16-Aug-16	0.017	--	--	--	--	--	--	--	--
BG-3-15	16-Aug-16	0.013	--	--	--	--	--	--	--	--
BG-3-20	16-Aug-16	0.014	--	--	--	--	--	--	--	--

Notes:

1. All units are in milligrams per kilogram (parts per million).
2. dup - Duplicate Sample
3. NS - No Standard
4. [(4)] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016

	- Concentration exceeds Residential PSRG
*	- Concentration exceeds Industrial PSRG
--	- Indicates the result is below detection limits.

Table 13c
Detected Background Boring Constituents - Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Chrysene	Di-n-octylphthalate	Fluoranthene	Pyrene
Health-Based Residential PSRG [4]		**0.16**	**0.016**	**0.16**	**16**	**NS**	**480**	**360**
Health-Based Industrial PSRG [4]		**2.9**	**0.29**	**2.9**	**290**	**NS**	**6,000**	**4,600**
BG-1-0.5	16-Aug-16	--	--	--	--	--	--	--
BG-1-1.5	16-Aug-16	0.0053	0.004	0.008	0.0033	--	0.0062	0.0055
BG-1-5	16-Aug-16	--	--	0.0051	--	--	--	--
BG-1-10	16-Aug-16	--	--	--	--	--	--	--
BG-1-10 (dup)	16-Aug-16	--	--	--	--	--	--	--
BG-1-15	16-Aug-16	--	--	--	--	--	--	--
BG-1-20	16-Aug-16	--	--	--	--	0.022	--	--
BG-2-0.5	16-Aug-16	--	--	--	--	0.027	--	--
BG-2-1.5	16-Aug-16	--	--	--	--	--	--	--
BG-2-5	16-Aug-16	--	--	--	--	--	--	--
BG-2-10	16-Aug-16	--	--	--	--	0.024	--	--
BG-2-15	16-Aug-16	--	--	--	--	0.023	--	--
BG-2-20	16-Aug-16	--	--	--	--	--	--	--
BG-3-0.5	16-Aug-16	--	--	--	--	--	--	--
BG-3-1.5	16-Aug-16	--	--	--	--	0.023	--	--
BG-3-5	16-Aug-16	--	--	--	--	--	--	--
BG-3-10	16-Aug-16	--	--	--	--	--	--	--
BG-3-15	16-Aug-16	--	--	--	--	--	--	--
BG-3-20	16-Aug-16	--	--	--	--	--	--	--

Notes:

1. All units are in milligrams per kilogram (parts per million).
2. dup - Duplicate Sample
3. NS - No Standard
4. [4] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016

	- Concentration exceeds Residential PSRG
*	- Concentration exceeds Industrial PSRG
--	- Indicates the result is below detection limits.

Table 13d
Detected Background Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds																			
		1,2-Benzenedicarboxylic acid, bis(2-meth	2- Chloropropionic acid, octadecyl ester	2,5-Hexanedione	2-Pentanone, 4-hydroxy-4-methyl-	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	6-Octadecenoic acid, (Z)-	9-Octadecenoic acid, (E)-	9-Octadecenamide, (Z)-	9-Octadecenoic acid	13-Docosenamide, (Z)-	14-Pentadecenoic acid	Caryophyllene	Cedrol	Cyclohexadecane	Diethyltoluamide	Friedelan-3-one	Heneicosane	Hentriacontane	Heptacosane	Lup-20(29)-en-28-oic acid, 3-hydroxy-, m
Health-Based Residential PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG (4)		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
BG-1-0.5	16-Aug-16	--	--	0.11	--	--	--	0.54	--	--	0.42	--	--	--	--	--	--	--	0.13	--	--
BG-1-1.5	16-Aug-16	--	--	--	--	--	--	0.085	--	--	0.091	--	--	--	--	--	--	--	--	0.097	--
BG-1-5	16-Aug-16	--	0.15	0.11	--	0.18	--	--	--	--	0.24	--	0.23	0.13	0.24	--	--	--	0.6	0.23	--
BG-1-10	16-Aug-16	--	--	--	--	--	--	0.33	--	--	--	--	0.45	--	--	--	0.11	--	--	--	0.2
BG-1-10 (dup)	16-Aug-16	--	--	0.15	--	--	0.47	--	--	--	0.41	--	0.22	--	--	--	--	--	--	--	--
BG-1-15	16-Aug-16	--	--	0.11	--	--		--	--	--	0.13	--	0.16	--	--	--	--	--	--	--	--
BG-1-20	16-Aug-16	--	--	0.19	--	--		--	--	--	0.61	0.1	--	--	--	--	--	--	--	--	--
BG-2-0.5	16-Aug-16	--	--	0.076	--	--	0.26	--	--	--	0.31	--	--	--	--	--	--	0.16	--	--	--
BG-2-1.5	16-Aug-16	--	--	0.077	0.92	--	--	--	--	--	0.54	--	--	--	--	--	--	--	--	--	--
BG-2-5	16-Aug-16	--	--	0.098	--	--	0.21	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--
BG-2-10	16-Aug-16	--	--	0.11	--	--	--	--	0.13	--	--	--	--	--	--	--	--	--	--	--	--
BG-2-15	16-Aug-16	--	--	0.075	--	--	--	0.17	--	--	0.2	--	--	--	--	--	--	--	--	--	--
BG-2-20	16-Aug-16	--	--	0.087	--	--	--	--	--	--	0.1	--	--	--	--	--	--	--	--	--	--
BG-3-0.5	16-Aug-16	--	--	0.093	--	--	--	--	--	--	0.57	--	--	--	--	--	--	--	--	0.081	--
BG-3-1.5	16-Aug-16	--	--		--	--	--	--	--	0.095	--	--	--	--	--	--	--	--	--	--	--
BG-3-5	16-Aug-16	--	--	0.11	--	--	0.72	--	--	0.11	0.15	--	--	--	--	--	--	--	--	--	--
BG-3-10	16-Aug-16	0.079	--	0.11	--	--	--	0.19		0.17	0.18	--	--	--	--	--	--	--	--	--	--
BG-3-15	16-Aug-16	--	--	0.11	--	--	0.26	--	--	--	0.36	--	--	--	--	0.29	--	--	--	--	--
BG-3-20	16-Aug-16	--	--	0.14	--	--	--	--	--	--	0.39	--	--	--	--	0.22	--	--	--	--	--

Table 13d
Detected Background Boring Constituents - Tentitively Identified Semi-Volatile Organic Compounds
Bud Holding Company
Guilford County, North Carolina

Soil Boring Sample Code	Sample Date	Tentatively Identified Semi-Volatile Organic Compounds																	
		n-Hexadecanoic acid	Naphthalene, 1,2,3,4-tetrahydro-1,6-dime	Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-	Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	Naphthalene, 1,2,4a,5,8,8a-hexahydro-4,7	Octadecanoic acid	Octadec-9-enoic acid	Oleic Acid	Squalene	Tetracosane	Tetracosapentaene, 2,6,10,15,19,23-hexam	Unknown 1	Unknown 2	Unknown 3	Unknown 4	Unknown 5	Unknown 6	Unknown 7
Health-Based Residential PSRG [(4)]		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Health-Based Industrial PSRG [(4)]		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
BG-1-0.5	16-Aug-16	0.083	--	--	--	--	--	--	--	--	--	--	1.2	0.093	--	--	--	--	--
BG-1-1.5	16-Aug-16	--	--	--	0.2	--	--	--	--	--	--	--	0.78	0.079	--	--	--	--	--
BG-1-5	16-Aug-16	0.19	0.69	0.12	--	0.16	--	--	--	--	--	0.15	0.18	0.82	0.24	0.13	0.2	0.12	0.45
BG-1-10	16-Aug-16	0.091	--	0.095	0.22	--	--	--	--	0.13	--	--	0.37	0.94	--	--	--	--	--
BG-1-10 (dup)	16-Aug-16	0.17	--	0.092	--	--	--	--	--	--	--	--	0.28	1.5	0.15	0.25	0.39	--	--
BG-1-15	16-Aug-16	0.096	--	--	--	--	--	0.81	--	--	--	--	0.18	1.1	0.53	--	--	--	--
BG-1-20	16-Aug-16	0.09	--	--	--	--	--	--	--	--	--	--	1.9	0.096	--	--	--	--	--
BG-2-0.5	16-Aug-16	--	--	--	--	--	--	--	--	0.17	--	--	0.89	--	--	--	--	--	--
BG-2-1.5	16-Aug-16	--	--	--	--	--	--	--	--	--	0.1	--	--	--	--	--	--	--	--
BG-2-5	16-Aug-16	--	--	--	0.085	--	--	--	--	--	--	--	0.95	0.12	--	--	--	--	--
BG-2-10	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	1.2	--	--	--	--	--	--
BG-2-15	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	0.85	0.082	--	--	--	--	--
BG-2-20	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	0.83	--	--	--	--	--	--
BG-3-0.5	16-Aug-16	--	--	--	--	--	--	--	0.09	--	--	--	0.97	--	--	--	--	--	--
BG-3-1.5	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	0.78	--	--	--	--	--	--
BG-3-5	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	0.18	1.1	--	--	--	--	--
BG-3-10	16-Aug-16	0.12	--	--	--	--	--	--	--	--	--	--	1.1	--	--	--	--	--	--
BG-3-15	16-Aug-16	--	--	--	--	--	0.099	--	--	--	--	--	1.1	0.12	--	--	--	--	--
BG-3-20	16-Aug-16	--	--	--	--	--	--	--	--	--	--	--	1.6	0.083	--	--	--	--	--

Notes:

1. All units are in milligrams per kilogram (parts per million).
2. dup - Duplicate Sample
3. NS - No Standard
4. [(4)] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016

	- Concentration exceeds Residential PSRG
--	- Indicates the result is below detection limits.

Table 13e
Detected Background Boring Constituents - General Chemistry
Bud Holding Company
Guilford County, North Carolina

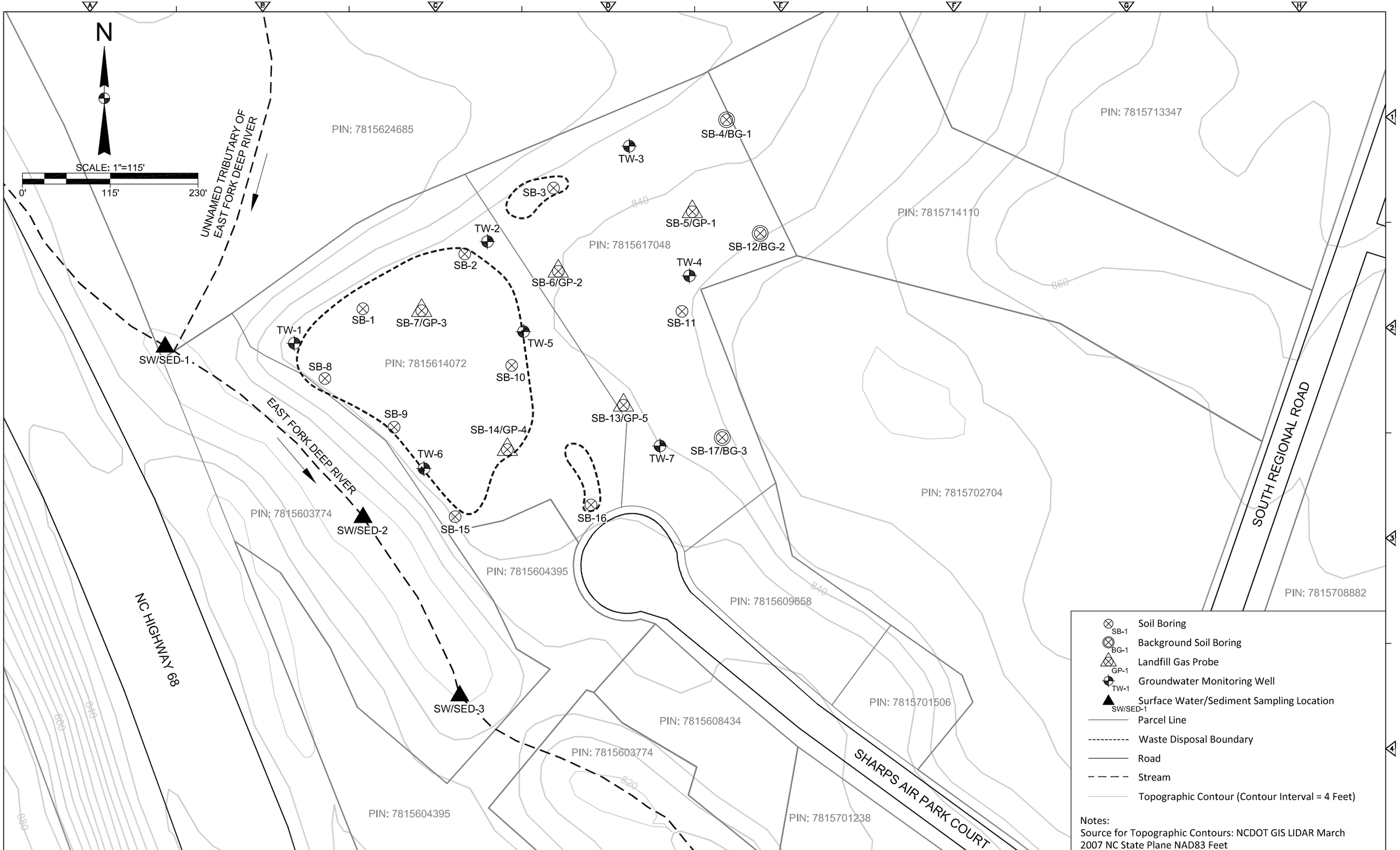
Soil Boring Sample Code	Sample Date	Ammonia	Nitrate	Sulfate
Health-Based Residential PSRG [4]		**NS**	**26,000**	**NS**
Health-Based Industrial PSRG [4]		**NS**	**100,000**	**NS**
BG-1-0.5	16-Aug-16	0.33	0.035	--
BG-1-1.5	16-Aug-16	--	0.093	--
BG-1-5	16-Aug-16	92	0.054	--
BG-1-10	16-Aug-16	3	0.077	--
BG-1-10 (dup)	16-Aug-16	1.3	0.24	--
BG-1-15	16-Aug-16	0.48	0.096	--
BG-1-20	16-Aug-16	--	0.032	--
BG-2-0.5	16-Aug-16	--	0.056	--
BG-2-1.5	16-Aug-16	--	0.48	--
BG-2-5	16-Aug-16	--	0.17	--
BG-2-10	16-Aug-16	--	--	--
BG-2-15	16-Aug-16	--	0.039	--
BG-2-20	16-Aug-16	--	--	--
BG-3-0.5	16-Aug-16	0.72	0.046	--
BG-3-1.5	16-Aug-16	0.37	0.043	--
BG-3-5	16-Aug-16	7.3	0.19	--
BG-3-10	16-Aug-16	0.63	--	--
BG-3-15	16-Aug-16	0.54	0.07	--
BG-3-20	16-Aug-16	0.5	--	--

Notes:

1. All units are in milligrams per kilogram (parts per million).
2. dup - Duplicate Sample
3. NS - No Standard
4. [4] - Inactive Hazardous Sites Branch Preliminary Soil Remediation Goal (PSRG) - April 2016

	- Indicates the result is below the detection limit
*	- Concentration exceeds Industrial PSRG
--	- Indicates the result is below the detection limit.

Figures



Notes:
Source for Topographic Contours: NCDOT GIS LIDAR March 2007 NC State Plane NAD83 Feet

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. WEISPFENNING
DRAWN BY: A. WEISPFENNING
SHEET CHK'D BY: D. FORBES
CROSS CHK'D BY: M. COLONE
APPROVED BY: D. FORBES
DATE: AUGUST 2016

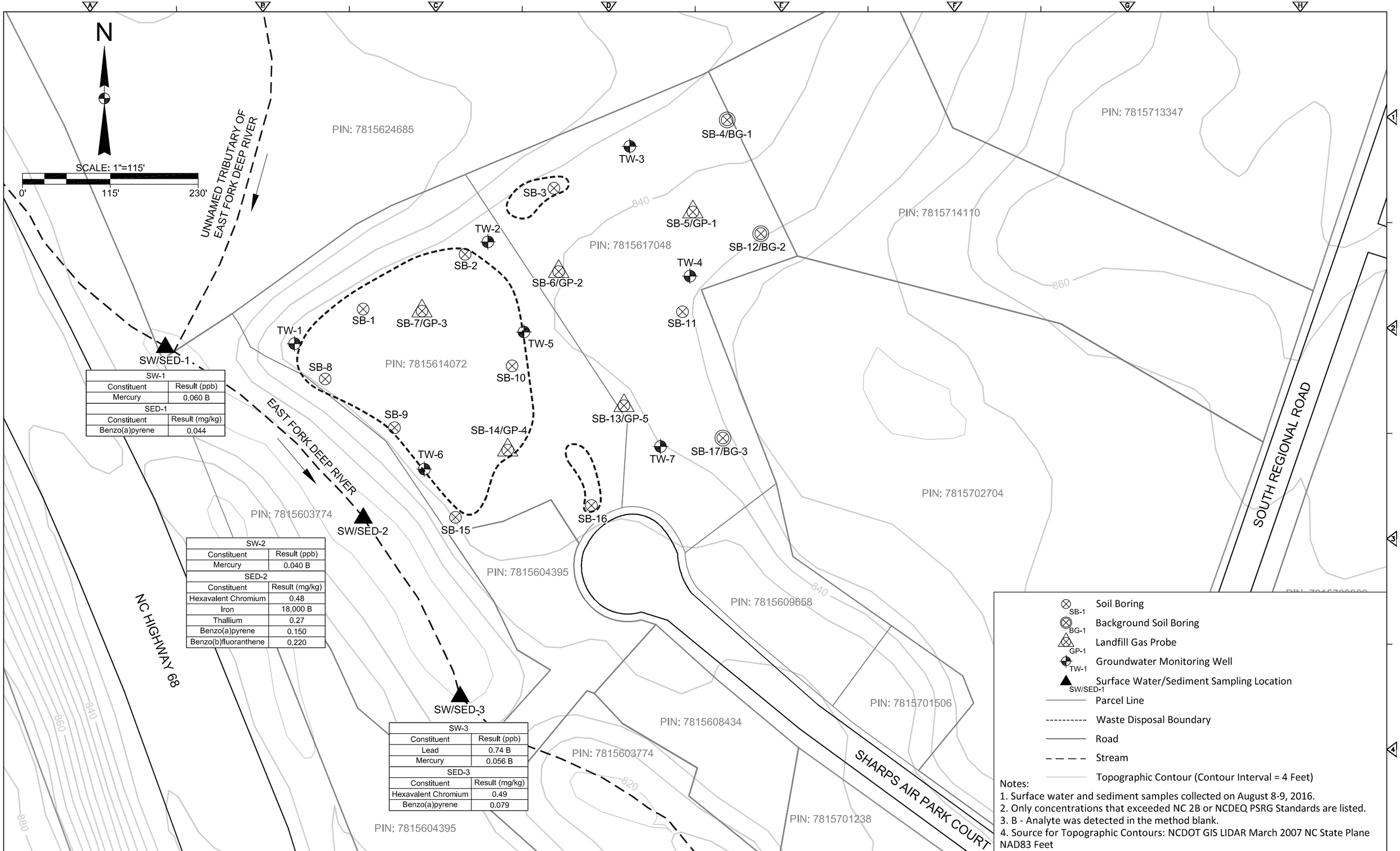
CDM Smith
CDM Smith Inc.
5400 Glenwood Avenue, Suite 400
Raleigh, NC 27612 | Tel: (919) 787-5620
NC F-1255

GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA

BUD HOLDING COMPANY
(NONCD0000673)

SITE MAP

PROJECT NO. 127844-115212
FILE NAME: FIGURE 1.DWG
FIGURE
1



SW-1	
Constituent	Result (ppb)
Mercury	0.060 B
SED-1	
Constituent	Result (mg/kg)
Benzo(a)pyrene	0.044

SW-2	
Constituent	Result (ppb)
Mercury	0.040 B
SED-2	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.48
Iron	18,000 B
Thallium	0.27
Benzo(a)pyrene	0.150
Benzo(b)fluoranthene	0.220

SW-3	
Constituent	Result (ppb)
Lead	0.74 B
Mercury	0.056 B
SED-3	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.49
Benzo(a)pyrene	0.079

Notes:
1. Surface water and sediment samples collected on August 8-9, 2016.
2. Only concentrations that exceeded NC 2B or NCDEQ PSRG Standards are listed.
3. B - Analyte was detected in the method blank.
4. Source for Topographic Contours: NCDOT GIS LIDAR March 2007 NC State Plane NAD83 Feet

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. WEISPFENNING
DRAWN BY: A. WEISPFENNING
SHEET CHK'D BY: D. FORBES
CROSS CHK'D BY: M. COLONE
APPROVED BY: D. FORBES
DATE: AUGUST 2016

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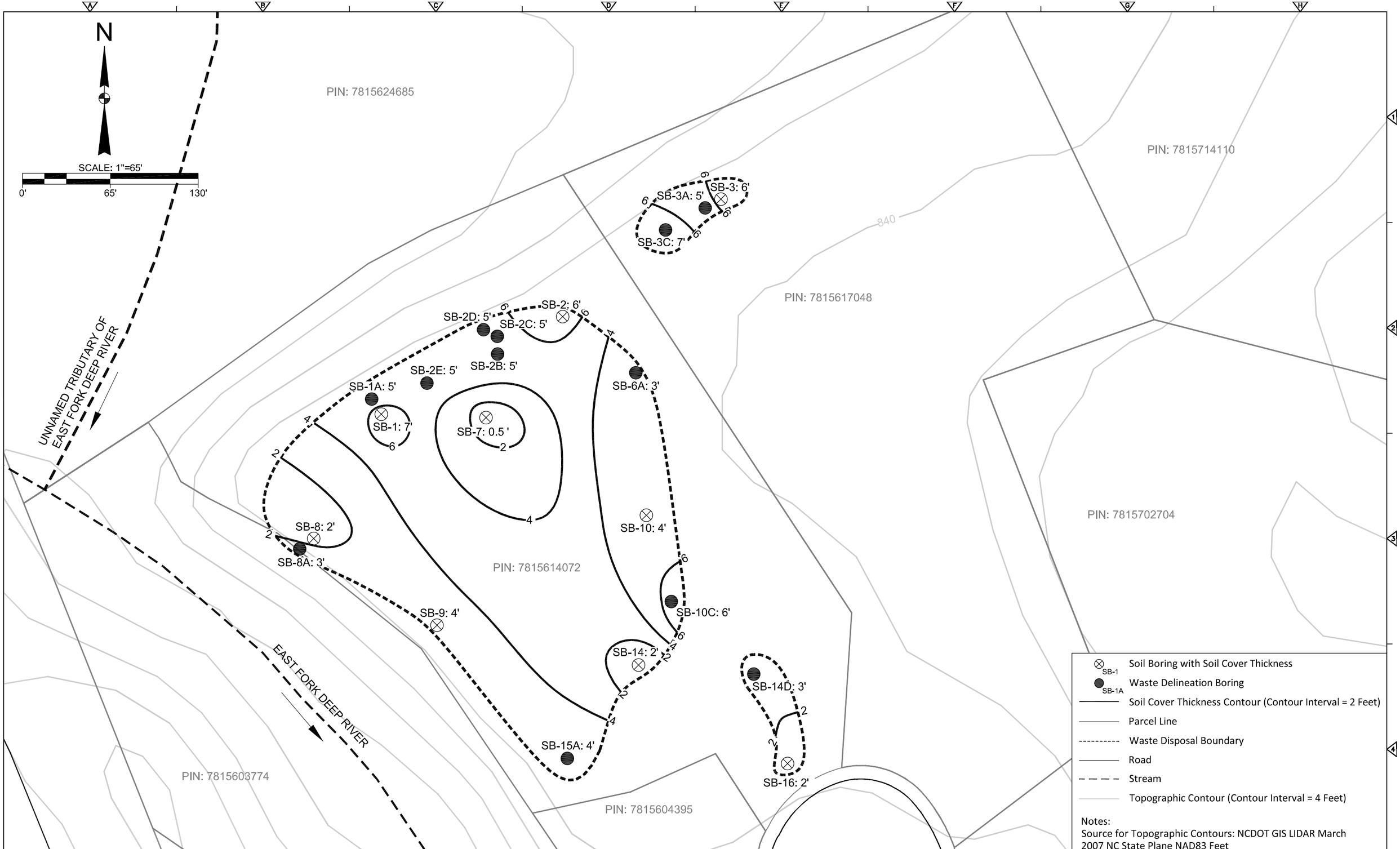
GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA

BUD HOLDING COMPANY
(NONCD0000673)

SURFACE WATER AND SEDIMENT ANALYTICAL RESULTS

PROJECT NO. 127844-115212
FILE NAME: FIGURE 2.DWG
FIGURE
2



Notes:
Source for Topographic Contours: NCDOT GIS LIDAR March 2007 NC State Plane NAD83 Feet

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. WEISPFENNING
DRAWN BY: A. WEISPFENNING
SHEET CHK'D BY: D. FORBES
CROSS CHK'D BY: M. COLONE
APPROVED BY: D. FORBES
DATE: AUGUST 2016

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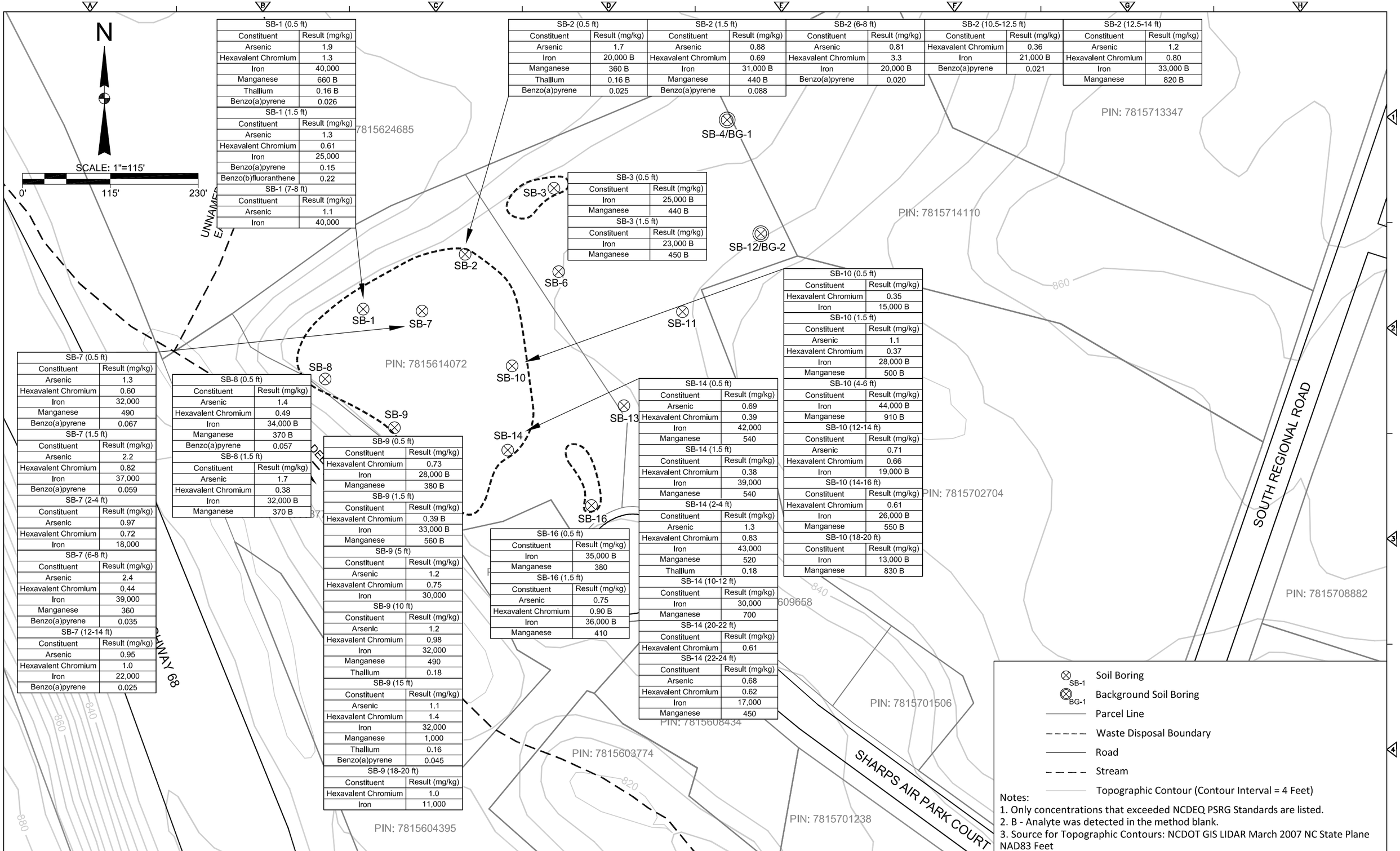
GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA

BUD HOLDING COMPANY
(NONCD0000673)

SOIL COVER THICKNESS MAP

PROJECT NO. 127844-115212
FILE NAME: FIGURE 3.DWG

FIGURE
3



SB-1 (0.5 ft)	
Constituent	Result (mg/kg)
Arsenic	1.9
Hexavalent Chromium	1.3
Iron	40,000
Manganese	660 B
Thallium	0.16 B
Benzo(a)pyrene	0.026

SB-1 (1.5 ft)	
Constituent	Result (mg/kg)
Arsenic	1.3
Hexavalent Chromium	0.61
Iron	25,000
Benzo(a)pyrene	0.15
Benzo(b)fluoranthene	0.22

SB-1 (7-8 ft)	
Constituent	Result (mg/kg)
Arsenic	1.1
Iron	40,000

SB-2 (0.5 ft)	
Constituent	Result (mg/kg)
Arsenic	1.7
Iron	20,000 B
Manganese	360 B
Thallium	0.16 B
Benzo(a)pyrene	0.025

SB-2 (1.5 ft)	
Constituent	Result (mg/kg)
Arsenic	0.88
Hexavalent Chromium	0.69
Iron	31,000 B
Manganese	440 B
Benzo(a)pyrene	0.088

SB-2 (6-8 ft)	
Constituent	Result (mg/kg)
Arsenic	0.81
Hexavalent Chromium	3.3
Iron	20,000 B
Benzo(a)pyrene	0.020

SB-2 (10.5-12.5 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.36
Iron	21,000 B
Benzo(a)pyrene	0.021

SB-2 (12.5-14 ft)	
Constituent	Result (mg/kg)
Arsenic	1.2
Hexavalent Chromium	0.80
Iron	33,000 B
Manganese	820 B

SB-3 (0.5 ft)	
Constituent	Result (mg/kg)
Iron	25,000 B
Manganese	440 B

SB-3 (1.5 ft)	
Constituent	Result (mg/kg)
Iron	23,000 B
Manganese	450 B

SB-7 (0.5 ft)	
Constituent	Result (mg/kg)
Arsenic	1.3
Hexavalent Chromium	0.60
Iron	32,000
Manganese	490
Benzo(a)pyrene	0.067

SB-7 (1.5 ft)	
Constituent	Result (mg/kg)
Arsenic	2.2
Hexavalent Chromium	0.82
Iron	37,000
Benzo(a)pyrene	0.059

SB-7 (2-4 ft)	
Constituent	Result (mg/kg)
Arsenic	0.97
Hexavalent Chromium	0.72
Iron	18,000

SB-7 (6-8 ft)	
Constituent	Result (mg/kg)
Arsenic	2.4
Hexavalent Chromium	0.44
Iron	39,000
Manganese	360
Benzo(a)pyrene	0.035

SB-7 (12-14 ft)	
Constituent	Result (mg/kg)
Arsenic	0.95
Hexavalent Chromium	1.0
Iron	22,000
Benzo(a)pyrene	0.025

SB-8 (0.5 ft)	
Constituent	Result (mg/kg)
Arsenic	1.4
Hexavalent Chromium	0.49
Iron	34,000 B
Manganese	370 B
Benzo(a)pyrene	0.057

SB-8 (1.5 ft)	
Constituent	Result (mg/kg)
Arsenic	1.7
Hexavalent Chromium	0.38
Iron	32,000 B
Manganese	370 B

SB-9 (0.5 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.73
Iron	28,000 B
Manganese	380 B

SB-9 (1.5 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.39 B
Iron	33,000 B
Manganese	560 B

SB-9 (5 ft)	
Constituent	Result (mg/kg)
Arsenic	1.2
Hexavalent Chromium	0.75
Iron	30,000

SB-9 (10 ft)	
Constituent	Result (mg/kg)
Arsenic	1.2
Hexavalent Chromium	0.98
Iron	32,000
Manganese	490
Thallium	0.18

SB-9 (15 ft)	
Constituent	Result (mg/kg)
Arsenic	1.1
Hexavalent Chromium	1.4
Iron	32,000
Manganese	1,000
Thallium	0.16
Benzo(a)pyrene	0.045

SB-9 (18-20 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	1.0
Iron	11,000

SB-16 (0.5 ft)	
Constituent	Result (mg/kg)
Iron	35,000 B
Manganese	380

SB-16 (1.5 ft)	
Constituent	Result (mg/kg)
Arsenic	0.75
Hexavalent Chromium	0.90 B
Iron	36,000 B
Manganese	410

SB-14 (0.5 ft)	
Constituent	Result (mg/kg)
Arsenic	0.69
Hexavalent Chromium	0.39
Iron	42,000
Manganese	540

SB-14 (1.5 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.38
Iron	39,000
Manganese	540

SB-14 (2-4 ft)	
Constituent	Result (mg/kg)
Arsenic	1.3
Hexavalent Chromium	0.83
Iron	43,000
Manganese	520
Thallium	0.18

SB-14 (10-12 ft)	
Constituent	Result (mg/kg)
Iron	30,000
Manganese	700

SB-14 (20-22 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.61

SB-14 (22-24 ft)	
Constituent	Result (mg/kg)
Arsenic	0.68
Hexavalent Chromium	0.62
Iron	17,000
Manganese	450

SB-10 (0.5 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.35
Iron	15,000 B

SB-10 (1.5 ft)	
Constituent	Result (mg/kg)
Arsenic	1.1
Hexavalent Chromium	0.37
Iron	28,000 B
Manganese	500 B

SB-10 (4-6 ft)	
Constituent	Result (mg/kg)
Iron	44,000 B
Manganese	910 B

SB-10 (12-14 ft)	
Constituent	Result (mg/kg)
Arsenic	0.71
Hexavalent Chromium	0.66
Iron	19,000 B

SB-10 (14-16 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.61
Iron	26,000 B
Manganese	550 B

SB-10 (18-20 ft)	
Constituent	Result (mg/kg)
Iron	13,000 B
Manganese	830 B

Notes:
1. Only concentrations that exceeded NCDEQ PSRG Standards are listed.
2. B - Analyte was detected in the method blank.
3. Source for Topographic Contours: NCDOT GIS LIDAR March 2007 NC State Plane NAD83 Feet

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. WEISPFENNING
DRAWN BY: A. WEISPFENNING
SHEET CHK'D BY: D. FORBES
CROSS CHK'D BY: M. COLONE
APPROVED BY: D. FORBES
DATE: AUGUST 2016

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NC F-1255

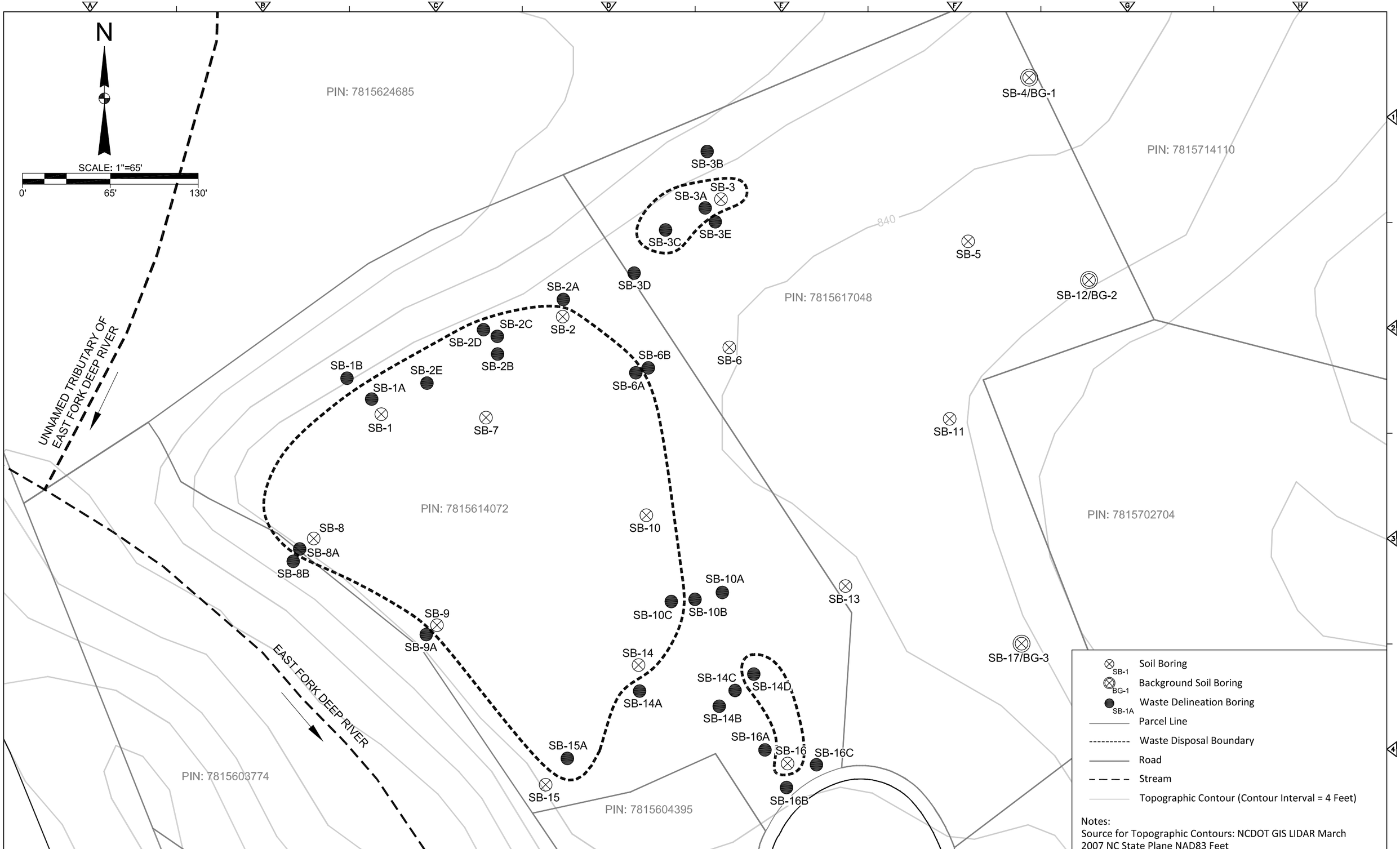
GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA

BUD HOLDING COMPANY
(NONCD0000673)

SOIL BORING
ANALYTICAL RESULTS

PROJECT NO. 127844-115212
FILE NAME: FIGURE 4.DWG

FIGURE
4



Notes:
Source for Topographic Contours: NCDOT GIS LIDAR March 2007 NC State Plane NAD83 Feet

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. WEISPFENNING
DRAWN BY: A. WEISPFENNING
SHEET CHK'D BY: D. FORBES
CROSS CHK'D BY: M. COLONE
APPROVED BY: D. FORBES
DATE: AUGUST 2016

CDM Smith
CDM Smith Inc.
5400 Glenwood Avenue, Suite 400
Raleigh, NC 27612 | Tel: (919) 787-5620
NC F-1255

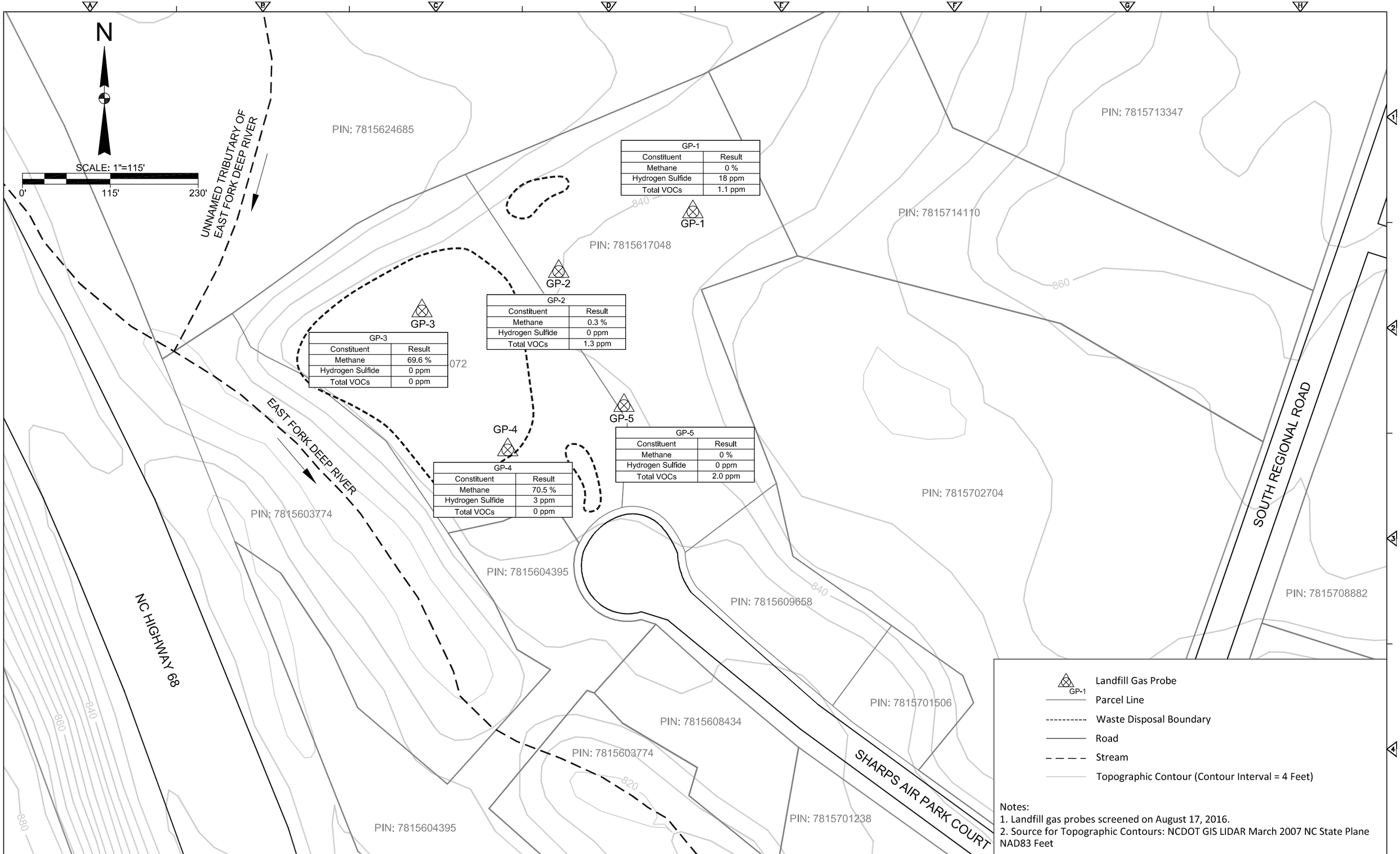
GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA

BUD HOLDING COMPANY
(NONCD0000673)

WASTE DISPOSAL BOUNDARY DELINEATION

PROJECT NO. 127844-115212
FILE NAME: FIGURE 5.DWG

FIGURE
5



GP-1	
Constituent	Result
Methane	0 %
Hydrogen Sulfide	18 ppm
Total VOCs	1.1 ppm

GP-2	
Constituent	Result
Methane	0.3 %
Hydrogen Sulfide	0 ppm
Total VOCs	1.3 ppm

GP-3	
Constituent	Result
Methane	69.6 %
Hydrogen Sulfide	0 ppm
Total VOCs	0 ppm

GP-4	
Constituent	Result
Methane	70.5 %
Hydrogen Sulfide	3 ppm
Total VOCs	0 ppm

GP-5	
Constituent	Result
Methane	0 %
Hydrogen Sulfide	0 ppm
Total VOCs	2.0 ppm

Notes:
1. Landfill gas probes screened on August 17, 2016.
2. Source for Topographic Contours: NCDOT GIS LIDAR March 2007 NC State Plane NAD83 Feet

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. WEISPFENNING
DRAWN BY: A. WEISPFENNING
SHEET CHK'D BY: D. FORBES
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APPROVED BY: D. FORBES
DATE: AUGUST 2016

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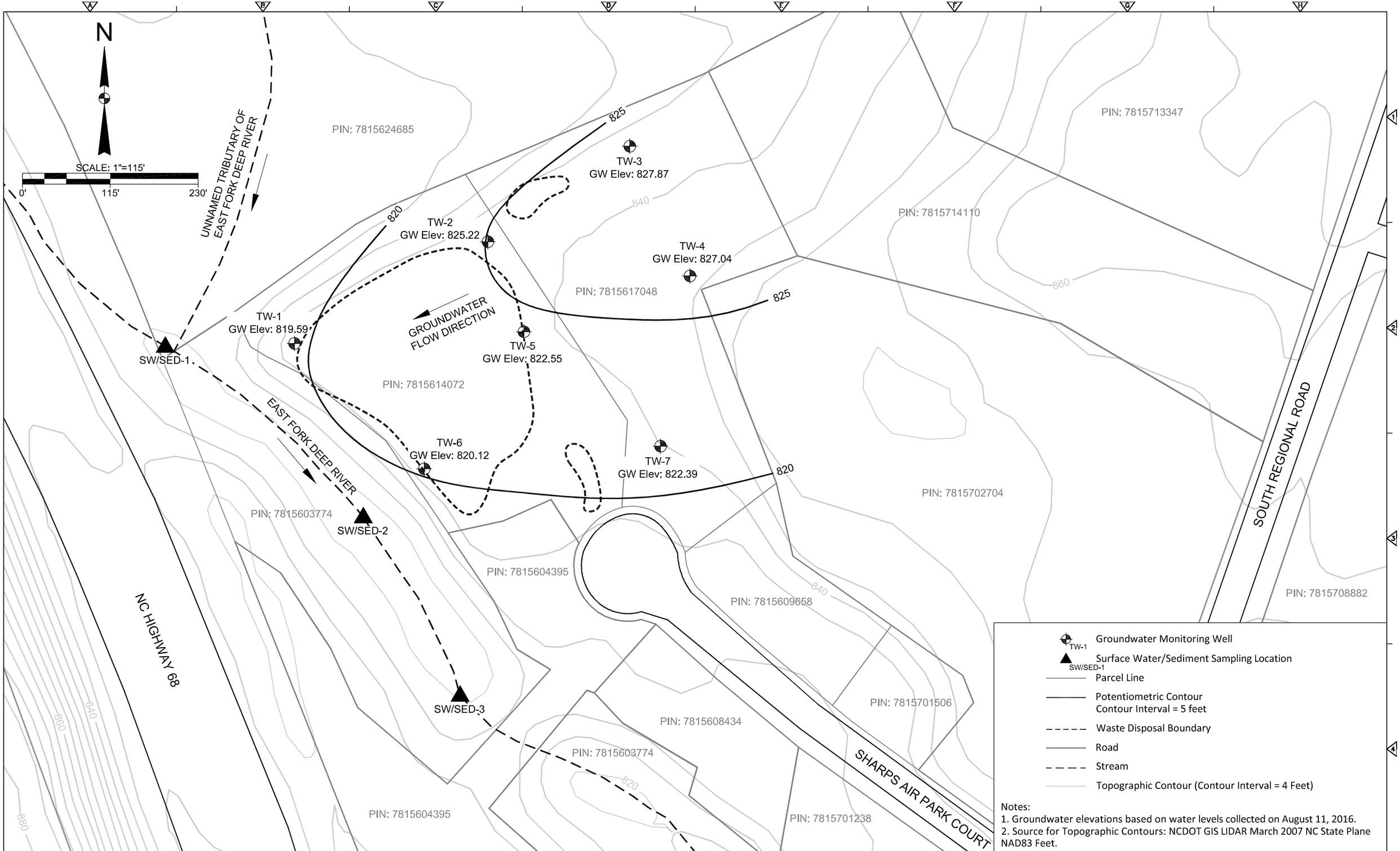
GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA

BUD HOLDING COMPANY
(NONCD0000673)

LANDFILL GAS PROBE SCREENING RESULTS

PROJECT NO. 127844-115212
FILE NAME: FIGURE 6.DWG
FIGURE
6



Notes:
1. Groundwater elevations based on water levels collected on August 11, 2016.
2. Source for Topographic Contours: NCDOT GIS LIDAR March 2007 NC State Plane NAD83 Feet.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. WEISPFENNING
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SHEET CHK'D BY: D. FORBES
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DATE: AUGUST 2016

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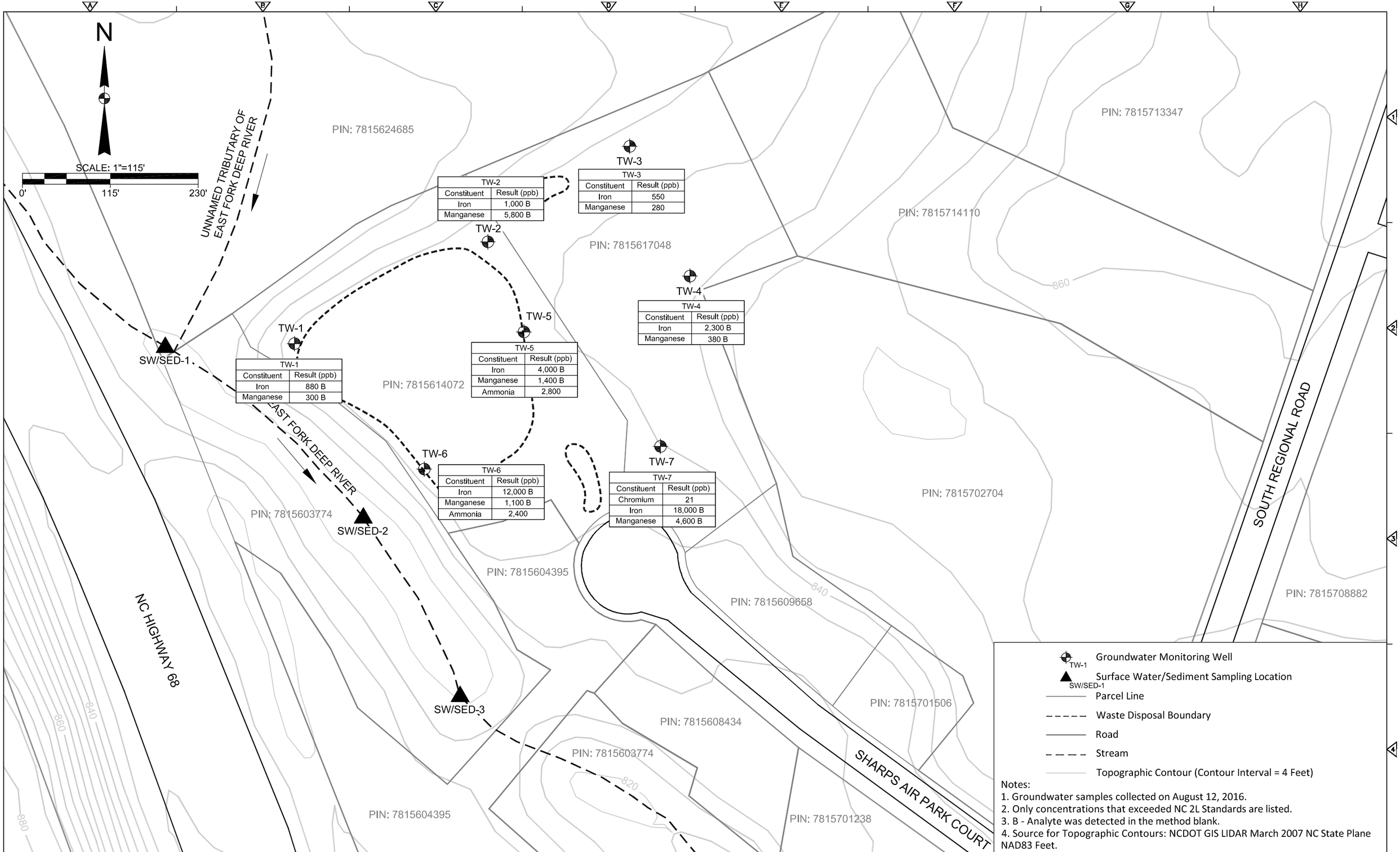
GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA

BUD HOLDING COMPANY
(NONCD0000673)

POTENTIOMETRIC SURFACE MAP

PROJECT NO. 127844-115212
FILE NAME: FIGURE 7.DWG

FIGURE
7



TW-1	
Constituent	Result (ppb)
Iron	880 B
Manganese	300 B

TW-2	
Constituent	Result (ppb)
Iron	1,000 B
Manganese	5,800 B

TW-3	
Constituent	Result (ppb)
Iron	550
Manganese	280

TW-4	
Constituent	Result (ppb)
Iron	2,300 B
Manganese	380 B

TW-5	
Constituent	Result (ppb)
Iron	4,000 B
Manganese	1,400 B
Ammonia	2,800

TW-6	
Constituent	Result (ppb)
Iron	12,000 B
Manganese	1,100 B
Ammonia	2,400

TW-7	
Constituent	Result (ppb)
Chromium	21
Iron	18,000 B
Manganese	4,600 B

Notes:
1. Groundwater samples collected on August 12, 2016.
2. Only concentrations that exceeded NC 2L Standards are listed.
3. B - Analyte was detected in the method blank.
4. Source for Topographic Contours: NCDOT GIS LIDAR March 2007 NC State Plane NAD83 Feet.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. WEISPFENNING
DRAWN BY: A. WEISPFENNING
SHEET CHK'D BY: D. FORBES
CROSS CHK'D BY: M. COLONE
APPROVED BY: D. FORBES
DATE: AUGUST 2016

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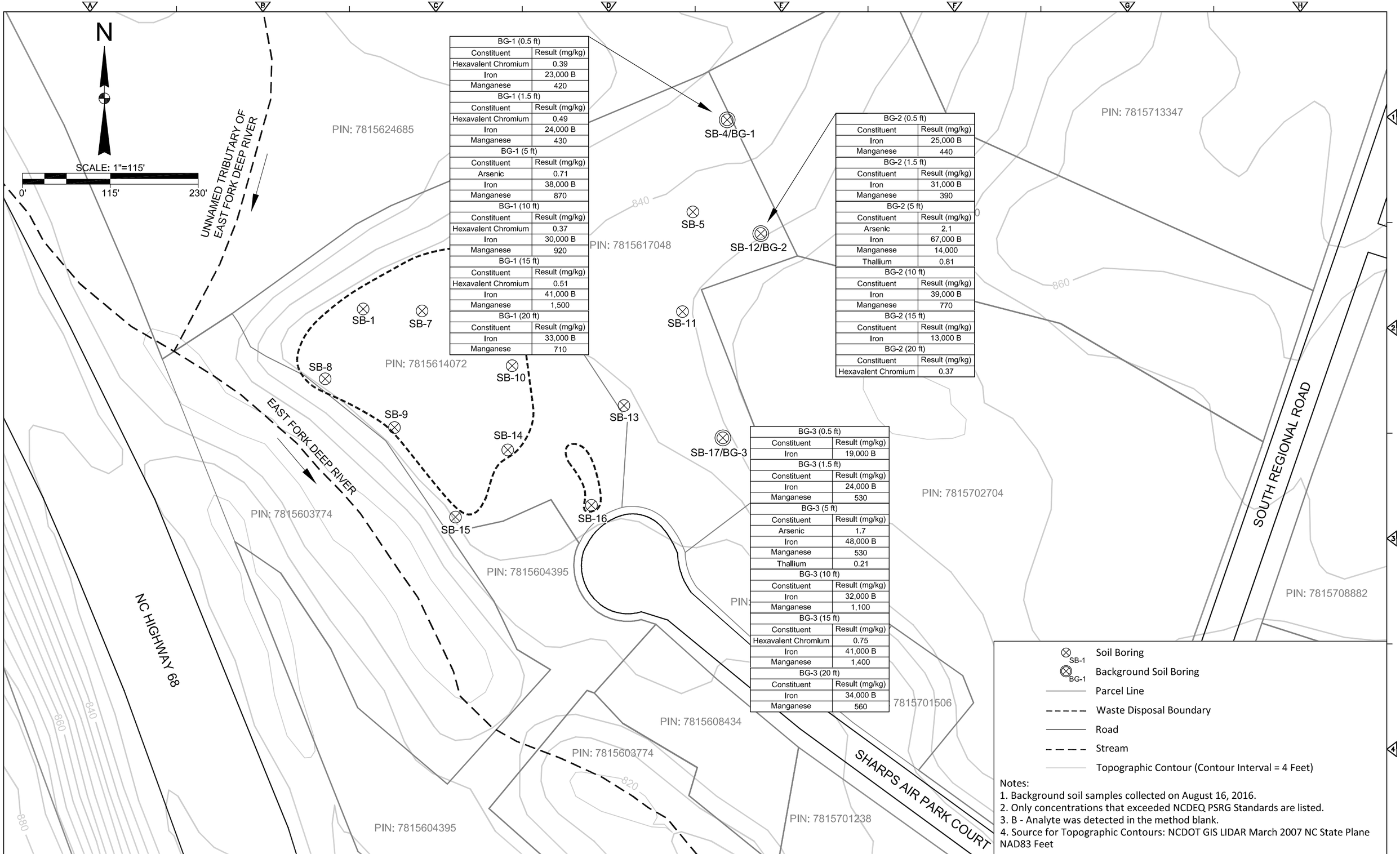
GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA

BUD HOLDING COMPANY
(NONCD0000673)

GROUNDWATER ANALYTICAL RESULTS

PROJECT NO. 127844-115212
FILE NAME: FIGURE B.DWG
FIGURE
8



BG-1 (0.5 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.39
Iron	23,000 B
Manganese	420
BG-1 (1.5 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.49
Iron	24,000 B
Manganese	430
BG-1 (5 ft)	
Constituent	Result (mg/kg)
Arsenic	0.71
Iron	38,000 B
Manganese	870
BG-1 (10 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.37
Iron	30,000 B
Manganese	920
BG-1 (15 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.51
Iron	41,000 B
Manganese	1,500
BG-1 (20 ft)	
Constituent	Result (mg/kg)
Iron	33,000 B
Manganese	710

BG-2 (0.5 ft)	
Constituent	Result (mg/kg)
Iron	25,000 B
Manganese	440
BG-2 (1.5 ft)	
Constituent	Result (mg/kg)
Iron	31,000 B
Manganese	390
BG-2 (5 ft)	
Constituent	Result (mg/kg)
Arsenic	2.1
Iron	67,000 B
Manganese	14,000
Thallium	0.81
BG-2 (10 ft)	
Constituent	Result (mg/kg)
Iron	39,000 B
Manganese	770
BG-2 (15 ft)	
Constituent	Result (mg/kg)
Iron	13,000 B
BG-2 (20 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.37

BG-3 (0.5 ft)	
Constituent	Result (mg/kg)
Iron	19,000 B
BG-3 (1.5 ft)	
Constituent	Result (mg/kg)
Iron	24,000 B
Manganese	530
BG-3 (5 ft)	
Constituent	Result (mg/kg)
Arsenic	1.7
Iron	48,000 B
Manganese	530
Thallium	0.21
BG-3 (10 ft)	
Constituent	Result (mg/kg)
Iron	32,000 B
Manganese	1,100
BG-3 (15 ft)	
Constituent	Result (mg/kg)
Hexavalent Chromium	0.75
Iron	41,000 B
Manganese	1,400
BG-3 (20 ft)	
Constituent	Result (mg/kg)
Iron	34,000 B
Manganese	560

SB-1 Soil Boring
BG-1 Background Soil Boring
Parcel Line
Waste Disposal Boundary
Road
Stream
Topographic Contour (Contour Interval = 4 Feet)

Notes:
1. Background soil samples collected on August 16, 2016.
2. Only concentrations that exceeded NCDEQ PSRG Standards are listed.
3. B - Analyte was detected in the method blank.
4. Source for Topographic Contours: NCDOT GIS LIDAR March 2007 NC State Plane NAD83 Feet

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. WEISPFENNING
DRAWN BY: A. WEISPFENNING
SHEET CHK'D BY: D. FORBES
CROSS CHK'D BY: M. COLONE
APPROVED BY: D. FORBES
DATE: AUGUST 2016

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GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA

BUD HOLDING COMPANY
(NONCD0000673)

BACKGROUND SOIL BORING
ANALYTICAL RESULTS

PROJECT NO. 127844-115212
FILE NAME: FIGURE 9.DWG
FIGURE
9

Appendix A
Field Notes

Bud Holding Company
Site Identification Number: NONCD0000673

Projects (continued).....

8-8-16 75°F cloudy/rain

0600 J. Bauer and B. Wiosek depart Raleigh and Charlotte offices

0800 J. Bauer and B. Wiosek onsite

Begin calibrating equipment

YSI 63, SN: 10C100174

pH 4.00 → 4.00 pass

7.00 → 7.00 pass

cond 1.413 ms/cm → 1.413 pass

Hanna HI turbidity meter

SN: 40056951

0.10 NTU → 0.10 pass

15.00 NTU → 15.00 pass

100.00 NTU → 100.00 pass

Begin SW/SED sampling

SW-3

pH	cond	temp	turb
7.62	68.9	22.6	10.0

0835 collect SW/SED-3 and DUP

0830 Drillers arrive onsite

Geologic exploration

Geoprobe 6620T

Paul McVey

Matt McGinnis

HSA 3.25"

8-8-16 75°F cloudy

0900 Begin temp GW well installation

Calibrate equipment

MiniRae 3000, SN: 592-912814

isobutylene exp. 1-20-20

100.00 ppm → 100.00 ppm pass

QRAE II SN: 181-212403

NC Zero Air exp 1/20/20

CO: 50.00 ppm → 50.00 ppm pass

H_2S: 10.00 ppm → 10.00 ppm pass

CH_4: 50.00 ppm → 50.00 ppm pass

O_2: 18.00 ppm → 18.00 ppm pass

TW-6

Depth	Lithology ~~clayey silt~~ (TB)
0-0.5	Gray ~~silty clay~~, trace gravel and med sand
3.5-5	~~Silty clay~~, trace med-coarse sand, trace gravel brown
7.5-10	silty clay, trace coarse sand, brown and black
13.5-15	clay, trace silt, trace waste, gray, moist wood chips

8-8-16 75°F cloudy

Depth	PID I	PID F	SPT
0-0.5	0.0	1.8	4
3.5-5	0.0	1.0	2
7.5-10	0.0	0.7	1
13.5-15	0.0	0.9	0
17.5-20	0.0	1.2	4
23.5-25	0.0	1.3	17

TW-6 Total depth: 25 ft

screen: 15-25 ft

filter: 13-25 ft

seal: 11-13 ft

1008 Bump test 99 ppm isobutylene

QRAE II 50 ppm CO

10 ppm H_2S

50% CH_4

18% O_2

Jarell Barr

8-8-16 75°F cloudy

TW-6 (cont)

depth	chara
17.5-20	clay, trace silt, moist, gray
23.5-25	clay, gray, wet trace ~~waste, wire~~ JB

1085 Complete TW-6. Pump is broken, fix pump

1130 Develop TW-6

1200 Offsite for lunch

1230 onsite, decon augers

TW-1

depth	chara
0-0.5	silty clay, trace gravel and coarse sand. Reddish brown
3.5-5	clay, trace silt and gravel. Reddish brown
7.5-10	clay, trace silt, gravel, and coarse sand. Reddish brown
13.5-15	clayey silt to silty sand. Med to coarse sand, trace gravel. brown

8-8-16 80°F cloudy

TW-1

depth	PID 1	PIDF	SPT
0-0.5	0.0	19.9	2
3.5-5	0.0	3.0	1
7.5-10	0.0	2.8	1
13.5-15	0.0	2.0	1
17.5-20	0.0	5.4	2
22.5-20	0.0	3.4 PWR	50/5.5

TW-1: total depth: 25 ft
screen: 15-25
filter: 13-25
seal: 11-13

1300 Bump test
PID: 100.2 ppm isobutylene
QRAE: 50 ppm CO
10 ppm H_2S
49% CH_4
18% O_2

Jarell Bar

8-8-16 75°F cloudy

depth	chara
17.5-20	clay, trace med sand and gravel. gray. moist
22.5-25	clay, trace gravel to PWR. moist

1400 Complete TW-1. Develop well, decon augers

TW-2

depth	IPID	FPID	SPT
0.-0.5	0.0	0.0	4
3.5-5	0.0	1.9	2
7.5-10	0.0	2.0	3
13.5-15	0.0	2.5	3
17.5-20	0.0	2.2	39

1030 Complete TW-2. Wet on the bottom, will not recharge overnight

TW-2 total depth: 20

screen	10-20
filter	8-20
seal	6-8

Jaell Ba

8-8-16 80°F cloudy

TW-2

depth	chara
0.0.5	clayey silt, trace sand and gravel. sand fine to coarse. brown
3.5-5	clay to silty clay with trace fine sand. brown
7.5-10	clay grading to clay with trace silt. reddish brown. Moist.
13.5-15	silty sandy clay, sand fine grained. trace gravel. reddish brown to gray.
17.5-20	silty clay, trace med sand, reddish brown to sand, trace silt and gravel, gray

Jaell Ba

8-8-16 75 F cloudy

1715 continue SW/SED

SW-2

pH	T	cond	turb
6.94	23.3	61.7	8.00

1730 collect SW/SED-2

~~SW-1~~ (JB)

~~pH T cond turb~~

~~1800 collect SW/SED-1~~

1815 Offsite to ship samples

Jarell Bauer

8-9-16 70°F cloudy

0700 J. Bauer, B. Wiosek, and drillers onsite. Calibrate equipment

MiniRae 3000, SN: 592-912814

isobutylene exp. 1-20-20

100.00 ppm → 100.00 ppm pass

QRAE II SN: 181.212403

NL Zero Air exp 1-20-20

CO: 50 ppm → 50 ppm pass

H_2S: 10.00 ppm → 10.00 ppm pass

CH_4: 50.00 ppm → 50.00 ppm pass

O_2: 18.00% → 18.00% pass

Well	WL	Casing Height
TW-1	20.75	3.34
2	15.05	0.0
3	10.36	0.2
4	15.01	0.0
5	20.61	3.32
6	20.87	3.99
7	19.70	1.5 ft

Jarell Bauer

8-9-16 70°F cloudy

TW-5

depth	chara
0-0.5	clayey silt, trace gravel, reddish brown
3.5-5	clayey silt grading to silty clay. brown and brownish red
7.5-10	clayey silt to clay, trace silt. Reddish brown
13.5-15	silty clay to clayey silt. Brown to gray and brown.
17.5-20	clayey silt, reddish brown to gray, wet
23.5-25	clay with trace gravel and silt grading to clayey silt, trace gravel. dark gray

0900 Complete TW-5

total depth: 25 ft

screen: 15-25

filter: 13-25

seal: 11-13

Develop well, decon augers

8-9-16 70°F cloudy

TW-5

depth	IPID	FPID	SPT
0-0.5	0.0	0.0	3
3.5-5	0.0	1.4	4
7.5-10	0.0	1.8	4
13.5-15	0.0	2.0	4
17.5-20	0.0	2.5	7
23.5-25	0.0	2.5	19

0915 Bump test

PID ~~98~~ 98 100.2 ppm isobutylene

QRAE: 50 ppm CO

10 ppm H_2S

50% CH_4

18% O_2

Jaelle Baur

8-9-16 75°F cloudy

TW-7

depth	chara
0-0.5	clayey silt, trace fine sand and gravel. reddish brown and tan
3.5-5	clayey silt, trace sand fine to coarse grained, trace gravel. reddish brown
7.5-10	clayey silt, trace sand fine to coarse grained trace gravel, brown
13.5-15	silty sand. sand fine to coarse grained. Pinkish tan and white
17.5-20	clayey silt, trace fine to coarse sand. Brown and pinkish tan
21-23	silty sand and gravel, PWR. gray

Refusal at ~~25~~ feet

Jaell

8-9-16 75°F cloudy

TW-7

depth	IPID	FPID	SPT
0-0.5	0.0	1.2	3
3.5-5	0.0	10.4	4
7.5-10	0.0	5.8	7
13.5-15	0.0	4.0	19
17.5-20	0.0	7.0	33
21-23	0.0	5.2	50/2.5

1215 complete TW-7

TW-7 total depth. 24

screen: ~~19~~ 23 14-24

filter: 12-24

seal: 10-12

Jaell

8-9-16 85F P. cloudy

1230 offsite for lunch

1300 onsite. Bump test, decon augers
98.3 ppm iso, cal, 100.3 ppm pass

TW-4

depth	chara
0-0.5	clayey silt, trace med to coarse sand and gravel. Brown.
3.5-5	Silty sand, sand fine to coarse, trace gravel. brown and white
7.5-10	clayey silt, brown to tan
13.5-15	clayey silt, brown and tan, moist
17.5-20	clayey silt, brown, dark green, pink
23.5-25	sand, trace silt, sand fine to coarse grained. Pinkish brown and brown. moist

1530 Complete TW-4
total depth: 25
screen: 15-25
filter: 13-25
sedl: 11-13

8-9-16 85F P. Cloudy

TW-4

depth	PID	FPID	SPT
0-0.5	0.0	3.8	4
3.5-5	0.0	5.3	5
7.5-10	0.0	5.5	5
13.5-15	0.0	7.8	7
17.5-20	0.0	6.8	13
23.5-25	0.0	8.6	29

Jack Bauer

8-9-16 85°F P. Cloudy

1550 Collect Rinsate Blank
Decon augers

TW-3

depth	chara
0-0.5	silt, trace clay and gravel. reddish brown
3.5-5	clayey silt to silty clay. Brown to dark gray
7.5-9	silty clay, brown.
9-10	sand, trace silt. sand fine to med grained. Pink, white, and green
13.5-15	Silt, trace fine sand. Pink and green
17.5-20	clayey silt to silt. pink and green.
23.5-25	sandy silt. sand fine grained. pink and green

1700 Complete TW-3
total depth: 25
screen: 15-25
filter: 13-25
seal: 11-13

8-9-16 85°F P. Cloudy

TW-3

depth	IPID	FPID	SPT
0-0.5	0.0	18.6	2
3.5-5	0.0	6.1	3
7.5-10	0.0	5.7	9
13.5-15	0.0	8.7	12
17.5-20	0.0	6.9	33
23.5-25	0.0	6.3	34

Jarell Bar

8-9-16 75°F P. cloudy

1705 Calibrate equipment
YSI 63, SN: 10C100174
pH 4.00 → 4.00 pass
7.00 → 7.00 pass
cond 1.413 ms/cm → 1.413 pass
Itanna HI SN: A0056951
0.98 → 0.10 pass cal
14.99 → 15.00 pass
100.00 → 100.00 pass

SW-1

pH	T	cond	turb
6.83	24.0	37.1	8.51

1730 sample SW/SED-1
1815 offsite for ice and to ~~sp~~ JB ship samples

Jaell Bau

8-10-16 75°F Sunny

0700 J. Bauer and B. Wlosek and drillers arrive onsite.
Calibrate equipment
MiniRae 3000, SN: 592-91284
99.7 ppm → 100.0 ppm
isobutylene, exp. 1-20-20
QRAE II, SN: 181 212403
NC zero air exp. 1-20-20
CO 50ppm → 50 ppm
H_2S 10.0 ppm → 10.0 ppm
CH_4 50% → 50%
O_2 18% → 18%
Develop the rest of the wells
0900 Complete well development, begin cover soil and waste borings

Jaell Bau

8-10-16 80°F Sunny

SB-2

depth	chara.
0-0.5	clayey silt, organics, dark brown
2-4	clayey silt, trace gravel. dark brown
4-6	" "
6-8	clayey silt, dark brown, wet and waste (wood chips) Metal
8-10	silty clay, dark brown, moist. Waste (metal, metal wire, wood chips)
10-12	silty clay, trace gravel. Moist. ~~WO~~ SB Trace waste (wood chips)
12-12.5	Clayey silt; waste (wood chips) dark green
12.5-14	clayey silt, brown.

cover soil: 0-6

waste: 6-12.5

8-10-16 80°F Sunny

SB-2

depth	PID	FPID	SPT
0-0.5	0.0	2.8	3
2-4	0.0	3.6	8
4-6	0.0	4.1	2
6-8	0.0	3.5	4
8-10	0.0	6.2	5
10-12	3.0	7.0	4
12-12.5	344	562	8
12.5-14	6.0	13.1	5

1005 Bump test

PID 100 ppm isobutylene

QRAE 50 ppm CO

10 ppm H_2S

50% CH_4

18% O_2

decon augers and split spoons

Jaelle Ball

8-10-16 85°F P. cloudy

1051 SB-1

depth	chara
0-~~0.5~~ 1 (JB)	silty clay, trace gravel. Brown and reddish brown.
2-4	clayey silt, gravel. trace fine to coarse sand. Brown and gray
4-5	clayey silt, trace gravel and sand. sand med to coarse. brown and gray
5-6	silty clay, brown and dark green
6-7	clayey silt, trace gravel. brown and dark green
7-8	Brick (waste) red
8-12	silty clay to silty clay with trace gravel. Brown, redaish brown, and dark green

cover soil: 0-7

waste: 7-8

8-10-16 85°F P. cloudy

SB-1

depth	PID	FID	SPT
0-~~0.5~~ 1 (JB)	0.0	3.0	10-5-5-9
2-4	0.0	5.6	↓
4-6	0.0	7.0	3-4-3-3
6-8	0.0	8.5	3-6-3-3
8-10	0.0	7.6	1-2-4-4
~~10-12~~	~~0.0~~		~~2-2-3-2~~ (JB)
10-12	0.0	2.4	2-2-3-2

1150 Bump test PID
100.3 ppm isobutylene pass
decon augers and split spoons

Jake Bane

8-10-16 85F P. cloudy

1200 Offsite for lunch

1230 Onsite. Begin SB-8

SB-8

depth	chara
0-1	clayey silt, brown, trace gravel
2-4	clayey silt, trace gravel and sand. sand fine to coarse. ~~Trat~~ (SB) Brown and dark green. Trace waste - plastic
4-6	clayey silt and silty clay. Trace gravel. Reddish brown and brown. waste- ~~tra~~ (SB) wood chips
6-8	silty clay to clayey silt. trace gravel. tan to brown and dark gray.
8-10	" "
10-12	clayey silt and trace gravel. Brown
12-14	clayey silt, trace gravel. Brown and dark gray
14-16	clayey silt, trace gravel. dark gray

8-10-16 85F sunny

SB-8

depth	IPID	FPID	SPT
0-1	0.0	2.5	WH - weight hamme
2-4	0.0	3.0	~~33~~ (JB) 3-3-4-7
4-6	4.3	2.8	1-2-2-4
6-8	2.6	2.4	3-6-6-6
8-10	3.3	2.5	2-2-2-2
10-12	4.2	3.8	1-1-1-1
12-14	3.8	3.9	weight of hammer
14-16	1.4	4.5	WH-1-1-3
16-18	1.8	4.6	1-2-2-2
18-20	0.0	4.7	WH-WH-WH-1
20-22	0.0	6.2	2-2-4-6

1330 Bump test

PID 100.3 ppm isobutylene

QRAE 50.2 ppm CO

9.8 ppm H_2S

50% CH_4

18% O_2

Jaller Ba

8-10-16 90°F P. cloudy

SB-8 (cont)

16-18 silty clay, trace gravel. dark gray. waste - trace wood chips

18-20 silty clay, dark gray, wet. ~~Trace~~ SB waste - trace wood chips

20-21 silty clay, dark gray, wet.

21-22 Sand ~~and~~ SB fine to med grained. trace gravel. gray and white. wet.

1405 Complete SB-8. auon augers + cover soil: 0-2 split spoons
waste: 2-20

1420 Collect SB-1-0.5
1425 Collect SB-1-1.5
1430 Collect SB-1-7-8
1500 M. Darwin onsite. J. Bauer offsite
1550 talk to Matt Colone
~~1550~~ collect SB-8 6 in & 18 in

8-10-16 90°F Cloudy

1515 SB-15 - Begin

depth	chara
0-0.5	clayey silt, trace med sand Brown
0.5-1	clayey silt, trace gravel, redish brown
2-4	clayey silt, brown to grey
4-6	silty clay, trace gravel roots, redish brown
6-8	silty clay brownish grey ~~trace wood chips~~ BW to ~~silty clay with~~ BW clayey silt with trace gravel
8-10	silty clay, trace gravel brownish red

Jarell Bauer

8-10-16 85°F BW cloudy

~~depth chara SB-15 continued~~

Bulldozer

8-10-16 85° cloudy

SB-15 WH= weight Hammer

depth	IPID	FPID	SPT
0-0.5	3.1	2.3	Hand Auger
0.5-1	2.9	3.9	Hand Auger
2-4	0.0	2.2	3-2-3-4
4-6	0.0	1.5	2-1-2-2
6-8	0.0	1.6	2-3-5-2
8-10	0.0	4.6	1-1-1-WH

~~SB 2~~ MED	cover soil sample	MED 0.5 ft
	" "	1.5 ft
SB-2	waste chara	10.5-12.5 ft
	waste chara	6-8
	nature soil	12.5-14

1640 Collect SB 2-0-0.5
1645 Collect SB 2-1.5
1650 Collect DUP-3 (DUP of SB 2-10.5-12.5)
1700 Collect SB 2-10.5-12.5
1715 Collect SB 2-6-8
1730 Collect SB 2-12.5-14

8-10-16 85° cloudy

1650 Begin SB-9

SB-9

Depth	Chara
0-1	clayey silt, trace sand red trace gravel, dark grey
2-4	clayey silt brownish red to clayey silt with trace gravel, yellowish brown
4-6	clayey silt, trace gravel brown to silty clay redish brown trace wood (waste)
6-8	silty clay brownish red
8-10	silty clay, trace gravel, trace wood/nails (waste) to white gravel
10-12	silty clay, trace gravel brown
12-14	silty clay, trace gravel grey
14-16	silty clay, grey, trace gravel, plastic (waste)
16-18	silty clay, grey
18-20	clay, grey to sandy silt, grey

8-10-16 85° cloudy

SB-9 Wt = weight of hammer

Depth	IPID	FPID	SPT
0-1	0.0	2.0	Hand Auger
2-4	0.0	3.9	2-3-4-4
4-6	2.5	3.4	1-2-1-3
6-8	1.5	6.0	1-2-6-5
8-10	2.2	8.0	2-12-9-11
10-12	2.1	8.2	2-Wt-Wt-Wt
12-14	0.0	8.0	9-Wt-Wt-2
14-16	0.0	11.1	15-Wt-Wt-2
16-18	0.0	6.6	1-Wt-Wt-Wt
18-20	0.0	10.5	Wt-Wt-Wt-3

1830 collect SB 8-0.5

1840 collect SB 8-1.5

1850 collect SB9-0.5

1900 collect SB9-1.5

Offsite

Jarell Bar

8-11-16 75°F P. Cloudy

0700 J. Bauer, M. Darwin, and drillers arrive onsite. Calibrate equipment
Mini Rae 3000, SN 592-91284
Isobutylene 100.4 ppm → 100.0 ppm pass
QRAE II SN 181.212403
NG zero Air exp. 1-20-20
CO 50 ppm → 50 ppm
H_2S 10 ppm → 10 ppm
CH_4 50% → 50%
O_2 18% → 18%

0800 M. Darwin begins GW sampling at temp wells.
0805 J. Bauer begins borings
SB-14 / GP-4

depth	chara
0-1.5	silt, gravel, trace clay. brown and reddish brown
2-4	clayey silt, trace gravel, trace ~~clay~~ (JB) waste - wood chips. brown and reddish brown
4-5	clayey silt and coarse sand. brown
5-6	Asphalt (waste)

8-11-16 85°F Sunny

SB-14 / GP-4

depth	IPID	FPID	SPT	
0-1.5	0.0	3.4		—
2-4	0.0	6.4	5-6-9-10	—
4-6	1.2	4.2	2-4-9-31	
6-8	0.0	5.2	8-6-4-3	
8-10	0.0	2.9	WH-WH-2-4	
10-12	0.0	5.7	2-6-7-8	—
12-14	0.0	5.3	2-4-6-6	
14-16	1.8	5.7	3-4-7-50/3	
16-18	—	—	3-2-1-2	
	No recovery			
18-20	—	—	3-2-2-3	
	No recovery			
20-22	0.0	15.8	2-1-3-8	—
22-24	0.0	7.7	5-25-32-38	—

0906 Bump test PID 100.3 ppm isobutylene
QRAE II 50 ppm CO
10 ppm H_2S
50% CH_4
18% O_2

8-11-16 85°F Sunny

SB-14 / GP-4 (cont)

depth	chara
6-8	clayey silt, gravel, coarse sand. brown and dark gray.
8-11	clay and silt. Trace gravel. Brown and dark grayish green.
11-12	clayey silt. Trace gravel. brown
12-14	silty clay, trace gravel. dark gray. trace waste - wood chips.
14-16	silty clay, trace gravel, dark gray and brown. trace waste: wood chips, plastic, asphalt
16-18	No split spoon recovery. Auger cuttings: silty clay, brown and dark gray
18-20	No split spoon recovery. ~~Ag~~ SB Auger cuttings: wet silty clay
20-22	silty clay and trace gravel. brown. wet

8-11-16 85°F P. cloudy

SB-14 / GP-4 (cont)

depth	chara
22-23	sand and silt. sand med to coarse grained. gray and white. wet
23-24	silt, brown, white, dry

0930 complete SB-14
cover soil: 0-2
waste: 2-16
native soil: 22

0950 complete GP-4
total depth: 11 ft
screen: 6-11
filter: 5-11
seal: 3-5
grout: 0-3

Decon augers and split spoons

1000 Bump test
PID 100.3 ppm isobutylene
QRAE 50.2 ppm CO
10 ppm H_2S
50 % CH_4
18 % O_2

8-11-16 85°F sunny

1010 SB-7/GP-3

depth	chara
0-0.5	clayey silt. trace gravel. Brown.
0.5-1.5	clayey silt. trace gravel. Brown. trace waste - asphalt
2-4	waste - wood chips. some clayey silt, reddish brown
4-6	No split spoon recovery. Auger cuttings: clayey silt, trace gravel. Brown, trace wood chips
6-8	silt and clay, trace gravel. reddish brown and brown. trace waste - wood chips
8-10	clayey silt, trace gravel. Brown and dark gray. waste - wood chips
10-12	silty clay, brown and dark gray. waste - wood chips, brick
12-13	silty clay, reddish brown. waste - wood ~~chips~~ trace gravel brick, plastic (JB)

* offset, cannot drill through wood

8-11-16 85°F sunny

SB-7/GP-3

depth	PID	FPID	SPT
0-0.5	0.0	2.9	
0.5-1.5	0.0	4.5	
2-4	3.3	5.5	2-1-1-3
4-6	—	—	4-5-6-6
	No recovery		
6-8	2.8	4.6	2-3-5-6
8-10	0.0	7.5	4-3-2-5
10-12	5.9	10.6	5-2-1-2
12-13	1.5	5.7	10-33-50/0.5

* cannot drill through wood, offset 10 ft to the east.

SB-7 B

depth	PID	FPID	SPT
14-16	4.2	2.7	23-19-23-16

~~16-18~~ (JB) Refusal at 16 ft. cannot drill through the wood.

1100 Bump test

PID 100.3 ppm isobutylene

QRAE 50.3 ppm CO

10 ppm H_2S

50% CH_4

18.3% O_2

8-11-16 85°F P. Cloudy

SB-7 B

depth	chara
14-16	Waste: wood. Trace soil at 14 ft (clay, dark gray)
~~16-18~~ (JB)	Refusal at 16 ft. cannot drill through the wood.

1150 complete SB-7 and -7B.
cover soil: 0-0.5 ft
waste: 0.5-16 ft
total depth: 16 ft

1215 Complete GP-3
total depth: 11 ft
screen: 6-11
filter: 5-11
seal: 3-5
grout: 0-3

1205 collect SB-14-0.5
1245 Offsite for lunch.
1330 Onsite. Decon augers and split spoons

8-11-16 90°F sunny

1340 offset SB-7 to the south.

SB-7 C

depth	chara
16-18	waste- asphalt
18-20	clay, dark gray. trace waste- wood chips
20-22	Sand, med to coarse grained. wet. Gray, white, pink, green

SB-7 C

depth	PID	FID	SPT
16-18	0.0	4.4	1-2-2-2
18-20	0.0	4.8	WH-WH-1-4
20-22	0.0	3.8	4-3-3-9

1405 Complete SB-7
total ~~depth~~ (JB) depth: 22 ft
cover soil: 0-0.5
waste: 0.5-20

8-11-16 90°F P. Cloudy

1415 SB-6 / GP-2 (offset S because of hill)

depth	chara
0-2	clayey silt, trace gravel. reddish brown
2-4	silty clay. ~~Brown~~ JB Trace gravel. Brown and gray.
4-6	clayey silt to silty clay. Gravel. tan to reddish brown
6-8	silty clay to silt and gravel, trace clay, reddish brown to dark gray, pink, and dark brown.
8-10	clayey silt, trace gravel. dark gray and brown.

Jaell Bar

8-11-16 90°F P. Cloudy

SB-6 / GP-2

depth	IPID	FPID	SPT
0-2	0.0	2.8	
2-4	0.0	5.1	4-4-5-6
4-6	0.0	5.9	2-1-2-3
6-8	3.1	6.8	3-4-7-8
8-10	1.2	7.8	2-3-5-7

1515 complete SB-6
total depth: 10 ft
No waste

1530 complete GP-2
total depth: 11 ft
screen: 6-11
filter: 5-11
seal: 3-5
grout: 0-3
Decon augers and split spoons

1535 Bump test
PID 100 ppm isobutylene
QRAE 50.4 ppm CO
10 ppm H_2S
50.1% CH_4
18.2% O_2

8-11-16 85°F P. cloudy

1615 SB-13 / GP-5

depth	chara
0-2	silt, ~~a~~ trace sand coarse, gravel. Brown
2-4	clayey silt, trace gravel.
4 (SB)	tan to brownish red.
4-6	silty clay, trace gravel. ~~reddi~~ (SB) brownish red, dark gray, pink
6-10	silty clay, trace gravel. brownish red, dark gray,
8-10 (SB)	pink, ~~br~~ (SB)

Jaell Barr

8-11-16 85°F P. Cloudy

SB-13 / GP-5

depth	IPID	FPID	SPT
0-2	1.4	5.4	
2-4	0.0	8.0	4-5-6-8
4-6	4.4	5.1	2-2-4-8
6-8	2.7	7.1	6-8-7-9
8-10	0.0	10.2	8-33-17-8

1645 complete SB-13
total depth: 10 ft
No waste

GP-5: total depth 11 ft
screen: 6-11
filter: 5-11
seal: 3-5
grout: 0-3

Decon augers and split spoons

1700 collect SB-14-1.5
1715 collect SB-14-2-4
1725 Collect SB-14-10-12 and DUP-2
1745 collect SB-14-20-22
1755 collect SB-14-22-24
1800 collect SB-7-0.5
1805 collect SB-7-1.5
1815 collect SB-7-2-4

8-11-16 85°F P. Clary

1820 SB-7-6-8 Collect
1830 SB-7-12-14 Collect
1835 Collect SB-7-22
1905 Collect SB-9-5
1915 Collect SB-9-10
1920 Collect SB-9-15
1925 Collect SB-9-18-20
1930 Offsite for ice and to ship samples.

Jall Bar

8-12-16 80°F Sunny

0700 J. Bauer M. Darwin and drillers onsite. Calibrate equipment
MiniRae 3000 SN: 592-91284
isobutylene exp. 1-20-20
100.3ppm → 100.00ppm pass
QRAE II SN: 181.212403
cal gas exp. 1-20-20
CO 50 ppm
H_2S 10 ppm
CH_4 50%
O_2 18%
0730 M. Darwin begins collecting GW samples from wells that went dry.
J. Bauer and drillers begin soil borings.

Jall Bar

8-12-16 80°F sunny

~~SB~~ (JB)

0738 SB-5 / GP-1

depth	chara
0-0.5	silt, trace clay and gravel. Brown
2-4	silty clay and gravel. dark gray and pink
4-6	clayey silt, trace gravel. Reddish brown
6-10	clayey silt to silty sand, trace gravel. sand fine to med grained. light pink, tan, light brown, and white.

~~8-10~~ (JB)

Jarell Ball

8-12-16 80°F sunny

SB-5 / GP-1

depth	PID	FPID	SPT
0-0.5	0.0	0.2	
2-4	0.0	1.3	3-3-5-7
4-6	1.2	3.6	3-5-4-5
6-8	0.0	6.5	2-4-8-14
8-10	0.2	4.9	7-14-16-17

0810 complete SB-5. No waste

cover soil: 0-7

Native: starts at 7 ft

GP-1 total depth: 11 ft

screen: 6-11

filter: 5-11

seal: 3-5

grout: 0-3

Decon augers and split spoons

1030 offsite for lunch

1100 onsite, Bump test

PID 100.2 ppm isobutylene

QRAE 50.2 ppm CO

10 ppm H_2S

50.1% CH_4

18.0% CO_2

8-12-16 85F P. Cloudy

1115 SB-10

depth	Charc
0 - 1.5	silt and gravel, brown
2-4	silty clay, trace gravel. Dark gray
4-6	silty clay, trace gravel, dark gray. trace waste - wood chips
6-8	waste - wood. some silty clay and gravel, dark gray.
8-10	clayey silt, trace gravel. Dark gray and redaish brown.
10-12	clayey silt and ~~trace~~ (SB) trace gravel. Brown
12-14	clayey silt to silty clay. ~~Trace~~ gravel. dark gray and brown to light brown. trace waste - wood chips
14-16	clayey silt. Dark gray and brown. trace waste - wood chips.
16-18	silty clay Grayish brown.
18-20	silty sand sand fine grained. Gray, wet

8-12-16 85F P. Cloudy

SB-10

depth	PID	FPID	SPT
0-0.5	0.0	2.4	
0.5-1.5	0.0	2.7	
2-4	0.0	3.7	3-3-4-5
4-6	5.3	4.6	2-1-2-4
6-8	3.9	4.9	7-2-3-6
8-10	3.7	4.7	2-3-5-7
10-12	5.7	4.6	2-3-5-4
12-14	5.3	6.0	3-5-5-5
14-16	2.8	5.6	3-3-6-7
16-18	4.5	7.2	2-3-5-5
18-20	1.9	6.1	4-5-3-2

1215 complete SB-10
total depth: 20 ft
cover soil: 0 - 4
waste: 4 - 16

1220 Bump test
PID 100.8 ppm isobutylene
QRAE 50.1 ppm CO
10 ppm H_2S
50.2% CH_4
18.1% O_2

Deion augers and split spoons

8-12-16 90°F sunny

1245 SB-16

depth	chara
0-1.5	silt and gravel, brown

1300 Talk to D. Forder. Move to SB-3.

1315 SB-3

depth	chara
0.5-1.5	silt and gravel, brown
2-4	silt and gravel, brown.
4-6	clayey silt and gravel. reddish brown
6-8	clayey silt, trace gravel, dark gray and reddish brown. waste - asphalt and wood chips. trace fabric
8-9	clayey silt, trace gravel. dark gray and brown. waste - asphalt and wood chips
9-10	silt, gray, moist
10-12	silt and sand, gray, moist sand fine-to-coarse grained

8-12-16 90°F sunny

SB-16

depth	PID	FPID	SPT
0-0.5	0.0	2.8	
0.5-1.5	0.0	3.4	

SB-3

depth	PID	FPID	SPT	
0-5	0.0	2.9		-
0.5-1.5	0.0	2.8		-
2-4	1.2	5.0	4-4-3-3	
4-6	3.4	4.2	2-4-4-5	
6-8	2.8	4.3	7-14-7-4	-
8-10	3.1	3.8	1-1-6-5	-
10-12	2.7	4.3	2-2-3-5	-

1345 complete SB-3. Decon
total depth: 12 ft
cover: 0-6
waste: 6-9

1350 Bump test
PID 100.2 ppm isobutylene
QRAE 50.1 ppm CO
10 ppm H_2S
50.1 % CH_4
18.2 % O_2

8-12-16 85 F Sunny

1415 SB-11

depth	chara
0-1.5	clayey silt and gravel, brown
2-4	silt, trace sand and gravel. sand fine to med grained. Brown and white
4-6	clayey silt and gravel, ~~dark~~ brown and dark gray
6-10	clayey silt. Dark gray and brownish red.

~~8-10~~ JB

Jaell Baer

8-12-16 85 F sunny

SB-11

depth	PID	FPID	SPT
0-0.5	1.8	4.8	
0.5-1.5	2.9	3.9	
2-4	3.8	4.7	3-4-5-7
4-6	4.0	6.1	2-3-5-6
6-8	4.4	6.4	8-5-6-9
8-10	3.7	5.4	5-7-7-8

1450 complete SB-11. NO waste
Dtcon

1345 Collect SB-10-0.5
1400 Collect SB-10-1.5
1420 Collect SB-10-18-20
1445 Collect SB-10-4-6 and DUP-4
1505 Collect SB-10-12-14
1510 Collect SB-10-14-16
1515 Collect SB-3-0.5
1525 Collect SB-3-1.5
1530 Collect SB-3-6 hold
1535 Collect SB-3-9 hold
1540 Collect SB-3-10-12 hold

1545 Drillers offsite

8-11-16 85°F sunny

Ground water sampling field notes

0700 calibrate equipment

YSI 63, SN: 10C100174

pH 4.02 → 4.00 pass

7.00 → 7.00 pass

cond 1.412 ms/cm → 1.413 pass

Hanna HI turbidity meter

SN: A0056951

0.10 NTU → 0.10 pass

15.02 NTU → 15.00 pass

100.3 NTU → 100.0 pass

~~0750 TW~~ JB

Well	Water Level	Total Depth
TW-1	20.75	28.82
2	~~13.75~~ JB 12.78	20.13
3	10.33	25.14
4	14.96	25.09
5	20.77	28.43
6	20.87	28.30
7	19.11	25.11

8-11-16 85°F sunny

~~0750 TW-2 WL 12.78 TD: 20.13~~

~~time~~	~~pH~~	~~temp~~	~~cond~~	~~turb~~
~~1155~~	~~6.92~~	~~18.7~~	~~679~~	~~860~~
~~1200~~	~~6.81~~	~~17.3~~	~~905~~	~~540~~
~~1205~~	~~6.83~~	~~18.0~~	~~503~~	~~121~~

~~Dry after 3 volumes. Let recharge Before sampling~~

JB

0830 TW-6 WL 20.87 TD: 28.30

casing height: 3.99

time	pH	temp	cond	turb
0910	6.61	21.0	318.7	>1000
0915	6.49	17.4	306.6	414
0920	6.43	17.1	310.0	158
0925	6.44	17.2	312.4	87.3
0930	6.48	17.2	315.8	50.2

0935 collect TW-6, let metals settle before sampling

1015 TW-1 WL: 20.75 TD: 28.82

casing: 3.34

time	pH	temp	cond	turb
1030	6.96	21.3	307.8	>1000
1035	6.95	18.8	301.9	>1000

8-11-16 85F sunny

TW-1 (cont)

time	pH	temp	cond	turb
1040	6.72	18.0	283.6	>1000
1045	6.75	17.7	220.5	759
1050	6.77	17.8	221.1	69.7
1055	6.79	17.8	220.8	55.3

1100 Collect TW-1 and DUP

Allow metals to settle before sampling

1140 TW-2 WL: 12.78 TD: 20.13

time	pH	temp	cond	turb
1155	692	18.7	679	860
1200	6.81	17.3	905	540
1205	6.83	18.0	503	121

Dry after 3 vols. let recharge before sampling.

1330 TW-5 WL: 20.77 TD: 28.43

casing: ~~25.03~~ GB 3.4

time	pH	temp	cond	turb
1400	6.74	24.1	888	109
1405	6.50	17.3	791	623
1410	6.50	17.1	776	813

Dry, let recharge before sampling

8/11-16 85°F Sunny

1435 TW-7 WL: 19.11 TD: 25.11

casing: ~~23.73~~ GB 1.38

time	pH	temp	cond	turb
1445	6.84	19.4	493	248
1450	6.60	17.9	693	>1000
1455	6.37	17.7	683	>1000

dry, let recharge before sampling

1530 TW-3 WL: 10.33 TD: 25.14

time	pH	temp	cond	turb
1540	6.89	20.3	647	724
1545	6.60	18.1	633	44.6
1550	6.70	17.9	623	50
1555	6.65	18.1	638	43.7
1600	6.68	17.7	634	31.2

1605 Collect TW-3

Let metals settle before sampling

1640 TW-4 WL: 14.96 TD: 25.09

time	pH	temp	cond	turb
1645	6.97	20.2	290.5	80.8
1650	6.85	18.0	287.3	79.6
1655	6.53	17.6	288.9	85.3
1700	6.14	17.2	290.4	84.8
1705	6.16	17.1	291.3	120

8-11-16 85°F sunny

TW-4 (cont)

time	pH	temp	cond	turb
1710	6.16	17.1	292.6	104

1715 collect TW-4

let metals settle before sampling

Mark Darwin

8-11-12

8-12-16 83°F Sunny

Groundwater Sampling

0630 Calibrate equipment

YSI 63, SN: 10C100174

pH 4.00 → 4.00 pass

7.04 → 7.00 pass

cond 1.416 → 1.413 pass

Hannah HI Turbidity meter

SN: A0056951

0.13 NTU → 0.10 pass

15.00 NTU → 15.00 pass

99.8 NTU → 100.0 pass

0650 Finish calibrating equipment

0700 Collect TW-1 metals

Turbidity 27.1

0705 Collect TW-6 metals

Turbidity 43.7

0710 Collect TW-4 metals

Turbidity 48.7

0750 Set up on TW-2 for sampling

WL = 13.75 Turb = 39.5

Let settle, final turb = 28.5

0800 Collect TW-2

0835 Set up TW-5 for sampling

WL = 20.83 Turb = 103

Let settle, final Turb = 24.4

0845 Collect TW-5

8-16-16 75°F Sunny

0700 J. Farley and M. Darwin & drillers arrive onsite.

Geologic exploration
Jacob Messick
David Haol
Dietrich D50, 2.25" augers

Calibrate equipment
MiniRae3000 SN
isobutylene exp. 1-20-20
100.3 ppm

QRAE II SN
cal gas exp. 1-20-20
CO 50 ppm
H_2S 10 ppm
CH_4 50%
O_2 18%

0715 SB-16

depth	IPID	FPID	SPT
0-2	0.0	3.4	
2-4	0.5	4.9	6-7-6-7
4-6	0.5	6.7	3-4-4-7
6-8	0.7	4.1	5-8-7-12
8-10	0.0	6.4	2-3-4-8
10-12	0.7	6.9	2-3-4-5

8-16-16 75°F Sunny

SB-16

depth	chara
0-2	Silt and gravel, brown
2-4	Silty clay and gravel, brown. trace waste- wood chips
4-6	clay, dark brown ~~and~~ (JB) trace waste-metal
6-8	silty clay, trace gravel. Dark gray and brown
8-10	silt and clay, trace gravel. Dark brown and gray
10-12	clayey silt and gravel, dark gray and brown
12-14	clayey silt, trace gravel. dark gray. trace waste- wood chips
14-19	(JB) clayey silt, trace gravel, dark gray. trace waste- wood chips
~~16-18~~ 19-20	clay, gray, brown, tan, black, white

8-16-16 80°F sunny

SB-16

depth	PID	FPID	SPT
12-14	0.6	8.1	6-5-5-4
14-16	0.0	9.2	2-2-4-4
16-18	0.1	10	2-2-4-5
18-20	0.2	11	2-3-3-6

0800 complete SB-16
total depth 20 ft
cover soil : 0-2
waste : 2-19
Decon augers and split spoons

0840 SB-4/BG-1

depth	chara
0-2	silt JB and gravel, brown
2-4	clayey silt and gravel
4-6	clay, dark gray
6-8	silty clay with gravel, dark gray to clay, gray
8-10	clay and silt, dark gray and brown
10-12	clayey silt to silt, dark gray
12-14	clay to silt. dark gray and brown. PWR

8-16-16 80°F sunny

SB-4/BG-1

depth	PID	FPID	SPT
0-2	0.0	1.5	6-8-8-4
2-4	0.8	3.9	3-3-4-4
4-6	0.0	6.5	1-2-2-2
6-8	0.0	5.5	4-4-4-4
8-10	0.0	3.5	2-2-3-8
10-12	0.1	7.7	5-8-23-25
12-14	0.0	6.7	9-11-28-50
14-16	0.0	2.2	14-24-36-50
16-18	0.0	10.5	36-42-50/3
18-20	0.0	4	18-50

0850 collect BG-1-0.5
0900 collect BG-1-1.5
0910 collect BG-1-5
0920 collect BG-1-10 and DUP
0935 collect BG-1-15
0940 collect BG-1-20
Complete SB-4/BG-1
total depth: 20
No waste
Decon augers and split spoons

8-16-16 85°F sunny

SB-4 / BG-1

depth	chara
14-16	clay and silt, dark gray and brown. PWR
16-20	silt and sand, trace gravel. sand fine to coarse. dark gray, pink, and brown PWR

1000 Bump test PID 100 ppm isobutylene
QRAE 20.9% O_2

1005 SB-12 / BG-2

depth	chara
0-2	silt and gravel, brown
2-4	clayey silt, dark brown and brown
4-6	silt, trace clay. brown and dark brown
6-8	silt and clay, brown, brownish red, black
8-10	silt and clay, trace coarse sand. brown to tan
10-11	silt, brown
11-14	sand, coarse and gravel. pink and brown PWR

SB-12 / BG-2

depth	PID	FPID	SPT
0-2	0.0	1.8	10-12-12-6
2-4	0.0	1.3	5-7-5-13
4-6	0.0	3.1	4-6-7-9
6-8	0.0	1.7	5-9-10-9
8-10	0.0	3.4	7-6-6-10
10-12	0.0	1.9	10-24-48-50
12-14	0.0	4.2	18-43-36-50
14-16	0.0	1.5	9-25-50
16-18	0.0	6.5	45-50
18-20	0.0	2.6	25-22-8-15

1010 Collect BG-2-0.5
1020 Collect BG-2-1.5
1045 Collect BG-2-5
1100 Collect BG-2-10
1110 Collect BG-2-15
1120 Collect BG-2-20
Bump test: PID 100 ppm isobutylene.
QRAE 20.9% O_2

8-16-16 85°F sunny

SB-14/BG-2

depth	chara
14-16	silt and fine sand. brown and pinkish brown. PWR
16-18	silt and ~~med~~ SF fine to med sand. Brown PWR
18-20	silt, fine to coarse sand, and gravel. Brown and pink

1130 complete SB-14/BG-2
total depth: 20 feet, no waste
Decon augers and spoons
1140 Offsite for lunch
1220 onsite
1230 Collect SB-16-0.5
1240 Collect SB-16-1.5
Bump test
100 ppm isobutylene
20.9% O_2

Jaelle Zarek

8-16-16 90°F sunny

1300 SB-17/BG-3

depth	PID	FPID	SPT
0-2	0.0	2.3	3-2-3-6
2-4	0.0	1.4	3-4-7-10
4-6	0.0	2.5	6-5-6-8
6-8	0.0	2.2	9-10-11-13
8-10	0.0	1.8	4-8-10-11
10-12	0.0	1.7	10-13-14-15
12-14	0.0	2.6	9-15-13-14
14-16	0.0	2.1	5-7-18-18
16-18	0.0	2.2	25-28-47-50
18-20	0.0	2.5	8-15-29-34

1315 Collect BG-3-0.5
1325 Collect BG-3-1.5
1340 Collect BG-3-5
1350 Collect BG-3-10
1400 Collect BG-3-15
1410 Collect BG-3-20
Bump test
100 ppm isobutylene
20.9% O_2

Jaelle Zarek

8-18-16 90°F Sunny

SB-17 / BG-3

depth	chara.
0-2	silt and gravel, brown
2-4	clayey silt, trace gravel. Dark gray and reddish brown.
4-8	silty clay, dark brown and brownish red. trace gravel
8-~~10~~ 12	silt, brown and dark gray, trace clay
12-14	silt and gravel brown, dark gray, tan. clay
14-16	clayey silt and gravel. dark gray, brown, tan, pink
16-20	silt and gravel. brown, tan, pink
~~18-20~~	

1403 complete SB-17 and BG-3.
Total depth: 20
No waste

8-16-16 95°F Sunny

1415 Begin waste delineations.

SB-3 A (offset east)

~~cover~~ depth	PID	
0-5	0.0	cover
5	3.5	waste

Brick, plastic

SB-3 B (offset north)

0-10	0.0	cover

No waste

SB-3 C (offset east)

0-7	0.0	cover
7	16	waste

Metal, plastic

SB-3 D (offset east)

0-10	0.0	cover

No waste

SB-3 E (offset south)

0-10	0.0	cover

No waste

1600 SB-2 A (offset north)

0-10	0.0	cover

No waste

8-16-16 85°F P. Cloudy

1630 SB-2 B (offset east)

0-5	0.0	cover
5	0.0	waste

Wood chips, metal wire

SB-2 C (offset north)

0-5	58	cover
5	1.2	waste

Rubber, metal, wire, plastic

SB-2 D (offset north)

0-5	0.0	cover
5	1	waste

Nail, metal, glass

Cannot offset north. Trees and steep hill.

SB-2 E (offset east)

0-5	0.0	cover
5	0.1	waste

brick

1730 Drillers offsite. Pack coolers

1800 offsite for ice and to ship samples.

Jaell Farell

8-17-16 75°F sunny

0700 Arrive onsite calibrate equipment

MiniRae 3000

isobutylene exp. 1-20-20

100.1 ppm → 100 ppm pass

QRAE II

cal gas exp. 1-20-20

CO 50ppm

H_2S 10 ppm

CH_4 50%

O_2 18%

0715 Continue waste delineation

SB-1 A (offset north)

0-5	0.0	cover
5	0.0	waste

Rubber, wire

SB-1 B (offset north)

0-10	5.7	cover
No waste		

0800 SB-8 A (east)

0-3	0.0	cover
3	3.6	waste

plastic

8-17-16 85°F sunny

SB-8 B (offset east)
0-10 0.0 cover
NO waste

0840 SB-9 A (offset east)
0-10 1.6 cover
NO waste

0900 SB-15 A (offset west)
0-4 0.1 cover
4 0.1 waste
glass, wood chips

0910 SB-14 A (offset NW)
0-10 1.0 cover
NO waste

SB-14 B (in between SB-14 and -16)
0-10 0.4 cover
NO waste

SB-14 C (offset NW of B)
0-10 0.9 cover
NO waste

SB-14 D (offset NW of C)
0-3 0.3 cover
3 0.3 waste
asphalt, plastic

8-17-16 90°F sunny

1015 SB-16 A (east)
0-10 0.0 cover
NO waste

SB-16 B (south)
0-10 0.0 cover
NO waste

SB-16 C (west)
0-10 0.0 cover
NO waste

1100 SB-10 A
0-10 0.0 cover
NO waste

SB-10 B (east)
0-10 0.0 cover
NO waste

SB-10 C east
0-6 0.0 cover
6 0.0 waste
wood chips

SB-6 A (east)
0-3 cover 0.0
3 0.0 waste
Metal

8-17-16 90°F sunny

1200 SB-6 B

0-10 0.0 cover

NO waste

1215 offsite for lunch

1300 onsite. M. Darwin abandons temp wells with drillers.

J. Farley begins LFG screening.

Calibrate equipment

GEM 2000+, SN GM11198

cal gas 35/50 exp 11-30-16

CH_4 50% → 50% pass

CO_2 35% → 35% pass

CO 50 ppm → 50 ppm pass

H_2S 25 ppm → 25 ppm pass

PID

isobutylene 100.2 ppm

Well	WL	T casing	B casing
GP-1	dry	14.97	11.31
5	dry	15.00	11.21
3	dry	15.01	11.62
4	dry	15.01	10.86
2	13.07	15.01	11.50

temp: 91 F humidity: 53%

baro pressure: 29.25" Hg

8-17-16 90°F sunny

Well	time	purge	LEL	SLEL	CH_4, O_2, CO_2, H_2S, VOCs
GP-1	1340	91	—	—	0, 11.7, 2.5, 18, 1.1
2	1355	206	6	6	0.3, 5.3, 8.3, 0, 1.3
3	1402	105	>>>	>>>	69.6, 0.0, 26.1, 0, 0
4	1407	158	>>>	>>>	70.5, 0.0, 20.6, 3, 0
5	1348	236	—	—	0 ~~2.3~~ ~~13~~ JP 2.0 17.3 1.1 0

1420 continue temp well abandonment

1530 complete well abandonment. Begin site restoration

1630 complete site restoration. Drillers offsite. J. Farley and M. Darwin offsite

Jaell Farley

Appendix B
Laboratory Analytical Data

Bud Holding Company
Site Identification Number: NONCD0000673

CDM Smith

5400 Glenwood Avenue, Suite 400
Raleigh, North Carolina 27612
tel: 919 325-3500
fax: 919 781-5730

September 14, 2016

Mr. David P. Kwiatkowski
North Carolina Department of
Environmental Quality
Division of Waste Management
Superfund Section
Pre-Regulatory Landfill Unit
1646 Mail Service Center
Raleigh, North Carolina 27699-1646

Subject: Laboratory Data Review
Bud Holding Company
10 and 12 Sharps Airpark Court
Greensboro, Guilford County, North Carolina
Site Identification Number: NONCD0000673
Task Order 673DP-1

Dear Mr. Kwiatkowski:

Please find the attached laboratory analytical data reports for the sampling completed at the Bud Holding Company site located in Greensboro, North Carolina. Samples were collected between August 8 and August 16, 2016, in accordance with Task Order 673DP-1 and the approved Work Plan. The samples were analyzed by a North Carolina certified laboratory. I have reviewed the lab reports and found the data to be usable, as noted. The laboratory data reports are attached.

All laboratory quality assurance/quality control (QA/QC) data were within acceptable limits, except as noted in the Case Narratives of the attached laboratory reports.

If you have any questions or comments, please do not hesitate to contact me by phone at (919) 325-3569 or by email to colonemf@cdmsmith.com.

Sincerely,

Mathew F. Colone, P.G.
CDM Smith, Inc.

cc: Daniel Forbes, CDM Smith

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

CDM Smith
5400 Glenwood Avenue
Suite 400
Raleigh, NC 27612
Attention: Dan Forbes

Project Name: **Bud Holdings**

Project Number: **SW**

Lot Number: **RH09011**

Date Completed: **08/19/2016**

Nisreen Saikaly
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
CDM Smith
Lot Number: RH09011

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Volatile Organic Compounds

The LCS recovery for acert exceeded method control limits in batch 19512; however, all other QA/QC criteria for the LCS were within acceptance criteria and method control limits. The associated sample results were below the PQL, therefore the results were reported and no corrective action was required.

Semivolatile Organic Compounds

The LCS associated with samples -001, -002 and -003 fails low for Bis(2-ethylhexyl)phthalate, Di-n-octylphthalate, Dibenzo(a,h)anthracene and Indeno(1,2,3-c,d)pyrene. Samples -001 and -002 are re-extracted. No sample was left for the re-extraction of -003. The re-extracts analyzed within hold and LCS passed for these analytes except for Dibenzo(a,h)anthracene which marginally failed at 47% recovery.

Sample Summary
CDM Smith
Lot Number: RH09011

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SW-2	Aqueous	08/08/2016 1735	08/09/2016
002	SW-3	Aqueous	08/08/2016 0835	08/09/2016
003	DUP-1	Aqueous	08/08/2016 0800	08/09/2016
004	TRIP BLANK	Aqueous	08/08/2016	08/09/2016

(4 samples)

Executive Summary
CDM Smith
Lot Number: RH09011

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SW-2	Aqueous	Nitrate - N	300.0	0.30		mg/L	5
001	SW-2	Aqueous	Sulfate	300.0	1.9		mg/L	5
001	SW-2	Aqueous	Acetone	8260B	6.0	J	ug/L	7
001	SW-2	Aqueous	Antimony	6020A	0.59	BJ	ug/L	13
001	SW-2	Aqueous	Copper	6020A	1.0	B	ug/L	13
001	SW-2	Aqueous	Iron	6020A	510	B	ug/L	13
001	SW-2	Aqueous	Lead	6020A	0.38	BJ	ug/L	13
001	SW-2	Aqueous	Manganese	6020A	33	B	ug/L	13
001	SW-2	Aqueous	Zinc	6020A	4.8	BJ	ug/L	13
001	SW-2	Aqueous	Mercury	7470A	0.000040	BJ	mg/L	14
002	SW-3	Aqueous	Nitrate - N	300.0	0.27		mg/L	15
002	SW-3	Aqueous	Sulfate	300.0	2.0		mg/L	15
002	SW-3	Aqueous	Acetone	8260B	2.1	J	ug/L	17
002	SW-3	Aqueous	6-Octadecenoic acid, (Z)-	8270D	3.2		ug/L	20
002	SW-3	Aqueous	Antimony	6020A	0.67	BJ	ug/L	23
002	SW-3	Aqueous	Copper	6020A	1.5	B	ug/L	23
002	SW-3	Aqueous	Iron	6020A	560	B	ug/L	23
002	SW-3	Aqueous	Lead	6020A	0.74	BJ	ug/L	23
002	SW-3	Aqueous	Manganese	6020A	31	B	ug/L	23
002	SW-3	Aqueous	Zinc	6020A	5.4	BJ	ug/L	23
002	SW-3	Aqueous	Mercury	7470A	0.000056	BJ	mg/L	24
003	DUP-1	Aqueous	Nitrate - N	300.0	0.27		mg/L	25
003	DUP-1	Aqueous	Sulfate	300.0	2.0		mg/L	25
003	DUP-1	Aqueous	Unknown	8270D	2.4		ug/L	30
003	DUP-1	Aqueous	Antimony	6020A	0.64	BJ	ug/L	33
003	DUP-1	Aqueous	Copper	6020A	1.6	B	ug/L	33
003	DUP-1	Aqueous	Iron	6020A	570	B	ug/L	33
003	DUP-1	Aqueous	Lead	6020A	0.42	BJ	ug/L	33
003	DUP-1	Aqueous	Manganese	6020A	31	B	ug/L	33
003	DUP-1	Aqueous	Zinc	6020A	4.3	BJ	ug/L	33
003	DUP-1	Aqueous	Mercury	7470A	0.00010	B	mg/L	34

(31 detections)

Inorganic non-metals

Client: **CDM Smith**
Laboratory ID: **RH09011-001**
Description: **SW-2**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 1735**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/16/2016 1414	MJI		19934
1		(Nitrate - N) 300.0	1	08/09/2016 1850	TAF		19508
1		(Sulfate) 300.0	1	08/09/2016 1850	TAF		19509

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		0.10	0.050	mg/L	1
Nitrate - N		**300.0**	**0.30**		**0.020**	**0.0025**	**mg/L**	**1**
Sulfate		**300.0**	**1.9**		**1.0**	**0.28**	**mg/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: **CDM Smith**
Laboratory ID: **RH09011-001**
Description: **SW-2**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 1735**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/10/2016 1106	SES		19506

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		117	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-001**
Description: **SW-2**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 1735**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/10/2016 1312	TML		19512

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**6.0**	**J**	**10**	**2.0**	**ug/L**	**1**
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-001**
Description: **SW-2**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 1735**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/10/2016 1312	TML		19512

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: **CDM Smith**
Laboratory ID: **RH09011-001**
Description: **SW-2**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 1735**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				19576

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		**8260B**					**ug/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: **CDM Smith**
Laboratory ID: **RH09011-001**
Description: **SW-2**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 1735**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1				19706

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		**8270D**					**ug/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-001**
Description: **SW-2**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 1735**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1117	JCG	08/10/2016 1741	19550
2	3520C	8270D	1	08/15/2016 1435	RBH	08/12/2016 1533	19753

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.2	0.049	ug/L	2
Acenaphthylene	208-96-8	8270D	ND		1.2	0.049	ug/L	2
Acetophenone	98-86-2	8270D	ND		1.2	0.28	ug/L	2
Anthracene	120-12-7	8270D	ND		1.2	0.074	ug/L	2
Atrazine	1912-24-9	8270D	ND		1.2	0.25	ug/L	2
Benzaldehyde	100-52-7	8270D	ND		6.2	0.33	ug/L	2
Benzo(a)anthracene	56-55-3	8270D	ND		1.2	0.049	ug/L	2
Benzo(a)pyrene	50-32-8	8270D	ND		1.2	0.086	ug/L	2
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.2	0.049	ug/L	2
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.2	0.049	ug/L	2
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.2	0.049	ug/L	2
1,1'-Biphenyl	92-52-4	8270D	ND		1.2	0.26	ug/L	2
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.2	0.19	ug/L	2
Butyl benzyl phthalate	85-68-7	8270D	ND		6.2	0.26	ug/L	2
Caprolactam	105-60-2	8270D	ND		6.2	0.88	ug/L	2
Carbazole	86-74-8	8270D	ND		1.2	0.049	ug/L	2
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.2	0.32	ug/L	2
4-Chloroaniline	106-47-8	8270D	ND		1.2	0.16	ug/L	2
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.2	0.074	ug/L	2
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.2	0.20	ug/L	2
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.2	0.21	ug/L	2
2-Chloronaphthalene	91-58-7	8270D	ND		1.2	0.19	ug/L	2
2-Chlorophenol	95-57-8	8270D	ND		1.2	0.19	ug/L	2
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.2	0.20	ug/L	2
Chrysene	218-01-9	8270D	ND		1.2	0.037	ug/L	2
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.2	0.037	ug/L	2
Dibenzofuran	132-64-9	8270D	ND		1.2	0.20	ug/L	2
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		6.2	1.0	ug/L	2
2,4-Dichlorophenol	120-83-2	8270D	ND		1.2	0.23	ug/L	2
Diethylphthalate	84-66-2	8270D	ND		6.2	0.23	ug/L	2
Dimethyl phthalate	131-11-3	8270D	ND		6.2	0.22	ug/L	2
2,4-Dimethylphenol	105-67-9	8270D	ND		1.2	0.19	ug/L	2
Di-n-butyl phthalate	84-74-2	8270D	ND		6.2	0.52	ug/L	2
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		6.2	1.1	ug/L	2
2,4-Dinitrophenol	51-28-5	8270D	ND		6.2	1.6	ug/L	2
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.5	0.44	ug/L	2
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.5	0.42	ug/L	2
Di-n-octylphthalate	117-84-0	8270D	ND		6.2	0.59	ug/L	2
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		6.2	0.47	ug/L	2
Fluoranthene	206-44-0	8270D	ND		1.2	0.26	ug/L	2
Fluorene	86-73-7	8270D	ND		1.2	0.037	ug/L	2
Hexachlorobenzene	118-74-1	8270D	ND		1.2	0.19	ug/L	2
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-001**
Description: **SW-2**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 1735**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1117	JCG	08/10/2016 1741	19550
2	3520C	8270D	1	08/15/2016 1435	RBH	08/12/2016 1533	19753

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270D	ND		6.2	1.4	ug/L	2
Hexachloroethane	67-72-1	8270D	ND		1.2	0.21	ug/L	2
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.2	0.049	ug/L	2
Isophorone	78-59-1	8270D	ND		1.2	0.27	ug/L	2
2-Methylnaphthalene	91-57-6	8270D	ND		1.2	0.049	ug/L	2
2-Methylphenol	95-48-7	8270D	ND		1.2	0.26	ug/L	2
3+4-Methylphenol	106-44-5	8270D	ND		2.5	0.57	ug/L	2
Naphthalene	91-20-3	8270D	ND		1.2	0.062	ug/L	2
2-Nitroaniline	88-74-4	8270D	ND		2.5	0.81	ug/L	2
3-Nitroaniline	99-09-2	8270D	ND		2.5	0.19	ug/L	2
4-Nitroaniline	100-01-6	8270D	ND		2.5	1.6	ug/L	2
Nitrobenzene	98-95-3	8270D	ND		1.2	0.21	ug/L	2
2-Nitrophenol	88-75-5	8270D	ND		2.5	0.54	ug/L	2
4-Nitrophenol	100-02-7	8270D	ND		6.2	2.6	ug/L	2
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.2	0.35	ug/L	2
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.2	1.0	ug/L	2
Pentachlorophenol	87-86-5	8270D	ND		6.2	1.7	ug/L	2
Phenanthrene	85-01-8	8270D	ND		1.2	0.074	ug/L	2
Phenol	108-95-2	8270D	ND		1.2	0.23	ug/L	2
Pyrene	129-00-0	8270D	ND		1.2	0.20	ug/L	2
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.2	0.23	ug/L	2
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.2	0.27	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
2-Fluorobiphenyl		59	37-129		58	37-129
2-Fluorophenol		47	24-127		50	24-127
Nitrobenzene-d5		61	38-127		63	38-127
Phenol-d5		54	28-128		54	28-128
Terphenyl-d14		69	10-148		60	10-148
2,4,6-Tribromophenol		61	41-144		59	41-144

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: **CDM Smith**
Laboratory ID: **RH09011-001**
Description: **SW-2**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 1735**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1812	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	**7440-36-0**	**6020A**	**0.59**	**BJ**	**1.0**	**0.17**	**ug/L**	**1**
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	ND		5.0	0.63	ug/L	1
Copper	**7440-50-8**	**6020A**	**1.0**	**B**	**1.0**	**0.15**	**ug/L**	**1**
Iron	**7439-89-6**	**6020A**	**510**	**B**	**20**	**6.3**	**ug/L**	**1**
Lead	**7439-92-1**	**6020A**	**0.38**	**BJ**	**1.0**	**0.15**	**ug/L**	**1**
Manganese	**7439-96-5**	**6020A**	**33**	**B**	**5.0**	**0.54**	**ug/L**	**1**
Nickel	7440-02-0	6020A	ND		5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	**7440-66-6**	**6020A**	**4.8**	**BJ**	**10**	**1.6**	**ug/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: **CDM Smith**
Laboratory ID: **RH09011-001**
Description: **SW-2**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 1735**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/16/2016 1521	CLM	08/15/2016 1730	19804

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	**7439-97-6**	**7470A**	**0.000040**	**BJ**	**0.00010**	**0.000028**	**mg/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: **CDM Smith**
Laboratory ID: **RH09011-002**
Description: **SW-3**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0835**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/16/2016 1416	MJI		19934
1		(Nitrate - N) 300.0	1	08/09/2016 1914	TAF		19508
1		(Sulfate) 300.0	1	08/09/2016 1914	TAF		19509

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		0.10	0.050	mg/L	1
Nitrate - N		**300.0**	**0.27**		**0.020**	**0.0025**	**mg/L**	**1**
Sulfate		**300.0**	**2.0**		**1.0**	**0.28**	**mg/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: **CDM Smith**
Laboratory ID: **RH09011-002**
Description: **SW-3**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0835**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/10/2016 1130	SES		19506

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **CDM Smith** | Laboratory ID: **RH09011-002**

Description: **SW-3** | Matrix: **Aqueous**

Date Sampled: **08/08/2016 0835**

Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/10/2016 1335	TML		19512

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**2.1**	**J**	**10**	**2.0**	**ug/L**	**1**
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-002**
Description: **SW-3**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0835**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/10/2016 1335	TML		19512

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: **CDM Smith**
Laboratory ID: **RH09011-002**
Description: **SW-3**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0835**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				19576

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		**8260B**					**ug/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: **CDM Smith**
Laboratory ID: **RH09011-002**
Description: **SW-3**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0835**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1142	JCG		19706

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
6-Octadecenoic acid, (Z)-		**8270D**	**3.2**				**ug/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-002**
Description: **SW-3**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0835**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1142	JCG	08/10/2016 1741	19550
2	3520C	8270D	1	08/15/2016 1500	RBH	08/12/2016 1533	19753

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.3	0.051	ug/L	2
Acenaphthylene	208-96-8	8270D	ND		1.3	0.051	ug/L	2
Acetophenone	98-86-2	8270D	ND		1.3	0.29	ug/L	2
Anthracene	120-12-7	8270D	ND		1.3	0.077	ug/L	2
Atrazine	1912-24-9	8270D	ND		1.3	0.26	ug/L	2
Benzaldehyde	100-52-7	8270D	ND		6.4	0.35	ug/L	2
Benzo(a)anthracene	56-55-3	8270D	ND		1.3	0.051	ug/L	2
Benzo(a)pyrene	50-32-8	8270D	ND		1.3	0.090	ug/L	2
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.3	0.051	ug/L	2
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.3	0.051	ug/L	2
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.3	0.051	ug/L	2
1,1'-Biphenyl	92-52-4	8270D	ND		1.3	0.27	ug/L	2
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.3	0.19	ug/L	2
Butyl benzyl phthalate	85-68-7	8270D	ND		6.4	0.27	ug/L	2
Caprolactam	105-60-2	8270D	ND		6.4	0.91	ug/L	2
Carbazole	86-74-8	8270D	ND		1.3	0.051	ug/L	2
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.3	0.33	ug/L	2
4-Chloroaniline	106-47-8	8270D	ND		1.3	0.17	ug/L	2
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.3	0.077	ug/L	2
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.3	0.21	ug/L	2
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.3	0.22	ug/L	2
2-Chloronaphthalene	91-58-7	8270D	ND		1.3	0.19	ug/L	2
2-Chlorophenol	95-57-8	8270D	ND		1.3	0.19	ug/L	2
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.3	0.21	ug/L	2
Chrysene	218-01-9	8270D	ND		1.3	0.038	ug/L	2
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.3	0.038	ug/L	2
Dibenzofuran	132-64-9	8270D	ND		1.3	0.21	ug/L	2
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		6.4	1.0	ug/L	2
2,4-Dichlorophenol	120-83-2	8270D	ND		1.3	0.24	ug/L	2
Diethylphthalate	84-66-2	8270D	ND		6.4	0.24	ug/L	2
Dimethyl phthalate	131-11-3	8270D	ND		6.4	0.23	ug/L	2
2,4-Dimethylphenol	105-67-9	8270D	ND		1.3	0.19	ug/L	2
Di-n-butyl phthalate	84-74-2	8270D	ND		6.4	0.54	ug/L	2
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		6.4	1.1	ug/L	2
2,4-Dinitrophenol	51-28-5	8270D	ND		6.4	1.7	ug/L	2
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.6	0.46	ug/L	2
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.6	0.44	ug/L	2
Di-n-octylphthalate	117-84-0	8270D	ND		6.4	0.62	ug/L	2
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		6.4	0.49	ug/L	2
Fluoranthene	206-44-0	8270D	ND		1.3	0.27	ug/L	2
Fluorene	86-73-7	8270D	ND		1.3	0.038	ug/L	2
Hexachlorobenzene	118-74-1	8270D	ND		1.3	0.19	ug/L	2
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-002**
Description: **SW-3**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0835**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1142	JCG	08/10/2016 1741	19550
2	3520C	8270D	1	08/15/2016 1500	RBH	08/12/2016 1533	19753

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270D	ND		6.4	1.4	ug/L	2
Hexachloroethane	67-72-1	8270D	ND		1.3	0.22	ug/L	2
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.3	0.051	ug/L	2
Isophorone	78-59-1	8270D	ND		1.3	0.28	ug/L	2
2-Methylnaphthalene	91-57-6	8270D	ND		1.3	0.051	ug/L	2
2-Methylphenol	95-48-7	8270D	ND		1.3	0.27	ug/L	2
3+4-Methylphenol	106-44-5	8270D	ND		2.6	0.59	ug/L	2
Naphthalene	91-20-3	8270D	ND		1.3	0.064	ug/L	2
2-Nitroaniline	88-74-4	8270D	ND		2.6	0.85	ug/L	2
3-Nitroaniline	99-09-2	8270D	ND		2.6	0.19	ug/L	2
4-Nitroaniline	100-01-6	8270D	ND		2.6	1.7	ug/L	2
Nitrobenzene	98-95-3	8270D	ND		1.3	0.22	ug/L	2
2-Nitrophenol	88-75-5	8270D	ND		2.6	0.56	ug/L	2
4-Nitrophenol	100-02-7	8270D	ND		6.4	2.7	ug/L	2
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.3	0.36	ug/L	2
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.3	1.1	ug/L	2
Pentachlorophenol	87-86-5	8270D	ND		6.4	1.7	ug/L	2
Phenanthrene	85-01-8	8270D	ND		1.3	0.077	ug/L	2
Phenol	108-95-2	8270D	ND		1.3	0.24	ug/L	2
Pyrene	129-00-0	8270D	ND		1.3	0.21	ug/L	2
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.3	0.24	ug/L	2
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.3	0.28	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
2-Fluorobiphenyl		55	37-129		52	37-129
2-Fluorophenol		46	24-127		45	24-127
Nitrobenzene-d5		59	38-127		56	38-127
Phenol-d5		52	28-128		51	28-128
Terphenyl-d14		61	10-148		61	10-148
2,4,6-Tribromophenol		62	41-144		62	41-144

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: **CDM Smith**
Laboratory ID: **RH09011-002**
Description: **SW-3**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0835**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1818	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	**7440-36-0**	**6020A**	**0.67**	**BJ**	**1.0**	**0.17**	**ug/L**	**1**
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	ND		5.0	0.63	ug/L	1
Copper	**7440-50-8**	**6020A**	**1.5**	**B**	**1.0**	**0.15**	**ug/L**	**1**
Iron	**7439-89-6**	**6020A**	**560**	**B**	**20**	**6.3**	**ug/L**	**1**
Lead	**7439-92-1**	**6020A**	**0.74**	**BJ**	**1.0**	**0.15**	**ug/L**	**1**
Manganese	**7439-96-5**	**6020A**	**31**	**B**	**5.0**	**0.54**	**ug/L**	**1**
Nickel	7440-02-0	6020A	ND		5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	**7440-66-6**	**6020A**	**5.4**	**BJ**	**10**	**1.6**	**ug/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: **CDM Smith**
Laboratory ID: **RH09011-002**
Description: **SW-3**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0835**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/16/2016 1529	CLM	08/15/2016 1730	19804

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	**7439-97-6**	**7470A**	**0.000056**	**BJ**	**0.00010**	**0.000028**	**mg/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: **CDM Smith**
Laboratory ID: **RH09011-003**
Description: **DUP-1**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0800**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/16/2016 1418	MJI		19934
1		(Nitrate - N) 300.0	1	08/09/2016 1938	TAF		19508
1		(Sulfate) 300.0	1	08/09/2016 1938	TAF		19509

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		0.10	0.050	mg/L	1
Nitrate - N		**300.0**	**0.27**		**0.020**	**0.0025**	**mg/L**	**1**
Sulfate		**300.0**	**2.0**		**1.0**	**0.28**	**mg/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: **CDM Smith**
Laboratory ID: **RH09011-003**
Description: **DUP-1**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0800**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/10/2016 1157	SES		19506

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-003**
Description: **DUP-1**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0800**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/10/2016 1358	TML		19512

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-003**
Description: **DUP-1**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0800**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/10/2016 1358	TML		19512

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		104	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: **CDM Smith**
Laboratory ID: **RH09011-003**
Description: **DUP-1**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0800**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				19576

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		**8260B**					**ug/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: **CDM Smith**
Laboratory ID: **RH09011-003**
Description: **DUP-1**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0800**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1206	JCG		19706

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		**8270D**	**2.4**				**ug/L**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
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P = The RPD between two GC columns exceeds 40%
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-003**
Description: **DUP-1**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0800**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1206	JCG	08/10/2016 1741	19550

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.0	0.040	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		1.0	0.040	ug/L	1
Acetophenone	98-86-2	8270D	ND		1.0	0.23	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	0.060	ug/L	1
Atrazine	1912-24-9	8270D	ND		1.0	0.20	ug/L	1
Benzaldehyde	100-52-7	8270D	ND		5.0	0.27	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	0.040	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	0.070	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	0.040	ug/L	1
1,1'-Biphenyl	92-52-4	8270D	ND		1.0	0.21	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.0	0.15	ug/L	1
Butyl benzyl phthalate	85-68-7	8270D	ND		5.0	0.21	ug/L	1
Caprolactam	105-60-2	8270D	ND		5.0	0.71	ug/L	1
Carbazole	86-74-8	8270D	ND		1.0	0.040	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.0	0.26	ug/L	1
4-Chloroaniline	106-47-8	8270D	ND		1.0	0.13	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.0	0.060	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.0	0.16	ug/L	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.0	0.17	ug/L	1
2-Chloronaphthalene	91-58-7	8270D	ND		1.0	0.15	ug/L	1
2-Chlorophenol	95-57-8	8270D	ND		1.0	0.15	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.0	0.16	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	0.030	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	0.030	ug/L	1
Dibenzofuran	132-64-9	8270D	ND		1.0	0.16	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		5.0	0.81	ug/L	1
2,4-Dichlorophenol	120-83-2	8270D	ND		1.0	0.19	ug/L	1
Diethylphthalate	84-66-2	8270D	ND		5.0	0.19	ug/L	1
Dimethyl phthalate	131-11-3	8270D	ND		5.0	0.18	ug/L	1
2,4-Dimethylphenol	105-67-9	8270D	ND		1.0	0.15	ug/L	1
Di-n-butyl phthalate	84-74-2	8270D	ND		5.0	0.42	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		5.0	0.89	ug/L	1
2,4-Dinitrophenol	51-28-5	8270D	ND		5.0	1.3	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.0	0.36	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.0	0.34	ug/L	1
Di-n-octylphthalate	117-84-0	8270D	ND		5.0	0.48	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		5.0	0.38	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	0.21	ug/L	1
Fluorene	86-73-7	8270D	ND		1.0	0.030	ug/L	1
Hexachlorobenzene	118-74-1	8270D	ND		1.0	0.15	ug/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		5.0	1.1	ug/L	1

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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-003**
Description: **DUP-1**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0800**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1206	JCG	08/10/2016 1741	19550

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		1.0	0.17	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	0.040	ug/L	1
Isophorone	78-59-1	8270D	ND		1.0	0.22	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	0.040	ug/L	1
2-Methylphenol	95-48-7	8270D	ND		1.0	0.21	ug/L	1
3+4-Methylphenol	106-44-5	8270D	ND		2.0	0.46	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.0	0.050	ug/L	1
2-Nitroaniline	88-74-4	8270D	ND		2.0	0.66	ug/L	1
3-Nitroaniline	99-09-2	8270D	ND		2.0	0.15	ug/L	1
4-Nitroaniline	100-01-6	8270D	ND		2.0	1.3	ug/L	1
Nitrobenzene	98-95-3	8270D	ND		1.0	0.17	ug/L	1
2-Nitrophenol	88-75-5	8270D	ND		2.0	0.44	ug/L	1
4-Nitrophenol	100-02-7	8270D	ND		5.0	2.1	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.0	0.28	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.0	0.84	ug/L	1
Pentachlorophenol	87-86-5	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	0.060	ug/L	1
Phenol	108-95-2	8270D	ND		1.0	0.19	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.0	0.19	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.0	0.22	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		52	37-129
2-Fluorophenol		45	24-127
Nitrobenzene-d5		56	38-127
Phenol-d5		48	28-128
Terphenyl-d14		55	10-148
2,4,6-Tribromophenol		59	41-144

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ND = Not detected at or above the MDL
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ICP-MS

Client: **CDM Smith**
Laboratory ID: **RH09011-003**
Description: **DUP-1**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0800**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1824	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	**7440-36-0**	**6020A**	**0.64**	**BJ**	**1.0**	**0.17**	**ug/L**	**1**
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	ND		5.0	0.63	ug/L	1
Copper	**7440-50-8**	**6020A**	**1.6**	**B**	**1.0**	**0.15**	**ug/L**	**1**
Iron	**7439-89-6**	**6020A**	**570**	**B**	**20**	**6.3**	**ug/L**	**1**
Lead	**7439-92-1**	**6020A**	**0.42**	**BJ**	**1.0**	**0.15**	**ug/L**	**1**
Manganese	**7439-96-5**	**6020A**	**31**	**B**	**5.0**	**0.54**	**ug/L**	**1**
Nickel	7440-02-0	6020A	ND		5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	**7440-66-6**	**6020A**	**4.3**	**BJ**	**10**	**1.6**	**ug/L**	**1**

PQL = Practical quantitation limit
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: **CDM Smith**
Laboratory ID: **RH09011-003**
Description: **DUP-1**
Matrix: **Aqueous**
Date Sampled: **08/08/2016 0800**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/16/2016 1531	CLM	08/15/2016 1730	19804

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	**7439-97-6**	**7470A**	**0.00010**	**B**	**0.00010**	**0.000028**	**mg/L**	**1**

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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-004**
Description: **TRIP BLANK**
Matrix: **Aqueous**
Date Sampled: **08/08/2016**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/10/2016 1139	TML		19512

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
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H = Out of holding time
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **CDM Smith**
Laboratory ID: **RH09011-004**
Description: **TRIP BLANK**
Matrix: **Aqueous**
Date Sampled: **08/08/2016**
Date Received: **08/09/2016**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/10/2016 1139	TML		19512

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
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QC Summary

Inorganic non-metals - MB

Sample ID: RQ19508-001
Batch: 19508
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N	ND		1	0.020	0.0025	mg/L	08/09/2016 1802

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19508-002
Batch: 19508
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	0.80	0.81		1	102	90-110	08/09/2016 1826

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH09011-003MS
Batch: 19508
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	0.27	0.80	1.1		1	100	90-110	08/09/2016 2002

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH09011-003MD
Batch: 19508
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	0.27	0.80	1.0		1	97	1.8	90-110	20	08/09/2016 2026

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ19509-001
Batch: 19509
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.28	mg/L	08/09/2016 1802

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19509-002
Batch: 19509
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	21		1	107	90-110	08/09/2016 1826

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH09011-003MS
Batch: 19509
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	2.0	20	22		1	98	90-110	08/09/2016 2002

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH09011-003MD
Batch: 19509
Analytical Method: 300.0
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	2.0	20	21		1	96	1.8	90-110	20	08/09/2016 2026

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ19934-001
Batch: 19934
Analytical Method: 350.1

Matrix: Aqueous
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	ND		1	0.10	0.050	mg/L	08/16/2016 1320

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19934-002
Batch: 19934
Analytical Method: 350.1

Matrix: Aqueous
Prep Method: 350.1

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	1.0	0.95		1	95	90-110	08/16/2016 1322

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS (SIM with isotope dilution) - MB

Sample ID: RQ19506-001
Batch: 19506
Analytical Method: 8260B (SIM iso.)

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	3.0	0.85	ug/L	08/10/2016 1025

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		113	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS (SIM with isotope dilution) - LCS

Sample ID: RQ19506-002
Batch: 19506
Analytical Method: 8260B (SIM iso.)

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	50	49		1	98	70-130	08/10/2016 0948

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		114	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS (SIM with isotope dilution) - Duplicate

Sample ID: RH09011-001DU
Batch: 19506
Analytical Method: 8260B (SIM iso.)

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
1,4-Dioxane	ND	ND		1	0.00	20	08/10/2016 1650

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		114	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS (SIM with isotope dilution) - MS

Sample ID: RH09011-002MS
Batch: 19506
Analytical Method: 8260B (SIM iso.)

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	ND	50	49		1	98	43-173	08/10/2016 1714

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		112	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19512-001
Batch: 19512
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	10	2.0	ug/L	08/10/2016 1104
Benzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Bromodichloromethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Bromoform	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Bromomethane (Methyl bromide)	ND		1	0.50	0.40	ug/L	08/10/2016 1104
2-Butanone (MEK)	ND		1	10	2.0	ug/L	08/10/2016 1104
Carbon disulfide	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Carbon tetrachloride	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Chlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Chloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Chloroform	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Chloromethane (Methyl chloride)	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Cyclohexane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Dibromochloromethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,2-Dibromoethane (EDB)	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,4-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,3-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,2-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Dichlorodifluoromethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,2-Dichloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,1-Dichloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
trans-1,2-Dichloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
cis-1,2-Dichloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,1-Dichloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,2-Dichloropropane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
trans-1,3-Dichloropropene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
cis-1,3-Dichloropropene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Ethylbenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
2-Hexanone	ND		1	10	2.0	ug/L	08/10/2016 1104
Isopropylbenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Methyl acetate	ND		1	1.0	0.40	ug/L	08/10/2016 1104
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.40	ug/L	08/10/2016 1104
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	08/10/2016 1104
Methylcyclohexane	ND		1	5.0	0.40	ug/L	08/10/2016 1104
Methylene chloride	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Styrene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,1,2,2-Tetrachloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Tetrachloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Toluene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	0.40	ug/L	08/10/2016 1104
1,2,4-Trichlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,1,2-Trichloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,1,1-Trichloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19512-001
Batch: 19512
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Trichlorofluoromethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Vinyl chloride	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Xylenes (total)	ND		1	1.0	0.40	ug/L	08/10/2016 1104

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19512-002
Batch: 19512
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	160	N	1	159	60-140	08/10/2016 1006
Benzene	50	50		1	100	70-130	08/10/2016 1006
Bromodichloromethane	50	53		1	106	70-130	08/10/2016 1006
Bromoform	50	44		1	87	70-130	08/10/2016 1006
Bromomethane (Methyl bromide)	50	44		1	88	60-140	08/10/2016 1006
2-Butanone (MEK)	100	130		1	135	60-140	08/10/2016 1006
Carbon disulfide	50	50		1	100	60-140	08/10/2016 1006
Carbon tetrachloride	50	50		1	101	70-130	08/10/2016 1006
Chlorobenzene	50	52		1	104	70-130	08/10/2016 1006
Chloroethane	50	43		1	87	60-140	08/10/2016 1006
Chloroform	50	50		1	100	70-130	08/10/2016 1006
Chloromethane (Methyl chloride)	50	50		1	101	50-130	08/10/2016 1006
Cyclohexane	50	44		1	88	70-130	08/10/2016 1006
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	96	70-130	08/10/2016 1006
Dibromochloromethane	50	56		1	112	70-130	08/10/2016 1006
1,2-Dibromoethane (EDB)	50	52		1	104	70-130	08/10/2016 1006
1,4-Dichlorobenzene	50	51		1	102	70-130	08/10/2016 1006
1,3-Dichlorobenzene	50	53		1	107	70-130	08/10/2016 1006
1,2-Dichlorobenzene	50	56		1	111	70-130	08/10/2016 1006
Dichlorodifluoromethane	50	60		1	119	60-140	08/10/2016 1006
1,2-Dichloroethane	50	51		1	102	70-130	08/10/2016 1006
1,1-Dichloroethane	50	53		1	105	70-130	08/10/2016 1006
trans-1,2-Dichloroethene	50	52		1	105	70-130	08/10/2016 1006
cis-1,2-Dichloroethene	50	54		1	107	70-130	08/10/2016 1006
1,1-Dichloroethene	50	53		1	107	70-130	08/10/2016 1006
1,2-Dichloropropane	50	52		1	105	70-130	08/10/2016 1006
trans-1,3-Dichloropropene	50	52		1	104	70-130	08/10/2016 1006
cis-1,3-Dichloropropene	50	55		1	109	70-130	08/10/2016 1006
Ethylbenzene	50	52		1	104	70-130	08/10/2016 1006
2-Hexanone	100	100		1	104	60-140	08/10/2016 1006
Isopropylbenzene	50	54		1	108	70-130	08/10/2016 1006
Methyl acetate	50	63		1	125	60-140	08/10/2016 1006
Methyl tertiary butyl ether (MTBE)	50	50		1	100	70-130	08/10/2016 1006
4-Methyl-2-pentanone	100	110		1	111	60-140	08/10/2016 1006
Methylcyclohexane	50	53		1	106	70-130	08/10/2016 1006
Methylene chloride	50	51		1	102	70-130	08/10/2016 1006
Styrene	50	54		1	108	70-130	08/10/2016 1006
1,1,2,2-Tetrachloroethane	50	57		1	113	70-130	08/10/2016 1006
Tetrachloroethene	50	55		1	109	70-130	08/10/2016 1006
Toluene	50	52		1	104	70-130	08/10/2016 1006
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	51		1	103	70-130	08/10/2016 1006
1,2,4-Trichlorobenzene	50	56		1	111	70-130	08/10/2016 1006
1,1,2-Trichloroethane	50	53		1	106	70-130	08/10/2016 1006
1,1,1-Trichloroethane	50	49		1	97	70-130	08/10/2016 1006

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19512-002
Batch: 19512
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	54		1	107	70-130	08/10/2016 1006
Trichlorofluoromethane	50	54		1	109	60-140	08/10/2016 1006
Vinyl chloride	50	48		1	95	60-140	08/10/2016 1006
Xylenes (total)	100	100		1	105	70-130	08/10/2016 1006

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19550-001
Batch: 19550
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/10/2016 1741

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	1.0	0.21	ug/L	08/12/2016 1032
2,4,5-Trichlorophenol	ND		1	1.0	0.19	ug/L	08/12/2016 1032
2,4,6-Trichlorophenol	ND		1	1.0	0.22	ug/L	08/12/2016 1032
2,4-Dichlorophenol	ND		1	1.0	0.19	ug/L	08/12/2016 1032
2,4-Dimethylphenol	ND		1	1.0	0.15	ug/L	08/12/2016 1032
2,4-Dinitrophenol	ND		1	5.0	1.3	ug/L	08/12/2016 1032
2,4-Dinitrotoluene	ND		1	2.0	0.36	ug/L	08/12/2016 1032
2,6-Dinitrotoluene	ND		1	2.0	0.34	ug/L	08/12/2016 1032
2-Chloronaphthalene	ND		1	1.0	0.15	ug/L	08/12/2016 1032
2-Chlorophenol	ND		1	1.0	0.15	ug/L	08/12/2016 1032
2-Methylnaphthalene	ND		1	1.0	0.040	ug/L	08/12/2016 1032
2-Methylphenol	ND		1	1.0	0.21	ug/L	08/12/2016 1032
2-Nitroaniline	ND		1	2.0	0.66	ug/L	08/12/2016 1032
2-Nitrophenol	ND		1	2.0	0.44	ug/L	08/12/2016 1032
3+4-Methylphenol	ND		1	2.0	0.46	ug/L	08/12/2016 1032
3,3'-Dichlorobenzidine	ND		1	5.0	0.81	ug/L	08/12/2016 1032
3-Nitroaniline	ND		1	2.0	0.15	ug/L	08/12/2016 1032
4,6-Dinitro-2-methylphenol	ND		1	5.0	0.89	ug/L	08/12/2016 1032
4-Bromophenyl phenyl ether	ND		1	1.0	0.15	ug/L	08/12/2016 1032
4-Chloro-3-methyl phenol	ND		1	1.0	0.26	ug/L	08/12/2016 1032
4-Chloroaniline	ND		1	1.0	0.13	ug/L	08/12/2016 1032
4-Chlorophenyl phenyl ether	ND		1	1.0	0.16	ug/L	08/12/2016 1032
4-Nitroaniline	ND		1	2.0	1.3	ug/L	08/12/2016 1032
4-Nitrophenol	ND		1	5.0	2.1	ug/L	08/12/2016 1032
Acenaphthene	ND		1	1.0	0.040	ug/L	08/12/2016 1032
Acenaphthylene	ND		1	1.0	0.040	ug/L	08/12/2016 1032
Acetophenone	ND		1	1.0	0.23	ug/L	08/12/2016 1032
Anthracene	ND		1	1.0	0.060	ug/L	08/12/2016 1032
Atrazine	ND		1	1.0	0.20	ug/L	08/12/2016 1032
Benzaldehyde	ND		1	5.0	0.27	ug/L	08/12/2016 1032
Benzo(a)anthracene	ND		1	1.0	0.040	ug/L	08/12/2016 1032
Benzo(a)pyrene	ND		1	1.0	0.070	ug/L	08/12/2016 1032
Benzo(b)fluoranthene	ND		1	1.0	0.040	ug/L	08/12/2016 1032
Benzo(g,h,i)perylene	ND		1	1.0	0.040	ug/L	08/12/2016 1032
Benzo(k)fluoranthene	ND		1	1.0	0.040	ug/L	08/12/2016 1032
bis (2-Chloro-1-methylethyl) ether	ND		1	1.0	0.17	ug/L	08/12/2016 1032
bis(2-Chloroethoxy)methane	ND		1	1.0	0.060	ug/L	08/12/2016 1032
bis(2-Chloroethyl)ether	ND		1	1.0	0.16	ug/L	08/12/2016 1032
bis(2-Ethylhexyl)phthalate	ND		1	5.0	0.38	ug/L	08/12/2016 1032
Butyl benzyl phthalate	ND		1	5.0	0.21	ug/L	08/12/2016 1032
Caprolactam	ND		1	5.0	0.71	ug/L	08/12/2016 1032
Carbazole	ND		1	1.0	0.040	ug/L	08/12/2016 1032
Chrysene	ND		1	1.0	0.030	ug/L	08/12/2016 1032
Di-n-butyl phthalate	ND		1	5.0	0.42	ug/L	08/12/2016 1032

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19550-001
Batch: 19550
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/10/2016 1741

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	5.0	0.48	ug/L	08/12/2016 1032
Dibenzo(a,h)anthracene	ND		1	1.0	0.030	ug/L	08/12/2016 1032
Dibenzofuran	ND		1	1.0	0.16	ug/L	08/12/2016 1032
Diethylphthalate	ND		1	5.0	0.19	ug/L	08/12/2016 1032
Dimethyl phthalate	ND		1	5.0	0.18	ug/L	08/12/2016 1032
Fluoranthene	ND		1	1.0	0.21	ug/L	08/12/2016 1032
Fluorene	ND		1	1.0	0.030	ug/L	08/12/2016 1032
Hexachlorobenzene	ND		1	1.0	0.15	ug/L	08/12/2016 1032
Hexachlorobutadiene	ND		1	1.0	0.17	ug/L	08/12/2016 1032
Hexachlorocyclopentadiene	ND		1	5.0	1.1	ug/L	08/12/2016 1032
Hexachloroethane	ND		1	1.0	0.17	ug/L	08/12/2016 1032
Indeno(1,2,3-c,d)pyrene	ND		1	1.0	0.040	ug/L	08/12/2016 1032
Isophorone	ND		1	1.0	0.22	ug/L	08/12/2016 1032
N-Nitrosodi-n-propylamine	ND		1	1.0	0.28	ug/L	08/12/2016 1032
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	1.0	0.84	ug/L	08/12/2016 1032
Naphthalene	ND		1	1.0	0.050	ug/L	08/12/2016 1032
Nitrobenzene	ND		1	1.0	0.17	ug/L	08/12/2016 1032
Pentachlorophenol	ND		1	5.0	1.3	ug/L	08/12/2016 1032
Phenanthrene	ND		1	1.0	0.060	ug/L	08/12/2016 1032
Phenol	ND		1	1.0	0.19	ug/L	08/12/2016 1032
Pyrene	ND		1	1.0	0.16	ug/L	08/12/2016 1032

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		55	41-144
2-Fluorobiphenyl		57	37-129
2-Fluorophenol		52	24-127
Nitrobenzene-d5		63	38-127
Phenol-d5		57	28-128
Terphenyl-d14		70	10-148

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19550-002
Batch: 19550
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/10/2016 1741

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	10	6.6		1	66	42-120	08/12/2016 1057
2,4,5-Trichlorophenol	10	7.0		1	70	56-118	08/12/2016 1057
2,4,6-Trichlorophenol	10	6.3		1	63	55-121	08/12/2016 1057
2,4-Dichlorophenol	20	13		1	67	55-117	08/12/2016 1057
2,4-Dimethylphenol	10	5.7		1	57	36-170	08/12/2016 1057
2,4-Dinitrophenol	10	5.9		1	59	47-133	08/12/2016 1057
2,4-Dinitrotoluene	10	7.6		1	76	59-127	08/12/2016 1057
2,6-Dinitrotoluene	10	7.1		1	71	59-126	08/12/2016 1057
2-Chloronaphthalene	10	6.5		1	65	46-100	08/12/2016 1057
2-Chlorophenol	10	6.5		1	65	50-117	08/12/2016 1057
2-Methylnaphthalene	10	6.6		1	66	57-115	08/12/2016 1057
2-Methylphenol	10	7.8		1	78	56-119	08/12/2016 1057
2-Nitroaniline	10	7.2		1	72	60-124	08/12/2016 1057
2-Nitrophenol	10	6.9		1	69	51-118	08/12/2016 1057
3+4-Methylphenol	10	7.3		1	73	53-119	08/12/2016 1057
3-Nitroaniline	10	6.7		1	67	43-123	08/12/2016 1057
4,6-Dinitro-2-methylphenol	10	7.5		1	75	56-128	08/12/2016 1057
4-Bromophenyl phenyl ether	10	6.8		1	68	55-121	08/12/2016 1057
4-Chloro-3-methyl phenol	10	7.5		1	75	58-125	08/12/2016 1057
4-Chloroaniline	10	7.9		1	79	10-128	08/12/2016 1057
4-Chlorophenyl phenyl ether	10	6.3		1	63	55-121	08/12/2016 1057
4-Nitroaniline	10	7.0		1	70	60-135	08/12/2016 1057
4-Nitrophenol	20	15		1	75	53-130	08/12/2016 1057
Acenaphthene	10	6.9		1	69	54-118	08/12/2016 1057
Acenaphthylene	10	7.2		1	72	48-155	08/12/2016 1057
Acetophenone	10	7.7		1	77	52-125	08/12/2016 1057
Anthracene	10	7.2		1	72	55-122	08/12/2016 1057
Atrazine	10	7.6		1	76	25-121	08/12/2016 1057
Benzaldehyde	10	8.3		1	83	45-115	08/12/2016 1057
Benzo(a)anthracene	10	6.8		1	68	56-123	08/12/2016 1057
Benzo(a)pyrene	10	5.5		1	55	54-124	08/12/2016 1057
Benzo(b)fluoranthene	10	5.9		1	59	55-136	08/12/2016 1057
Benzo(g,h,i)perylene	10	5.3		1	53	42-129	08/12/2016 1057
Benzo(k)fluoranthene	10	5.7		1	57	53-132	08/12/2016 1057
bis (2-Chloro-1-methylethyl) ether	10	7.6		1	76	42-124	08/12/2016 1057
bis(2-Chloroethoxy)methane	10	8.0		1	80	44-127	08/12/2016 1057
bis(2-Chloroethyl)ether	10	7.4		1	74	46-120	08/12/2016 1057
bis(2-Ethylhexyl)phthalate	10	3.4	N	1	34	56-128	08/12/2016 1057
Butyl benzyl phthalate	10	8.1		1	81	54-135	08/12/2016 1057
Caprolactam	10	6.1		1	61	44-152	08/12/2016 1057
Carbazole	10	7.0		1	70	45-101	08/12/2016 1057
Chrysene	10	6.9		1	69	54-120	08/12/2016 1057
Di-n-butyl phthalate	10	8.1		1	81	60-131	08/12/2016 1057
Di-n-octylphthalate	10	3.3	N	1	33	50-136	08/12/2016 1057

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19550-002
Batch: 19550
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/10/2016 1741

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Dibenzo(a,h)anthracene	10	3.1	N	1	31	50-127	08/12/2016 1057
Dibenzofuran	10	6.7		1	67	58-118	08/12/2016 1057
Diethylphthalate	10	7.9		1	79	60-125	08/12/2016 1057
Dimethyl phthalate	10	7.3		1	73	60-122	08/12/2016 1057
Fluoranthene	10	7.1		1	71	58-124	08/12/2016 1057
Fluorene	10	6.8		1	68	57-119	08/12/2016 1057
Hexachlorobenzene	10	7.1		1	71	55-118	08/12/2016 1057
Hexachlorobutadiene	10	5.4		1	54	53-116	08/12/2016 1057
Hexachlorocyclopentadiene	50	13		1	27	16-96	08/12/2016 1057
Hexachloroethane	10	5.8		1	58	31-110	08/12/2016 1057
Indeno(1,2,3-c,d)pyrene	10	4.7	N	1	47	48-126	08/12/2016 1057
Isophorone	10	8.0		1	80	57-123	08/12/2016 1057
N-Nitrosodi-n-propylamine	10	9.1		1	91	54-127	08/12/2016 1057
N-Nitrosodiphenylamine (Diphenylamine)	10	7.1		1	71	35-146	08/12/2016 1057
Naphthalene	10	6.5		1	65	52-109	08/12/2016 1057
Nitrobenzene	10	7.7		1	77	51-122	08/12/2016 1057
Pentachlorophenol	20	14		1	72	42-131	08/12/2016 1057
Phenanthrene	10	7.1		1	71	56-119	08/12/2016 1057
Phenol	10	6.1		1	61	49-117	08/12/2016 1057
Pyrene	10	7.4		1	74	55-127	08/12/2016 1057

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		65	41-144
2-Fluorobiphenyl		64	37-129
2-Fluorophenol		55	24-127
Nitrobenzene-d5		74	38-127
Phenol-d5		58	28-128
Terphenyl-d14		58	10-148

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: RH09011-003MS
Batch: 19550
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/10/2016 1741

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	24	16		1	65	54-118	08/15/2016 1231
Acenaphthylene	ND	24	16		1	66	48-155	08/15/2016 1231
Acetophenone	ND	24	17		1	68	52-125	08/15/2016 1231
Anthracene	ND	24	17		1	69	55-122	08/15/2016 1231
Atrazine	ND	24	18		1	74	25-121	08/15/2016 1231
Benzaldehyde	ND	24	20		1	80	45-115	08/15/2016 1231
Benzo(a)anthracene	ND	24	18		1	74	56-123	08/15/2016 1231
Benzo(a)pyrene	ND	24	17		1	69	54-124	08/15/2016 1231
Benzo(b)fluoranthene	ND	24	18		1	76	55-136	08/15/2016 1231
Benzo(g,h,i)perylene	ND	24	20		1	81	42-129	08/15/2016 1231
Benzo(k)fluoranthene	ND	24	18		1	73	53-132	08/15/2016 1231
1,1'-Biphenyl	ND	24	15		1	63	42-120	08/15/2016 1231
4-Bromophenyl phenyl ether	ND	24	16		1	64	55-121	08/15/2016 1231
Butyl benzyl phthalate	ND	24	22		1	90	54-135	08/15/2016 1231
Caprolactam	ND	24	20		1	81	44-152	08/15/2016 1231
Carbazole	ND	24	18		1	74	45-101	08/15/2016 1231
4-Chloro-3-methyl phenol	ND	24	18		1	73	58-125	08/15/2016 1231
4-Chloroaniline	ND	24	20		1	81	10-128	08/15/2016 1231
bis(2-Chloroethoxy)methane	ND	24	17		1	71	44-127	08/15/2016 1231
bis(2-Chloroethyl)ether	ND	24	17		1	70	46-120	08/15/2016 1231
bis (2-Chloro-1-methylethyl) ether	ND	24	18		1	74	42-124	08/15/2016 1231
2-Chloronaphthalene	ND	24	15		1	61	46-100	08/15/2016 1231
2-Chlorophenol	ND	24	15		1	62	50-117	08/15/2016 1231
4-Chlorophenyl phenyl ether	ND	24	14		1	59	55-121	08/15/2016 1231
Chrysene	ND	24	18		1	75	54-120	08/15/2016 1231
Dibenzo(a,h)anthracene	ND	24	12	N	1	49	50-127	08/15/2016 1231
Dibenzofuran	ND	24	15		1	61	58-118	08/15/2016 1231
2,4-Dichlorophenol	ND	49	29		1	60	55-117	08/15/2016 1231
Diethylphthalate	ND	24	18		1	76	60-125	08/15/2016 1231
Dimethyl phthalate	ND	24	17		1	69	60-122	08/15/2016 1231
2,4-Dimethylphenol	ND	24	14		1	59	36-170	08/15/2016 1231
Di-n-butyl phthalate	ND	24	20		1	84	60-131	08/15/2016 1231
4,6-Dinitro-2-methylphenol	ND	24	19		1	77	56-128	08/15/2016 1231
2,4-Dinitrophenol	ND	24	16		1	65	47-133	08/15/2016 1231
2,4-Dinitrotoluene	ND	24	18		1	75	59-127	08/15/2016 1231
2,6-Dinitrotoluene	ND	24	17		1	70	59-126	08/15/2016 1231
Di-n-octylphthalate	ND	24	18		1	72	50-136	08/15/2016 1231
bis(2-Ethylhexyl)phthalate	ND	24	20		1	83	56-128	08/15/2016 1231
Fluoranthene	ND	24	17		1	71	58-124	08/15/2016 1231
Fluorene	ND	24	16		1	65	57-119	08/15/2016 1231
Hexachlorobenzene	ND	24	17		1	69	55-118	08/15/2016 1231
Hexachlorobutadiene	ND	24	13		1	53	53-116	08/15/2016 1231
Hexachlorocyclopentadiene	ND	120	39		1	32	16-96	08/15/2016 1231
Hexachloroethane	ND	24	15		1	60	31-110	08/15/2016 1231

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: RH09011-003MS
Batch: 19550
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/10/2016 1741

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Indeno(1,2,3-c,d)pyrene	ND	24	18		1	72	48-126	08/15/2016 1231
Isophorone	ND	24	17		1	71	57-123	08/15/2016 1231
2-Methylnaphthalene	ND	24	15		1	61	57-115	08/15/2016 1231
2-Methylphenol	ND	24	21		1	84	56-119	08/15/2016 1231
3+4-Methylphenol	ND	24	18		1	75	53-119	08/15/2016 1231
Naphthalene	ND	24	15		1	62	52-109	08/15/2016 1231
2-Nitroaniline	ND	24	17		1	69	60-124	08/15/2016 1231
3-Nitroaniline	ND	24	15		1	63	43-123	08/15/2016 1231
4-Nitroaniline	ND	24	16		1	67	60-135	08/15/2016 1231
Nitrobenzene	ND	24	17		1	72	51-122	08/15/2016 1231
2-Nitrophenol	ND	24	16		1	65	51-118	08/15/2016 1231
4-Nitrophenol	ND	49	44		1	90	53-130	08/15/2016 1231
N-Nitrosodi-n-propylamine	ND	24	21		1	87	54-127	08/15/2016 1231
N-Nitrosodiphenylamine (Diphenylamine)	ND	24	16		1	64	35-146	08/15/2016 1231
Pentachlorophenol	ND	49	36		1	74	42-131	08/15/2016 1231
Phenanthrene	ND	24	17		1	69	56-119	08/15/2016 1231
Phenol	ND	24	15		1	62	49-117	08/15/2016 1231
Pyrene	ND	24	19		1	77	55-127	08/15/2016 1231
2,4,5-Trichlorophenol	ND	24	16		1	65	56-118	08/15/2016 1231
2,4,6-Trichlorophenol	ND	24	15		1	62	55-121	08/15/2016 1231

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		58	37-129
2-Fluorophenol		53	24-127
Nitrobenzene-d5		67	38-127
Phenol-d5		59	28-128
Terphenyl-d14		64	10-148
2,4,6-Tribromophenol		63	41-144

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: RH09011-003MD
Batch: 19550
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/10/2016 1741

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	24	15		1	63	4.9	54-118	40	08/15/2016 1256
Acenaphthylene	ND	24	16		1	66	3.2	48-155	40	08/15/2016 1256
Acetophenone	ND	24	17		1	71	1.3	52-125	40	08/15/2016 1256
Anthracene	ND	24	15		1	63	11	55-122	40	08/15/2016 1256
Atrazine	ND	24	17		1	71	6.5	25-121	40	08/15/2016 1256
Benzaldehyde	ND	24	19		1	82	0.85	45-115	40	08/15/2016 1256
Benzo(a)anthracene	ND	24	16		1	66	14	56-123	40	08/15/2016 1256
Benzo(a)pyrene	ND	24	13		1	55	26	54-124	40	08/15/2016 1256
Benzo(b)fluoranthene	ND	24	14		1	58	29	55-136	40	08/15/2016 1256
Benzo(g,h,i)perylene	ND	24	14		1	59	32	42-129	40	08/15/2016 1256
Benzo(k)fluoranthene	ND	24	14		1	59	24	53-132	40	08/15/2016 1256
1,1'-Biphenyl	ND	24	14		1	61	5.5	42-120	40	08/15/2016 1256
4-Bromophenyl phenyl ether	ND	24	15		1	61	6.2	55-121	40	08/15/2016 1256
Butyl benzyl phthalate	ND	24	19		1	81	13	54-135	40	08/15/2016 1256
Caprolactam	ND	24	16		1	68	19	44-152	40	08/15/2016 1256
Carbazole	ND	24	17		1	70	7.7	45-101	40	08/15/2016 1256
4-Chloro-3-methyl phenol	ND	24	16		1	66	12	58-125	40	08/15/2016 1256
4-Chloroaniline	ND	24	17		1	72	14	10-128	40	08/15/2016 1256
bis(2-Chloroethoxy)methane	ND	24	16		1	69	4.6	44-127	40	08/15/2016 1256
bis(2-Chloroethyl)ether	ND	24	16		1	69	4.3	46-120	40	08/15/2016 1256
bis (2-Chloro-1-methylethyl) ether	ND	24	17		1	73	3.1	42-124	40	08/15/2016 1256
2-Chloronaphthalene	ND	24	14		1	59	5.9	46-100	40	08/15/2016 1256
2-Chlorophenol	ND	24	15		1	63	1.1	50-117	40	08/15/2016 1256
4-Chlorophenyl phenyl ether	ND	24	13		1	56	7.7	55-121	40	08/15/2016 1256
Chrysene	ND	24	16		1	66	14	54-120	40	08/15/2016 1256
Dibenzo(a,h)anthracene	ND	24	9.0	N	1	38	29	50-127	40	08/15/2016 1256
Dibenzofuran	ND	24	14		1	59	6.1	58-118	40	08/15/2016 1256
2,4-Dichlorophenol	ND	48	27		1	56	8.5	55-117	40	08/15/2016 1256
Diethylphthalate	ND	24	17		1	72	7.2	60-125	40	08/15/2016 1256
Dimethyl phthalate	ND	24	16		1	67	6.6	60-122	40	08/15/2016 1256
2,4-Dimethylphenol	ND	24	14		1	59	3.2	36-170	40	08/15/2016 1256
Di-n-butyl phthalate	ND	24	18		1	78	10	60-131	40	08/15/2016 1256
4,6-Dinitro-2-methylphenol	ND	24	18		1	77	3.0	56-128	40	08/15/2016 1256
2,4-Dinitrophenol	ND	24	15		1	61	8.8	47-133	40	08/15/2016 1256
2,4-Dinitrotoluene	ND	24	17		1	72	6.0	59-127	40	08/15/2016 1256
2,6-Dinitrotoluene	ND	24	16		1	66	7.9	59-126	40	08/15/2016 1256
Di-n-octylphthalate	ND	24	13		1	54	32	50-136	40	08/15/2016 1256
bis(2-Ethylhexyl)phthalate	ND	24	14		1	60	35	56-128	40	08/15/2016 1256
Fluoranthene	ND	24	16		1	65	10	58-124	40	08/15/2016 1256
Fluorene	ND	24	15		1	62	7.7	57-119	40	08/15/2016 1256
Hexachlorobenzene	ND	24	15		1	63	11	55-118	40	08/15/2016 1256
Hexachlorobutadiene	ND	24	12	N	1	50	8.3	53-116	40	08/15/2016 1256
Hexachlorocyclopentadiene	ND	120	38		1	32	2.6	16-96	40	08/15/2016 1256
Hexachloroethane	ND	24	13		1	56	11	31-110	40	08/15/2016 1256

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: RH09011-003MD
Batch: 19550
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/10/2016 1741

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Indeno(1,2,3-c,d)pyrene	ND	24	13		1	56	28	48-126	40	08/15/2016 1256
Isophorone	ND	24	16		1	68	6.6	57-123	40	08/15/2016 1256
2-Methylnaphthalene	ND	24	15		1	63	0.85	57-115	40	08/15/2016 1256
2-Methylphenol	ND	24	19		1	81	6.0	56-119	40	08/15/2016 1256
3+4-Methylphenol	ND	24	15		1	63	21	53-119	40	08/15/2016 1256
Naphthalene	ND	24	15		1	61	2.5	52-109	40	08/15/2016 1256
2-Nitroaniline	ND	24	15		1	65	8.2	60-124	40	08/15/2016 1256
3-Nitroaniline	ND	24	14		1	61	5.6	43-123	40	08/15/2016 1256
4-Nitroaniline	ND	24	16		1	66	4.5	60-135	40	08/15/2016 1256
Nitrobenzene	ND	24	18		1	74	1.1	51-122	40	08/15/2016 1256
2-Nitrophenol	ND	24	15		1	65	2.2	51-118	40	08/15/2016 1256
4-Nitrophenol	ND	48	42		1	88	5.2	53-130	40	08/15/2016 1256
N-Nitrosodi-n-propylamine	ND	24	20		1	84	6.2	54-127	40	08/15/2016 1256
N-Nitrosodiphenylamine (Diphenylamine)	ND	24	14		1	57	14	35-146	40	08/15/2016 1256
Pentachlorophenol	ND	48	33		1	70	8.2	42-131	40	08/15/2016 1256
Phenanthrene	ND	24	15		1	64	9.1	56-119	40	08/15/2016 1256
Phenol	ND	24	15		1	61	3.1	49-117	40	08/15/2016 1256
Pyrene	ND	24	17		1	70	12	55-127	40	08/15/2016 1256
2,4,5-Trichlorophenol	ND	24	15		1	65	3.7	56-118	40	08/15/2016 1256
2,4,6-Trichlorophenol	ND	24	14		1	59	7.0	55-121	40	08/15/2016 1256

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		56	37-129
2-Fluorophenol		55	24-127
Nitrobenzene-d5		69	38-127
Phenol-d5		58	28-128
Terphenyl-d14		52	10-148
2,4,6-Tribromophenol		60	41-144

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19753-001
Batch: 19753
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/12/2016 1533

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	1.0	0.21	ug/L	08/15/2016 1027
2,4,5-Trichlorophenol	ND		1	1.0	0.19	ug/L	08/15/2016 1027
2,4,6-Trichlorophenol	ND		1	1.0	0.22	ug/L	08/15/2016 1027
2,4-Dichlorophenol	ND		1	1.0	0.19	ug/L	08/15/2016 1027
2,4-Dimethylphenol	ND		1	1.0	0.15	ug/L	08/15/2016 1027
2,4-Dinitrophenol	ND		1	5.0	1.3	ug/L	08/15/2016 1027
2,4-Dinitrotoluene	ND		1	2.0	0.36	ug/L	08/15/2016 1027
2,6-Dinitrotoluene	ND		1	2.0	0.34	ug/L	08/15/2016 1027
2-Chloronaphthalene	ND		1	1.0	0.15	ug/L	08/15/2016 1027
2-Chlorophenol	ND		1	1.0	0.15	ug/L	08/15/2016 1027
2-Methylnaphthalene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
2-Methylphenol	ND		1	1.0	0.21	ug/L	08/15/2016 1027
2-Nitroaniline	ND		1	2.0	0.66	ug/L	08/15/2016 1027
2-Nitrophenol	ND		1	2.0	0.44	ug/L	08/15/2016 1027
3+4-Methylphenol	ND		1	2.0	0.46	ug/L	08/15/2016 1027
3,3'-Dichlorobenzidine	ND		1	5.0	0.81	ug/L	08/15/2016 1027
3-Nitroaniline	ND		1	2.0	0.15	ug/L	08/15/2016 1027
4,6-Dinitro-2-methylphenol	ND		1	5.0	0.89	ug/L	08/15/2016 1027
4-Bromophenyl phenyl ether	ND		1	1.0	0.15	ug/L	08/15/2016 1027
4-Chloro-3-methyl phenol	ND		1	1.0	0.26	ug/L	08/15/2016 1027
4-Chloroaniline	ND		1	1.0	0.13	ug/L	08/15/2016 1027
4-Chlorophenyl phenyl ether	ND		1	1.0	0.16	ug/L	08/15/2016 1027
4-Nitroaniline	ND		1	2.0	1.3	ug/L	08/15/2016 1027
4-Nitrophenol	ND		1	5.0	2.1	ug/L	08/15/2016 1027
Acenaphthene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Acenaphthylene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Acetophenone	ND		1	1.0	0.23	ug/L	08/15/2016 1027
Anthracene	ND		1	1.0	0.060	ug/L	08/15/2016 1027
Atrazine	ND		1	1.0	0.20	ug/L	08/15/2016 1027
Benzaldehyde	ND		1	5.0	0.27	ug/L	08/15/2016 1027
Benzo(a)anthracene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Benzo(a)pyrene	ND		1	1.0	0.070	ug/L	08/15/2016 1027
Benzo(b)fluoranthene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Benzo(g,h,i)perylene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Benzo(k)fluoranthene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
bis (2-Chloro-1-methylethyl) ether	ND		1	1.0	0.17	ug/L	08/15/2016 1027
bis(2-Chloroethoxy)methane	ND		1	1.0	0.060	ug/L	08/15/2016 1027
bis(2-Chloroethyl)ether	ND		1	1.0	0.16	ug/L	08/15/2016 1027
bis(2-Ethylhexyl)phthalate	ND		1	5.0	0.38	ug/L	08/15/2016 1027
Butyl benzyl phthalate	ND		1	5.0	0.21	ug/L	08/15/2016 1027
Caprolactam	ND		1	5.0	0.71	ug/L	08/15/2016 1027
Carbazole	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Chrysene	ND		1	1.0	0.030	ug/L	08/15/2016 1027
Di-n-butyl phthalate	ND		1	5.0	0.42	ug/L	08/15/2016 1027

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19753-001
Batch: 19753
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/12/2016 1533

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	5.0	0.48	ug/L	08/15/2016 1027
Dibenzo(a,h)anthracene	ND		1	1.0	0.030	ug/L	08/15/2016 1027
Dibenzofuran	ND		1	1.0	0.16	ug/L	08/15/2016 1027
Diethylphthalate	ND		1	5.0	0.19	ug/L	08/15/2016 1027
Dimethyl phthalate	ND		1	5.0	0.18	ug/L	08/15/2016 1027
Fluoranthene	ND		1	1.0	0.21	ug/L	08/15/2016 1027
Fluorene	ND		1	1.0	0.030	ug/L	08/15/2016 1027
Hexachlorobenzene	ND		1	1.0	0.15	ug/L	08/15/2016 1027
Hexachlorocyclopentadiene	ND		1	5.0	1.1	ug/L	08/15/2016 1027
Hexachloroethane	ND		1	1.0	0.17	ug/L	08/15/2016 1027
Indeno(1,2,3-c,d)pyrene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Isophorone	ND		1	1.0	0.22	ug/L	08/15/2016 1027
N-Nitrosodi-n-propylamine	ND		1	1.0	0.28	ug/L	08/15/2016 1027
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	1.0	0.84	ug/L	08/15/2016 1027
Naphthalene	ND		1	1.0	0.050	ug/L	08/15/2016 1027
Nitrobenzene	ND		1	1.0	0.17	ug/L	08/15/2016 1027
Pentachlorophenol	ND		1	5.0	1.3	ug/L	08/15/2016 1027
Phenanthrene	ND		1	1.0	0.060	ug/L	08/15/2016 1027
Phenol	ND		1	1.0	0.19	ug/L	08/15/2016 1027
Pyrene	ND		1	1.0	0.16	ug/L	08/15/2016 1027

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		52	41-144
2-Fluorobiphenyl		57	37-129
2-Fluorophenol		52	24-127
Nitrobenzene-d5		62	38-127
Phenol-d5		57	28-128
Terphenyl-d14		70	10-148

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19753-002
Batch: 19753
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/12/2016 1533

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	10	6.1		1	61	42-120	08/15/2016 1410
2,4,5-Trichlorophenol	10	6.6		1	66	56-118	08/15/2016 1410
2,4,6-Trichlorophenol	10	5.9		1	59	55-121	08/15/2016 1410
2,4-Dichlorophenol	20	12		1	62	55-117	08/15/2016 1410
2,4-Dimethylphenol	10	5.6		1	56	36-170	08/15/2016 1410
2,4-Dinitrophenol	10	4.7		1	47	47-133	08/15/2016 1410
2,4-Dinitrotoluene	10	7.5		1	75	59-127	08/15/2016 1410
2,6-Dinitrotoluene	10	6.9		1	69	59-126	08/15/2016 1410
2-Chloronaphthalene	10	5.9		1	59	46-100	08/15/2016 1410
2-Chlorophenol	10	6.6		1	66	50-117	08/15/2016 1410
2-Methylnaphthalene	10	6.1		1	61	57-115	08/15/2016 1410
2-Methylphenol	10	8.4		1	84	56-119	08/15/2016 1410
2-Nitroaniline	10	7.2		1	72	60-124	08/15/2016 1410
2-Nitrophenol	10	6.7		1	67	51-118	08/15/2016 1410
3+4-Methylphenol	10	7.6		1	76	53-119	08/15/2016 1410
3-Nitroaniline	10	6.9		1	69	43-123	08/15/2016 1410
4,6-Dinitro-2-methylphenol	10	7.1		1	71	56-128	08/15/2016 1410
4-Bromophenyl phenyl ether	10	6.6		1	66	55-121	08/15/2016 1410
4-Chloro-3-methyl phenol	10	7.4		1	74	58-125	08/15/2016 1410
4-Chloroaniline	10	9.1		1	91	10-128	08/15/2016 1410
4-Chlorophenyl phenyl ether	10	6.0		1	60	55-121	08/15/2016 1410
4-Nitroaniline	10	7.0		1	70	60-135	08/15/2016 1410
4-Nitrophenol	20	17		1	84	53-130	08/15/2016 1410
Acenaphthene	10	6.5		1	65	54-118	08/15/2016 1410
Acenaphthylene	10	6.8		1	68	48-155	08/15/2016 1410
Acetophenone	10	7.4		1	74	52-125	08/15/2016 1410
Anthracene	10	7.2		1	72	55-122	08/15/2016 1410
Atrazine	10	7.4		1	74	25-121	08/15/2016 1410
Benzaldehyde	10	8.4		1	84	45-115	08/15/2016 1410
Benzo(a)anthracene	10	7.1		1	71	56-123	08/15/2016 1410
Benzo(a)pyrene	10	6.5		1	65	54-124	08/15/2016 1410
Benzo(b)fluoranthene	10	6.9		1	69	55-136	08/15/2016 1410
Benzo(g,h,i)perylene	10	7.6		1	76	42-129	08/15/2016 1410
Benzo(k)fluoranthene	10	7.0		1	70	53-132	08/15/2016 1410
bis (2-Chloro-1-methylethyl) ether	10	7.5		1	75	42-124	08/15/2016 1410
bis(2-Chloroethoxy)methane	10	7.6		1	76	44-127	08/15/2016 1410
bis(2-Chloroethyl)ether	10	7.5		1	75	46-120	08/15/2016 1410
bis(2-Ethylhexyl)phthalate	10	5.8		1	58	56-128	08/15/2016 1410
Butyl benzyl phthalate	10	8.3		1	83	54-135	08/15/2016 1410
Caprolactam	10	8.2		1	82	44-152	08/15/2016 1410
Carbazole	10	7.1		1	71	45-101	08/15/2016 1410
Chrysene	10	7.2		1	72	54-120	08/15/2016 1410
Di-n-butyl phthalate	10	8.2		1	82	60-131	08/15/2016 1410
Di-n-octylphthalate	10	5.3		1	53	50-136	08/15/2016 1410

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19753-002
Batch: 19753
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/12/2016 1533

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Dibenzo(a,h)anthracene	10	4.7	N	1	47	50-127	08/15/2016 1410
Dibenzofuran	10	6.3		1	63	58-118	08/15/2016 1410
Diethylphthalate	10	7.4		1	74	60-125	08/15/2016 1410
Dimethyl phthalate	10	6.9		1	69	60-122	08/15/2016 1410
Fluoranthene	10	6.9		1	69	58-124	08/15/2016 1410
Fluorene	10	6.4		1	64	57-119	08/15/2016 1410
Hexachlorobenzene	10	6.9		1	69	55-118	08/15/2016 1410
Hexachlorocyclopentadiene	50	13		1	27	16-96	08/15/2016 1410
Hexachloroethane	10	5.7		1	57	31-110	08/15/2016 1410
Indeno(1,2,3-c,d)pyrene	10	6.8		1	68	48-126	08/15/2016 1410
Isophorone	10	7.6		1	76	57-123	08/15/2016 1410
N-Nitrosodi-n-propylamine	10	9.0		1	90	54-127	08/15/2016 1410
N-Nitrosodiphenylamine (Diphenylamine)	10	6.8		1	68	35-146	08/15/2016 1410
Naphthalene	10	6.1		1	61	52-109	08/15/2016 1410
Nitrobenzene	10	7.5		1	75	51-122	08/15/2016 1410
Pentachlorophenol	20	14		1	71	42-131	08/15/2016 1410
Phenanthrene	10	6.8		1	68	56-119	08/15/2016 1410
Phenol	10	6.6		1	66	49-117	08/15/2016 1410
Pyrene	10	7.5		1	75	55-127	08/15/2016 1410

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		63	41-144
2-Fluorobiphenyl		60	37-129
2-Fluorophenol		57	24-127
Nitrobenzene-d5		73	38-127
Phenol-d5		63	28-128
Terphenyl-d14		67	10-148

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MB

Sample ID: RQ19846-001
Batch: 19846
Analytical Method: 6020A

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 08/15/2016 1302

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	**0.19**	**J**	**1**	**1.0**	**0.17**	**ug/L**	**08/18/2016 1801**
Arsenic	ND		1	1.0	0.26	ug/L	08/18/2016 1801
Beryllium	ND		1	0.40	0.12	ug/L	08/18/2016 1801
Cadmium	ND		1	0.10	0.044	ug/L	08/18/2016 1801
Chromium	ND		1	5.0	0.63	ug/L	08/18/2016 1801
Copper	**0.19**	**J**	**1**	**1.0**	**0.15**	**ug/L**	**08/18/2016 1801**
Iron	**8.8**	**J**	**1**	**20**	**6.3**	**ug/L**	**08/18/2016 1801**
Lead	**0.88**	**J**	**1**	**1.0**	**0.15**	**ug/L**	**08/18/2016 1801**
Manganese	**0.83**	**J**	**1**	**5.0**	**0.54**	**ug/L**	**08/18/2016 1801**
Nickel	ND		1	5.0	0.63	ug/L	08/18/2016 1801
Selenium	ND		1	1.0	0.95	ug/L	08/18/2016 1801
Silver	ND		1	1.0	0.17	ug/L	08/18/2016 1801
Thallium	ND		1	0.50	0.075	ug/L	08/18/2016 1801
Zinc	**2.0**	**J**	**1**	**10**	**1.6**	**ug/L**	**08/18/2016 1801**

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - LCS

Sample ID: RQ19846-002
Batch: 19846
Analytical Method: 6020A

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 08/15/2016 1302

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	100	100		1	102	80-120	08/18/2016 1807
Arsenic	100	110		1	108	80-120	08/18/2016 1807
Beryllium	100	110		1	110	80-120	08/18/2016 1807
Cadmium	100	100		1	103	80-120	08/18/2016 1807
Chromium	100	100		1	105	80-120	08/18/2016 1807
Copper	100	100		1	105	80-120	08/18/2016 1807
Iron	1000	1100		1	111	80-120	08/18/2016 1807
Lead	100	100		1	105	80-120	08/18/2016 1807
Manganese	100	110		1	106	80-120	08/18/2016 1807
Nickel	100	100		1	104	80-120	08/18/2016 1807
Selenium	100	110		1	114	80-120	08/18/2016 1807
Silver	100	110		1	107	80-120	08/18/2016 1807
Thallium	100	110		1	105	80-120	08/18/2016 1807
Zinc	100	110		1	111	80-120	08/18/2016 1807

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MB

Sample ID: RQ19804-001
Batch: 19804
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 08/15/2016 1730

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	**0.000093**	**J**	**1**	**0.00010**	**0.000028**	**mg/L**	**08/16/2016 1516**

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - LCS

Sample ID: RQ19804-002
Batch: 19804
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 08/15/2016 1730

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.0020	0.0019		1	97	80-120	08/16/2016 1518

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MS

Sample ID: RH09011-001MS
Batch: 19804
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 08/15/2016 1730

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.000040	0.0020	0.0019		1	94	85-115	08/16/2016 1524

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MSD

Sample ID: RH09011-001MD
Batch: 19804
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 08/15/2016 1730

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.000040	0.0020	0.0019		1	93	1.6	85-115	20	08/16/2016 1526

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Chain of Custody
and
Miscellaneous Documents

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63413

RH09011

Client	CDM Smith
Address	5400 Glenwood Ave Suite 400
City / State / Zip Code	Raleigh / NC / 27604
Project Name	Bud Holdings
Project No.	SW
P.O. No.	
Report to Contact	Dan Forbes
Sampler's Signature	x Janelle Bauer
Printed Name	Janelle Bauer
Telephone No. / E-mail	919-325-3500
Quote No.	

Analysis (Attach list if more space is needed)

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab (G) / Composite (C)	Aqueous	Solid	Non-Aqueous	Unpres.	HNO3	H2SO4	HCl	NaOH	ZnAc/NaOH	VOCs	VOCs 1,4-D	SVOCs	Metals	NO3	SO4	Ammonia	Remarks / Cooler I.D.
SW-2	8-8-16	1735	G	x									x	x	x	x	x	x	x	
SW-3	8-8-16	0835	G	x									x	x	x	x	x	x	x	
DUP-1	8-8-16	0800	G	x									x	x	x	x	x	x	x	
Trip Blank				x									x							

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☐ Standard ☒ Rush (Specify) 5 days

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

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

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Janelle Bauer	8-8-16	1830	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FEDEX	8-9-16	0930	4. Laboratory received by	8-9-16	0930

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Circle): Yes No Ice Pack — Receipt Temp. 4.6 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: CDM Smith Cooler Inspected by/date: EW 8/9/16 Lot #: R H0901

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Other

Yes ☑	No ☐		1. Were custody seals present on the cooler?
Yes ☑	No ☐	NA ☐	2. If custody seals were present, were they intact and unbroken?

pH strip ID: 16-946 Cl strip ID: 16-800

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:
4.6 4.6 °C / / °C / / °C / / °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☑	No ☐	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☐	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
EW 8/9/16 Yes ☑	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☑	No ☐	NA ☐	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☑	No ☐		22. Was the quote number used taken from the container label? 14101

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be > 2 by _____ Date: _____
Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR#

Sample labels applied by: EW Verified by: _____ Date: 8/9/16

Comments: _____

Report of Analysis

CDM Smith
5400 Glenwood Avenue
Suite 400
Raleigh, NC 27612
Attention: Dan Forbes

Project Name: Bud Holding

Project Number: SW

Lot Number: RH10006

Date Completed: 08/19/2016

Nisreen Saikaly
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
CDM Smith
Lot Number: RH10006

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Semivolatile Organic Compounds

The LCS associated with samples -001 and -002 fails low for Bis(2-ethylhexyl)phthalate, Di-n-octylphthalate, Dibenzo(a,h)anthracene and Indeno(1,2,3-c,d)pyrene. Samples -001 and -002 are re-extracted. The re-extracts analyzed within hold and LCS passed for these analytes except for Dibenzo(a,h)anthracene which marginally failed at 47% recovery.

Sample Summary
CDM Smith
Lot Number: RH10006

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SW-1	Aqueous	08/09/2016 1730	08/10/2016
002	RINSATE BLANK	Aqueous	08/09/2016 1550	08/10/2016

(2 samples)

Executive Summary

CDM Smith

Lot Number: RH10006

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SW-1	Aqueous	Nitrate - N	300.0	0.29		mg/L	5
001	SW-1	Aqueous	Sulfate	300.0	0.89	J	mg/L	5
001	SW-1	Aqueous	Acetone	8260B	2.2	J	ug/L	7
001	SW-1	Aqueous	Antimony	6020A	0.35	BJ	ug/L	13
001	SW-1	Aqueous	Copper	6020A	1.9	B	ug/L	13
001	SW-1	Aqueous	Iron	6020A	500	B	ug/L	13
001	SW-1	Aqueous	Lead	6020A	0.32	BJ	ug/L	13
001	SW-1	Aqueous	Manganese	6020A	31	B	ug/L	13
001	SW-1	Aqueous	Zinc	6020A	5.0	BJ	ug/L	13
001	SW-1	Aqueous	Mercury	7470A	0.000060	BJ	mg/L	14
002	RINSATE BLANK	Aqueous	Nitrate - N	300.0	5.4		mg/L	15
002	RINSATE BLANK	Aqueous	Acetone	8260B	5.2	J	ug/L	17
002	RINSATE BLANK	Aqueous	2-Butanone (MEK)	8260B	2.2	J	ug/L	17
002	RINSATE BLANK	Aqueous	Unknown	8270D	2.3		ug/L	20
002	RINSATE BLANK	Aqueous	Diethyltoluamide	8270D	4.5		ug/L	20
002	RINSATE BLANK	Aqueous	Benzophenone	8270D	7.0		ug/L	20
002	RINSATE BLANK	Aqueous	Copper	6020A	0.51	BJ	ug/L	23
002	RINSATE BLANK	Aqueous	Manganese	6020A	0.73	BJ	ug/L	23
002	RINSATE BLANK	Aqueous	Zinc	6020A	2.1	BJ	ug/L	23
002	RINSATE BLANK	Aqueous	Mercury	7470A	0.000043	BJ	mg/L	24

(20 detections)

Inorganic non-metals

Client: CDM Smith
Laboratory ID: RH10006-001
Description: SW-1
Matrix: Aqueous
Date Sampled: 08/09/2016 1730
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/16/2016 1745	MJI		19964
1		(Nitrate - N) 300.0	1	08/10/2016 1438	TAF		19781
2		(Sulfate) 300.0	1	08/15/2016 1757	TAF		19975

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		0.10	0.050	mg/L	1
Nitrate - N		300.0	0.29		0.020	0.0025	mg/L	1
Sulfate		300.0	0.89	J	1.0	0.28	mg/L	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: CDM Smith
Laboratory ID: RH10006-001
Description: SW-1
Matrix: Aqueous
Date Sampled: 08/09/2016 1730
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/10/2016 1625	SES		19506

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		116	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH10006-001
Description: SW-1
Matrix: Aqueous
Date Sampled: 08/09/2016 1730
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/11/2016 0050	ECP		19579

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	2.2	J	10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH10006-001
Description: SW-1
Matrix: Aqueous
Date Sampled: 08/09/2016 1730
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/11/2016 0050	ECP		19579

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH10006-001
Description: SW-1
Matrix: Aqueous
Date Sampled: 08/09/2016 1730
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				19580

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH10006-001
Description: SW-1
Matrix: Aqueous
Date Sampled: 08/09/2016 1730
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1				19706

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8270D					ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH10006-001
Description: SW-1
Matrix: Aqueous
Date Sampled: 08/09/2016 1730
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1321	JCG	08/10/2016 1741	19550
2	3520C	8270D	1	08/15/2016 1525	RBH	08/12/2016 1533	19753

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.1	0.045	ug/L	2
Acenaphthylene	208-96-8	8270D	ND		1.1	0.045	ug/L	2
Acetophenone	98-86-2	8270D	ND		1.1	0.26	ug/L	2
Anthracene	120-12-7	8270D	ND		1.1	0.067	ug/L	2
Atrazine	1912-24-9	8270D	ND		1.1	0.22	ug/L	2
Benzaldehyde	100-52-7	8270D	ND		5.6	0.30	ug/L	2
Benzo(a)anthracene	56-55-3	8270D	ND		1.1	0.045	ug/L	2
Benzo(a)pyrene	50-32-8	8270D	ND		1.1	0.079	ug/L	2
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.1	0.045	ug/L	2
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.1	0.045	ug/L	2
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.1	0.045	ug/L	2
1,1'-Biphenyl	92-52-4	8270D	ND		1.1	0.24	ug/L	2
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.1	0.17	ug/L	2
Butyl benzyl phthalate	85-68-7	8270D	ND		5.6	0.24	ug/L	2
Caprolactam	105-60-2	8270D	ND		5.6	0.80	ug/L	2
Carbazole	86-74-8	8270D	ND		1.1	0.045	ug/L	2
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.1	0.29	ug/L	2
4-Chloroaniline	106-47-8	8270D	ND		1.1	0.15	ug/L	2
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.1	0.067	ug/L	2
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.1	0.18	ug/L	2
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.1	0.19	ug/L	2
2-Chloronaphthalene	91-58-7	8270D	ND		1.1	0.17	ug/L	2
2-Chlorophenol	95-57-8	8270D	ND		1.1	0.17	ug/L	2
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.1	0.18	ug/L	2
Chrysene	218-01-9	8270D	ND		1.1	0.034	ug/L	2
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.1	0.034	ug/L	2
Dibenzofuran	132-64-9	8270D	ND		1.1	0.18	ug/L	2
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		5.6	0.91	ug/L	2
2,4-Dichlorophenol	120-83-2	8270D	ND		1.1	0.21	ug/L	2
Diethylphthalate	84-66-2	8270D	ND		5.6	0.21	ug/L	2
Dimethyl phthalate	131-11-3	8270D	ND		5.6	0.20	ug/L	2
2,4-Dimethylphenol	105-67-9	8270D	ND		1.1	0.17	ug/L	2
Di-n-butyl phthalate	84-74-2	8270D	ND		5.6	0.47	ug/L	2
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		5.6	1.0	ug/L	2
2,4-Dinitrophenol	51-28-5	8270D	ND		5.6	1.5	ug/L	2
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.2	0.40	ug/L	2
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.2	0.38	ug/L	2
Di-n-octylphthalate	117-84-0	8270D	ND		5.6	0.54	ug/L	2
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		5.6	0.43	ug/L	2
Fluoranthene	206-44-0	8270D	ND		1.1	0.24	ug/L	2
Fluorene	86-73-7	8270D	ND		1.1	0.034	ug/L	2
Hexachlorobenzene	118-74-1	8270D	ND		1.1	0.17	ug/L	2
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH10006-001
Description: SW-1
Matrix: Aqueous
Date Sampled: 08/09/2016 1730
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1321	JCG	08/10/2016 1741	19550
2	3520C	8270D	1	08/15/2016 1525	RBH	08/12/2016 1533	19753

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270D	ND		5.6	1.2	ug/L	2
Hexachloroethane	67-72-1	8270D	ND		1.1	0.19	ug/L	2
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.1	0.045	ug/L	2
Isophorone	78-59-1	8270D	ND		1.1	0.25	ug/L	2
2-Methylnaphthalene	91-57-6	8270D	ND		1.1	0.045	ug/L	2
2-Methylphenol	95-48-7	8270D	ND		1.1	0.24	ug/L	2
3+4-Methylphenol	106-44-5	8270D	ND		2.2	0.52	ug/L	2
Naphthalene	91-20-3	8270D	ND		1.1	0.056	ug/L	2
2-Nitroaniline	88-74-4	8270D	ND		2.2	0.74	ug/L	2
3-Nitroaniline	99-09-2	8270D	ND		2.2	0.17	ug/L	2
4-Nitroaniline	100-01-6	8270D	ND		2.2	1.5	ug/L	2
Nitrobenzene	98-95-3	8270D	ND		1.1	0.19	ug/L	2
2-Nitrophenol	88-75-5	8270D	ND		2.2	0.49	ug/L	2
4-Nitrophenol	100-02-7	8270D	ND		5.6	2.3	ug/L	2
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.1	0.31	ug/L	2
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.1	0.94	ug/L	2
Pentachlorophenol	87-86-5	8270D	ND		5.6	1.5	ug/L	2
Phenanthrene	85-01-8	8270D	ND		1.1	0.067	ug/L	2
Phenol	108-95-2	8270D	ND		1.1	0.21	ug/L	2
Pyrene	129-00-0	8270D	ND		1.1	0.18	ug/L	2
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.1	0.21	ug/L	2
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.1	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
2-Fluorobiphenyl		56	37-129		49	37-129
2-Fluorophenol		47	24-127		46	24-127
Nitrobenzene-d5		59	38-127		55	38-127
Phenol-d5		51	28-128		47	28-128
Terphenyl-d14		52	10-148		49	10-148
2,4,6-Tribromophenol		57	41-144		54	41-144

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith
Description: SW-1
Date Sampled: 08/09/2016 1730
Date Received: 08/10/2016

Laboratory ID: RH10006-001
Matrix: Aqueous

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1829	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.35	BJ	1.0	0.17	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	ND		5.0	0.63	ug/L	1
Copper	7440-50-8	6020A	1.9	B	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	500	B	20	6.3	ug/L	1
Lead	7439-92-1	6020A	0.32	BJ	1.0	0.15	ug/L	1
Manganese	7439-96-5	6020A	31	B	5.0	0.54	ug/L	1
Nickel	7440-02-0	6020A	ND		5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	7440-66-6	6020A	5.0	BJ	10	1.6	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith
Laboratory ID: RH10006-001
Description: SW-1
Matrix: Aqueous
Date Sampled: 08/09/2016 1730
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/16/2016 1540	CLM	08/15/2016 1730	19804

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	0.000060	BJ	0.00010	0.000028	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith
Laboratory ID: RH10006-002
Description: RINSATE BLANK
Matrix: Aqueous
Date Sampled: 08/09/2016 1550
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/16/2016 1747	MJI		19964
1		(Nitrate - N) 300.0	1	08/10/2016 1550	TAF		19781
2		(Sulfate) 300.0	1	08/15/2016 1909	TAF		19975

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		0.10	0.050	mg/L	1
Nitrate - N		300.0	5.4		0.020	0.0025	mg/L	1
Sulfate		300.0	ND		1.0	0.28	mg/L	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: CDM Smith
Laboratory ID: RH10006-002
Description: RINSATE BLANK
Matrix: Aqueous
Date Sampled: 08/09/2016 1550
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/10/2016 1246	SES		19506

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH10006-002
Description: RINSATE BLANK
Matrix: Aqueous
Date Sampled: 08/09/2016 1550
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/10/2016 2234	ECP		19579

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	5.2	J	10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	2.2	J	10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH10006-002
Description: RINSATE BLANK
Matrix: Aqueous
Date Sampled: 08/09/2016 1550
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/10/2016 2234	ECP		19579

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		103	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH10006-002
Description: RINSATE BLANK
Matrix: Aqueous
Date Sampled: 08/09/2016 1550
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				19580

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH10006-002
Description: RINSATE BLANK
Matrix: Aqueous
Date Sampled: 08/09/2016 1550
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1345	JCG		19706

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	2.3				ug/L	1
Diethyltoluamide		8270D	4.5				ug/L	1
Benzophenone		8270D	7.0				ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH10006-002
Description: RINSATE BLANK
Matrix: Aqueous
Date Sampled: 08/09/2016 1550
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1345	JCG	08/10/2016 1741	19550
2	3520C	8270D	1	08/15/2016 1549	RBH	08/12/2016 1533	19753

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.1	0.045	ug/L	2
Acenaphthylene	208-96-8	8270D	ND		1.1	0.045	ug/L	2
Acetophenone	98-86-2	8270D	ND		1.1	0.26	ug/L	2
Anthracene	120-12-7	8270D	ND		1.1	0.068	ug/L	2
Atrazine	1912-24-9	8270D	ND		1.1	0.23	ug/L	2
Benzaldehyde	100-52-7	8270D	ND		5.7	0.31	ug/L	2
Benzo(a)anthracene	56-55-3	8270D	ND		1.1	0.045	ug/L	2
Benzo(a)pyrene	50-32-8	8270D	ND		1.1	0.080	ug/L	2
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.1	0.045	ug/L	2
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.1	0.045	ug/L	2
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.1	0.045	ug/L	2
1,1'-Biphenyl	92-52-4	8270D	ND		1.1	0.24	ug/L	2
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.1	0.17	ug/L	2
Butyl benzyl phthalate	85-68-7	8270D	ND		5.7	0.24	ug/L	2
Caprolactam	105-60-2	8270D	ND		5.7	0.81	ug/L	2
Carbazole	86-74-8	8270D	ND		1.1	0.045	ug/L	2
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.1	0.30	ug/L	2
4-Chloroaniline	106-47-8	8270D	ND		1.1	0.15	ug/L	2
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.1	0.068	ug/L	2
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.1	0.18	ug/L	2
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.1	0.19	ug/L	2
2-Chloronaphthalene	91-58-7	8270D	ND		1.1	0.17	ug/L	2
2-Chlorophenol	95-57-8	8270D	ND		1.1	0.17	ug/L	2
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.1	0.18	ug/L	2
Chrysene	218-01-9	8270D	ND		1.1	0.034	ug/L	2
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.1	0.034	ug/L	2
Dibenzofuran	132-64-9	8270D	ND		1.1	0.18	ug/L	2
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		5.7	0.92	ug/L	2
2,4-Dichlorophenol	120-83-2	8270D	ND		1.1	0.22	ug/L	2
Diethylphthalate	84-66-2	8270D	ND		5.7	0.22	ug/L	2
Dimethyl phthalate	131-11-3	8270D	ND		5.7	0.20	ug/L	2
2,4-Dimethylphenol	105-67-9	8270D	ND		1.1	0.17	ug/L	2
Di-n-butyl phthalate	84-74-2	8270D	ND		5.7	0.48	ug/L	2
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		5.7	1.0	ug/L	2
2,4-Dinitrophenol	51-28-5	8270D	ND		5.7	1.5	ug/L	2
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.3	0.41	ug/L	2
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.3	0.39	ug/L	2
Di-n-octylphthalate	117-84-0	8270D	ND		5.7	0.55	ug/L	2
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		5.7	0.43	ug/L	2
Fluoranthene	206-44-0	8270D	ND		1.1	0.24	ug/L	2
Fluorene	86-73-7	8270D	ND		1.1	0.034	ug/L	2
Hexachlorobenzene	118-74-1	8270D	ND		1.1	0.17	ug/L	2
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH10006-002
Description: RINSATE BLANK
Matrix: Aqueous
Date Sampled: 08/09/2016 1550
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/15/2016 1345	JCG	08/10/2016 1741	19550
2	3520C	8270D	1	08/15/2016 1549	RBH	08/12/2016 1533	19753

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270D	ND		5.7	1.3	ug/L	2
Hexachloroethane	67-72-1	8270D	ND		1.1	0.19	ug/L	2
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.1	0.045	ug/L	2
Isophorone	78-59-1	8270D	ND		1.1	0.25	ug/L	2
2-Methylnaphthalene	91-57-6	8270D	ND		1.1	0.045	ug/L	2
2-Methylphenol	95-48-7	8270D	ND		1.1	0.24	ug/L	2
3+4-Methylphenol	106-44-5	8270D	ND		2.3	0.52	ug/L	2
Naphthalene	91-20-3	8270D	ND		1.1	0.057	ug/L	2
2-Nitroaniline	88-74-4	8270D	ND		2.3	0.75	ug/L	2
3-Nitroaniline	99-09-2	8270D	ND		2.3	0.17	ug/L	2
4-Nitroaniline	100-01-6	8270D	ND		2.3	1.5	ug/L	2
Nitrobenzene	98-95-3	8270D	ND		1.1	0.19	ug/L	2
2-Nitrophenol	88-75-5	8270D	ND		2.3	0.50	ug/L	2
4-Nitrophenol	100-02-7	8270D	ND		5.7	2.4	ug/L	2
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.1	0.32	ug/L	2
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.1	0.95	ug/L	2
Pentachlorophenol	87-86-5	8270D	ND		5.7	1.5	ug/L	2
Phenanthrene	85-01-8	8270D	ND		1.1	0.068	ug/L	2
Phenol	108-95-2	8270D	ND		1.1	0.22	ug/L	2
Pyrene	129-00-0	8270D	ND		1.1	0.18	ug/L	2
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.1	0.22	ug/L	2
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.1	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
2-Fluorobiphenyl		54	37-129		52	37-129
2-Fluorophenol		47	24-127		47	24-127
Nitrobenzene-d5		59	38-127		57	38-127
Phenol-d5		51	28-128		50	28-128
Terphenyl-d14		63	10-148		54	10-148
2,4,6-Tribromophenol		56	41-144		50	41-144

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith
Laboratory ID: RH10006-002
Description: RINSATE BLANK
Matrix: Aqueous
Date Sampled: 08/09/2016 1550
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1835	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		1.0	0.17	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	ND		5.0	0.63	ug/L	1
Copper	7440-50-8	6020A	0.51	BJ	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	ND		20	6.3	ug/L	1
Lead	7439-92-1	6020A	ND		1.0	0.15	ug/L	1
Manganese	7439-96-5	6020A	0.73	BJ	5.0	0.54	ug/L	1
Nickel	7440-02-0	6020A	ND		5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	7440-66-6	6020A	2.1	BJ	10	1.6	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith
Laboratory ID: RH10006-002
Description: RINSATE BLANK
Matrix: Aqueous
Date Sampled: 08/09/2016 1550
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/16/2016 1548	CLM	08/15/2016 1730	19804

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	0.000043	BJ	0.00010	0.000028	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ19781-001
Batch: 19781
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N	ND		1	0.020	0.0025	mg/L	08/10/2016 1349

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19781-002
Batch: 19781
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	0.80	0.81		1	101	90-110	08/10/2016 1414

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH10006-001MS
Batch: 19781
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	0.29	0.80	1.1		1	98	90-110	08/10/2016 1502

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH10006-001MD
Batch: 19781
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	0.29	0.80	1.1		1	99	0.63	90-110	20	08/10/2016 1526

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ19964-001
Batch: 19964
Analytical Method: 350.1

Matrix: Aqueous
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	ND		1	0.10	0.050	mg/L	08/16/2016 1713

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19964-002
Batch: 19964
Analytical Method: 350.1

Matrix: Aqueous
Prep Method: 350.1

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	1.0	0.96		1	96	90-110	08/16/2016 1715

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ19975-001
Batch: 19975
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.28	mg/L	08/15/2016 1621

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19975-002
Batch: 19975
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	102	90-110	08/15/2016 1645

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH10006-001MS
Batch: 19975
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	0.89	20	19		1	90	90-110	08/15/2016 1821

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH10006-001MD
Batch: 19975
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	0.89	20	20		1	94	4.2	90-110	20	08/15/2016 1845

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS (SIM with isotope dilution) - MB

Sample ID: RQ19506-001
Batch: 19506
Analytical Method: 8260B (SIM iso.)

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	3.0	0.85	ug/L	08/10/2016 1025

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		113	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS (SIM with isotope dilution) - LCS

Sample ID: RQ19506-002
Batch: 19506
Analytical Method: 8260B (SIM iso.)

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	50	49		1	98	70-130	08/10/2016 0948

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		114	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19579-001
Batch: 19579
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	10	2.0	ug/L	08/10/2016 2133
Benzene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Bromodichloromethane	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Bromoform	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Bromomethane (Methyl bromide)	ND		1	0.50	0.40	ug/L	08/10/2016 2133
2-Butanone (MEK)	ND		1	10	2.0	ug/L	08/10/2016 2133
Carbon disulfide	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Carbon tetrachloride	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Chlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Chloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Chloroform	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Chloromethane (Methyl chloride)	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Cyclohexane	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Dibromochloromethane	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,2-Dibromoethane (EDB)	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,4-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,2-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,3-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Dichlorodifluoromethane	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,2-Dichloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,1-Dichloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 2133
cis-1,2-Dichloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,1-Dichloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
trans-1,2-Dichloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,2-Dichloropropane	ND		1	0.50	0.40	ug/L	08/10/2016 2133
cis-1,3-Dichloropropene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
trans-1,3-Dichloropropene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Ethylbenzene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
2-Hexanone	ND		1	10	2.0	ug/L	08/10/2016 2133
Isopropylbenzene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Methyl acetate	ND		1	1.0	0.40	ug/L	08/10/2016 2133
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.40	ug/L	08/10/2016 2133
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	08/10/2016 2133
Methylcyclohexane	ND		1	5.0	0.40	ug/L	08/10/2016 2133
Methylene chloride	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Styrene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,1,2,2-Tetrachloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Tetrachloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Toluene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	0.40	ug/L	08/10/2016 2133
1,2,4-Trichlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,1,1-Trichloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 2133
1,1,2-Trichloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 2133

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19579-001
Batch: 19579
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Trichlorofluoromethane	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Vinyl chloride	ND		1	0.50	0.40	ug/L	08/10/2016 2133
Xylenes (total)	ND		1	1.0	0.40	ug/L	08/10/2016 2133

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19579-002
Batch: 19579
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	120		1	116	60-140	08/10/2016 1837
Benzene	50	49		1	98	70-130	08/10/2016 1837
Bromodichloromethane	50	52		1	103	70-130	08/10/2016 1837
Bromoform	50	41		1	82	70-130	08/10/2016 1837
Bromomethane (Methyl bromide)	50	47		1	95	60-140	08/10/2016 1837
2-Butanone (MEK)	100	120		1	120	60-140	08/10/2016 1837
Carbon disulfide	50	46		1	93	60-140	08/10/2016 1837
Carbon tetrachloride	50	47		1	94	70-130	08/10/2016 1837
Chlorobenzene	50	52		1	103	70-130	08/10/2016 1837
Chloroethane	50	46		1	93	60-140	08/10/2016 1837
Chloroform	50	49		1	98	70-130	08/10/2016 1837
Chloromethane (Methyl chloride)	50	48		1	95	50-130	08/10/2016 1837
Cyclohexane	50	49		1	99	70-130	08/10/2016 1837
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	93	70-130	08/10/2016 1837
Dibromochloromethane	50	54		1	108	70-130	08/10/2016 1837
1,2-Dibromoethane (EDB)	50	51		1	102	70-130	08/10/2016 1837
1,4-Dichlorobenzene	50	50		1	100	70-130	08/10/2016 1837
1,2-Dichlorobenzene	50	55		1	109	70-130	08/10/2016 1837
1,3-Dichlorobenzene	50	52		1	104	70-130	08/10/2016 1837
Dichlorodifluoromethane	50	60		1	120	60-140	08/10/2016 1837
1,2-Dichloroethane	50	49		1	98	70-130	08/10/2016 1837
1,1-Dichloroethane	50	52		1	103	70-130	08/10/2016 1837
cis-1,2-Dichloroethene	50	51		1	103	70-130	08/10/2016 1837
1,1-Dichloroethene	50	49		1	97	70-130	08/10/2016 1837
trans-1,2-Dichloroethene	50	51		1	102	70-130	08/10/2016 1837
1,2-Dichloropropane	50	51		1	101	70-130	08/10/2016 1837
cis-1,3-Dichloropropene	50	53		1	106	70-130	08/10/2016 1837
trans-1,3-Dichloropropene	50	50		1	100	70-130	08/10/2016 1837
Ethylbenzene	50	51		1	102	70-130	08/10/2016 1837
2-Hexanone	100	100		1	102	60-140	08/10/2016 1837
Isopropylbenzene	50	51		1	103	70-130	08/10/2016 1837
Methyl acetate	50	55		1	110	60-140	08/10/2016 1837
Methyl tertiary butyl ether (MTBE)	50	47		1	95	70-130	08/10/2016 1837
4-Methyl-2-pentanone	100	100		1	104	60-140	08/10/2016 1837
Methylcyclohexane	50	51		1	103	70-130	08/10/2016 1837
Methylene chloride	50	47		1	93	70-130	08/10/2016 1837
Styrene	50	51		1	102	70-130	08/10/2016 1837
1,1,2,2-Tetrachloroethane	50	54		1	108	70-130	08/10/2016 1837
Tetrachloroethene	50	52		1	104	70-130	08/10/2016 1837
Toluene	50	51		1	102	70-130	08/10/2016 1837
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	49		1	98	70-130	08/10/2016 1837
1,2,4-Trichlorobenzene	50	55		1	110	70-130	08/10/2016 1837
1,1,1-Trichloroethane	50	47		1	95	70-130	08/10/2016 1837
1,1,2-Trichloroethane	50	52		1	103	70-130	08/10/2016 1837

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19579-002
Batch: 19579
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	52		1	103	70-130	08/10/2016 1837
Trichlorofluoromethane	50	53		1	106	60-140	08/10/2016 1837
Vinyl chloride	50	47		1	94	60-140	08/10/2016 1837
Xylenes (total)	100	100		1	101	70-130	08/10/2016 1837

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19550-001
Batch: 19550
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/10/2016 1741

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Hexachlorobutadiene	ND		1	1.0	0.17	ug/L	08/12/2016 1032

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		55	41-144
2-Fluorobiphenyl		57	37-129
2-Fluorophenol		52	24-127
Nitrobenzene-d5		63	38-127
Phenol-d5		57	28-128
Terphenyl-d14		70	10-148

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19550-002
Batch: 19550
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/10/2016 1741

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachlorobutadiene	10	5.4		1	54	53-116	08/12/2016 1057

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		65	41-144
2-Fluorobiphenyl		64	37-129
2-Fluorophenol		55	24-127
Nitrobenzene-d5		74	38-127
Phenol-d5		58	28-128
Terphenyl-d14		58	10-148

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19753-001
Batch: 19753
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/12/2016 1533

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	1.0	0.21	ug/L	08/15/2016 1027
2,4,5-Trichlorophenol	ND		1	1.0	0.19	ug/L	08/15/2016 1027
2,4,6-Trichlorophenol	ND		1	1.0	0.22	ug/L	08/15/2016 1027
2,4-Dichlorophenol	ND		1	1.0	0.19	ug/L	08/15/2016 1027
2,4-Dimethylphenol	ND		1	1.0	0.15	ug/L	08/15/2016 1027
2,4-Dinitrophenol	ND		1	5.0	1.3	ug/L	08/15/2016 1027
2,4-Dinitrotoluene	ND		1	2.0	0.36	ug/L	08/15/2016 1027
2,6-Dinitrotoluene	ND		1	2.0	0.34	ug/L	08/15/2016 1027
2-Chloronaphthalene	ND		1	1.0	0.15	ug/L	08/15/2016 1027
2-Chlorophenol	ND		1	1.0	0.15	ug/L	08/15/2016 1027
2-Methylnaphthalene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
2-Methylphenol	ND		1	1.0	0.21	ug/L	08/15/2016 1027
2-Nitroaniline	ND		1	2.0	0.66	ug/L	08/15/2016 1027
2-Nitrophenol	ND		1	2.0	0.44	ug/L	08/15/2016 1027
3+4-Methylphenol	ND		1	2.0	0.46	ug/L	08/15/2016 1027
3,3'-Dichlorobenzidine	ND		1	5.0	0.81	ug/L	08/15/2016 1027
3-Nitroaniline	ND		1	2.0	0.15	ug/L	08/15/2016 1027
4,6-Dinitro-2-methylphenol	ND		1	5.0	0.89	ug/L	08/15/2016 1027
4-Bromophenyl phenyl ether	ND		1	1.0	0.15	ug/L	08/15/2016 1027
4-Chloro-3-methyl phenol	ND		1	1.0	0.26	ug/L	08/15/2016 1027
4-Chloroaniline	ND		1	1.0	0.13	ug/L	08/15/2016 1027
4-Chlorophenyl phenyl ether	ND		1	1.0	0.16	ug/L	08/15/2016 1027
4-Nitroaniline	ND		1	2.0	1.3	ug/L	08/15/2016 1027
4-Nitrophenol	ND		1	5.0	2.1	ug/L	08/15/2016 1027
Acenaphthene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Acenaphthylene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Acetophenone	ND		1	1.0	0.23	ug/L	08/15/2016 1027
Anthracene	ND		1	1.0	0.060	ug/L	08/15/2016 1027
Atrazine	ND		1	1.0	0.20	ug/L	08/15/2016 1027
Benzaldehyde	ND		1	5.0	0.27	ug/L	08/15/2016 1027
Benzo(a)anthracene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Benzo(a)pyrene	ND		1	1.0	0.070	ug/L	08/15/2016 1027
Benzo(b)fluoranthene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Benzo(g,h,i)perylene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Benzo(k)fluoranthene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
bis (2-Chloro-1-methylethyl) ether	ND		1	1.0	0.17	ug/L	08/15/2016 1027
bis(2-Chloroethoxy)methane	ND		1	1.0	0.060	ug/L	08/15/2016 1027
bis(2-Chloroethyl)ether	ND		1	1.0	0.16	ug/L	08/15/2016 1027
bis(2-Ethylhexyl)phthalate	ND		1	5.0	0.38	ug/L	08/15/2016 1027
Butyl benzyl phthalate	ND		1	5.0	0.21	ug/L	08/15/2016 1027
Caprolactam	ND		1	5.0	0.71	ug/L	08/15/2016 1027
Carbazole	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Chrysene	ND		1	1.0	0.030	ug/L	08/15/2016 1027
Di-n-butyl phthalate	ND		1	5.0	0.42	ug/L	08/15/2016 1027

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19753-001
Batch: 19753
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/12/2016 1533

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	5.0	0.48	ug/L	08/15/2016 1027
Dibenzo(a,h)anthracene	ND		1	1.0	0.030	ug/L	08/15/2016 1027
Dibenzofuran	ND		1	1.0	0.16	ug/L	08/15/2016 1027
Diethylphthalate	ND		1	5.0	0.19	ug/L	08/15/2016 1027
Dimethyl phthalate	ND		1	5.0	0.18	ug/L	08/15/2016 1027
Fluoranthene	ND		1	1.0	0.21	ug/L	08/15/2016 1027
Fluorene	ND		1	1.0	0.030	ug/L	08/15/2016 1027
Hexachlorobenzene	ND		1	1.0	0.15	ug/L	08/15/2016 1027
Hexachlorocyclopentadiene	ND		1	5.0	1.1	ug/L	08/15/2016 1027
Hexachloroethane	ND		1	1.0	0.17	ug/L	08/15/2016 1027
Indeno(1,2,3-c,d)pyrene	ND		1	1.0	0.040	ug/L	08/15/2016 1027
Isophorone	ND		1	1.0	0.22	ug/L	08/15/2016 1027
N-Nitrosodi-n-propylamine	ND		1	1.0	0.28	ug/L	08/15/2016 1027
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	1.0	0.84	ug/L	08/15/2016 1027
Naphthalene	ND		1	1.0	0.050	ug/L	08/15/2016 1027
Nitrobenzene	ND		1	1.0	0.17	ug/L	08/15/2016 1027
Pentachlorophenol	ND		1	5.0	1.3	ug/L	08/15/2016 1027
Phenanthrene	ND		1	1.0	0.060	ug/L	08/15/2016 1027
Phenol	ND		1	1.0	0.19	ug/L	08/15/2016 1027
Pyrene	ND		1	1.0	0.16	ug/L	08/15/2016 1027

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		52	41-144
2-Fluorobiphenyl		57	37-129
2-Fluorophenol		52	24-127
Nitrobenzene-d5		62	38-127
Phenol-d5		57	28-128
Terphenyl-d14		70	10-148

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19753-002
Batch: 19753
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/12/2016 1533

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	10	6.1		1	61	42-120	08/15/2016 1410
2,4,5-Trichlorophenol	10	6.6		1	66	56-118	08/15/2016 1410
2,4,6-Trichlorophenol	10	5.9		1	59	55-121	08/15/2016 1410
2,4-Dichlorophenol	20	12		1	62	55-117	08/15/2016 1410
2,4-Dimethylphenol	10	5.6		1	56	36-170	08/15/2016 1410
2,4-Dinitrophenol	10	4.7		1	47	47-133	08/15/2016 1410
2,4-Dinitrotoluene	10	7.5		1	75	59-127	08/15/2016 1410
2,6-Dinitrotoluene	10	6.9		1	69	59-126	08/15/2016 1410
2-Chloronaphthalene	10	5.9		1	59	46-100	08/15/2016 1410
2-Chlorophenol	10	6.6		1	66	50-117	08/15/2016 1410
2-Methylnaphthalene	10	6.1		1	61	57-115	08/15/2016 1410
2-Methylphenol	10	8.4		1	84	56-119	08/15/2016 1410
2-Nitroaniline	10	7.2		1	72	60-124	08/15/2016 1410
2-Nitrophenol	10	6.7		1	67	51-118	08/15/2016 1410
3+4-Methylphenol	10	7.6		1	76	53-119	08/15/2016 1410
3-Nitroaniline	10	6.9		1	69	43-123	08/15/2016 1410
4,6-Dinitro-2-methylphenol	10	7.1		1	71	56-128	08/15/2016 1410
4-Bromophenyl phenyl ether	10	6.6		1	66	55-121	08/15/2016 1410
4-Chloro-3-methyl phenol	10	7.4		1	74	58-125	08/15/2016 1410
4-Chloroaniline	10	9.1		1	91	10-128	08/15/2016 1410
4-Chlorophenyl phenyl ether	10	6.0		1	60	55-121	08/15/2016 1410
4-Nitroaniline	10	7.0		1	70	60-135	08/15/2016 1410
4-Nitrophenol	20	17		1	84	53-130	08/15/2016 1410
Acenaphthene	10	6.5		1	65	54-118	08/15/2016 1410
Acenaphthylene	10	6.8		1	68	48-155	08/15/2016 1410
Acetophenone	10	7.4		1	74	52-125	08/15/2016 1410
Anthracene	10	7.2		1	72	55-122	08/15/2016 1410
Atrazine	10	7.4		1	74	25-121	08/15/2016 1410
Benzaldehyde	10	8.4		1	84	45-115	08/15/2016 1410
Benzo(a)anthracene	10	7.1		1	71	56-123	08/15/2016 1410
Benzo(a)pyrene	10	6.5		1	65	54-124	08/15/2016 1410
Benzo(b)fluoranthene	10	6.9		1	69	55-136	08/15/2016 1410
Benzo(g,h,i)perylene	10	7.6		1	76	42-129	08/15/2016 1410
Benzo(k)fluoranthene	10	7.0		1	70	53-132	08/15/2016 1410
bis (2-Chloro-1-methylethyl) ether	10	7.5		1	75	42-124	08/15/2016 1410
bis(2-Chloroethoxy)methane	10	7.6		1	76	44-127	08/15/2016 1410
bis(2-Chloroethyl)ether	10	7.5		1	75	46-120	08/15/2016 1410
bis(2-Ethylhexyl)phthalate	10	5.8		1	58	56-128	08/15/2016 1410
Butyl benzyl phthalate	10	8.3		1	83	54-135	08/15/2016 1410
Caprolactam	10	8.2		1	82	44-152	08/15/2016 1410
Carbazole	10	7.1		1	71	45-101	08/15/2016 1410
Chrysene	10	7.2		1	72	54-120	08/15/2016 1410
Di-n-butyl phthalate	10	8.2		1	82	60-131	08/15/2016 1410
Di-n-octylphthalate	10	5.3		1	53	50-136	08/15/2016 1410

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19753-002
Batch: 19753
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/12/2016 1533

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Dibenzo(a,h)anthracene	10	4.7	N	1	47	50-127	08/15/2016 1410
Dibenzofuran	10	6.3		1	63	58-118	08/15/2016 1410
Diethylphthalate	10	7.4		1	74	60-125	08/15/2016 1410
Dimethyl phthalate	10	6.9		1	69	60-122	08/15/2016 1410
Fluoranthene	10	6.9		1	69	58-124	08/15/2016 1410
Fluorene	10	6.4		1	64	57-119	08/15/2016 1410
Hexachlorobenzene	10	6.9		1	69	55-118	08/15/2016 1410
Hexachlorocyclopentadiene	50	13		1	27	16-96	08/15/2016 1410
Hexachloroethane	10	5.7		1	57	31-110	08/15/2016 1410
Indeno(1,2,3-c,d)pyrene	10	6.8		1	68	48-126	08/15/2016 1410
Isophorone	10	7.6		1	76	57-123	08/15/2016 1410
N-Nitrosodi-n-propylamine	10	9.0		1	90	54-127	08/15/2016 1410
N-Nitrosodiphenylamine (Diphenylamine)	10	6.8		1	68	35-146	08/15/2016 1410
Naphthalene	10	6.1		1	61	52-109	08/15/2016 1410
Nitrobenzene	10	7.5		1	75	51-122	08/15/2016 1410
Pentachlorophenol	20	14		1	71	42-131	08/15/2016 1410
Phenanthrene	10	6.8		1	68	56-119	08/15/2016 1410
Phenol	10	6.6		1	66	49-117	08/15/2016 1410
Pyrene	10	7.5		1	75	55-127	08/15/2016 1410

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		63	41-144
2-Fluorobiphenyl		60	37-129
2-Fluorophenol		57	24-127
Nitrobenzene-d5		73	38-127
Phenol-d5		63	28-128
Terphenyl-d14		67	10-148

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MB

Sample ID: RQ19846-001
Batch: 19846
Analytical Method: 6020A

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 08/15/2016 1302

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	0.19	J	1	1.0	0.17	ug/L	08/18/2016 1801
Arsenic	ND		1	1.0	0.26	ug/L	08/18/2016 1801
Beryllium	ND		1	0.40	0.12	ug/L	08/18/2016 1801
Cadmium	ND		1	0.10	0.044	ug/L	08/18/2016 1801
Chromium	ND		1	5.0	0.63	ug/L	08/18/2016 1801
Copper	0.19	J	1	1.0	0.15	ug/L	08/18/2016 1801
Iron	8.8	J	1	20	6.3	ug/L	08/18/2016 1801
Lead	0.88	J	1	1.0	0.15	ug/L	08/18/2016 1801
Manganese	0.83	J	1	5.0	0.54	ug/L	08/18/2016 1801
Nickel	ND		1	5.0	0.63	ug/L	08/18/2016 1801
Selenium	ND		1	1.0	0.95	ug/L	08/18/2016 1801
Silver	ND		1	1.0	0.17	ug/L	08/18/2016 1801
Thallium	ND		1	0.50	0.075	ug/L	08/18/2016 1801
Zinc	2.0	J	1	10	1.6	ug/L	08/18/2016 1801

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - LCS

Sample ID: RQ19846-002
Batch: 19846
Analytical Method: 6020A

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 08/15/2016 1302

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	100	100		1	102	80-120	08/18/2016 1807
Arsenic	100	110		1	108	80-120	08/18/2016 1807
Beryllium	100	110		1	110	80-120	08/18/2016 1807
Cadmium	100	100		1	103	80-120	08/18/2016 1807
Chromium	100	100		1	105	80-120	08/18/2016 1807
Copper	100	100		1	105	80-120	08/18/2016 1807
Iron	1000	1100		1	111	80-120	08/18/2016 1807
Lead	100	100		1	105	80-120	08/18/2016 1807
Manganese	100	110		1	106	80-120	08/18/2016 1807
Nickel	100	100		1	104	80-120	08/18/2016 1807
Selenium	100	110		1	114	80-120	08/18/2016 1807
Silver	100	110		1	107	80-120	08/18/2016 1807
Thallium	100	110		1	105	80-120	08/18/2016 1807
Zinc	100	110		1	111	80-120	08/18/2016 1807

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MB

Sample ID: RQ19804-001
Batch: 19804
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 08/15/2016 1730

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	0.000093	J	1	0.00010	0.000028	mg/L	08/16/2016 1516

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - LCS

Sample ID: RQ19804-002
Batch: 19804
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 08/15/2016 1730

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.0020	0.0019		1	97	80-120	08/16/2016 1518

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Chain of Custody
and
Miscellaneous Documents

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63414

Client	COM Smith
Report to Contact	Dan Forbes
Telephone No. / E-mail	919-325-3500
Quote No.	
Address	5400 Glenwood Ave, Suite 400
Sampler's Signature	x Janelle Bauer
City	Raleigh
State	NC
Zip Code	27612
Printed Name	Janelle Bauer
Project Name	Bud Holdings
Project No.	SW
P.O. No.	
Page	1 of 1
	RH10006

Analysis (Attach list if more space is needed)

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab (G) Composite (C)	Matrix: Aqueous	Matrix: Solid	Matrix: Wastewater	No of Containers by Preservative Type: Unpres.	HCl	HNO3	H2SO4	NaOH	Na2S2O3	VOC	VOC 1,4-D	SVOC	Metals	NO3	SO4	Ammonia			Remarks / Cooler I.D.
SW-1	8-9-16	1730	G	x									x	x	x	x	x	x	x			
Rinsate Blank	8-9-16	1550	G	x									x	x	x	x	x	x	x			

Turn Around Time Required (Prior lab approval required for expedited TAT.)
☐ Standard ☒ Rush (Specify) 5 days

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Janelle Bauer	8-9-16	1830	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEX	8/10/16	0900	4. Laboratory received by: [signature]	8/10/16	0900

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) Yes No Ice Pack
Receipt Temp. 2.1 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: CDM Smith Cooler Inspected by/date: mcm / 08/10/16 Lot #: R16100006

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: _____ Cl strip ID: _____

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

12.1/12.1 °C ___/___/___ °C ___/___/___ °C ___/___/___ °C

mcm 8/10/16

Method: ☑ Temperature Blank ☑ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☑	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☑	No ☐		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☑	No ☐	NA ☐	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☑	No ☐	NA ☐	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☑	No ☐	N/A	22. Was the quote number used taken from the container label?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be ≥ 2 by _____ Date: _____

Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR#

Sample labels applied by: mcm Verified by: _____ Date: 8/10/16

Comments: _____

Report of Analysis

CDM Smith
5400 Glenwood Avenue
Suite 400
Raleigh, NC 27612
Attention: Dan Forbes

Project Name: Bud Holdings

Project Number: SED

Lot Number: RH09014

Date Completed: 08/19/2016

Nisreen Saikaly
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
CDM Smith
Lot Number: RH09014

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary

CDM Smith

Lot Number: RH09014

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SED-2	Solid	08/08/2016 1735	08/09/2016
002	SED-3	Solid	08/08/2016 0835	08/09/2016
003	DUP-1	Solid	08/08/2016 0800	08/09/2016
004	TRIP BLANK	Aqueous	08/08/2016	08/09/2016

(4 samples)

Executive Summary
CDM Smith
Lot Number: RH09014

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SED-2	Solid	Ammonia - N (gas	350.1	13		mg/kg	7
001	SED-2	Solid	Hexavalent Chromium	7196A	0.48	J	mg/kg	7
001	SED-2	Solid	Nitrate - N (soluble)	300.0	0.15	J	mg/kg	7
001	SED-2	Solid	Acetone	8260B	45	B	ug/kg	9
001	SED-2	Solid	2-Propanone, 1-chloro-	8270D	210		ug/kg	12
001	SED-2	Solid	Unknown	8270D	690		ug/kg	12
001	SED-2	Solid	9-Hexadecenoic acid	8270D	190		ug/kg	12
001	SED-2	Solid	n-Hexadecanoic acid	8270D	640		ug/kg	12
001	SED-2	Solid	9-Octadecenoic acid, (E)-	8270D	960		ug/kg	12
001	SED-2	Solid	Octadecanoic acid	8270D	290		ug/kg	12
001	SED-2	Solid	Hexadecanoic acid, butyl	8270D	140		ug/kg	12
001	SED-2	Solid	Tetradecane	8270D	150		ug/kg	12
001	SED-2	Solid	Heptacosane	8270D	150		ug/kg	12
001	SED-2	Solid	Squalene	8270D	180		ug/kg	12
001	SED-2	Solid	Benzo[e]pyrene	8270D	140		ug/kg	12
001	SED-2	Solid	Heptadecane, 9-octyl-	8270D	470		ug/kg	12
001	SED-2	Solid	Unknown	8270D	140		ug/kg	12
001	SED-2	Solid	Anthracene	8270D	13	J	ug/kg	13
001	SED-2	Solid	Benzo(a)anthracene	8270D	110		ug/kg	13
001	SED-2	Solid	Benzo(a)pyrene	8270D	150		ug/kg	13
001	SED-2	Solid	Benzo(b)fluoranthene	8270D	220		ug/kg	13
001	SED-2	Solid	Benzo(g,h,i)perylene	8270D	130		ug/kg	13
001	SED-2	Solid	Benzo(k)fluoranthene	8270D	93		ug/kg	13
001	SED-2	Solid	Carbazole	8270D	32	J	ug/kg	13
001	SED-2	Solid	Chrysene	8270D	210		ug/kg	13
001	SED-2	Solid	bis(2-Ethylhexyl)phthalate	8270D	28	J	ug/kg	13
001	SED-2	Solid	Fluoranthene	8270D	390		ug/kg	13
001	SED-2	Solid	Indeno(1,2,3-c,d)pyrene	8270D	120		ug/kg	14
001	SED-2	Solid	Phenanthrene	8270D	130		ug/kg	14
001	SED-2	Solid	Pyrene	8270D	280		ug/kg	14
001	SED-2	Solid	Antimony	6020A	0.066	BJ	mg/kg	15
001	SED-2	Solid	Beryllium	6020A	0.92		mg/kg	15
001	SED-2	Solid	Cadmium	6020A	0.045	J	mg/kg	15
001	SED-2	Solid	Chromium	6020A	16	J	mg/kg	15
001	SED-2	Solid	Copper	6020A	19	B	mg/kg	15
001	SED-2	Solid	Iron	6020A	18000	B	mg/kg	15
001	SED-2	Solid	Lead	6020A	10	B	mg/kg	15
001	SED-2	Solid	Manganese	6020A	300		mg/kg	15
001	SED-2	Solid	Nickel	6020A	7.5	BJ	mg/kg	15
001	SED-2	Solid	Thallium	6020A	0.27		mg/kg	15
001	SED-2	Solid	Zinc	6020A	66	B	mg/kg	15
001	SED-2	Solid	Mercury	7471B	0.057	BJ	mg/kg	16
002	SED-3	Solid	Ammonia - N (gas	350.1	0.30	J	mg/kg	17
002	SED-3	Solid	Hexavalent Chromium	7196A	0.49	J	mg/kg	17
002	SED-3	Solid	Nitrate - N (soluble)	300.0	0.046	J	mg/kg	17

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	SED-3	Solid	2-Propanone, 1-chloro-	8270D	99		ug/kg	22
002	SED-3	Solid	Unknown	8270D	490		ug/kg	22
002	SED-3	Solid	9-Hexadecenoic acid	8270D	96		ug/kg	22
002	SED-3	Solid	n-Hexadecanoic acid	8270D	240		ug/kg	22
002	SED-3	Solid	6-Octadecenoic acid, (Z)-	8270D	450		ug/kg	22
002	SED-3	Solid	Octadecanoic acid	8270D	96		ug/kg	22
002	SED-3	Solid	Friedelan-3-one	8270D	110		ug/kg	22
002	SED-3	Solid	Anthracene	8270D	23	J	ug/kg	23
002	SED-3	Solid	Benzo(a)anthracene	8270D	90		ug/kg	23
002	SED-3	Solid	Benzo(a)pyrene	8270D	79		ug/kg	23
002	SED-3	Solid	Benzo(b)fluoranthene	8270D	96		ug/kg	23
002	SED-3	Solid	Benzo(g,h,i)perylene	8270D	45		ug/kg	23
002	SED-3	Solid	Benzo(k)fluoranthene	8270D	50		ug/kg	23
002	SED-3	Solid	Chrysene	8270D	100		ug/kg	23
002	SED-3	Solid	Fluoranthene	8270D	190		ug/kg	23
002	SED-3	Solid	Indeno(1,2,3-c,d)pyrene	8270D	44	J	ug/kg	24
002	SED-3	Solid	Phenanthrene	8270D	87		ug/kg	24
002	SED-3	Solid	Pyrene	8270D	140		ug/kg	24
002	SED-3	Solid	Antimony	6020A	0.065	BJ	mg/kg	25
002	SED-3	Solid	Beryllium	6020A	0.37		mg/kg	25
002	SED-3	Solid	Cadmium	6020A	0.015	J	mg/kg	25
002	SED-3	Solid	Chromium	6020A	6.3		mg/kg	25
002	SED-3	Solid	Copper	6020A	3.1	B	mg/kg	25
002	SED-3	Solid	Iron	6020A	6500	B	mg/kg	25
002	SED-3	Solid	Lead	6020A	3.9	B	mg/kg	25
002	SED-3	Solid	Manganese	6020A	170		mg/kg	25
002	SED-3	Solid	Nickel	6020A	2.5	B	mg/kg	25
002	SED-3	Solid	Thallium	6020A	0.087	J	mg/kg	25
002	SED-3	Solid	Zinc	6020A	15	B	mg/kg	25
002	SED-3	Solid	Mercury	7471B	0.022	BJ	mg/kg	26
003	DUP-1	Solid	Ammonia - N (gas	350.1	0.23	J	mg/kg	27
003	DUP-1	Solid	Nitrate - N (soluble)	300.0	0.044	J	mg/kg	27
003	DUP-1	Solid	2-Propanone, 1-chloro-	8270D	120		ug/kg	32
003	DUP-1	Solid	Unknown	8270D	550		ug/kg	32
003	DUP-1	Solid	n-Hexadecanoic acid	8270D	160		ug/kg	32
003	DUP-1	Solid	Benzo(a)anthracene	8270D	11	J	ug/kg	33
003	DUP-1	Solid	Benzo(a)pyrene	8270D	21	J	ug/kg	33
003	DUP-1	Solid	Benzo(b)fluoranthene	8270D	32	J	ug/kg	33
003	DUP-1	Solid	Benzo(g,h,i)perylene	8270D	19	J	ug/kg	33
003	DUP-1	Solid	Benzo(k)fluoranthene	8270D	14	J	ug/kg	33
003	DUP-1	Solid	Chrysene	8270D	22	J	ug/kg	33
003	DUP-1	Solid	Fluoranthene	8270D	47		ug/kg	33
003	DUP-1	Solid	Indeno(1,2,3-c,d)pyrene	8270D	17	J	ug/kg	34
003	DUP-1	Solid	Phenanthrene	8270D	20	J	ug/kg	34
003	DUP-1	Solid	Pyrene	8270D	36	J	ug/kg	34
003	DUP-1	Solid	Antimony	6020A	0.024	BJ	mg/kg	35
003	DUP-1	Solid	Arsenic	6020A	0.047	J	mg/kg	35
003	DUP-1	Solid	Beryllium	6020A	0.26		mg/kg	35

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	DUP-1	Solid	Cadmium	6020A	0.013	J	mg/kg	35
003	DUP-1	Solid	Chromium	6020A	4.9		mg/kg	35
003	DUP-1	Solid	Copper	6020A	2.7	B	mg/kg	35
003	DUP-1	Solid	Iron	6020A	5200	B	mg/kg	35
003	DUP-1	Solid	Lead	6020A	2.4	B	mg/kg	35
003	DUP-1	Solid	Manganese	6020A	190		mg/kg	35
003	DUP-1	Solid	Nickel	6020A	2.1	B	mg/kg	35
003	DUP-1	Solid	Thallium	6020A	0.079	J	mg/kg	35
003	DUP-1	Solid	Zinc	6020A	15	B	mg/kg	35
003	DUP-1	Solid	Mercury	7471B	0.033	BJ	mg/kg	36

(103 detections)

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH09014-001
Description:	SED-2	Matrix:	Solid
Date Sampled:	08/08/2016 1735	% Solids:	59.6 08/09/2016 2359
Date Received:	08/09/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1149	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/14/2016 1956	TAF		19885
1		(Sulfate (sol) 300.0	1	08/14/2016 1956	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	13		1.7	0.17	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.48	J	1.7	0.42	mg/kg	1
Nitrate - N (soluble)		300.0	0.15	J	0.34	0.041	mg/kg	1
Sulfate (soluble)		300.0	ND		17	8.4	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH09014-001
Description: SED-2	Matrix: Solid
Date Sampled: 08/08/2016 1735	% Solids: 59.6 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/12/2016 2354	JJG		19771	6.73

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		25	15	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH09014-001
Description: SED-2
Matrix: Solid
Date Sampled: 08/08/2016 1735
% Solids: 59.6 08/09/2016 2359
Date Received: 08/09/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/10/2016 1500	SES		19503	6.76

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	45	B	25	5.0	ug/kg	1
Benzene	71-43-2	8260B	ND		6.2	2.5	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.2	2.5	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.2	2.5	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.2	2.5	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		25	5.0	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.2	2.5	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.2	2.5	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.2	2.5	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.2	2.5	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.2	2.5	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.2	2.5	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.2	2.5	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.2	2.5	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.2	2.5	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.2	2.5	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.2	2.5	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.2	2.5	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.2	2.5	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.2	2.5	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.2	2.5	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.2	2.5	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.2	2.5	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.2	2.5	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.2	2.5	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.2	2.5	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.2	2.5	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.2	2.5	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.2	2.5	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	5.0	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.2	2.5	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.2	2.5	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.2	2.5	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	5.0	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.2	2.5	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.2	2.5	ug/kg	1
Styrene	100-42-5	8260B	ND		6.2	2.5	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.2	2.5	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.2	2.5	ug/kg	1
Toluene	108-88-3	8260B	ND		6.2	2.5	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.2	2.5	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.2	2.5	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.2	2.5	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.2	2.5	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH09014-001
Description: SED-2	Matrix: Solid
Date Sampled: 08/08/2016 1735	% Solids: 59.6 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/10/2016 1500	SES		19503	6.76

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.2	2.5	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.2	2.5	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.2	2.5	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		12	5.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		95	47-138
Toluene-d8		119	68-124

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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client:	CDM Smith	Laboratory ID:	RH09014-001
Description:	SED-2	Matrix:	Solid
Date Sampled:	08/08/2016 1735	% Solids:	59.6 08/09/2016 2359
Date Received:	08/09/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19594

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH09014-001
Description: SED-2	Matrix: Solid
Date Sampled: 08/08/2016 1735	% Solids: 59.6 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1614	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
2-Propanone, 1-chloro-		8270D	210				ug/kg	1
Unknown		8270D	690				ug/kg	1
9-Hexadecenoic acid		8270D	190				ug/kg	1
n-Hexadecanoic acid		8270D	640				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	960				ug/kg	1
Octadecanoic acid		8270D	290				ug/kg	1
Hexadecanoic acid, butyl ester		8270D	140				ug/kg	1
Tetradecane		8270D	150				ug/kg	1
Heptacosane		8270D	150				ug/kg	1
Squalene		8270D	180				ug/kg	1
Benzo[e]pyrene		8270D	140				ug/kg	1
Heptadecane, 9-octyl-		8270D	470				ug/kg	1
Unknown		8270D	140				ug/kg	1

PQL = Practical quantitation limit
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH09014-001
Description: SED-2
Matrix: Solid
Date Sampled: 08/08/2016 1735
% Solids: 59.6 08/09/2016 2359
Date Received: 08/09/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1614	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		55	2.9	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		55	2.9	ug/kg	1
Acetophenone	98-86-2	8270D	ND		55	20	ug/kg	1
Anthracene	120-12-7	8270D	13	J	55	3.3	ug/kg	1
Atrazine	1912-24-9	8270D	ND		55	7.5	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		55	23	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	110		55	1.9	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	150		55	2.4	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	220		55	2.5	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	130		55	1.9	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	93		55	2.4	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		55	18	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		55	13	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		110	14	ug/kg	1
Caprolactam	105-60-2	8270D	ND		55	12	ug/kg	1
Carbazole	86-74-8	8270D	32	J	55	16	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		55	10	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		55	5.2	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		55	14	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		55	13	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		55	16	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		55	10	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		55	10	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		55	12	ug/kg	1
Chrysene	218-01-9	8270D	210		55	1.9	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		55	3.1	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		55	11	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		290	61	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		55	9.9	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		55	6.9	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		55	11	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		55	17	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		55	20	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		290	68	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		290	120	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		110	18	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		110	19	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		55	16	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	28	J	55	24	ug/kg	1
Fluoranthene	206-44-0	8270D	390		55	1.5	ug/kg	1
Fluorene	86-73-7	8270D	ND		55	3.3	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		55	14	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		55	13	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		290	89	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH09014-001
Description: SED-2	Matrix: Solid
Date Sampled: 08/08/2016 1735	% Solids: 59.6 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1614	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		55	9.7	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	120		55	2.3	ug/kg	1
Isophorone	78-59-1	8270D	ND		55	14	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		55	2.6	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		55	12	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		110	17	ug/kg	1
Naphthalene	91-20-3	8270D	ND		55	2.6	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		110	15	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		110	11	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		110	10	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		55	22	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		110	24	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		290	70	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		55	20	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		55	12	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		290	74	ug/kg	1
Phenanthrene	85-01-8	8270D	130		55	3.1	ug/kg	1
Phenol	108-95-2	8270D	ND		55	12	ug/kg	1
Pyrene	129-00-0	8270D	280		55	1.9	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		55	10	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		55	7.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		45	33-102
2-Fluorophenol		47	28-104
Nitrobenzene-d5		46	22-109
Phenol-d5		50	27-103
Terphenyl-d14		70	41-120
2,4,6-Tribromophenol		66	30-117

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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH09014-001
Description: SED-2	Matrix: Solid
Date Sampled: 08/08/2016 1735	% Solids: 59.6 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/11/2016 2130	BNW	08/10/2016 1014	19484
2	3050B	6020A	10	08/12/2016 1752	BNW	08/10/2016 1014	19484
3	3050B	6020A	10	08/18/2016 1717	BNW	08/10/2016 1014	19484

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.066	BJ	0.39	0.023	mg/kg	1
Arsenic	7440-38-2	6020A	ND		3.9	0.49	mg/kg	2
Beryllium	7440-41-7	6020A	0.92		0.15	0.012	mg/kg	1
Cadmium	7440-43-9	6020A	0.045	J	0.39	0.031	mg/kg	2
Chromium	7440-47-3	6020A	16	J	20	0.45	mg/kg	2
Copper	7440-50-8	6020A	19	B	3.9	0.34	mg/kg	3
Iron	7439-89-6	6020A	18000	B	77	6.6	mg/kg	2
Lead	7439-92-1	6020A	10	B	0.39	0.0093	mg/kg	1
Manganese	7439-96-5	6020A	300		20	3.7	mg/kg	2
Nickel	7440-02-0	6020A	7.5	BJ	20	0.42	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.9	0.59	mg/kg	2
Silver	7440-22-4	6020A	ND		0.39	0.031	mg/kg	1
Thallium	7440-28-0	6020A	0.27		0.20	0.012	mg/kg	1
Zinc	7440-66-6	6020A	66	B	39	1.0	mg/kg	3

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH09014-001
Description: SED-2	Matrix: Solid
Date Sampled: 08/08/2016 1735	% Solids: 59.6 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	7471B	7471B	1	08/12/2016 0951	CLM	08/09/2016 1402	19418

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.057	BJ	0.14	0.010	mg/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH09014-002
Description: SED-3	Matrix: Solid
Date Sampled: 08/08/2016 0835	% Solids: 72.0 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1151	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/14/2016 2020	TAF		19885
1		(Sulfate (sol) 300.0	1	08/14/2016 2020	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.30	J	1.4	0.14	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.49	J	1.4	0.35	mg/kg	1
Nitrate - N (soluble)		300.0	0.046	J	0.28	0.034	mg/kg	1
Sulfate (soluble)		300.0	ND		14	6.9	mg/kg	1

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P = The RPD between two GC columns exceeds 40%
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Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH09014-002
Description: SED-3	Matrix: Solid
Date Sampled: 08/08/2016 0835	% Solids: 72.0 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/13/2016 0016	JJG		19771	6.07

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		23	14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130

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Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH09014-002
Description: SED-3
Matrix: Solid
Date Sampled: 08/08/2016 0835
% Solids: 72.0 08/09/2016 2359
Date Received: 08/09/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/10/2016 1522	SES		19503	4.45

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		31	6.2	ug/kg	1
Benzene	71-43-2	8260B	ND		7.8	3.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		7.8	3.1	ug/kg	1
Bromoform	75-25-2	8260B	ND		7.8	3.1	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		7.8	3.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		31	6.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		7.8	3.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		7.8	3.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		7.8	3.1	ug/kg	1
Chloroethane	75-00-3	8260B	ND		7.8	3.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		7.8	3.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		7.8	3.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		7.8	3.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		7.8	3.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		7.8	3.1	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		7.8	3.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		7.8	3.1	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		7.8	3.1	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		7.8	3.1	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		7.8	3.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		7.8	3.1	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		7.8	3.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		7.8	3.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		7.8	3.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		7.8	3.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		7.8	3.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		7.8	3.1	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		7.8	3.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		7.8	3.1	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		16	6.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		7.8	3.1	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		7.8	3.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		7.8	3.1	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		16	6.2	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		7.8	3.1	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		7.8	3.1	ug/kg	1
Styrene	100-42-5	8260B	ND		7.8	3.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		7.8	3.1	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		7.8	3.1	ug/kg	1
Toluene	108-88-3	8260B	ND		7.8	3.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		7.8	3.1	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		7.8	3.1	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		7.8	3.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		7.8	3.1	ug/kg	1

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH09014-002
Description: SED-3	Matrix: Solid
Date Sampled: 08/08/2016 0835	% Solids: 72.0 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/10/2016 1522	SES		19503	4.45

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		7.8	3.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		7.8	3.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		7.8	3.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		16	6.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	53-142
Bromofluorobenzene		108	47-138
Toluene-d8		110	68-124

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH09014-002
Description: SED-3	Matrix: Solid
Date Sampled: 08/08/2016 0835	% Solids: 72.0 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19594

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

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Library Search

Client: CDM Smith	Laboratory ID: RH09014-002
Description: SED-3	Matrix: Solid
Date Sampled: 08/08/2016 0835	% Solids: 72.0 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1639	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
2-Propanone, 1-chloro-		8270D	99				ug/kg	1
Unknown		8270D	490				ug/kg	1
9-Hexadecenoic acid		8270D	96				ug/kg	1
n-Hexadecanoic acid		8270D	240				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	450				ug/kg	1
Octadecanoic acid		8270D	96				ug/kg	1
Friedelan-3-one		8270D	110				ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH09014-002
Description: SED-3
Matrix: Solid
Date Sampled: 08/08/2016 0835
% Solids: 72.0 08/09/2016 2359
Date Received: 08/09/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1639	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		45	2.3	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		45	2.4	ug/kg	1
Acetophenone	98-86-2	8270D	ND		45	16	ug/kg	1
Anthracene	120-12-7	8270D	23	J	45	2.7	ug/kg	1
Atrazine	1912-24-9	8270D	ND		45	6.0	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		45	19	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	90		45	1.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	79		45	2.0	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	96		45	2.0	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	45		45	1.5	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	50		45	1.9	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		45	15	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		45	11	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		91	12	ug/kg	1
Caprolactam	105-60-2	8270D	ND		45	10	ug/kg	1
Carbazole	86-74-8	8270D	ND		45	13	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		45	8.2	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		45	4.2	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		45	11	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		45	11	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		45	13	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		45	8.4	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		45	8.1	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		45	9.4	ug/kg	1
Chrysene	218-01-9	8270D	100		45	1.5	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		45	2.5	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		45	8.7	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		230	49	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		45	8.0	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		45	5.6	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		45	8.9	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		45	14	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		45	16	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		230	55	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		230	94	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		91	15	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		91	16	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		45	13	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		45	19	ug/kg	1
Fluoranthene	206-44-0	8270D	190		45	1.2	ug/kg	1
Fluorene	86-73-7	8270D	ND		45	2.7	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		45	12	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		45	11	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		230	72	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH09014-002
Description: SED-3
Matrix: Solid
Date Sampled: 08/08/2016 0835
% Solids: 72.0 08/09/2016 2359
Date Received: 08/09/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1639	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		45	7.8	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	44	J	45	1.8	ug/kg	1
Isophorone	78-59-1	8270D	ND		45	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		45	2.1	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		45	9.6	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		91	14	ug/kg	1
Naphthalene	91-20-3	8270D	ND		45	2.1	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		91	12	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		91	8.8	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		91	8.2	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		45	18	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		91	20	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		230	56	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		45	16	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		45	10	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		230	60	ug/kg	1
Phenanthrene	85-01-8	8270D	87		45	2.5	ug/kg	1
Phenol	108-95-2	8270D	ND		45	9.4	ug/kg	1
Pyrene	129-00-0	8270D	140		45	1.6	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		45	8.2	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		45	6.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		37	33-102
2-Fluorophenol		39	28-104
Nitrobenzene-d5		42	22-109
Phenol-d5		44	27-103
Terphenyl-d14		56	41-120
2,4,6-Tribromophenol		57	30-117

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ICP-MS

Client: CDM Smith	Laboratory ID: RH09014-002
Description: SED-3	Matrix: Solid
Date Sampled: 08/08/2016 0835	% Solids: 72.0 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/11/2016 2158	BNW	08/10/2016 1014	19484
2	3050B	6020A	5	08/12/2016 1820	BNW	08/10/2016 1014	19484

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.065	BJ	0.33	0.020	mg/kg	1
Arsenic	7440-38-2	6020A	ND		0.33	0.042	mg/kg	1
Beryllium	7440-41-7	6020A	0.37		0.13	0.010	mg/kg	1
Cadmium	7440-43-9	6020A	0.015	J	0.033	0.0026	mg/kg	1
Chromium	7440-47-3	6020A	6.3		1.7	0.038	mg/kg	1
Copper	7440-50-8	6020A	3.1	B	0.33	0.029	mg/kg	1
Iron	7439-89-6	6020A	6500	B	6.5	0.56	mg/kg	1
Lead	7439-92-1	6020A	3.9	B	0.33	0.0078	mg/kg	1
Manganese	7439-96-5	6020A	170		8.5	1.6	mg/kg	2
Nickel	7440-02-0	6020A	2.5	B	1.7	0.035	mg/kg	1
Selenium	7782-49-2	6020A	ND		0.33	0.050	mg/kg	1
Silver	7440-22-4	6020A	ND		0.33	0.026	mg/kg	1
Thallium	7440-28-0	6020A	0.087	J	0.17	0.010	mg/kg	1
Zinc	7440-66-6	6020A	15	B	3.3	0.086	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
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ND = Not detected at or above the MDL
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH09014-002
Description: SED-3	Matrix: Solid
Date Sampled: 08/08/2016 0835	% Solids: 72.0 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	7471B	7471B	1	08/12/2016 0953	CLM	08/09/2016 1402	19418

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.022	BJ	0.099	0.0075	mg/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH09014-003
Description: DUP-1	Matrix: Solid
Date Sampled: 08/08/2016 0800	% Solids: 69.7 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1153	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/14/2016 2133	TAF		19885
1		(Sulfate (sol) 300.0	1	08/14/2016 2133	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.23	J	1.4	0.14	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.4	0.36	mg/kg	1
Nitrate - N (soluble)		300.0	0.044	J	0.29	0.035	mg/kg	1
Sulfate (soluble)		300.0	ND		14	7.2	mg/kg	1

PQL = Practical quantitation limit
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH09014-003
Description: DUP-1	Matrix: Solid
Date Sampled: 08/08/2016 0800	% Solids: 69.7 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/13/2016 0038	JJG		19771	5.43

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		26	16	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH09014-003
Description: DUP-1
Matrix: Solid
Date Sampled: 08/08/2016 0800
% Solids: 69.7 08/09/2016 2359
Date Received: 08/09/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/10/2016 1544	SES		19503	5.65

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		25	5.1	ug/kg	1
Benzene	71-43-2	8260B	ND		6.3	2.5	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.3	2.5	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.3	2.5	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.3	2.5	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		25	5.1	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.3	2.5	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.3	2.5	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.3	2.5	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.3	2.5	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.3	2.5	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.3	2.5	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.3	2.5	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.3	2.5	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.3	2.5	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.3	2.5	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.3	2.5	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.3	2.5	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.3	2.5	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.3	2.5	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.3	2.5	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.3	2.5	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.3	2.5	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.3	2.5	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.3	2.5	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.3	2.5	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.3	2.5	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.3	2.5	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.3	2.5	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	5.1	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.3	2.5	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.3	2.5	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.3	2.5	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	5.1	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.3	2.5	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.3	2.5	ug/kg	1
Styrene	100-42-5	8260B	ND		6.3	2.5	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.3	2.5	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.3	2.5	ug/kg	1
Toluene	108-88-3	8260B	ND		6.3	2.5	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.3	2.5	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.3	2.5	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.3	2.5	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.3	2.5	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH09014-003
Description: DUP-1	Matrix: Solid
Date Sampled: 08/08/2016 0800	% Solids: 69.7 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/10/2016 1544	SES		19503	5.65

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.3	2.5	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.3	2.5	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.3	2.5	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	5.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	53-142
Bromofluorobenzene		109	47-138
Toluene-d8		111	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH09014-003
Description: DUP-1	Matrix: Solid
Date Sampled: 08/08/2016 0800	% Solids: 69.7 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19594

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH09014-003
Description: DUP-1	Matrix: Solid
Date Sampled: 08/08/2016 0800	% Solids: 69.7 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1704	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
2-Propanone, 1-chloro-		8270D	120				ug/kg	1
Unknown		8270D	550				ug/kg	1
n-Hexadecanoic acid		8270D	160				ug/kg	1

PQL = Practical quantitation limit
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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH09014-003
Description: DUP-1
Matrix: Solid
Date Sampled: 08/08/2016 0800
% Solids: 69.7 08/09/2016 2359
Date Received: 08/09/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1704	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		47	2.4	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		47	2.5	ug/kg	1
Acetophenone	98-86-2	8270D	ND		47	17	ug/kg	1
Anthracene	120-12-7	8270D	ND		47	2.8	ug/kg	1
Atrazine	1912-24-9	8270D	ND		47	6.3	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		47	20	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	11	J	47	1.6	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	21	J	47	2.0	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	32	J	47	2.1	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	19	J	47	1.6	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	14	J	47	2.0	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		47	15	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		47	11	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		95	12	ug/kg	1
Caprolactam	105-60-2	8270D	ND		47	10	ug/kg	1
Carbazole	86-74-8	8270D	ND		47	13	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		47	8.6	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		47	4.3	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		47	11	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		47	11	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		47	13	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		47	8.8	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		47	8.4	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		47	9.8	ug/kg	1
Chrysene	218-01-9	8270D	22	J	47	1.6	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		47	2.6	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		47	9.0	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		240	51	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		47	8.3	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		47	5.8	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		47	9.3	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		47	14	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		47	17	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		240	57	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		240	98	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		95	15	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		95	16	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		47	14	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		47	20	ug/kg	1
Fluoranthene	206-44-0	8270D	47		47	1.3	ug/kg	1
Fluorene	86-73-7	8270D	ND		47	2.8	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		47	12	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		47	11	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		240	75	ug/kg	1

PQL = Practical quantitation limit
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH09014-003
Description: DUP-1
Matrix: Solid
Date Sampled: 08/08/2016 0800
% Solids: 69.7 08/09/2016 2359
Date Received: 08/09/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1704	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		47	8.1	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	17	J	47	1.9	ug/kg	1
Isophorone	78-59-1	8270D	ND		47	12	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		47	2.1	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		47	10	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		95	14	ug/kg	1
Naphthalene	91-20-3	8270D	ND		47	2.2	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		95	13	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		95	9.1	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		95	8.5	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		47	18	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		95	20	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		240	58	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		47	17	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		47	10	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		240	62	ug/kg	1
Phenanthrene	85-01-8	8270D	20	J	47	2.6	ug/kg	1
Phenol	108-95-2	8270D	ND		47	9.8	ug/kg	1
Pyrene	129-00-0	8270D	36	J	47	1.6	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		47	8.6	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		47	6.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		41	33-102
2-Fluorophenol		44	28-104
Nitrobenzene-d5		45	22-109
Phenol-d5		46	27-103
Terphenyl-d14		56	41-120
2,4,6-Tribromophenol		55	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH09014-003
Description: DUP-1	Matrix: Solid
Date Sampled: 08/08/2016 0800	% Solids: 69.7 08/09/2016 2359
Date Received: 08/09/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/11/2016 2204	BNW	08/10/2016 1014	19484
2	3050B	6020A	5	08/12/2016 1837	BNW	08/10/2016 1014	19484

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.024	BJ	0.33	0.020	mg/kg	1
Arsenic	7440-38-2	6020A	0.047	J	0.33	0.042	mg/kg	1
Beryllium	7440-41-7	6020A	0.26		0.13	0.011	mg/kg	1
Cadmium	7440-43-9	6020A	0.013	J	0.033	0.0026	mg/kg	1
Chromium	7440-47-3	6020A	4.9		1.7	0.038	mg/kg	1
Copper	7440-50-8	6020A	2.7	B	0.33	0.029	mg/kg	1
Iron	7439-89-6	6020A	5200	B	6.6	0.57	mg/kg	1
Lead	7439-92-1	6020A	2.4	B	0.33	0.0079	mg/kg	1
Manganese	7439-96-5	6020A	190		8.6	1.6	mg/kg	2
Nickel	7440-02-0	6020A	2.1	B	1.7	0.036	mg/kg	1
Selenium	7782-49-2	6020A	ND		0.33	0.050	mg/kg	1
Silver	7440-22-4	6020A	ND		0.33	0.026	mg/kg	1
Thallium	7440-28-0	6020A	0.079	J	0.17	0.011	mg/kg	1
Zinc	7440-66-6	6020A	15	B	3.3	0.087	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client:	CDM Smith	Laboratory ID:	RH09014-003
Description:	DUP-1	Matrix:	Solid
Date Sampled:	08/08/2016 0800	% Solids:	69.7 08/09/2016 2359
Date Received:	08/09/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	7471B	7471B	1	08/12/2016 0955	CLM	08/09/2016 1402	19418

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.033	BJ	0.12	0.0090	mg/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH09014-004
Description: TRIP BLANK
Matrix: Aqueous
Date Sampled: 08/08/2016
Date Received: 08/09/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/10/2016 1202	TML		19512

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH09014-004
Description: TRIP BLANK
Matrix: Aqueous
Date Sampled: 08/08/2016
Date Received: 08/09/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/10/2016 1202	TML		19512

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ19883-001
Batch: 19883
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate (soluble)	ND		1	10	5.0	mg/kg	08/14/2016 1820

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19883-002
Batch: 19883
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	200	180		1	91	90-110	08/14/2016 1756

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH09014-002MS
Batch: 19883
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	ND	200	180		1	91	90-110	08/14/2016 2044

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH09014-002MD
Batch: 19883
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate (soluble)	ND	200	180		1	90	0.67	90-110	20	08/14/2016 2109

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ19885-001
Batch: 19885
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.20	0.025	mg/kg	08/14/2016 1820

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19885-002
Batch: 19885
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.82		1	102	90-110	08/14/2016 1756

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH09014-002MS
Batch: 19885
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.046	8.0	8.0		1	100	90-110	08/14/2016 2044

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH09014-002MD
Batch: 19885
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N (soluble)	0.046	8.0	8.0		1	100	0.36	90-110	20	08/14/2016 2109

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - Duplicate

Sample ID: RH09014-003DU
Batch: 19902
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/16/2016 925

Parameter	Sample Amount (mg/kg)	Result (mg/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Hexavalent Chromium	ND	12		1	0.00	20	08/16/2016 1819

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20034-001
Batch: 20034
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	ND		1	1.0	0.10	mg/kg	08/17/2016 1145

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20034-002
Batch: 20034
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	10	9.4		1	94	90-110	08/17/2016 1147

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH09014-003MS
Batch: 20034
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	0.23	14	13		1	90	90-110	08/17/2016 1155

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH09014-003MD
Batch: 20034
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ammonia - N (gas diffusion)	0.23	14	13	N	1	87	2.7	90-110	20	08/17/2016 1157

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19503-001
Batch: 19503
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	5.3	J	1	20	4.0	ug/kg	08/10/2016 1023
Benzene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Bromodichloromethane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Bromoform	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Bromomethane (Methyl bromide)	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
2-Butanone (MEK)	ND		1	20	4.0	ug/kg	08/10/2016 1023
Carbon disulfide	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Carbon tetrachloride	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Chlorobenzene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Chloroethane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Chloroform	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Chloromethane (Methyl chloride)	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Cyclohexane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Dibromochloromethane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,2-Dibromoethane (EDB)	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,2-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,4-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,3-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Dichlorodifluoromethane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,2-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,1-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,1-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
cis-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
trans-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,2-Dichloropropane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
trans-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
cis-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Ethylbenzene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
2-Hexanone	ND		1	10	4.0	ug/kg	08/10/2016 1023
Isopropylbenzene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Methyl acetate	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
4-Methyl-2-pentanone	ND		1	10	4.0	ug/kg	08/10/2016 1023
Methylcyclohexane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Methylene chloride	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Styrene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,1,2,2-Tetrachloroethane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Tetrachloroethene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Toluene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,2,4-Trichlorobenzene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,1,1-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
1,1,2-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19503-001
Batch: 19503
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Trichlorofluoromethane	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Vinyl chloride	ND		1	5.0	2.0	ug/kg	08/10/2016 1023
Xylenes (total)	ND		1	10	4.0	ug/kg	08/10/2016 1023

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		108	47-138
1,2-Dichloroethane-d4		103	53-142
Toluene-d8		109	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19503-002
Batch: 19503
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	104	60-140	08/10/2016 0924
Benzene	50	47		1	94	69-123	08/10/2016 0924
Bromodichloromethane	50	50		1	99	69-121	08/10/2016 0924
Bromoform	50	46		1	92	61-119	08/10/2016 0924
Bromomethane (Methyl bromide)	50	62		1	123	10-168	08/10/2016 0924
2-Butanone (MEK)	100	93		1	93	57-148	08/10/2016 0924
Carbon disulfide	50	52		1	103	58-122	08/10/2016 0924
Carbon tetrachloride	50	49		1	98	58-136	08/10/2016 0924
Chlorobenzene	50	49		1	98	59-129	08/10/2016 0924
Chloroethane	50	60		1	120	60-140	08/10/2016 0924
Chloroform	50	49		1	98	71-125	08/10/2016 0924
Chloromethane (Methyl chloride)	50	63		1	126	34-134	08/10/2016 0924
Cyclohexane	50	52		1	105	53-139	08/10/2016 0924
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	95	55-125	08/10/2016 0924
Dibromochloromethane	50	49		1	99	66-119	08/10/2016 0924
1,2-Dibromoethane (EDB)	50	48		1	95	74-124	08/10/2016 0924
1,2-Dichlorobenzene	50	51		1	101	57-131	08/10/2016 0924
1,4-Dichlorobenzene	50	50		1	99	52-133	08/10/2016 0924
1,3-Dichlorobenzene	50	50		1	99	51-134	08/10/2016 0924
Dichlorodifluoromethane	50	72		1	145	10-157	08/10/2016 0924
1,2-Dichloroethane	50	48		1	96	67-129	08/10/2016 0924
1,1-Dichloroethane	50	51		1	102	71-127	08/10/2016 0924
1,1-Dichloroethene	50	52		1	104	69-138	08/10/2016 0924
cis-1,2-Dichloroethene	50	48		1	96	70-122	08/10/2016 0924
trans-1,2-Dichloroethene	50	50		1	100	68-131	08/10/2016 0924
1,2-Dichloropropane	50	48		1	97	72-124	08/10/2016 0924
trans-1,3-Dichloropropene	50	50		1	100	70-124	08/10/2016 0924
cis-1,3-Dichloropropene	50	50		1	99	70-126	08/10/2016 0924
Ethylbenzene	50	49		1	98	59-128	08/10/2016 0924
2-Hexanone	100	94		1	94	54-137	08/10/2016 0924
Isopropylbenzene	50	51		1	101	50-136	08/10/2016 0924
Methyl acetate	50	49		1	98	59-137	08/10/2016 0924
Methyl tertiary butyl ether (MTBE)	50	47		1	94	70-130	08/10/2016 0924
4-Methyl-2-pentanone	100	95		1	95	60-134	08/10/2016 0924
Methylcyclohexane	50	52		1	104	41-144	08/10/2016 0924
Methylene chloride	50	48		1	97	70-130	08/10/2016 0924
Styrene	50	50		1	100	54-136	08/10/2016 0924
1,1,2,2-Tetrachloroethane	50	49		1	97	69-132	08/10/2016 0924
Tetrachloroethene	50	51		1	102	45-150	08/10/2016 0924
Toluene	50	50		1	100	61-129	08/10/2016 0924
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	53		1	106	49-136	08/10/2016 0924
1,2,4-Trichlorobenzene	50	51		1	102	34-145	08/10/2016 0924
1,1,1-Trichloroethane	50	50		1	99	63-128	08/10/2016 0924
1,1,2-Trichloroethane	50	48		1	97	55-128	08/10/2016 0924

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19503-002
Batch: 19503
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	49		1	99	62-126	08/10/2016 0924
Trichlorofluoromethane	50	60		1	120	45-138	08/10/2016 0924
Vinyl chloride	50	60		1	120	42-132	08/10/2016 0924
Xylenes (total)	100	99		1	99	58-128	08/10/2016 0924

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		113	47-138
1,2-Dichloroethane-d4		105	53-142
Toluene-d8		114	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19512-001
Batch: 19512
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	10	2.0	ug/L	08/10/2016 1104
Benzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Bromodichloromethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Bromoform	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Bromomethane (Methyl bromide)	ND		1	0.50	0.40	ug/L	08/10/2016 1104
2-Butanone (MEK)	ND		1	10	2.0	ug/L	08/10/2016 1104
Carbon disulfide	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Carbon tetrachloride	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Chlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Chloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Chloroform	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Chloromethane (Methyl chloride)	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Cyclohexane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Dibromochloromethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,2-Dibromoethane (EDB)	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,4-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,3-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,2-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Dichlorodifluoromethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,2-Dichloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,1-Dichloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
trans-1,2-Dichloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
cis-1,2-Dichloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,1-Dichloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,2-Dichloropropane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
trans-1,3-Dichloropropene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
cis-1,3-Dichloropropene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Ethylbenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
2-Hexanone	ND		1	10	2.0	ug/L	08/10/2016 1104
Isopropylbenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Methyl acetate	ND		1	1.0	0.40	ug/L	08/10/2016 1104
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.40	ug/L	08/10/2016 1104
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	08/10/2016 1104
Methylcyclohexane	ND		1	5.0	0.40	ug/L	08/10/2016 1104
Methylene chloride	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Styrene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,1,2,2-Tetrachloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Tetrachloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Toluene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	0.40	ug/L	08/10/2016 1104
1,2,4-Trichlorobenzene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,1,2-Trichloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
1,1,1-Trichloroethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19512-001
Batch: 19512
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Trichlorofluoromethane	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Vinyl chloride	ND		1	0.50	0.40	ug/L	08/10/2016 1104
Xylenes (total)	ND		1	1.0	0.40	ug/L	08/10/2016 1104

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19512-002
Batch: 19512
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	160	N	1	159	60-140	08/10/2016 1006
Benzene	50	50		1	100	70-130	08/10/2016 1006
Bromodichloromethane	50	53		1	106	70-130	08/10/2016 1006
Bromoform	50	44		1	87	70-130	08/10/2016 1006
Bromomethane (Methyl bromide)	50	44		1	88	60-140	08/10/2016 1006
2-Butanone (MEK)	100	130		1	135	60-140	08/10/2016 1006
Carbon disulfide	50	50		1	100	60-140	08/10/2016 1006
Carbon tetrachloride	50	50		1	101	70-130	08/10/2016 1006
Chlorobenzene	50	52		1	104	70-130	08/10/2016 1006
Chloroethane	50	43		1	87	60-140	08/10/2016 1006
Chloroform	50	50		1	100	70-130	08/10/2016 1006
Chloromethane (Methyl chloride)	50	50		1	101	50-130	08/10/2016 1006
Cyclohexane	50	44		1	88	70-130	08/10/2016 1006
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	96	70-130	08/10/2016 1006
Dibromochloromethane	50	56		1	112	70-130	08/10/2016 1006
1,2-Dibromoethane (EDB)	50	52		1	104	70-130	08/10/2016 1006
1,4-Dichlorobenzene	50	51		1	102	70-130	08/10/2016 1006
1,3-Dichlorobenzene	50	53		1	107	70-130	08/10/2016 1006
1,2-Dichlorobenzene	50	56		1	111	70-130	08/10/2016 1006
Dichlorodifluoromethane	50	60		1	119	60-140	08/10/2016 1006
1,2-Dichloroethane	50	51		1	102	70-130	08/10/2016 1006
1,1-Dichloroethane	50	53		1	105	70-130	08/10/2016 1006
trans-1,2-Dichloroethene	50	52		1	105	70-130	08/10/2016 1006
cis-1,2-Dichloroethene	50	54		1	107	70-130	08/10/2016 1006
1,1-Dichloroethene	50	53		1	107	70-130	08/10/2016 1006
1,2-Dichloropropane	50	52		1	105	70-130	08/10/2016 1006
trans-1,3-Dichloropropene	50	52		1	104	70-130	08/10/2016 1006
cis-1,3-Dichloropropene	50	55		1	109	70-130	08/10/2016 1006
Ethylbenzene	50	52		1	104	70-130	08/10/2016 1006
2-Hexanone	100	100		1	104	60-140	08/10/2016 1006
Isopropylbenzene	50	54		1	108	70-130	08/10/2016 1006
Methyl acetate	50	63		1	125	60-140	08/10/2016 1006
Methyl tertiary butyl ether (MTBE)	50	50		1	100	70-130	08/10/2016 1006
4-Methyl-2-pentanone	100	110		1	111	60-140	08/10/2016 1006
Methylcyclohexane	50	53		1	106	70-130	08/10/2016 1006
Methylene chloride	50	51		1	102	70-130	08/10/2016 1006
Styrene	50	54		1	108	70-130	08/10/2016 1006
1,1,2,2-Tetrachloroethane	50	57		1	113	70-130	08/10/2016 1006
Tetrachloroethene	50	55		1	109	70-130	08/10/2016 1006
Toluene	50	52		1	104	70-130	08/10/2016 1006
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	51		1	103	70-130	08/10/2016 1006
1,2,4-Trichlorobenzene	50	56		1	111	70-130	08/10/2016 1006
1,1,2-Trichloroethane	50	53		1	106	70-130	08/10/2016 1006
1,1,1-Trichloroethane	50	49		1	97	70-130	08/10/2016 1006

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19512-002
Batch: 19512
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	54		1	107	70-130	08/10/2016 1006
Trichlorofluoromethane	50	54		1	109	60-140	08/10/2016 1006
Vinyl chloride	50	48		1	95	60-140	08/10/2016 1006
Xylenes (total)	100	100		1	105	70-130	08/10/2016 1006

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19771-001
Batch: 19771
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	20	12	ug/kg	08/12/2016 2145

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		105	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19771-002
Batch: 19771
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	100	95		1	95	70-130	08/12/2016 2106

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19677-001
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	33	11	ug/kg	08/12/2016 0943
2,4,5-Trichlorophenol	ND		1	33	6.1	ug/kg	08/12/2016 0943
2,4,6-Trichlorophenol	ND		1	33	4.7	ug/kg	08/12/2016 0943
2,4-Dichlorophenol	ND		1	33	5.9	ug/kg	08/12/2016 0943
2,4-Dimethylphenol	ND		1	33	10	ug/kg	08/12/2016 0943
2,4-Dinitrophenol	ND		1	170	69	ug/kg	08/12/2016 0943
2,4-Dinitrotoluene	ND		1	67	11	ug/kg	08/12/2016 0943
2,6-Dinitrotoluene	ND		1	67	11	ug/kg	08/12/2016 0943
2-Chloronaphthalene	ND		1	33	6.2	ug/kg	08/12/2016 0943
2-Chlorophenol	ND		1	33	6.0	ug/kg	08/12/2016 0943
2-Methylnaphthalene	ND		1	33	1.5	ug/kg	08/12/2016 0943
2-Methylphenol	ND		1	33	7.1	ug/kg	08/12/2016 0943
2-Nitroaniline	ND		1	67	8.9	ug/kg	08/12/2016 0943
2-Nitrophenol	ND		1	67	15	ug/kg	08/12/2016 0943
3+4-Methylphenol	ND		1	67	10	ug/kg	08/12/2016 0943
3,3'-Dichlorobenzidine	ND		1	170	36	ug/kg	08/12/2016 0943
3-Nitroaniline	ND		1	67	6.5	ug/kg	08/12/2016 0943
4,6-Dinitro-2-methylphenol	ND		1	170	40	ug/kg	08/12/2016 0943
4-Bromophenyl phenyl ether	ND		1	33	7.9	ug/kg	08/12/2016 0943
4-Chloro-3-methyl phenol	ND		1	33	6.1	ug/kg	08/12/2016 0943
4-Chloroaniline	ND		1	33	3.1	ug/kg	08/12/2016 0943
4-Chlorophenyl phenyl ether	ND		1	33	6.9	ug/kg	08/12/2016 0943
4-Nitroaniline	ND		1	67	6.0	ug/kg	08/12/2016 0943
4-Nitrophenol	ND		1	170	41	ug/kg	08/12/2016 0943
Acenaphthene	ND		1	33	1.7	ug/kg	08/12/2016 0943
Acenaphthylene	ND		1	33	1.7	ug/kg	08/12/2016 0943
Acetophenone	ND		1	33	12	ug/kg	08/12/2016 0943
Anthracene	ND		1	33	2.0	ug/kg	08/12/2016 0943
Atrazine	ND		1	33	4.4	ug/kg	08/12/2016 0943
Benzaldehyde	ND		1	33	14	ug/kg	08/12/2016 0943
Benzo(a)anthracene	ND		1	33	1.1	ug/kg	08/12/2016 0943
Benzo(a)pyrene	ND		1	33	1.5	ug/kg	08/12/2016 0943
Benzo(b)fluoranthene	ND		1	33	1.5	ug/kg	08/12/2016 0943
Benzo(g,h,i)perylene	ND		1	33	1.1	ug/kg	08/12/2016 0943
Benzo(k)fluoranthene	ND		1	33	1.4	ug/kg	08/12/2016 0943
bis (2-Chloro-1-methylethyl) ether	ND		1	33	9.3	ug/kg	08/12/2016 0943
bis(2-Chloroethoxy)methane	ND		1	33	8.1	ug/kg	08/12/2016 0943
bis(2-Chloroethyl)ether	ND		1	33	7.9	ug/kg	08/12/2016 0943
bis(2-Ethylhexyl)phthalate	ND		1	33	14	ug/kg	08/12/2016 0943
Butyl benzyl phthalate	ND		1	67	8.6	ug/kg	08/12/2016 0943
Caprolactam	ND		1	33	7.4	ug/kg	08/12/2016 0943
Carbazole	ND		1	33	9.4	ug/kg	08/12/2016 0943
Chrysene	ND		1	33	1.1	ug/kg	08/12/2016 0943
Di-n-butyl phthalate	ND		1	33	12	ug/kg	08/12/2016 0943

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19677-001
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	33	9.8	ug/kg	08/12/2016 0943
Dibenzo(a,h)anthracene	ND		1	33	1.8	ug/kg	08/12/2016 0943
Dibenzofuran	ND		1	33	6.4	ug/kg	08/12/2016 0943
Diethylphthalate	ND		1	33	4.1	ug/kg	08/12/2016 0943
Dimethyl phthalate	ND		1	33	6.6	ug/kg	08/12/2016 0943
Fluoranthene	ND		1	33	0.89	ug/kg	08/12/2016 0943
Fluorene	ND		1	33	2.0	ug/kg	08/12/2016 0943
Hexachlorobenzene	ND		1	33	8.6	ug/kg	08/12/2016 0943
Hexachlorobutadiene	ND		1	33	7.9	ug/kg	08/12/2016 0943
Hexachlorocyclopentadiene	ND		1	170	53	ug/kg	08/12/2016 0943
Hexachloroethane	ND		1	33	5.8	ug/kg	08/12/2016 0943
Indeno(1,2,3-c,d)pyrene	ND		1	33	1.4	ug/kg	08/12/2016 0943
Isophorone	ND		1	33	8.4	ug/kg	08/12/2016 0943
N-Nitrosodi-n-propylamine	ND		1	33	12	ug/kg	08/12/2016 0943
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	33	7.4	ug/kg	08/12/2016 0943
Naphthalene	ND		1	33	1.6	ug/kg	08/12/2016 0943
Nitrobenzene	ND		1	33	13	ug/kg	08/12/2016 0943
Pentachlorophenol	ND		1	170	44	ug/kg	08/12/2016 0943
Phenanthrene	ND		1	33	1.8	ug/kg	08/12/2016 0943
Phenol	ND		1	33	6.9	ug/kg	08/12/2016 0943
Pyrene	ND		1	33	1.2	ug/kg	08/12/2016 0943

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		57	30-117
2-Fluorobiphenyl		59	33-102
2-Fluorophenol		55	28-104
Nitrobenzene-d5		59	22-109
Phenol-d5		59	27-103
Terphenyl-d14		75	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19677-002
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	330	200		1	61	30-130	08/12/2016 1008
2,4,5-Trichlorophenol	330	200		1	59	46-122	08/12/2016 1008
2,4,6-Trichlorophenol	330	190		1	56	38-115	08/12/2016 1008
2,4-Dichlorophenol	670	360		1	55	41-113	08/12/2016 1008
2,4-Dimethylphenol	330	180		1	55	33-123	08/12/2016 1008
2,4-Dinitrophenol	330	210		1	63	30-130	08/12/2016 1008
2,4-Dinitrotoluene	330	240		1	72	48-124	08/12/2016 1008
2,6-Dinitrotoluene	330	220		1	65	47-125	08/12/2016 1008
2-Chloronaphthalene	330	200		1	60	31-127	08/12/2016 1008
2-Chlorophenol	330	200		1	59	37-106	08/12/2016 1008
2-Methylnaphthalene	330	200		1	59	40-106	08/12/2016 1008
2-Methylphenol	330	210		1	63	32-107	08/12/2016 1008
2-Nitroaniline	330	220		1	67	45-128	08/12/2016 1008
2-Nitrophenol	330	200		1	61	35-108	08/12/2016 1008
3+4-Methylphenol	330	210		1	62	39-108	08/12/2016 1008
3,3'-Dichlorobenzidine	330	260		1	77	30-130	08/12/2016 1008
3-Nitroaniline	330	200		1	61	24-127	08/12/2016 1008
4,6-Dinitro-2-methylphenol	330	260		1	77	40-130	08/12/2016 1008
4-Bromophenyl phenyl ether	330	200		1	60	46-118	08/12/2016 1008
4-Chloro-3-methyl phenol	330	220		1	67	49-118	08/12/2016 1008
4-Chloroaniline	330	230		1	69	10-125	08/12/2016 1008
4-Chlorophenyl phenyl ether	330	180		1	55	47-116	08/12/2016 1008
4-Nitroaniline	330	240		1	73	48-127	08/12/2016 1008
4-Nitrophenol	670	600		1	90	18-154	08/12/2016 1008
Acenaphthene	330	200		1	61	46-114	08/12/2016 1008
Acenaphthylene	330	220		1	66	44-122	08/12/2016 1008
Acetophenone	330	180		1	54	30-130	08/12/2016 1008
Anthracene	330	230		1	69	50-119	08/12/2016 1008
Atrazine	330	250		1	75	30-130	08/12/2016 1008
Benzaldehyde	330	230		1	69	40-117	08/12/2016 1008
Benzo(a)anthracene	330	260		1	77	47-121	08/12/2016 1008
Benzo(a)pyrene	330	270		1	80	55-134	08/12/2016 1008
Benzo(b)fluoranthene	330	260		1	79	28-139	08/12/2016 1008
Benzo(g,h,i)perylene	330	310		1	92	36-125	08/12/2016 1008
Benzo(k)fluoranthene	330	270		1	80	47-130	08/12/2016 1008
bis (2-Chloro-1-methylethyl) ether	330	220		1	65	31-102	08/12/2016 1008
bis(2-Chloroethoxy)methane	330	220		1	67	39-108	08/12/2016 1008
bis(2-Chloroethyl)ether	330	220		1	65	32-105	08/12/2016 1008
bis(2-Ethylhexyl)phthalate	330	300		1	90	45-128	08/12/2016 1008
Butyl benzyl phthalate	330	300		1	92	46-128	08/12/2016 1008
Caprolactam	330	290		1	87	30-130	08/12/2016 1008
Carbazole	330	250		1	74	30-130	08/12/2016 1008
Chrysene	330	260		1	78	45-126	08/12/2016 1008
Di-n-butyl phthalate	330	280		1	84	51-129	08/12/2016 1008

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19677-002
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Di-n-octylphthalate	330	270		1	82	49-142	08/12/2016 1008
Dibenzo(a,h)anthracene	330	180		1	55	30-130	08/12/2016 1008
Dibenzofuran	330	190		1	58	45-112	08/12/2016 1008
Diethylphthalate	330	240		1	73	49-123	08/12/2016 1008
Dimethyl phthalate	330	220		1	66	48-120	08/12/2016 1008
Fluoranthene	330	230		1	70	50-123	08/12/2016 1008
Fluorene	330	190		1	58	48-117	08/12/2016 1008
Hexachlorobenzene	330	210		1	63	44-122	08/12/2016 1008
Hexachlorobutadiene	330	180		1	54	33-103	08/12/2016 1008
Hexachlorocyclopentadiene	1700	820		1	49	18-121	08/12/2016 1008
Hexachloroethane	330	180		1	54	30-96	08/12/2016 1008
Indeno(1,2,3-c,d)pyrene	330	270		1	82	45-123	08/12/2016 1008
Isophorone	330	180		1	53	30-130	08/12/2016 1008
N-Nitrosodi-n-propylamine	330	250		1	76	32-115	08/12/2016 1008
N-Nitrosodiphenylamine (Diphenylamine)	330	230		1	68	53-150	08/12/2016 1008
Naphthalene	330	200		1	59	36-110	08/12/2016 1008
Nitrobenzene	330	220		1	66	33-114	08/12/2016 1008
Pentachlorophenol	670	480		1	72	27-138	08/12/2016 1008
Phenanthrene	330	220		1	65	49-117	08/12/2016 1008
Phenol	330	200		1	61	36-108	08/12/2016 1008
Pyrene	330	260		1	79	47-119	08/12/2016 1008

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		62	30-117
2-Fluorobiphenyl		58	33-102
2-Fluorophenol		57	28-104
Nitrobenzene-d5		64	22-109
Phenol-d5		61	27-103
Terphenyl-d14		75	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MB

Sample ID: RQ19484-001
Batch: 19484
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/10/2016 1014

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	0.070	J	1	0.25	0.015	mg/kg	08/11/2016 2035
Arsenic	ND		1	0.25	0.032	mg/kg	08/11/2016 2035
Beryllium	ND		1	0.10	0.0080	mg/kg	08/11/2016 2035
Cadmium	ND		1	0.025	0.0020	mg/kg	08/11/2016 2035
Chromium	ND		1	1.3	0.029	mg/kg	08/11/2016 2035
Copper	0.22	J	1	0.25	0.022	mg/kg	08/11/2016 2035
Iron	1.1	J	1	5.0	0.43	mg/kg	08/11/2016 2035
Lead	0.049	J	1	0.25	0.0060	mg/kg	08/11/2016 2035
Manganese	ND		1	1.3	0.24	mg/kg	08/11/2016 2035
Nickel	0.44	J	1	1.3	0.027	mg/kg	08/11/2016 2035
Selenium	ND		1	0.25	0.038	mg/kg	08/11/2016 2035
Silver	ND		1	0.25	0.020	mg/kg	08/11/2016 2035
Thallium	ND		1	0.13	0.0080	mg/kg	08/11/2016 2035
Zinc	0.12	J	1	2.5	0.066	mg/kg	08/11/2016 2035

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - LCS

Sample ID: RQ19484-002
Batch: 19484
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/10/2016 1014

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	10	9.9		1	99	80-120	08/11/2016 2040
Arsenic	10	9.6		1	96	80-120	08/11/2016 2040
Beryllium	10	9.8		1	98	80-120	08/11/2016 2040
Cadmium	10	9.4		1	94	80-120	08/11/2016 2040
Chromium	10	9.9		1	99	80-120	08/11/2016 2040
Copper	10	10		1	100	80-120	08/11/2016 2040
Iron	100	91		1	91	80-120	08/11/2016 2040
Lead	10	10		1	101	80-120	08/11/2016 2040
Manganese	10	9.7		1	97	80-120	08/11/2016 2040
Nickel	10	10		1	101	80-120	08/11/2016 2040
Selenium	10	9.7		1	97	80-120	08/11/2016 2040
Silver	10	9.5		1	95	80-120	08/11/2016 2040
Thallium	10	9.6		1	96	80-120	08/11/2016 2040
Zinc	10	9.7		1	97	80-120	08/11/2016 2040

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MS

Sample ID: RH09014-001MS
Batch: 19484
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/10/2016 1014

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	0.066	15	2.9	N	1	19	75-125	08/11/2016 2136
Arsenic	ND	15	11	N	10	71	75-125	08/12/2016 1758
Beryllium	0.92	15	16		1	95	75-125	08/11/2016 2136
Cadmium	0.045	15	13		10	86	75-125	08/12/2016 1758
Chromium	16	15	29		10	89	75-125	08/12/2016 1758
Copper	19	15	29		10	94	75-125	08/12/2016 1758
Copper	19	15	40	N	10	137	75-125	08/18/2016 1722
Iron	18000	150	20000	N	10	1130	75-125	08/12/2016 1758
Lead	10	15	29		1	120	75-125	08/11/2016 2136
Manganese	300	15	290	N	10	-59	75-125	08/12/2016 1758
Nickel	7.5	15	20		10	81	75-125	08/12/2016 1758
Selenium	ND	15	10	N	10	67	75-125	08/12/2016 1758
Silver	ND	15	14		1	92	75-125	08/11/2016 2136
Thallium	0.27	15	14		1	92	75-125	08/11/2016 2136
Zinc	66	15	83		10	108	75-125	08/18/2016 1722

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MSD

Sample ID: RH09014-001MD
Batch: 19484
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/10/2016 1014

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Antimony	0.066	15	2.7	N	1	17	9.1	75-125	20	08/11/2016 2142
Arsenic	ND	15	11	N	10	73	3.4	75-125	20	08/12/2016 1803
Beryllium	0.92	15	16		1	95	0.55	75-125	20	08/11/2016 2142
Cadmium	0.045	15	14		10	89	3.8	75-125	20	08/12/2016 1803
Chromium	16	15	32		10	105	8.0	75-125	20	08/12/2016 1803
Copper	19	15	31		10	111	9.3	75-125	20	08/12/2016 1803
Copper	19	15	44	N	10	161	9.2	75-125	20	08/18/2016 1728
Iron	18000	150	22000	N	10	2070	7.0	75-125	20	08/12/2016 1803
Lead	10	15	28		1	112	3.9	75-125	20	08/11/2016 2142
Manganese	300	15	340	N	10	236	14	75-125	20	08/12/2016 1803
Nickel	7.5	15	22		10	94	9.6	75-125	20	08/12/2016 1803
Selenium	ND	15	10	N	10	67	0.55	75-125	20	08/12/2016 1803
Silver	ND	15	14		1	91	0.82	75-125	20	08/11/2016 2142
Thallium	0.27	15	14		1	89	1.9	75-125	20	08/11/2016 2142
Zinc	66	15	95	N	10	185	14	75-125	20	08/18/2016 1728

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MB

Sample ID: RQ19418-001
Batch: 19418
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/09/2016 1402

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	0.0089	J	1	0.083	0.0063	mg/kg	08/11/2016 1037

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - LCS

Sample ID: RQ19418-002
Batch: 19418
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/09/2016 1402

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.83	0.87		1	104	80-120	08/11/2016 1039

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Chain of Custody
and
Miscellaneous Documents

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63409

Client: CDM Smith
Address: 5400 Glenwood Ave, Suite 400
City: Raleigh | State: NC | Zip Code: 27604
Project Name: Bud Holdings
Project No.: SED
P.O. No.:
Report to Contact: Dan Forbes
Sampler's Signature: x Janelle Bauer
Printed Name: Janelle Bauer
Telephone No. / E-mail: 919-325-3500
Quote No.:
Analysis (Attach list if more space is needed)
Page 1 of 1
RH09014

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab/Composite	Matrix: Aqueous	Solid	Non-Aqueous	No of Containers by Preservative Type: Liquids	HSO4	HNO3	HCl	NaOH	NaS2O3		VOC	VOC + 1,4-D	SVOC	Metals, NH3, NO3	Hex Cr			Remarks / Cooler I.D.
SED-2	8-8-16	1735	G	~~X~~	X									X	X	X	X	X			
SED-3	8-8-16	0835	G		X									X	X	X	X	X			
DUP-1	8-8-16	0800	G		X									X	X	X	X	X			
Trip Blank				X										X							

Turn Around Time Required (Prior lab approval required for expedited TAT.)
☐ Standard ☒ Rush (Specify) 5 days

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

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

QC Requirements (Specify)

		Date	Time			Date	Time
1. Relinquished by	Janelle Bauer	8-8-16	1830	1. Received by			
2. Relinquished by				2. Received by			
3. Relinquished by				3. Received by			
4. Relinquished by	FEDEX	8-9-16	0930	4. Laboratory received by		8-9-16	0930

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) Yes No Ice Pack Receipt Temp. 4.6 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: [illegible]

Shealy Environmental Services, Inc.
Document Number: ME0018C-04

Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: CDM Smith Cooler Inspected by/date: tCa 8/9/14 Lot #: RH0904 14

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Other

Yes ☑	No ☐		1. Were custody seals present on the cooler?
Yes ☑	No ☐	NA ☐	2. If custody seals were present, were they intact and unbroken?

pH strip ID: _____ Cl strip ID: _____

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

4.4 /4.6 °C ___ / ___ / ___ °C ___ / ___ / ___ °C ___ / ___ / ___ °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☑	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☑	No ☐		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☑	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☑	No ☐		22. Was the quote number used taken from the container label? 19101

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be >2 by _____ Date: _____

Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR# _____

Sample labels applied by: _____ Verified by: _____ Date: _____

Comments: _____

Report of Analysis

CDM Smith
5400 Glenwood Avenue
Suite 400
Raleigh, NC 27612
Attention: Dan Forbes

Project Name: Bud Holdings

Project Number: SED

Lot Number: RH10004

Date Completed: 08/18/2016

Nisreen Saikaly
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
CDM Smith
Lot Number: RH10004

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary

CDM Smith

Lot Number: RH10004

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SED-1	Solid	08/09/2016 1730	08/10/2016

(1 sample)

Executive Summary
CDM Smith
Lot Number: RH10004

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SED-1	Solid	Ammonia - N (gas	350.1	0.25	J	mg/kg	5
001	SED-1	Solid	Nitrate - N (soluble)	300.0	0.040	J	mg/kg	5
001	SED-1	Solid	Unknown Alkane	8260B	8.5		ug/kg	9
001	SED-1	Solid	2-Propanone, 1-chloro-	8270D	91		ug/kg	10
001	SED-1	Solid	Unknown	8270D	450		ug/kg	10
001	SED-1	Solid	n-Hexadecanoic acid	8270D	140		ug/kg	10
001	SED-1	Solid	9-Octadecenoic acid, (E)-	8270D	630		ug/kg	10
001	SED-1	Solid	Anthracene	8270D	6.9	J	ug/kg	11
001	SED-1	Solid	Benzo(a)anthracene	8270D	40	J	ug/kg	11
001	SED-1	Solid	Benzo(a)pyrene	8270D	44		ug/kg	11
001	SED-1	Solid	Benzo(b)fluoranthene	8270D	60		ug/kg	11
001	SED-1	Solid	Benzo(g,h,i)perylene	8270D	19	J	ug/kg	11
001	SED-1	Solid	Benzo(k)fluoranthene	8270D	25	J	ug/kg	11
001	SED-1	Solid	Chrysene	8270D	49		ug/kg	11
001	SED-1	Solid	Fluoranthene	8270D	110		ug/kg	11
001	SED-1	Solid	Indeno(1,2,3-c,d)pyrene	8270D	20	J	ug/kg	12
001	SED-1	Solid	Phenanthrene	8270D	45		ug/kg	12
001	SED-1	Solid	Pyrene	8270D	79		ug/kg	12
001	SED-1	Solid	Antimony	6020A	0.021	BJ	mg/kg	13
001	SED-1	Solid	Beryllium	6020A	0.18		mg/kg	13
001	SED-1	Solid	Cadmium	6020A	0.0053	J	mg/kg	13
001	SED-1	Solid	Chromium	6020A	4.0		mg/kg	13
001	SED-1	Solid	Copper	6020A	1.8	B	mg/kg	13
001	SED-1	Solid	Iron	6020A	4300	B	mg/kg	13
001	SED-1	Solid	Lead	6020A	1.8	B	mg/kg	13
001	SED-1	Solid	Manganese	6020A	140		mg/kg	13
001	SED-1	Solid	Nickel	6020A	1.6	B	mg/kg	13
001	SED-1	Solid	Thallium	6020A	0.044	J	mg/kg	13
001	SED-1	Solid	Zinc	6020A	9.9	B	mg/kg	13

(29 detections)

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH10004-001
Description:	SED-1	Matrix:	Solid
Date Sampled:	08/09/2016 1730	% Solids:	74.2 08/11/2016 1830
Date Received:	08/10/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1159	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/14/2016 2245	TAF		19885
1		(Sulfate (sol) 300.0	1	08/14/2016 2245	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.25	J	1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.3	0.34	mg/kg	1
Nitrate - N (soluble)		300.0	0.040	J	0.27	0.033	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.7	mg/kg	1

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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH10004-001
Description: SED-1	Matrix: Solid
Date Sampled: 08/09/2016 1730	% Solids: 74.2 08/11/2016 1830
Date Received: 08/10/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/13/2016 0100	JJG		19771	6.51

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		21	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		116	70-130

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH10004-001
Description: SED-1
Matrix: Solid
Date Sampled: 08/09/2016 1730
% Solids: 74.2 08/11/2016 1830
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1146	SES		19729	5.71

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		24	4.7	ug/kg	1
Benzene	71-43-2	8260B	ND		5.9	2.4	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.9	2.4	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.9	2.4	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.9	2.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		24	4.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.9	2.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.9	2.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.9	2.4	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.9	2.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.9	2.4	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.9	2.4	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.9	2.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.9	2.4	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.9	2.4	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.9	2.4	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.9	2.4	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.9	2.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.9	2.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.9	2.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.9	2.4	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.9	2.4	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.9	2.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.9	2.4	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	4.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.9	2.4	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.9	2.4	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.9	2.4	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	4.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.9	2.4	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.9	2.4	ug/kg	1
Styrene	100-42-5	8260B	ND		5.9	2.4	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.9	2.4	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.9	2.4	ug/kg	1
Toluene	108-88-3	8260B	ND		5.9	2.4	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.9	2.4	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.9	2.4	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.9	2.4	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.9	2.4	ug/kg	1

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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH10004-001
Description: SED-1	Matrix: Solid
Date Sampled: 08/09/2016 1730	% Solids: 74.2 08/11/2016 1830
Date Received: 08/10/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1146	SES		19729	5.71

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.9	2.4	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.9	2.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.9	2.4	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		12	4.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	53-142
Bromofluorobenzene		105	47-138
Toluene-d8		105	68-124

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH10004-001
Description: SED-1	Matrix: Solid
Date Sampled: 08/09/2016 1730	% Solids: 74.2 08/11/2016 1830
Date Received: 08/10/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/12/2016 1146	SES		19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown Alkane		8260B	8.5				ug/kg	1

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Library Search

Client: CDM Smith	Laboratory ID: RH10004-001
Description: SED-1	Matrix: Solid
Date Sampled: 08/09/2016 1730	% Solids: 74.2 08/11/2016 1830
Date Received: 08/10/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 2023	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
2-Propanone, 1-chloro-		8270D	91				ug/kg	1
Unknown		8270D	450				ug/kg	1
n-Hexadecanoic acid		8270D	140				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	630				ug/kg	1

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH10004-001
Description: SED-1
Matrix: Solid
Date Sampled: 08/09/2016 1730
% Solids: 74.2 08/11/2016 1830
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 2023	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		44	2.3	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		44	2.3	ug/kg	1
Acetophenone	98-86-2	8270D	ND		44	16	ug/kg	1
Anthracene	120-12-7	8270D	6.9	J	44	2.7	ug/kg	1
Atrazine	1912-24-9	8270D	ND		44	6.0	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		44	19	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	40	J	44	1.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	44		44	2.0	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	60		44	2.0	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	19	J	44	1.5	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	25	J	44	1.9	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		44	15	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		44	11	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		90	12	ug/kg	1
Caprolactam	105-60-2	8270D	ND		44	9.9	ug/kg	1
Carbazole	86-74-8	8270D	ND		44	13	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		44	8.2	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		44	4.2	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		44	11	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		44	11	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		44	13	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		44	8.4	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		44	8.0	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		44	9.3	ug/kg	1
Chrysene	218-01-9	8270D	49		44	1.5	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		44	2.5	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		44	8.6	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		230	49	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		44	7.9	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		44	5.5	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		44	8.8	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		44	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		44	16	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		230	55	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		230	93	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		90	15	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		90	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		44	13	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		44	19	ug/kg	1
Fluoranthene	206-44-0	8270D	110		44	1.2	ug/kg	1
Fluorene	86-73-7	8270D	ND		44	2.6	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		44	12	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		44	11	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		230	72	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH10004-001
Description: SED-1
Matrix: Solid
Date Sampled: 08/09/2016 1730
% Solids: 74.2 08/11/2016 1830
Date Received: 08/10/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 2023	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		44	7.8	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	20	J	44	1.8	ug/kg	1
Isophorone	78-59-1	8270D	ND		44	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		44	2.0	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		44	9.5	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		90	14	ug/kg	1
Naphthalene	91-20-3	8270D	ND		44	2.1	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		90	12	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		90	8.7	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		90	8.1	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		44	17	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		90	20	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		230	56	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		44	16	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		44	9.9	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		230	60	ug/kg	1
Phenanthrene	85-01-8	8270D	45		44	2.5	ug/kg	1
Phenol	108-95-2	8270D	ND		44	9.3	ug/kg	1
Pyrene	129-00-0	8270D	79		44	1.6	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		44	8.2	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		44	6.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		34	33-102
2-Fluorophenol		38	28-104
Nitrobenzene-d5		35	22-109
Phenol-d5		40	27-103
Terphenyl-d14		57	41-120
2,4,6-Tribromophenol		51	30-117

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ICP-MS

Client: CDM Smith	Laboratory ID: RH10004-001
Description: SED-1	Matrix: Solid
Date Sampled: 08/09/2016 1730	% Solids: 74.2 08/11/2016 1830
Date Received: 08/10/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/11/2016 2209	BNW	08/10/2016 1014	19484
2	3050B	6020A	5	08/12/2016 1848	BNW	08/10/2016 1014	19484

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.021	BJ	0.31	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	ND		0.31	0.039	mg/kg	1
Beryllium	7440-41-7	6020A	0.18		0.12	0.0098	mg/kg	1
Cadmium	7440-43-9	6020A	0.0053	J	0.031	0.0025	mg/kg	1
Chromium	7440-47-3	6020A	4.0		1.6	0.036	mg/kg	1
Copper	7440-50-8	6020A	1.8	B	0.31	0.027	mg/kg	1
Iron	7439-89-6	6020A	4300	B	6.1	0.53	mg/kg	1
Lead	7439-92-1	6020A	1.8	B	0.31	0.0074	mg/kg	1
Manganese	7439-96-5	6020A	140		8.0	1.5	mg/kg	2
Nickel	7440-02-0	6020A	1.6	B	1.6	0.033	mg/kg	1
Selenium	7782-49-2	6020A	ND		0.31	0.047	mg/kg	1
Silver	7440-22-4	6020A	ND		0.31	0.025	mg/kg	1
Thallium	7440-28-0	6020A	0.044	J	0.16	0.0098	mg/kg	1
Zinc	7440-66-6	6020A	9.9	B	3.1	0.081	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH10004-001
Description: SED-1	Matrix: Solid
Date Sampled: 08/09/2016 1730	% Solids: 74.2 08/11/2016 1830
Date Received: 08/10/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1343	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.10	0.0079	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ19883-001
Batch: 19883
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate (soluble)	ND		1	10	5.0	mg/kg	08/14/2016 1820

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19883-002
Batch: 19883
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	200	180		1	91	90-110	08/14/2016 1756

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH10004-001MS
Batch: 19883
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	ND	200	190		1	93	90-110	08/14/2016 2309

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH10004-001MD
Batch: 19883
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate (soluble)	ND	200	180		1	91	2.1	90-110	20	08/14/2016 2333

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ19885-001
Batch: 19885
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.20	0.025	mg/kg	08/14/2016 1820

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19885-002
Batch: 19885
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.82		1	102	90-110	08/14/2016 1756

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH10004-001MS
Batch: 19885
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.040	8.0	8.5		1	106	90-110	08/14/2016 2309

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH10004-001MD
Batch: 19885
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N (soluble)	0.040	8.0	8.3		1	103	2.3	90-110	20	08/14/2016 2333

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20034-001
Batch: 20034
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	ND		1	1.0	0.10	mg/kg	08/17/2016 1145

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20034-002
Batch: 20034
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	10	9.4		1	94	90-110	08/17/2016 1147

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19729-001
Batch: 19729
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	4.0	ug/kg	08/12/2016 1025
Benzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Bromodichloromethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Bromoform	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Bromomethane (Methyl bromide)	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
2-Butanone (MEK)	ND		1	20	4.0	ug/kg	08/12/2016 1025
Carbon disulfide	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Carbon tetrachloride	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Chlorobenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Chloroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Chloroform	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Chloromethane (Methyl chloride)	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Cyclohexane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Dibromochloromethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,2-Dibromoethane (EDB)	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,2-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,4-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,3-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Dichlorodifluoromethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,2-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,1-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,1-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
cis-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
trans-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,2-Dichloropropane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
trans-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
cis-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Ethylbenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
2-Hexanone	ND		1	10	4.0	ug/kg	08/12/2016 1025
Isopropylbenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Methyl acetate	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
4-Methyl-2-pentanone	ND		1	10	4.0	ug/kg	08/12/2016 1025
Methylcyclohexane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Methylene chloride	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Styrene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,1,2,2-Tetrachloroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Tetrachloroethene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Toluene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,2,4-Trichlorobenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,1,1-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,1,2-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19729-001
Batch: 19729
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Trichlorofluoromethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Vinyl chloride	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Xylenes (total)	ND		1	10	4.0	ug/kg	08/12/2016 1025

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		108	47-138
1,2-Dichloroethane-d4		99	53-142
Toluene-d8		106	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19729-002
Batch: 19729
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	108	60-140	08/12/2016 0928
Benzene	50	52		1	104	69-123	08/12/2016 0928
Bromodichloromethane	50	54		1	107	69-121	08/12/2016 0928
Bromoform	50	47		1	94	61-119	08/12/2016 0928
Bromomethane (Methyl bromide)	50	57		1	113	10-168	08/12/2016 0928
2-Butanone (MEK)	100	100		1	103	57-148	08/12/2016 0928
Carbon disulfide	50	55		1	110	58-122	08/12/2016 0928
Carbon tetrachloride	50	54		1	109	58-136	08/12/2016 0928
Chlorobenzene	50	52		1	105	59-129	08/12/2016 0928
Chloroethane	50	58		1	116	60-140	08/12/2016 0928
Chloroform	50	54		1	108	71-125	08/12/2016 0928
Chloromethane (Methyl chloride)	50	60		1	121	34-134	08/12/2016 0928
Cyclohexane	50	57		1	114	53-139	08/12/2016 0928
1,2-Dibromo-3-chloropropane (DBCP)	50	49		1	99	55-125	08/12/2016 0928
Dibromochloromethane	50	51		1	102	66-119	08/12/2016 0928
1,2-Dibromoethane (EDB)	50	49		1	99	74-124	08/12/2016 0928
1,2-Dichlorobenzene	50	54		1	107	57-131	08/12/2016 0928
1,4-Dichlorobenzene	50	53		1	107	52-133	08/12/2016 0928
1,3-Dichlorobenzene	50	53		1	106	51-134	08/12/2016 0928
Dichlorodifluoromethane	50	68		1	135	10-157	08/12/2016 0928
1,2-Dichloroethane	50	53		1	105	67-129	08/12/2016 0928
1,1-Dichloroethane	50	55		1	111	71-127	08/12/2016 0928
1,1-Dichloroethene	50	56		1	113	69-138	08/12/2016 0928
cis-1,2-Dichloroethene	50	53		1	107	70-122	08/12/2016 0928
trans-1,2-Dichloroethene	50	55		1	111	68-131	08/12/2016 0928
1,2-Dichloropropane	50	52		1	104	72-124	08/12/2016 0928
trans-1,3-Dichloropropene	50	51		1	102	70-124	08/12/2016 0928
cis-1,3-Dichloropropene	50	53		1	107	70-126	08/12/2016 0928
Ethylbenzene	50	52		1	104	59-128	08/12/2016 0928
2-Hexanone	100	93		1	93	54-137	08/12/2016 0928
Isopropylbenzene	50	54		1	109	50-136	08/12/2016 0928
Methyl acetate	50	50		1	100	59-137	08/12/2016 0928
Methyl tertiary butyl ether (MTBE)	50	49		1	97	70-130	08/12/2016 0928
4-Methyl-2-pentanone	100	99		1	99	60-134	08/12/2016 0928
Methylcyclohexane	50	57		1	115	41-144	08/12/2016 0928
Methylene chloride	50	52		1	103	70-130	08/12/2016 0928
Styrene	50	52		1	104	54-136	08/12/2016 0928
1,1,2,2-Tetrachloroethane	50	49		1	98	69-132	08/12/2016 0928
Tetrachloroethene	50	55		1	110	45-150	08/12/2016 0928
Toluene	50	54		1	107	61-129	08/12/2016 0928
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	58		1	115	49-136	08/12/2016 0928
1,2,4-Trichlorobenzene	50	55		1	110	34-145	08/12/2016 0928
1,1,1-Trichloroethane	50	55		1	110	63-128	08/12/2016 0928
1,1,2-Trichloroethane	50	49		1	99	55-128	08/12/2016 0928

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19729-002
Batch: 19729
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	56		1	111	62-126	08/12/2016 0928
Trichlorofluoromethane	50	63		1	127	45-138	08/12/2016 0928
Vinyl chloride	50	59		1	117	42-132	08/12/2016 0928
Xylenes (total)	100	100		1	104	58-128	08/12/2016 0928

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		106	47-138
1,2-Dichloroethane-d4		97	53-142
Toluene-d8		107	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: RH10004-001DU
Batch: 19729
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Acetone	ND	ND		1	0.00	20	08/12/2016 1834
Benzene	ND	ND		1	0.00	20	08/12/2016 1834
Bromodichloromethane	ND	ND		1	0.00	20	08/12/2016 1834
Bromoform	ND	ND		1	0.00	20	08/12/2016 1834
Bromomethane (Methyl bromide)	ND	ND		1	0.00	20	08/12/2016 1834
2-Butanone (MEK)	ND	ND		1	0.00	20	08/12/2016 1834
Carbon disulfide	ND	ND		1	0.00	20	08/12/2016 1834
Carbon tetrachloride	ND	7.6		1	200	20	08/12/2016 1834
Chlorobenzene	ND	ND		1	0.00	20	08/12/2016 1834
Chloroethane	ND	ND		1	0.00	20	08/12/2016 1834
Chloroform	ND	ND		1	0.00	20	08/12/2016 1834
Chloromethane (Methyl chloride)	ND	ND		1	0.00	20	08/12/2016 1834
Cyclohexane	ND	ND		1	0.00	20	08/12/2016 1834
1,2-Dibromo-3-chloropropane (DBCP)	ND	ND		1	0.00	20	08/12/2016 1834
Dibromochloromethane	ND	ND		1	0.00	20	08/12/2016 1834
1,2-Dibromoethane (EDB)	ND	ND		1	0.00	20	08/12/2016 1834
1,2-Dichlorobenzene	ND	ND		1	0.00	20	08/12/2016 1834
1,3-Dichlorobenzene	ND	ND		1	0.00	20	08/12/2016 1834
1,4-Dichlorobenzene	ND	ND		1	0.00	20	08/12/2016 1834
Dichlorodifluoromethane	ND	ND		1	0.00	20	08/12/2016 1834
1,1-Dichloroethane	ND	ND		1	0.00	20	08/12/2016 1834
1,2-Dichloroethane	ND	ND		1	0.00	20	08/12/2016 1834
1,1-Dichloroethene	ND	ND		1	0.00	20	08/12/2016 1834
cis-1,2-Dichloroethene	ND	ND		1	0.00	20	08/12/2016 1834
trans-1,2-Dichloroethene	ND	ND		1	0.00	20	08/12/2016 1834
1,2-Dichloropropane	ND	ND		1	0.00	20	08/12/2016 1834
cis-1,3-Dichloropropene	ND	ND		1	0.00	20	08/12/2016 1834
trans-1,3-Dichloropropene	ND	ND		1	0.00	20	08/12/2016 1834
Ethylbenzene	ND	ND		1	0.00	20	08/12/2016 1834
2-Hexanone	ND	ND		1	0.00	20	08/12/2016 1834
Isopropylbenzene	ND	ND		1	0.00	20	08/12/2016 1834
Methyl acetate	ND	ND		1	0.00	20	08/12/2016 1834
Methyl tertiary butyl ether (MTBE)	ND	ND		1	0.00	20	08/12/2016 1834
4-Methyl-2-pentanone	ND	ND		1	0.00	20	08/12/2016 1834
Methylcyclohexane	ND	ND		1	0.00	20	08/12/2016 1834
Methylene chloride	ND	ND		1	0.00	20	08/12/2016 1834
Styrene	ND	ND		1	0.00	20	08/12/2016 1834
1,1,2,2-Tetrachloroethane	ND	ND		1	0.00	20	08/12/2016 1834
Tetrachloroethene	ND	ND		1	0.00	20	08/12/2016 1834
Toluene	ND	ND		1	0.00	20	08/12/2016 1834
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND		1	0.00	20	08/12/2016 1834
1,2,4-Trichlorobenzene	ND	ND		1	0.00	20	08/12/2016 1834
1,1,1-Trichloroethane	ND	ND		1	0.00	20	08/12/2016 1834
1,1,2-Trichloroethane	ND	ND		1	0.00	20	08/12/2016 1834

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: RH10004-001DU
Batch: 19729
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Trichloroethene	ND	ND		1	0.00	20	08/12/2016 1834
Trichlorofluoromethane	ND	ND		1	0.00	20	08/12/2016 1834
Vinyl chloride	ND	ND		1	0.00	20	08/12/2016 1834
Xylenes (total)	ND	ND		1	0.00	20	08/12/2016 1834

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		107	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19771-001
Batch: 19771
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	20	12	ug/kg	08/12/2016 2145

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		105	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19771-002
Batch: 19771
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	100	95		1	95	70-130	08/12/2016 2106

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19677-001
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	33	11	ug/kg	08/12/2016 0943
2,4,5-Trichlorophenol	ND		1	33	6.1	ug/kg	08/12/2016 0943
2,4,6-Trichlorophenol	ND		1	33	4.7	ug/kg	08/12/2016 0943
2,4-Dichlorophenol	ND		1	33	5.9	ug/kg	08/12/2016 0943
2,4-Dimethylphenol	ND		1	33	10	ug/kg	08/12/2016 0943
2,4-Dinitrophenol	ND		1	170	69	ug/kg	08/12/2016 0943
2,4-Dinitrotoluene	ND		1	67	11	ug/kg	08/12/2016 0943
2,6-Dinitrotoluene	ND		1	67	11	ug/kg	08/12/2016 0943
2-Chloronaphthalene	ND		1	33	6.2	ug/kg	08/12/2016 0943
2-Chlorophenol	ND		1	33	6.0	ug/kg	08/12/2016 0943
2-Methylnaphthalene	ND		1	33	1.5	ug/kg	08/12/2016 0943
2-Methylphenol	ND		1	33	7.1	ug/kg	08/12/2016 0943
2-Nitroaniline	ND		1	67	8.9	ug/kg	08/12/2016 0943
2-Nitrophenol	ND		1	67	15	ug/kg	08/12/2016 0943
3+4-Methylphenol	ND		1	67	10	ug/kg	08/12/2016 0943
3,3'-Dichlorobenzidine	ND		1	170	36	ug/kg	08/12/2016 0943
3-Nitroaniline	ND		1	67	6.5	ug/kg	08/12/2016 0943
4,6-Dinitro-2-methylphenol	ND		1	170	40	ug/kg	08/12/2016 0943
4-Bromophenyl phenyl ether	ND		1	33	7.9	ug/kg	08/12/2016 0943
4-Chloro-3-methyl phenol	ND		1	33	6.1	ug/kg	08/12/2016 0943
4-Chloroaniline	ND		1	33	3.1	ug/kg	08/12/2016 0943
4-Chlorophenyl phenyl ether	ND		1	33	6.9	ug/kg	08/12/2016 0943
4-Nitroaniline	ND		1	67	6.0	ug/kg	08/12/2016 0943
4-Nitrophenol	ND		1	170	41	ug/kg	08/12/2016 0943
Acenaphthene	ND		1	33	1.7	ug/kg	08/12/2016 0943
Acenaphthylene	ND		1	33	1.7	ug/kg	08/12/2016 0943
Acetophenone	ND		1	33	12	ug/kg	08/12/2016 0943
Anthracene	ND		1	33	2.0	ug/kg	08/12/2016 0943
Atrazine	ND		1	33	4.4	ug/kg	08/12/2016 0943
Benzaldehyde	ND		1	33	14	ug/kg	08/12/2016 0943
Benzo(a)anthracene	ND		1	33	1.1	ug/kg	08/12/2016 0943
Benzo(a)pyrene	ND		1	33	1.5	ug/kg	08/12/2016 0943
Benzo(b)fluoranthene	ND		1	33	1.5	ug/kg	08/12/2016 0943
Benzo(g,h,i)perylene	ND		1	33	1.1	ug/kg	08/12/2016 0943
Benzo(k)fluoranthene	ND		1	33	1.4	ug/kg	08/12/2016 0943
bis (2-Chloro-1-methylethyl) ether	ND		1	33	9.3	ug/kg	08/12/2016 0943
bis(2-Chloroethoxy)methane	ND		1	33	8.1	ug/kg	08/12/2016 0943
bis(2-Chloroethyl)ether	ND		1	33	7.9	ug/kg	08/12/2016 0943
bis(2-Ethylhexyl)phthalate	ND		1	33	14	ug/kg	08/12/2016 0943
Butyl benzyl phthalate	ND		1	67	8.6	ug/kg	08/12/2016 0943
Caprolactam	ND		1	33	7.4	ug/kg	08/12/2016 0943
Carbazole	ND		1	33	9.4	ug/kg	08/12/2016 0943
Chrysene	ND		1	33	1.1	ug/kg	08/12/2016 0943
Di-n-butyl phthalate	ND		1	33	12	ug/kg	08/12/2016 0943

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19677-001
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	33	9.8	ug/kg	08/12/2016 0943
Dibenzo(a,h)anthracene	ND		1	33	1.8	ug/kg	08/12/2016 0943
Dibenzofuran	ND		1	33	6.4	ug/kg	08/12/2016 0943
Diethylphthalate	ND		1	33	4.1	ug/kg	08/12/2016 0943
Dimethyl phthalate	ND		1	33	6.6	ug/kg	08/12/2016 0943
Fluoranthene	ND		1	33	0.89	ug/kg	08/12/2016 0943
Fluorene	ND		1	33	2.0	ug/kg	08/12/2016 0943
Hexachlorobenzene	ND		1	33	8.6	ug/kg	08/12/2016 0943
Hexachlorobutadiene	ND		1	33	7.9	ug/kg	08/12/2016 0943
Hexachlorocyclopentadiene	ND		1	170	53	ug/kg	08/12/2016 0943
Hexachloroethane	ND		1	33	5.8	ug/kg	08/12/2016 0943
Indeno(1,2,3-c,d)pyrene	ND		1	33	1.4	ug/kg	08/12/2016 0943
Isophorone	ND		1	33	8.4	ug/kg	08/12/2016 0943
N-Nitrosodi-n-propylamine	ND		1	33	12	ug/kg	08/12/2016 0943
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	33	7.4	ug/kg	08/12/2016 0943
Naphthalene	ND		1	33	1.6	ug/kg	08/12/2016 0943
Nitrobenzene	ND		1	33	13	ug/kg	08/12/2016 0943
Pentachlorophenol	ND		1	170	44	ug/kg	08/12/2016 0943
Phenanthrene	ND		1	33	1.8	ug/kg	08/12/2016 0943
Phenol	ND		1	33	6.9	ug/kg	08/12/2016 0943
Pyrene	ND		1	33	1.2	ug/kg	08/12/2016 0943

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		57	30-117
2-Fluorobiphenyl		59	33-102
2-Fluorophenol		55	28-104
Nitrobenzene-d5		59	22-109
Phenol-d5		59	27-103
Terphenyl-d14		75	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19677-002
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	330	200		1	61	30-130	08/12/2016 1008
2,4,5-Trichlorophenol	330	200		1	59	46-122	08/12/2016 1008
2,4,6-Trichlorophenol	330	190		1	56	38-115	08/12/2016 1008
2,4-Dichlorophenol	670	360		1	55	41-113	08/12/2016 1008
2,4-Dimethylphenol	330	180		1	55	33-123	08/12/2016 1008
2,4-Dinitrophenol	330	210		1	63	30-130	08/12/2016 1008
2,4-Dinitrotoluene	330	240		1	72	48-124	08/12/2016 1008
2,6-Dinitrotoluene	330	220		1	65	47-125	08/12/2016 1008
2-Chloronaphthalene	330	200		1	60	31-127	08/12/2016 1008
2-Chlorophenol	330	200		1	59	37-106	08/12/2016 1008
2-Methylnaphthalene	330	200		1	59	40-106	08/12/2016 1008
2-Methylphenol	330	210		1	63	32-107	08/12/2016 1008
2-Nitroaniline	330	220		1	67	45-128	08/12/2016 1008
2-Nitrophenol	330	200		1	61	35-108	08/12/2016 1008
3+4-Methylphenol	330	210		1	62	39-108	08/12/2016 1008
3,3'-Dichlorobenzidine	330	260		1	77	30-130	08/12/2016 1008
3-Nitroaniline	330	200		1	61	24-127	08/12/2016 1008
4,6-Dinitro-2-methylphenol	330	260		1	77	40-130	08/12/2016 1008
4-Bromophenyl phenyl ether	330	200		1	60	46-118	08/12/2016 1008
4-Chloro-3-methyl phenol	330	220		1	67	49-118	08/12/2016 1008
4-Chloroaniline	330	230		1	69	10-125	08/12/2016 1008
4-Chlorophenyl phenyl ether	330	180		1	55	47-116	08/12/2016 1008
4-Nitroaniline	330	240		1	73	48-127	08/12/2016 1008
4-Nitrophenol	670	600		1	90	18-154	08/12/2016 1008
Acenaphthene	330	200		1	61	46-114	08/12/2016 1008
Acenaphthylene	330	220		1	66	44-122	08/12/2016 1008
Acetophenone	330	180		1	54	30-130	08/12/2016 1008
Anthracene	330	230		1	69	50-119	08/12/2016 1008
Atrazine	330	250		1	75	30-130	08/12/2016 1008
Benzaldehyde	330	230		1	69	40-117	08/12/2016 1008
Benzo(a)anthracene	330	260		1	77	47-121	08/12/2016 1008
Benzo(a)pyrene	330	270		1	80	55-134	08/12/2016 1008
Benzo(b)fluoranthene	330	260		1	79	28-139	08/12/2016 1008
Benzo(g,h,i)perylene	330	310		1	92	36-125	08/12/2016 1008
Benzo(k)fluoranthene	330	270		1	80	47-130	08/12/2016 1008
bis (2-Chloro-1-methylethyl) ether	330	220		1	65	31-102	08/12/2016 1008
bis(2-Chloroethoxy)methane	330	220		1	67	39-108	08/12/2016 1008
bis(2-Chloroethyl)ether	330	220		1	65	32-105	08/12/2016 1008
bis(2-Ethylhexyl)phthalate	330	300		1	90	45-128	08/12/2016 1008
Butyl benzyl phthalate	330	300		1	92	46-128	08/12/2016 1008
Caprolactam	330	290		1	87	30-130	08/12/2016 1008
Carbazole	330	250		1	74	30-130	08/12/2016 1008
Chrysene	330	260		1	78	45-126	08/12/2016 1008
Di-n-butyl phthalate	330	280		1	84	51-129	08/12/2016 1008

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19677-002
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Di-n-octylphthalate	330	270		1	82	49-142	08/12/2016 1008
Dibenzo(a,h)anthracene	330	180		1	55	30-130	08/12/2016 1008
Dibenzofuran	330	190		1	58	45-112	08/12/2016 1008
Diethylphthalate	330	240		1	73	49-123	08/12/2016 1008
Dimethyl phthalate	330	220		1	66	48-120	08/12/2016 1008
Fluoranthene	330	230		1	70	50-123	08/12/2016 1008
Fluorene	330	190		1	58	48-117	08/12/2016 1008
Hexachlorobenzene	330	210		1	63	44-122	08/12/2016 1008
Hexachlorobutadiene	330	180		1	54	33-103	08/12/2016 1008
Hexachlorocyclopentadiene	1700	820		1	49	18-121	08/12/2016 1008
Hexachloroethane	330	180		1	54	30-96	08/12/2016 1008
Indeno(1,2,3-c,d)pyrene	330	270		1	82	45-123	08/12/2016 1008
Isophorone	330	180		1	53	30-130	08/12/2016 1008
N-Nitrosodi-n-propylamine	330	250		1	76	32-115	08/12/2016 1008
N-Nitrosodiphenylamine (Diphenylamine)	330	230		1	68	53-150	08/12/2016 1008
Naphthalene	330	200		1	59	36-110	08/12/2016 1008
Nitrobenzene	330	220		1	66	33-114	08/12/2016 1008
Pentachlorophenol	670	480		1	72	27-138	08/12/2016 1008
Phenanthrene	330	220		1	65	49-117	08/12/2016 1008
Phenol	330	200		1	61	36-108	08/12/2016 1008
Pyrene	330	260		1	79	47-119	08/12/2016 1008

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		62	30-117
2-Fluorobiphenyl		58	33-102
2-Fluorophenol		57	28-104
Nitrobenzene-d5		64	22-109
Phenol-d5		61	27-103
Terphenyl-d14		75	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: RH10004-001MS
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	440	230		1	52	30-130	08/16/2016 1230
Acenaphthylene	ND	440	240		1	54	30-130	08/16/2016 1230
Acetophenone	ND	440	210		1	46	30-130	08/16/2016 1230
Anthracene	6.9	440	290		1	63	30-130	08/16/2016 1230
Atrazine	ND	440	300		1	67	30-130	08/16/2016 1230
Benzaldehyde	ND	440	250		1	56	40-117	08/16/2016 1230
Benzo(a)anthracene	40	440	320		1	63	30-130	08/16/2016 1230
Benzo(a)pyrene	44	440	350		1	68	30-130	08/16/2016 1230
Benzo(b)fluoranthene	60	440	350		1	66	30-130	08/16/2016 1230
Benzo(g,h,i)perylene	19	440	210		1	43	30-130	08/16/2016 1230
Benzo(k)fluoranthene	25	440	350		1	73	30-130	08/16/2016 1230
1,1'-Biphenyl	ND	440	210		1	47	30-130	08/16/2016 1230
4-Bromophenyl phenyl ether	ND	440	240		1	54	30-130	08/16/2016 1230
Butyl benzyl phthalate	ND	440	360		1	81	30-130	08/16/2016 1230
Caprolactam	ND	440	340		1	76	30-130	08/16/2016 1230
Carbazole	ND	440	290		1	66	30-130	08/16/2016 1230
4-Chloro-3-methyl phenol	ND	440	270		1	62	30-130	08/16/2016 1230
4-Chloroaniline	ND	440	120		1	28	10-130	08/16/2016 1230
bis(2-Chloroethoxy)methane	ND	440	250		1	58	30-130	08/16/2016 1230
bis(2-Chloroethyl)ether	ND	440	220		1	51	30-130	08/16/2016 1230
bis (2-Chloro-1-methylethyl) ether	ND	440	220		1	49	30-130	08/16/2016 1230
2-Chloronaphthalene	ND	440	210		1	47	30-130	08/16/2016 1230
2-Chlorophenol	ND	440	230		1	52	30-130	08/16/2016 1230
4-Chlorophenyl phenyl ether	ND	440	210		1	47	30-130	08/16/2016 1230
Chrysene	49	440	320		1	62	30-130	08/16/2016 1230
Dibenzo(a,h)anthracene	ND	440	150		1	34	30-130	08/16/2016 1230
Dibenzofuran	ND	440	220		1	50	30-130	08/16/2016 1230
3,3'-Dichlorobenzidine	ND	440	230		1	51	30-130	08/16/2016 1230
2,4-Dichlorophenol	ND	890	440		1	50	30-130	08/16/2016 1230
Diethylphthalate	ND	440	270		1	60	30-130	08/16/2016 1230
Dimethyl phthalate	ND	440	240		1	55	30-130	08/16/2016 1230
2,4-Dimethylphenol	ND	440	250		1	56	30-130	08/16/2016 1230
Di-n-butyl phthalate	ND	440	330		1	76	30-130	08/16/2016 1230
4,6-Dinitro-2-methylphenol	ND	440	270		1	62	30-130	08/16/2016 1230
2,4-Dinitrophenol	ND	440	240		1	54	30-130	08/16/2016 1230
2,4-Dinitrotoluene	ND	440	270		1	62	30-130	08/16/2016 1230
2,6-Dinitrotoluene	ND	440	240		1	54	30-130	08/16/2016 1230
Di-n-octylphthalate	ND	440	370		1	84	30-130	08/16/2016 1230
bis(2-Ethylhexyl)phthalate	ND	440	380		1	86	30-130	08/16/2016 1230
Fluoranthene	110	440	320		1	47	30-130	08/16/2016 1230
Fluorene	ND	440	220		1	50	30-130	08/16/2016 1230
Hexachlorobenzene	ND	440	250		1	57	30-130	08/16/2016 1230
Hexachlorobutadiene	ND	440	160		1	36	30-130	08/16/2016 1230
Hexachlorocyclopentadiene	ND	2200	61	N	1	2.8	30-130	08/16/2016 1230

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: RH10004-001MS
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachloroethane	ND	440	73	N	1	16	30-130	08/16/2016 1230
Indeno(1,2,3-c,d)pyrene	20	440	230		1	47	30-130	08/16/2016 1230
Isophorone	ND	440	230		1	52	30-130	08/16/2016 1230
2-Methylnaphthalene	ND	440	210		1	48	30-130	08/16/2016 1230
2-Methylphenol	ND	440	380		1	87	30-130	08/16/2016 1230
3+4-Methylphenol	ND	440	270		1	61	30-130	08/16/2016 1230
Naphthalene	ND	440	200		1	45	30-130	08/16/2016 1230
2-Nitroaniline	ND	440	260		1	58	30-130	08/16/2016 1230
3-Nitroaniline	ND	440	200		1	46	30-130	08/16/2016 1230
4-Nitroaniline	ND	440	250		1	58	30-130	08/16/2016 1230
Nitrobenzene	ND	440	230		1	53	30-130	08/16/2016 1230
2-Nitrophenol	ND	440	220		1	51	30-130	08/16/2016 1230
4-Nitrophenol	ND	890	740		1	83	30-130	08/16/2016 1230
N-Nitrosodi-n-propylamine	ND	440	290		1	66	30-130	08/16/2016 1230
N-Nitrosodiphenylamine (Diphenylamine)	ND	440	270		1	60	30-130	08/16/2016 1230
Pentachlorophenol	ND	890	560		1	63	30-130	08/16/2016 1230
Phenanthrene	45	440	280		1	53	30-130	08/16/2016 1230
Phenol	ND	440	240		1	55	30-130	08/16/2016 1230
Pyrene	79	440	330		1	57	30-130	08/16/2016 1230
2,4,5-Trichlorophenol	ND	440	240		1	54	30-130	08/16/2016 1230
2,4,6-Trichlorophenol	ND	440	220		1	49	30-130	08/16/2016 1230

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		41	33-102
2-Fluorophenol		48	28-104
Nitrobenzene-d5		47	22-109
Phenol-d5		53	27-103
Terphenyl-d14		59	41-120
2,4,6-Tribromophenol		59	30-117

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: RH10004-001MD
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	450	210		1	46	11	30-130	40	08/16/2016 1254
Acenaphthylene	ND	450	210		1	48	12	30-130	40	08/16/2016 1254
Acetophenone	ND	450	170		1	39	17	30-130	40	08/16/2016 1254
Anthracene	6.9	450	280		1	61	2.3	30-130	40	08/16/2016 1254
Atrazine	ND	450	320		1	71	6.9	30-130	40	08/16/2016 1254
Benzaldehyde	ND	450	210		1	47	18	40-117	40	08/16/2016 1254
Benzo(a)anthracene	40	450	330		1	64	3.3	30-130	40	08/16/2016 1254
Benzo(a)pyrene	44	450	340		1	67	0.84	30-130	40	08/16/2016 1254
Benzo(b)fluoranthene	60	450	360		1	66	0.40	30-130	40	08/16/2016 1254
Benzo(g,h,i)perylene	19	450	220		1	45	4.4	30-130	40	08/16/2016 1254
Benzo(k)fluoranthene	25	450	350		1	72	0.73	30-130	40	08/16/2016 1254
1,1'-Biphenyl	ND	450	190		1	42	11	30-130	40	08/16/2016 1254
4-Bromophenyl phenyl ether	ND	450	230		1	51	4.7	30-130	40	08/16/2016 1254
Butyl benzyl phthalate	ND	450	370		1	82	2.3	30-130	40	08/16/2016 1254
Caprolactam	ND	450	320		1	72	5.1	30-130	40	08/16/2016 1254
Carbazole	ND	450	300		1	68	4.1	30-130	40	08/16/2016 1254
4-Chloro-3-methyl phenol	ND	450	260		1	59	3.5	30-130	40	08/16/2016 1254
4-Chloroaniline	ND	450	32	N,+	1	7.1	120	10-130	40	08/16/2016 1254
bis(2-Chloroethoxy)methane	ND	450	230		1	51	11	30-130	40	08/16/2016 1254
bis(2-Chloroethyl)ether	ND	450	180		1	41	20	30-130	40	08/16/2016 1254
bis (2-Chloro-1-methylethyl) ether	ND	450	180		1	39	22	30-130	40	08/16/2016 1254
2-Chloronaphthalene	ND	450	180		1	41	13	30-130	40	08/16/2016 1254
2-Chlorophenol	ND	450	190		1	44	16	30-130	40	08/16/2016 1254
4-Chlorophenyl phenyl ether	ND	450	200		1	45	4.3	30-130	40	08/16/2016 1254
Chrysene	49	450	330		1	63	2.8	30-130	40	08/16/2016 1254
Dibenzo(a,h)anthracene	ND	450	160		1	35	3.7	30-130	40	08/16/2016 1254
Dibenzofuran	ND	450	200		1	45	9.2	30-130	40	08/16/2016 1254
3,3'-Dichlorobenzidine	ND	450	120	N,+	1	28	58	30-130	40	08/16/2016 1254
2,4-Dichlorophenol	ND	900	400		1	45	10	30-130	40	08/16/2016 1254
Diethylphthalate	ND	450	280		1	62	2.8	30-130	40	08/16/2016 1254
Dimethyl phthalate	ND	450	240		1	54	1.6	30-130	40	08/16/2016 1254
2,4-Dimethylphenol	ND	450	230		1	52	7.2	30-130	40	08/16/2016 1254
Di-n-butyl phthalate	ND	450	360		1	80	6.2	30-130	40	08/16/2016 1254
4,6-Dinitro-2-methylphenol	ND	450	270		1	60	1.2	30-130	40	08/16/2016 1254
2,4-Dinitrophenol	ND	450	210		1	48	11	30-130	40	08/16/2016 1254
2,4-Dinitrotoluene	ND	450	270		1	60	1.7	30-130	40	08/16/2016 1254
2,6-Dinitrotoluene	ND	450	240		1	54	1.8	30-130	40	08/16/2016 1254
Di-n-octylphthalate	ND	450	360		1	80	3.1	30-130	40	08/16/2016 1254
bis(2-Ethylhexyl)phthalate	ND	450	380		1	85	0.43	30-130	40	08/16/2016 1254
Fluoranthene	110	450	340		1	52	7.1	30-130	40	08/16/2016 1254
Fluorene	ND	450	220		1	49	1.5	30-130	40	08/16/2016 1254
Hexachlorobenzene	ND	450	260		1	57	1.2	30-130	40	08/16/2016 1254
Hexachlorobutadiene	ND	450	120	N	1	26	31	30-130	40	08/16/2016 1254
Hexachlorocyclopentadiene	ND	2200	42	N	1	1.9	38	30-130	40	08/16/2016 1254

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: RH10004-001MD
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexachloroethane	ND	450	48	N	1	11	40	30-130	40	08/16/2016 1254
Indeno(1,2,3-c,d)pyrene	20	450	240		1	49	3.3	30-130	40	08/16/2016 1254
Isophorone	ND	450	220		1	50	2.7	30-130	40	08/16/2016 1254
2-Methylnaphthalene	ND	450	180		1	40	17	30-130	40	08/16/2016 1254
2-Methylphenol	ND	450	330		1	74	15	30-130	40	08/16/2016 1254
3+4-Methylphenol	ND	450	240		1	54	10	30-130	40	08/16/2016 1254
Naphthalene	ND	450	150		1	34	26	30-130	40	08/16/2016 1254
2-Nitroaniline	ND	450	260		1	57	0.67	30-130	40	08/16/2016 1254
3-Nitroaniline	ND	450	100	N,+	1	23	65	30-130	40	08/16/2016 1254
4-Nitroaniline	ND	450	200		1	44	25	30-130	40	08/16/2016 1254
Nitrobenzene	ND	450	190		1	42	21	30-130	40	08/16/2016 1254
2-Nitrophenol	ND	450	190		1	42	17	30-130	40	08/16/2016 1254
4-Nitrophenol	ND	900	760		1	84	2.6	30-130	40	08/16/2016 1254
N-Nitrosodi-n-propylamine	ND	450	260		1	58	12	30-130	40	08/16/2016 1254
N-Nitrosodiphenylamine (Diphenylamine)	ND	450	260		1	59	1.1	30-130	40	08/16/2016 1254
Pentachlorophenol	ND	900	590		1	66	5.6	30-130	40	08/16/2016 1254
Phenanthrene	45	450	280		1	51	1.4	30-130	40	08/16/2016 1254
Phenol	ND	450	220		1	50	8.2	30-130	40	08/16/2016 1254
Pyrene	79	450	350		1	61	5.7	30-130	40	08/16/2016 1254
2,4,5-Trichlorophenol	ND	450	240		1	54	1.5	30-130	40	08/16/2016 1254
2,4,6-Trichlorophenol	ND	450	210		1	47	2.9	30-130	40	08/16/2016 1254

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		37	33-102
2-Fluorophenol		40	28-104
Nitrobenzene-d5		38	22-109
Phenol-d5		47	27-103
Terphenyl-d14		61	41-120
2,4,6-Tribromophenol		52	30-117

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MB

Sample ID: RQ19484-001
Batch: 19484
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/10/2016 1014

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	0.070	J	1	0.25	0.015	mg/kg	08/11/2016 2035
Arsenic	ND		1	0.25	0.032	mg/kg	08/11/2016 2035
Beryllium	ND		1	0.10	0.0080	mg/kg	08/11/2016 2035
Cadmium	ND		1	0.025	0.0020	mg/kg	08/11/2016 2035
Chromium	ND		1	1.3	0.029	mg/kg	08/11/2016 2035
Copper	0.22	J	1	0.25	0.022	mg/kg	08/11/2016 2035
Iron	1.1	J	1	5.0	0.43	mg/kg	08/11/2016 2035
Lead	0.049	J	1	0.25	0.0060	mg/kg	08/11/2016 2035
Manganese	ND		1	1.3	0.24	mg/kg	08/11/2016 2035
Nickel	0.44	J	1	1.3	0.027	mg/kg	08/11/2016 2035
Selenium	ND		1	0.25	0.038	mg/kg	08/11/2016 2035
Silver	ND		1	0.25	0.020	mg/kg	08/11/2016 2035
Thallium	ND		1	0.13	0.0080	mg/kg	08/11/2016 2035
Zinc	0.12	J	1	2.5	0.066	mg/kg	08/11/2016 2035

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - LCS

Sample ID: RQ19484-002
Batch: 19484
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/10/2016 1014

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	10	9.9		1	99	80-120	08/11/2016 2040
Arsenic	10	9.6		1	96	80-120	08/11/2016 2040
Beryllium	10	9.8		1	98	80-120	08/11/2016 2040
Cadmium	10	9.4		1	94	80-120	08/11/2016 2040
Chromium	10	9.9		1	99	80-120	08/11/2016 2040
Copper	10	10		1	100	80-120	08/11/2016 2040
Iron	100	91		1	91	80-120	08/11/2016 2040
Lead	10	10		1	101	80-120	08/11/2016 2040
Manganese	10	9.7		1	97	80-120	08/11/2016 2040
Nickel	10	10		1	101	80-120	08/11/2016 2040
Selenium	10	9.7		1	97	80-120	08/11/2016 2040
Silver	10	9.5		1	95	80-120	08/11/2016 2040
Thallium	10	9.6		1	96	80-120	08/11/2016 2040
Zinc	10	9.7		1	97	80-120	08/11/2016 2040

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MB

Sample ID: RQ20057-001
Batch: 20057
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/17/2016 1457

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	ND		1	0.083	0.0063	mg/kg	08/18/2016 1339

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - LCS

Sample ID: RQ20057-002
Batch: 20057
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/17/2016 1457

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.83	0.83		1	100	80-120	08/18/2016 1341

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Chain of Custody
and
Miscellaneous Documents

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY **Chain of Custody Record**

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63410

Client: CDM Smith
Address: 5400 Glenwood Ave, Suite 400
City: Raleigh | State: NC | Zip Code: 27604
Project Name: Bud Holdings
Project No.: SED
P.O. No.:
Report to Contact: Dan Forbes
Sampler's Signature: x Janelle Bauer
Printed Name: Janelle Bauer
Telephone No. / E-mail: 919-325-3500
Quote No.:
Page 1 of 1
RH10004

Analysis (Attach list if more space is needed)

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab (G) / Composite (C)	Matrix: Aqueous	Solid	Non-Aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC	VOC 1,4-D	SVOC	Hex Cr	Metals Wet Chem 304 NO3	Remarks / Cooler I.D.
SED-1	8-9-16	1730	G		x								x	x	x	x	x	

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☐ Standard ☒ Rush (Specify) 5 days

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

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

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished by: Janelle Bauer	8-9-16	1830	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEx	8/10/16	0900	4. Laboratory received by: [signature]	8/10/16	0900

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack
Receipt Temp. 2-1 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-04

Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: CDM Smith Cooler Inspected by/date: mam / 02/10/16 Lot #: RH10004

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: _____ Cl strip ID: _____

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

2.1/2.1 °C ___/___/___ °C ___/___/___ °C ___/___/___ °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☑	No ☐	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☑	No ☐		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☐	No ☐	NA ☑	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☑	No ☐	NA ☐	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☑	No ☐	N/A	22. Was the quote number used taken from the container label?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be > 2 by _____ Date: _____

Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR# _____

Sample labels applied by: mam Verified by: _____ Date: 2/10/16

Comments: _____

Report of Analysis

CDM Smith
5400 Glenwood Avenue
Suite 400
Raleigh, NC 27612
Attention: Dan Forbes

Project Name: Bud Holding

Lot Number: RH11024

Date Completed: 08/19/2016

Nisreen Saikaly
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
CDM Smith
Lot Number: RH11024

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary
CDM Smith
Lot Number: RH11024

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SB-1-0.5	Solid	08/10/2016 1420	08/11/2016
002	SB-1-1.5	Solid	08/10/2016 1425	08/11/2016
003	SB-1-7-8	Solid	08/10/2016 1430	08/11/2016
004	SB-2-0-0.5	Solid	08/10/2016 1640	08/11/2016
005	SB-2-1.5	Solid	08/10/2016 1645	08/11/2016
006	SB-2-10.5-12.5	Solid	08/10/2016 1700	08/11/2016
007	DUP-3	Solid	08/10/2016 1650	08/11/2016
008	SB-2-6-8	Solid	08/10/2016 1715	08/11/2016
009	SB-2-12.5-14	Solid	08/10/2016 1730	08/11/2016
010	SB-8-0.5	Solid	08/10/2016 1830	08/11/2016
011	SB-8-1.5	Solid	08/10/2016 1840	08/11/2016
012	SB-9-0.5	Solid	08/10/2016 1850	08/11/2016
013	SB-9-1.5	Solid	08/10/2016 1900	08/11/2016
014	TRIP BLANK	Aqueous	08/10/2016	08/11/2016

(14 samples)

Executive Summary
CDM Smith
Lot Number: RH11024

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SB-1-0.5	Solid	Ammonia - N (gas	350.1	1.2	J	mg/kg	16
001	SB-1-0.5	Solid	Hexavalent Chromium	7196A	1.3		mg/kg	16
001	SB-1-0.5	Solid	Nitrate - N (soluble)	300.0	0.18	J	mg/kg	16
001	SB-1-0.5	Solid	2-Propanone, 1-chloro-	8270D	100		ug/kg	21
001	SB-1-0.5	Solid	Unknown	8270D	620		ug/kg	21
001	SB-1-0.5	Solid	n-Hexadecanoic acid	8270D	290		ug/kg	21
001	SB-1-0.5	Solid	9-Octadecenoic acid, (E)-	8270D	510		ug/kg	21
001	SB-1-0.5	Solid	Octadecanoic acid	8270D	140		ug/kg	21
001	SB-1-0.5	Solid	13-Docosenamide, (Z)-	8270D	460		ug/kg	21
001	SB-1-0.5	Solid	Octacosane	8270D	220		ug/kg	21
001	SB-1-0.5	Solid	Humulane-1,6-dien-3-ol	8270D	98		ug/kg	21
001	SB-1-0.5	Solid	Benzo(a)anthracene	8270D	20	J	ug/kg	22
001	SB-1-0.5	Solid	Benzo(a)pyrene	8270D	26	J	ug/kg	22
001	SB-1-0.5	Solid	Benzo(b)fluoranthene	8270D	32	J	ug/kg	22
001	SB-1-0.5	Solid	Benzo(g,h,i)perylene	8270D	17	J	ug/kg	22
001	SB-1-0.5	Solid	Benzo(k)fluoranthene	8270D	13	J	ug/kg	22
001	SB-1-0.5	Solid	Chrysene	8270D	24	J	ug/kg	22
001	SB-1-0.5	Solid	Di-n-butyl phthalate	8270D	19	J	ug/kg	22
001	SB-1-0.5	Solid	Fluoranthene	8270D	34	J	ug/kg	22
001	SB-1-0.5	Solid	Indeno(1,2,3-c,d)pyrene	8270D	15	J	ug/kg	23
001	SB-1-0.5	Solid	Phenanthrene	8270D	9.5	J	ug/kg	23
001	SB-1-0.5	Solid	Pyrene	8270D	28	J	ug/kg	23
001	SB-1-0.5	Solid	Antimony	6020A	0.022	BJ	mg/kg	24
001	SB-1-0.5	Solid	Arsenic	6020A	1.9	J	mg/kg	24
001	SB-1-0.5	Solid	Beryllium	6020A	0.64	J	mg/kg	24
001	SB-1-0.5	Solid	Cadmium	6020A	0.091	J	mg/kg	24
001	SB-1-0.5	Solid	Chromium	6020A	66	B	mg/kg	24
001	SB-1-0.5	Solid	Copper	6020A	47	B	mg/kg	24
001	SB-1-0.5	Solid	Iron	6020A	40000		mg/kg	24
001	SB-1-0.5	Solid	Lead	6020A	23	B	mg/kg	24
001	SB-1-0.5	Solid	Manganese	6020A	660	B	mg/kg	24
001	SB-1-0.5	Solid	Nickel	6020A	25	B	mg/kg	24
001	SB-1-0.5	Solid	Selenium	6020A	0.56	J	mg/kg	24
001	SB-1-0.5	Solid	Thallium	6020A	0.16	B	mg/kg	24
001	SB-1-0.5	Solid	Zinc	6020A	47	B	mg/kg	24
001	SB-1-0.5	Solid	Mercury	7471B	0.036	J	mg/kg	25
002	SB-1-1.5	Solid	Ammonia - N (gas	350.1	2.3		mg/kg	26
002	SB-1-1.5	Solid	Hexavalent Chromium	7196A	0.61	J	mg/kg	26
002	SB-1-1.5	Solid	Nitrate - N (soluble)	300.0	1.6		mg/kg	26
002	SB-1-1.5	Solid	Sulfate (soluble)	300.0	38		mg/kg	26
002	SB-1-1.5	Solid	Acetone	8260B	93		ug/kg	28
002	SB-1-1.5	Solid	2-Butanone (MEK)	8260B	12	J	ug/kg	28
002	SB-1-1.5	Solid	Unknown	8270D	1400		ug/kg	31
002	SB-1-1.5	Solid	9-Octadecenoic acid, (E)-	8270D	600		ug/kg	31
002	SB-1-1.5	Solid	Unknown	8270D	170		ug/kg	31

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	SB-1-1.5	Solid	Unknown	8270D	280		ug/kg	31
002	SB-1-1.5	Solid	Tricosane	8270D	290		ug/kg	31
002	SB-1-1.5	Solid	Oxirane, 2-decyl-3-(5-	8270D	270		ug/kg	31
002	SB-1-1.5	Solid	Unknown	8270D	270		ug/kg	31
002	SB-1-1.5	Solid	Heptadecane, 9-octyl-	8270D	210		ug/kg	31
002	SB-1-1.5	Solid	Tridecane, 7-propyl-	8270D	210		ug/kg	31
002	SB-1-1.5	Solid	Unknown	8270D	210		ug/kg	31
002	SB-1-1.5	Solid	Unknown	8270D	170		ug/kg	31
002	SB-1-1.5	Solid	Behenyl chloride	8270D	190		ug/kg	31
002	SB-1-1.5	Solid	Tetratriacontane	8270D	350		ug/kg	31
002	SB-1-1.5	Solid	Unknown	8270D	210		ug/kg	31
002	SB-1-1.5	Solid	Hexadecane	8270D	230		ug/kg	31
002	SB-1-1.5	Solid	Pentacosane	8270D	400		ug/kg	31
002	SB-1-1.5	Solid	Unknown	8270D	220		ug/kg	31
002	SB-1-1.5	Solid	13-Docosenamide, (Z)-	8270D	1000		ug/kg	31
002	SB-1-1.5	Solid	Unknown	8270D	430		ug/kg	31
002	SB-1-1.5	Solid	Unknown	8270D	570		ug/kg	31
002	SB-1-1.5	Solid	Acenaphthylene	8270D	12	J	ug/kg	32
002	SB-1-1.5	Solid	Anthracene	8270D	25	J	ug/kg	32
002	SB-1-1.5	Solid	Benzo(a)anthracene	8270D	120		ug/kg	32
002	SB-1-1.5	Solid	Benzo(a)pyrene	8270D	150		ug/kg	32
002	SB-1-1.5	Solid	Benzo(b)fluoranthene	8270D	220		ug/kg	32
002	SB-1-1.5	Solid	Benzo(g,h,i)perylene	8270D	41		ug/kg	32
002	SB-1-1.5	Solid	Benzo(k)fluoranthene	8270D	83		ug/kg	32
002	SB-1-1.5	Solid	Chrysene	8270D	130		ug/kg	32
002	SB-1-1.5	Solid	bis(2-Ethylhexyl)phthalate	8270D	31	J	ug/kg	32
002	SB-1-1.5	Solid	Fluoranthene	8270D	250		ug/kg	32
002	SB-1-1.5	Solid	Indeno(1,2,3-c,d)pyrene	8270D	45		ug/kg	33
002	SB-1-1.5	Solid	Phenanthrene	8270D	86		ug/kg	33
002	SB-1-1.5	Solid	Pyrene	8270D	220		ug/kg	33
002	SB-1-1.5	Solid	Arsenic	6020A	1.3	J	mg/kg	34
002	SB-1-1.5	Solid	Beryllium	6020A	0.20		mg/kg	34
002	SB-1-1.5	Solid	Cadmium	6020A	0.098	J	mg/kg	34
002	SB-1-1.5	Solid	Chromium	6020A	39	B	mg/kg	34
002	SB-1-1.5	Solid	Copper	6020A	28	B	mg/kg	34
002	SB-1-1.5	Solid	Iron	6020A	25000		mg/kg	34
002	SB-1-1.5	Solid	Lead	6020A	25	B	mg/kg	34
002	SB-1-1.5	Solid	Manganese	6020A	170	B	mg/kg	34
002	SB-1-1.5	Solid	Nickel	6020A	11	BJ	mg/kg	34
002	SB-1-1.5	Solid	Selenium	6020A	0.43	J	mg/kg	34
002	SB-1-1.5	Solid	Thallium	6020A	0.11	BJ	mg/kg	34
002	SB-1-1.5	Solid	Zinc	6020A	67	B	mg/kg	34
002	SB-1-1.5	Solid	Mercury	7471B	0.059	J	mg/kg	35
003	SB-1-7-8	Solid	Ammonia - N (gas	350.1	1.2		mg/kg	36
003	SB-1-7-8	Solid	Nitrate - N (soluble)	300.0	1.0		mg/kg	36
003	SB-1-7-8	Solid	Acetone	8260B	74		ug/kg	38
003	SB-1-7-8	Solid	2-Butanone (MEK)	8260B	8.0	J	ug/kg	38
003	SB-1-7-8	Solid	Unknown	8270D	660		ug/kg	41

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	SB-1-7-8	Solid	Unknown	8270D	220		ug/kg	41
003	SB-1-7-8	Solid	Unknown	8270D	230		ug/kg	41
003	SB-1-7-8	Solid	13-Docosenamide, (Z)-	8270D	930		ug/kg	41
003	SB-1-7-8	Solid	Unknown	8270D	690		ug/kg	41
003	SB-1-7-8	Solid	Unknown	8270D	400		ug/kg	41
003	SB-1-7-8	Solid	Unknown	8270D	490		ug/kg	41
003	SB-1-7-8	Solid	Unknown	8270D	530		ug/kg	41
003	SB-1-7-8	Solid	Coprostane	8270D	450		ug/kg	41
003	SB-1-7-8	Solid	Unknown	8270D	310		ug/kg	41
003	SB-1-7-8	Solid	Unknown	8270D	1300		ug/kg	41
003	SB-1-7-8	Solid	Unknown	8270D	400		ug/kg	41
003	SB-1-7-8	Solid	Unknown	8270D	370		ug/kg	41
003	SB-1-7-8	Solid	Unknown	8270D	290		ug/kg	41
003	SB-1-7-8	Solid	Unknown	8270D	430		ug/kg	41
003	SB-1-7-8	Solid	28-Nor-17.beta.(H)-hopane	8270D	1400		ug/kg	41
003	SB-1-7-8	Solid	28-Nor-17.alpha.(H)-	8270D	740		ug/kg	41
003	SB-1-7-8	Solid	Unknown	8270D	350		ug/kg	41
003	SB-1-7-8	Solid	.beta.-iso-Methyl ionone	8270D	540		ug/kg	41
003	SB-1-7-8	Solid	Benzo(b)fluoranthene	8270D	21	J	ug/kg	42
003	SB-1-7-8	Solid	Pyrene	8270D	11	J	ug/kg	43
003	SB-1-7-8	Solid	Arsenic	6020A	1.1	J	mg/kg	44
003	SB-1-7-8	Solid	Beryllium	6020A	0.60	J	mg/kg	44
003	SB-1-7-8	Solid	Chromium	6020A	41	B	mg/kg	44
003	SB-1-7-8	Solid	Copper	6020A	71	B	mg/kg	44
003	SB-1-7-8	Solid	Iron	6020A	40000		mg/kg	44
003	SB-1-7-8	Solid	Lead	6020A	12	B	mg/kg	44
003	SB-1-7-8	Solid	Manganese	6020A	230	B	mg/kg	44
003	SB-1-7-8	Solid	Nickel	6020A	16	B	mg/kg	44
003	SB-1-7-8	Solid	Thallium	6020A	0.065	BJ	mg/kg	44
003	SB-1-7-8	Solid	Zinc	6020A	24	B	mg/kg	44
004	SB-2-0-0.5	Solid	Ammonia - N (gas	350.1	0.32	J	mg/kg	46
004	SB-2-0-0.5	Solid	Nitrate - N (soluble)	300.0	0.082	J	mg/kg	46
004	SB-2-0-0.5	Solid	Methyl acetate	8260B	9.3		ug/kg	48
004	SB-2-0-0.5	Solid	Unknown	8270D	470		ug/kg	51
004	SB-2-0-0.5	Solid	Tridecanoic acid	8270D	220		ug/kg	51
004	SB-2-0-0.5	Solid	Unknown	8270D	340		ug/kg	51
004	SB-2-0-0.5	Solid	6-Octadecenoic acid, (Z)-	8270D	320		ug/kg	51
004	SB-2-0-0.5	Solid	Octadecanoic acid	8270D	140		ug/kg	51
004	SB-2-0-0.5	Solid	Eicosane, 10-methyl-	8270D	150		ug/kg	51
004	SB-2-0-0.5	Solid	Heptacosane	8270D	230		ug/kg	51
004	SB-2-0-0.5	Solid	Unknown	8270D	290		ug/kg	51
004	SB-2-0-0.5	Solid	Nonadecane	8270D	180		ug/kg	51
004	SB-2-0-0.5	Solid	Decane, 3,8-dimethyl-	8270D	200		ug/kg	51
004	SB-2-0-0.5	Solid	1-Chloroeicosane	8270D	320		ug/kg	51
004	SB-2-0-0.5	Solid	Unknown	8270D	230		ug/kg	51
004	SB-2-0-0.5	Solid	Octacosane	8270D	160		ug/kg	51
004	SB-2-0-0.5	Solid	1-Phenanthrenecarboxylic	8270D	150		ug/kg	51
004	SB-2-0-0.5	Solid	13-Docosenamide, (Z)-	8270D	860		ug/kg	51

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
004	SB-2-0-0.5	Solid	Friedelan-3-one	8270D	190		ug/kg	51
004	SB-2-0-0.5	Solid	Tetracosane	8270D	180		ug/kg	51
004	SB-2-0-0.5	Solid	Unknown	8270D	140		ug/kg	51
004	SB-2-0-0.5	Solid	Unknown	8270D	290		ug/kg	51
004	SB-2-0-0.5	Solid	1,4-Dimethyl-8-	8270D	240		ug/kg	51
004	SB-2-0-0.5	Solid	Anthracene	8270D	4.5	J	ug/kg	52
004	SB-2-0-0.5	Solid	Benzo(a)anthracene	8270D	23	J	ug/kg	52
004	SB-2-0-0.5	Solid	Benzo(a)pyrene	8270D	25	J	ug/kg	52
004	SB-2-0-0.5	Solid	Benzo(b)fluoranthene	8270D	35	J	ug/kg	52
004	SB-2-0-0.5	Solid	Benzo(g,h,i)perylene	8270D	13	J	ug/kg	52
004	SB-2-0-0.5	Solid	Benzo(k)fluoranthene	8270D	14	J	ug/kg	52
004	SB-2-0-0.5	Solid	Chrysene	8270D	27	J	ug/kg	52
004	SB-2-0-0.5	Solid	Di-n-butyl phthalate	8270D	15	J	ug/kg	52
004	SB-2-0-0.5	Solid	bis(2-Ethylhexyl)phthalate	8270D	19	J	ug/kg	52
004	SB-2-0-0.5	Solid	Fluoranthene	8270D	44		ug/kg	52
004	SB-2-0-0.5	Solid	Indeno(1,2,3-c,d)pyrene	8270D	12	J	ug/kg	53
004	SB-2-0-0.5	Solid	Phenanthrene	8270D	14	J	ug/kg	53
004	SB-2-0-0.5	Solid	Pyrene	8270D	37	J	ug/kg	53
004	SB-2-0-0.5	Solid	Antimony	6020A	0.12	BJ	mg/kg	54
004	SB-2-0-0.5	Solid	Arsenic	6020A	1.7	J	mg/kg	54
004	SB-2-0-0.5	Solid	Beryllium	6020A	0.29		mg/kg	54
004	SB-2-0-0.5	Solid	Cadmium	6020A	0.16	J	mg/kg	54
004	SB-2-0-0.5	Solid	Chromium	6020A	27		mg/kg	54
004	SB-2-0-0.5	Solid	Copper	6020A	27	B	mg/kg	54
004	SB-2-0-0.5	Solid	Iron	6020A	20000	B	mg/kg	54
004	SB-2-0-0.5	Solid	Lead	6020A	59	B	mg/kg	54
004	SB-2-0-0.5	Solid	Manganese	6020A	360	B	mg/kg	54
004	SB-2-0-0.5	Solid	Nickel	6020A	10	BJ	mg/kg	54
004	SB-2-0-0.5	Solid	Thallium	6020A	0.088	J	mg/kg	54
004	SB-2-0-0.5	Solid	Zinc	6020A	55	B	mg/kg	54
004	SB-2-0-0.5	Solid	Mercury	7471B	0.047	J	mg/kg	55
005	SB-2-1.5	Solid	Ammonia - N (gas	350.1	0.34	J	mg/kg	56
005	SB-2-1.5	Solid	Hexavalent Chromium	7196A	0.69	J	mg/kg	56
005	SB-2-1.5	Solid	Nitrate - N (soluble)	300.0	1.3		mg/kg	56
005	SB-2-1.5	Solid	Acetone	8260B	4.9	J	ug/kg	58
005	SB-2-1.5	Solid	Hexanal	8260B	4.2		ug/kg	60
005	SB-2-1.5	Solid	1-Hexanol	8260B	4.3		ug/kg	60
005	SB-2-1.5	Solid	3-Octanone	8260B	42		ug/kg	60
005	SB-2-1.5	Solid	2-Propanone, 1-chloro-	8270D	92		ug/kg	61
005	SB-2-1.5	Solid	Unknown	8270D	560		ug/kg	61
005	SB-2-1.5	Solid	n-Hexadecanoic acid	8270D	94		ug/kg	61
005	SB-2-1.5	Solid	9-Octadecenoic acid, (E)-	8270D	490		ug/kg	61
005	SB-2-1.5	Solid	13-Docosenamide, (Z)-	8270D	520		ug/kg	61
005	SB-2-1.5	Solid	Unknown	8270D	140		ug/kg	61
005	SB-2-1.5	Solid	Heptadecane, 2,6,10,15-	8270D	84		ug/kg	61
005	SB-2-1.5	Solid	Acenaphthylene	8270D	29	J	ug/kg	62
005	SB-2-1.5	Solid	Anthracene	8270D	11	J	ug/kg	62
005	SB-2-1.5	Solid	Benzo(a)anthracene	8270D	62		ug/kg	62

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
005	SB-2-1.5	Solid	Benzo(a)pyrene	8270D	88		ug/kg	62
005	SB-2-1.5	Solid	Benzo(b)fluoranthene	8270D	88		ug/kg	62
005	SB-2-1.5	Solid	Benzo(g,h,i)perylene	8270D	43		ug/kg	62
005	SB-2-1.5	Solid	Benzo(k)fluoranthene	8270D	34	J	ug/kg	62
005	SB-2-1.5	Solid	Chrysene	8270D	78		ug/kg	62
005	SB-2-1.5	Solid	Fluoranthene	8270D	81		ug/kg	62
005	SB-2-1.5	Solid	Indeno(1,2,3-c,d)pyrene	8270D	34	J	ug/kg	63
005	SB-2-1.5	Solid	Phenanthrene	8270D	28	J	ug/kg	63
005	SB-2-1.5	Solid	Pyrene	8270D	200		ug/kg	63
005	SB-2-1.5	Solid	Antimony	6020A	0.049	BJ	mg/kg	64
005	SB-2-1.5	Solid	Arsenic	6020A	0.88	J	mg/kg	64
005	SB-2-1.5	Solid	Beryllium	6020A	0.48		mg/kg	64
005	SB-2-1.5	Solid	Cadmium	6020A	0.097	J	mg/kg	64
005	SB-2-1.5	Solid	Chromium	6020A	42		mg/kg	64
005	SB-2-1.5	Solid	Copper	6020A	44	B	mg/kg	64
005	SB-2-1.5	Solid	Iron	6020A	31000	B	mg/kg	64
005	SB-2-1.5	Solid	Lead	6020A	19	B	mg/kg	64
005	SB-2-1.5	Solid	Manganese	6020A	440	B	mg/kg	64
005	SB-2-1.5	Solid	Nickel	6020A	19	B	mg/kg	64
005	SB-2-1.5	Solid	Thallium	6020A	0.074	J	mg/kg	64
005	SB-2-1.5	Solid	Zinc	6020A	48	B	mg/kg	64
005	SB-2-1.5	Solid	Mercury	7471B	0.028	J	mg/kg	65
006	SB-2-10.5-12.5	Solid	Ammonia - N (gas	350.1	6.1		mg/kg	66
006	SB-2-10.5-12.5	Solid	Hexavalent Chromium	7196A	0.36	J	mg/kg	66
006	SB-2-10.5-12.5	Solid	Nitrate - N (soluble)	300.0	0.18	J	mg/kg	66
006	SB-2-10.5-12.5	Solid	Acetone	8260B	94		ug/kg	68
006	SB-2-10.5-12.5	Solid	2-Butanone (MEK)	8260B	10	J	ug/kg	68
006	SB-2-10.5-12.5	Solid	1R-.alpha.-Pinene	8260B	13		ug/kg	70
006	SB-2-10.5-12.5	Solid	Cyclotetrasiloxane,	8260B	4.5		ug/kg	70
006	SB-2-10.5-12.5	Solid	Unknown Alkane	8260B	210		ug/kg	70
006	SB-2-10.5-12.5	Solid	Unknown Alkane	8260B	24		ug/kg	70
006	SB-2-10.5-12.5	Solid	Amylene Hydrate	8270D	150		ug/kg	71
006	SB-2-10.5-12.5	Solid	2-Propanone, 1-chloro-	8270D	170		ug/kg	71
006	SB-2-10.5-12.5	Solid	Unknown	8270D	680		ug/kg	71
006	SB-2-10.5-12.5	Solid	Diethyltoluamide	8270D	99		ug/kg	71
006	SB-2-10.5-12.5	Solid	n-Hexadecanoic acid	8270D	400		ug/kg	71
006	SB-2-10.5-12.5	Solid	6-Octadecenoic acid, (Z)-	8270D	590		ug/kg	71
006	SB-2-10.5-12.5	Solid	Octadecanoic acid	8270D	190		ug/kg	71
006	SB-2-10.5-12.5	Solid	Unknown	8270D	120		ug/kg	71
006	SB-2-10.5-12.5	Solid	13-Docosenamide, (Z)-	8270D	470		ug/kg	71
006	SB-2-10.5-12.5	Solid	Unknown	8270D	540		ug/kg	71
006	SB-2-10.5-12.5	Solid	Naringenin	8270D	130		ug/kg	71
006	SB-2-10.5-12.5	Solid	Docosane, 9-butyl-	8270D	240		ug/kg	71
006	SB-2-10.5-12.5	Solid	Unknown	8270D	170		ug/kg	71
006	SB-2-10.5-12.5	Solid	Acenaphthylene	8270D	4.7	J	ug/kg	72
006	SB-2-10.5-12.5	Solid	Anthracene	8270D	5.9	J	ug/kg	72
006	SB-2-10.5-12.5	Solid	Benzo(a)anthracene	8270D	20	J	ug/kg	72
006	SB-2-10.5-12.5	Solid	Benzo(a)pyrene	8270D	21	J	ug/kg	72

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
006	SB-2-10.5-12.5	Solid	Benzo(b)fluoranthene	8270D	20	J	ug/kg	72
006	SB-2-10.5-12.5	Solid	Benzo(g,h,i)perylene	8270D	11	J	ug/kg	72
006	SB-2-10.5-12.5	Solid	Benzo(k)fluoranthene	8270D	11	J	ug/kg	72
006	SB-2-10.5-12.5	Solid	Chrysene	8270D	22	J	ug/kg	72
006	SB-2-10.5-12.5	Solid	bis(2-Ethylhexyl)phthalate	8270D	28	J	ug/kg	72
006	SB-2-10.5-12.5	Solid	Fluoranthene	8270D	39	J	ug/kg	72
006	SB-2-10.5-12.5	Solid	Indeno(1,2,3-c,d)pyrene	8270D	9.1	J	ug/kg	73
006	SB-2-10.5-12.5	Solid	Phenanthrene	8270D	25	J	ug/kg	73
006	SB-2-10.5-12.5	Solid	Pyrene	8270D	44		ug/kg	73
006	SB-2-10.5-12.5	Solid	Antimony	6020A	0.029	BJ	mg/kg	74
006	SB-2-10.5-12.5	Solid	Arsenic	6020A	0.60	J	mg/kg	74
006	SB-2-10.5-12.5	Solid	Beryllium	6020A	0.38		mg/kg	74
006	SB-2-10.5-12.5	Solid	Chromium	6020A	29		mg/kg	74
006	SB-2-10.5-12.5	Solid	Copper	6020A	24	B	mg/kg	74
006	SB-2-10.5-12.5	Solid	Iron	6020A	21000	B	mg/kg	74
006	SB-2-10.5-12.5	Solid	Lead	6020A	9.8	B	mg/kg	74
006	SB-2-10.5-12.5	Solid	Manganese	6020A	220	B	mg/kg	74
006	SB-2-10.5-12.5	Solid	Nickel	6020A	12	BJ	mg/kg	74
006	SB-2-10.5-12.5	Solid	Thallium	6020A	0.063	J	mg/kg	74
006	SB-2-10.5-12.5	Solid	Zinc	6020A	17	B	mg/kg	74
006	SB-2-10.5-12.5	Solid	Mercury	7471B	0.034	J	mg/kg	75
007	DUP-3	Solid	Ammonia - N (gas	350.1	4.4		mg/kg	76
007	DUP-3	Solid	Hexavalent Chromium	7196A	0.35	J	mg/kg	76
007	DUP-3	Solid	Nitrate - N (soluble)	300.0	0.43		mg/kg	76
007	DUP-3	Solid	Acetone	8260B	84		ug/kg	78
007	DUP-3	Solid	2-Butanone (MEK)	8260B	7.3	J	ug/kg	78
007	DUP-3	Solid	1R-.alpha.-Pinene	8260B	61		ug/kg	80
007	DUP-3	Solid	Camphene	8260B	11		ug/kg	80
007	DUP-3	Solid	Unknown Alkane	8260B	120		ug/kg	80
007	DUP-3	Solid	3-Menthene	8260B	5.2		ug/kg	80
007	DUP-3	Solid	Unknown Alkane	8260B	13		ug/kg	80
007	DUP-3	Solid	Unknown	8260B	7.0		ug/kg	80
007	DUP-3	Solid	Unknown	8270D	81		ug/kg	81
007	DUP-3	Solid	2-Propanone, 1-chloro-	8270D	96		ug/kg	81
007	DUP-3	Solid	Unknown	8270D	490		ug/kg	81
007	DUP-3	Solid	n-Hexadecanoic acid	8270D	200		ug/kg	81
007	DUP-3	Solid	Decane, 2-methyl-	8270D	97		ug/kg	81
007	DUP-3	Solid	6-Octadecenoic acid, (Z)-	8270D	830		ug/kg	81
007	DUP-3	Solid	Octadecanoic acid	8270D	110		ug/kg	81
007	DUP-3	Solid	13-Docosenamide, (Z)-	8270D	520		ug/kg	81
007	DUP-3	Solid	Friedelan-3-one	8270D	440		ug/kg	81
007	DUP-3	Solid	Unknown	8270D	280		ug/kg	81
007	DUP-3	Solid	Unknown	8270D	300		ug/kg	81
007	DUP-3	Solid	Benzo(a)anthracene	8270D	5.3	J	ug/kg	82
007	DUP-3	Solid	Benzo(b)fluoranthene	8270D	4.7	J	ug/kg	82
007	DUP-3	Solid	Caprolactam	8270D	33	J	ug/kg	82
007	DUP-3	Solid	Chrysene	8270D	3.3	J	ug/kg	82
007	DUP-3	Solid	Fluoranthene	8270D	8.1	J	ug/kg	82

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
007	DUP-3	Solid	Phenanthrene	8270D	3.9	J	ug/kg	83
007	DUP-3	Solid	Pyrene	8270D	7.6	J	ug/kg	83
007	DUP-3	Solid	Antimony	6020A	0.027	BJ	mg/kg	84
007	DUP-3	Solid	Arsenic	6020A	0.75	J	mg/kg	84
007	DUP-3	Solid	Beryllium	6020A	0.35		mg/kg	84
007	DUP-3	Solid	Cadmium	6020A	0.081	J	mg/kg	84
007	DUP-3	Solid	Chromium	6020A	36		mg/kg	84
007	DUP-3	Solid	Copper	6020A	47	B	mg/kg	84
007	DUP-3	Solid	Iron	6020A	24000	B	mg/kg	84
007	DUP-3	Solid	Lead	6020A	13	B	mg/kg	84
007	DUP-3	Solid	Manganese	6020A	290	B	mg/kg	84
007	DUP-3	Solid	Nickel	6020A	21	BJ	mg/kg	84
007	DUP-3	Solid	Thallium	6020A	0.048	J	mg/kg	84
007	DUP-3	Solid	Zinc	6020A	33	B	mg/kg	84
007	DUP-3	Solid	Mercury	7471B	0.0072	J	mg/kg	85
008	SB-2-6-8	Solid	Ammonia - N (gas	350.1	7.2		mg/kg	86
008	SB-2-6-8	Solid	Hexavalent Chromium	7196A	3.3		mg/kg	86
008	SB-2-6-8	Solid	Nitrate - N (soluble)	300.0	3.2		mg/kg	86
008	SB-2-6-8	Solid	Acetone	8260B	97		ug/kg	88
008	SB-2-6-8	Solid	2-Butanone (MEK)	8260B	14	J	ug/kg	88
008	SB-2-6-8	Solid	Unknown	8270D	820		ug/kg	91
008	SB-2-6-8	Solid	Unknown	8270D	450		ug/kg	91
008	SB-2-6-8	Solid	Pentadecanoic acid	8270D	400		ug/kg	91
008	SB-2-6-8	Solid	Unknown	8270D	660		ug/kg	91
008	SB-2-6-8	Solid	Unknown	8270D	1200		ug/kg	91
008	SB-2-6-8	Solid	n-Hexadecanoic acid	8270D	1500		ug/kg	91
008	SB-2-6-8	Solid	Eicosane	8270D	340		ug/kg	91
008	SB-2-6-8	Solid	Heptadecanoic acid	8270D	360		ug/kg	91
008	SB-2-6-8	Solid	Unknown	8270D	290		ug/kg	91
008	SB-2-6-8	Solid	Unknown	8270D	330		ug/kg	91
008	SB-2-6-8	Solid	Unknown	8270D	290		ug/kg	91
008	SB-2-6-8	Solid	Hexadecane	8270D	270		ug/kg	91
008	SB-2-6-8	Solid	6-Octadecenoic acid, (Z)-	8270D	1100		ug/kg	91
008	SB-2-6-8	Solid	Octadecanoic acid	8270D	530		ug/kg	91
008	SB-2-6-8	Solid	Z-5-Nonadecene	8270D	330		ug/kg	91
008	SB-2-6-8	Solid	Unknown	8270D	430		ug/kg	91
008	SB-2-6-8	Solid	13-Docosenamide, (Z)-	8270D	1000		ug/kg	91
008	SB-2-6-8	Solid	Unknown	8270D	4600		ug/kg	91
008	SB-2-6-8	Solid	Unknown	8270D	4800		ug/kg	91
008	SB-2-6-8	Solid	Unknown	8270D	580		ug/kg	91
008	SB-2-6-8	Solid	Benzo(a)anthracene	8270D	17	J	ug/kg	92
008	SB-2-6-8	Solid	Benzo(a)pyrene	8270D	20	J	ug/kg	92
008	SB-2-6-8	Solid	Benzo(b)fluoranthene	8270D	32	J	ug/kg	92
008	SB-2-6-8	Solid	Caprolactam	8270D	55	J	ug/kg	92
008	SB-2-6-8	Solid	Chrysene	8270D	19	J	ug/kg	92
008	SB-2-6-8	Solid	Fluoranthene	8270D	31	J	ug/kg	92
008	SB-2-6-8	Solid	Phenanthrene	8270D	25	J	ug/kg	93
008	SB-2-6-8	Solid	Pyrene	8270D	36	J	ug/kg	93

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
008	SB-2-6-8	Solid	Antimony	6020A	0.057	BJ	mg/kg	94
008	SB-2-6-8	Solid	Arsenic	6020A	0.81	J	mg/kg	94
008	SB-2-6-8	Solid	Beryllium	6020A	0.36		mg/kg	94
008	SB-2-6-8	Solid	Cadmium	6020A	0.11	J	mg/kg	94
008	SB-2-6-8	Solid	Chromium	6020A	21	J	mg/kg	94
008	SB-2-6-8	Solid	Copper	6020A	24	B	mg/kg	94
008	SB-2-6-8	Solid	Iron	6020A	20000	B	mg/kg	94
008	SB-2-6-8	Solid	Lead	6020A	16	B	mg/kg	94
008	SB-2-6-8	Solid	Manganese	6020A	270	B	mg/kg	94
008	SB-2-6-8	Solid	Nickel	6020A	9.0	BJ	mg/kg	94
008	SB-2-6-8	Solid	Thallium	6020A	0.045	J	mg/kg	94
008	SB-2-6-8	Solid	Zinc	6020A	32	B	mg/kg	94
009	SB-2-12.5-14	Solid	Ammonia - N (gas	350.1	35		mg/kg	96
009	SB-2-12.5-14	Solid	Hexavalent Chromium	7196A	0.80	J	mg/kg	96
009	SB-2-12.5-14	Solid	Nitrate - N (soluble)	300.0	0.053	J	mg/kg	96
009	SB-2-12.5-14	Solid	Acetone	8260B	140		ug/kg	98
009	SB-2-12.5-14	Solid	2-Butanone (MEK)	8260B	17	J	ug/kg	98
009	SB-2-12.5-14	Solid	Unknown Alkane	8260B	28		ug/kg	100
009	SB-2-12.5-14	Solid	1R-.alpha.-Pinene	8260B	180		ug/kg	100
009	SB-2-12.5-14	Solid	Camphene	8260B	26		ug/kg	100
009	SB-2-12.5-14	Solid	Unknown Alkane	8260B	14		ug/kg	100
009	SB-2-12.5-14	Solid	3-Menthene	8260B	8.0		ug/kg	100
009	SB-2-12.5-14	Solid	.beta.-Pinene	8260B	14		ug/kg	100
009	SB-2-12.5-14	Solid	2-Propanone, 1-chloro-	8270D	93		ug/kg	101
009	SB-2-12.5-14	Solid	2-Pentanone, 4-hydroxy-4-	8270D	500		ug/kg	101
009	SB-2-12.5-14	Solid	n-Hexadecanoic acid	8270D	100		ug/kg	101
009	SB-2-12.5-14	Solid	Unknown	8270D	250		ug/kg	101
009	SB-2-12.5-14	Solid	Phenanthrene, 1-methyl-7-	8270D	91		ug/kg	101
009	SB-2-12.5-14	Solid	Tricosane, 2-methyl-	8270D	96		ug/kg	101
009	SB-2-12.5-14	Solid	13-Docosenamide, (Z)-	8270D	550		ug/kg	101
009	SB-2-12.5-14	Solid	Unknown	8270D	84		ug/kg	101
009	SB-2-12.5-14	Solid	Tetracosane, 11-decyl-	8270D	150		ug/kg	101
009	SB-2-12.5-14	Solid	Antimony	6020A	0.021	BJ	mg/kg	104
009	SB-2-12.5-14	Solid	Arsenic	6020A	1.2	J	mg/kg	104
009	SB-2-12.5-14	Solid	Beryllium	6020A	0.45		mg/kg	104
009	SB-2-12.5-14	Solid	Chromium	6020A	22		mg/kg	104
009	SB-2-12.5-14	Solid	Copper	6020A	17	B	mg/kg	104
009	SB-2-12.5-14	Solid	Iron	6020A	33000	B	mg/kg	104
009	SB-2-12.5-14	Solid	Lead	6020A	18	B	mg/kg	104
009	SB-2-12.5-14	Solid	Manganese	6020A	820	B	mg/kg	104
009	SB-2-12.5-14	Solid	Nickel	6020A	6.1	BJ	mg/kg	104
009	SB-2-12.5-14	Solid	Selenium	6020A	0.47	J	mg/kg	104
009	SB-2-12.5-14	Solid	Thallium	6020A	0.13	J	mg/kg	104
009	SB-2-12.5-14	Solid	Zinc	6020A	13	B	mg/kg	104
009	SB-2-12.5-14	Solid	Mercury	7471B	0.037	J	mg/kg	105
010	SB-8-0.5	Solid	Ammonia - N (gas	350.1	2.9		mg/kg	106
010	SB-8-0.5	Solid	Hexavalent Chromium	7196A	0.49	J	mg/kg	106
010	SB-8-0.5	Solid	Nitrate - N (soluble)	300.0	0.75		mg/kg	106

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
010	SB-8-0.5	Solid	Acetone	8260B	39		ug/kg	108
010	SB-8-0.5	Solid	Unknown	8270D	390		ug/kg	111
010	SB-8-0.5	Solid	Benzoic acid, 2-hydroxy-,	8270D	180		ug/kg	111
010	SB-8-0.5	Solid	Homosalate	8270D	430		ug/kg	111
010	SB-8-0.5	Solid	n-Hexadecanoic acid	8270D	480		ug/kg	111
010	SB-8-0.5	Solid	Oxybenzone	8270D	110		ug/kg	111
010	SB-8-0.5	Solid	9-Octadecenoic acid, (E)-	8270D	1500		ug/kg	111
010	SB-8-0.5	Solid	Octadecanoic acid	8270D	280		ug/kg	111
010	SB-8-0.5	Solid	Unknown	8270D	270		ug/kg	111
010	SB-8-0.5	Solid	Unknown	8270D	94		ug/kg	111
010	SB-8-0.5	Solid	13-Docosenamide, (Z)-	8270D	860		ug/kg	111
010	SB-8-0.5	Solid	Acenaphthylene	8270D	19	J	ug/kg	112
010	SB-8-0.5	Solid	Anthracene	8270D	6.7	J	ug/kg	112
010	SB-8-0.5	Solid	Benzo(a)anthracene	8270D	29	J	ug/kg	112
010	SB-8-0.5	Solid	Benzo(a)pyrene	8270D	57		ug/kg	112
010	SB-8-0.5	Solid	Benzo(b)fluoranthene	8270D	66		ug/kg	112
010	SB-8-0.5	Solid	Benzo(g,h,i)perylene	8270D	28	J	ug/kg	112
010	SB-8-0.5	Solid	Benzo(k)fluoranthene	8270D	20	J	ug/kg	112
010	SB-8-0.5	Solid	Chrysene	8270D	28	J	ug/kg	112
010	SB-8-0.5	Solid	bis(2-Ethylhexyl)phthalate	8270D	24	J	ug/kg	112
010	SB-8-0.5	Solid	Fluoranthene	8270D	36	J	ug/kg	112
010	SB-8-0.5	Solid	Indeno(1,2,3-c,d)pyrene	8270D	23	J	ug/kg	113
010	SB-8-0.5	Solid	Phenanthrene	8270D	10	J	ug/kg	113
010	SB-8-0.5	Solid	Pyrene	8270D	83		ug/kg	113
010	SB-8-0.5	Solid	Antimony	6020A	0.031	BJ	mg/kg	114
010	SB-8-0.5	Solid	Arsenic	6020A	1.4	J	mg/kg	114
010	SB-8-0.5	Solid	Beryllium	6020A	0.34		mg/kg	114
010	SB-8-0.5	Solid	Cadmium	6020A	0.031	J	mg/kg	114
010	SB-8-0.5	Solid	Chromium	6020A	41		mg/kg	114
010	SB-8-0.5	Solid	Copper	6020A	31	B	mg/kg	114
010	SB-8-0.5	Solid	Iron	6020A	34000	B	mg/kg	114
010	SB-8-0.5	Solid	Lead	6020A	9.3	B	mg/kg	114
010	SB-8-0.5	Solid	Manganese	6020A	370	B	mg/kg	114
010	SB-8-0.5	Solid	Nickel	6020A	17	B	mg/kg	114
010	SB-8-0.5	Solid	Thallium	6020A	0.095	J	mg/kg	114
010	SB-8-0.5	Solid	Zinc	6020A	33	B	mg/kg	114
010	SB-8-0.5	Solid	Mercury	7471B	0.027	J	mg/kg	115
011	SB-8-1.5	Solid	Ammonia - N (gas	350.1	2.8		mg/kg	116
011	SB-8-1.5	Solid	Hexavalent Chromium	7196A	0.38	J	mg/kg	116
011	SB-8-1.5	Solid	Nitrate - N (soluble)	300.0	0.54		mg/kg	116
011	SB-8-1.5	Solid	Acetone	8260B	98		ug/kg	118
011	SB-8-1.5	Solid	2-Butanone (MEK)	8260B	14	J	ug/kg	118
011	SB-8-1.5	Solid	2-Propanone, 1-chloro-	8270D	110		ug/kg	121
011	SB-8-1.5	Solid	Unknown	8270D	460		ug/kg	121
011	SB-8-1.5	Solid	9-Octadecenoic acid, (E)-	8270D	120		ug/kg	121
011	SB-8-1.5	Solid	13-Docosenamide, (Z)-	8270D	630		ug/kg	121
011	SB-8-1.5	Solid	Benzo(a)anthracene	8270D	7.2	J	ug/kg	122
011	SB-8-1.5	Solid	Benzo(a)pyrene	8270D	6.4	J	ug/kg	122

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
011	SB-8-1.5	Solid	Benzo(b)fluoranthene	8270D	6.9	J	ug/kg	122
011	SB-8-1.5	Solid	Benzo(g,h,i)perylene	8270D	3.4	J	ug/kg	122
011	SB-8-1.5	Solid	Benzo(k)fluoranthene	8270D	2.8	J	ug/kg	122
011	SB-8-1.5	Solid	Chrysene	8270D	4.7	J	ug/kg	122
011	SB-8-1.5	Solid	Fluoranthene	8270D	6.3	J	ug/kg	122
011	SB-8-1.5	Solid	Indeno(1,2,3-c,d)pyrene	8270D	2.9	J	ug/kg	123
011	SB-8-1.5	Solid	Phenanthrene	8270D	3.0	J	ug/kg	123
011	SB-8-1.5	Solid	Pyrene	8270D	9.4	J	ug/kg	123
011	SB-8-1.5	Solid	Antimony	6020A	0.076	BJ	mg/kg	124
011	SB-8-1.5	Solid	Arsenic	6020A	1.7	J	mg/kg	124
011	SB-8-1.5	Solid	Beryllium	6020A	0.73	J	mg/kg	124
011	SB-8-1.5	Solid	Cadmium	6020A	0.15	J	mg/kg	124
011	SB-8-1.5	Solid	Chromium	6020A	54		mg/kg	124
011	SB-8-1.5	Solid	Copper	6020A	53	B	mg/kg	124
011	SB-8-1.5	Solid	Iron	6020A	32000	B	mg/kg	124
011	SB-8-1.5	Solid	Lead	6020A	34	B	mg/kg	124
011	SB-8-1.5	Solid	Manganese	6020A	370	B	mg/kg	124
011	SB-8-1.5	Solid	Nickel	6020A	20	BJ	mg/kg	124
011	SB-8-1.5	Solid	Thallium	6020A	0.081	J	mg/kg	124
011	SB-8-1.5	Solid	Zinc	6020A	68	B	mg/kg	124
011	SB-8-1.5	Solid	Mercury	7471B	0.098		mg/kg	125
012	SB-9-0.5	Solid	Ammonia - N (gas	350.1	2.8		mg/kg	126
012	SB-9-0.5	Solid	Hexavalent Chromium	7196A	0.73	BJ	mg/kg	126
012	SB-9-0.5	Solid	Nitrate - N (soluble)	300.0	0.066	J	mg/kg	126
012	SB-9-0.5	Solid	Acetone	8260B	57		ug/kg	128
012	SB-9-0.5	Solid	2-Butanone (MEK)	8260B	7.2	J	ug/kg	128
012	SB-9-0.5	Solid	2-Propanone, 1-chloro-	8270D	93		ug/kg	131
012	SB-9-0.5	Solid	Unknown	8270D	470		ug/kg	131
012	SB-9-0.5	Solid	n-Hexadecanoic acid	8270D	170		ug/kg	131
012	SB-9-0.5	Solid	6-Octadecenoic acid, (Z)-	8270D	120		ug/kg	131
012	SB-9-0.5	Solid	Octadecanoic acid	8270D	120		ug/kg	131
012	SB-9-0.5	Solid	13-Docosenamide, (Z)-	8270D	1000		ug/kg	131
012	SB-9-0.5	Solid	Squalene	8270D	86		ug/kg	131
012	SB-9-0.5	Solid	Heptacosane	8270D	210		ug/kg	131
012	SB-9-0.5	Solid	Unknown	8270D	87		ug/kg	131
012	SB-9-0.5	Solid	Eicosane	8270D	90		ug/kg	131
012	SB-9-0.5	Solid	Unknown	8270D	120		ug/kg	131
012	SB-9-0.5	Solid	Benzo(a)anthracene	8270D	5.6	J	ug/kg	132
012	SB-9-0.5	Solid	Benzo(a)pyrene	8270D	4.6	J	ug/kg	132
012	SB-9-0.5	Solid	Benzo(b)fluoranthene	8270D	5.7	J	ug/kg	132
012	SB-9-0.5	Solid	Chrysene	8270D	3.5	J	ug/kg	132
012	SB-9-0.5	Solid	Fluoranthene	8270D	6.6	J	ug/kg	132
012	SB-9-0.5	Solid	Phenanthrene	8270D	2.9	J	ug/kg	133
012	SB-9-0.5	Solid	Pyrene	8270D	6.1	J	ug/kg	133
012	SB-9-0.5	Solid	Antimony	6020A	0.029	BJ	mg/kg	134
012	SB-9-0.5	Solid	Beryllium	6020A	0.36		mg/kg	134
012	SB-9-0.5	Solid	Cadmium	6020A	0.035	J	mg/kg	134
012	SB-9-0.5	Solid	Chromium	6020A	29		mg/kg	134

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
012	SB-9-0.5	Solid	Copper	6020A	36	B	mg/kg	134
012	SB-9-0.5	Solid	Iron	6020A	28000	B	mg/kg	134
012	SB-9-0.5	Solid	Lead	6020A	7.4	B	mg/kg	134
012	SB-9-0.5	Solid	Manganese	6020A	380	B	mg/kg	134
012	SB-9-0.5	Solid	Nickel	6020A	15	B	mg/kg	134
012	SB-9-0.5	Solid	Thallium	6020A	0.074	J	mg/kg	134
012	SB-9-0.5	Solid	Zinc	6020A	36	B	mg/kg	134
012	SB-9-0.5	Solid	Mercury	7471B	0.012	J	mg/kg	135
013	SB-9-1.5	Solid	Ammonia - N (gas	350.1	4.1		mg/kg	136
013	SB-9-1.5	Solid	Hexavalent Chromium	7196A	0.39	BJ	mg/kg	136
013	SB-9-1.5	Solid	Nitrate - N (soluble)	300.0	0.089	J	mg/kg	136
013	SB-9-1.5	Solid	Acetone	8260B	52		ug/kg	138
013	SB-9-1.5	Solid	2-Butanone (MEK)	8260B	5.1	J	ug/kg	138
013	SB-9-1.5	Solid	Unknown	8270D	540		ug/kg	141
013	SB-9-1.5	Solid	1R-.alpha.-Pinene	8270D	1400		ug/kg	141
013	SB-9-1.5	Solid	Bicyclo[3.1.1]heptane, 6,6-	8270D	710		ug/kg	141
013	SB-9-1.5	Solid	Octadec-9-enoic acid	8270D	620		ug/kg	141
013	SB-9-1.5	Solid	Tetratetracontane	8270D	280		ug/kg	141
013	SB-9-1.5	Solid	Docosane	8270D	290		ug/kg	141
013	SB-9-1.5	Solid	Tetracosane	8270D	270		ug/kg	141
013	SB-9-1.5	Solid	Unknown	8270D	480		ug/kg	141
013	SB-9-1.5	Solid	Octadecane, 3-methyl-	8270D	220		ug/kg	141
013	SB-9-1.5	Solid	Unknown	8270D	240		ug/kg	141
013	SB-9-1.5	Solid	Eicosane	8270D	360		ug/kg	141
013	SB-9-1.5	Solid	Unknown	8270D	220		ug/kg	141
013	SB-9-1.5	Solid	Unknown	8270D	390		ug/kg	141
013	SB-9-1.5	Solid	Unknown	8270D	450		ug/kg	141
013	SB-9-1.5	Solid	1-Phenanthrenecarboxylic	8270D	740		ug/kg	141
013	SB-9-1.5	Solid	Unknown	8270D	450		ug/kg	141
013	SB-9-1.5	Solid	Abietic acid	8270D	570		ug/kg	141
013	SB-9-1.5	Solid	Silane, trichlorooctadecyl-	8270D	250		ug/kg	141
013	SB-9-1.5	Solid	Unknown	8270D	220		ug/kg	141
013	SB-9-1.5	Solid	13-Docosenamide, (Z)-	8270D	450		ug/kg	141
013	SB-9-1.5	Solid	Acenaphthylene	8270D	3.2	J	ug/kg	142
013	SB-9-1.5	Solid	Benzo(a)anthracene	8270D	11	J	ug/kg	142
013	SB-9-1.5	Solid	Benzo(a)pyrene	8270D	15	J	ug/kg	142
013	SB-9-1.5	Solid	Benzo(b)fluoranthene	8270D	19	J	ug/kg	142
013	SB-9-1.5	Solid	Benzo(g,h,i)perylene	8270D	6.9	J	ug/kg	142
013	SB-9-1.5	Solid	Benzo(k)fluoranthene	8270D	8.2	J	ug/kg	142
013	SB-9-1.5	Solid	Caprolactam	8270D	33	J	ug/kg	142
013	SB-9-1.5	Solid	Chrysene	8270D	13	J	ug/kg	142
013	SB-9-1.5	Solid	bis(2-Ethylhexyl)phthalate	8270D	26	J	ug/kg	142
013	SB-9-1.5	Solid	Fluoranthene	8270D	18	J	ug/kg	142
013	SB-9-1.5	Solid	Indeno(1,2,3-c,d)pyrene	8270D	7.3	J	ug/kg	143
013	SB-9-1.5	Solid	Phenanthrene	8270D	6.0	J	ug/kg	143
013	SB-9-1.5	Solid	Pyrene	8270D	20	J	ug/kg	143
013	SB-9-1.5	Solid	Antimony	6020A	0.026	BJ	mg/kg	144
013	SB-9-1.5	Solid	Arsenic	6020A	0.45	J	mg/kg	144

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
013	SB-9-1.5	Solid	Beryllium	6020A	0.38		mg/kg	144
013	SB-9-1.5	Solid	Cadmium	6020A	0.038	J	mg/kg	144
013	SB-9-1.5	Solid	Chromium	6020A	37		mg/kg	144
013	SB-9-1.5	Solid	Copper	6020A	40	B	mg/kg	144
013	SB-9-1.5	Solid	Iron	6020A	33000	B	mg/kg	144
013	SB-9-1.5	Solid	Lead	6020A	9.3	B	mg/kg	144
013	SB-9-1.5	Solid	Manganese	6020A	560	B	mg/kg	144
013	SB-9-1.5	Solid	Nickel	6020A	25	B	mg/kg	144
013	SB-9-1.5	Solid	Thallium	6020A	0.11	J	mg/kg	144
013	SB-9-1.5	Solid	Zinc	6020A	52	B	mg/kg	144
013	SB-9-1.5	Solid	Mercury	7471B	0.025	J	mg/kg	145

(536 detections)

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH11024-001
Description:	SB-1-0.5	Matrix:	Solid
Date Sampled:	08/10/2016 1420	% Solids:	76.4 08/11/2016 1830
Date Received:	08/11/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1201	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/14/2016 2357	TAF		19885
1		(Sulfate (sol) 300.0	1	08/14/2016 2357	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	1.2	J	1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	1.3		1.3	0.33	mg/kg	1
Nitrate - N (soluble)		300.0	0.18	J	0.26	0.032	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.5	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-001
Description: SB-1-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1420	% Solids: 76.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/12/2016 2226	JJG		19771	5.78

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		23	14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130

PQL = Practical quantitation limit
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-001
Description: SB-1-0.5
Matrix: Solid
Date Sampled: 08/10/2016 1420
% Solids: 76.4 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1209	SES		19729	6.11

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		21	4.3	ug/kg	1
Benzene	71-43-2	8260B	ND		5.4	2.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.4	2.1	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.4	2.1	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.4	2.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		21	4.3	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.4	2.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.4	2.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.4	2.1	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.4	2.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.4	2.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.4	2.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.4	2.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.4	2.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.4	2.1	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.4	2.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.4	2.1	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.4	2.1	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.4	2.1	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.4	2.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.4	2.1	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.4	2.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.4	2.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.4	2.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.4	2.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.4	2.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.4	2.1	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.4	2.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.4	2.1	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	4.3	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.4	2.1	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.4	2.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.4	2.1	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	4.3	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.4	2.1	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.4	2.1	ug/kg	1
Styrene	100-42-5	8260B	ND		5.4	2.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.4	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.4	2.1	ug/kg	1
Toluene	108-88-3	8260B	ND		5.4	2.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.4	2.1	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.4	2.1	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.4	2.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.4	2.1	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-001
Description: SB-1-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1420	% Solids: 76.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1209	SES		19729	6.11

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.4	2.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.4	2.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.4	2.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	4.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		105	68-124

PQL = Practical quantitation limit
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client:	CDM Smith	Laboratory ID:	RH11024-001
Description:	SB-1-0.5	Matrix:	Solid
Date Sampled:	08/10/2016 1420	% Solids:	76.4 08/11/2016 1830
Date Received:	08/11/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-001
Description: SB-1-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1420	% Solids: 76.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1051	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
2-Propanone, 1-chloro-		8270D	100				ug/kg	1
Unknown		8270D	620				ug/kg	1
n-Hexadecanoic acid		8270D	290				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	510				ug/kg	1
Octadecanoic acid		8270D	140				ug/kg	1
13-Docosenamide, (Z)-		8270D	460				ug/kg	1
Octacosane		8270D	220				ug/kg	1
Humulane-1,6-dien-3-ol		8270D	98				ug/kg	1

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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-001
Description: SB-1-0.5
Matrix: Solid
Date Sampled: 08/10/2016 1420
% Solids: 76.4 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1051	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		43	2.2	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		43	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		43	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		43	2.6	ug/kg	1
Atrazine	1912-24-9	8270D	ND		43	5.7	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		43	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	20	J	43	1.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	26	J	43	1.9	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	32	J	43	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	17	J	43	1.5	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	13	J	43	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		43	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		43	10	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		86	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		43	9.5	ug/kg	1
Carbazole	86-74-8	8270D	ND		43	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		43	7.8	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		43	4.0	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		43	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		43	10	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		43	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		43	8.0	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		43	7.7	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		43	8.9	ug/kg	1
Chrysene	218-01-9	8270D	24	J	43	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		43	2.4	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		43	8.3	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		220	47	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		43	7.6	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		43	5.3	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		43	8.5	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		43	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	19	J	43	16	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		220	52	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		220	89	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		86	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		86	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		43	13	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		43	19	ug/kg	1
Fluoranthene	206-44-0	8270D	34	J	43	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		43	2.5	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		43	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		43	10	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		220	69	ug/kg	1

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E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-001
Description: SB-1-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1420	% Solids: 76.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1051	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		43	7.4	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	15	J	43	1.8	ug/kg	1
Isophorone	78-59-1	8270D	ND		43	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		43	2.0	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		43	9.1	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		86	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		43	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		86	12	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		86	8.3	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		86	7.8	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		43	17	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		86	19	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		220	53	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		43	16	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		43	9.5	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		220	57	ug/kg	1
Phenanthrene	85-01-8	8270D	9.5	J	43	2.4	ug/kg	1
Phenol	108-95-2	8270D	ND		43	8.9	ug/kg	1
Pyrene	129-00-0	8270D	28	J	43	1.5	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		43	7.8	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		43	6.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		55	33-102
2-Fluorophenol		56	28-104
Nitrobenzene-d5		55	22-109
Phenol-d5		58	27-103
Terphenyl-d14		71	41-120
2,4,6-Tribromophenol		69	30-117

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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-001
Description: SB-1-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1420	% Solids: 76.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/18/2016 2139	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/18/2016 2155	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.022	BJ	0.30	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	1.9	J	3.0	0.38	mg/kg	2
Beryllium	7440-41-7	6020A	0.64	J	1.2	0.096	mg/kg	2
Cadmium	7440-43-9	6020A	0.091	J	0.30	0.024	mg/kg	2
Chromium	7440-47-3	6020A	66	B	16	0.35	mg/kg	2
Copper	7440-50-8	6020A	47	B	0.30	0.026	mg/kg	1
Iron	7439-89-6	6020A	40000		60	5.2	mg/kg	2
Lead	7439-92-1	6020A	23	B	0.30	0.0072	mg/kg	1
Manganese	7439-96-5	6020A	660	B	16	2.9	mg/kg	2
Nickel	7440-02-0	6020A	25	B	16	0.32	mg/kg	2
Selenium	7782-49-2	6020A	0.56	J	3.0	0.46	mg/kg	2
Silver	7440-22-4	6020A	ND		3.0	0.24	mg/kg	2
Thallium	7440-28-0	6020A	0.16	B	0.16	0.0096	mg/kg	1
Zinc	7440-66-6	6020A	47	B	3.0	0.079	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-001
Description: SB-1-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1420	% Solids: 76.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1346	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.036	J	0.096	0.0073	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH11024-002
Description:	SB-1-1.5	Matrix:	Solid
Date Sampled:	08/10/2016 1425	% Solids:	81.4 08/11/2016 1830
Date Received:	08/11/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1213	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/15/2016 0021	TAF		19885
1		(Sulfate (sol) 300.0	1	08/15/2016 0021	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	2.3		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.61	J	1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	1.6		0.25	0.030	mg/kg	1
Sulfate (soluble)		300.0	38		12	6.1	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-002
Description: SB-1-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1425	% Solids: 81.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B (SIM)	1	08/15/2016 1741	SES		19853	5.69

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		22	13	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4	N	132	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-002
Description: SB-1-1.5
Matrix: Solid
Date Sampled: 08/10/2016 1425
% Solids: 81.4 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1231	SES		19729	4.76

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	93		26	5.2	ug/kg	1
Benzene	71-43-2	8260B	ND		6.5	2.6	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.5	2.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.5	2.6	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.5	2.6	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	12	J	26	5.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.5	2.6	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.5	2.6	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.5	2.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.5	2.6	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.5	2.6	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.5	2.6	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.5	2.6	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.5	2.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.5	2.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.5	2.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.5	2.6	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.5	2.6	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.5	2.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.5	2.6	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.5	2.6	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.5	2.6	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.5	2.6	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.5	2.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	5.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.5	2.6	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.5	2.6	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.5	2.6	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	5.2	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.5	2.6	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.5	2.6	ug/kg	1
Styrene	100-42-5	8260B	ND		6.5	2.6	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.5	2.6	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.5	2.6	ug/kg	1
Toluene	108-88-3	8260B	ND		6.5	2.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.5	2.6	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.5	2.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.5	2.6	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.5	2.6	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-002
Description: SB-1-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1425	% Solids: 81.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1231	SES		19729	4.76

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.5	2.6	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.5	2.6	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.5	2.6	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	5.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		100	47-138
Toluene-d8		105	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-002
Description: SB-1-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1425	% Solids: 81.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-002
Description: SB-1-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1425	% Solids: 81.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1319	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	1400				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	600				ug/kg	1
Unknown		8270D	170				ug/kg	1
Unknown		8270D	280				ug/kg	1
Tricosane		8270D	290				ug/kg	1
Oxirane, 2-decyl-3-(5-methylhexyl)-, cis		8270D	270				ug/kg	1
Unknown		8270D	270				ug/kg	1
Heptadecane, 9-octyl-		8270D	210				ug/kg	1
Tridecane, 7-propyl-		8270D	210				ug/kg	1
Unknown		8270D	210				ug/kg	1
Unknown		8270D	170				ug/kg	1
Behenyl chloride		8270D	190				ug/kg	1
Tetratriacontane		8270D	350				ug/kg	1
Unknown		8270D	210				ug/kg	1
Hexadecane		8270D	230				ug/kg	1
Pentacosane		8270D	400				ug/kg	1
Unknown		8270D	220				ug/kg	1
13-Docosenamide, (Z)-		8270D	1000				ug/kg	1
Unknown		8270D	430				ug/kg	1
Unknown		8270D	570				ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-002
Description: SB-1-1.5
Matrix: Solid
Date Sampled: 08/10/2016 1425
% Solids: 81.4 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1319	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		41	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	12	J	41	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		41	15	ug/kg	1
Anthracene	120-12-7	8270D	25	J	41	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		41	5.5	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		41	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	120		41	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	150		41	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	220		41	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	41		41	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	83		41	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		41	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		41	9.7	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		82	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		41	9.1	ug/kg	1
Carbazole	86-74-8	8270D	ND		41	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		41	7.5	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		41	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		41	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		41	9.7	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		41	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		41	7.6	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		41	7.3	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		41	8.5	ug/kg	1
Chrysene	218-01-9	8270D	130		41	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		41	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		41	7.9	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	45	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		41	7.2	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		41	5.0	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		41	8.1	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		41	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		41	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	50	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	85	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		82	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		82	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		41	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	31	J	41	18	ug/kg	1
Fluoranthene	206-44-0	8270D	250		41	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		41	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		41	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		41	9.6	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	65	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-002
Description: SB-1-1.5
Matrix: Solid
Date Sampled: 08/10/2016 1425
% Solids: 81.4 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1319	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		41	7.1	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	45		41	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		41	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		41	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		41	8.7	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		82	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		41	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		82	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		82	7.9	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		82	7.4	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		41	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		82	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	51	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		41	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		41	9.0	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	54	ug/kg	1
Phenanthrene	85-01-8	8270D	86		41	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		41	8.5	ug/kg	1
Pyrene	129-00-0	8270D	220		41	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		41	7.4	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		41	5.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		56	33-102
2-Fluorophenol		54	28-104
Nitrobenzene-d5		57	22-109
Phenol-d5		54	27-103
Terphenyl-d14		68	41-120
2,4,6-Tribromophenol		71	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-002
Description: SB-1-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1425	% Solids: 81.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/18/2016 2144	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/18/2016 2201	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.29	0.017	mg/kg	1
Arsenic	7440-38-2	6020A	1.3	J	2.9	0.37	mg/kg	2
Beryllium	7440-41-7	6020A	0.20		0.11	0.0092	mg/kg	1
Cadmium	7440-43-9	6020A	0.098	J	0.29	0.023	mg/kg	2
Chromium	7440-47-3	6020A	39	B	15	0.33	mg/kg	2
Copper	7440-50-8	6020A	28	B	0.29	0.025	mg/kg	1
Iron	7439-89-6	6020A	25000		57	4.9	mg/kg	2
Lead	7439-92-1	6020A	25	B	0.29	0.0069	mg/kg	1
Manganese	7439-96-5	6020A	170	B	15	2.7	mg/kg	2
Nickel	7440-02-0	6020A	11	BJ	15	0.31	mg/kg	2
Selenium	7782-49-2	6020A	0.43	J	2.9	0.43	mg/kg	2
Silver	7440-22-4	6020A	ND		2.9	0.23	mg/kg	2
Thallium	7440-28-0	6020A	0.11	BJ	0.15	0.0092	mg/kg	1
Zinc	7440-66-6	6020A	67	B	2.9	0.076	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-002
Description: SB-1-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1425	% Solids: 81.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1353	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.059	J	0.10	0.0076	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH11024-003
Description: SB-1-7-8	Matrix: Solid
Date Sampled: 08/10/2016 1430	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1215	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/15/2016 0045	TAF		19885
1		(Sulfate (sol) 300.0	1	08/15/2016 0045	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	1.2		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	1.0		0.25	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.2	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-003
Description: SB-1-7-8	Matrix: Solid
Date Sampled: 08/10/2016 1430	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/12/2016 2310	JJG		19771	5.16

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		24	15	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-003
Description: SB-1-7-8
Matrix: Solid
Date Sampled: 08/10/2016 1430
% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1254	SES		19729	6.01

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	74		21	4.1	ug/kg	1
Benzene	71-43-2	8260B	ND		5.2	2.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.2	2.1	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.2	2.1	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.2	2.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	8.0	J	21	4.1	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.2	2.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.2	2.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.2	2.1	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.2	2.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.2	2.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.2	2.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.2	2.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.2	2.1	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.2	2.1	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.2	2.1	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.2	2.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.2	2.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.2	2.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.2	2.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.2	2.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.2	2.1	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.2	2.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.2	2.1	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	4.1	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.2	2.1	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.2	2.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.2	2.1	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	4.1	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.2	2.1	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.2	2.1	ug/kg	1
Styrene	100-42-5	8260B	ND		5.2	2.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.2	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.2	2.1	ug/kg	1
Toluene	108-88-3	8260B	ND		5.2	2.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.2	2.1	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.2	2.1	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.2	2.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.2	2.1	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-003
Description: SB-1-7-8	Matrix: Solid
Date Sampled: 08/10/2016 1430	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1254	SES		19729	6.01

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.2	2.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.2	2.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.2	2.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	4.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		105	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client:	CDM Smith	Laboratory ID:	RH11024-003
Description:	SB-1-7-8	Matrix:	Solid
Date Sampled:	08/10/2016 1430	% Solids:	80.5 08/11/2016 1830
Date Received:	08/11/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-003
Description: SB-1-7-8	Matrix: Solid
Date Sampled: 08/10/2016 1430	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	2	08/16/2016 1400	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	660				ug/kg	1
Unknown		8270D	220				ug/kg	1
Unknown		8270D	230				ug/kg	1
13-Docosenamide, (Z)-		8270D	930				ug/kg	1
Unknown		8270D	690				ug/kg	1
Unknown		8270D	400				ug/kg	1
Unknown		8270D	490				ug/kg	1
Unknown		8270D	530				ug/kg	1
Coprostane		8270D	450				ug/kg	1
Unknown		8270D	310				ug/kg	1
Unknown		8270D	1300				ug/kg	1
Unknown		8270D	400				ug/kg	1
Unknown		8270D	370				ug/kg	1
Unknown		8270D	290				ug/kg	1
Unknown		8270D	430				ug/kg	1
28-Nor-17.beta.(H)-hopane		8270D	1400				ug/kg	1
28-Nor-17.alpha.(H)-hopane		8270D	740				ug/kg	1
Unknown		8270D	350				ug/kg	1
.beta.-iso-Methyl ionone		8270D	540				ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-003
Description: SB-1-7-8
Matrix: Solid
Date Sampled: 08/10/2016 1430
% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	2	08/16/2016 1400	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		81	4.2	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		81	4.3	ug/kg	1
Acetophenone	98-86-2	8270D	ND		81	29	ug/kg	1
Anthracene	120-12-7	8270D	ND		81	4.9	ug/kg	1
Atrazine	1912-24-9	8270D	ND		81	11	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		81	34	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		81	2.8	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		81	3.5	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	21	J	81	3.6	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		81	2.8	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		81	3.5	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		81	27	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		81	19	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		160	21	ug/kg	1
Caprolactam	105-60-2	8270D	ND		81	18	ug/kg	1
Carbazole	86-74-8	8270D	ND		81	23	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		81	15	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		81	7.5	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		81	20	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		81	19	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		81	23	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		81	15	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		81	15	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		81	17	ug/kg	1
Chrysene	218-01-9	8270D	ND		81	2.7	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		81	4.5	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		81	16	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		420	89	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		81	14	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		81	10	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		81	16	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		81	24	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		81	29	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		420	99	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		420	170	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		160	27	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		160	28	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		81	24	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		81	35	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		81	2.2	ug/kg	1
Fluorene	86-73-7	8270D	ND		81	4.8	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		81	21	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		81	19	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		420	130	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-003
Description: SB-1-7-8
Matrix: Solid
Date Sampled: 08/10/2016 1430
% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	2	08/16/2016 1400	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		81	14	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		81	3.3	ug/kg	1
Isophorone	78-59-1	8270D	ND		81	21	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		81	3.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		81	17	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		160	25	ug/kg	1
Naphthalene	91-20-3	8270D	ND		81	3.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		160	22	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		160	16	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		160	15	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		81	32	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		160	35	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		420	100	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		81	29	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		81	18	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		420	110	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		81	4.5	ug/kg	1
Phenol	108-95-2	8270D	ND		81	17	ug/kg	1
Pyrene	129-00-0	8270D	11	J	81	2.8	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		81	15	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		81	11	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		63	33-102
2-Fluorophenol		61	28-104
Nitrobenzene-d5		65	22-109
Phenol-d5		62	27-103
Terphenyl-d14		71	41-120
2,4,6-Tribromophenol		71	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-003
Description: SB-1-7-8	Matrix: Solid
Date Sampled: 08/10/2016 1430	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/18/2016 2150	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/18/2016 2206	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.30	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	1.1	J	3.0	0.38	mg/kg	2
Beryllium	7440-41-7	6020A	0.60	J	1.2	0.095	mg/kg	2
Cadmium	7440-43-9	6020A	ND		0.30	0.024	mg/kg	2
Chromium	7440-47-3	6020A	41	B	15	0.34	mg/kg	2
Copper	7440-50-8	6020A	71	B	0.30	0.026	mg/kg	1
Iron	7439-89-6	6020A	40000		59	5.1	mg/kg	2
Lead	7439-92-1	6020A	12	B	0.30	0.0071	mg/kg	1
Manganese	7439-96-5	6020A	230	B	15	2.8	mg/kg	2
Nickel	7440-02-0	6020A	16	B	15	0.32	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.0	0.45	mg/kg	2
Silver	7440-22-4	6020A	ND		3.0	0.24	mg/kg	2
Thallium	7440-28-0	6020A	0.065	BJ	0.15	0.0095	mg/kg	1
Zinc	7440-66-6	6020A	24	B	3.0	0.078	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-003
Description: SB-1-7-8	Matrix: Solid
Date Sampled: 08/10/2016 1430	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1355	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.092	0.0070	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH11024-004
Description: SB-2-0-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1640	% Solids: 77.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1217	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/15/2016 0109	TAF		19885
1		(Sulfate (sol) 300.0	1	08/15/2016 0109	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.32	J	1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.3	0.32	mg/kg	1
Nitrate - N (soluble)		300.0	0.082	J	0.26	0.032	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.4	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-004
Description: SB-2-0-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1640	% Solids: 77.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/12/2016 2332	JJG		19771	5.37

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		24	15	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		117	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-004
Description: SB-2-0-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1640	% Solids: 77.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1316	SES		19729	4.95

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		26	5.2	ug/kg	1
Benzene	71-43-2	8260B	ND		6.5	2.6	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.5	2.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.5	2.6	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.5	2.6	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		26	5.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.5	2.6	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.5	2.6	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.5	2.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.5	2.6	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.5	2.6	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.5	2.6	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.5	2.6	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.5	2.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.5	2.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.5	2.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.5	2.6	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.5	2.6	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.5	2.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.5	2.6	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.5	2.6	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.5	2.6	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.5	2.6	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.5	2.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	5.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.5	2.6	ug/kg	1
Methyl acetate	79-20-9	8260B	9.3		6.5	2.6	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.5	2.6	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	5.2	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.5	2.6	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.5	2.6	ug/kg	1
Styrene	100-42-5	8260B	ND		6.5	2.6	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.5	2.6	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.5	2.6	ug/kg	1
Toluene	108-88-3	8260B	ND		6.5	2.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.5	2.6	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.5	2.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.5	2.6	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.5	2.6	ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-004
Description: SB-2-0-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1640	% Solids: 77.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1316	SES		19729	4.95

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.5	2.6	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.5	2.6	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.5	2.6	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	5.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-004
Description: SB-2-0-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1640	% Solids: 77.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-004
Description: SB-2-0-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1640	% Solids: 77.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1115	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	470				ug/kg	1
Tridecanoic acid		8270D	220				ug/kg	1
Unknown		8270D	340				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	320				ug/kg	1
Octadecanoic acid		8270D	140				ug/kg	1
Eicosane, 10-methyl-		8270D	150				ug/kg	1
Heptacosane		8270D	230				ug/kg	1
Unknown		8270D	290				ug/kg	1
Nonadecane		8270D	180				ug/kg	1
Decane, 3,8-dimethyl-		8270D	200				ug/kg	1
1-Chloroeicosane		8270D	320				ug/kg	1
Unknown		8270D	230				ug/kg	1
Octacosane		8270D	160				ug/kg	1
1-Phenanthrenecarboxylic acid, 1,2,3,4,4		8270D	150				ug/kg	1
13-Docosenamide, (Z)-		8270D	860				ug/kg	1
Friedelan-3-one		8270D	190				ug/kg	1
Tetracosane		8270D	180				ug/kg	1
Unknown		8270D	140				ug/kg	1
Unknown		8270D	290				ug/kg	1
1,4-Dimethyl-8-isopropylidenetricyclo[5.		8270D	240				ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-004
Description: SB-2-0-0.5
Matrix: Solid
Date Sampled: 08/10/2016 1640
% Solids: 77.6 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1115	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		41	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		41	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		41	15	ug/kg	1
Anthracene	120-12-7	8270D	4.5	J	41	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		41	5.6	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		41	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	23	J	41	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	25	J	41	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	35	J	41	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	13	J	41	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	14	J	41	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		41	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		41	9.9	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		84	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		41	9.2	ug/kg	1
Carbazole	86-74-8	8270D	ND		41	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		41	7.6	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		41	3.9	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		41	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		41	9.9	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		41	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		41	7.8	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		41	7.4	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		41	8.7	ug/kg	1
Chrysene	218-01-9	8270D	27	J	41	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		41	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		41	8.0	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	45	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		41	7.4	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		41	5.1	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		41	8.2	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		41	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	15	J	41	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	51	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	87	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		84	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		84	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		41	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	19	J	41	18	ug/kg	1
Fluoranthene	206-44-0	8270D	44		41	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		41	2.5	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		41	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		41	9.8	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	67	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-004
Description: SB-2-0-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1640	% Solids: 77.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1115	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		41	7.2	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	12	J	41	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		41	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		41	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		41	8.8	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		84	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		41	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		84	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		84	8.1	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		84	7.5	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		41	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		84	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	52	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		41	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		41	9.2	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	55	ug/kg	1
Phenanthrene	85-01-8	8270D	14	J	41	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		41	8.7	ug/kg	1
Pyrene	129-00-0	8270D	37	J	41	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		41	7.6	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		41	5.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		46	33-102
2-Fluorophenol		45	28-104
Nitrobenzene-d5		52	22-109
Phenol-d5		47	27-103
Terphenyl-d14		57	41-120
2,4,6-Tribromophenol		57	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-004
Description: SB-2-0-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1640	% Solids: 77.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/18/2016 2347	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/18/2016 2240	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.12	BJ	0.30	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	1.7	J	3.0	0.39	mg/kg	2
Beryllium	7440-41-7	6020A	0.29		0.12	0.0097	mg/kg	1
Cadmium	7440-43-9	6020A	0.16	J	0.30	0.024	mg/kg	2
Chromium	7440-47-3	6020A	27		16	0.35	mg/kg	2
Copper	7440-50-8	6020A	27	B	0.30	0.027	mg/kg	1
Iron	7439-89-6	6020A	20000	B	61	5.2	mg/kg	2
Lead	7439-92-1	6020A	59	B	0.30	0.0073	mg/kg	1
Manganese	7439-96-5	6020A	360	B	16	2.9	mg/kg	2
Nickel	7440-02-0	6020A	10	BJ	16	0.33	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.0	0.46	mg/kg	2
Silver	7440-22-4	6020A	ND		3.0	0.24	mg/kg	2
Thallium	7440-28-0	6020A	0.088	J	0.16	0.0097	mg/kg	1
Zinc	7440-66-6	6020A	55	B	3.0	0.080	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-004
Description: SB-2-0-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1640	% Solids: 77.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1357	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.047	J	0.10	0.0078	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH11024-005
Description: SB-2-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1645	% Solids: 79.7 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1219	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/15/2016 0133	TAF		19885
1		(Sulfate (sol) 300.0	1	08/15/2016 0133	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.34	J	1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.69	J	1.3	0.32	mg/kg	1
Nitrate - N (soluble)		300.0	1.3		0.25	0.031	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.3	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-005
Description: SB-2-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1645	% Solids: 79.7 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B (SIM)	1	08/15/2016 1803	SES		19853	6.33

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		20	12	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4	N	132	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-005
Description: SB-2-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1645	% Solids: 79.7 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1339	SES		19729	6.13

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	4.9	J	20	4.1	ug/kg	1
Benzene	71-43-2	8260B	ND		5.1	2.0	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.1	2.0	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.1	2.0	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.1	2.0	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		20	4.1	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.1	2.0	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.1	2.0	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.1	2.0	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.1	2.0	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.1	2.0	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.1	2.0	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.1	2.0	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.1	2.0	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.1	2.0	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.1	2.0	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.1	2.0	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.1	2.0	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.1	2.0	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.1	2.0	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.1	2.0	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.1	2.0	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.1	2.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.1	2.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.1	2.0	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.1	2.0	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.1	2.0	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.1	2.0	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.1	2.0	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	4.1	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.1	2.0	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.1	2.0	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.1	2.0	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	4.1	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.1	2.0	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.1	2.0	ug/kg	1
Styrene	100-42-5	8260B	ND		5.1	2.0	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.1	2.0	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.1	2.0	ug/kg	1
Toluene	108-88-3	8260B	ND		5.1	2.0	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.1	2.0	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.1	2.0	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.1	2.0	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.1	2.0	ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-005
Description: SB-2-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1645	% Solids: 79.7 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1339	SES		19729	6.13

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.1	2.0	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.1	2.0	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.1	2.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	4.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		101	47-138
Toluene-d8		103	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-005
Description: SB-2-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1645	% Solids: 79.7 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/12/2016 1339	SES		19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexanal		8260B	4.2				ug/kg	1
1-Hexanol		8260B	4.3				ug/kg	1
3-Octanone		8260B	42				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-005
Description: SB-2-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1645	% Solids: 79.7 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1140	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
2-Propanone, 1-chloro-		8270D	92				ug/kg	1
Unknown		8270D	560				ug/kg	1
n-Hexadecanoic acid		8270D	94				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	490				ug/kg	1
13-Docosenamide, (Z)-		8270D	520				ug/kg	1
Unknown		8270D	140				ug/kg	1
Heptadecane, 2,6,10,15-tetramethyl-		8270D	84				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-005
Description: SB-2-1.5
Matrix: Solid
Date Sampled: 08/10/2016 1645
% Solids: 79.7 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1140	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		40	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	29	J	40	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		40	15	ug/kg	1
Anthracene	120-12-7	8270D	11	J	40	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		40	5.4	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		40	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	62		40	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	88		40	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	88		40	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	43		40	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	34	J	40	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		40	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		40	9.7	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		82	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		40	9.0	ug/kg	1
Carbazole	86-74-8	8270D	ND		40	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		40	7.5	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		40	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		40	9.9	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		40	9.7	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		40	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		40	7.6	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		40	7.3	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		40	8.5	ug/kg	1
Chrysene	218-01-9	8270D	78		40	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		40	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		40	7.9	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	44	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		40	7.2	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		40	5.0	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		40	8.0	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		40	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		40	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	50	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	85	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		82	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		82	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		40	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		40	18	ug/kg	1
Fluoranthene	206-44-0	8270D	81		40	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		40	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		40	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		40	9.6	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	65	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-005
Description: SB-2-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1645	% Solids: 79.7 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1140	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		40	7.1	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	34	J	40	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		40	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		40	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		40	8.7	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		82	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		40	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		82	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		82	7.9	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		82	7.4	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		40	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		82	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	51	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		40	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		40	9.0	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	54	ug/kg	1
Phenanthrene	85-01-8	8270D	28	J	40	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		40	8.5	ug/kg	1
Pyrene	129-00-0	8270D	200		40	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		40	7.4	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		40	5.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		51	33-102
2-Fluorophenol		53	28-104
Nitrobenzene-d5		55	22-109
Phenol-d5		51	27-103
Terphenyl-d14		60	41-120
2,4,6-Tribromophenol		58	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-005
Description: SB-2-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1645	% Solids: 79.7 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/18/2016 2352	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/18/2016 2245	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.049	BJ	0.31	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	0.88	J	3.1	0.39	mg/kg	2
Beryllium	7440-41-7	6020A	0.48		0.12	0.0098	mg/kg	1
Cadmium	7440-43-9	6020A	0.097	J	0.31	0.024	mg/kg	2
Chromium	7440-47-3	6020A	42		16	0.35	mg/kg	2
Copper	7440-50-8	6020A	44	B	0.31	0.027	mg/kg	1
Iron	7439-89-6	6020A	31000	B	61	5.3	mg/kg	2
Lead	7439-92-1	6020A	19	B	0.31	0.0073	mg/kg	1
Manganese	7439-96-5	6020A	440	B	16	2.9	mg/kg	2
Nickel	7440-02-0	6020A	19	B	16	0.33	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.1	0.46	mg/kg	2
Silver	7440-22-4	6020A	ND		3.1	0.24	mg/kg	2
Thallium	7440-28-0	6020A	0.074	J	0.16	0.0098	mg/kg	1
Zinc	7440-66-6	6020A	48	B	3.1	0.081	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-005
Description: SB-2-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1645	% Solids: 79.7 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1400	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.028	J	0.10	0.0077	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH11024-006
Description: SB-2-10.5-12.5	Matrix: Solid
Date Sampled: 08/10/2016 1700	% Solids: 78.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1221	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/15/2016 0157	TAF		19885
1		(Sulfate (sol) 300.0	1	08/15/2016 0157	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	6.1		1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.36	J	1.3	0.32	mg/kg	1
Nitrate - N (soluble)		300.0	0.18	J	0.26	0.031	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.4	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-006
Description: SB-2-10.5-12.5	Matrix: Solid
Date Sampled: 08/10/2016 1700	% Solids: 78.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/13/2016 0144	JJG		19771	5.03

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		25	16	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-006
Description: SB-2-10.5-12.5	Matrix: Solid
Date Sampled: 08/10/2016 1700	% Solids: 78.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1402	SES		19729	5.64

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	94		23	4.5	ug/kg	1
Benzene	71-43-2	8260B	ND		5.7	2.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.7	2.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.7	2.3	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.7	2.3	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	10	J	23	4.5	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.7	2.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.7	2.3	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.7	2.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.7	2.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.7	2.3	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.7	2.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.7	2.3	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.7	2.3	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.7	2.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.7	2.3	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.7	2.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.7	2.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.7	2.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.7	2.3	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.7	2.3	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.7	2.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.7	2.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.7	2.3	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.7	2.3	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.7	2.3	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.7	2.3	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.7	2.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.7	2.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	4.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.7	2.3	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.7	2.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.7	2.3	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	4.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.7	2.3	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.7	2.3	ug/kg	1
Styrene	100-42-5	8260B	ND		5.7	2.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.7	2.3	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.7	2.3	ug/kg	1
Toluene	108-88-3	8260B	ND		5.7	2.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.7	2.3	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.7	2.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.7	2.3	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.7	2.3	ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-006
Description: SB-2-10.5-12.5	Matrix: Solid
Date Sampled: 08/10/2016 1700	% Solids: 78.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1402	SES		19729	5.64

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.7	2.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.7	2.3	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.7	2.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	4.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		108	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-006
Description: SB-2-10.5-12.5	Matrix: Solid
Date Sampled: 08/10/2016 1700	% Solids: 78.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/12/2016 1402	SES		19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1R-.alpha.-Pinene		8260B	13				ug/kg	1
Cyclotetrasiloxane, octamethyl-		8260B	4.5				ug/kg	1
Unknown Alkane		8260B	210				ug/kg	1
Unknown Alkane		8260B	24				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-006
Description: SB-2-10.5-12.5	Matrix: Solid
Date Sampled: 08/10/2016 1700	% Solids: 78.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1729	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Amylene Hydrate		8270D	150				ug/kg	1
2-Propanone, 1-chloro-		8270D	170				ug/kg	1
Unknown		8270D	680				ug/kg	1
Diethyltoluamide		8270D	99				ug/kg	1
n-Hexadecanoic acid		8270D	400				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	590				ug/kg	1
Octadecanoic acid		8270D	190				ug/kg	1
Unknown		8270D	120				ug/kg	1
13-Docosenamide, (Z)-		8270D	470				ug/kg	1
Unknown		8270D	540				ug/kg	1
Naringenin		8270D	130				ug/kg	1
Docosane, 9-butyl-		8270D	240				ug/kg	1
Unknown		8270D	170				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-006
Description: SB-2-10.5-12.5
Matrix: Solid
Date Sampled: 08/10/2016 1700
% Solids: 78.2 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1729	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		42	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	4.7	J	42	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		42	15	ug/kg	1
Anthracene	120-12-7	8270D	5.9	J	42	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		42	5.6	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		42	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	20	J	42	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	21	J	42	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	20	J	42	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	11	J	42	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	11	J	42	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		42	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		42	10	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		84	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		42	9.3	ug/kg	1
Carbazole	86-74-8	8270D	ND		42	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		42	7.6	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		42	3.9	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		42	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		42	9.9	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		42	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		42	7.8	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		42	7.5	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		42	8.7	ug/kg	1
Chrysene	218-01-9	8270D	22	J	42	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		42	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		42	8.1	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	46	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		42	7.4	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		42	5.2	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		42	8.3	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		42	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		42	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	51	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	87	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		84	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		84	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		42	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	28	J	42	18	ug/kg	1
Fluoranthene	206-44-0	8270D	39	J	42	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		42	2.5	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		42	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		42	9.9	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	67	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-006
Description: SB-2-10.5-12.5	Matrix: Solid
Date Sampled: 08/10/2016 1700	% Solids: 78.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1729	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		42	7.2	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	9.1	J	42	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		42	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		42	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		42	8.9	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		84	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		42	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		84	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		84	8.1	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		84	7.6	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		42	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		84	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	52	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		42	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		42	9.3	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	56	ug/kg	1
Phenanthrene	85-01-8	8270D	25	J	42	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		42	8.7	ug/kg	1
Pyrene	129-00-0	8270D	44		42	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		42	7.6	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		42	5.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		54	33-102
2-Fluorophenol		54	28-104
Nitrobenzene-d5		71	22-109
Phenol-d5		39	27-103
Terphenyl-d14		74	41-120
2,4,6-Tribromophenol		71	30-117

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-006
Description: SB-2-10.5-12.5	Matrix: Solid
Date Sampled: 08/10/2016 1700	% Solids: 78.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/18/2016 2358	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/18/2016 2251	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.029	BJ	0.32	0.019	mg/kg	1
Arsenic	7440-38-2	6020A	0.60	J	3.2	0.41	mg/kg	2
Beryllium	7440-41-7	6020A	0.38		0.13	0.010	mg/kg	1
Cadmium	7440-43-9	6020A	ND		0.32	0.026	mg/kg	2
Chromium	7440-47-3	6020A	29		17	0.37	mg/kg	2
Copper	7440-50-8	6020A	24	B	0.32	0.028	mg/kg	1
Iron	7439-89-6	6020A	21000	B	64	5.5	mg/kg	2
Lead	7439-92-1	6020A	9.8	B	0.32	0.0077	mg/kg	1
Manganese	7439-96-5	6020A	220	B	17	3.0	mg/kg	2
Nickel	7440-02-0	6020A	12	BJ	17	0.34	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.2	0.48	mg/kg	2
Silver	7440-22-4	6020A	ND		3.2	0.26	mg/kg	2
Thallium	7440-28-0	6020A	0.063	J	0.17	0.010	mg/kg	1
Zinc	7440-66-6	6020A	17	B	3.2	0.084	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-006
Description: SB-2-10.5-12.5	Matrix: Solid
Date Sampled: 08/10/2016 1700	% Solids: 78.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1407	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.034	J	0.099	0.0075	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH11024-007
Description: DUP-3	Matrix: Solid
Date Sampled: 08/10/2016 1650	% Solids: 80.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1223	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/15/2016 0221	TAF		19885
1		(Sulfate (sol) 300.0	1	08/15/2016 0221	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	4.4		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.35	J	1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	0.43		0.25	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.2	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-007
Description: DUP-3	Matrix: Solid
Date Sampled: 08/10/2016 1650	% Solids: 80.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/13/2016 0206	JJG		19771	5.37

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		23	14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-007
Description: DUP-3
Matrix: Solid
Date Sampled: 08/10/2016 1650
% Solids: 80.6 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1424	SES		19729	5.73

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	84		22	4.3	ug/kg	1
Benzene	71-43-2	8260B	ND		5.4	2.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.4	2.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.4	2.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.4	2.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	7.3	J	22	4.3	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.4	2.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.4	2.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.4	2.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.4	2.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.4	2.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.4	2.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.4	2.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.4	2.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.4	2.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.4	2.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.4	2.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.4	2.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.4	2.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.4	2.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.4	2.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.4	2.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.4	2.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.4	2.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	4.3	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.4	2.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.4	2.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.4	2.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	4.3	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.4	2.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.4	2.2	ug/kg	1
Styrene	100-42-5	8260B	ND		5.4	2.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.4	2.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.4	2.2	ug/kg	1
Toluene	108-88-3	8260B	ND		5.4	2.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.4	2.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.4	2.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.4	2.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.4	2.2	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-007
Description: DUP-3	Matrix: Solid
Date Sampled: 08/10/2016 1650	% Solids: 80.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1424	SES		19729	5.73

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.4	2.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.4	2.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.4	2.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	4.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-007
Description: DUP-3	Matrix: Solid
Date Sampled: 08/10/2016 1650	% Solids: 80.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/12/2016 1424	SES		19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1R-.alpha.-Pinene		8260B	61				ug/kg	1
Camphene		8260B	11				ug/kg	1
Unknown Alkane		8260B	120				ug/kg	1
3-Menthene		8260B	5.2				ug/kg	1
Unknown Alkane		8260B	13				ug/kg	1
Unknown		8260B	7.0				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-007
Description: DUP-3	Matrix: Solid
Date Sampled: 08/10/2016 1650	% Solids: 80.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1754	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	81				ug/kg	1
2-Propanone, 1-chloro-		8270D	96				ug/kg	1
Unknown		8270D	490				ug/kg	1
n-Hexadecanoic acid		8270D	200				ug/kg	1
Decane, 2-methyl-		8270D	97				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	830				ug/kg	1
Octadecanoic acid		8270D	110				ug/kg	1
13-Docosenamide, (Z)-		8270D	520				ug/kg	1
Friedelan-3-one		8270D	440				ug/kg	1
Unknown		8270D	280				ug/kg	1
Unknown		8270D	300				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-007
Description: DUP-3
Matrix: Solid
Date Sampled: 08/10/2016 1650
% Solids: 80.6 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1754	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		40	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		40	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		40	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		40	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		40	5.4	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		40	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	5.3	J	40	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		40	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	4.7	J	40	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		40	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		40	1.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		40	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		40	9.6	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		81	10	ug/kg	1
Caprolactam	105-60-2	8270D	33	J	40	8.9	ug/kg	1
Carbazole	86-74-8	8270D	ND		40	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		40	7.4	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		40	3.7	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		40	9.8	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		40	9.6	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		40	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		40	7.5	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		40	7.2	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		40	8.4	ug/kg	1
Chrysene	218-01-9	8270D	3.3	J	40	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		40	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		40	7.8	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	44	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		40	7.1	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		40	5.0	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		40	8.0	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		40	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		40	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	49	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	84	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		81	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		81	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		40	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		40	17	ug/kg	1
Fluoranthene	206-44-0	8270D	8.1	J	40	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		40	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		40	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		40	9.5	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	65	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-007
Description: DUP-3
Matrix: Solid
Date Sampled: 08/10/2016 1650
% Solids: 80.6 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1754	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		40	7.0	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		40	1.6	ug/kg	1
Isophorone	78-59-1	8270D	ND		40	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		40	1.8	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		40	8.6	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		81	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		40	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		81	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		81	7.8	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		81	7.3	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		40	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		81	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	50	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		40	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		40	8.9	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	54	ug/kg	1
Phenanthrene	85-01-8	8270D	3.9	J	40	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		40	8.4	ug/kg	1
Pyrene	129-00-0	8270D	7.6	J	40	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		40	7.3	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		40	5.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		48	33-102
2-Fluorophenol		49	28-104
Nitrobenzene-d5		52	22-109
Phenol-d5		51	27-103
Terphenyl-d14		67	41-120
2,4,6-Tribromophenol		63	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-007
Description: DUP-3	Matrix: Solid
Date Sampled: 08/10/2016 1650	% Solids: 80.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0004	BNW	08/17/2016 0950	20013
3	3050B	6020A	20	08/19/2016 1338	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.027	BJ	0.25	0.015	mg/kg	1
Arsenic	7440-38-2	6020A	0.75	J	5.1	0.65	mg/kg	3
Beryllium	7440-41-7	6020A	0.35		0.10	0.0082	mg/kg	1
Cadmium	7440-43-9	6020A	0.081	J	0.51	0.041	mg/kg	3
Chromium	7440-47-3	6020A	36		26	0.59	mg/kg	3
Copper	7440-50-8	6020A	47	B	0.25	0.022	mg/kg	1
Iron	7439-89-6	6020A	24000	B	100	8.8	mg/kg	3
Lead	7439-92-1	6020A	13	B	0.25	0.0061	mg/kg	1
Manganese	7439-96-5	6020A	290	B	26	4.9	mg/kg	3
Nickel	7440-02-0	6020A	21	BJ	26	0.55	mg/kg	3
Selenium	7782-49-2	6020A	ND		5.1	0.77	mg/kg	3
Silver	7440-22-4	6020A	ND		5.1	0.41	mg/kg	3
Thallium	7440-28-0	6020A	0.048	J	0.13	0.0082	mg/kg	1
Zinc	7440-66-6	6020A	33	B	2.5	0.067	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-007
Description: DUP-3	Matrix: Solid
Date Sampled: 08/10/2016 1650	% Solids: 80.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1409	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.0072	J	0.095	0.0072	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH11024-008
Description: SB-2-6-8	Matrix: Solid
Date Sampled: 08/10/2016 1715	% Solids: 51.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1225	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/15/2016 0333	TAF		19885
1		(Sulfate (sol) 300.0	1	08/15/2016 0333	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	7.2		1.9	0.19	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	3.3		1.9	0.49	mg/kg	1
Nitrate - N (soluble)		300.0	3.2		0.39	0.048	mg/kg	1
Sulfate (soluble)		300.0	ND		19	9.7	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-008
Description: SB-2-6-8	Matrix: Solid
Date Sampled: 08/10/2016 1715	% Solids: 51.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B (SIM)	1	08/15/2016 1826	SES		19853	5.67

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		34	21	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		127	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-008
Description: SB-2-6-8
Matrix: Solid
Date Sampled: 08/10/2016 1715
% Solids: 51.4 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1447	SES		19729	4.63

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	97		42	8.4	ug/kg	1
Benzene	71-43-2	8260B	ND		11	4.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		11	4.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		11	4.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		11	4.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	14	J	42	8.4	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		11	4.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		11	4.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		11	4.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		11	4.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		11	4.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		11	4.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		11	4.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		11	4.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		11	4.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		11	4.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		11	4.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		11	4.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		11	4.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		11	4.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		11	4.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		11	4.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		11	4.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		11	4.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		11	4.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		11	4.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		11	4.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		11	4.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		11	4.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		21	8.4	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		11	4.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		11	4.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		11	4.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		21	8.4	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		11	4.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		11	4.2	ug/kg	1
Styrene	100-42-5	8260B	ND		11	4.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		11	4.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		11	4.2	ug/kg	1
Toluene	108-88-3	8260B	ND		11	4.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		11	4.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		11	4.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		11	4.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		11	4.2	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-008
Description: SB-2-6-8	Matrix: Solid
Date Sampled: 08/10/2016 1715	% Solids: 51.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1447	SES		19729	4.63

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		11	4.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		11	4.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		11	4.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		21	8.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		100	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-008
Description: SB-2-6-8	Matrix: Solid
Date Sampled: 08/10/2016 1715	% Solids: 51.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-008
Description: SB-2-6-8	Matrix: Solid
Date Sampled: 08/10/2016 1715	% Solids: 51.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1819	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	820				ug/kg	1
Unknown		8270D	450				ug/kg	1
Pentadecanoic acid		8270D	400				ug/kg	1
Unknown		8270D	660				ug/kg	1
Unknown		8270D	1200				ug/kg	1
n-Hexadecanoic acid		8270D	1500				ug/kg	1
Eicosane		8270D	340				ug/kg	1
Heptadecanoic acid		8270D	360				ug/kg	1
Unknown		8270D	290				ug/kg	1
Unknown		8270D	330				ug/kg	1
Unknown		8270D	290				ug/kg	1
Hexadecane		8270D	270				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	1100				ug/kg	1
Octadecanoic acid		8270D	530				ug/kg	1
Z-5-Nonadecene		8270D	330				ug/kg	1
Unknown		8270D	430				ug/kg	1
13-Docosenamide, (Z)-		8270D	1000				ug/kg	1
Unknown		8270D	4600				ug/kg	1
Unknown		8270D	4800				ug/kg	1
Unknown		8270D	580				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-008
Description: SB-2-6-8
Matrix: Solid
Date Sampled: 08/10/2016 1715
% Solids: 51.4 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1819	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		63	3.3	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		63	3.3	ug/kg	1
Acetophenone	98-86-2	8270D	ND		63	23	ug/kg	1
Anthracene	120-12-7	8270D	ND		63	3.8	ug/kg	1
Atrazine	1912-24-9	8270D	ND		63	8.5	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		63	27	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	17	J	63	2.2	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	20	J	63	2.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	32	J	63	2.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		63	2.2	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		63	2.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		63	21	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		63	15	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		130	17	ug/kg	1
Caprolactam	105-60-2	8270D	55	J	63	14	ug/kg	1
Carbazole	86-74-8	8270D	ND		63	18	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		63	12	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		63	5.9	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		63	16	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		63	15	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		63	18	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		63	12	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		63	11	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		63	13	ug/kg	1
Chrysene	218-01-9	8270D	19	J	63	2.1	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		63	3.5	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		63	12	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		330	70	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		63	11	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		63	7.9	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		63	13	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		63	19	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		63	23	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		330	78	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		330	130	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		130	21	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		130	22	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		63	19	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		63	28	ug/kg	1
Fluoranthene	206-44-0	8270D	31	J	63	1.7	ug/kg	1
Fluorene	86-73-7	8270D	ND		63	3.8	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		63	16	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		63	15	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		330	100	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-008
Description: SB-2-6-8
Matrix: Solid
Date Sampled: 08/10/2016 1715
% Solids: 51.4 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1819	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		63	11	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		63	2.6	ug/kg	1
Isophorone	78-59-1	8270D	ND		63	16	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		63	2.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		63	14	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		130	20	ug/kg	1
Naphthalene	91-20-3	8270D	ND		63	3.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		130	17	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		130	12	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		130	12	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		63	25	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	28	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		330	80	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		63	23	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		63	14	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		330	85	ug/kg	1
Phenanthrene	85-01-8	8270D	25	J	63	3.5	ug/kg	1
Phenol	108-95-2	8270D	ND		63	13	ug/kg	1
Pyrene	129-00-0	8270D	36	J	63	2.2	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		63	12	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		63	9.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		46	33-102
2-Fluorophenol		45	28-104
Nitrobenzene-d5		47	22-109
Phenol-d5		46	27-103
Terphenyl-d14		57	41-120
2,4,6-Tribromophenol		59	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-008
Description: SB-2-6-8	Matrix: Solid
Date Sampled: 08/10/2016 1715	% Solids: 51.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0009	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/18/2016 2302	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.057	BJ	0.48	0.029	mg/kg	1
Arsenic	7440-38-2	6020A	0.81	J	4.8	0.62	mg/kg	2
Beryllium	7440-41-7	6020A	0.36		0.19	0.015	mg/kg	1
Cadmium	7440-43-9	6020A	0.11	J	0.48	0.038	mg/kg	2
Chromium	7440-47-3	6020A	21	J	25	0.56	mg/kg	2
Copper	7440-50-8	6020A	24	B	0.48	0.042	mg/kg	1
Iron	7439-89-6	6020A	20000	B	96	8.3	mg/kg	2
Lead	7439-92-1	6020A	16	B	0.48	0.012	mg/kg	1
Manganese	7439-96-5	6020A	270	B	25	4.6	mg/kg	2
Nickel	7440-02-0	6020A	9.0	BJ	25	0.52	mg/kg	2
Selenium	7782-49-2	6020A	ND		4.8	0.73	mg/kg	2
Silver	7440-22-4	6020A	ND		4.8	0.38	mg/kg	2
Thallium	7440-28-0	6020A	0.045	J	0.25	0.015	mg/kg	1
Zinc	7440-66-6	6020A	32	B	4.8	0.13	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-008
Description: SB-2-6-8	Matrix: Solid
Date Sampled: 08/10/2016 1715	% Solids: 51.4 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1412	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.16	0.012	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH11024-009
Description: SB-2-12.5-14	Matrix: Solid
Date Sampled: 08/10/2016 1730	% Solids: 79.9 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1233	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/15/2016 0357	TAF		19885
1		(Sulfate (sol) 300.0	1	08/15/2016 0357	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	35		1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.80	J	1.3	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	0.053	J	0.25	0.031	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.3	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-009
Description: SB-2-12.5-14	Matrix: Solid
Date Sampled: 08/10/2016 1730	% Solids: 79.9 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/13/2016 0250	JJG		19771	6.32

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		20	12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-009
Description: SB-2-12.5-14
Matrix: Solid
Date Sampled: 08/10/2016 1730
% Solids: 79.9 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1510	SES		19729	5.58

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	140		22	4.5	ug/kg	1
Benzene	71-43-2	8260B	ND		5.6	2.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.6	2.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.6	2.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.6	2.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	17	J	22	4.5	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.6	2.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.6	2.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.6	2.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.6	2.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.6	2.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.6	2.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.6	2.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.6	2.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.6	2.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.6	2.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.6	2.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.6	2.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.6	2.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.6	2.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.6	2.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.6	2.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.6	2.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.6	2.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	4.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.6	2.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.6	2.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.6	2.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	4.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.6	2.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.6	2.2	ug/kg	1
Styrene	100-42-5	8260B	ND		5.6	2.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.6	2.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.6	2.2	ug/kg	1
Toluene	108-88-3	8260B	ND		5.6	2.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.6	2.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.6	2.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.6	2.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.6	2.2	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-009
Description: SB-2-12.5-14	Matrix: Solid
Date Sampled: 08/10/2016 1730	% Solids: 79.9 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1510	SES		19729	5.58

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.6	2.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.6	2.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.6	2.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	4.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		107	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-009
Description: SB-2-12.5-14	Matrix: Solid
Date Sampled: 08/10/2016 1730	% Solids: 79.9 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/12/2016 1510	SES		19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown Alkane		8260B	28				ug/kg	1
1R-.alpha.-Pinene		8260B	180				ug/kg	1
Camphene		8260B	26				ug/kg	1
Unknown Alkane		8260B	14				ug/kg	1
3-Menthene		8260B	8.0				ug/kg	1
.beta.-Pinene		8260B	14				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-009
Description: SB-2-12.5-14	Matrix: Solid
Date Sampled: 08/10/2016 1730	% Solids: 79.9 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1844	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
2-Propanone, 1-chloro-		8270D	93				ug/kg	1
2-Pentanone, 4-hydroxy-4-methyl-		8270D	500				ug/kg	1
n-Hexadecanoic acid		8270D	100				ug/kg	1
Unknown		8270D	250				ug/kg	1
Phenanthrene, 1-methyl-7-(1-methylethyl)		8270D	91				ug/kg	1
Tricosane, 2-methyl-		8270D	96				ug/kg	1
13-Docosenamide, (Z)-		8270D	550				ug/kg	1
Unknown		8270D	84				ug/kg	1
Tetracosane, 11-decyl-		8270D	150				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-009
Description: SB-2-12.5-14
Matrix: Solid
Date Sampled: 08/10/2016 1730
% Solids: 79.9 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1844	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		41	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		41	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		41	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		41	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		41	5.5	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		41	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		41	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		41	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		41	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		41	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		41	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		41	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		41	9.7	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		82	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		41	9.1	ug/kg	1
Carbazole	86-74-8	8270D	ND		41	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		41	7.5	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		41	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		41	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		41	9.7	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		41	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		41	7.6	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		41	7.3	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		41	8.5	ug/kg	1
Chrysene	218-01-9	8270D	ND		41	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		41	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		41	7.9	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	45	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		41	7.2	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		41	5.0	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		41	8.1	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		41	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		41	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	50	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	85	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		82	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		82	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		41	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		41	18	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		41	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		41	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		41	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		41	9.7	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	66	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-009
Description: SB-2-12.5-14	Matrix: Solid
Date Sampled: 08/10/2016 1730	% Solids: 79.9 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1844	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		41	7.1	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		41	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		41	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		41	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		41	8.7	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		82	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		41	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		82	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		82	7.9	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		82	7.4	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		41	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		82	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	51	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		41	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		41	9.1	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	54	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		41	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		41	8.5	ug/kg	1
Pyrene	129-00-0	8270D	ND		41	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		41	7.5	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		41	5.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		44	33-102
2-Fluorophenol		46	28-104
Nitrobenzene-d5		48	22-109
Phenol-d5		44	27-103
Terphenyl-d14		57	41-120
2,4,6-Tribromophenol		54	30-117

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-009
Description: SB-2-12.5-14	Matrix: Solid
Date Sampled: 08/10/2016 1730	% Solids: 79.9 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0015	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/18/2016 2308	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.021	BJ	0.29	0.017	mg/kg	1
Arsenic	7440-38-2	6020A	1.2	J	2.9	0.37	mg/kg	2
Beryllium	7440-41-7	6020A	0.45		0.12	0.0093	mg/kg	1
Cadmium	7440-43-9	6020A	ND		0.29	0.023	mg/kg	2
Chromium	7440-47-3	6020A	22		15	0.34	mg/kg	2
Copper	7440-50-8	6020A	17	B	0.29	0.026	mg/kg	1
Iron	7439-89-6	6020A	33000	B	58	5.0	mg/kg	2
Lead	7439-92-1	6020A	18	B	0.29	0.0070	mg/kg	1
Manganese	7439-96-5	6020A	820	B	15	2.8	mg/kg	2
Nickel	7440-02-0	6020A	6.1	BJ	15	0.31	mg/kg	2
Selenium	7782-49-2	6020A	0.47	J	2.9	0.44	mg/kg	2
Silver	7440-22-4	6020A	ND		2.9	0.23	mg/kg	2
Thallium	7440-28-0	6020A	0.13	J	0.15	0.0093	mg/kg	1
Zinc	7440-66-6	6020A	13	B	2.9	0.077	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-009
Description: SB-2-12.5-14	Matrix: Solid
Date Sampled: 08/10/2016 1730	% Solids: 79.9 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1414	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.037	J	0.098	0.0074	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH11024-010
Description:	SB-8-0.5	Matrix:	Solid
Date Sampled:	08/10/2016 1830	% Solids:	83.6 08/11/2016 1830
Date Received:	08/11/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1235	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/15/2016 0421	TAF		19885
1		(Sulfate (sol) 300.0	1	08/15/2016 0421	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	2.9		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.49	J	1.2	0.30	mg/kg	1
Nitrate - N (soluble)		300.0	0.75		0.24	0.029	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.0	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-010
Description: SB-8-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1830	% Solids: 83.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/13/2016 0312	JJG		19771	5.95

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		20	12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		125	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-010
Description: SB-8-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1830	% Solids: 83.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1533	SES		19729	5.37

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	39		22	4.5	ug/kg	1
Benzene	71-43-2	8260B	ND		5.6	2.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.6	2.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.6	2.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.6	2.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		22	4.5	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.6	2.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.6	2.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.6	2.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.6	2.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.6	2.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.6	2.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.6	2.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.6	2.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.6	2.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.6	2.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.6	2.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.6	2.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.6	2.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.6	2.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.6	2.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.6	2.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.6	2.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.6	2.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	4.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.6	2.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.6	2.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.6	2.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	4.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.6	2.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.6	2.2	ug/kg	1
Styrene	100-42-5	8260B	ND		5.6	2.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.6	2.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.6	2.2	ug/kg	1
Toluene	108-88-3	8260B	ND		5.6	2.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.6	2.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.6	2.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.6	2.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.6	2.2	ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-010
Description: SB-8-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1830	% Solids: 83.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1533	SES		19729	5.37

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.6	2.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.6	2.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.6	2.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	4.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		102	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-010
Description: SB-8-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1830	% Solids: 83.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-010
Description: SB-8-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1830	% Solids: 83.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1205	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	390				ug/kg	1
Benzoic acid, 2-hydroxy-, 3-methylbutyl		8270D	180				ug/kg	1
Homosalate		8270D	430				ug/kg	1
n-Hexadecanoic acid		8270D	480				ug/kg	1
Oxybenzone		8270D	110				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	1500				ug/kg	1
Octadecanoic acid		8270D	280				ug/kg	1
Unknown		8270D	270				ug/kg	1
Unknown		8270D	94				ug/kg	1
13-Docosenamide, (Z)-		8270D	860				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-010
Description: SB-8-0.5
Matrix: Solid
Date Sampled: 08/10/2016 1830
% Solids: 83.6 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1205	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		39	2.0	ug/kg	1
Acenaphthylene	208-96-8	8270D	19	J	39	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		39	14	ug/kg	1
Anthracene	120-12-7	8270D	6.7	J	39	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		39	5.3	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		39	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	29	J	39	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	57		39	1.7	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	66		39	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	28	J	39	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	20	J	39	1.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		39	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		39	9.4	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		79	10	ug/kg	1
Caprolactam	105-60-2	8270D	ND		39	8.7	ug/kg	1
Carbazole	86-74-8	8270D	ND		39	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		39	7.2	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		39	3.6	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		39	9.6	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		39	9.4	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		39	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		39	7.4	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		39	7.0	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		39	8.2	ug/kg	1
Chrysene	218-01-9	8270D	28	J	39	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		39	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		39	7.6	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		200	43	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		39	7.0	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		39	4.9	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		39	7.8	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		39	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		39	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		200	48	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		200	82	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		79	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		79	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		39	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	24	J	39	17	ug/kg	1
Fluoranthene	206-44-0	8270D	36	J	39	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		39	2.3	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		39	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		39	9.3	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		200	63	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-010
Description: SB-8-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1830	% Solids: 83.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/16/2016 1205	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		39	6.8	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	23	J	39	1.6	ug/kg	1
Isophorone	78-59-1	8270D	ND		39	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		39	1.8	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		39	8.4	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		79	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		39	1.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		79	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		79	7.6	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		79	7.1	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		39	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		79	17	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		200	49	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		39	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		39	8.7	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		200	52	ug/kg	1
Phenanthrene	85-01-8	8270D	10	J	39	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		39	8.2	ug/kg	1
Pyrene	129-00-0	8270D	83		39	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		39	7.2	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		39	5.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		44	33-102
2-Fluorophenol		38	28-104
Nitrobenzene-d5		42	22-109
Phenol-d5		44	27-103
Terphenyl-d14		56	41-120
2,4,6-Tribromophenol		60	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-010
Description: SB-8-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1830	% Solids: 83.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0020	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/18/2016 2313	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.031	BJ	0.30	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	1.4	J	3.0	0.38	mg/kg	2
Beryllium	7440-41-7	6020A	0.34		0.12	0.0095	mg/kg	1
Cadmium	7440-43-9	6020A	0.031	J	0.30	0.024	mg/kg	2
Chromium	7440-47-3	6020A	41		15	0.34	mg/kg	2
Copper	7440-50-8	6020A	31	B	0.30	0.026	mg/kg	1
Iron	7439-89-6	6020A	34000	B	59	5.1	mg/kg	2
Lead	7439-92-1	6020A	9.3	B	0.30	0.0071	mg/kg	1
Manganese	7439-96-5	6020A	370	B	15	2.8	mg/kg	2
Nickel	7440-02-0	6020A	17	B	15	0.32	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.0	0.45	mg/kg	2
Silver	7440-22-4	6020A	ND		3.0	0.24	mg/kg	2
Thallium	7440-28-0	6020A	0.095	J	0.15	0.0095	mg/kg	1
Zinc	7440-66-6	6020A	33	B	3.0	0.078	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-010
Description: SB-8-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1830	% Solids: 83.6 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1416	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.027	J	0.092	0.0070	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH11024-011
Description:	SB-8-1.5	Matrix:	Solid
Date Sampled:	08/10/2016 1840	% Solids:	81.2 08/11/2016 1830
Date Received:	08/11/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1237	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/16/2016 1819	AMM1	08/16/2016 0925	19902
1		(Nitrate - N) 300.0	1	08/15/2016 0445	TAF		19885
1		(Sulfate (sol) 300.0	1	08/15/2016 0445	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	2.8		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.38	J	1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	0.54		0.25	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.2	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-011
Description: SB-8-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1840	% Solids: 81.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/13/2016 0334	JJG		19771	6.50

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		19	12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		119	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-011
Description: SB-8-1.5
Matrix: Solid
Date Sampled: 08/10/2016 1840
% Solids: 81.2 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1555	SES		19729	7.08

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	98		17	3.5	ug/kg	1
Benzene	71-43-2	8260B	ND		4.3	1.7	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.3	1.7	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.3	1.7	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.3	1.7	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	14	J	17	3.5	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.3	1.7	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.3	1.7	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.3	1.7	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.3	1.7	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.3	1.7	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.3	1.7	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.3	1.7	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.3	1.7	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.3	1.7	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.3	1.7	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.3	1.7	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.3	1.7	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.3	1.7	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.3	1.7	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.3	1.7	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.3	1.7	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.3	1.7	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.3	1.7	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.3	1.7	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.3	1.7	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.3	1.7	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.3	1.7	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.3	1.7	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.7	3.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.3	1.7	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.3	1.7	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.3	1.7	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.7	3.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.3	1.7	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.3	1.7	ug/kg	1
Styrene	100-42-5	8260B	ND		4.3	1.7	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.3	1.7	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.3	1.7	ug/kg	1
Toluene	108-88-3	8260B	ND		4.3	1.7	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.3	1.7	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.3	1.7	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.3	1.7	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.3	1.7	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-011
Description: SB-8-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1840	% Solids: 81.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1555	SES		19729	7.08

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.3	1.7	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.3	1.7	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.3	1.7	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.7	3.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		103	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
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E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-011
Description: SB-8-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1840	% Solids: 81.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-011
Description: SB-8-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1840	% Solids: 81.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1908	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
2-Propanone, 1-chloro-		8270D	110				ug/kg	1
Unknown		8270D	460				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	120				ug/kg	1
13-Docosenamide, (Z)-		8270D	630				ug/kg	1

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B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-011
Description: SB-8-1.5
Matrix: Solid
Date Sampled: 08/10/2016 1840
% Solids: 81.2 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1908	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		40	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		40	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		40	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		40	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		40	5.4	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		40	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	7.2	J	40	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	6.4	J	40	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	6.9	J	40	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	3.4	J	40	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	2.8	J	40	1.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		40	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		40	9.6	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		81	10	ug/kg	1
Caprolactam	105-60-2	8270D	ND		40	9.0	ug/kg	1
Carbazole	86-74-8	8270D	ND		40	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		40	7.4	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		40	3.7	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		40	9.8	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		40	9.6	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		40	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		40	7.5	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		40	7.2	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		40	8.4	ug/kg	1
Chrysene	218-01-9	8270D	4.7	J	40	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		40	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		40	7.8	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	44	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		40	7.1	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		40	5.0	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		40	8.0	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		40	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		40	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	49	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	84	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		81	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		81	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		40	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		40	17	ug/kg	1
Fluoranthene	206-44-0	8270D	6.3	J	40	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		40	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		40	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		40	9.5	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	65	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-011
Description: SB-8-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1840	% Solids: 81.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1908	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		40	7.0	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	2.9	J	40	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		40	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		40	1.8	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		40	8.6	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		81	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		40	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		81	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		81	7.8	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		81	7.3	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		40	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		81	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	50	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		40	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		40	8.9	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	54	ug/kg	1
Phenanthrene	85-01-8	8270D	3.0	J	40	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		40	8.4	ug/kg	1
Pyrene	129-00-0	8270D	9.4	J	40	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		40	7.4	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		40	5.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		47	33-102
2-Fluorophenol		45	28-104
Nitrobenzene-d5		46	22-109
Phenol-d5		45	27-103
Terphenyl-d14		59	41-120
2,4,6-Tribromophenol		63	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-011
Description: SB-8-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1840	% Solids: 81.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0037	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/18/2016 2330	BNW	08/17/2016 0950	20013
3	3050B	6020A	20	08/19/2016 1343	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.076	BJ	0.26	0.015	mg/kg	1
Arsenic	7440-38-2	6020A	1.7	J	5.1	0.65	mg/kg	3
Beryllium	7440-41-7	6020A	0.73	J	1.0	0.082	mg/kg	2
Cadmium	7440-43-9	6020A	0.15	J	0.51	0.041	mg/kg	3
Chromium	7440-47-3	6020A	54		27	0.59	mg/kg	3
Copper	7440-50-8	6020A	53	B	0.26	0.022	mg/kg	1
Iron	7439-89-6	6020A	32000	B	100	8.8	mg/kg	3
Lead	7439-92-1	6020A	34	B	0.26	0.0061	mg/kg	1
Manganese	7439-96-5	6020A	370	B	27	4.9	mg/kg	3
Nickel	7440-02-0	6020A	20	BJ	27	0.55	mg/kg	3
Selenium	7782-49-2	6020A	ND		5.1	0.78	mg/kg	3
Silver	7440-22-4	6020A	ND		5.1	0.41	mg/kg	3
Thallium	7440-28-0	6020A	0.081	J	0.13	0.0082	mg/kg	1
Zinc	7440-66-6	6020A	68	B	2.6	0.067	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-011
Description: SB-8-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1840	% Solids: 81.2 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1419	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.098		0.098	0.0074	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH11024-012
Description:	SB-9-0.5	Matrix:	Solid
Date Sampled:	08/10/2016 1850	% Solids:	82.5 08/11/2016 1830
Date Received:	08/11/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1239	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/15/2016 0509	TAF		19885
1		(Sulfate (sol) 300.0	1	08/15/2016 0509	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	2.8		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.73	BJ	1.2	0.30	mg/kg	1
Nitrate - N (soluble)		300.0	0.066	J	0.24	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.1	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-012
Description: SB-9-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1850	% Solids: 82.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/13/2016 0356	JJG		19771	5.83

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		21	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		114	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-012
Description: SB-9-0.5
Matrix: Solid
Date Sampled: 08/10/2016 1850
% Solids: 82.5 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1618	SES		19729	5.81

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	57		21	4.2	ug/kg	1
Benzene	71-43-2	8260B	ND		5.2	2.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.2	2.1	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.2	2.1	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.2	2.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	7.2	J	21	4.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.2	2.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.2	2.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.2	2.1	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.2	2.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.2	2.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.2	2.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.2	2.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.2	2.1	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.2	2.1	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.2	2.1	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.2	2.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.2	2.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.2	2.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.2	2.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.2	2.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.2	2.1	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.2	2.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.2	2.1	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	4.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.2	2.1	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.2	2.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.2	2.1	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	4.2	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.2	2.1	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.2	2.1	ug/kg	1
Styrene	100-42-5	8260B	ND		5.2	2.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.2	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.2	2.1	ug/kg	1
Toluene	108-88-3	8260B	ND		5.2	2.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.2	2.1	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.2	2.1	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.2	2.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.2	2.1	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-012
Description: SB-9-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1850	% Solids: 82.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1618	SES		19729	5.81

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.2	2.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.2	2.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.2	2.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	4.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		104	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-012
Description: SB-9-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1850	% Solids: 82.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-012
Description: SB-9-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1850	% Solids: 82.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1933	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
2-Propanone, 1-chloro-		8270D	93				ug/kg	1
Unknown		8270D	470				ug/kg	1
n-Hexadecanoic acid		8270D	170				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	120				ug/kg	1
Octadecanoic acid		8270D	120				ug/kg	1
13-Docosenamide, (Z)-		8270D	1000				ug/kg	1
Squalene		8270D	86				ug/kg	1
Heptacosane		8270D	210				ug/kg	1
Unknown		8270D	87				ug/kg	1
Eicosane		8270D	90				ug/kg	1
Unknown		8270D	120				ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-012
Description: SB-9-0.5
Matrix: Solid
Date Sampled: 08/10/2016 1850
% Solids: 82.5 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1933	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		40	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		40	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		40	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		40	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		40	5.4	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		40	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	5.6	J	40	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	4.6	J	40	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	5.7	J	40	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		40	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		40	1.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		40	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		40	9.6	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		81	10	ug/kg	1
Caprolactam	105-60-2	8270D	ND		40	8.9	ug/kg	1
Carbazole	86-74-8	8270D	ND		40	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		40	7.4	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		40	3.7	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		40	9.8	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		40	9.6	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		40	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		40	7.5	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		40	7.2	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		40	8.4	ug/kg	1
Chrysene	218-01-9	8270D	3.5	J	40	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		40	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		40	7.8	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	44	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		40	7.1	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		40	5.0	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		40	7.9	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		40	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		40	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	49	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	84	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		81	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		81	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		40	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		40	17	ug/kg	1
Fluoranthene	206-44-0	8270D	6.6	J	40	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		40	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		40	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		40	9.5	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	65	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-012
Description: SB-9-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1850	% Solids: 82.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1933	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		40	7.0	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		40	1.6	ug/kg	1
Isophorone	78-59-1	8270D	ND		40	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		40	1.8	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		40	8.6	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		81	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		40	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		81	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		81	7.8	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		81	7.3	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		40	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		81	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	50	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		40	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		40	8.9	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	54	ug/kg	1
Phenanthrene	85-01-8	8270D	2.9	J	40	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		40	8.4	ug/kg	1
Pyrene	129-00-0	8270D	6.1	J	40	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		40	7.3	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		40	5.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		47	33-102
2-Fluorophenol		46	28-104
Nitrobenzene-d5		49	22-109
Phenol-d5		48	27-103
Terphenyl-d14		62	41-120
2,4,6-Tribromophenol		61	30-117

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-012
Description: SB-9-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1850	% Solids: 82.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0043	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/18/2016 2336	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.029	BJ	0.29	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	ND		2.9	0.38	mg/kg	2
Beryllium	7440-41-7	6020A	0.36		0.12	0.0094	mg/kg	1
Cadmium	7440-43-9	6020A	0.035	J	0.29	0.024	mg/kg	2
Chromium	7440-47-3	6020A	29		15	0.34	mg/kg	2
Copper	7440-50-8	6020A	36	B	0.29	0.026	mg/kg	1
Iron	7439-89-6	6020A	28000	B	59	5.1	mg/kg	2
Lead	7439-92-1	6020A	7.4	B	0.29	0.0071	mg/kg	1
Manganese	7439-96-5	6020A	380	B	15	2.8	mg/kg	2
Nickel	7440-02-0	6020A	15	B	15	0.32	mg/kg	2
Selenium	7782-49-2	6020A	ND		2.9	0.45	mg/kg	2
Silver	7440-22-4	6020A	ND		2.9	0.24	mg/kg	2
Thallium	7440-28-0	6020A	0.074	J	0.15	0.0094	mg/kg	1
Zinc	7440-66-6	6020A	36	B	2.9	0.078	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-012
Description: SB-9-0.5	Matrix: Solid
Date Sampled: 08/10/2016 1850	% Solids: 82.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1421	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.012	J	0.097	0.0074	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH11024-013
Description:	SB-9-1.5	Matrix:	Solid
Date Sampled:	08/10/2016 1900	% Solids:	80.5 08/11/2016 1830
Date Received:	08/11/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/17/2016 1241	MJI		20034
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/15/2016 0533	TAF		19885
1		(Sulfate (sol) 300.0	1	08/15/2016 0533	TAF		19883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	4.1		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.39	BJ	1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	0.089	J	0.25	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.2	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-013
Description: SB-9-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1900	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/13/2016 0418	JJG		19771	5.89

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		21	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		122	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-013
Description: SB-9-1.5
Matrix: Solid
Date Sampled: 08/10/2016 1900
% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1641	SES		19729	5.58

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	52		22	4.5	ug/kg	1
Benzene	71-43-2	8260B	ND		5.6	2.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.6	2.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.6	2.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.6	2.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	5.1	J	22	4.5	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.6	2.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.6	2.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.6	2.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.6	2.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.6	2.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.6	2.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.6	2.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.6	2.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.6	2.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.6	2.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.6	2.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.6	2.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.6	2.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.6	2.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.6	2.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.6	2.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.6	2.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.6	2.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	4.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.6	2.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.6	2.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.6	2.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	4.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.6	2.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.6	2.2	ug/kg	1
Styrene	100-42-5	8260B	ND		5.6	2.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.6	2.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.6	2.2	ug/kg	1
Toluene	108-88-3	8260B	ND		5.6	2.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.6	2.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.6	2.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.6	2.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.6	2.2	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-013
Description: SB-9-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1900	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/12/2016 1641	SES		19729	5.58

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.6	2.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.6	2.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.6	2.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	4.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	53-142
Bromofluorobenzene		103	47-138
Toluene-d8		103	68-124

PQL = Practical quantitation limit
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-013
Description: SB-9-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1900	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH11024-013
Description: SB-9-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1900	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1958	JCG		19709

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	540				ug/kg	1
1R-.alpha.-Pinene		8270D	1400				ug/kg	1
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me		8270D	710				ug/kg	1
Octadec-9-enoic acid		8270D	620				ug/kg	1
Tetratetracontane		8270D	280				ug/kg	1
Docosane		8270D	290				ug/kg	1
Tetracosane		8270D	270				ug/kg	1
Unknown		8270D	480				ug/kg	1
Octadecane, 3-methyl-		8270D	220				ug/kg	1
Unknown		8270D	240				ug/kg	1
Eicosane		8270D	360				ug/kg	1
Unknown		8270D	220				ug/kg	1
Unknown		8270D	390				ug/kg	1
Unknown		8270D	450				ug/kg	1
1-Phenanthrenecarboxylic acid, 1,2,3,4,4		8270D	740				ug/kg	1
Unknown		8270D	450				ug/kg	1
Abietic acid		8270D	570				ug/kg	1
Silane, trichlorooctadecyl-		8270D	250				ug/kg	1
Unknown		8270D	220				ug/kg	1
13-Docosenamide, (Z)-		8270D	450				ug/kg	1

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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-013
Description: SB-9-1.5
Matrix: Solid
Date Sampled: 08/10/2016 1900
% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1958	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		41	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	3.2	J	41	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		41	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		41	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		41	5.5	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		41	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	11	J	41	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	15	J	41	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	19	J	41	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	6.9	J	41	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	8.2	J	41	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		41	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		41	9.8	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		83	11	ug/kg	1
Caprolactam	105-60-2	8270D	33	J	41	9.2	ug/kg	1
Carbazole	86-74-8	8270D	ND		41	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		41	7.6	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		41	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		41	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		41	9.8	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		41	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		41	7.7	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		41	7.4	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		41	8.6	ug/kg	1
Chrysene	218-01-9	8270D	13	J	41	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		41	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		41	8.0	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	45	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		41	7.3	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		41	5.1	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		41	8.2	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		41	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		41	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	50	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	86	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		83	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		83	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		41	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	26	J	41	18	ug/kg	1
Fluoranthene	206-44-0	8270D	18	J	41	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		41	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		41	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		41	9.8	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	66	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH11024-013
Description: SB-9-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1900	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/15/2016 1958	JCG	08/11/2016 2021	19677

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		41	7.2	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	7.3	J	41	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		41	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		41	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		41	8.8	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		83	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		41	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		83	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		83	8.0	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		83	7.5	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		41	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		83	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	51	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		41	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		41	9.1	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	55	ug/kg	1
Phenanthrene	85-01-8	8270D	6.0	J	41	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		41	8.6	ug/kg	1
Pyrene	129-00-0	8270D	20	J	41	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		41	7.5	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		41	5.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		48	33-102
2-Fluorophenol		48	28-104
Nitrobenzene-d5		50	22-109
Phenol-d5		50	27-103
Terphenyl-d14		58	41-120
2,4,6-Tribromophenol		63	30-117

PQL = Practical quantitation limit
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH11024-013
Description: SB-9-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1900	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0048	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/18/2016 2341	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.026	BJ	0.30	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	0.45	J	3.0	0.38	mg/kg	2
Beryllium	7440-41-7	6020A	0.38		0.12	0.0096	mg/kg	1
Cadmium	7440-43-9	6020A	0.038	J	0.30	0.024	mg/kg	2
Chromium	7440-47-3	6020A	37		16	0.35	mg/kg	2
Copper	7440-50-8	6020A	40	B	0.30	0.026	mg/kg	1
Iron	7439-89-6	6020A	33000	B	60	5.1	mg/kg	2
Lead	7439-92-1	6020A	9.3	B	0.30	0.0072	mg/kg	1
Manganese	7439-96-5	6020A	560	B	16	2.9	mg/kg	2
Nickel	7440-02-0	6020A	25	B	16	0.32	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.0	0.45	mg/kg	2
Silver	7440-22-4	6020A	ND		3.0	0.24	mg/kg	2
Thallium	7440-28-0	6020A	0.11	J	0.16	0.0096	mg/kg	1
Zinc	7440-66-6	6020A	52	B	3.0	0.079	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH11024-013
Description: SB-9-1.5	Matrix: Solid
Date Sampled: 08/10/2016 1900	% Solids: 80.5 08/11/2016 1830
Date Received: 08/11/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1423	COH	08/17/2016 1457	20057

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.025	J	0.092	0.0070	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-014
Description: TRIP BLANK
Matrix: Aqueous
Date Sampled: 08/10/2016
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/12/2016 2239	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH11024-014
Description: TRIP BLANK
Matrix: Aqueous
Date Sampled: 08/10/2016
Date Received: 08/11/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/12/2016 2239	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		117	70-130
Bromofluorobenzene		115	70-130
Toluene-d8		118	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ19883-001
Batch: 19883
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate (soluble)	ND		1	10	5.0	mg/kg	08/14/2016 1820

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19883-002
Batch: 19883
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	200	180		1	91	90-110	08/14/2016 1756

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ19885-001
Batch: 19885
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.20	0.025	mg/kg	08/14/2016 1820

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19885-002
Batch: 19885
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.82		1	102	90-110	08/14/2016 1756

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH11024-001MS
Batch: 19902
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/16/2016 925

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	1.3	5.2	2.8	N	1	29	75-125	08/16/2016 1819

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH11024-001MD
Batch: 19902
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/16/2016 925

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexavalent Chromium	1.3	5.2	5.9	+	1	90	72	75-125	20	08/16/2016 1819

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH11024-010MS
Batch: 19902
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/16/2016 925

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	0.49	880	400	N	50	45	75-125	08/16/2016 1819

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ19904-001
Batch: 19904
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/16/2016 925

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Hexavalent Chromium	0.36	J	1	1.0	0.25	mg/kg	08/17/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19904-002
Batch: 19904
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/16/2016 925

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	4.0	3.8		1	96	90-110	08/17/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH11024-013MS
Batch: 19904
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/16/2016 925

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	0.39	720	560	N	50	63	75-125	08/17/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20034-001
Batch: 20034
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	ND		1	1.0	0.10	mg/kg	08/17/2016 1145

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20034-002
Batch: 20034
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	10	9.4		1	94	90-110	08/17/2016 1147

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH11024-001MS
Batch: 20034
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	1.2	13	12	N	1	84	90-110	08/17/2016 1209

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH11024-001MD
Batch: 20034
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ammonia - N (gas diffusion)	1.2	13	14		1	94	11	90-110	20	08/17/2016 1211

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19729-001
Batch: 19729
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	4.0	ug/kg	08/12/2016 1025
Benzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Bromodichloromethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Bromoform	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Bromomethane (Methyl bromide)	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
2-Butanone (MEK)	ND		1	20	4.0	ug/kg	08/12/2016 1025
Carbon disulfide	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Carbon tetrachloride	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Chlorobenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Chloroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Chloroform	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Chloromethane (Methyl chloride)	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Cyclohexane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Dibromochloromethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,2-Dibromoethane (EDB)	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,2-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,4-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,3-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Dichlorodifluoromethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,2-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,1-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,1-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
cis-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
trans-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,2-Dichloropropane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
trans-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
cis-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Ethylbenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
2-Hexanone	ND		1	10	4.0	ug/kg	08/12/2016 1025
Isopropylbenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Methyl acetate	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
4-Methyl-2-pentanone	ND		1	10	4.0	ug/kg	08/12/2016 1025
Methylcyclohexane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Methylene chloride	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Styrene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,1,2,2-Tetrachloroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Tetrachloroethene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Toluene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,2,4-Trichlorobenzene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,1,1-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
1,1,2-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19729-001
Batch: 19729
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Trichlorofluoromethane	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Vinyl chloride	ND		1	5.0	2.0	ug/kg	08/12/2016 1025
Xylenes (total)	ND		1	10	4.0	ug/kg	08/12/2016 1025

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		108	47-138
1,2-Dichloroethane-d4		99	53-142
Toluene-d8		106	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19729-002
Batch: 19729
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	108	60-140	08/12/2016 0928
Benzene	50	52		1	104	69-123	08/12/2016 0928
Bromodichloromethane	50	54		1	107	69-121	08/12/2016 0928
Bromoform	50	47		1	94	61-119	08/12/2016 0928
Bromomethane (Methyl bromide)	50	57		1	113	10-168	08/12/2016 0928
2-Butanone (MEK)	100	100		1	103	57-148	08/12/2016 0928
Carbon disulfide	50	55		1	110	58-122	08/12/2016 0928
Carbon tetrachloride	50	54		1	109	58-136	08/12/2016 0928
Chlorobenzene	50	52		1	105	59-129	08/12/2016 0928
Chloroethane	50	58		1	116	60-140	08/12/2016 0928
Chloroform	50	54		1	108	71-125	08/12/2016 0928
Chloromethane (Methyl chloride)	50	60		1	121	34-134	08/12/2016 0928
Cyclohexane	50	57		1	114	53-139	08/12/2016 0928
1,2-Dibromo-3-chloropropane (DBCP)	50	49		1	99	55-125	08/12/2016 0928
Dibromochloromethane	50	51		1	102	66-119	08/12/2016 0928
1,2-Dibromoethane (EDB)	50	49		1	99	74-124	08/12/2016 0928
1,2-Dichlorobenzene	50	54		1	107	57-131	08/12/2016 0928
1,4-Dichlorobenzene	50	53		1	107	52-133	08/12/2016 0928
1,3-Dichlorobenzene	50	53		1	106	51-134	08/12/2016 0928
Dichlorodifluoromethane	50	68		1	135	10-157	08/12/2016 0928
1,2-Dichloroethane	50	53		1	105	67-129	08/12/2016 0928
1,1-Dichloroethane	50	55		1	111	71-127	08/12/2016 0928
1,1-Dichloroethene	50	56		1	113	69-138	08/12/2016 0928
cis-1,2-Dichloroethene	50	53		1	107	70-122	08/12/2016 0928
trans-1,2-Dichloroethene	50	55		1	111	68-131	08/12/2016 0928
1,2-Dichloropropane	50	52		1	104	72-124	08/12/2016 0928
trans-1,3-Dichloropropene	50	51		1	102	70-124	08/12/2016 0928
cis-1,3-Dichloropropene	50	53		1	107	70-126	08/12/2016 0928
Ethylbenzene	50	52		1	104	59-128	08/12/2016 0928
2-Hexanone	100	93		1	93	54-137	08/12/2016 0928
Isopropylbenzene	50	54		1	109	50-136	08/12/2016 0928
Methyl acetate	50	50		1	100	59-137	08/12/2016 0928
Methyl tertiary butyl ether (MTBE)	50	49		1	97	70-130	08/12/2016 0928
4-Methyl-2-pentanone	100	99		1	99	60-134	08/12/2016 0928
Methylcyclohexane	50	57		1	115	41-144	08/12/2016 0928
Methylene chloride	50	52		1	103	70-130	08/12/2016 0928
Styrene	50	52		1	104	54-136	08/12/2016 0928
1,1,2,2-Tetrachloroethane	50	49		1	98	69-132	08/12/2016 0928
Tetrachloroethene	50	55		1	110	45-150	08/12/2016 0928
Toluene	50	54		1	107	61-129	08/12/2016 0928
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	58		1	115	49-136	08/12/2016 0928
1,2,4-Trichlorobenzene	50	55		1	110	34-145	08/12/2016 0928
1,1,1-Trichloroethane	50	55		1	110	63-128	08/12/2016 0928
1,1,2-Trichloroethane	50	49		1	99	55-128	08/12/2016 0928

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19729-002
Batch: 19729
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	56		1	111	62-126	08/12/2016 0928
Trichlorofluoromethane	50	63		1	127	45-138	08/12/2016 0928
Vinyl chloride	50	59		1	117	42-132	08/12/2016 0928
Xylenes (total)	100	100		1	104	58-128	08/12/2016 0928

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		106	47-138
1,2-Dichloroethane-d4		97	53-142
Toluene-d8		107	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MS

Sample ID: RH11024-001MS
Batch: 19729
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	ND	110	430	N	1	378	60-140	08/12/2016 1857
Benzene	ND	57	43		1	75	69-123	08/12/2016 1857
Bromodichloromethane	ND	57	39	N	1	67	69-121	08/12/2016 1857
Bromoform	ND	57	25	N	1	44	61-119	08/12/2016 1857
Bromomethane (Methyl bromide)	ND	57	16	N	1	27	35-144	08/12/2016 1857
2-Butanone (MEK)	ND	110	65		1	57	57-148	08/12/2016 1857
Carbon disulfide	ND	57	41		1	72	58-122	08/12/2016 1857
Carbon tetrachloride	ND	57	46		1	81	58-136	08/12/2016 1857
Chlorobenzene	ND	57	38		1	67	59-129	08/12/2016 1857
Chloroethane	ND	57	57		1	99	50-132	08/12/2016 1857
Chloroform	ND	57	45		1	78	71-125	08/12/2016 1857
Chloromethane (Methyl chloride)	ND	57	50		1	88	34-134	08/12/2016 1857
Cyclohexane	ND	57	51		1	89	53-139	08/12/2016 1857
1,2-Dibromo-3-chloropropane (DBCP)	ND	57	36		1	62	55-125	08/12/2016 1857
Dibromochloromethane	ND	57	35	N	1	62	66-119	08/12/2016 1857
1,2-Dibromoethane (EDB)	ND	57	35	N	1	60	74-124	08/12/2016 1857
1,2-Dichlorobenzene	ND	57	31	N	1	54	57-131	08/12/2016 1857
1,3-Dichlorobenzene	ND	57	33		1	58	51-134	08/12/2016 1857
1,4-Dichlorobenzene	ND	57	33		1	58	52-133	08/12/2016 1857
Dichlorodifluoromethane	ND	57	71		1	124	10-157	08/12/2016 1857
1,1-Dichloroethane	ND	57	47		1	82	71-127	08/12/2016 1857
1,2-Dichloroethane	ND	57	41		1	72	67-129	08/12/2016 1857
1,1-Dichloroethene	ND	57	51		1	89	69-138	08/12/2016 1857
cis-1,2-Dichloroethene	ND	57	43		1	74	70-122	08/12/2016 1857
trans-1,2-Dichloroethene	ND	57	46		1	80	68-131	08/12/2016 1857
1,2-Dichloropropane	ND	57	43		1	75	72-124	08/12/2016 1857
cis-1,3-Dichloropropene	ND	57	14	N	1	25	70-126	08/12/2016 1857
trans-1,3-Dichloropropene	ND	57	21	N	1	37	70-124	08/12/2016 1857
Ethylbenzene	ND	57	41		1	72	59-128	08/12/2016 1857
2-Hexanone	ND	110	27	N	1	24	54-137	08/12/2016 1857
Isopropylbenzene	ND	57	53		1	92	50-136	08/12/2016 1857
Methyl acetate	ND	57	4.9	N	1	8.5	59-137	08/12/2016 1857
Methyl tertiary butyl ether (MTBE)	ND	57	39	N	1	68	70-130	08/12/2016 1857
4-Methyl-2-pentanone	ND	110	57	N	1	50	60-134	08/12/2016 1857
Methylcyclohexane	ND	57	48		1	84	41-144	08/12/2016 1857
Methylene chloride	ND	57	41	N	1	71	77-129	08/12/2016 1857
Styrene	ND	57	28	N	1	49	54-136	08/12/2016 1857
1,1,2,2-Tetrachloroethane	ND	57	48		1	83	69-132	08/12/2016 1857
Tetrachloroethene	ND	57	47		1	83	70-130	08/12/2016 1857
Toluene	ND	57	42		1	73	61-129	08/12/2016 1857
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	57	55		1	97	49-136	08/12/2016 1857
1,2,4-Trichlorobenzene	ND	57	14	N	1	25	34-145	08/12/2016 1857
1,1,1-Trichloroethane	ND	57	48		1	84	63-128	08/12/2016 1857
1,1,2-Trichloroethane	ND	57	41		1	72	55-128	08/12/2016 1857

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MS

Sample ID: RH11024-001MS
Batch: 19729
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	57	45		1	78	62-126	08/12/2016 1857
Trichlorofluoromethane	ND	57	62		1	108	45-138	08/12/2016 1857
Vinyl chloride	ND	57	55		1	96	42-132	08/12/2016 1857
Xylenes (total)	ND	110	78		1	68	58-128	08/12/2016 1857

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		99	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19770-001
Batch: 19770
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	2.0	ug/L	08/12/2016 2135
Benzene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Bromodichloromethane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Bromoform	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Bromomethane (Methyl bromide)	ND		1	5.0	0.40	ug/L	08/12/2016 2135
2-Butanone (MEK)	ND		1	10	2.0	ug/L	08/12/2016 2135
Carbon disulfide	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Chlorobenzene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Chloroethane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Chloroform	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Chloromethane (Methyl chloride)	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Cyclohexane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Dibromochloromethane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,2-Dibromoethane (EDB)	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,3-Dichlorobenzene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,4-Dichlorobenzene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,2-Dichlorobenzene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Dichlorodifluoromethane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,1-Dichloroethane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,2-Dichloroethane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,1-Dichloroethene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
cis-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,2-Dichloropropane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
cis-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
trans-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Ethylbenzene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
2-Hexanone	ND		1	10	2.0	ug/L	08/12/2016 2135
Isopropylbenzene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Methyl acetate	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	08/12/2016 2135
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	08/12/2016 2135
Methylcyclohexane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Methylene chloride	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Styrene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Tetrachloroethene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Toluene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,2,4-Trichlorobenzene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,1,2-Trichloroethane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
1,1,1-Trichloroethane	ND		1	5.0	0.40	ug/L	08/12/2016 2135

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19770-001
Batch: 19770
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Trichlorofluoromethane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Vinyl chloride	ND		1	2.0	0.40	ug/L	08/12/2016 2135
Xylenes (total)	ND		1	5.0	0.40	ug/L	08/12/2016 2135

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		107	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19770-002
Batch: 19770
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	113	60-140	08/12/2016 2034
Benzene	50	44		1	88	70-130	08/12/2016 2034
Bromodichloromethane	50	46		1	92	70-130	08/12/2016 2034
Bromoform	50	37		1	73	70-130	08/12/2016 2034
Bromomethane (Methyl bromide)	50	40		1	79	60-140	08/12/2016 2034
2-Butanone (MEK)	100	120		1	118	60-140	08/12/2016 2034
Carbon disulfide	50	43		1	85	60-140	08/12/2016 2034
Carbon tetrachloride	50	43		1	87	70-130	08/12/2016 2034
Chlorobenzene	50	43		1	86	70-130	08/12/2016 2034
Chloroethane	50	39		1	79	60-140	08/12/2016 2034
Chloroform	50	44		1	88	70-130	08/12/2016 2034
Chloromethane (Methyl chloride)	50	44		1	88	60-140	08/12/2016 2034
Cyclohexane	50	40		1	79	70-130	08/12/2016 2034
1,2-Dibromo-3-chloropropane (DBCP)	50	42		1	84	70-130	08/12/2016 2034
Dibromochloromethane	50	45		1	91	70-130	08/12/2016 2034
1,2-Dibromoethane (EDB)	50	43		1	86	70-130	08/12/2016 2034
1,3-Dichlorobenzene	50	42		1	85	70-130	08/12/2016 2034
1,4-Dichlorobenzene	50	41		1	82	70-130	08/12/2016 2034
1,2-Dichlorobenzene	50	45		1	89	70-130	08/12/2016 2034
Dichlorodifluoromethane	50	53		1	107	60-140	08/12/2016 2034
1,1-Dichloroethane	50	46		1	93	70-130	08/12/2016 2034
1,2-Dichloroethane	50	45		1	89	70-130	08/12/2016 2034
1,1-Dichloroethene	50	45		1	91	70-130	08/12/2016 2034
trans-1,2-Dichloroethene	50	45		1	91	70-130	08/12/2016 2034
cis-1,2-Dichloroethene	50	47		1	95	70-130	08/12/2016 2034
1,2-Dichloropropane	50	45		1	90	70-130	08/12/2016 2034
cis-1,3-Dichloropropene	50	48		1	96	70-130	08/12/2016 2034
trans-1,3-Dichloropropene	50	43		1	87	70-130	08/12/2016 2034
Ethylbenzene	50	43		1	85	70-130	08/12/2016 2034
2-Hexanone	100	92		1	92	60-140	08/12/2016 2034
Isopropylbenzene	50	43		1	85	70-130	08/12/2016 2034
Methyl acetate	50	52		1	104	60-140	08/12/2016 2034
Methyl tertiary butyl ether (MTBE)	50	42		1	84	70-130	08/12/2016 2034
4-Methyl-2-pentanone	100	99		1	99	60-140	08/12/2016 2034
Methylcyclohexane	50	42		1	85	70-130	08/12/2016 2034
Methylene chloride	50	43		1	86	70-130	08/12/2016 2034
Styrene	50	45		1	90	70-130	08/12/2016 2034
1,1,2,2-Tetrachloroethane	50	45		1	90	70-130	08/12/2016 2034
Tetrachloroethene	50	44		1	88	70-130	08/12/2016 2034
Toluene	50	43		1	87	70-130	08/12/2016 2034
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	45		1	91	70-130	08/12/2016 2034
1,2,4-Trichlorobenzene	50	42		1	84	70-130	08/12/2016 2034
1,1,2-Trichloroethane	50	43		1	87	70-130	08/12/2016 2034
1,1,1-Trichloroethane	50	43		1	86	70-130	08/12/2016 2034

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19770-002
Batch: 19770
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	47		1	95	70-130	08/12/2016 2034
Trichlorofluoromethane	50	48		1	96	70-130	08/12/2016 2034
Vinyl chloride	50	43		1	86	70-130	08/12/2016 2034
Xylenes (total)	100	86		1	86	70-130	08/12/2016 2034

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		113	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		112	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19771-001
Batch: 19771
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	20	12	ug/kg	08/12/2016 2145

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		105	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19771-002
Batch: 19771
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	100	95		1	95	70-130	08/12/2016 2106

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MS

Sample ID: RH11024-001MS
Batch: 19771
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	ND	82	92		1	111	70-130	08/13/2016 0608

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4	N	166	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: RH11024-003DU
Batch: 19771
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
1,4-Dioxane	ND	ND		1	0.00	40	08/13/2016 0546

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		120	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19853-001
Batch: 19853
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	20	12	ug/kg	08/15/2016 1153

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		120	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19853-002
Batch: 19853
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	100	110		1	113	70-130	08/15/2016 1056

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19677-001
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	33	11	ug/kg	08/12/2016 0943
2,4,5-Trichlorophenol	ND		1	33	6.1	ug/kg	08/12/2016 0943
2,4,6-Trichlorophenol	ND		1	33	4.7	ug/kg	08/12/2016 0943
2,4-Dichlorophenol	ND		1	33	5.9	ug/kg	08/12/2016 0943
2,4-Dimethylphenol	ND		1	33	10	ug/kg	08/12/2016 0943
2,4-Dinitrophenol	ND		1	170	69	ug/kg	08/12/2016 0943
2,4-Dinitrotoluene	ND		1	67	11	ug/kg	08/12/2016 0943
2,6-Dinitrotoluene	ND		1	67	11	ug/kg	08/12/2016 0943
2-Chloronaphthalene	ND		1	33	6.2	ug/kg	08/12/2016 0943
2-Chlorophenol	ND		1	33	6.0	ug/kg	08/12/2016 0943
2-Methylnaphthalene	ND		1	33	1.5	ug/kg	08/12/2016 0943
2-Methylphenol	ND		1	33	7.1	ug/kg	08/12/2016 0943
2-Nitroaniline	ND		1	67	8.9	ug/kg	08/12/2016 0943
2-Nitrophenol	ND		1	67	15	ug/kg	08/12/2016 0943
3+4-Methylphenol	ND		1	67	10	ug/kg	08/12/2016 0943
3,3'-Dichlorobenzidine	ND		1	170	36	ug/kg	08/12/2016 0943
3-Nitroaniline	ND		1	67	6.5	ug/kg	08/12/2016 0943
4,6-Dinitro-2-methylphenol	ND		1	170	40	ug/kg	08/12/2016 0943
4-Bromophenyl phenyl ether	ND		1	33	7.9	ug/kg	08/12/2016 0943
4-Chloro-3-methyl phenol	ND		1	33	6.1	ug/kg	08/12/2016 0943
4-Chloroaniline	ND		1	33	3.1	ug/kg	08/12/2016 0943
4-Chlorophenyl phenyl ether	ND		1	33	6.9	ug/kg	08/12/2016 0943
4-Nitroaniline	ND		1	67	6.0	ug/kg	08/12/2016 0943
4-Nitrophenol	ND		1	170	41	ug/kg	08/12/2016 0943
Acenaphthene	ND		1	33	1.7	ug/kg	08/12/2016 0943
Acenaphthylene	ND		1	33	1.7	ug/kg	08/12/2016 0943
Acetophenone	ND		1	33	12	ug/kg	08/12/2016 0943
Anthracene	ND		1	33	2.0	ug/kg	08/12/2016 0943
Atrazine	ND		1	33	4.4	ug/kg	08/12/2016 0943
Benzaldehyde	ND		1	33	14	ug/kg	08/12/2016 0943
Benzo(a)anthracene	ND		1	33	1.1	ug/kg	08/12/2016 0943
Benzo(a)pyrene	ND		1	33	1.5	ug/kg	08/12/2016 0943
Benzo(b)fluoranthene	ND		1	33	1.5	ug/kg	08/12/2016 0943
Benzo(g,h,i)perylene	ND		1	33	1.1	ug/kg	08/12/2016 0943
Benzo(k)fluoranthene	ND		1	33	1.4	ug/kg	08/12/2016 0943
bis (2-Chloro-1-methylethyl) ether	ND		1	33	9.3	ug/kg	08/12/2016 0943
bis(2-Chloroethoxy)methane	ND		1	33	8.1	ug/kg	08/12/2016 0943
bis(2-Chloroethyl)ether	ND		1	33	7.9	ug/kg	08/12/2016 0943
bis(2-Ethylhexyl)phthalate	ND		1	33	14	ug/kg	08/12/2016 0943
Butyl benzyl phthalate	ND		1	67	8.6	ug/kg	08/12/2016 0943
Caprolactam	ND		1	33	7.4	ug/kg	08/12/2016 0943
Carbazole	ND		1	33	9.4	ug/kg	08/12/2016 0943
Chrysene	ND		1	33	1.1	ug/kg	08/12/2016 0943
Di-n-butyl phthalate	ND		1	33	12	ug/kg	08/12/2016 0943

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19677-001
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	33	9.8	ug/kg	08/12/2016 0943
Dibenzo(a,h)anthracene	ND		1	33	1.8	ug/kg	08/12/2016 0943
Dibenzofuran	ND		1	33	6.4	ug/kg	08/12/2016 0943
Diethylphthalate	ND		1	33	4.1	ug/kg	08/12/2016 0943
Dimethyl phthalate	ND		1	33	6.6	ug/kg	08/12/2016 0943
Fluoranthene	ND		1	33	0.89	ug/kg	08/12/2016 0943
Fluorene	ND		1	33	2.0	ug/kg	08/12/2016 0943
Hexachlorobenzene	ND		1	33	8.6	ug/kg	08/12/2016 0943
Hexachlorobutadiene	ND		1	33	7.9	ug/kg	08/12/2016 0943
Hexachlorocyclopentadiene	ND		1	170	53	ug/kg	08/12/2016 0943
Hexachloroethane	ND		1	33	5.8	ug/kg	08/12/2016 0943
Indeno(1,2,3-c,d)pyrene	ND		1	33	1.4	ug/kg	08/12/2016 0943
Isophorone	ND		1	33	8.4	ug/kg	08/12/2016 0943
N-Nitrosodi-n-propylamine	ND		1	33	12	ug/kg	08/12/2016 0943
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	33	7.4	ug/kg	08/12/2016 0943
Naphthalene	ND		1	33	1.6	ug/kg	08/12/2016 0943
Nitrobenzene	ND		1	33	13	ug/kg	08/12/2016 0943
Pentachlorophenol	ND		1	170	44	ug/kg	08/12/2016 0943
Phenanthrene	ND		1	33	1.8	ug/kg	08/12/2016 0943
Phenol	ND		1	33	6.9	ug/kg	08/12/2016 0943
Pyrene	ND		1	33	1.2	ug/kg	08/12/2016 0943

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		57	30-117
2-Fluorobiphenyl		59	33-102
2-Fluorophenol		55	28-104
Nitrobenzene-d5		59	22-109
Phenol-d5		59	27-103
Terphenyl-d14		75	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19677-002
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	330	200		1	61	30-130	08/12/2016 1008
2,4,5-Trichlorophenol	330	200		1	59	46-122	08/12/2016 1008
2,4,6-Trichlorophenol	330	190		1	56	38-115	08/12/2016 1008
2,4-Dichlorophenol	670	360		1	55	41-113	08/12/2016 1008
2,4-Dimethylphenol	330	180		1	55	33-123	08/12/2016 1008
2,4-Dinitrophenol	330	210		1	63	30-130	08/12/2016 1008
2,4-Dinitrotoluene	330	240		1	72	48-124	08/12/2016 1008
2,6-Dinitrotoluene	330	220		1	65	47-125	08/12/2016 1008
2-Chloronaphthalene	330	200		1	60	31-127	08/12/2016 1008
2-Chlorophenol	330	200		1	59	37-106	08/12/2016 1008
2-Methylnaphthalene	330	200		1	59	40-106	08/12/2016 1008
2-Methylphenol	330	210		1	63	32-107	08/12/2016 1008
2-Nitroaniline	330	220		1	67	45-128	08/12/2016 1008
2-Nitrophenol	330	200		1	61	35-108	08/12/2016 1008
3+4-Methylphenol	330	210		1	62	39-108	08/12/2016 1008
3,3'-Dichlorobenzidine	330	260		1	77	30-130	08/12/2016 1008
3-Nitroaniline	330	200		1	61	24-127	08/12/2016 1008
4,6-Dinitro-2-methylphenol	330	260		1	77	40-130	08/12/2016 1008
4-Bromophenyl phenyl ether	330	200		1	60	46-118	08/12/2016 1008
4-Chloro-3-methyl phenol	330	220		1	67	49-118	08/12/2016 1008
4-Chloroaniline	330	230		1	69	10-125	08/12/2016 1008
4-Chlorophenyl phenyl ether	330	180		1	55	47-116	08/12/2016 1008
4-Nitroaniline	330	240		1	73	48-127	08/12/2016 1008
4-Nitrophenol	670	600		1	90	18-154	08/12/2016 1008
Acenaphthene	330	200		1	61	46-114	08/12/2016 1008
Acenaphthylene	330	220		1	66	44-122	08/12/2016 1008
Acetophenone	330	180		1	54	30-130	08/12/2016 1008
Anthracene	330	230		1	69	50-119	08/12/2016 1008
Atrazine	330	250		1	75	30-130	08/12/2016 1008
Benzaldehyde	330	230		1	69	40-117	08/12/2016 1008
Benzo(a)anthracene	330	260		1	77	47-121	08/12/2016 1008
Benzo(a)pyrene	330	270		1	80	55-134	08/12/2016 1008
Benzo(b)fluoranthene	330	260		1	79	28-139	08/12/2016 1008
Benzo(g,h,i)perylene	330	310		1	92	36-125	08/12/2016 1008
Benzo(k)fluoranthene	330	270		1	80	47-130	08/12/2016 1008
bis (2-Chloro-1-methylethyl) ether	330	220		1	65	31-102	08/12/2016 1008
bis(2-Chloroethoxy)methane	330	220		1	67	39-108	08/12/2016 1008
bis(2-Chloroethyl)ether	330	220		1	65	32-105	08/12/2016 1008
bis(2-Ethylhexyl)phthalate	330	300		1	90	45-128	08/12/2016 1008
Butyl benzyl phthalate	330	300		1	92	46-128	08/12/2016 1008
Caprolactam	330	290		1	87	30-130	08/12/2016 1008
Carbazole	330	250		1	74	30-130	08/12/2016 1008
Chrysene	330	260		1	78	45-126	08/12/2016 1008
Di-n-butyl phthalate	330	280		1	84	51-129	08/12/2016 1008

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19677-002
Batch: 19677
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/11/2016 2021

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Di-n-octylphthalate	330	270		1	82	49-142	08/12/2016 1008
Dibenzo(a,h)anthracene	330	180		1	55	30-130	08/12/2016 1008
Dibenzofuran	330	190		1	58	45-112	08/12/2016 1008
Diethylphthalate	330	240		1	73	49-123	08/12/2016 1008
Dimethyl phthalate	330	220		1	66	48-120	08/12/2016 1008
Fluoranthene	330	230		1	70	50-123	08/12/2016 1008
Fluorene	330	190		1	58	48-117	08/12/2016 1008
Hexachlorobenzene	330	210		1	63	44-122	08/12/2016 1008
Hexachlorobutadiene	330	180		1	54	33-103	08/12/2016 1008
Hexachlorocyclopentadiene	1700	820		1	49	18-121	08/12/2016 1008
Hexachloroethane	330	180		1	54	30-96	08/12/2016 1008
Indeno(1,2,3-c,d)pyrene	330	270		1	82	45-123	08/12/2016 1008
Isophorone	330	180		1	53	30-130	08/12/2016 1008
N-Nitrosodi-n-propylamine	330	250		1	76	32-115	08/12/2016 1008
N-Nitrosodiphenylamine (Diphenylamine)	330	230		1	68	53-150	08/12/2016 1008
Naphthalene	330	200		1	59	36-110	08/12/2016 1008
Nitrobenzene	330	220		1	66	33-114	08/12/2016 1008
Pentachlorophenol	670	480		1	72	27-138	08/12/2016 1008
Phenanthrene	330	220		1	65	49-117	08/12/2016 1008
Phenol	330	200		1	61	36-108	08/12/2016 1008
Pyrene	330	260		1	79	47-119	08/12/2016 1008

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		62	30-117
2-Fluorobiphenyl		58	33-102
2-Fluorophenol		57	28-104
Nitrobenzene-d5		64	22-109
Phenol-d5		61	27-103
Terphenyl-d14		75	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MB

Sample ID: RQ19752-001
Batch: 19752
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/15/2016 1115

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	0.016	J	1	0.25	0.015	mg/kg	08/18/2016 2122
Arsenic	ND		1	0.25	0.032	mg/kg	08/18/2016 2122
Beryllium	ND		1	0.10	0.0080	mg/kg	08/18/2016 2122
Cadmium	ND		1	0.025	0.0020	mg/kg	08/18/2016 2122
Chromium	0.080	J	1	1.3	0.029	mg/kg	08/18/2016 2122
Copper	0.10	J	1	0.25	0.022	mg/kg	08/18/2016 2122
Lead	0.11	J	1	0.25	0.0060	mg/kg	08/18/2016 2122
Manganese	0.36	J	1	1.3	0.24	mg/kg	08/18/2016 2122
Nickel	0.11	J	1	1.3	0.027	mg/kg	08/18/2016 2122
Selenium	ND		1	0.25	0.038	mg/kg	08/18/2016 2122
Silver	0.44		1	0.25	0.020	mg/kg	08/18/2016 2122
Thallium	0.034	J	1	0.13	0.0080	mg/kg	08/18/2016 2122
Zinc	0.39	J	1	2.5	0.066	mg/kg	08/18/2016 2122

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - LCS

Sample ID: RQ19752-002
Batch: 19752
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/15/2016 1115

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	9.3	9.1		5	98	80-120	08/18/2016 2133
Arsenic	9.3	9.1		5	97	80-120	08/18/2016 2133
Beryllium	9.3	9.1		5	98	80-120	08/18/2016 2133
Cadmium	9.3	8.6		5	93	80-120	08/18/2016 2133
Chromium	9.3	9.4		5	101	80-120	08/18/2016 2133
Copper	9.3	10		5	110	80-120	08/18/2016 2133
Iron	93	110		1	120	80-120	08/18/2016 2128
Lead	9.3	9.5		5	102	80-120	08/18/2016 2133
Manganese	9.3	9.6		5	103	80-120	08/18/2016 2133
Nickel	9.3	9.6		5	102	80-120	08/18/2016 2133
Selenium	9.3	8.4		5	90	80-120	08/18/2016 2133
Silver	9.3	9.7		5	104	80-120	08/18/2016 2133
Thallium	9.3	9.0		5	97	80-120	08/18/2016 2133
Zinc	9.3	9.1		5	97	80-120	08/18/2016 2133

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MB

Sample ID: RQ20013-001
Batch: 20013
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/17/2016 950

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	0.096	J	1	0.25	0.015	mg/kg	08/18/2016 2223
Arsenic	ND		1	0.25	0.032	mg/kg	08/18/2016 2223
Beryllium	ND		1	0.10	0.0080	mg/kg	08/18/2016 2223
Cadmium	ND		1	0.025	0.0020	mg/kg	08/18/2016 2223
Chromium	ND		1	1.3	0.029	mg/kg	08/18/2016 2223
Copper	0.037	J	1	0.25	0.022	mg/kg	08/18/2016 2223
Iron	4.8	J	1	5.0	0.43	mg/kg	08/19/2016 1321
Lead	0.021	J	1	0.25	0.0060	mg/kg	08/18/2016 2223
Manganese	0.30	J	1	1.3	0.24	mg/kg	08/18/2016 2223
Nickel	0.097	J	1	1.3	0.027	mg/kg	08/18/2016 2223
Selenium	ND		1	0.25	0.038	mg/kg	08/18/2016 2223
Silver	ND		1	0.25	0.020	mg/kg	08/18/2016 2223
Thallium	ND		1	0.13	0.0080	mg/kg	08/18/2016 2223
Zinc	0.15	J	1	2.5	0.066	mg/kg	08/18/2016 2223

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - LCS

Sample ID: RQ20013-002
Batch: 20013
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/17/2016 950

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	10	9.3		5	93	80-120	08/18/2016 2234
Arsenic	10	9.9		5	99	80-120	08/18/2016 2234
Beryllium	10	12		5	120	80-120	08/18/2016 2234
Cadmium	10	9.7		5	97	80-120	08/18/2016 2234
Chromium	10	10		5	104	80-120	08/18/2016 2234
Copper	10	10		5	102	80-120	08/18/2016 2234
Iron	100	100		1	101	80-120	08/19/2016 1327
Lead	10	10		5	100	80-120	08/18/2016 2234
Manganese	10	11		5	107	80-120	08/18/2016 2234
Nickel	10	10		5	103	80-120	08/18/2016 2234
Selenium	10	9.6		5	96	80-120	08/18/2016 2234
Silver	10	10		5	103	80-120	08/18/2016 2234
Thallium	10	9.4		5	94	80-120	08/18/2016 2234
Zinc	10	10		5	101	80-120	08/18/2016 2234

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MB

Sample ID: RQ20057-001
Batch: 20057
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/17/2016 1457

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	ND		1	0.083	0.0063	mg/kg	08/18/2016 1339

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - LCS

Sample ID: RQ20057-002
Batch: 20057
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/17/2016 1457

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.83	0.83		1	100	80-120	08/18/2016 1341

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MS

Sample ID: RH11024-001MS
Batch: 20057
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/17/2016 1457

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.036	0.94	1.2	N	1	126	80-120	08/18/2016 1348

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MSD

Sample ID: RH11024-001MD
Batch: 20057
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/17/2016 1457

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.036	1.1	1.4	N	1	124	11	80-120	20	08/18/2016 1350

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Chain of Custody
and
Miscellaneous Documents

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63433

CDM Smith

Client: 5400 Glenwood Ave Ste 400	Report to Contact: Doug Forbes	Telephone No. / E-mail: Forbesd@cdmsmith.com	Quote No.
Address: Raleigh	Sampler's Signature: x Mark O'Darwin	Analysis (Attach list if more space is needed)	Page 1 of 2
City: NC; State: NC; Zip Code: 27612	Printed Name: Mark Darwin		RH11024
Project Name: Bat Holding			
Project No.	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Matrix: Aqueous	Solid	Non-Aqueous Oil	Other	No of Containers by Preservative Type: Unpres	H2SO4	HNO3	HCl	NaOH	NaHSO4	Zn(Ac)2 / NaOH	VOC	VOC 1,4-D	SVOC Hex Cr	Metals, NH3, SO4, MS					Remarks / Cooler I.D.
SB-1-0.5	8-10-16	1420	G		X		X								X	X	X	X					
SB-1-1.5		1425	G		X		X																
SB-1-7-8		1430	G		X		X																
SB-2-0-0.5		1640	G		X																		
SB-2-1.5		1645	G		X																		
SB-2-10.5-12.5		1700	G		X																		
DUP-3		1650	G		X																		
SB-2-6-8		1715	G		X																		
SB-2-12.5-14		1730	G		X																		
SB-8-0.5		1830	G		X																		

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☒ Standard ☐ Rush (Specify)	Sample Disposal ☐ Return to Client ☒ Disposal by Lab	Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown	QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Mark O'Darwin	8/10/16	2000	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEx	8/11/16	0900	4. Laboratory received by: Tracy Dowdle	8/11/16	0900

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) (Yes) No Ice Pack Receipt Temp. 3.1 °C 3.4 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

SHEALY **Chain of Custody Record**

Number 63432

CDM Smith

Client	Report to Contact	Telephone No. / E-mail	Quote No.
5400 Glenwood Ave Ste 400	Dan Forbes	forbesd@cdmsmith.com	
Address	**Sampler's Signature**	**Analysis (Attach list if more space is needed)**	Page 2 of 2
Raleigh	x Mark Dascoin		
City / **State** / **Zip Code**	**Printed Name**		
NC / 27612	Mark Dascoin		
Project Name			
Bud Holding			
Project No. / **P.O. No.**			

RH11024

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab/Composite	Matrix: Aqueous	Solid	Non-Aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	NaS2O3	Other	VOC	SVOC 1,4-D	SVOC Hex Cr	Metals MTS SO4, NO3					Remarks / Cooler I.D.
SB 8-1.5	8-10-16	1840	G		X		X						X	X	X	X	X					
SB 9-0.5	↓	1850	↓		X		X						X	X	X	X	X					Do not analyze until CDM Smith Approves
SB 9-1.5	↓	1900	↓		X		X						X	X	X	X	X					
Trip Blank	—	—		X						X				X								

Turn Around Time Required (Prior lab approval required for expedited TAT.)	Sample Disposal	Possible Hazard Identification	QC Requirements (Specify)
☒ Standard ☐ Rush (Specify)	☐ Return to Client ☒ Disposal by Lab	☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown	

	Date	Time		Date	Time
1. Relinquished by: Mark Dascoin	8-10-16	2000	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEx	8/11/16	0900	4. Laboratory received by: Lacey Doubli	8/11/16	0900

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack
Receipt Temp. 3.1 °C 3.4 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: CDM Smith Cooler Inspected by/date: [illegible] / 8/11/16 Lot #: RH11024

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: NA Cl strip ID: NA
Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:
3211 / 3.1 / 3.1 °C 1533/3.4 / 3.4 °C ___ / ___ / ___ °C ___ / ___ / ___ °C
Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C
Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☑	No ☐	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☑	No ☐		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☑	No ☐	1910	22. Was the quote number used taken from the container label?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) ___ were received incorrectly preserved and were adjusted accordingly in sample receiving with ___ (H_2SO_4, HNO3, HCl, NaOH) using SR # ___.

Sample(s) ___ were received with bubbles >6 mm in diameter.

Samples(s) ___ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: ___.

SC Drinking Water Project Sample(s) pH verified to be ≤2 by ___ Date: ___
Sample(s) ___ were not received at a pH of <2 and were adjusted accordingly using SR# ___

Sample labels applied by: [illegible] Verified by: ___ Date: 8/11/16

Comments: ___

Report of Analysis

CDM Smith
5400 Glenwood Avenue
Suite 400
Raleigh, NC 27612
Attention: Dan Forbes

Project Name: Bud Holdings

Lot Number: RH13005

Date Completed: 08/22/2016

Nisreen Saikaly
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
CDM Smith
Lot Number: RH13005

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary
CDM Smith
Lot Number: RH13005

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SB-10-0.5	Solid	08/12/2016 1345	08/13/2016
002	SB-10-1.5	Solid	08/12/2016 1400	08/13/2016
003	SB-10-18-20	Solid	08/12/2016 1420	08/13/2016
004	SB-10-4-6	Solid	08/12/2016 1445	08/13/2016
005	SB-10-12-14	Solid	08/12/2016 1505	08/13/2016
006	SB-10-14-16	Solid	08/12/2016 1510	08/13/2016
007	SB-3-0.5	Solid	08/12/2016 1515	08/13/2016
008	SB-3-1.5	Solid	08/12/2016 1525	08/13/2016
009	SB-3-6	Solid	08/12/2016 1530	08/13/2016
010	SB-3-9	Solid	08/12/2016 1535	08/13/2016
011	SB-3-10-12	Solid	08/12/2016 1540	08/13/2016
012	DUP-4	Solid	08/12/2016 0800	08/13/2016
013	TRIP BLANK	Aqueous	08/12/2016	08/13/2016

(13 samples)

Executive Summary
CDM Smith
Lot Number: RH13005

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SB-10-0.5	Solid	Ammonia - N (gas	350.1	0.36	BJ	mg/kg	9
001	SB-10-0.5	Solid	Hexavalent Chromium	7196A	0.35	J	mg/kg	9
001	SB-10-0.5	Solid	Nitrate - N (soluble)	300.0	0.036	J	mg/kg	9
001	SB-10-0.5	Solid	Unknown	8270D	650		ug/kg	14
001	SB-10-0.5	Solid	Oleic Acid	8270D	290		ug/kg	14
001	SB-10-0.5	Solid	Hexadecanoic acid, butyl	8270D	150		ug/kg	14
001	SB-10-0.5	Solid	Octadecanoic acid, butyl	8270D	110		ug/kg	14
001	SB-10-0.5	Solid	13-Docosenamide, (Z)-	8270D	140		ug/kg	14
001	SB-10-0.5	Solid	Antimony	6020A	0.058	BJ	mg/kg	17
001	SB-10-0.5	Solid	Beryllium	6020A	0.29		mg/kg	17
001	SB-10-0.5	Solid	Cadmium	6020A	0.029	J	mg/kg	17
001	SB-10-0.5	Solid	Chromium	6020A	16		mg/kg	17
001	SB-10-0.5	Solid	Copper	6020A	17	B	mg/kg	17
001	SB-10-0.5	Solid	Iron	6020A	15000	B	mg/kg	17
001	SB-10-0.5	Solid	Lead	6020A	2.8	B	mg/kg	17
001	SB-10-0.5	Solid	Manganese	6020A	300	B	mg/kg	17
001	SB-10-0.5	Solid	Nickel	6020A	10	BJ	mg/kg	17
001	SB-10-0.5	Solid	Thallium	6020A	0.040	J	mg/kg	17
001	SB-10-0.5	Solid	Zinc	6020A	39	B	mg/kg	17
002	SB-10-1.5	Solid	Ammonia - N (gas	350.1	0.88	BJ	mg/kg	19
002	SB-10-1.5	Solid	Hexavalent Chromium	7196A	0.37	J	mg/kg	19
002	SB-10-1.5	Solid	Nitrate - N (soluble)	300.0	0.15	J	mg/kg	19
002	SB-10-1.5	Solid	Acetone	8260B	11	J	ug/kg	21
002	SB-10-1.5	Solid	Propane, 2,2-dimethoxy-	8270D	120		ug/kg	24
002	SB-10-1.5	Solid	2-Pentanone, 4-hydroxy-4-	8270D	550		ug/kg	24
002	SB-10-1.5	Solid	13-Docosenamide, (Z)-	8270D	420		ug/kg	24
002	SB-10-1.5	Solid	Antimony	6020A	0.11	BJ	mg/kg	27
002	SB-10-1.5	Solid	Arsenic	6020A	1.1	J	mg/kg	27
002	SB-10-1.5	Solid	Beryllium	6020A	0.48		mg/kg	27
002	SB-10-1.5	Solid	Chromium	6020A	54		mg/kg	27
002	SB-10-1.5	Solid	Copper	6020A	20	B	mg/kg	27
002	SB-10-1.5	Solid	Iron	6020A	28000	B	mg/kg	27
002	SB-10-1.5	Solid	Lead	6020A	9.0	B	mg/kg	27
002	SB-10-1.5	Solid	Manganese	6020A	500	B	mg/kg	27
002	SB-10-1.5	Solid	Nickel	6020A	12	BJ	mg/kg	27
002	SB-10-1.5	Solid	Thallium	6020A	0.061	J	mg/kg	27
002	SB-10-1.5	Solid	Zinc	6020A	37	B	mg/kg	27
003	SB-10-18-20	Solid	Ammonia - N (gas	350.1	38	B	mg/kg	29
003	SB-10-18-20	Solid	Nitrate - N (soluble)	300.0	0.082	J	mg/kg	29
003	SB-10-18-20	Solid	Acetone	8260B	150		ug/kg	31
003	SB-10-18-20	Solid	2-Butanone (MEK)	8260B	26		ug/kg	31
003	SB-10-18-20	Solid	2-Propanone, 1-chloro-	8270D	97		ug/kg	34
003	SB-10-18-20	Solid	Unknown	8270D	95		ug/kg	34
003	SB-10-18-20	Solid	2-Pentanone, 4-hydroxy-4-	8270D	680		ug/kg	34
003	SB-10-18-20	Solid	Hexanoic acid	8270D	120		ug/kg	34

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	SB-10-18-20	Solid	n-Hexadecanoic acid	8270D	130		ug/kg	34
003	SB-10-18-20	Solid	6-Octadecenoic acid, (Z)-	8270D	260		ug/kg	34
003	SB-10-18-20	Solid	Octadecanoic acid	8270D	120		ug/kg	34
003	SB-10-18-20	Solid	1-Hexadecene	8270D	140		ug/kg	34
003	SB-10-18-20	Solid	13-Docosenamide, (Z)-	8270D	540		ug/kg	34
003	SB-10-18-20	Solid	Dodecanoic acid,	8270D	110		ug/kg	34
003	SB-10-18-20	Solid	Unknown	8270D	120		ug/kg	34
003	SB-10-18-20	Solid	Antimony	6020A	0.028	BJ	mg/kg	37
003	SB-10-18-20	Solid	Beryllium	6020A	0.41		mg/kg	37
003	SB-10-18-20	Solid	Chromium	6020A	13		mg/kg	37
003	SB-10-18-20	Solid	Copper	6020A	6.8	B	mg/kg	37
003	SB-10-18-20	Solid	Iron	6020A	13000	B	mg/kg	37
003	SB-10-18-20	Solid	Lead	6020A	10	B	mg/kg	37
003	SB-10-18-20	Solid	Manganese	6020A	830	B	mg/kg	37
003	SB-10-18-20	Solid	Nickel	6020A	3.5	BJ	mg/kg	37
003	SB-10-18-20	Solid	Silver	6020A	0.023	J	mg/kg	37
003	SB-10-18-20	Solid	Thallium	6020A	0.098	J	mg/kg	37
003	SB-10-18-20	Solid	Zinc	6020A	8.8	BJ	mg/kg	37
004	SB-10-4-6	Solid	Ammonia - N (gas	350.1	14		mg/kg	39
004	SB-10-4-6	Solid	Nitrate - N (soluble)	300.0	0.15	J	mg/kg	39
004	SB-10-4-6	Solid	Acetone	8260B	52		ug/kg	41
004	SB-10-4-6	Solid	2-Butanone (MEK)	8260B	5.9	J	ug/kg	41
004	SB-10-4-6	Solid	Unknown	8270D	430		ug/kg	44
004	SB-10-4-6	Solid	n-Hexadecanoic acid	8270D	150		ug/kg	44
004	SB-10-4-6	Solid	9-Octadecenoic acid, (E)-	8270D	470		ug/kg	44
004	SB-10-4-6	Solid	Octadecanoic acid	8270D	100		ug/kg	44
004	SB-10-4-6	Solid	Octadecanoic acid, butyl	8270D	200		ug/kg	44
004	SB-10-4-6	Solid	13-Docosenamide, (Z)-	8270D	530		ug/kg	44
004	SB-10-4-6	Solid	Fluoranthene	8270D	1.3	J	ug/kg	45
004	SB-10-4-6	Solid	Antimony	6020A	0.039	BJ	mg/kg	47
004	SB-10-4-6	Solid	Beryllium	6020A	0.99		mg/kg	47
004	SB-10-4-6	Solid	Chromium	6020A	48		mg/kg	47
004	SB-10-4-6	Solid	Copper	6020A	61	B	mg/kg	47
004	SB-10-4-6	Solid	Iron	6020A	44000	B	mg/kg	47
004	SB-10-4-6	Solid	Lead	6020A	9.9	B	mg/kg	47
004	SB-10-4-6	Solid	Manganese	6020A	910	B	mg/kg	47
004	SB-10-4-6	Solid	Nickel	6020A	27	BJ	mg/kg	47
004	SB-10-4-6	Solid	Thallium	6020A	0.088	J	mg/kg	47
004	SB-10-4-6	Solid	Zinc	6020A	63	BJ	mg/kg	47
005	SB-10-12-14	Solid	Ammonia - N (gas	350.1	13		mg/kg	49
005	SB-10-12-14	Solid	Hexavalent Chromium	7196A	0.66	J	mg/kg	49
005	SB-10-12-14	Solid	Nitrate - N (soluble)	300.0	0.099	J	mg/kg	49
005	SB-10-12-14	Solid	Acetone	8260B	110		ug/kg	51
005	SB-10-12-14	Solid	2-Butanone (MEK)	8260B	17	J	ug/kg	51
005	SB-10-12-14	Solid	Cyclopentane	8260B	13		ug/kg	53
005	SB-10-12-14	Solid	Unknown	8270D	260		ug/kg	54
005	SB-10-12-14	Solid	13-Docosenamide, (Z)-	8270D	420		ug/kg	54
005	SB-10-12-14	Solid	Octacosane	8270D	93		ug/kg	54

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
005	SB-10-12-14	Solid	Pentadecane, 8-hexyl-	8270D	160		ug/kg	54
005	SB-10-12-14	Solid	Antimony	6020A	0.024	BJ	mg/kg	57
005	SB-10-12-14	Solid	Arsenic	6020A	0.71	J	mg/kg	57
005	SB-10-12-14	Solid	Beryllium	6020A	0.56		mg/kg	57
005	SB-10-12-14	Solid	Cadmium	6020A	0.039	J	mg/kg	57
005	SB-10-12-14	Solid	Chromium	6020A	24		mg/kg	57
005	SB-10-12-14	Solid	Copper	6020A	20	B	mg/kg	57
005	SB-10-12-14	Solid	Iron	6020A	19000	B	mg/kg	57
005	SB-10-12-14	Solid	Lead	6020A	12	B	mg/kg	57
005	SB-10-12-14	Solid	Manganese	6020A	240	B	mg/kg	57
005	SB-10-12-14	Solid	Nickel	6020A	11	BJ	mg/kg	57
005	SB-10-12-14	Solid	Thallium	6020A	0.14	J	mg/kg	57
005	SB-10-12-14	Solid	Zinc	6020A	28	BJ	mg/kg	57
006	SB-10-14-16	Solid	Ammonia - N (gas	350.1	33		mg/kg	59
006	SB-10-14-16	Solid	Hexavalent Chromium	7196A	0.61	J	mg/kg	59
006	SB-10-14-16	Solid	Nitrate - N (soluble)	300.0	0.085	J	mg/kg	59
006	SB-10-14-16	Solid	Acetone	8260B	63		ug/kg	61
006	SB-10-14-16	Solid	2-Butanone (MEK)	8260B	8.3	J	ug/kg	61
006	SB-10-14-16	Solid	Carbon disulfide	8260B	2.2	J	ug/kg	61
006	SB-10-14-16	Solid	Unknown	8260B	4.1		ug/kg	63
006	SB-10-14-16	Solid	Propylene Glycol	8270D	110		ug/kg	64
006	SB-10-14-16	Solid	Unknown	8270D	450		ug/kg	64
006	SB-10-14-16	Solid	n-Hexadecanoic acid	8270D	170		ug/kg	64
006	SB-10-14-16	Solid	3-Bromobenzoic acid,	8270D	190		ug/kg	64
006	SB-10-14-16	Solid	2-Phenanthrenol,	8270D	130		ug/kg	64
006	SB-10-14-16	Solid	Unknown	8270D	91		ug/kg	64
006	SB-10-14-16	Solid	13-Docosenamide, (Z)-	8270D	560		ug/kg	64
006	SB-10-14-16	Solid	Heptacosane	8270D	130		ug/kg	64
006	SB-10-14-16	Solid	Nonadecane	8270D	270		ug/kg	64
006	SB-10-14-16	Solid	Unknown	8270D	100		ug/kg	64
006	SB-10-14-16	Solid	Unknown	8270D	88		ug/kg	64
006	SB-10-14-16	Solid	Heptadecane, 9-octyl-	8270D	85		ug/kg	64
006	SB-10-14-16	Solid	Naphthalene,	8270D	170		ug/kg	64
006	SB-10-14-16	Solid	Benzo(a)anthracene	8270D	4.2	J	ug/kg	65
006	SB-10-14-16	Solid	Chrysene	8270D	3.9	J	ug/kg	65
006	SB-10-14-16	Solid	Fluoranthene	8270D	4.1	J	ug/kg	65
006	SB-10-14-16	Solid	Pyrene	8270D	3.6	J	ug/kg	66
006	SB-10-14-16	Solid	Antimony	6020A	0.027	BJ	mg/kg	67
006	SB-10-14-16	Solid	Beryllium	6020A	0.87		mg/kg	67
006	SB-10-14-16	Solid	Cadmium	6020A	0.027	J	mg/kg	67
006	SB-10-14-16	Solid	Chromium	6020A	30		mg/kg	67
006	SB-10-14-16	Solid	Copper	6020A	30	B	mg/kg	67
006	SB-10-14-16	Solid	Iron	6020A	26000	B	mg/kg	67
006	SB-10-14-16	Solid	Lead	6020A	9.2	B	mg/kg	67
006	SB-10-14-16	Solid	Manganese	6020A	550	B	mg/kg	67
006	SB-10-14-16	Solid	Nickel	6020A	32	B	mg/kg	67
006	SB-10-14-16	Solid	Silver	6020A	0.026	J	mg/kg	67
006	SB-10-14-16	Solid	Thallium	6020A	0.059	J	mg/kg	67

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
006	SB-10-14-16	Solid	Zinc	6020A	43	B	mg/kg	67
006	SB-10-14-16	Solid	Mercury	7471B	0.0095	J	mg/kg	68
007	SB-3-0.5	Solid	Ammonia - N (gas	350.1	0.70	J	mg/kg	69
007	SB-3-0.5	Solid	Nitrate - N (soluble)	300.0	0.052	J	mg/kg	69
007	SB-3-0.5	Solid	Propane, 2,2-dimethoxy-	8270D	100		ug/kg	74
007	SB-3-0.5	Solid	R-(-)-1,2-propanediol	8270D	150		ug/kg	74
007	SB-3-0.5	Solid	Unknown	8270D	570		ug/kg	74
007	SB-3-0.5	Solid	Octadec-9-enoic acid	8270D	170		ug/kg	74
007	SB-3-0.5	Solid	Hexadecanoic acid, butyl	8270D	120		ug/kg	74
007	SB-3-0.5	Solid	Octadecanoic acid, butyl	8270D	90		ug/kg	74
007	SB-3-0.5	Solid	Unknown	8270D	110		ug/kg	74
007	SB-3-0.5	Solid	13-Docosenamide, (Z)-	8270D	280		ug/kg	74
007	SB-3-0.5	Solid	Heneicosane, 11-decyl-	8270D	98		ug/kg	74
007	SB-3-0.5	Solid	Fluoranthene	8270D	1.1	J	ug/kg	75
007	SB-3-0.5	Solid	Antimony	6020A	0.051	BJ	mg/kg	77
007	SB-3-0.5	Solid	Beryllium	6020A	0.43		mg/kg	77
007	SB-3-0.5	Solid	Cadmium	6020A	0.025	J	mg/kg	77
007	SB-3-0.5	Solid	Chromium	6020A	35		mg/kg	77
007	SB-3-0.5	Solid	Copper	6020A	30	B	mg/kg	77
007	SB-3-0.5	Solid	Iron	6020A	25000	B	mg/kg	77
007	SB-3-0.5	Solid	Lead	6020A	5.0	B	mg/kg	77
007	SB-3-0.5	Solid	Manganese	6020A	440	B	mg/kg	77
007	SB-3-0.5	Solid	Nickel	6020A	20	B	mg/kg	77
007	SB-3-0.5	Solid	Thallium	6020A	0.054	J	mg/kg	77
007	SB-3-0.5	Solid	Zinc	6020A	42	B	mg/kg	77
008	SB-3-1.5	Solid	Unknown	8270D	520		ug/kg	84
008	SB-3-1.5	Solid	Hexadecanoic acid, butyl	8270D	200		ug/kg	84
008	SB-3-1.5	Solid	Octadecanoic acid, butyl	8270D	170		ug/kg	84
008	SB-3-1.5	Solid	13-Docosenamide, (Z)-	8270D	300		ug/kg	84
008	SB-3-1.5	Solid	Antimony	6020A	0.025	BJ	mg/kg	87
008	SB-3-1.5	Solid	Arsenic	6020A	0.59	J	mg/kg	87
008	SB-3-1.5	Solid	Beryllium	6020A	0.33		mg/kg	87
008	SB-3-1.5	Solid	Chromium	6020A	35		mg/kg	87
008	SB-3-1.5	Solid	Copper	6020A	30	B	mg/kg	87
008	SB-3-1.5	Solid	Iron	6020A	23000	B	mg/kg	87
008	SB-3-1.5	Solid	Lead	6020A	4.6	B	mg/kg	87
008	SB-3-1.5	Solid	Manganese	6020A	450	B	mg/kg	87
008	SB-3-1.5	Solid	Nickel	6020A	20	B	mg/kg	87
008	SB-3-1.5	Solid	Thallium	6020A	0.052	J	mg/kg	87
008	SB-3-1.5	Solid	Zinc	6020A	38	B	mg/kg	87
012	DUP-4	Solid	Ammonia - N (gas	350.1	11		mg/kg	89
012	DUP-4	Solid	Nitrate - N (soluble)	300.0	0.098	J	mg/kg	89
012	DUP-4	Solid	Acetone	8260B	210		ug/kg	91
012	DUP-4	Solid	2-Butanone (MEK)	8260B	30		ug/kg	91
012	DUP-4	Solid	Cyclopentane	8260B	17		ug/kg	93
012	DUP-4	Solid	Unknown	8260B	13		ug/kg	93
012	DUP-4	Solid	Bicyclo[2.2.1]heptane,	8260B	29		ug/kg	93
012	DUP-4	Solid	Unknown	8270D	430		ug/kg	94

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
012	DUP-4	Solid	n-Hexadecanoic acid	8270D	140		ug/kg	94
012	DUP-4	Solid	6-Octadecenoic acid, (Z)-	8270D	210		ug/kg	94
012	DUP-4	Solid	13-Docosenamide, (Z)-	8270D	790		ug/kg	94
012	DUP-4	Solid	Heptacosane	8270D	98		ug/kg	94
012	DUP-4	Solid	1H-Cycloprop[e]azulene,	8270D	98		ug/kg	94
012	DUP-4	Solid	Benzo(a)anthracene	8270D	6.2	J	ug/kg	95
012	DUP-4	Solid	Benzo(a)pyrene	8270D	4.5	J	ug/kg	95
012	DUP-4	Solid	Benzo(b)fluoranthene	8270D	8.4	J	ug/kg	95
012	DUP-4	Solid	Benzo(g,h,i)perylene	8270D	5.3	J	ug/kg	95
012	DUP-4	Solid	Chrysene	8270D	4.4	J	ug/kg	95
012	DUP-4	Solid	Fluoranthene	8270D	8.0	J	ug/kg	95
012	DUP-4	Solid	Pyrene	8270D	7.1	J	ug/kg	96
012	DUP-4	Solid	Antimony	6020A	0.023	BJ	mg/kg	97
012	DUP-4	Solid	Beryllium	6020A	0.97		mg/kg	97
012	DUP-4	Solid	Cadmium	6020A	0.071	J	mg/kg	97
012	DUP-4	Solid	Chromium	6020A	33	J	mg/kg	97
012	DUP-4	Solid	Copper	6020A	49	B	mg/kg	97
012	DUP-4	Solid	Iron	6020A	39000	B	mg/kg	97
012	DUP-4	Solid	Lead	6020A	8.0	B	mg/kg	97
012	DUP-4	Solid	Manganese	6020A	840	B	mg/kg	97
012	DUP-4	Solid	Nickel	6020A	19	BJ	mg/kg	97
012	DUP-4	Solid	Thallium	6020A	0.071	J	mg/kg	97
012	DUP-4	Solid	Zinc	6020A	54	BJ	mg/kg	97

(212 detections)

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH13005-001
Description: SB-10-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1345	% Solids: 79.6 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1517	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/17/2016 0633	TAF		20270
1		(Sulfate (sol) 300.0	1	08/17/2016 0633	TAF		20274

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.36	BJ	1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.35	J	1.3	0.32	mg/kg	1
Nitrate - N (soluble)		300.0	0.036	J	0.25	0.031	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.3	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-001
Description: SB-10-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1345	% Solids: 79.6 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B (SIM)	1	08/16/2016 1353	SES		19935	5.35

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		23	14	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-001
Description: SB-10-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1345	% Solids: 79.6 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0215	JJG		19897	5.32

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		24	4.7	ug/kg	1
Benzene	71-43-2	8260B	ND		5.9	2.4	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.9	2.4	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.9	2.4	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.9	2.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		24	4.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.9	2.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.9	2.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.9	2.4	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.9	2.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.9	2.4	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.9	2.4	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.9	2.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.9	2.4	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.9	2.4	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.9	2.4	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.9	2.4	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.9	2.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.9	2.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.9	2.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.9	2.4	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.9	2.4	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.9	2.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.9	2.4	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	4.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.9	2.4	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.9	2.4	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.9	2.4	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	4.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.9	2.4	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.9	2.4	ug/kg	1
Styrene	100-42-5	8260B	ND		5.9	2.4	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.9	2.4	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.9	2.4	ug/kg	1
Toluene	108-88-3	8260B	ND		5.9	2.4	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.9	2.4	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.9	2.4	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.9	2.4	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.9	2.4	ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-001
Description: SB-10-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1345	% Solids: 79.6 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0215	JJG		19897	5.32

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.9	2.4	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.9	2.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.9	2.4	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		12	4.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client:	CDM Smith	Laboratory ID:	RH13005-001
Description:	SB-10-0.5	Matrix:	Solid
Date Sampled:	08/12/2016 1345	% Solids:	79.6 08/13/2016 1626
Date Received:	08/13/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19900

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-001
Description: SB-10-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1345	% Solids: 79.6 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1706	JCG		20026

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	650				ug/kg	1
Oleic Acid		8270D	290				ug/kg	1
Hexadecanoic acid, butyl ester		8270D	150				ug/kg	1
Octadecanoic acid, butyl ester		8270D	110				ug/kg	1
13-Docosenamide, (Z)-		8270D	140				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-001
Description: SB-10-0.5
Matrix: Solid
Date Sampled: 08/12/2016 1345
% Solids: 79.6 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1706	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		41	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		41	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		41	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		41	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		41	5.5	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		41	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		41	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		41	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		41	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		41	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		41	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		41	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		41	9.9	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		84	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		41	9.2	ug/kg	1
Carbazole	86-74-8	8270D	ND		41	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		41	7.6	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		41	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		41	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		41	9.9	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		41	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		41	7.7	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		41	7.4	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		41	8.6	ug/kg	1
Chrysene	218-01-9	8270D	ND		41	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		41	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		41	8.0	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	45	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		41	7.3	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		41	5.1	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		41	8.2	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		41	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		41	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	50	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	86	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		84	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		84	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		41	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		41	18	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		41	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		41	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		41	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		41	9.8	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	66	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-001
Description: SB-10-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1345	% Solids: 79.6 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1706	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		41	7.2	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		41	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		41	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		41	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		41	8.8	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		84	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		41	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		84	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		84	8.0	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		84	7.5	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		41	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		84	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	52	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		41	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		41	9.2	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	55	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		41	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		41	8.6	ug/kg	1
Pyrene	129-00-0	8270D	ND		41	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		41	7.6	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		41	5.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		55	33-102
2-Fluorophenol		61	28-104
Nitrobenzene-d5		60	22-109
Phenol-d5		63	27-103
Terphenyl-d14		78	41-120
2,4,6-Tribromophenol		61	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH13005-001
Description: SB-10-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1345	% Solids: 79.6 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 2031	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/19/2016 1817	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.058	BJ	0.22	0.013	mg/kg	1
Arsenic	7440-38-2	6020A	ND		2.2	0.28	mg/kg	2
Beryllium	7440-41-7	6020A	0.29		0.089	0.0071	mg/kg	1
Cadmium	7440-43-9	6020A	0.029	J	0.22	0.018	mg/kg	2
Chromium	7440-47-3	6020A	16		12	0.26	mg/kg	2
Copper	7440-50-8	6020A	17	B	2.2	0.20	mg/kg	2
Iron	7439-89-6	6020A	15000	B	44	3.8	mg/kg	2
Lead	7439-92-1	6020A	2.8	B	0.22	0.0053	mg/kg	1
Manganese	7439-96-5	6020A	300	B	12	2.1	mg/kg	2
Nickel	7440-02-0	6020A	10	BJ	12	0.24	mg/kg	2
Selenium	7782-49-2	6020A	ND		2.2	0.34	mg/kg	2
Silver	7440-22-4	6020A	ND		0.22	0.018	mg/kg	1
Thallium	7440-28-0	6020A	0.040	J	0.12	0.0071	mg/kg	1
Zinc	7440-66-6	6020A	39	B	22	0.59	mg/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH13005-001
Description: SB-10-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1345	% Solids: 79.6 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1151	COH	08/19/2016 1032	20174

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.10	0.0079	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH13005-002
Description:	SB-10-1.5	Matrix:	Solid
Date Sampled:	08/12/2016 1400	% Solids:	85.9 08/13/2016 1626
Date Received:	08/13/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1519	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/17/2016 0745	TAF		20270
1		(Sulfate (sol) 300.0	1	08/17/2016 0745	TAF		20274

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.88	BJ	1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.37	J	1.2	0.29	mg/kg	1
Nitrate - N (soluble)		300.0	0.15	J	0.23	0.029	mg/kg	1
Sulfate (soluble)		300.0	ND		12	5.8	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-002
Description: SB-10-1.5	Matrix: Solid
Date Sampled: 08/12/2016 1400	% Solids: 85.9 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1932	SES		19853	5.68

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		20	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		130	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-002
Description: SB-10-1.5	Matrix: Solid
Date Sampled: 08/12/2016 1400	% Solids: 85.9 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0238	JJG		19897	4.33

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	11	J	27	5.4	ug/kg	1
Benzene	71-43-2	8260B	ND		6.7	2.7	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.7	2.7	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.7	2.7	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.7	2.7	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		27	5.4	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.7	2.7	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.7	2.7	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.7	2.7	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.7	2.7	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.7	2.7	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.7	2.7	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.7	2.7	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.7	2.7	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.7	2.7	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.7	2.7	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.7	2.7	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.7	2.7	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.7	2.7	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.7	2.7	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.7	2.7	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.7	2.7	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.7	2.7	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.7	2.7	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.7	2.7	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.7	2.7	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.7	2.7	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.7	2.7	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.7	2.7	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	5.4	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.7	2.7	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.7	2.7	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.7	2.7	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	5.4	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.7	2.7	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.7	2.7	ug/kg	1
Styrene	100-42-5	8260B	ND		6.7	2.7	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.7	2.7	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.7	2.7	ug/kg	1
Toluene	108-88-3	8260B	ND		6.7	2.7	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.7	2.7	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.7	2.7	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.7	2.7	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.7	2.7	ug/kg	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
ND = Not detected at or above the MDL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-002
Description: SB-10-1.5	Matrix: Solid
Date Sampled: 08/12/2016 1400	% Solids: 85.9 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0238	JJG		19897	4.33

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.7	2.7	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.7	2.7	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.7	2.7	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	5.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		107	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client:	CDM Smith	Laboratory ID:	RH13005-002
Description:	SB-10-1.5	Matrix:	Solid
Date Sampled:	08/12/2016 1400	% Solids:	85.9 08/13/2016 1626
Date Received:	08/13/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19900

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-002
Description: SB-10-1.5	Matrix: Solid
Date Sampled: 08/12/2016 1400	% Solids: 85.9 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1731	JCG		20026

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Propane, 2,2-dimethoxy-		8270D	120				ug/kg	1
2-Pentanone, 4-hydroxy-4-methyl-		8270D	550				ug/kg	1
13-Docosenamide, (Z)-		8270D	420				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-002
Description: SB-10-1.5
Matrix: Solid
Date Sampled: 08/12/2016 1400
% Solids: 85.9 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1731	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		38	2.0	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		38	2.0	ug/kg	1
Acetophenone	98-86-2	8270D	ND		38	14	ug/kg	1
Anthracene	120-12-7	8270D	ND		38	2.3	ug/kg	1
Atrazine	1912-24-9	8270D	ND		38	5.1	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		38	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		38	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		38	1.7	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		38	1.7	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		38	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		38	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		38	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		38	9.1	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		77	9.9	ug/kg	1
Caprolactam	105-60-2	8270D	ND		38	8.5	ug/kg	1
Carbazole	86-74-8	8270D	ND		38	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		38	7.0	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		38	3.5	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		38	9.3	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		38	9.1	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		38	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		38	7.1	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		38	6.8	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		38	8.0	ug/kg	1
Chrysene	218-01-9	8270D	ND		38	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		38	2.1	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		38	7.4	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		200	42	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		38	6.8	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		38	4.7	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		38	7.5	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		38	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		38	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		200	47	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		200	80	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		77	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		77	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		38	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		38	16	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		38	1.0	ug/kg	1
Fluorene	86-73-7	8270D	ND		38	2.3	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		38	9.8	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		38	9.0	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		200	61	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: SB-10-1.5
Date Sampled: 08/12/2016 1400
Date Received: 08/13/2016

Laboratory ID: RH13005-002
Matrix: Solid
% Solids: 85.9 08/13/2016 1626

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1731	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		38	6.6	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		38	1.6	ug/kg	1
Isophorone	78-59-1	8270D	ND		38	9.7	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		38	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		38	8.1	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		77	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		38	1.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		77	10	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		77	7.4	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		77	6.9	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		38	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		77	17	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		200	48	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		38	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		38	8.5	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		200	51	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		38	2.1	ug/kg	1
Phenol	108-95-2	8270D	ND		38	8.0	ug/kg	1
Pyrene	129-00-0	8270D	ND		38	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		38	7.0	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		38	5.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		54	33-102
2-Fluorophenol		57	28-104
Nitrobenzene-d5		60	22-109
Phenol-d5		56	27-103
Terphenyl-d14		68	41-120
2,4,6-Tribromophenol		63	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH13005-002
Description: SB-10-1.5	Matrix: Solid
Date Sampled: 08/12/2016 1400	% Solids: 85.9 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 2059	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/19/2016 1845	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.11	BJ	0.24	0.015	mg/kg	1
Arsenic	7440-38-2	6020A	1.1	J	2.4	0.31	mg/kg	2
Beryllium	7440-41-7	6020A	0.48		0.097	0.0077	mg/kg	1
Cadmium	7440-43-9	6020A	ND		0.24	0.019	mg/kg	2
Chromium	7440-47-3	6020A	54		13	0.28	mg/kg	2
Copper	7440-50-8	6020A	20	B	2.4	0.21	mg/kg	2
Iron	7439-89-6	6020A	28000	B	48	4.2	mg/kg	2
Lead	7439-92-1	6020A	9.0	B	0.24	0.0058	mg/kg	1
Manganese	7439-96-5	6020A	500	B	13	2.3	mg/kg	2
Nickel	7440-02-0	6020A	12	BJ	13	0.26	mg/kg	2
Selenium	7782-49-2	6020A	ND		2.4	0.37	mg/kg	2
Silver	7440-22-4	6020A	ND		0.24	0.019	mg/kg	1
Thallium	7440-28-0	6020A	0.061	J	0.13	0.0077	mg/kg	1
Zinc	7440-66-6	6020A	37	B	24	0.64	mg/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH13005-002
Description: SB-10-1.5	Matrix: Solid
Date Sampled: 08/12/2016 1400	% Solids: 85.9 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1158	COH	08/19/2016 1032	20174

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.089	0.0067	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH13005-003
Description: SB-10-18-20	Matrix: Solid
Date Sampled: 08/12/2016 1420	% Solids: 78.7 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1521	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/17/2016 0809	TAF		20270
1		(Sulfate (sol) 300.0	1	08/17/2016 0809	TAF		20274

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	38	B	1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.3	0.32	mg/kg	1
Nitrate - N (soluble)		300.0	0.082	J	0.25	0.031	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.3	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-003
Description: SB-10-18-20	Matrix: Solid
Date Sampled: 08/12/2016 1420	% Solids: 78.7 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/16/2016 1118	SES		19935	5.94

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		21	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		114	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-003
Description: SB-10-18-20	Matrix: Solid
Date Sampled: 08/12/2016 1420	% Solids: 78.7 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	08/16/2016 1909	SES		19936	7.42

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	150		17	3.4	ug/kg	2
Benzene	71-43-2	8260B	ND		4.3	1.7	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		4.3	1.7	ug/kg	2
Bromoform	75-25-2	8260B	ND		4.3	1.7	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.3	1.7	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	26		17	3.4	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		4.3	1.7	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		4.3	1.7	ug/kg	2
Chlorobenzene	108-90-7	8260B	ND		4.3	1.7	ug/kg	2
Chloroethane	75-00-3	8260B	ND		4.3	1.7	ug/kg	2
Chloroform	67-66-3	8260B	ND		4.3	1.7	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.3	1.7	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		4.3	1.7	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.3	1.7	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		4.3	1.7	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.3	1.7	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.3	1.7	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.3	1.7	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.3	1.7	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		4.3	1.7	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		4.3	1.7	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		4.3	1.7	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		4.3	1.7	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.3	1.7	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.3	1.7	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		4.3	1.7	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.3	1.7	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.3	1.7	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		4.3	1.7	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		8.6	3.4	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		4.3	1.7	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		4.3	1.7	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.3	1.7	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.6	3.4	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		4.3	1.7	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		4.3	1.7	ug/kg	2
Styrene	100-42-5	8260B	ND		4.3	1.7	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.3	1.7	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		4.3	1.7	ug/kg	2
Toluene	108-88-3	8260B	ND		4.3	1.7	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.3	1.7	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.3	1.7	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.3	1.7	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.3	1.7	ug/kg	2

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
ND = Not detected at or above the MDL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-003
Description: SB-10-18-20	Matrix: Solid
Date Sampled: 08/12/2016 1420	% Solids: 78.7 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	08/16/2016 1909	SES		19936	7.42

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.3	1.7	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		4.3	1.7	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		4.3	1.7	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		8.6	3.4	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		105	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-003
Description: SB-10-18-20	Matrix: Solid
Date Sampled: 08/12/2016 1420	% Solids: 78.7 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19938

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-003
Description: SB-10-18-20	Matrix: Solid
Date Sampled: 08/12/2016 1420	% Solids: 78.7 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1755	JCG		20026

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
2-Propanone, 1-chloro-		8270D	97				ug/kg	1
Unknown		8270D	95				ug/kg	1
2-Pentanone, 4-hydroxy-4-methyl-		8270D	680				ug/kg	1
Hexanoic acid		8270D	120				ug/kg	1
n-Hexadecanoic acid		8270D	130				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	260				ug/kg	1
Octadecanoic acid		8270D	120				ug/kg	1
1-Hexadecene		8270D	140				ug/kg	1
13-Docosenamide, (Z)-		8270D	540				ug/kg	1
Dodecanoic acid, hexadecyl ester		8270D	110				ug/kg	1
Unknown		8270D	120				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-003
Description: SB-10-18-20
Matrix: Solid
Date Sampled: 08/12/2016 1420
% Solids: 78.7 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1755	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		42	2.2	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		42	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		42	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		42	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		42	5.6	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		42	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		42	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		42	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		42	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		42	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		42	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		42	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		42	10	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		85	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		42	9.4	ug/kg	1
Carbazole	86-74-8	8270D	ND		42	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		42	7.7	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		42	3.9	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		42	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		42	10	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		42	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		42	7.9	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		42	7.6	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		42	8.8	ug/kg	1
Chrysene	218-01-9	8270D	ND		42	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		42	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		42	8.1	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		220	46	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		42	7.5	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		42	5.2	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		42	8.3	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		42	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		42	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		220	51	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		220	88	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		85	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		85	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		42	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		42	18	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		42	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		42	2.5	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		42	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		42	10	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		220	68	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: SB-10-18-20
Date Sampled: 08/12/2016 1420
Date Received: 08/13/2016

Laboratory ID: RH13005-003
Matrix: Solid
% Solids: 78.7 08/13/2016 1626

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1755	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		42	7.3	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		42	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		42	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		42	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		42	9.0	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		85	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		42	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		85	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		85	8.2	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		85	7.7	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		42	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		85	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		220	53	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		42	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		42	9.3	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		220	56	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		42	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		42	8.8	ug/kg	1
Pyrene	129-00-0	8270D	ND		42	1.5	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		42	7.7	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		42	5.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		51	33-102
2-Fluorophenol		53	28-104
Nitrobenzene-d5		56	22-109
Phenol-d5		55	27-103
Terphenyl-d14		67	41-120
2,4,6-Tribromophenol		61	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH13005-003
Description: SB-10-18-20	Matrix: Solid
Date Sampled: 08/12/2016 1420	% Solids: 78.7 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 2104	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/19/2016 1850	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.028	BJ	0.26	0.015	mg/kg	1
Arsenic	7440-38-2	6020A	ND		2.6	0.33	mg/kg	2
Beryllium	7440-41-7	6020A	0.41		0.10	0.0083	mg/kg	1
Cadmium	7440-43-9	6020A	ND		0.26	0.021	mg/kg	2
Chromium	7440-47-3	6020A	13		13	0.30	mg/kg	2
Copper	7440-50-8	6020A	6.8	B	2.6	0.23	mg/kg	2
Iron	7439-89-6	6020A	13000	B	52	4.4	mg/kg	2
Lead	7439-92-1	6020A	10	B	0.26	0.0062	mg/kg	1
Manganese	7439-96-5	6020A	830	B	13	2.5	mg/kg	2
Nickel	7440-02-0	6020A	3.5	BJ	13	0.28	mg/kg	2
Selenium	7782-49-2	6020A	ND		2.6	0.39	mg/kg	2
Silver	7440-22-4	6020A	0.023	J	0.26	0.021	mg/kg	1
Thallium	7440-28-0	6020A	0.098	J	0.13	0.0083	mg/kg	1
Zinc	7440-66-6	6020A	8.8	BJ	26	0.68	mg/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH13005-003
Description: SB-10-18-20	Matrix: Solid
Date Sampled: 08/12/2016 1420	% Solids: 78.7 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1201	COH	08/19/2016 1032	20174

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.097	0.0074	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH13005-004
Description: SB-10-4-6	Matrix: Solid
Date Sampled: 08/12/2016 1445	% Solids: 75.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1808	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/17/2016 0834	TAF		20270
1		(Sulfate (sol) 300.0	1	08/17/2016 0834	TAF		20274

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	14		1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.3	0.33	mg/kg	1
Nitrate - N (soluble)		300.0	0.15	J	0.27	0.032	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.6	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-004
Description: SB-10-4-6	Matrix: Solid
Date Sampled: 08/12/2016 1445	% Solids: 75.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/16/2016 1140	SES		19935	6.29

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		21	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-004
Description: SB-10-4-6
Matrix: Solid
Date Sampled: 08/12/2016 1445
% Solids: 75.4 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0324	JJG		19897	5.84

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	52		23	4.5	ug/kg	1
Benzene	71-43-2	8260B	ND		5.7	2.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.7	2.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.7	2.3	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.7	2.3	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	5.9	J	23	4.5	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.7	2.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.7	2.3	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.7	2.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.7	2.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.7	2.3	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.7	2.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.7	2.3	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.7	2.3	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.7	2.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.7	2.3	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.7	2.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.7	2.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.7	2.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.7	2.3	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.7	2.3	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.7	2.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.7	2.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.7	2.3	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.7	2.3	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.7	2.3	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.7	2.3	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.7	2.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.7	2.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	4.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.7	2.3	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.7	2.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.7	2.3	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	4.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.7	2.3	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.7	2.3	ug/kg	1
Styrene	100-42-5	8260B	ND		5.7	2.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.7	2.3	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.7	2.3	ug/kg	1
Toluene	108-88-3	8260B	ND		5.7	2.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.7	2.3	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.7	2.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.7	2.3	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.7	2.3	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-004
Description: SB-10-4-6	Matrix: Solid
Date Sampled: 08/12/2016 1445	% Solids: 75.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0324	JJG		19897	5.84

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.7	2.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.7	2.3	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.7	2.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	4.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		107	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client:	CDM Smith	Laboratory ID:	RH13005-004
Description:	SB-10-4-6	Matrix:	Solid
Date Sampled:	08/12/2016 1445	% Solids:	75.4 08/13/2016 1626
Date Received:	08/13/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19900

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-004
Description: SB-10-4-6	Matrix: Solid
Date Sampled: 08/12/2016 1445	% Solids: 75.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1820	JCG		20026

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	430				ug/kg	1
n-Hexadecanoic acid		8270D	150				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	470				ug/kg	1
Octadecanoic acid		8270D	100				ug/kg	1
Octadecanoic acid, butyl ester		8270D	200				ug/kg	1
13-Docosenamide, (Z)-		8270D	530				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-004
Description: SB-10-4-6
Matrix: Solid
Date Sampled: 08/12/2016 1445
% Solids: 75.4 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1820	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		43	2.2	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		43	2.3	ug/kg	1
Acetophenone	98-86-2	8270D	ND		43	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		43	2.6	ug/kg	1
Atrazine	1912-24-9	8270D	ND		43	5.8	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		43	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		43	1.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		43	1.9	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		43	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		43	1.5	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		43	1.9	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		43	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		43	10	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		88	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		43	9.7	ug/kg	1
Carbazole	86-74-8	8270D	ND		43	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		43	8.0	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		43	4.1	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		43	11	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		43	10	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		43	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		43	8.2	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		43	7.8	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		43	9.1	ug/kg	1
Chrysene	218-01-9	8270D	ND		43	1.5	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		43	2.4	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		43	8.4	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		220	48	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		43	7.7	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		43	5.4	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		43	8.6	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		43	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		43	16	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		220	53	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		220	91	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		88	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		88	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		43	13	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		43	19	ug/kg	1
Fluoranthene	206-44-0	8270D	1.3	J	43	1.2	ug/kg	1
Fluorene	86-73-7	8270D	ND		43	2.6	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		43	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		43	10	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		220	70	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: SB-10-4-6
Date Sampled: 08/12/2016 1445
Date Received: 08/13/2016

Laboratory ID: RH13005-004
Matrix: Solid
% Solids: 75.4 08/13/2016 1626

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1820	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		43	7.6	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		43	1.8	ug/kg	1
Isophorone	78-59-1	8270D	ND		43	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		43	2.0	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		43	9.3	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		88	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		43	2.1	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		88	12	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		88	8.5	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		88	7.9	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		43	17	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		88	19	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		220	55	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		43	16	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		43	9.7	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		220	58	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		43	2.4	ug/kg	1
Phenol	108-95-2	8270D	ND		43	9.1	ug/kg	1
Pyrene	129-00-0	8270D	ND		43	1.5	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		43	8.0	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		43	6.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		36	33-102
2-Fluorophenol		36	28-104
Nitrobenzene-d5		38	22-109
Phenol-d5		38	27-103
Terphenyl-d14		56	41-120
2,4,6-Tribromophenol		46	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH13005-004
Description: SB-10-4-6	Matrix: Solid
Date Sampled: 08/12/2016 1445	% Solids: 75.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 2110	BNW	08/17/2016 0950	20013
3	3050B	6020A	20	08/19/2016 2003	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.039	BJ	0.33	0.020	mg/kg	1
Arsenic	7440-38-2	6020A	ND		6.5	0.84	mg/kg	3
Beryllium	7440-41-7	6020A	0.99		0.13	0.010	mg/kg	1
Cadmium	7440-43-9	6020A	ND		0.65	0.052	mg/kg	3
Chromium	7440-47-3	6020A	48		34	0.76	mg/kg	3
Copper	7440-50-8	6020A	61	B	6.5	0.58	mg/kg	3
Iron	7439-89-6	6020A	44000	B	130	11	mg/kg	3
Lead	7439-92-1	6020A	9.9	B	0.33	0.0079	mg/kg	1
Manganese	7439-96-5	6020A	910	B	34	6.3	mg/kg	3
Nickel	7440-02-0	6020A	27	BJ	34	0.71	mg/kg	3
Selenium	7782-49-2	6020A	ND		6.5	0.99	mg/kg	3
Silver	7440-22-4	6020A	ND		0.33	0.026	mg/kg	1
Thallium	7440-28-0	6020A	0.088	J	0.17	0.010	mg/kg	1
Zinc	7440-66-6	6020A	63	BJ	65	1.7	mg/kg	3

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH13005-004
Description: SB-10-4-6	Matrix: Solid
Date Sampled: 08/12/2016 1445	% Solids: 75.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1203	COH	08/19/2016 1032	20174

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.10	0.0076	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH13005-005
Description: SB-10-12-14	Matrix: Solid
Date Sampled: 08/12/2016 1505	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1810	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/17/2016 0858	TAF		20270
1		(Sulfate (sol) 300.0	1	08/17/2016 0858	TAF		20274

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	13		1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.66	J	1.3	0.33	mg/kg	1
Nitrate - N (soluble)		300.0	0.099	J	0.26	0.032	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.5	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-005
Description: SB-10-12-14	Matrix: Solid
Date Sampled: 08/12/2016 1505	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/16/2016 1202	SES		19935	4.65

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		28	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-005
Description: SB-10-12-14	Matrix: Solid
Date Sampled: 08/12/2016 1505	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 1629	SES		19936	6.24

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	110		21	4.2	ug/kg	1
Benzene	71-43-2	8260B	ND		5.2	2.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.2	2.1	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.2	2.1	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.2	2.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	17	J	21	4.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.2	2.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.2	2.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.2	2.1	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.2	2.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.2	2.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.2	2.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.2	2.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.2	2.1	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.2	2.1	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.2	2.1	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.2	2.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.2	2.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.2	2.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.2	2.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.2	2.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.2	2.1	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.2	2.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.2	2.1	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	4.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.2	2.1	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.2	2.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.2	2.1	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	4.2	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.2	2.1	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.2	2.1	ug/kg	1
Styrene	100-42-5	8260B	ND		5.2	2.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.2	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.2	2.1	ug/kg	1
Toluene	108-88-3	8260B	ND		5.2	2.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.2	2.1	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.2	2.1	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.2	2.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.2	2.1	ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-005
Description: SB-10-12-14	Matrix: Solid
Date Sampled: 08/12/2016 1505	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 1629	SES		19936	6.24

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.2	2.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.2	2.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.2	2.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	4.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		102	47-138
Toluene-d8		103	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-005
Description: SB-10-12-14	Matrix: Solid
Date Sampled: 08/12/2016 1505	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/16/2016 1629	SES		19938

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Cyclopentane		8260B	13				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-005
Description: SB-10-12-14	Matrix: Solid
Date Sampled: 08/12/2016 1505	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1844	JCG		20026

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	260				ug/kg	1
13-Docosenamide, (Z)-		8270D	420				ug/kg	1
Octacosane		8270D	93				ug/kg	1
Pentadecane, 8-hexyl-		8270D	160				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-005
Description: SB-10-12-14
Matrix: Solid
Date Sampled: 08/12/2016 1505
% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1844	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		43	2.2	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		43	2.3	ug/kg	1
Acetophenone	98-86-2	8270D	ND		43	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		43	2.6	ug/kg	1
Atrazine	1912-24-9	8270D	ND		43	5.8	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		43	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		43	1.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		43	1.9	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		43	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		43	1.5	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		43	1.9	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		43	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		43	10	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		88	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		43	9.7	ug/kg	1
Carbazole	86-74-8	8270D	ND		43	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		43	8.0	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		43	4.0	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		43	11	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		43	10	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		43	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		43	8.1	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		43	7.8	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		43	9.1	ug/kg	1
Chrysene	218-01-9	8270D	ND		43	1.5	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		43	2.4	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		43	8.4	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		220	47	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		43	7.7	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		43	5.4	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		43	8.6	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		43	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		43	16	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		220	53	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		220	91	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		88	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		88	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		43	13	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		43	19	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		43	1.2	ug/kg	1
Fluorene	86-73-7	8270D	ND		43	2.6	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		43	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		43	10	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		220	70	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-005
Description: SB-10-12-14	Matrix: Solid
Date Sampled: 08/12/2016 1505	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1844	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		43	7.5	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		43	1.8	ug/kg	1
Isophorone	78-59-1	8270D	ND		43	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		43	2.0	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		43	9.3	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		88	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		43	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		88	12	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		88	8.4	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		88	7.9	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		43	17	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		88	19	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		220	54	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		43	16	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		43	9.6	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		220	58	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		43	2.4	ug/kg	1
Phenol	108-95-2	8270D	ND		43	9.1	ug/kg	1
Pyrene	129-00-0	8270D	ND		43	1.5	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		43	7.9	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		43	6.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl	N	23	33-102
2-Fluorophenol	N	21	28-104
Nitrobenzene-d5		22	22-109
Phenol-d5	N	24	27-103
Terphenyl-d14		46	41-120
2,4,6-Tribromophenol		41	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH13005-005
Description: SB-10-12-14	Matrix: Solid
Date Sampled: 08/12/2016 1505	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 2116	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/19/2016 1901	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.024	BJ	0.29	0.017	mg/kg	1
Arsenic	7440-38-2	6020A	0.71	J	2.9	0.37	mg/kg	2
Beryllium	7440-41-7	6020A	0.56		0.12	0.0093	mg/kg	1
Cadmium	7440-43-9	6020A	0.039	J	0.29	0.023	mg/kg	2
Chromium	7440-47-3	6020A	24		15	0.34	mg/kg	2
Copper	7440-50-8	6020A	20	B	2.9	0.25	mg/kg	2
Iron	7439-89-6	6020A	19000	B	58	5.0	mg/kg	2
Lead	7439-92-1	6020A	12	B	0.29	0.0070	mg/kg	1
Manganese	7439-96-5	6020A	240	B	15	2.8	mg/kg	2
Nickel	7440-02-0	6020A	11	BJ	15	0.31	mg/kg	2
Selenium	7782-49-2	6020A	ND		2.9	0.44	mg/kg	2
Silver	7440-22-4	6020A	ND		0.29	0.023	mg/kg	1
Thallium	7440-28-0	6020A	0.14	J	0.15	0.0093	mg/kg	1
Zinc	7440-66-6	6020A	28	BJ	29	0.76	mg/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH13005-005
Description: SB-10-12-14	Matrix: Solid
Date Sampled: 08/12/2016 1505	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1205	COH	08/19/2016 1032	20174

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.11	0.0082	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH13005-006
Description: SB-10-14-16	Matrix: Solid
Date Sampled: 08/12/2016 1510	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1812	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/17/2016 0922	TAF		20270
1		(Sulfate (sol) 300.0	1	08/17/2016 0922	TAF		20274

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	33		1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.61	J	1.3	0.33	mg/kg	1
Nitrate - N (soluble)		300.0	0.085	J	0.26	0.032	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.5	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-006
Description: SB-10-14-16	Matrix: Solid
Date Sampled: 08/12/2016 1510	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/16/2016 1225	SES		19935	6.18

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		21	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-006
Description: SB-10-14-16
Matrix: Solid
Date Sampled: 08/12/2016 1510
% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 1652	SES		19936	6.32

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	63		21	4.1	ug/kg	1
Benzene	71-43-2	8260B	ND		5.2	2.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.2	2.1	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.2	2.1	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.2	2.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	8.3	J	21	4.1	ug/kg	1
Carbon disulfide	75-15-0	8260B	2.2	J	5.2	2.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.2	2.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.2	2.1	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.2	2.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.2	2.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.2	2.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.2	2.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.2	2.1	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.2	2.1	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.2	2.1	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.2	2.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.2	2.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.2	2.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.2	2.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.2	2.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.2	2.1	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.2	2.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.2	2.1	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	4.1	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.2	2.1	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.2	2.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.2	2.1	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	4.1	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.2	2.1	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.2	2.1	ug/kg	1
Styrene	100-42-5	8260B	ND		5.2	2.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.2	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.2	2.1	ug/kg	1
Toluene	108-88-3	8260B	ND		5.2	2.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.2	2.1	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.2	2.1	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.2	2.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.2	2.1	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-006
Description: SB-10-14-16	Matrix: Solid
Date Sampled: 08/12/2016 1510	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 1652	SES		19936	6.32

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.2	2.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.2	2.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.2	2.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	4.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		107	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-006
Description: SB-10-14-16	Matrix: Solid
Date Sampled: 08/12/2016 1510	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/16/2016 1652	SES		19938

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8260B	4.1				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-006
Description: SB-10-14-16	Matrix: Solid
Date Sampled: 08/12/2016 1510	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1909	JCG		20026

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Propylene Glycol		8270D	110				ug/kg	1
Unknown		8270D	450				ug/kg	1
n-Hexadecanoic acid		8270D	170				ug/kg	1
3-Bromobenzoic acid, pentadecyl ester		8270D	190				ug/kg	1
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa		8270D	130				ug/kg	1
Unknown		8270D	91				ug/kg	1
13-Docosenamide, (Z)-		8270D	560				ug/kg	1
Heptacosane		8270D	130				ug/kg	1
Nonadecane		8270D	270				ug/kg	1
Unknown		8270D	100				ug/kg	1
Unknown		8270D	88				ug/kg	1
Heptadecane, 9-octyl-		8270D	85				ug/kg	1
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-		8270D	170				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-006
Description: SB-10-14-16
Matrix: Solid
Date Sampled: 08/12/2016 1510
% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1909	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		42	2.2	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		42	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		42	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		42	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		42	5.7	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		42	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	4.2	J	42	1.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		42	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		42	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		42	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		42	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		42	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		42	10	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		85	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		42	9.4	ug/kg	1
Carbazole	86-74-8	8270D	ND		42	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		42	7.8	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		42	3.9	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		42	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		42	10	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		42	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		42	7.9	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		42	7.6	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		42	8.8	ug/kg	1
Chrysene	218-01-9	8270D	3.9	J	42	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		42	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		42	8.2	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		220	46	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		42	7.5	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		42	5.2	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		42	8.4	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		42	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		42	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		220	52	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		220	88	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		85	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		85	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		42	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		42	18	ug/kg	1
Fluoranthene	206-44-0	8270D	4.1	J	42	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		42	2.5	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		42	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		42	10	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		220	68	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-006
Description: SB-10-14-16	Matrix: Solid
Date Sampled: 08/12/2016 1510	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 1909	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		42	7.3	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		42	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		42	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		42	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		42	9.0	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		85	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		42	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		85	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		85	8.2	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		85	7.7	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		42	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		85	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		220	53	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		42	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		42	9.4	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		220	56	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		42	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		42	8.8	ug/kg	1
Pyrene	129-00-0	8270D	3.6	J	42	1.5	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		42	7.7	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		42	6.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		45	33-102
2-Fluorophenol		40	28-104
Nitrobenzene-d5		45	22-109
Phenol-d5		40	27-103
Terphenyl-d14		62	41-120
2,4,6-Tribromophenol		61	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH13005-006
Description: SB-10-14-16	Matrix: Solid
Date Sampled: 08/12/2016 1510	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 2121	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/19/2016 1918	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.027	BJ	0.29	0.017	mg/kg	1
Arsenic	7440-38-2	6020A	ND		2.9	0.37	mg/kg	2
Beryllium	7440-41-7	6020A	0.87		0.12	0.0093	mg/kg	1
Cadmium	7440-43-9	6020A	0.027	J	0.29	0.023	mg/kg	2
Chromium	7440-47-3	6020A	30		15	0.34	mg/kg	2
Copper	7440-50-8	6020A	30	B	2.9	0.26	mg/kg	2
Iron	7439-89-6	6020A	26000	B	58	5.0	mg/kg	2
Lead	7439-92-1	6020A	9.2	B	0.29	0.0070	mg/kg	1
Manganese	7439-96-5	6020A	550	B	15	2.8	mg/kg	2
Nickel	7440-02-0	6020A	32	B	15	0.31	mg/kg	2
Selenium	7782-49-2	6020A	ND		2.9	0.44	mg/kg	2
Silver	7440-22-4	6020A	0.026	J	0.29	0.023	mg/kg	1
Thallium	7440-28-0	6020A	0.059	J	0.15	0.0093	mg/kg	1
Zinc	7440-66-6	6020A	43	B	29	0.77	mg/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH13005-006
Description: SB-10-14-16	Matrix: Solid
Date Sampled: 08/12/2016 1510	% Solids: 76.4 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1208	COH	08/19/2016 1032	20174

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.0095	J	0.096	0.0073	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH13005-007
Description: SB-3-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1515	% Solids: 78.3 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1814	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/17/2016 1034	TAF		20270
1		(Sulfate (sol) 300.0	1	08/17/2016 1034	TAF		20274

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.70	J	1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.3	0.32	mg/kg	1
Nitrate - N (soluble)		300.0	0.052	J	0.26	0.031	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.4	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-007
Description: SB-3-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1515	% Solids: 78.3 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/16/2016 1247	SES		19935	5.00

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		26	16	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-007
Description: SB-3-0.5
Matrix: Solid
Date Sampled: 08/12/2016 1515
% Solids: 78.3 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 1715	SES		19936	5.31

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		24	4.8	ug/kg	1
Benzene	71-43-2	8260B	ND		6.0	2.4	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.0	2.4	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.0	2.4	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.0	2.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		24	4.8	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.0	2.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.0	2.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.0	2.4	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.0	2.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.0	2.4	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.0	2.4	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.0	2.4	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.0	2.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.0	2.4	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.0	2.4	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.0	2.4	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.0	2.4	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.0	2.4	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.0	2.4	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.0	2.4	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.0	2.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.0	2.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.0	2.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.0	2.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.0	2.4	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.0	2.4	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.0	2.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.0	2.4	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	4.8	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.0	2.4	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.0	2.4	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.0	2.4	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	4.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.0	2.4	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.0	2.4	ug/kg	1
Styrene	100-42-5	8260B	ND		6.0	2.4	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.0	2.4	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.0	2.4	ug/kg	1
Toluene	108-88-3	8260B	ND		6.0	2.4	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.0	2.4	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.0	2.4	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.0	2.4	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.0	2.4	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-007
Description: SB-3-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1515	% Solids: 78.3 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 1715	SES		19936	5.31

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.0	2.4	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.0	2.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.0	2.4	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		12	4.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		107	47-138
Toluene-d8		105	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-007
Description: SB-3-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1515	% Solids: 78.3 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19938

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-007
Description: SB-3-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1515	% Solids: 78.3 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 2022	JCG		20026

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Propane, 2,2-dimethoxy-		8270D	100				ug/kg	1
R-(-)-1,2-propanediol		8270D	150				ug/kg	1
Unknown		8270D	570				ug/kg	1
Octadec-9-enoic acid		8270D	170				ug/kg	1
Hexadecanoic acid, butyl ester		8270D	120				ug/kg	1
Octadecanoic acid, butyl ester		8270D	90				ug/kg	1
Unknown		8270D	110				ug/kg	1
13-Docosenamide, (Z)-		8270D	280				ug/kg	1
Heneicosane, 11-decyl-		8270D	98				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-007
Description: SB-3-0.5
Matrix: Solid
Date Sampled: 08/12/2016 1515
% Solids: 78.3 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 2022	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		41	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		41	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		41	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		41	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		41	5.5	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		41	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		41	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		41	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		41	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		41	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		41	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		41	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		41	9.8	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		83	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		41	9.1	ug/kg	1
Carbazole	86-74-8	8270D	ND		41	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		41	7.5	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		41	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		41	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		41	9.8	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		41	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		41	7.7	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		41	7.4	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		41	8.6	ug/kg	1
Chrysene	218-01-9	8270D	ND		41	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		41	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		41	7.9	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	45	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		41	7.3	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		41	5.1	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		41	8.1	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		41	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		41	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	50	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	86	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		83	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		83	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		41	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		41	18	ug/kg	1
Fluoranthene	206-44-0	8270D	1.1	J	41	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		41	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		41	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		41	9.7	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	66	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-007
Description: SB-3-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1515	% Solids: 78.3 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/17/2016 2022	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		41	7.1	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		41	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		41	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		41	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		41	8.8	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		83	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		41	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		83	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		83	8.0	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		83	7.5	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		41	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		83	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	51	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		41	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		41	9.1	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	55	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		41	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		41	8.6	ug/kg	1
Pyrene	129-00-0	8270D	ND		41	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		41	7.5	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		41	5.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		48	33-102
2-Fluorophenol		48	28-104
Nitrobenzene-d5		53	22-109
Phenol-d5		49	27-103
Terphenyl-d14		57	41-120
2,4,6-Tribromophenol		56	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH13005-007
Description: SB-3-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1515	% Solids: 78.3 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 2138	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/19/2016 1924	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.051	BJ	0.28	0.017	mg/kg	1
Arsenic	7440-38-2	6020A	ND		2.8	0.36	mg/kg	2
Beryllium	7440-41-7	6020A	0.43		0.11	0.0089	mg/kg	1
Cadmium	7440-43-9	6020A	0.025	J	0.28	0.022	mg/kg	2
Chromium	7440-47-3	6020A	35		15	0.32	mg/kg	2
Copper	7440-50-8	6020A	30	B	2.8	0.25	mg/kg	2
Iron	7439-89-6	6020A	25000	B	56	4.8	mg/kg	2
Lead	7439-92-1	6020A	5.0	B	0.28	0.0067	mg/kg	1
Manganese	7439-96-5	6020A	440	B	15	2.7	mg/kg	2
Nickel	7440-02-0	6020A	20	B	15	0.30	mg/kg	2
Selenium	7782-49-2	6020A	ND		2.8	0.42	mg/kg	2
Silver	7440-22-4	6020A	ND		0.28	0.022	mg/kg	1
Thallium	7440-28-0	6020A	0.054	J	0.15	0.0089	mg/kg	1
Zinc	7440-66-6	6020A	42	B	28	0.74	mg/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH13005-007
Description: SB-3-0.5	Matrix: Solid
Date Sampled: 08/12/2016 1515	% Solids: 78.3 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1215	COH	08/19/2016 1032	20174

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.10	0.0078	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH13005-008
Description: SB-3-1.5	Matrix: Solid
Date Sampled: 08/12/2016 1525	% Solids: 80.5 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1820	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/17/2016 1146	TAF		20270
1		(Sulfate (sol) 300.0	1	08/17/2016 1146	TAF		20274

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	ND		0.25	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.2	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-008
Description: SB-3-1.5	Matrix: Solid
Date Sampled: 08/12/2016 1525	% Solids: 80.5 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/16/2016 1309	SES		19935	5.79

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		21	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-008
Description: SB-3-1.5
Matrix: Solid
Date Sampled: 08/12/2016 1525
% Solids: 80.5 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 1738	SES		19936	5.30

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		23	4.7	ug/kg	1
Benzene	71-43-2	8260B	ND		5.9	2.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.9	2.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.9	2.3	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.9	2.3	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		23	4.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.9	2.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.9	2.3	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.9	2.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.9	2.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.9	2.3	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.9	2.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.9	2.3	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.9	2.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.9	2.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.9	2.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.9	2.3	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.9	2.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.9	2.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.9	2.3	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.9	2.3	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.9	2.3	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.9	2.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.9	2.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	4.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.9	2.3	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.9	2.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.9	2.3	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	4.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.9	2.3	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.9	2.3	ug/kg	1
Styrene	100-42-5	8260B	ND		5.9	2.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.9	2.3	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.9	2.3	ug/kg	1
Toluene	108-88-3	8260B	ND		5.9	2.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.9	2.3	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.9	2.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.9	2.3	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.9	2.3	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-008
Description: SB-3-1.5	Matrix: Solid
Date Sampled: 08/12/2016 1525	% Solids: 80.5 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 1738	SES		19936	5.30

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.9	2.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.9	2.3	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.9	2.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		12	4.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		108	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client:	CDM Smith	Laboratory ID:	RH13005-008
Description:	SB-3-1.5	Matrix:	Solid
Date Sampled:	08/12/2016 1525	% Solids:	80.5 08/13/2016 1626
Date Received:	08/13/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19938

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-008
Description: SB-3-1.5	Matrix: Solid
Date Sampled: 08/12/2016 1525	% Solids: 80.5 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1136	JCG		20026

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	520				ug/kg	1
Hexadecanoic acid, butyl ester		8270D	200				ug/kg	1
Octadecanoic acid, butyl ester		8270D	170				ug/kg	1
13-Docosenamide, (Z)-		8270D	300				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-008
Description: SB-3-1.5
Matrix: Solid
Date Sampled: 08/12/2016 1525
% Solids: 80.5 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1136	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		41	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		41	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		41	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		41	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		41	5.5	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		41	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		41	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		41	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		41	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		41	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		41	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		41	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		41	9.8	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		83	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		41	9.1	ug/kg	1
Carbazole	86-74-8	8270D	ND		41	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		41	7.5	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		41	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		41	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		41	9.8	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		41	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		41	7.7	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		41	7.3	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		41	8.6	ug/kg	1
Chrysene	218-01-9	8270D	ND		41	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		41	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		41	7.9	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	45	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		41	7.3	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		41	5.1	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		41	8.1	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		41	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		41	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	50	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	86	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		83	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		83	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		41	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		41	18	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		41	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		41	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		41	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		41	9.7	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	66	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-008
Description: SB-3-1.5
Matrix: Solid
Date Sampled: 08/12/2016 1525
% Solids: 80.5 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1136	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		41	7.1	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		41	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		41	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		41	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		41	8.7	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		83	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		41	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		83	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		83	8.0	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		83	7.4	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		41	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		83	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	51	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		41	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		41	9.1	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	55	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		41	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		41	8.5	ug/kg	1
Pyrene	129-00-0	8270D	ND		41	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		41	7.5	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		41	5.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		42	33-102
2-Fluorophenol		43	28-104
Nitrobenzene-d5		46	22-109
Phenol-d5		49	27-103
Terphenyl-d14		59	41-120
2,4,6-Tribromophenol		53	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH13005-008
Description: SB-3-1.5	Matrix: Solid
Date Sampled: 08/12/2016 1525	% Solids: 80.5 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 2144	BNW	08/17/2016 0950	20013
2	3050B	6020A	10	08/19/2016 1929	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.025	BJ	0.30	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	0.59	J	3.0	0.39	mg/kg	2
Beryllium	7440-41-7	6020A	0.33		0.12	0.0096	mg/kg	1
Cadmium	7440-43-9	6020A	ND		0.30	0.024	mg/kg	2
Chromium	7440-47-3	6020A	35		16	0.35	mg/kg	2
Copper	7440-50-8	6020A	30	B	3.0	0.27	mg/kg	2
Iron	7439-89-6	6020A	23000	B	60	5.2	mg/kg	2
Lead	7439-92-1	6020A	4.6	B	0.30	0.0072	mg/kg	1
Manganese	7439-96-5	6020A	450	B	16	2.9	mg/kg	2
Nickel	7440-02-0	6020A	20	B	16	0.33	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.0	0.46	mg/kg	2
Silver	7440-22-4	6020A	ND		0.30	0.024	mg/kg	1
Thallium	7440-28-0	6020A	0.052	J	0.16	0.0096	mg/kg	1
Zinc	7440-66-6	6020A	38	B	30	0.80	mg/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH13005-008
Description: SB-3-1.5	Matrix: Solid
Date Sampled: 08/12/2016 1525	% Solids: 80.5 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1217	COH	08/19/2016 1032	20174

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.10	0.0078	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH13005-012
Description: DUP-4	Matrix: Solid
Date Sampled: 08/12/2016 0800	% Solids: 73.0 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1828	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/17/2016 1322	TAF		20270
1		(Sulfate (sol) 300.0	1	08/17/2016 1322	TAF		20274

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	11		1.4	0.14	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.4	0.34	mg/kg	1
Nitrate - N (soluble)		300.0	0.098	J	0.27	0.034	mg/kg	1
Sulfate (soluble)		300.0	ND		14	6.8	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-012
Description: DUP-4	Matrix: Solid
Date Sampled: 08/12/2016 0800	% Solids: 73.0 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/16/2016 1331	SES		19935	4.87

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		28	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		116	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-012
Description: DUP-4
Matrix: Solid
Date Sampled: 08/12/2016 0800
% Solids: 73.0 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 1800	SES		19936	5.84

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	210		23	4.7	ug/kg	1
Benzene	71-43-2	8260B	ND		5.9	2.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.9	2.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.9	2.3	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.9	2.3	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	30		23	4.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.9	2.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.9	2.3	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.9	2.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.9	2.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.9	2.3	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.9	2.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.9	2.3	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.9	2.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.9	2.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.9	2.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.9	2.3	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.9	2.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.9	2.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.9	2.3	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.9	2.3	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.9	2.3	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.9	2.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.9	2.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	4.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.9	2.3	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.9	2.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.9	2.3	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	4.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.9	2.3	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.9	2.3	ug/kg	1
Styrene	100-42-5	8260B	ND		5.9	2.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.9	2.3	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.9	2.3	ug/kg	1
Toluene	108-88-3	8260B	ND		5.9	2.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.9	2.3	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.9	2.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.9	2.3	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.9	2.3	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH13005-012
Description: DUP-4	Matrix: Solid
Date Sampled: 08/12/2016 0800	% Solids: 73.0 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 1800	SES		19936	5.84

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.9	2.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.9	2.3	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.9	2.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		12	4.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		101	47-138
Toluene-d8		105	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-012
Description: DUP-4	Matrix: Solid
Date Sampled: 08/12/2016 0800	% Solids: 73.0 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/16/2016 1800	SES		19938

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Cyclopentane		8260B	17				ug/kg	1
Unknown		8260B	13				ug/kg	1
Bicyclo[2.2.1]heptane, 2,2,3-trimethyl-		8260B	29				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH13005-012
Description: DUP-4	Matrix: Solid
Date Sampled: 08/12/2016 0800	% Solids: 73.0 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1201	JCG		20026

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	430				ug/kg	1
n-Hexadecanoic acid		8270D	140				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	210				ug/kg	1
13-Docosenamide, (Z)-		8270D	790				ug/kg	1
Heptacosane		8270D	98				ug/kg	1
1H-Cycloprop[e]azulene, decahydro-1,1,7-		8270D	98				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-012
Description: DUP-4
Matrix: Solid
Date Sampled: 08/12/2016 0800
% Solids: 73.0 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1201	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		44	2.3	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		44	2.3	ug/kg	1
Acetophenone	98-86-2	8270D	ND		44	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		44	2.7	ug/kg	1
Atrazine	1912-24-9	8270D	ND		44	5.9	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		44	19	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	6.2	J	44	1.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	4.5	J	44	1.9	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	8.4	J	44	2.0	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	5.3	J	44	1.5	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		44	1.9	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		44	15	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		44	11	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		89	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		44	9.8	ug/kg	1
Carbazole	86-74-8	8270D	ND		44	13	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		44	8.1	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		44	4.1	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		44	11	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		44	11	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		44	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		44	8.3	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		44	7.9	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		44	9.2	ug/kg	1
Chrysene	218-01-9	8270D	4.4	J	44	1.5	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		44	2.4	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		44	8.6	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		230	48	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		44	7.8	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		44	5.5	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		44	8.8	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		44	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		44	16	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		230	54	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		230	92	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		89	15	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		89	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		44	13	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		44	19	ug/kg	1
Fluoranthene	206-44-0	8270D	8.0	J	44	1.2	ug/kg	1
Fluorene	86-73-7	8270D	ND		44	2.6	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		44	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		44	10	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		230	71	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-012
Description: DUP-4
Matrix: Solid
Date Sampled: 08/12/2016 0800
% Solids: 73.0 08/13/2016 1626
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1201	JCG	08/16/2016 2144	19960

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		44	7.7	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		44	1.8	ug/kg	1
Isophorone	78-59-1	8270D	ND		44	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		44	2.0	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		44	9.4	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		89	14	ug/kg	1
Naphthalene	91-20-3	8270D	ND		44	2.1	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		89	12	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		89	8.6	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		89	8.0	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		44	17	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		89	19	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		230	55	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		44	16	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		44	9.8	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		230	59	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		44	2.4	ug/kg	1
Phenol	108-95-2	8270D	ND		44	9.2	ug/kg	1
Pyrene	129-00-0	8270D	7.1	J	44	1.5	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		44	8.1	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		44	6.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		38	33-102
2-Fluorophenol		36	28-104
Nitrobenzene-d5		40	22-109
Phenol-d5		40	27-103
Terphenyl-d14		61	41-120
2,4,6-Tribromophenol		57	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH13005-012
Description: DUP-4	Matrix: Solid
Date Sampled: 08/12/2016 0800	% Solids: 73.0 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 2149	BNW	08/17/2016 0950	20013
3	3050B	6020A	20	08/19/2016 2009	BNW	08/17/2016 0950	20013

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.023	BJ	0.34	0.020	mg/kg	1
Arsenic	7440-38-2	6020A	ND		6.8	0.87	mg/kg	3
Beryllium	7440-41-7	6020A	0.97		0.14	0.011	mg/kg	1
Cadmium	7440-43-9	6020A	0.071	J	0.68	0.054	mg/kg	3
Chromium	7440-47-3	6020A	33	J	35	0.79	mg/kg	3
Copper	7440-50-8	6020A	49	B	6.8	0.60	mg/kg	3
Iron	7439-89-6	6020A	39000	B	140	12	mg/kg	3
Lead	7439-92-1	6020A	8.0	B	0.34	0.0082	mg/kg	1
Manganese	7439-96-5	6020A	840	B	35	6.5	mg/kg	3
Nickel	7440-02-0	6020A	19	BJ	35	0.74	mg/kg	3
Selenium	7782-49-2	6020A	ND		6.8	1.0	mg/kg	3
Silver	7440-22-4	6020A	ND		0.34	0.027	mg/kg	1
Thallium	7440-28-0	6020A	0.071	J	0.18	0.011	mg/kg	1
Zinc	7440-66-6	6020A	54	BJ	68	1.8	mg/kg	3

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH13005-012
Description: DUP-4	Matrix: Solid
Date Sampled: 08/12/2016 0800	% Solids: 73.0 08/13/2016 1626
Date Received: 08/13/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1220	COH	08/19/2016 1032	20174

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.11	0.0086	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-013
Description: TRIP BLANK
Matrix: Aqueous
Date Sampled: 08/12/2016
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/16/2016 1646	TML		19965

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13005-013
Description: TRIP BLANK
Matrix: Aqueous
Date Sampled: 08/12/2016
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/16/2016 1646	TML		19965

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ20085-001
Batch: 20085
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/18/2016 1210

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Hexavalent Chromium	ND		1	1.0	0.25	mg/kg	08/19/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20085-002
Batch: 20085
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/18/2016 1210

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	4.0	3.9		1	97	90-110	08/19/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH13005-002MS
Batch: 20085
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/18/2016 1210

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	0.37	4.7	5.3		1	105	75-125	08/19/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH13005-002MD
Batch: 20085
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/18/2016 1210

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexavalent Chromium	0.37	4.7	4.5		1	88	16	75-125	20	08/19/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH13005-007MS
Batch: 20085
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/18/2016 1210

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	ND	800	490	N	50	61	75-125	08/19/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20270-001
Batch: 20270
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.20	0.025	mg/kg	08/17/2016 0609

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20270-002
Batch: 20270
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.81		1	102	90-110	08/17/2016 0545

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH13005-001MS
Batch: 20270
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.036	8.0	7.8		1	97	90-110	08/17/2016 0657

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH13005-001MD
Batch: 20270
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N (soluble)	0.036	8.0	7.7		1	96	0.92	90-110	20	08/17/2016 0721

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH13005-007MS
Batch: 20270
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.052	8.0	8.7		1	109	90-110	08/17/2016 1058

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH13005-007MD
Batch: 20270
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N (soluble)	0.052	8.0	8.0		1	99	9.0	90-110	20	08/17/2016 1122

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20274-001
Batch: 20274
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate (soluble)	ND		1	10	5.0	mg/kg	08/17/2016 0609

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20274-002
Batch: 20274
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	200	180		1	90	90-110	08/17/2016 0545

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH13005-001MS
Batch: 20274
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	ND	200	170	N	1	87	90-110	08/17/2016 0657

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH13005-001MD
Batch: 20274
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate (soluble)	ND	200	180	N	1	88	1.5	90-110	20	08/17/2016 0721

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH13005-007MS
Batch: 20274
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	ND	200	180		1	91	90-110	08/17/2016 1058

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH13005-007MD
Batch: 20274
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate (soluble)	ND	200	180		1	92	0.89	90-110	20	08/17/2016 1122

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20279-001
Batch: 20279
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	0.22	J	1	1.0	0.10	mg/kg	08/19/2016 1419

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20279-002
Batch: 20279
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	10	9.9		1	99	90-110	08/19/2016 1421

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20306-001
Batch: 20306
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	ND		1	1.0	0.10	mg/kg	08/19/2016 1804

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20306-002
Batch: 20306
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	10	10		1	103	90-110	08/19/2016 1806

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH13005-007MS
Batch: 20306
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	0.70	10	10		1	97	90-110	08/19/2016 1816

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH13005-007MD
Batch: 20306
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ammonia - N (gas diffusion)	0.70	10	10		1	95	2.3	90-110	20	08/19/2016 1818

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19853-001
Batch: 19853
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	20	12	ug/kg	08/15/2016 1153

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		120	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19853-002
Batch: 19853
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	100	110		1	113	70-130	08/15/2016 1056

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19897-001
Batch: 19897
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	4.0	ug/kg	08/15/2016 2155
Benzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Bromodichloromethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Bromoform	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Bromomethane (Methyl bromide)	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
2-Butanone (MEK)	ND		1	20	4.0	ug/kg	08/15/2016 2155
Carbon disulfide	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Carbon tetrachloride	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Chlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Chloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Chloroform	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Chloromethane (Methyl chloride)	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Cyclohexane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Dibromochloromethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,2-Dibromoethane (EDB)	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,4-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,3-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,2-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Dichlorodifluoromethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,2-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,1-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
trans-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
cis-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,1-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,2-Dichloropropane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
trans-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
cis-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Ethylbenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
2-Hexanone	ND		1	10	4.0	ug/kg	08/15/2016 2155
Isopropylbenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Methyl acetate	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
4-Methyl-2-pentanone	ND		1	10	4.0	ug/kg	08/15/2016 2155
Methylcyclohexane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Methylene chloride	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Styrene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,1,2,2-Tetrachloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Tetrachloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Toluene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,2,4-Trichlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,1,2-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,1,1-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19897-001
Batch: 19897
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Trichlorofluoromethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Vinyl chloride	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Xylenes (total)	ND		1	10	4.0	ug/kg	08/15/2016 2155

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		109	47-138
1,2-Dichloroethane-d4		99	53-142
Toluene-d8		108	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19897-002
Batch: 19897
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	98		1	98	60-140	08/15/2016 2049
Benzene	50	51		1	101	69-123	08/15/2016 2049
Bromodichloromethane	50	52		1	104	69-121	08/15/2016 2049
Bromoform	50	46		1	91	61-119	08/15/2016 2049
Bromomethane (Methyl bromide)	50	50		1	100	10-168	08/15/2016 2049
2-Butanone (MEK)	100	95		1	95	57-148	08/15/2016 2049
Carbon disulfide	50	50		1	99	58-122	08/15/2016 2049
Carbon tetrachloride	50	51		1	102	58-136	08/15/2016 2049
Chlorobenzene	50	52		1	103	59-129	08/15/2016 2049
Chloroethane	50	53		1	106	60-140	08/15/2016 2049
Chloroform	50	49		1	98	71-125	08/15/2016 2049
Chloromethane (Methyl chloride)	50	52		1	103	34-134	08/15/2016 2049
Cyclohexane	50	55		1	109	53-139	08/15/2016 2049
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	95	55-125	08/15/2016 2049
Dibromochloromethane	50	50		1	100	66-119	08/15/2016 2049
1,2-Dibromoethane (EDB)	50	48		1	96	74-124	08/15/2016 2049
1,4-Dichlorobenzene	50	53		1	107	52-133	08/15/2016 2049
1,3-Dichlorobenzene	50	53		1	106	51-134	08/15/2016 2049
1,2-Dichlorobenzene	50	52		1	104	57-131	08/15/2016 2049
Dichlorodifluoromethane	50	61		1	123	10-157	08/15/2016 2049
1,2-Dichloroethane	50	48		1	96	67-129	08/15/2016 2049
1,1-Dichloroethane	50	51		1	102	71-127	08/15/2016 2049
trans-1,2-Dichloroethene	50	51		1	102	68-131	08/15/2016 2049
cis-1,2-Dichloroethene	50	49		1	98	70-122	08/15/2016 2049
1,1-Dichloroethene	50	53		1	106	69-138	08/15/2016 2049
1,2-Dichloropropane	50	51		1	101	72-124	08/15/2016 2049
trans-1,3-Dichloropropene	50	50		1	101	70-124	08/15/2016 2049
cis-1,3-Dichloropropene	50	51		1	103	70-126	08/15/2016 2049
Ethylbenzene	50	53		1	106	59-128	08/15/2016 2049
2-Hexanone	100	96		1	96	54-137	08/15/2016 2049
Isopropylbenzene	50	54		1	108	50-136	08/15/2016 2049
Methyl acetate	50	46		1	93	59-137	08/15/2016 2049
Methyl tertiary butyl ether (MTBE)	50	43		1	87	70-130	08/15/2016 2049
4-Methyl-2-pentanone	100	97		1	97	60-134	08/15/2016 2049
Methylcyclohexane	50	58		1	117	41-144	08/15/2016 2049
Methylene chloride	50	46		1	92	70-130	08/15/2016 2049
Styrene	50	52		1	105	54-136	08/15/2016 2049
1,1,2,2-Tetrachloroethane	50	48		1	96	69-132	08/15/2016 2049
Tetrachloroethene	50	56		1	113	45-150	08/15/2016 2049
Toluene	50	53		1	106	61-129	08/15/2016 2049
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	56		1	112	49-136	08/15/2016 2049
1,2,4-Trichlorobenzene	50	55		1	109	34-145	08/15/2016 2049
1,1,2-Trichloroethane	50	48		1	96	55-128	08/15/2016 2049
1,1,1-Trichloroethane	50	50		1	100	63-128	08/15/2016 2049

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19897-002
Batch: 19897
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	54		1	108	62-126	08/15/2016 2049
Trichlorofluoromethane	50	59		1	118	45-138	08/15/2016 2049
Vinyl chloride	50	53		1	105	42-132	08/15/2016 2049
Xylenes (total)	100	100		1	104	58-128	08/15/2016 2049

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		108	47-138
1,2-Dichloroethane-d4		96	53-142
Toluene-d8		107	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19935-001
Batch: 19935
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	20	12	ug/kg	08/16/2016 1035

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		103	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19935-002
Batch: 19935
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	100	110		1	114	70-130	08/16/2016 0927

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		95	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: RH13005-003DU
Batch: 19935
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
1,4-Dioxane	ND	ND		1	0.00	40	08/16/2016 1415

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MS

Sample ID: RH13005-004MS
Batch: 19935
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	ND	140	160		1	119	70-130	08/16/2016 1437

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		112	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19936-001
Batch: 19936
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	4.0	ug/kg	08/16/2016 1209
Benzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Bromodichloromethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Bromoform	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Bromomethane (Methyl bromide)	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
2-Butanone (MEK)	ND		1	20	4.0	ug/kg	08/16/2016 1209
Carbon disulfide	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Carbon tetrachloride	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Chlorobenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Chloroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Chloroform	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Chloromethane (Methyl chloride)	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Cyclohexane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Dibromochloromethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,2-Dibromoethane (EDB)	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,3-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,4-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,2-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Dichlorodifluoromethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,2-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,1-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
trans-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
cis-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,1-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,2-Dichloropropane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
cis-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
trans-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Ethylbenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
2-Hexanone	ND		1	10	4.0	ug/kg	08/16/2016 1209
Isopropylbenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Methyl acetate	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
4-Methyl-2-pentanone	ND		1	10	4.0	ug/kg	08/16/2016 1209
Methylcyclohexane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Methylene chloride	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Styrene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,1,2,2-Tetrachloroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Tetrachloroethene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Toluene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,2,4-Trichlorobenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,1,1-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,1,2-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19936-001
Batch: 19936
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Trichlorofluoromethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Vinyl chloride	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Xylenes (total)	ND		1	10	4.0	ug/kg	08/16/2016 1209

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		107	47-138
1,2-Dichloroethane-d4		98	53-142
Toluene-d8		106	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19936-002
Batch: 19936
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	120		1	119	60-140	08/16/2016 1113
Benzene	50	50		1	99	69-123	08/16/2016 1113
Bromodichloromethane	50	52		1	104	69-121	08/16/2016 1113
Bromoform	50	49		1	97	61-119	08/16/2016 1113
Bromomethane (Methyl bromide)	50	47		1	95	10-168	08/16/2016 1113
2-Butanone (MEK)	100	110		1	108	57-148	08/16/2016 1113
Carbon disulfide	50	47		1	95	58-122	08/16/2016 1113
Carbon tetrachloride	50	48		1	97	58-136	08/16/2016 1113
Chlorobenzene	50	51		1	102	59-129	08/16/2016 1113
Chloroethane	50	49		1	97	60-140	08/16/2016 1113
Chloroform	50	49		1	98	71-125	08/16/2016 1113
Chloromethane (Methyl chloride)	50	48		1	96	34-134	08/16/2016 1113
Cyclohexane	50	50		1	99	53-139	08/16/2016 1113
1,2-Dibromo-3-chloropropane (DBCP)	50	54		1	107	55-125	08/16/2016 1113
Dibromochloromethane	50	52		1	104	66-119	08/16/2016 1113
1,2-Dibromoethane (EDB)	50	51		1	103	74-124	08/16/2016 1113
1,3-Dichlorobenzene	50	51		1	101	51-134	08/16/2016 1113
1,4-Dichlorobenzene	50	51		1	102	52-133	08/16/2016 1113
1,2-Dichlorobenzene	50	52		1	103	57-131	08/16/2016 1113
Dichlorodifluoromethane	50	50		1	100	10-157	08/16/2016 1113
1,2-Dichloroethane	50	50		1	100	67-129	08/16/2016 1113
1,1-Dichloroethane	50	50		1	100	71-127	08/16/2016 1113
trans-1,2-Dichloroethene	50	49		1	98	68-131	08/16/2016 1113
cis-1,2-Dichloroethene	50	48		1	96	70-122	08/16/2016 1113
1,1-Dichloroethene	50	50		1	100	69-138	08/16/2016 1113
1,2-Dichloropropane	50	51		1	102	72-124	08/16/2016 1113
cis-1,3-Dichloropropene	50	51		1	102	70-126	08/16/2016 1113
trans-1,3-Dichloropropene	50	51		1	102	70-124	08/16/2016 1113
Ethylbenzene	50	50		1	99	59-128	08/16/2016 1113
2-Hexanone	100	110		1	107	54-137	08/16/2016 1113
Isopropylbenzene	50	52		1	103	50-136	08/16/2016 1113
Methyl acetate	50	54		1	109	59-137	08/16/2016 1113
Methyl tertiary butyl ether (MTBE)	50	47		1	93	70-130	08/16/2016 1113
4-Methyl-2-pentanone	100	110		1	109	60-134	08/16/2016 1113
Methylcyclohexane	50	51		1	103	41-144	08/16/2016 1113
Methylene chloride	50	47		1	95	70-130	08/16/2016 1113
Styrene	50	51		1	101	54-136	08/16/2016 1113
1,1,2,2-Tetrachloroethane	50	52		1	104	69-132	08/16/2016 1113
Tetrachloroethene	50	51		1	103	45-150	08/16/2016 1113
Toluene	50	51		1	101	61-129	08/16/2016 1113
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	49		1	99	49-136	08/16/2016 1113
1,2,4-Trichlorobenzene	50	50		1	99	34-145	08/16/2016 1113
1,1,1-Trichloroethane	50	48		1	97	63-128	08/16/2016 1113
1,1,2-Trichloroethane	50	50		1	101	55-128	08/16/2016 1113

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19936-002
Batch: 19936
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	53		1	105	62-126	08/16/2016 1113
Trichlorofluoromethane	50	51		1	101	45-138	08/16/2016 1113
Vinyl chloride	50	46		1	93	42-132	08/16/2016 1113
Xylenes (total)	100	100		1	101	58-128	08/16/2016 1113

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		105	47-138
1,2-Dichloroethane-d4		95	53-142
Toluene-d8		105	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19965-001
Batch: 19965
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	2.0	ug/L	08/16/2016 1618
Benzene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Bromodichloromethane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Bromoform	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Bromomethane (Methyl bromide)	ND		1	5.0	0.40	ug/L	08/16/2016 1618
2-Butanone (MEK)	ND		1	10	2.0	ug/L	08/16/2016 1618
Carbon disulfide	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Chlorobenzene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Chloroethane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Chloroform	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Chloromethane (Methyl chloride)	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Cyclohexane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Dibromochloromethane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,2-Dibromoethane (EDB)	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,4-Dichlorobenzene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,3-Dichlorobenzene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,2-Dichlorobenzene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Dichlorodifluoromethane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,2-Dichloroethane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,1-Dichloroethane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
cis-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,1-Dichloroethene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,2-Dichloropropane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
trans-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
cis-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Ethylbenzene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
2-Hexanone	ND		1	10	2.0	ug/L	08/16/2016 1618
Isopropylbenzene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Methyl acetate	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	08/16/2016 1618
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	08/16/2016 1618
Methylcyclohexane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Methylene chloride	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Styrene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Tetrachloroethene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Toluene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,2,4-Trichlorobenzene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,1,2-Trichloroethane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
1,1,1-Trichloroethane	ND		1	5.0	0.40	ug/L	08/16/2016 1618

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19965-001
Batch: 19965
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Trichlorofluoromethane	ND		1	5.0	0.40	ug/L	08/16/2016 1618
Vinyl chloride	ND		1	2.0	0.40	ug/L	08/16/2016 1618
Xylenes (total)	ND		1	5.0	0.40	ug/L	08/16/2016 1618

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19965-002
Batch: 19965
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	110	60-140	08/16/2016 1527
Benzene	50	47		1	94	70-130	08/16/2016 1527
Bromodichloromethane	50	52		1	105	70-130	08/16/2016 1527
Bromoform	50	51		1	102	70-130	08/16/2016 1527
Bromomethane (Methyl bromide)	50	48		1	95	60-140	08/16/2016 1527
2-Butanone (MEK)	100	110		1	109	60-140	08/16/2016 1527
Carbon disulfide	50	49		1	99	60-140	08/16/2016 1527
Carbon tetrachloride	50	50		1	101	70-130	08/16/2016 1527
Chlorobenzene	50	49		1	99	70-130	08/16/2016 1527
Chloroethane	50	49		1	99	60-140	08/16/2016 1527
Chloroform	50	48		1	97	70-130	08/16/2016 1527
Chloromethane (Methyl chloride)	50	51		1	101	60-140	08/16/2016 1527
Cyclohexane	50	50		1	99	70-130	08/16/2016 1527
1,2-Dibromo-3-chloropropane (DBCP)	50	54		1	108	70-130	08/16/2016 1527
Dibromochloromethane	50	53		1	107	70-130	08/16/2016 1527
1,2-Dibromoethane (EDB)	50	50		1	100	70-130	08/16/2016 1527
1,4-Dichlorobenzene	50	48		1	96	70-130	08/16/2016 1527
1,3-Dichlorobenzene	50	50		1	99	70-130	08/16/2016 1527
1,2-Dichlorobenzene	50	50		1	100	70-130	08/16/2016 1527
Dichlorodifluoromethane	50	57		1	114	60-140	08/16/2016 1527
1,2-Dichloroethane	50	51		1	102	70-130	08/16/2016 1527
1,1-Dichloroethane	50	49		1	98	70-130	08/16/2016 1527
cis-1,2-Dichloroethene	50	49		1	98	70-130	08/16/2016 1527
trans-1,2-Dichloroethene	50	49		1	97	70-130	08/16/2016 1527
1,1-Dichloroethene	50	50		1	101	70-130	08/16/2016 1527
1,2-Dichloropropane	50	50		1	100	70-130	08/16/2016 1527
trans-1,3-Dichloropropene	50	53		1	106	70-130	08/16/2016 1527
cis-1,3-Dichloropropene	50	53		1	106	70-130	08/16/2016 1527
Ethylbenzene	50	50		1	101	70-130	08/16/2016 1527
2-Hexanone	100	99		1	99	60-140	08/16/2016 1527
Isopropylbenzene	50	52		1	104	70-130	08/16/2016 1527
Methyl acetate	50	52		1	104	60-140	08/16/2016 1527
Methyl tertiary butyl ether (MTBE)	50	47		1	94	70-130	08/16/2016 1527
4-Methyl-2-pentanone	100	100		1	103	60-140	08/16/2016 1527
Methylcyclohexane	50	51		1	103	70-130	08/16/2016 1527
Methylene chloride	50	48		1	96	70-130	08/16/2016 1527
Styrene	50	52		1	103	70-130	08/16/2016 1527
1,1,2,2-Tetrachloroethane	50	49		1	98	70-130	08/16/2016 1527
Tetrachloroethene	50	51		1	102	70-130	08/16/2016 1527
Toluene	50	50		1	100	70-130	08/16/2016 1527
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	50		1	99	70-130	08/16/2016 1527
1,2,4-Trichlorobenzene	50	53		1	105	70-130	08/16/2016 1527
1,1,2-Trichloroethane	50	51		1	101	70-130	08/16/2016 1527
1,1,1-Trichloroethane	50	50		1	99	70-130	08/16/2016 1527

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19965-002
Batch: 19965
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	51		1	103	70-130	08/16/2016 1527
Trichlorofluoromethane	50	54		1	109	70-130	08/16/2016 1527
Vinyl chloride	50	48		1	95	70-130	08/16/2016 1527
Xylenes (total)	100	100		1	101	70-130	08/16/2016 1527

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19960-001
Batch: 19960
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 2144

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	33	11	ug/kg	08/17/2016 1030
2,4,5-Trichlorophenol	ND		1	33	6.1	ug/kg	08/17/2016 1030
2,4,6-Trichlorophenol	ND		1	33	4.7	ug/kg	08/17/2016 1030
2,4-Dichlorophenol	ND		1	33	5.9	ug/kg	08/17/2016 1030
2,4-Dimethylphenol	ND		1	33	10	ug/kg	08/17/2016 1030
2,4-Dinitrophenol	ND		1	170	69	ug/kg	08/17/2016 1030
2,4-Dinitrotoluene	ND		1	67	11	ug/kg	08/17/2016 1030
2,6-Dinitrotoluene	ND		1	67	11	ug/kg	08/17/2016 1030
2-Chloronaphthalene	ND		1	33	6.2	ug/kg	08/17/2016 1030
2-Chlorophenol	ND		1	33	6.0	ug/kg	08/17/2016 1030
2-Methylnaphthalene	ND		1	33	1.5	ug/kg	08/17/2016 1030
2-Methylphenol	ND		1	33	7.1	ug/kg	08/17/2016 1030
2-Nitroaniline	ND		1	67	8.9	ug/kg	08/17/2016 1030
2-Nitrophenol	ND		1	67	15	ug/kg	08/17/2016 1030
3+4-Methylphenol	ND		1	67	10	ug/kg	08/17/2016 1030
3,3'-Dichlorobenzidine	ND		1	170	36	ug/kg	08/17/2016 1030
3-Nitroaniline	ND		1	67	6.5	ug/kg	08/17/2016 1030
4,6-Dinitro-2-methylphenol	ND		1	170	40	ug/kg	08/17/2016 1030
4-Bromophenyl phenyl ether	ND		1	33	7.9	ug/kg	08/17/2016 1030
4-Chloro-3-methyl phenol	ND		1	33	6.1	ug/kg	08/17/2016 1030
4-Chloroaniline	ND		1	33	3.1	ug/kg	08/17/2016 1030
4-Chlorophenyl phenyl ether	ND		1	33	6.9	ug/kg	08/17/2016 1030
4-Nitroaniline	ND		1	67	6.0	ug/kg	08/17/2016 1030
4-Nitrophenol	ND		1	170	41	ug/kg	08/17/2016 1030
Acenaphthene	ND		1	33	1.7	ug/kg	08/17/2016 1030
Acenaphthylene	ND		1	33	1.7	ug/kg	08/17/2016 1030
Acetophenone	ND		1	33	12	ug/kg	08/17/2016 1030
Anthracene	ND		1	33	2.0	ug/kg	08/17/2016 1030
Atrazine	ND		1	33	4.4	ug/kg	08/17/2016 1030
Benzaldehyde	ND		1	33	14	ug/kg	08/17/2016 1030
Benzo(a)anthracene	ND		1	33	1.1	ug/kg	08/17/2016 1030
Benzo(a)pyrene	ND		1	33	1.5	ug/kg	08/17/2016 1030
Benzo(b)fluoranthene	ND		1	33	1.5	ug/kg	08/17/2016 1030
Benzo(g,h,i)perylene	ND		1	33	1.1	ug/kg	08/17/2016 1030
Benzo(k)fluoranthene	ND		1	33	1.4	ug/kg	08/17/2016 1030
bis (2-Chloro-1-methylethyl) ether	ND		1	33	9.3	ug/kg	08/17/2016 1030
bis(2-Chloroethoxy)methane	ND		1	33	8.1	ug/kg	08/17/2016 1030
bis(2-Chloroethyl)ether	ND		1	33	7.9	ug/kg	08/17/2016 1030
bis(2-Ethylhexyl)phthalate	ND		1	33	14	ug/kg	08/17/2016 1030
Butyl benzyl phthalate	ND		1	67	8.6	ug/kg	08/17/2016 1030
Caprolactam	ND		1	33	7.4	ug/kg	08/17/2016 1030
Carbazole	ND		1	33	9.4	ug/kg	08/17/2016 1030
Chrysene	ND		1	33	1.1	ug/kg	08/17/2016 1030
Di-n-butyl phthalate	ND		1	33	12	ug/kg	08/17/2016 1030

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19960-001
Batch: 19960
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 2144

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	33	9.8	ug/kg	08/17/2016 1030
Dibenzo(a,h)anthracene	ND		1	33	1.8	ug/kg	08/17/2016 1030
Dibenzofuran	ND		1	33	6.4	ug/kg	08/17/2016 1030
Diethylphthalate	ND		1	33	4.1	ug/kg	08/17/2016 1030
Dimethyl phthalate	ND		1	33	6.6	ug/kg	08/17/2016 1030
Fluoranthene	ND		1	33	0.89	ug/kg	08/17/2016 1030
Fluorene	ND		1	33	2.0	ug/kg	08/17/2016 1030
Hexachlorobenzene	ND		1	33	8.6	ug/kg	08/17/2016 1030
Hexachlorobutadiene	ND		1	33	7.9	ug/kg	08/17/2016 1030
Hexachlorocyclopentadiene	ND		1	170	53	ug/kg	08/17/2016 1030
Hexachloroethane	ND		1	33	5.8	ug/kg	08/17/2016 1030
Indeno(1,2,3-c,d)pyrene	ND		1	33	1.4	ug/kg	08/17/2016 1030
Isophorone	ND		1	33	8.4	ug/kg	08/17/2016 1030
N-Nitrosodi-n-propylamine	ND		1	33	12	ug/kg	08/17/2016 1030
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	33	7.4	ug/kg	08/17/2016 1030
Naphthalene	ND		1	33	1.6	ug/kg	08/17/2016 1030
Nitrobenzene	ND		1	33	13	ug/kg	08/17/2016 1030
Pentachlorophenol	ND		1	170	44	ug/kg	08/17/2016 1030
Phenanthrene	ND		1	33	1.8	ug/kg	08/17/2016 1030
Phenol	ND		1	33	6.9	ug/kg	08/17/2016 1030
Pyrene	ND		1	33	1.2	ug/kg	08/17/2016 1030

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		63	30-117
2-Fluorobiphenyl		64	33-102
2-Fluorophenol		59	28-104
Nitrobenzene-d5		69	22-109
Phenol-d5		62	27-103
Terphenyl-d14		78	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19960-002
Batch: 19960
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 2144

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	330	150		1	47	30-130	08/17/2016 1054
2,4,5-Trichlorophenol	330	190		1	56	46-122	08/17/2016 1054
2,4,6-Trichlorophenol	330	160		1	49	38-115	08/17/2016 1054
2,4-Dichlorophenol	670	280		1	43	41-113	08/17/2016 1054
2,4-Dimethylphenol	330	190		1	57	33-123	08/17/2016 1054
2,4-Dinitrophenol	330	230		1	68	30-130	08/17/2016 1054
2,4-Dinitrotoluene	330	250		1	76	48-124	08/17/2016 1054
2,6-Dinitrotoluene	330	210		1	64	47-125	08/17/2016 1054
2-Chloronaphthalene	330	150		1	46	31-127	08/17/2016 1054
2-Chlorophenol	330	150		1	45	37-106	08/17/2016 1054
2-Methylnaphthalene	330	160		1	47	40-106	08/17/2016 1054
2-Methylphenol	330	190		1	58	32-107	08/17/2016 1054
2-Nitroaniline	330	210		1	63	45-128	08/17/2016 1054
2-Nitrophenol	330	150		1	44	35-108	08/17/2016 1054
3+4-Methylphenol	330	170		1	50	39-108	08/17/2016 1054
3,3'-Dichlorobenzidine	330	290		1	86	30-130	08/17/2016 1054
3-Nitroaniline	330	210		1	63	24-127	08/17/2016 1054
4,6-Dinitro-2-methylphenol	330	290		1	88	40-130	08/17/2016 1054
4-Bromophenyl phenyl ether	330	210		1	62	46-118	08/17/2016 1054
4-Chloro-3-methyl phenol	330	210		1	62	49-118	08/17/2016 1054
4-Chloroaniline	330	200		1	61	10-125	08/17/2016 1054
4-Chlorophenyl phenyl ether	330	170		1	51	47-116	08/17/2016 1054
4-Nitroaniline	330	270		1	81	48-127	08/17/2016 1054
4-Nitrophenol	670	660		1	98	18-154	08/17/2016 1054
Acenaphthene	330	170		1	52	46-114	08/17/2016 1054
Acenaphthylene	330	180		1	54	44-122	08/17/2016 1054
Acetophenone	330	150		1	45	30-130	08/17/2016 1054
Anthracene	330	260		1	78	50-119	08/17/2016 1054
Atrazine	330	280		1	85	30-130	08/17/2016 1054
Benzaldehyde	330	170		1	51	40-117	08/17/2016 1054
Benzo(a)anthracene	330	300		1	89	47-121	08/17/2016 1054
Benzo(a)pyrene	330	310		1	94	55-134	08/17/2016 1054
Benzo(b)fluoranthene	330	300		1	91	28-139	08/17/2016 1054
Benzo(g,h,i)perylene	330	360		1	107	36-125	08/17/2016 1054
Benzo(k)fluoranthene	330	300		1	91	47-130	08/17/2016 1054
bis (2-Chloro-1-methylethyl) ether	330	160		1	49	31-102	08/17/2016 1054
bis(2-Chloroethoxy)methane	330	170		1	52	39-108	08/17/2016 1054
bis(2-Chloroethyl)ether	330	170		1	53	32-105	08/17/2016 1054
bis(2-Ethylhexyl)phthalate	330	350		1	105	45-128	08/17/2016 1054
Butyl benzyl phthalate	330	350		1	104	46-128	08/17/2016 1054
Caprolactam	330	310		1	95	30-130	08/17/2016 1054
Carbazole	330	290		1	88	30-130	08/17/2016 1054
Chrysene	330	300		1	91	45-126	08/17/2016 1054
Di-n-butyl phthalate	330	330		1	99	51-129	08/17/2016 1054

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19960-002
Batch: 19960
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 2144

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Di-n-octylphthalate	330	310		1	92	49-142	08/17/2016 1054
Dibenzo(a,h)anthracene	330	250		1	74	30-130	08/17/2016 1054
Dibenzofuran	330	170		1	51	45-112	08/17/2016 1054
Diethylphthalate	330	260		1	78	49-123	08/17/2016 1054
Dimethyl phthalate	330	220		1	65	48-120	08/17/2016 1054
Fluoranthene	330	280		1	84	50-123	08/17/2016 1054
Fluorene	330	180		1	55	48-117	08/17/2016 1054
Hexachlorobenzene	330	250		1	74	44-122	08/17/2016 1054
Hexachlorobutadiene	330	130		1	38	33-103	08/17/2016 1054
Hexachlorocyclopentadiene	1700	580		1	35	18-121	08/17/2016 1054
Hexachloroethane	330	140		1	41	30-96	08/17/2016 1054
Indeno(1,2,3-c,d)pyrene	330	330		1	98	45-123	08/17/2016 1054
Isophorone	330	180		1	53	30-130	08/17/2016 1054
N-Nitrosodi-n-propylamine	330	200		1	61	32-115	08/17/2016 1054
N-Nitrosodiphenylamine (Diphenylamine)	330	250		1	76	53-150	08/17/2016 1054
Naphthalene	330	150		1	44	36-110	08/17/2016 1054
Nitrobenzene	330	170		1	50	33-114	08/17/2016 1054
Pentachlorophenol	670	540		1	80	27-138	08/17/2016 1054
Phenanthrene	330	240		1	71	49-117	08/17/2016 1054
Phenol	330	170		1	51	36-108	08/17/2016 1054
Pyrene	330	300		1	89	47-119	08/17/2016 1054

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		63	30-117
2-Fluorobiphenyl		42	33-102
2-Fluorophenol		41	28-104
Nitrobenzene-d5		47	22-109
Phenol-d5		48	27-103
Terphenyl-d14		79	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: RH13005-006MS
Batch: 19960
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 2144

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	430	190		1	44	30-130	08/17/2016 1933
Acenaphthylene	ND	430	190		1	45	30-130	08/17/2016 1933
Acetophenone	ND	430	150		1	35	30-130	08/17/2016 1933
Anthracene	ND	430	260		1	59	30-130	08/17/2016 1933
Atrazine	ND	430	250		1	56	30-130	08/17/2016 1933
Benzaldehyde	ND	430	170	N	1	39	40-117	08/17/2016 1933
Benzo(a)anthracene	4.2	430	270		1	62	30-130	08/17/2016 1933
Benzo(a)pyrene	ND	430	280		1	64	30-130	08/17/2016 1933
Benzo(b)fluoranthene	ND	430	270		1	63	30-130	08/17/2016 1933
Benzo(g,h,i)perylene	ND	430	220		1	50	30-130	08/17/2016 1933
Benzo(k)fluoranthene	ND	430	280		1	64	30-130	08/17/2016 1933
1,1'-Biphenyl	ND	430	170		1	39	30-130	08/17/2016 1933
4-Bromophenyl phenyl ether	ND	430	220		1	50	30-130	08/17/2016 1933
Butyl benzyl phthalate	ND	430	320		1	74	30-130	08/17/2016 1933
Caprolactam	ND	430	270		1	62	30-130	08/17/2016 1933
Carbazole	ND	430	260		1	60	30-130	08/17/2016 1933
4-Chloro-3-methyl phenol	ND	430	230		1	52	30-130	08/17/2016 1933
4-Chloroaniline	ND	430	56		1	13	10-130	08/17/2016 1933
bis(2-Chloroethoxy)methane	ND	430	170		1	40	30-130	08/17/2016 1933
bis(2-Chloroethyl)ether	ND	430	150		1	34	30-130	08/17/2016 1933
bis (2-Chloro-1-methylethyl) ether	ND	430	160		1	37	30-130	08/17/2016 1933
2-Chloronaphthalene	ND	430	170		1	39	30-130	08/17/2016 1933
2-Chlorophenol	ND	430	150		1	35	30-130	08/17/2016 1933
4-Chlorophenyl phenyl ether	ND	430	190		1	43	30-130	08/17/2016 1933
Chrysene	3.9	430	280		1	63	30-130	08/17/2016 1933
Dibenzo(a,h)anthracene	ND	430	170		1	40	30-130	08/17/2016 1933
Dibenzofuran	ND	430	180		1	41	30-130	08/17/2016 1933
3,3'-Dichlorobenzidine	ND	430	170		1	39	30-130	08/17/2016 1933
2,4-Dichlorophenol	ND	870	320		1	37	30-130	08/17/2016 1933
Diethylphthalate	ND	430	230		1	54	30-130	08/17/2016 1933
Dimethyl phthalate	ND	430	210		1	48	30-130	08/17/2016 1933
2,4-Dimethylphenol	ND	430	190		1	45	30-130	08/17/2016 1933
Di-n-butyl phthalate	ND	430	290		1	66	30-130	08/17/2016 1933
4,6-Dinitro-2-methylphenol	ND	430	240		1	55	30-130	08/17/2016 1933
2,4-Dinitrophenol	ND	430	190		1	44	30-130	08/17/2016 1933
2,4-Dinitrotoluene	ND	430	230		1	54	30-130	08/17/2016 1933
2,6-Dinitrotoluene	ND	430	200		1	46	30-130	08/17/2016 1933
Di-n-octylphthalate	ND	430	290		1	67	30-130	08/17/2016 1933
bis(2-Ethylhexyl)phthalate	ND	430	340		1	77	30-130	08/17/2016 1933
Fluoranthene	4.1	430	250		1	58	30-130	08/17/2016 1933
Fluorene	ND	430	200		1	45	30-130	08/17/2016 1933
Hexachlorobenzene	ND	430	230		1	54	30-130	08/17/2016 1933
Hexachlorobutadiene	ND	430	120	N	1	28	30-130	08/17/2016 1933
Hexachlorocyclopentadiene	ND	2200	83	N	1	3.8	30-130	08/17/2016 1933

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: RH13005-006MS
Batch: 19960
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 2144

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachloroethane	ND	430	82	N	1	19	30-130	08/17/2016 1933
Indeno(1,2,3-c,d)pyrene	ND	430	220		1	52	30-130	08/17/2016 1933
Isophorone	ND	430	180		1	41	30-130	08/17/2016 1933
2-Methylnaphthalene	ND	430	160		1	38	30-130	08/17/2016 1933
2-Methylphenol	ND	430	200		1	47	30-130	08/17/2016 1933
3+4-Methylphenol	ND	430	180		1	42	30-130	08/17/2016 1933
Naphthalene	ND	430	140		1	33	30-130	08/17/2016 1933
2-Nitroaniline	ND	430	220		1	51	30-130	08/17/2016 1933
3-Nitroaniline	ND	430	140		1	33	30-130	08/17/2016 1933
4-Nitroaniline	ND	430	180		1	40	30-130	08/17/2016 1933
Nitrobenzene	ND	430	160		1	36	30-130	08/17/2016 1933
2-Nitrophenol	ND	430	150		1	35	30-130	08/17/2016 1933
4-Nitrophenol	ND	870	620		1	72	30-130	08/17/2016 1933
N-Nitrosodi-n-propylamine	ND	430	210		1	49	30-130	08/17/2016 1933
N-Nitrosodiphenylamine (Diphenylamine)	ND	430	230		1	52	30-130	08/17/2016 1933
Pentachlorophenol	ND	870	550		1	63	30-130	08/17/2016 1933
Phenanthrene	ND	430	240		1	55	30-130	08/17/2016 1933
Phenol	ND	430	160		1	37	30-130	08/17/2016 1933
Pyrene	3.6	430	280		1	63	30-130	08/17/2016 1933
2,4,5-Trichlorophenol	ND	430	210		1	48	30-130	08/17/2016 1933
2,4,6-Trichlorophenol	ND	430	200		1	45	30-130	08/17/2016 1933

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		35	33-102
2-Fluorophenol		31	28-104
Nitrobenzene-d5		34	22-109
Phenol-d5		35	27-103
Terphenyl-d14		53	41-120
2,4,6-Tribromophenol		53	30-117

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: RH13005-006MD
Batch: 19960
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 2144

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	430	230		1	54	19	30-130	40	08/17/2016 1958
Acenaphthylene	ND	430	240		1	56	21	30-130	40	08/17/2016 1958
Acetophenone	ND	430	210		1	48	30	30-130	40	08/17/2016 1958
Anthracene	ND	430	290		1	67	11	30-130	40	08/17/2016 1958
Atrazine	ND	430	300		1	71	21	30-130	40	08/17/2016 1958
Benzaldehyde	ND	430	230		1	53	29	40-117	40	08/17/2016 1958
Benzo(a)anthracene	4.2	430	300		1	70	11	30-130	40	08/17/2016 1958
Benzo(a)pyrene	ND	430	320		1	75	14	30-130	40	08/17/2016 1958
Benzo(b)fluoranthene	ND	430	320		1	74	15	30-130	40	08/17/2016 1958
Benzo(g,h,i)perylene	ND	430	260		1	62	21	30-130	40	08/17/2016 1958
Benzo(k)fluoranthene	ND	430	300		1	69	6.7	30-130	40	08/17/2016 1958
1,1'-Biphenyl	ND	430	220		1	52	26	30-130	40	08/17/2016 1958
4-Bromophenyl phenyl ether	ND	430	250		1	58	14	30-130	40	08/17/2016 1958
Butyl benzyl phthalate	ND	430	370		1	87	14	30-130	40	08/17/2016 1958
Caprolactam	ND	430	340		1	80	23	30-130	40	08/17/2016 1958
Carbazole	ND	430	300		1	70	13	30-130	40	08/17/2016 1958
4-Chloro-3-methyl phenol	ND	430	260		1	60	12	30-130	40	08/17/2016 1958
4-Chloroaniline	ND	430	76		1	18	30	10-130	40	08/17/2016 1958
bis(2-Chloroethoxy)methane	ND	430	240		1	55	30	30-130	40	08/17/2016 1958
bis(2-Chloroethyl)ether	ND	430	210		1	49	33	30-130	40	08/17/2016 1958
bis (2-Chloro-1-methylethyl) ether	ND	430	210		1	50	28	30-130	40	08/17/2016 1958
2-Chloronaphthalene	ND	430	210		1	50	23	30-130	40	08/17/2016 1958
2-Chlorophenol	ND	430	210		1	49	30	30-130	40	08/17/2016 1958
4-Chlorophenyl phenyl ether	ND	430	220		1	52	18	30-130	40	08/17/2016 1958
Chrysene	3.9	430	310		1	72	12	30-130	40	08/17/2016 1958
Dibenzo(a,h)anthracene	ND	430	210		1	49	18	30-130	40	08/17/2016 1958
Dibenzofuran	ND	430	220		1	52	21	30-130	40	08/17/2016 1958
3,3'-Dichlorobenzidine	ND	430	250		1	59	40	30-130	40	08/17/2016 1958
2,4-Dichlorophenol	ND	860	440		1	51	31	30-130	40	08/17/2016 1958
Diethylphthalate	ND	430	280		1	66	19	30-130	40	08/17/2016 1958
Dimethyl phthalate	ND	430	250		1	58	18	30-130	40	08/17/2016 1958
2,4-Dimethylphenol	ND	430	260		1	62	31	30-130	40	08/17/2016 1958
Di-n-butyl phthalate	ND	430	350		1	81	18	30-130	40	08/17/2016 1958
4,6-Dinitro-2-methylphenol	ND	430	280		1	65	16	30-130	40	08/17/2016 1958
2,4-Dinitrophenol	ND	430	220		1	51	15	30-130	40	08/17/2016 1958
2,4-Dinitrotoluene	ND	430	270		1	63	14	30-130	40	08/17/2016 1958
2,6-Dinitrotoluene	ND	430	250		1	57	20	30-130	40	08/17/2016 1958
Di-n-octylphthalate	ND	430	330		1	76	12	30-130	40	08/17/2016 1958
bis(2-Ethylhexyl)phthalate	ND	430	380		1	90	14	30-130	40	08/17/2016 1958
Fluoranthene	4.1	430	300		1	70	17	30-130	40	08/17/2016 1958
Fluorene	ND	430	230		1	54	15	30-130	40	08/17/2016 1958
Hexachlorobenzene	ND	430	270		1	62	13	30-130	40	08/17/2016 1958
Hexachlorobutadiene	ND	430	170		1	39	29	30-130	40	08/17/2016 1958
Hexachlorocyclopentadiene	ND	2100	92	N	1	4.3	10	30-130	40	08/17/2016 1958

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: RH13005-006MD
Batch: 19960
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 2144

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexachloroethane	ND	430	100	N	1	23	20	30-130	40	08/17/2016 1958
Indeno(1,2,3-c,d)pyrene	ND	430	270		1	63	19	30-130	40	08/17/2016 1958
Isophorone	ND	430	240		1	56	28	30-130	40	08/17/2016 1958
2-Methylnaphthalene	ND	430	210		1	48	22	30-130	40	08/17/2016 1958
2-Methylphenol	ND	430	270		1	64	29	30-130	40	08/17/2016 1958
3+4-Methylphenol	ND	430	230		1	54	25	30-130	40	08/17/2016 1958
Naphthalene	ND	430	190		1	45	29	30-130	40	08/17/2016 1958
2-Nitroaniline	ND	430	270		1	64	20	30-130	40	08/17/2016 1958
3-Nitroaniline	ND	430	190		1	44	28	30-130	40	08/17/2016 1958
4-Nitroaniline	ND	430	270	+	1	63	42	30-130	40	08/17/2016 1958
Nitrobenzene	ND	430	220		1	50	31	30-130	40	08/17/2016 1958
2-Nitrophenol	ND	430	210		1	50	33	30-130	40	08/17/2016 1958
4-Nitrophenol	ND	860	730		1	86	16	30-130	40	08/17/2016 1958
N-Nitrosodi-n-propylamine	ND	430	280		1	66	28	30-130	40	08/17/2016 1958
N-Nitrosodiphenylamine (Diphenylamine)	ND	430	280		1	65	20	30-130	40	08/17/2016 1958
Pentachlorophenol	ND	860	620		1	72	12	30-130	40	08/17/2016 1958
Phenanthrene	ND	430	270		1	63	13	30-130	40	08/17/2016 1958
Phenol	ND	430	220		1	52	31	30-130	40	08/17/2016 1958
Pyrene	3.6	430	310		1	72	11	30-130	40	08/17/2016 1958
2,4,5-Trichlorophenol	ND	430	250		1	57	16	30-130	40	08/17/2016 1958
2,4,6-Trichlorophenol	ND	430	230		1	53	15	30-130	40	08/17/2016 1958

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		45	33-102
2-Fluorophenol		43	28-104
Nitrobenzene-d5		46	22-109
Phenol-d5		48	27-103
Terphenyl-d14		62	41-120
2,4,6-Tribromophenol		61	30-117

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MB

Sample ID: RQ20013-001
Batch: 20013
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/17/2016 950

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	0.096	J	1	0.25	0.015	mg/kg	08/18/2016 2223
Arsenic	ND		1	0.25	0.032	mg/kg	08/18/2016 2223
Beryllium	ND		1	0.10	0.0080	mg/kg	08/18/2016 2223
Cadmium	ND		1	0.025	0.0020	mg/kg	08/18/2016 2223
Chromium	ND		1	1.3	0.029	mg/kg	08/18/2016 2223
Copper	0.037	J	1	0.25	0.022	mg/kg	08/18/2016 2223
Iron	4.8	J	1	5.0	0.43	mg/kg	08/19/2016 1321
Lead	0.021	J	1	0.25	0.0060	mg/kg	08/18/2016 2223
Manganese	0.30	J	1	1.3	0.24	mg/kg	08/18/2016 2223
Nickel	0.097	J	1	1.3	0.027	mg/kg	08/18/2016 2223
Selenium	ND		1	0.25	0.038	mg/kg	08/18/2016 2223
Silver	ND		1	0.25	0.020	mg/kg	08/18/2016 2223
Thallium	ND		1	0.13	0.0080	mg/kg	08/18/2016 2223
Zinc	0.15	J	1	2.5	0.066	mg/kg	08/18/2016 2223

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - LCS

Sample ID: RQ20013-002
Batch: 20013
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/17/2016 950

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	10	9.3		5	93	80-120	08/18/2016 2234
Arsenic	10	9.9		5	99	80-120	08/18/2016 2234
Beryllium	10	12		5	120	80-120	08/18/2016 2234
Cadmium	10	9.7		5	97	80-120	08/18/2016 2234
Chromium	10	10		5	104	80-120	08/18/2016 2234
Copper	10	10		5	102	80-120	08/18/2016 2234
Iron	100	100		1	101	80-120	08/19/2016 1327
Lead	10	10		5	100	80-120	08/18/2016 2234
Manganese	10	11		5	107	80-120	08/18/2016 2234
Nickel	10	10		5	103	80-120	08/18/2016 2234
Selenium	10	9.6		5	96	80-120	08/18/2016 2234
Silver	10	10		5	103	80-120	08/18/2016 2234
Thallium	10	9.4		5	94	80-120	08/18/2016 2234
Zinc	10	10		5	101	80-120	08/18/2016 2234

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MS

Sample ID: RH13005-001MS
Batch: 20013
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/17/2016 950

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	0.058	7.9	1.6	N	1	19	75-125	08/19/2016 2037
Arsenic	ND	7.9	5.4	N	10	69	75-125	08/19/2016 1822
Beryllium	0.29	7.9	6.1	N	1	73	75-125	08/19/2016 2037
Cadmium	0.029	7.9	7.3		10	92	75-125	08/19/2016 1822
Chromium	16	7.9	24		10	110	75-125	08/19/2016 1822
Copper	17	7.9	26		10	104	75-125	08/19/2016 1822
Iron	15000	79	17000	N	10	2630	75-125	08/19/2016 1822
Lead	2.8	7.9	11		1	106	75-125	08/19/2016 2037
Manganese	300	7.9	380	N	10	986	75-125	08/19/2016 1822
Nickel	10	7.9	18		10	106	75-125	08/19/2016 1822
Selenium	ND	7.9	5.5	N	10	71	75-125	08/19/2016 1822
Silver	ND	7.9	8.2		1	104	75-125	08/19/2016 2037
Thallium	0.040	7.9	8.1		1	102	75-125	08/19/2016 2037
Zinc	39	7.9	50	N	10	142	75-125	08/19/2016 1822

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MSD

Sample ID: RH13005-001MD
Batch: 20013
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/17/2016 950

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Antimony	0.058	7.7	1.4	N	1	18	10	75-125	20	08/19/2016 2042
Arsenic	ND	7.7	5.5	N	10	72	2.4	75-125	20	08/19/2016 1828
Beryllium	0.29	7.7	6.2		1	77	2.0	75-125	20	08/19/2016 2042
Cadmium	0.029	7.7	7.2		10	94	1.3	75-125	20	08/19/2016 1828
Chromium	16	7.7	23		10	102	3.4	75-125	20	08/19/2016 1828
Copper	17	7.7	24		10	91	4.7	75-125	20	08/19/2016 1828
Iron	15000	77	16000	N	10	1590	5.1	75-125	20	08/19/2016 1828
Lead	2.8	7.7	11		1	109	0.41	75-125	20	08/19/2016 2042
Manganese	300	7.7	350	N	10	625	8.1	75-125	20	08/19/2016 1828
Nickel	10	7.7	18		10	106	1.0	75-125	20	08/19/2016 1828
Selenium	ND	7.7	6.1		10	79	9.2	75-125	20	08/19/2016 1828
Silver	ND	7.7	8.5		1	112	4.2	75-125	20	08/19/2016 2042
Thallium	0.040	7.7	8.0		1	104	0.71	75-125	20	08/19/2016 2042
Zinc	39	7.7	48		10	117	4.5	75-125	20	08/19/2016 1828

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MB

Sample ID: RQ20174-001
Batch: 20174
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/19/2016 1032

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	ND		1	0.083	0.0063	mg/kg	08/19/2016 1147

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - LCS

Sample ID: RQ20174-002
Batch: 20174
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/19/2016 1032

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.83	0.81		1	97	80-120	08/19/2016 1149

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MS

Sample ID: RH13005-001MS
Batch: 20174
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/19/2016 1032

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	ND	0.90	1.0		1	114	80-120	08/19/2016 1154

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MSD

Sample ID: RH13005-001MD
Batch: 20174
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/19/2016 1032

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	ND	0.99	1.1		1	107	2.8	80-120	20	08/19/2016 1156

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Chain of Custody
and
Miscellaneous Documents

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63428

Client	CDM Smith
Address	5400 Glenwood Ave Suite 400
City / State / Zip Code	Raleigh / NC / 27612
Project Name	Bud Holdings
Project No.	
P.O. No.	
Report to Contact	Dan Forbes
Sampler's Signature	x Janelle Bauer
Printed Name	Janelle Bauer
Telephone No. / E-mail	forbesd@cdmsmith.com
Quote No.	19101
Page	1 of 2
Analysis (Attach list if more space is needed)	

RH13005

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Matrix: Aqueous	Solid	Non-Aqueous	No of Containers by Preservative Type: Diesel	HCl	HNO3	H2SO4	NaOH	ZnAc/NaOH		VOCs	VOC 1,4-D	SVOC	Hex Cr	Metals NH3, SO4 NO3						Remarks / Cooler I.D.
SB-10-0.5	8-12-16	1345	G		X									X	X	X	X							
SB-10-1.5		1400	G		X									X	X	X	X							
SB-10-18-20		1420	G		X									X	X	X	X							
SB-10-4-6		1445	G		X									X	X	X	X							
SB-10-12-14		1505	G		X									X	X	X	X							
SB-10-14-16		1510	G		X									X	X	X	X							
SB-3-0.5		1515	G		X									X	X	X	X							
SB-3-1.5		1525	G		X									X	X	X	X							
SB-3-6		1530	G		X									X	X	X	X							Hold until confirmation from CDM Smith
SB-3-9		1535	G		X									X	X	X	X							Hold until confirmation from CDM Smith

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☐ Standard ☒ Rush (Specify) 5 day

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

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

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Janelle Bauer	8-12-16	1700	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: Fedex	8/13/16	0835	4. Laboratory received by: Tracy Double	8/13/16	0835

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Circle): (Yes) No Ice Pack — Receipt Temp. 2.1 °C 2.7 3.5

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63430

Client: Jec pg.1
Address:
City: State: Zip Code:
Project Name:
Report to Contact:
Sampler's Signature: x Janelle Bar
Printed Name: Janelle Bauer
Telephone No. / E-mail:
Quote No.:
Analysis (Attach list if more space is needed)
Page 2 of 2
RH13005

Project No.: P.O. No.:

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab/Composite	Aqueous	Solid	Non-Aqueous	Liquid	Acid	NaOH	HCl	NaOH	SO3/Na	VOCs	VOC 1-4,-D	SVOC Hex cr	Metals NH3,SO4 NO2					Remarks / Cooler I.D.
SB-3-10-12	8-12-16	1540	G		X								X	X	X	X					Hold until confirm. LOM sample
DUP-4	8-12-16	0800	G		X								X	X	X	X					
Trip Blank				X									X								

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☐ Standard ☒ Rush (Specify) 5 days
Sample Disposal: ☐ Return to Client ☐ Disposal by Lab
Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown
QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished by: Janelle Bar	8-12-16	1700	1. Received by:		
2. Relinquished by:			2. Received by:		
3. Relinquished by:			3. Received by:		
4. Relinquished by: Fed Ex	8/13/16	0835	4. Laboratory received by: Tracy Hawkins	8/13/16	0835

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle): Yes No Ice Pack
Receipt Temp. 3.5 °C 2.1 2.7

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: MF0018C-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: CDM Smith Cooler Inspected by/date: [illegible] / 8/13/16 Lot #: R-H13005

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: NA Cl strip ID: NA

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

2.1 / 2.1 °C 2.7 / 2.7 °C 3.5 / 3.5 °C / / °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☑	No ☐	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☑	No ☐		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☐	No ☐	NA ☑	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/TEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☑	No ☐	19101	22. Was the quote number used taken from the container label?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be >12 by _____ Date: _____

Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR# _____

Sample labels applied by: [illegible] Verified by: _____ Date: 8/13/16

Comments: _____

Report of Analysis

CDM Smith
5400 Glenwood Avenue
Suite 400
Raleigh, NC 27612
Attention: Dan Forbes

Project Name: Bud Holdings

Project Number: Soil

Lot Number: RH12021

Date Completed: 08/19/2016

Nisreen Saikaly
Project Manager

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The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
CDM Smith
Lot Number: RH12021

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary
CDM Smith
Lot Number: RH12021

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SB-14-0.5	Solid	08/11/2016 1205	08/12/2016
002	SB-14-1.5	Solid	08/11/2016 1700	08/12/2016
003	SB-14-2-4	Solid	08/11/2016 1715	08/12/2016
004	SB-14-10-12	Solid	08/11/2016 1725	08/12/2016
005	SB-14-20-22	Solid	08/11/2016 1745	08/12/2016
006	SB-14-22-24	Solid	08/11/2016 1755	08/12/2016
007	SB-7-0.5	Solid	08/11/2016 1800	08/12/2016
008	SB-7-1.5	Solid	08/11/2016 1805	08/12/2016
009	SB-7-2-4	Solid	08/11/2016 1815	08/12/2016
010	SB-7-6-8	Solid	08/11/2016 1820	08/12/2016
011	SB-7-12-14	Solid	08/11/2016 1830	08/12/2016
012	SB-7-22	Solid	08/11/2016 1835	08/12/2016
013	SB-9-5	Solid	08/11/2016 1905	08/12/2016
014	SB-9-10	Solid	08/11/2016 1915	08/12/2016
015	SB-9-15	Solid	08/11/2016 1920	08/12/2016
016	SB-9-18-20	Solid	08/11/2016 1925	08/12/2016
017	DUP-2	Solid	08/11/2016 0800	08/12/2016
018	TRIP BLANK	Aqueous	08/11/2016	

(18 samples)

Executive Summary
CDM Smith
Lot Number: RH12021

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SB-14-0.5	Solid	Ammonia - N (gas	350.1	0.47	J	mg/kg	17
001	SB-14-0.5	Solid	Hexavalent Chromium	7196A	0.39	J	mg/kg	17
001	SB-14-0.5	Solid	Nitrate - N (soluble)	300.0	0.051	J	mg/kg	17
001	SB-14-0.5	Solid	1R-.alpha.-Pinene	8260B	6.1		ug/kg	21
001	SB-14-0.5	Solid	Camphene	8260B	18		ug/kg	21
001	SB-14-0.5	Solid	Propylene Glycol	8270D	210		ug/kg	22
001	SB-14-0.5	Solid	Unknown	8270D	730		ug/kg	22
001	SB-14-0.5	Solid	Unknown	8270D	84		ug/kg	22
001	SB-14-0.5	Solid	9-Oxononanoic acid	8270D	280		ug/kg	22
001	SB-14-0.5	Solid	Hexadecenoic acid, Z-11-	8270D	110		ug/kg	22
001	SB-14-0.5	Solid	n-Hexadecanoic acid	8270D	410		ug/kg	22
001	SB-14-0.5	Solid	3-Bromobenzoic acid,	8270D	420		ug/kg	22
001	SB-14-0.5	Solid	Octadecanoic acid	8270D	120		ug/kg	22
001	SB-14-0.5	Solid	13-Docosenamide, (Z)-	8270D	770		ug/kg	22
001	SB-14-0.5	Solid	Squalene	8270D	89		ug/kg	22
001	SB-14-0.5	Solid	Tricosane	8270D	81		ug/kg	22
001	SB-14-0.5	Solid	Octacosane	8270D	150		ug/kg	22
001	SB-14-0.5	Solid	Heneicosane, 11-decyl-	8270D	87		ug/kg	22
001	SB-14-0.5	Solid	Arsenic	6020A	0.69	J	mg/kg	25
001	SB-14-0.5	Solid	Beryllium	6020A	0.89	J	mg/kg	25
001	SB-14-0.5	Solid	Cadmium	6020A	0.035	J	mg/kg	25
001	SB-14-0.5	Solid	Chromium	6020A	49		mg/kg	25
001	SB-14-0.5	Solid	Copper	6020A	51		mg/kg	25
001	SB-14-0.5	Solid	Iron	6020A	42000		mg/kg	25
001	SB-14-0.5	Solid	Lead	6020A	7.7		mg/kg	25
001	SB-14-0.5	Solid	Manganese	6020A	540		mg/kg	25
001	SB-14-0.5	Solid	Nickel	6020A	43		mg/kg	25
001	SB-14-0.5	Solid	Thallium	6020A	0.13	J	mg/kg	25
001	SB-14-0.5	Solid	Zinc	6020A	48		mg/kg	25
002	SB-14-1.5	Solid	Ammonia - N (gas	350.1	0.56	J	mg/kg	27
002	SB-14-1.5	Solid	Hexavalent Chromium	7196A	0.38	J	mg/kg	27
002	SB-14-1.5	Solid	Nitrate - N (soluble)	300.0	0.14	J	mg/kg	27
002	SB-14-1.5	Solid	Unknown	8270D	380		ug/kg	32
002	SB-14-1.5	Solid	Unknown	8270D	520		ug/kg	32
002	SB-14-1.5	Solid	Triacetin	8270D	85		ug/kg	32
002	SB-14-1.5	Solid	Unknown	8270D	130		ug/kg	32
002	SB-14-1.5	Solid	n-Hexadecanoic acid	8270D	79		ug/kg	32
002	SB-14-1.5	Solid	6-Octadecenoic acid, (Z)-	8270D	220		ug/kg	32
002	SB-14-1.5	Solid	9-Octadecenamide, (Z)-	8270D	160		ug/kg	32
002	SB-14-1.5	Solid	Eicosane	8270D	86		ug/kg	32
002	SB-14-1.5	Solid	Antimony	6020A	0.031	J	mg/kg	35
002	SB-14-1.5	Solid	Beryllium	6020A	1.1		mg/kg	35
002	SB-14-1.5	Solid	Chromium	6020A	37		mg/kg	35
002	SB-14-1.5	Solid	Copper	6020A	52		mg/kg	35
002	SB-14-1.5	Solid	Iron	6020A	39000		mg/kg	35

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	SB-14-1.5	Solid	Lead	6020A	8.6		mg/kg	35
002	SB-14-1.5	Solid	Manganese	6020A	540		mg/kg	35
002	SB-14-1.5	Solid	Nickel	6020A	22	J	mg/kg	35
002	SB-14-1.5	Solid	Thallium	6020A	0.078	J	mg/kg	35
002	SB-14-1.5	Solid	Zinc	6020A	41		mg/kg	35
002	SB-14-1.5	Solid	Mercury	7471B	0.012	J	mg/kg	36
003	SB-14-2-4	Solid	Ammonia - N (gas	350.1	9.1		mg/kg	37
003	SB-14-2-4	Solid	Hexavalent Chromium	7196A	0.83	J	mg/kg	37
003	SB-14-2-4	Solid	Nitrate - N (soluble)	300.0	0.066	J	mg/kg	37
003	SB-14-2-4	Solid	Acetone	8260B	18	J	ug/kg	39
003	SB-14-2-4	Solid	Unknown	8270D	150		ug/kg	42
003	SB-14-2-4	Solid	Unknown	8270D	650		ug/kg	42
003	SB-14-2-4	Solid	Triacetin	8270D	99		ug/kg	42
003	SB-14-2-4	Solid	10,18-Bisnorabieta-	8270D	200		ug/kg	42
003	SB-14-2-4	Solid	2-Phenanthrenol,	8270D	81		ug/kg	42
003	SB-14-2-4	Solid	13-Docosenamide, (Z)-	8270D	200		ug/kg	42
003	SB-14-2-4	Solid	Pentacosane	8270D	150		ug/kg	42
003	SB-14-2-4	Solid	Tricosane	8270D	130		ug/kg	42
003	SB-14-2-4	Solid	Unknown	8270D	110		ug/kg	42
003	SB-14-2-4	Solid	Antimony	6020A	0.041	J	mg/kg	45
003	SB-14-2-4	Solid	Arsenic	6020A	1.3	J	mg/kg	45
003	SB-14-2-4	Solid	Beryllium	6020A	0.40		mg/kg	45
003	SB-14-2-4	Solid	Chromium	6020A	35		mg/kg	45
003	SB-14-2-4	Solid	Copper	6020A	44		mg/kg	45
003	SB-14-2-4	Solid	Iron	6020A	43000		mg/kg	45
003	SB-14-2-4	Solid	Lead	6020A	16		mg/kg	45
003	SB-14-2-4	Solid	Manganese	6020A	520		mg/kg	45
003	SB-14-2-4	Solid	Nickel	6020A	18		mg/kg	45
003	SB-14-2-4	Solid	Thallium	6020A	0.18		mg/kg	45
003	SB-14-2-4	Solid	Zinc	6020A	31		mg/kg	45
003	SB-14-2-4	Solid	Mercury	7471B	0.057	J	mg/kg	46
004	SB-14-10-12	Solid	Ammonia - N (gas	350.1	11		mg/kg	47
004	SB-14-10-12	Solid	Nitrate - N (soluble)	300.0	0.048	J	mg/kg	47
004	SB-14-10-12	Solid	Acetone	8260B	26		ug/kg	49
004	SB-14-10-12	Solid	Propylene Glycol	8270D	87		ug/kg	52
004	SB-14-10-12	Solid	Unknown	8270D	610		ug/kg	52
004	SB-14-10-12	Solid	Stigmast-4-en-3-one	8270D	110		ug/kg	52
004	SB-14-10-12	Solid	Unknown	8270D	91		ug/kg	52
004	SB-14-10-12	Solid	13-Docosenamide, (Z)-	8270D	360		ug/kg	52
004	SB-14-10-12	Solid	Friedelan-3-one	8270D	290		ug/kg	52
004	SB-14-10-12	Solid	Unknown	8270D	250		ug/kg	52
004	SB-14-10-12	Solid	Unknown	8270D	420		ug/kg	52
004	SB-14-10-12	Solid	Unknown	8270D	76		ug/kg	52
004	SB-14-10-12	Solid	Beryllium	6020A	1.6		mg/kg	55
004	SB-14-10-12	Solid	Cadmium	6020A	0.047	J	mg/kg	55
004	SB-14-10-12	Solid	Chromium	6020A	26		mg/kg	55
004	SB-14-10-12	Solid	Copper	6020A	48		mg/kg	55
004	SB-14-10-12	Solid	Iron	6020A	30000		mg/kg	55

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
004	SB-14-10-12	Solid	Lead	6020A	7.4		mg/kg	55
004	SB-14-10-12	Solid	Manganese	6020A	700		mg/kg	55
004	SB-14-10-12	Solid	Nickel	6020A	19		mg/kg	55
004	SB-14-10-12	Solid	Thallium	6020A	0.049	J	mg/kg	55
004	SB-14-10-12	Solid	Zinc	6020A	54		mg/kg	55
005	SB-14-20-22	Solid	Ammonia - N (gas	350.1	1.9		mg/kg	57
005	SB-14-20-22	Solid	Hexavalent Chromium	7196A	0.61	J	mg/kg	57
005	SB-14-20-22	Solid	Nitrate - N (soluble)	300.0	0.11	J	mg/kg	57
005	SB-14-20-22	Solid	Acetone	8260B	82		ug/kg	59
005	SB-14-20-22	Solid	2-Butanone (MEK)	8260B	11	J	ug/kg	59
005	SB-14-20-22	Solid	1R-.alpha.-Pinene	8260B	61		ug/kg	61
005	SB-14-20-22	Solid	Camphene	8260B	26		ug/kg	61
005	SB-14-20-22	Solid	.beta.-Pinene	8260B	23		ug/kg	61
005	SB-14-20-22	Solid	Unknown	8270D	660		ug/kg	62
005	SB-14-20-22	Solid	Unknown	8270D	120		ug/kg	62
005	SB-14-20-22	Solid	18-Norabietane	8270D	400		ug/kg	62
005	SB-14-20-22	Solid	9-Octadecenoic acid, (E)-	8270D	860		ug/kg	62
005	SB-14-20-22	Solid	10,18-Bisnorabieta-	8270D	110		ug/kg	62
005	SB-14-20-22	Solid	Phenanthrene, 1-methyl-7-	8270D	220		ug/kg	62
005	SB-14-20-22	Solid	Unknown	8270D	130		ug/kg	62
005	SB-14-20-22	Solid	13-Docosenamide, (Z)-	8270D	450		ug/kg	62
005	SB-14-20-22	Solid	Heneicosane	8270D	110		ug/kg	62
005	SB-14-20-22	Solid	Pentacosane	8270D	88		ug/kg	62
005	SB-14-20-22	Solid	Tetracosane	8270D	88		ug/kg	62
005	SB-14-20-22	Solid	Beryllium	6020A	0.24		mg/kg	65
005	SB-14-20-22	Solid	Chromium	6020A	13	J	mg/kg	65
005	SB-14-20-22	Solid	Copper	6020A	7.6		mg/kg	65
005	SB-14-20-22	Solid	Iron	6020A	7400		mg/kg	65
005	SB-14-20-22	Solid	Lead	6020A	3.3		mg/kg	65
005	SB-14-20-22	Solid	Manganese	6020A	63		mg/kg	65
005	SB-14-20-22	Solid	Nickel	6020A	6.4	J	mg/kg	65
005	SB-14-20-22	Solid	Thallium	6020A	0.036	J	mg/kg	65
005	SB-14-20-22	Solid	Zinc	6020A	10		mg/kg	65
006	SB-14-22-24	Solid	Ammonia - N (gas	350.1	32		mg/kg	67
006	SB-14-22-24	Solid	Hexavalent Chromium	7196A	0.62	J	mg/kg	67
006	SB-14-22-24	Solid	Nitrate - N (soluble)	300.0	0.19	J	mg/kg	67
006	SB-14-22-24	Solid	Acetone	8260B	290		ug/kg	69
006	SB-14-22-24	Solid	2-Butanone (MEK)	8260B	34		ug/kg	69
006	SB-14-22-24	Solid	Ethylbenzene	8260B	4.9	J	ug/kg	69
006	SB-14-22-24	Solid	Methyl acetate	8260B	5.0	J	ug/kg	69
006	SB-14-22-24	Solid	4-Octene, 2,6-dimethyl-, [S-	8260B	12		ug/kg	71
006	SB-14-22-24	Solid	Tricyclo[2.2.1.0(2,6)]heptan	8260B	81		ug/kg	71
006	SB-14-22-24	Solid	Bicyclo[3.1.1]heptane, 6,6-	8260B	43		ug/kg	71
006	SB-14-22-24	Solid	Cyclohexene, 1-methyl-4-	8260B	8.6		ug/kg	71
006	SB-14-22-24	Solid	1R-.alpha.-Pinene	8270D	1100		ug/kg	72
006	SB-14-22-24	Solid	Bicyclo[3.1.1]heptane, 6,6-	8270D	3200		ug/kg	72
006	SB-14-22-24	Solid	Unknown	8270D	1000		ug/kg	72
006	SB-14-22-24	Solid	Unknown	8270D	1900		ug/kg	72

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
006	SB-14-22-24	Solid	18-Norabietane	8270D	10000		ug/kg	72
006	SB-14-22-24	Solid	4b,8-Dimethyl-2-	8270D	2400		ug/kg	72
006	SB-14-22-24	Solid	6-Octadecenoic acid, (Z)-	8270D	690		ug/kg	72
006	SB-14-22-24	Solid	5-Bromo-4-oxo-4,5,6,7-	8270D	400		ug/kg	72
006	SB-14-22-24	Solid	Phenanthrene, 1-methyl-7-	8270D	4000		ug/kg	72
006	SB-14-22-24	Solid	Unknown	8270D	370		ug/kg	72
006	SB-14-22-24	Solid	Acridin-9-amine, 1,2,3,4-	8270D	530		ug/kg	72
006	SB-14-22-24	Solid	Unknown	8270D	540		ug/kg	72
006	SB-14-22-24	Solid	Unknown	8270D	600		ug/kg	72
006	SB-14-22-24	Solid	Tridecane, 7-propyl-	8270D	680		ug/kg	72
006	SB-14-22-24	Solid	1-Phenanthrenecarboxylic	8270D	1000		ug/kg	72
006	SB-14-22-24	Solid	4H-1-Benzopyran-4-one,	8270D	840		ug/kg	72
006	SB-14-22-24	Solid	Abietic acid	8270D	840		ug/kg	72
006	SB-14-22-24	Solid	Unknown	8270D	370		ug/kg	72
006	SB-14-22-24	Solid	1-Docosene	8270D	490		ug/kg	72
006	SB-14-22-24	Solid	13-Docosenamide, (Z)-	8270D	510		ug/kg	72
006	SB-14-22-24	Solid	Benzo(a)anthracene	8270D	7.0	J	ug/kg	73
006	SB-14-22-24	Solid	Benzo(a)pyrene	8270D	6.6	J	ug/kg	73
006	SB-14-22-24	Solid	Benzo(b)fluoranthene	8270D	15	J	ug/kg	73
006	SB-14-22-24	Solid	Chrysene	8270D	7.8	J	ug/kg	73
006	SB-14-22-24	Solid	bis(2-Ethylhexyl)phthalate	8270D	39	J	ug/kg	73
006	SB-14-22-24	Solid	Fluoranthene	8270D	33	J	ug/kg	73
006	SB-14-22-24	Solid	3+4-Methylphenol	8270D	28	J	ug/kg	74
006	SB-14-22-24	Solid	Phenanthrene	8270D	7.3	J	ug/kg	74
006	SB-14-22-24	Solid	Pyrene	8270D	14	J	ug/kg	74
006	SB-14-22-24	Solid	Arsenic	6020A	0.68	J	mg/kg	75
006	SB-14-22-24	Solid	Beryllium	6020A	0.41		mg/kg	75
006	SB-14-22-24	Solid	Cadmium	6020A	0.058	J	mg/kg	75
006	SB-14-22-24	Solid	Chromium	6020A	24		mg/kg	75
006	SB-14-22-24	Solid	Copper	6020A	21		mg/kg	75
006	SB-14-22-24	Solid	Iron	6020A	17000		mg/kg	75
006	SB-14-22-24	Solid	Lead	6020A	18		mg/kg	75
006	SB-14-22-24	Solid	Manganese	6020A	450		mg/kg	75
006	SB-14-22-24	Solid	Nickel	6020A	10	J	mg/kg	75
006	SB-14-22-24	Solid	Selenium	6020A	0.56	J	mg/kg	75
006	SB-14-22-24	Solid	Thallium	6020A	0.11	J	mg/kg	75
006	SB-14-22-24	Solid	Zinc	6020A	29		mg/kg	75
006	SB-14-22-24	Solid	Mercury	7471B	0.031	J	mg/kg	76
007	SB-7-0.5	Solid	Ammonia - N (gas	350.1	0.90	J	mg/kg	77
007	SB-7-0.5	Solid	Hexavalent Chromium	7196A	0.60	J	mg/kg	77
007	SB-7-0.5	Solid	Nitrate - N (soluble)	300.0	0.39		mg/kg	77
007	SB-7-0.5	Solid	Unknown	8270D	580		ug/kg	82
007	SB-7-0.5	Solid	n-Hexadecanoic acid	8270D	100		ug/kg	82
007	SB-7-0.5	Solid	4b,8-Dimethyl-2-	8270D	93		ug/kg	82
007	SB-7-0.5	Solid	Dodecane, 2-methyl-8-	8270D	100		ug/kg	82
007	SB-7-0.5	Solid	Unknown	8270D	210		ug/kg	82
007	SB-7-0.5	Solid	Unknown	8270D	100		ug/kg	82
007	SB-7-0.5	Solid	Hexadecanoic acid, butyl	8270D	110		ug/kg	82

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
007	SB-7-0.5	Solid	Octadecanoic acid, butyl	8270D	110		ug/kg	82
007	SB-7-0.5	Solid	1-Heneicosanol	8270D	140		ug/kg	82
007	SB-7-0.5	Solid	Eicosane	8270D	86		ug/kg	82
007	SB-7-0.5	Solid	Z-14-Nonacosane	8270D	350		ug/kg	82
007	SB-7-0.5	Solid	13-Docosenamide, (Z)-	8270D	430		ug/kg	82
007	SB-7-0.5	Solid	Unknown	8270D	180		ug/kg	82
007	SB-7-0.5	Solid	Friedelan-3-one	8270D	590		ug/kg	82
007	SB-7-0.5	Solid	Octacosane	8270D	440		ug/kg	82
007	SB-7-0.5	Solid	Unknown	8270D	150		ug/kg	82
007	SB-7-0.5	Solid	Unknown	8270D	140		ug/kg	82
007	SB-7-0.5	Solid	Unknown	8270D	180		ug/kg	82
007	SB-7-0.5	Solid	Acenaphthylene	8270D	6.9	J	ug/kg	83
007	SB-7-0.5	Solid	Anthracene	8270D	9.8	J	ug/kg	83
007	SB-7-0.5	Solid	Benzo(a)anthracene	8270D	52		ug/kg	83
007	SB-7-0.5	Solid	Benzo(a)pyrene	8270D	67		ug/kg	83
007	SB-7-0.5	Solid	Benzo(b)fluoranthene	8270D	79		ug/kg	83
007	SB-7-0.5	Solid	Benzo(g,h,i)perylene	8270D	22	J	ug/kg	83
007	SB-7-0.5	Solid	Benzo(k)fluoranthene	8270D	36	J	ug/kg	83
007	SB-7-0.5	Solid	Chrysene	8270D	54		ug/kg	83
007	SB-7-0.5	Solid	Di-n-butyl phthalate	8270D	30	J	ug/kg	83
007	SB-7-0.5	Solid	bis(2-Ethylhexyl)phthalate	8270D	31	J	ug/kg	83
007	SB-7-0.5	Solid	Fluoranthene	8270D	86		ug/kg	83
007	SB-7-0.5	Solid	Indeno(1,2,3-c,d)pyrene	8270D	22	J	ug/kg	84
007	SB-7-0.5	Solid	Phenanthrene	8270D	36	J	ug/kg	84
007	SB-7-0.5	Solid	Pyrene	8270D	81		ug/kg	84
007	SB-7-0.5	Solid	Arsenic	6020A	1.3	J	mg/kg	85
007	SB-7-0.5	Solid	Beryllium	6020A	0.24		mg/kg	85
007	SB-7-0.5	Solid	Cadmium	6020A	0.27	J	mg/kg	85
007	SB-7-0.5	Solid	Chromium	6020A	32		mg/kg	85
007	SB-7-0.5	Solid	Copper	6020A	38		mg/kg	85
007	SB-7-0.5	Solid	Iron	6020A	32000		mg/kg	85
007	SB-7-0.5	Solid	Lead	6020A	51		mg/kg	85
007	SB-7-0.5	Solid	Manganese	6020A	490		mg/kg	85
007	SB-7-0.5	Solid	Nickel	6020A	14		mg/kg	85
007	SB-7-0.5	Solid	Thallium	6020A	0.10	J	mg/kg	85
007	SB-7-0.5	Solid	Zinc	6020A	890		mg/kg	85
007	SB-7-0.5	Solid	Mercury	7471B	0.054	J	mg/kg	86
008	SB-7-1.5	Solid	Ammonia - N (gas	350.1	0.45	J	mg/kg	87
008	SB-7-1.5	Solid	Hexavalent Chromium	7196A	0.82	J	mg/kg	87
008	SB-7-1.5	Solid	Nitrate - N (soluble)	300.0	0.81		mg/kg	87
008	SB-7-1.5	Solid	Unknown	8270D	520		ug/kg	92
008	SB-7-1.5	Solid	Heptacosane	8270D	630		ug/kg	92
008	SB-7-1.5	Solid	Benzo(a)anthracene	8270D	56	J	ug/kg	93
008	SB-7-1.5	Solid	Benzo(a)pyrene	8270D	59	J	ug/kg	93
008	SB-7-1.5	Solid	Benzo(b)fluoranthene	8270D	78	J	ug/kg	93
008	SB-7-1.5	Solid	Benzo(g,h,i)perylene	8270D	28	J	ug/kg	93
008	SB-7-1.5	Solid	Benzo(k)fluoranthene	8270D	35	J	ug/kg	93
008	SB-7-1.5	Solid	Chrysene	8270D	49	J	ug/kg	93

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
008	SB-7-1.5	Solid	bis(2-Ethylhexyl)phthalate	8270D	120	J	ug/kg	93
008	SB-7-1.5	Solid	Fluoranthene	8270D	93	J	ug/kg	93
008	SB-7-1.5	Solid	Indeno(1,2,3-c,d)pyrene	8270D	22	J	ug/kg	94
008	SB-7-1.5	Solid	Phenanthrene	8270D	31	J	ug/kg	94
008	SB-7-1.5	Solid	Pyrene	8270D	81	J	ug/kg	94
008	SB-7-1.5	Solid	Arsenic	6020A	2.2	J	mg/kg	95
008	SB-7-1.5	Solid	Beryllium	6020A	0.27		mg/kg	95
008	SB-7-1.5	Solid	Cadmium	6020A	0.25	J	mg/kg	95
008	SB-7-1.5	Solid	Chromium	6020A	87		mg/kg	95
008	SB-7-1.5	Solid	Copper	6020A	34		mg/kg	95
008	SB-7-1.5	Solid	Iron	6020A	37000		mg/kg	95
008	SB-7-1.5	Solid	Lead	6020A	49		mg/kg	95
008	SB-7-1.5	Solid	Manganese	6020A	320		mg/kg	95
008	SB-7-1.5	Solid	Nickel	6020A	13	J	mg/kg	95
008	SB-7-1.5	Solid	Selenium	6020A	0.63	J	mg/kg	95
008	SB-7-1.5	Solid	Thallium	6020A	0.098	J	mg/kg	95
008	SB-7-1.5	Solid	Zinc	6020A	88		mg/kg	95
008	SB-7-1.5	Solid	Mercury	7471B	0.24		mg/kg	96
009	SB-7-2-4	Solid	Ammonia - N (gas	350.1	6.2		mg/kg	97
009	SB-7-2-4	Solid	Hexavalent Chromium	7196A	0.72	J	mg/kg	97
009	SB-7-2-4	Solid	Nitrate - N (soluble)	300.0	0.53		mg/kg	97
009	SB-7-2-4	Solid	Acetone	8260B	77		ug/kg	99
009	SB-7-2-4	Solid	2-Butanone (MEK)	8260B	11	J	ug/kg	99
009	SB-7-2-4	Solid	2-Pentanone	8260B	4.0		ug/kg	101
009	SB-7-2-4	Solid	Propylene Glycol	8270D	120		ug/kg	102
009	SB-7-2-4	Solid	Unknown	8270D	500		ug/kg	102
009	SB-7-2-4	Solid	n-Hexadecanoic acid	8270D	1400		ug/kg	102
009	SB-7-2-4	Solid	9-Octadecenoic acid, (E)-	8270D	2200		ug/kg	102
009	SB-7-2-4	Solid	Octadecanoic acid	8270D	350		ug/kg	102
009	SB-7-2-4	Solid	Unknown	8270D	99		ug/kg	102
009	SB-7-2-4	Solid	Unknown	8270D	100		ug/kg	102
009	SB-7-2-4	Solid	Unknown	8270D	460		ug/kg	102
009	SB-7-2-4	Solid	Octadecanoic acid, butyl	8270D	120		ug/kg	102
009	SB-7-2-4	Solid	Heneicosane	8270D	360		ug/kg	102
009	SB-7-2-4	Solid	Oxirane, hexadecyl-	8270D	130		ug/kg	102
009	SB-7-2-4	Solid	13-Docosenamide, (Z)-	8270D	1200		ug/kg	102
009	SB-7-2-4	Solid	Squalene	8270D	160		ug/kg	102
009	SB-7-2-4	Solid	Unknown	8270D	590		ug/kg	102
009	SB-7-2-4	Solid	Heptacosane	8270D	99		ug/kg	102
009	SB-7-2-4	Solid	Unknown	8270D	180		ug/kg	102
009	SB-7-2-4	Solid	Unknown	8270D	140		ug/kg	102
009	SB-7-2-4	Solid	Unknown	8270D	120		ug/kg	102
009	SB-7-2-4	Solid	Unknown	8270D	140		ug/kg	102
009	SB-7-2-4	Solid	Stigmasterol, 22,23-	8270D	690		ug/kg	102
009	SB-7-2-4	Solid	Benzo(a)anthracene	8270D	5.4	J	ug/kg	103
009	SB-7-2-4	Solid	Chrysene	8270D	3.2	J	ug/kg	103
009	SB-7-2-4	Solid	Di-n-butyl phthalate	8270D	17	J	ug/kg	103
009	SB-7-2-4	Solid	bis(2-Ethylhexyl)phthalate	8270D	20	J	ug/kg	103

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
009	SB-7-2-4	Solid	Fluoranthene	8270D	5.3	J	ug/kg	103
009	SB-7-2-4	Solid	Pyrene	8270D	5.8	J	ug/kg	104
009	SB-7-2-4	Solid	Arsenic	6020A	0.97	J	mg/kg	105
009	SB-7-2-4	Solid	Beryllium	6020A	0.18		mg/kg	105
009	SB-7-2-4	Solid	Cadmium	6020A	0.033	J	mg/kg	105
009	SB-7-2-4	Solid	Chromium	6020A	20		mg/kg	105
009	SB-7-2-4	Solid	Copper	6020A	17		mg/kg	105
009	SB-7-2-4	Solid	Iron	6020A	18000		mg/kg	105
009	SB-7-2-4	Solid	Lead	6020A	9.4		mg/kg	105
009	SB-7-2-4	Solid	Manganese	6020A	260		mg/kg	105
009	SB-7-2-4	Solid	Nickel	6020A	6.8	J	mg/kg	105
009	SB-7-2-4	Solid	Thallium	6020A	0.065	J	mg/kg	105
009	SB-7-2-4	Solid	Zinc	6020A	21		mg/kg	105
009	SB-7-2-4	Solid	Mercury	7471B	0.047	J	mg/kg	106
010	SB-7-6-8	Solid	Ammonia - N (gas	350.1	15		mg/kg	107
010	SB-7-6-8	Solid	Hexavalent Chromium	7196A	0.44	J	mg/kg	107
010	SB-7-6-8	Solid	Nitrate - N (soluble)	300.0	0.76		mg/kg	107
010	SB-7-6-8	Solid	Acetone	8260B	130		ug/kg	109
010	SB-7-6-8	Solid	2-Butanone (MEK)	8260B	15	J	ug/kg	109
010	SB-7-6-8	Solid	.beta.-Pinene	8260B	6.2		ug/kg	111
010	SB-7-6-8	Solid	R-(-)-1,2-propanediol	8270D	130		ug/kg	112
010	SB-7-6-8	Solid	Unknown	8270D	580		ug/kg	112
010	SB-7-6-8	Solid	Unknown	8270D	86		ug/kg	112
010	SB-7-6-8	Solid	Tetradecanoic acid	8270D	200		ug/kg	112
010	SB-7-6-8	Solid	18-Norabietane	8270D	99		ug/kg	112
010	SB-7-6-8	Solid	Hexadecanoic acid, butyl	8270D	97		ug/kg	112
010	SB-7-6-8	Solid	Octadecanoic acid, butyl	8270D	110		ug/kg	112
010	SB-7-6-8	Solid	Unknown	8270D	160		ug/kg	112
010	SB-7-6-8	Solid	Unknown	8270D	99		ug/kg	112
010	SB-7-6-8	Solid	13-Docosenamide, (Z)-	8270D	500		ug/kg	112
010	SB-7-6-8	Solid	Nonadecane	8270D	93		ug/kg	112
010	SB-7-6-8	Solid	Naphthalene,	8270D	200		ug/kg	112
010	SB-7-6-8	Solid	Unknown	8270D	95		ug/kg	112
010	SB-7-6-8	Solid	Anthracene	8270D	5.8	J	ug/kg	113
010	SB-7-6-8	Solid	Benzo(a)anthracene	8270D	28	J	ug/kg	113
010	SB-7-6-8	Solid	Benzo(a)pyrene	8270D	35	J	ug/kg	113
010	SB-7-6-8	Solid	Benzo(b)fluoranthene	8270D	46		ug/kg	113
010	SB-7-6-8	Solid	Benzo(g,h,i)perylene	8270D	20	J	ug/kg	113
010	SB-7-6-8	Solid	Benzo(k)fluoranthene	8270D	18	J	ug/kg	113
010	SB-7-6-8	Solid	Chrysene	8270D	33	J	ug/kg	113
010	SB-7-6-8	Solid	Di-n-butyl phthalate	8270D	18	J	ug/kg	113
010	SB-7-6-8	Solid	bis(2-Ethylhexyl)phthalate	8270D	700		ug/kg	113
010	SB-7-6-8	Solid	Fluoranthene	8270D	50		ug/kg	113
010	SB-7-6-8	Solid	Indeno(1,2,3-c,d)pyrene	8270D	18	J	ug/kg	114
010	SB-7-6-8	Solid	Phenanthrene	8270D	21	J	ug/kg	114
010	SB-7-6-8	Solid	Pyrene	8270D	48		ug/kg	114
010	SB-7-6-8	Solid	Arsenic	6020A	2.4	J	mg/kg	115
010	SB-7-6-8	Solid	Beryllium	6020A	0.23		mg/kg	115

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
010	SB-7-6-8	Solid	Cadmium	6020A	0.092	J	mg/kg	115
010	SB-7-6-8	Solid	Chromium	6020A	50		mg/kg	115
010	SB-7-6-8	Solid	Copper	6020A	41		mg/kg	115
010	SB-7-6-8	Solid	Iron	6020A	39000		mg/kg	115
010	SB-7-6-8	Solid	Lead	6020A	22		mg/kg	115
010	SB-7-6-8	Solid	Manganese	6020A	360		mg/kg	115
010	SB-7-6-8	Solid	Nickel	6020A	17		mg/kg	115
010	SB-7-6-8	Solid	Selenium	6020A	0.47	J	mg/kg	115
010	SB-7-6-8	Solid	Thallium	6020A	0.098	J	mg/kg	115
010	SB-7-6-8	Solid	Zinc	6020A	78		mg/kg	115
010	SB-7-6-8	Solid	Mercury	7471B	0.031	J	mg/kg	116
011	SB-7-12-14	Solid	Ammonia - N (gas	350.1	4.5		mg/kg	117
011	SB-7-12-14	Solid	Hexavalent Chromium	7196A	1.0	J	mg/kg	117
011	SB-7-12-14	Solid	Nitrate - N (soluble)	300.0	0.99		mg/kg	117
011	SB-7-12-14	Solid	Acetone	8260B	86		ug/kg	119
011	SB-7-12-14	Solid	2-Butanone (MEK)	8260B	10	J	ug/kg	119
011	SB-7-12-14	Solid	Toluene	8260B	6.1		ug/kg	119
011	SB-7-12-14	Solid	Camphene	8260B	5.2		ug/kg	121
011	SB-7-12-14	Solid	.beta.-Pinene	8260B	5.2		ug/kg	121
011	SB-7-12-14	Solid	2-Nonanone	8260B	3.8		ug/kg	121
011	SB-7-12-14	Solid	1,2,4-Metheno-1H-indene,	8270D	2700		ug/kg	122
011	SB-7-12-14	Solid	Cyclohexane, 1-ethenyl-1-	8270D	1600		ug/kg	122
011	SB-7-12-14	Solid	1H-	8270D	570		ug/kg	122
011	SB-7-12-14	Solid	Naphthalene, 1,2,4a,5,8,8a-	8270D	590		ug/kg	122
011	SB-7-12-14	Solid	.alpha.-Muurolene	8270D	1800		ug/kg	122
011	SB-7-12-14	Solid	Naphthalene, 1,2,3,5,6,8a-	8270D	2300		ug/kg	122
011	SB-7-12-14	Solid	Naphthalene, 1,2,3,4-	8270D	1800		ug/kg	122
011	SB-7-12-14	Solid	.alpha.-Cadinol	8270D	850		ug/kg	122
011	SB-7-12-14	Solid	Phenol, 2,6-dimethoxy-4-(2-	8270D	670		ug/kg	122
011	SB-7-12-14	Solid	Tetradecanoic acid	8270D	730		ug/kg	122
011	SB-7-12-14	Solid	n-Hexadecanoic acid	8270D	5900		ug/kg	122
011	SB-7-12-14	Solid	Unknown	8270D	1000		ug/kg	122
011	SB-7-12-14	Solid	2H-Inden-2-one,	8270D	3200		ug/kg	122
011	SB-7-12-14	Solid	Unknown	8270D	510		ug/kg	122
011	SB-7-12-14	Solid	Unknown	8270D	2500		ug/kg	122
011	SB-7-12-14	Solid	6-Octadecenoic acid, (Z)-	8270D	850		ug/kg	122
011	SB-7-12-14	Solid	Unknown	8270D	970		ug/kg	122
011	SB-7-12-14	Solid	13-Docosenamide, (Z)-	8270D	880		ug/kg	122
011	SB-7-12-14	Solid	Unknown	8270D	750		ug/kg	122
011	SB-7-12-14	Solid	.beta.-Sitosterol	8270D	2000		ug/kg	122
011	SB-7-12-14	Solid	Anthracene	8270D	6.1	J	ug/kg	123
011	SB-7-12-14	Solid	Benzo(a)anthracene	8270D	20	J	ug/kg	123
011	SB-7-12-14	Solid	Benzo(a)pyrene	8270D	25	J	ug/kg	123
011	SB-7-12-14	Solid	Benzo(b)fluoranthene	8270D	24	J	ug/kg	123
011	SB-7-12-14	Solid	Benzo(k)fluoranthene	8270D	15	J	ug/kg	123
011	SB-7-12-14	Solid	Chrysene	8270D	18	J	ug/kg	123
011	SB-7-12-14	Solid	Di-n-butyl phthalate	8270D	40	J	ug/kg	123
011	SB-7-12-14	Solid	bis(2-Ethylhexyl)phthalate	8270D	67		ug/kg	123

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
011	SB-7-12-14	Solid	Fluoranthene	8270D	40	J	ug/kg	123
011	SB-7-12-14	Solid	Indeno(1,2,3-c,d)pyrene	8270D	8.5	J	ug/kg	124
011	SB-7-12-14	Solid	3+4-Methylphenol	8270D	53	J	ug/kg	124
011	SB-7-12-14	Solid	Phenanthrene	8270D	25	J	ug/kg	124
011	SB-7-12-14	Solid	Pyrene	8270D	34	J	ug/kg	124
011	SB-7-12-14	Solid	Arsenic	6020A	0.95		mg/kg	125
011	SB-7-12-14	Solid	Beryllium	6020A	0.18		mg/kg	125
011	SB-7-12-14	Solid	Cadmium	6020A	0.012	J	mg/kg	125
011	SB-7-12-14	Solid	Chromium	6020A	21		mg/kg	125
011	SB-7-12-14	Solid	Copper	6020A	19		mg/kg	125
011	SB-7-12-14	Solid	Iron	6020A	22000		mg/kg	125
011	SB-7-12-14	Solid	Lead	6020A	5.8		mg/kg	125
011	SB-7-12-14	Solid	Manganese	6020A	73		mg/kg	125
011	SB-7-12-14	Solid	Nickel	6020A	5.7		mg/kg	125
011	SB-7-12-14	Solid	Selenium	6020A	0.25	J	mg/kg	125
011	SB-7-12-14	Solid	Thallium	6020A	0.093	J	mg/kg	125
011	SB-7-12-14	Solid	Zinc	6020A	23		mg/kg	125
011	SB-7-12-14	Solid	Mercury	7471B	0.022	J	mg/kg	126
012	SB-7-22	Solid	Ammonia - N (gas	350.1	0.87	J	mg/kg	127
012	SB-7-22	Solid	Nitrate - N (soluble)	300.0	0.10	J	mg/kg	127
012	SB-7-22	Solid	Acetone	8260B	44		ug/kg	129
012	SB-7-22	Solid	Cyclobutane, methyl-	8260B	31		ug/kg	131
012	SB-7-22	Solid	R-(-)-1,2-propanediol	8270D	120		ug/kg	132
012	SB-7-22	Solid	Unknown	8270D	490		ug/kg	132
012	SB-7-22	Solid	13-Docosenamide, (Z)-	8270D	500		ug/kg	132
012	SB-7-22	Solid	Unknown	8270D	670		ug/kg	132
012	SB-7-22	Solid	Di-n-butyl phthalate	8270D	17	J	ug/kg	133
012	SB-7-22	Solid	Beryllium	6020A	0.29		mg/kg	135
012	SB-7-22	Solid	Chromium	6020A	15	J	mg/kg	135
012	SB-7-22	Solid	Copper	6020A	17		mg/kg	135
012	SB-7-22	Solid	Iron	6020A	8800		mg/kg	135
012	SB-7-22	Solid	Lead	6020A	5.6		mg/kg	135
012	SB-7-22	Solid	Manganese	6020A	69		mg/kg	135
012	SB-7-22	Solid	Nickel	6020A	7.9	J	mg/kg	135
012	SB-7-22	Solid	Thallium	6020A	0.066	J	mg/kg	135
012	SB-7-22	Solid	Zinc	6020A	15		mg/kg	135
013	SB-9-5	Solid	Ammonia - N (gas	350.1	18		mg/kg	137
013	SB-9-5	Solid	Hexavalent Chromium	7196A	0.75	J	mg/kg	137
013	SB-9-5	Solid	Nitrate - N (soluble)	300.0	0.66		mg/kg	137
013	SB-9-5	Solid	Acetone	8260B	77		ug/kg	139
013	SB-9-5	Solid	2-Butanone (MEK)	8260B	9.2	J	ug/kg	139
013	SB-9-5	Solid	Unknown	8270D	470		ug/kg	142
013	SB-9-5	Solid	Diethyltoluamide	8270D	92		ug/kg	142
013	SB-9-5	Solid	9-Octadecenoic acid, (E)-	8270D	330		ug/kg	142
013	SB-9-5	Solid	Hexadecanoic acid, butyl	8270D	160		ug/kg	142
013	SB-9-5	Solid	Octadecanoic acid, butyl	8270D	170		ug/kg	142
013	SB-9-5	Solid	Unknown	8270D	90		ug/kg	142
013	SB-9-5	Solid	13-Docosenamide, (Z)-	8270D	370		ug/kg	142

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
013	SB-9-5	Solid	Unknown	8270D	100		ug/kg	142
013	SB-9-5	Solid	Heneicosane, 11-pentyl-	8270D	170		ug/kg	142
013	SB-9-5	Solid	Guaia-3,9-diene	8270D	100		ug/kg	142
013	SB-9-5	Solid	Benzo(a)anthracene	8270D	5.9	J	ug/kg	143
013	SB-9-5	Solid	Benzo(a)pyrene	8270D	5.5	J	ug/kg	143
013	SB-9-5	Solid	Benzo(b)fluoranthene	8270D	9.0	J	ug/kg	143
013	SB-9-5	Solid	Benzo(g,h,i)perylene	8270D	2.8	J	ug/kg	143
013	SB-9-5	Solid	Fluoranthene	8270D	6.2	J	ug/kg	143
013	SB-9-5	Solid	Pyrene	8270D	8.4	J	ug/kg	144
013	SB-9-5	Solid	Antimony	6020A	0.039	J	mg/kg	145
013	SB-9-5	Solid	Arsenic	6020A	1.2	J	mg/kg	145
013	SB-9-5	Solid	Beryllium	6020A	0.33		mg/kg	145
013	SB-9-5	Solid	Cadmium	6020A	0.078	J	mg/kg	145
013	SB-9-5	Solid	Chromium	6020A	42		mg/kg	145
013	SB-9-5	Solid	Copper	6020A	40		mg/kg	145
013	SB-9-5	Solid	Iron	6020A	30000		mg/kg	145
013	SB-9-5	Solid	Lead	6020A	20		mg/kg	145
013	SB-9-5	Solid	Manganese	6020A	320		mg/kg	145
013	SB-9-5	Solid	Nickel	6020A	14	J	mg/kg	145
013	SB-9-5	Solid	Thallium	6020A	0.10	J	mg/kg	145
013	SB-9-5	Solid	Zinc	6020A	56		mg/kg	145
013	SB-9-5	Solid	Mercury	7471B	0.035	J	mg/kg	146
014	SB-9-10	Solid	Ammonia - N (gas	350.1	22		mg/kg	147
014	SB-9-10	Solid	Hexavalent Chromium	7196A	0.98	J	mg/kg	147
014	SB-9-10	Solid	Nitrate - N (soluble)	300.0	1.2		mg/kg	147
014	SB-9-10	Solid	Sulfate (soluble)	300.0	26		mg/kg	147
014	SB-9-10	Solid	Acetone	8260B	170		ug/kg	149
014	SB-9-10	Solid	2-Butanone (MEK)	8260B	22	J	ug/kg	149
014	SB-9-10	Solid	Chlorobenzene	8260B	17		ug/kg	149
014	SB-9-10	Solid	1,4-Dichlorobenzene	8260B	9.0		ug/kg	149
014	SB-9-10	Solid	Unknown	8270D	470		ug/kg	152
014	SB-9-10	Solid	Unknown	8270D	830		ug/kg	152
014	SB-9-10	Solid	Unknown	8270D	610		ug/kg	152
014	SB-9-10	Solid	28-Nor-17.beta.(H)-hopane	8270D	800		ug/kg	152
014	SB-9-10	Solid	1-Cyclohexene, 1,3,3-	8270D	730		ug/kg	152
014	SB-9-10	Solid	Benzo(b)fluoranthene	8270D	67	J	ug/kg	153
014	SB-9-10	Solid	Chrysene	8270D	30	J	ug/kg	153
014	SB-9-10	Solid	Fluoranthene	8270D	30	J	ug/kg	153
014	SB-9-10	Solid	Phenanthrene	8270D	25	J	ug/kg	154
014	SB-9-10	Solid	Pyrene	8270D	45	J	ug/kg	154
014	SB-9-10	Solid	Arsenic	6020A	1.2	J	mg/kg	155
014	SB-9-10	Solid	Beryllium	6020A	0.29		mg/kg	155
014	SB-9-10	Solid	Cadmium	6020A	0.18	J	mg/kg	155
014	SB-9-10	Solid	Chromium	6020A	25		mg/kg	155
014	SB-9-10	Solid	Copper	6020A	51		mg/kg	155
014	SB-9-10	Solid	Iron	6020A	32000		mg/kg	155
014	SB-9-10	Solid	Lead	6020A	22		mg/kg	155
014	SB-9-10	Solid	Manganese	6020A	490		mg/kg	155

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
014	SB-9-10	Solid	Nickel	6020A	14	J	mg/kg	155
014	SB-9-10	Solid	Thallium	6020A	0.18		mg/kg	155
014	SB-9-10	Solid	Zinc	6020A	44		mg/kg	155
014	SB-9-10	Solid	Mercury	7471B	0.054	J	mg/kg	156
015	SB-9-15	Solid	Ammonia - N (gas	350.1	46		mg/kg	157
015	SB-9-15	Solid	Hexavalent Chromium	7196A	1.4		mg/kg	157
015	SB-9-15	Solid	Nitrate - N (soluble)	300.0	1.3		mg/kg	157
015	SB-9-15	Solid	Sulfate (soluble)	300.0	94		mg/kg	157
015	SB-9-15	Solid	Acetone	8260B	100		ug/kg	159
015	SB-9-15	Solid	2-Butanone (MEK)	8260B	12	J	ug/kg	159
015	SB-9-15	Solid	Carbon disulfide	8260B	3.5	J	ug/kg	159
015	SB-9-15	Solid	Chlorobenzene	8260B	58		ug/kg	159
015	SB-9-15	Solid	R-(-)-1,2-propanediol	8270D	110		ug/kg	162
015	SB-9-15	Solid	Unknown	8270D	1400		ug/kg	162
015	SB-9-15	Solid	Diethyltoluamide	8270D	97		ug/kg	162
015	SB-9-15	Solid	Hexadecanoic acid, butyl	8270D	250		ug/kg	162
015	SB-9-15	Solid	Octadecanoic acid, butyl	8270D	210		ug/kg	162
015	SB-9-15	Solid	Silane, trichlorooctadecyl-	8270D	130		ug/kg	162
015	SB-9-15	Solid	7H-Furo[3,2-	8270D	160		ug/kg	162
015	SB-9-15	Solid	Cyclohexadecane	8270D	180		ug/kg	162
015	SB-9-15	Solid	Unknown	8270D	450		ug/kg	162
015	SB-9-15	Solid	Cyclotetradecane	8270D	150		ug/kg	162
015	SB-9-15	Solid	Unknown	8270D	160		ug/kg	162
015	SB-9-15	Solid	Z-12-Pentacosene	8270D	130		ug/kg	162
015	SB-9-15	Solid	1-Heptadecanol, acetate	8270D	93		ug/kg	162
015	SB-9-15	Solid	Unknown	8270D	140		ug/kg	162
015	SB-9-15	Solid	Dodecanoic acid,	8270D	120		ug/kg	162
015	SB-9-15	Solid	Octadecane	8270D	170		ug/kg	162
015	SB-9-15	Solid	Benzo(a)anthracene	8270D	45		ug/kg	163
015	SB-9-15	Solid	Benzo(a)pyrene	8270D	45		ug/kg	163
015	SB-9-15	Solid	Benzo(b)fluoranthene	8270D	86		ug/kg	163
015	SB-9-15	Solid	Benzo(g,h,i)perylene	8270D	21	J	ug/kg	163
015	SB-9-15	Solid	Benzo(k)fluoranthene	8270D	28	J	ug/kg	163
015	SB-9-15	Solid	Chrysene	8270D	54		ug/kg	163
015	SB-9-15	Solid	bis(2-Ethylhexyl)phthalate	8270D	25	J	ug/kg	163
015	SB-9-15	Solid	Fluoranthene	8270D	97		ug/kg	163
015	SB-9-15	Solid	Indeno(1,2,3-c,d)pyrene	8270D	21	J	ug/kg	164
015	SB-9-15	Solid	Phenanthrene	8270D	27	J	ug/kg	164
015	SB-9-15	Solid	Pyrene	8270D	71		ug/kg	164
015	SB-9-15	Solid	Arsenic	6020A	1.1	J	mg/kg	165
015	SB-9-15	Solid	Beryllium	6020A	0.37		mg/kg	165
015	SB-9-15	Solid	Cadmium	6020A	0.29	J	mg/kg	165
015	SB-9-15	Solid	Chromium	6020A	39		mg/kg	165
015	SB-9-15	Solid	Copper	6020A	39		mg/kg	165
015	SB-9-15	Solid	Iron	6020A	32000		mg/kg	165
015	SB-9-15	Solid	Lead	6020A	33		mg/kg	165
015	SB-9-15	Solid	Manganese	6020A	1000		mg/kg	165
015	SB-9-15	Solid	Nickel	6020A	15	J	mg/kg	165

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
015	SB-9-15	Solid	Selenium	6020A	0.51	J	mg/kg	165
015	SB-9-15	Solid	Thallium	6020A	0.16		mg/kg	165
015	SB-9-15	Solid	Zinc	6020A	64		mg/kg	165
015	SB-9-15	Solid	Mercury	7471B	0.054	J	mg/kg	166
016	SB-9-18-20	Solid	Ammonia - N (gas	350.1	72		mg/kg	167
016	SB-9-18-20	Solid	Hexavalent Chromium	7196A	1.0	J	mg/kg	167
016	SB-9-18-20	Solid	Nitrate - N (soluble)	300.0	0.10	J	mg/kg	167
016	SB-9-18-20	Solid	Acetone	8260B	70		ug/kg	169
016	SB-9-18-20	Solid	2-Butanone (MEK)	8260B	11	J	ug/kg	169
016	SB-9-18-20	Solid	Chlorobenzene	8260B	11		ug/kg	169
016	SB-9-18-20	Solid	Unknown	8270D	96		ug/kg	172
016	SB-9-18-20	Solid	R-(-)-1,2-propanediol	8270D	110		ug/kg	172
016	SB-9-18-20	Solid	Unknown	8270D	550		ug/kg	172
016	SB-9-18-20	Solid	1,2,3-Propanetriol,	8270D	100		ug/kg	172
016	SB-9-18-20	Solid	n-Hexadecanoic acid	8270D	92		ug/kg	172
016	SB-9-18-20	Solid	9-Octadecenoic acid, (E)-	8270D	230		ug/kg	172
016	SB-9-18-20	Solid	Hexadecanoic acid, butyl	8270D	100		ug/kg	172
016	SB-9-18-20	Solid	Cyclooctadecane, ethyl-	8270D	100		ug/kg	172
016	SB-9-18-20	Solid	1-Nonadecene	8270D	110		ug/kg	172
016	SB-9-18-20	Solid	Unknown	8270D	140		ug/kg	172
016	SB-9-18-20	Solid	13-Docosenamide, (Z)-	8270D	170		ug/kg	172
016	SB-9-18-20	Solid	Docosane	8270D	93		ug/kg	172
016	SB-9-18-20	Solid	Perylene	8270D	500		ug/kg	172
016	SB-9-18-20	Solid	Hexatriacontane	8270D	120		ug/kg	172
016	SB-9-18-20	Solid	Di-n-butyl phthalate	8270D	22	J	ug/kg	173
016	SB-9-18-20	Solid	Beryllium	6020A	0.71		mg/kg	175
016	SB-9-18-20	Solid	Chromium	6020A	24		mg/kg	175
016	SB-9-18-20	Solid	Copper	6020A	8.9		mg/kg	175
016	SB-9-18-20	Solid	Iron	6020A	11000		mg/kg	175
016	SB-9-18-20	Solid	Lead	6020A	11		mg/kg	175
016	SB-9-18-20	Solid	Manganese	6020A	110		mg/kg	175
016	SB-9-18-20	Solid	Nickel	6020A	8.2	J	mg/kg	175
016	SB-9-18-20	Solid	Thallium	6020A	0.13	J	mg/kg	175
016	SB-9-18-20	Solid	Zinc	6020A	22		mg/kg	175
016	SB-9-18-20	Solid	Mercury	7471B	0.0091	J	mg/kg	176
017	DUP-2	Solid	Ammonia - N (gas	350.1	13		mg/kg	177
017	DUP-2	Solid	Hexavalent Chromium	7196A	0.44	J	mg/kg	177
017	DUP-2	Solid	Nitrate - N (soluble)	300.0	0.085	J	mg/kg	177
017	DUP-2	Solid	Acetone	8260B	37		ug/kg	179
017	DUP-2	Solid	2-Butanone (MEK)	8260B	3.9	J	ug/kg	179
017	DUP-2	Solid	Unknown	8270D	500		ug/kg	182
017	DUP-2	Solid	Hexadecanoic acid, butyl	8270D	110		ug/kg	182
017	DUP-2	Solid	13-Docosenamide, (Z)-	8270D	260		ug/kg	182
017	DUP-2	Solid	Friedelan-3-one	8270D	180		ug/kg	182
017	DUP-2	Solid	Beryllium	6020A	0.71		mg/kg	185
017	DUP-2	Solid	Cadmium	6020A	0.033	J	mg/kg	185
017	DUP-2	Solid	Chromium	6020A	27		mg/kg	185
017	DUP-2	Solid	Copper	6020A	55		mg/kg	185

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
017	DUP-2	Solid	Iron	6020A	34000		mg/kg	185
017	DUP-2	Solid	Lead	6020A	10		mg/kg	185
017	DUP-2	Solid	Manganese	6020A	510		mg/kg	185
017	DUP-2	Solid	Nickel	6020A	20		mg/kg	185
017	DUP-2	Solid	Thallium	6020A	0.053	J	mg/kg	185
017	DUP-2	Solid	Zinc	6020A	55		mg/kg	185

(579 detections)

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH12021-001
Description:	SB-14-0.5	Matrix:	Solid
Date Sampled:	08/11/2016 1205	% Solids:	84.3 08/13/2016 1626
Date Received:	08/12/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1423	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 0558	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 0558	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.47	J	1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.39	J	1.2	0.30	mg/kg	1
Nitrate - N (soluble)		300.0	0.051	J	0.24	0.029	mg/kg	1
Sulfate (soluble)		300.0	ND		12	5.9	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-001
Description: SB-14-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1205	% Solids: 84.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/13/2016 0440	JJG		19771	4.40

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		27	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		123	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-001
Description: SB-14-0.5
Matrix: Solid
Date Sampled: 08/11/2016 1205
% Solids: 84.3 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1539	ALL		19838	4.68

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		25	5.1	ug/kg	1
Benzene	71-43-2	8260B	ND		6.3	2.5	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.3	2.5	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.3	2.5	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.3	2.5	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		25	5.1	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.3	2.5	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.3	2.5	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.3	2.5	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.3	2.5	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.3	2.5	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.3	2.5	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.3	2.5	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.3	2.5	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.3	2.5	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.3	2.5	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.3	2.5	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.3	2.5	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.3	2.5	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.3	2.5	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.3	2.5	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.3	2.5	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.3	2.5	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.3	2.5	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.3	2.5	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.3	2.5	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.3	2.5	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.3	2.5	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.3	2.5	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	5.1	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.3	2.5	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.3	2.5	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.3	2.5	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	5.1	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.3	2.5	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.3	2.5	ug/kg	1
Styrene	100-42-5	8260B	ND		6.3	2.5	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.3	2.5	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.3	2.5	ug/kg	1
Toluene	108-88-3	8260B	ND		6.3	2.5	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.3	2.5	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.3	2.5	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.3	2.5	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.3	2.5	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-001
Description: SB-14-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1205	% Solids: 84.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1539	ALL		19838	4.68

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.3	2.5	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.3	2.5	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.3	2.5	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	5.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		105	47-138
Toluene-d8		105	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-001
Description: SB-14-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1205	% Solids: 84.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/15/2016 1539	SES		20009

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1R-.alpha.-Pinene		8260B	6.1				ug/kg	1
Camphene		8260B	18				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-001
Description: SB-14-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1205	% Solids: 84.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1250	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Propylene Glycol		8270D	210				ug/kg	1
Unknown		8270D	730				ug/kg	1
Unknown		8270D	84				ug/kg	1
9-Oxononanoic acid		8270D	280				ug/kg	1
Hexadecenoic acid, Z-11-		8270D	110				ug/kg	1
n-Hexadecanoic acid		8270D	410				ug/kg	1
3-Bromobenzoic acid, pentadecyl ester		8270D	420				ug/kg	1
Octadecanoic acid		8270D	120				ug/kg	1
13-Docosenamide, (Z)-		8270D	770				ug/kg	1
Squalene		8270D	89				ug/kg	1
Tricosane		8270D	81				ug/kg	1
Octacosane		8270D	150				ug/kg	1
Heneicosane, 11-decyl-		8270D	87				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-001
Description: SB-14-0.5
Matrix: Solid
Date Sampled: 08/11/2016 1205
% Solids: 84.3 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1250	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		39	2.0	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		39	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		39	14	ug/kg	1
Anthracene	120-12-7	8270D	ND		39	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		39	5.3	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		39	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		39	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		39	1.7	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		39	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		39	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		39	1.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		39	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		39	9.4	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		79	10	ug/kg	1
Caprolactam	105-60-2	8270D	ND		39	8.7	ug/kg	1
Carbazole	86-74-8	8270D	ND		39	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		39	7.2	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		39	3.7	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		39	9.6	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		39	9.4	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		39	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		39	7.4	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		39	7.1	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		39	8.2	ug/kg	1
Chrysene	218-01-9	8270D	ND		39	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		39	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		39	7.6	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		200	43	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		39	7.0	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		39	4.9	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		39	7.8	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		39	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		39	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		200	48	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		200	82	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		79	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		79	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		39	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		39	17	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		39	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		39	2.3	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		39	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		39	9.3	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		200	63	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: SB-14-0.5
Date Sampled: 08/11/2016 1205
Date Received: 08/12/2016

Laboratory ID: RH12021-001
Matrix: Solid
% Solids: 84.3 08/13/2016 1626

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1250	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		39	6.8	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		39	1.6	ug/kg	1
Isophorone	78-59-1	8270D	ND		39	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		39	1.8	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		39	8.4	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		79	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		39	1.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		79	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		79	7.6	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		79	7.1	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		39	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		79	17	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		200	49	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		39	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		39	8.7	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		200	52	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		39	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		39	8.2	ug/kg	1
Pyrene	129-00-0	8270D	ND		39	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		39	7.2	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		39	5.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		60	33-102
2-Fluorophenol		56	28-104
Nitrobenzene-d5		66	22-109
Phenol-d5		59	27-103
Terphenyl-d14		75	41-120
2,4,6-Tribromophenol		74	30-117

PQL = Practical quantitation limit
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-001
Description: SB-14-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1205	% Solids: 84.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0319	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0054	BNW	08/15/2016 1115	19752
3	3050B	6020A	10	08/19/2016 1349	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.28	0.017	mg/kg	1
Arsenic	7440-38-2	6020A	0.69	J	2.8	0.36	mg/kg	2
Beryllium	7440-41-7	6020A	0.89	J	1.1	0.090	mg/kg	2
Cadmium	7440-43-9	6020A	0.035	J	0.28	0.022	mg/kg	2
Chromium	7440-47-3	6020A	49		15	0.32	mg/kg	2
Copper	7440-50-8	6020A	51		0.28	0.025	mg/kg	1
Iron	7439-89-6	6020A	42000		56	4.8	mg/kg	2
Lead	7439-92-1	6020A	7.7		0.28	0.0067	mg/kg	1
Manganese	7439-96-5	6020A	540		15	2.7	mg/kg	2
Nickel	7440-02-0	6020A	43		15	0.30	mg/kg	2
Selenium	7782-49-2	6020A	ND		2.8	0.43	mg/kg	2
Silver	7440-22-4	6020A	ND		2.8	0.22	mg/kg	3
Thallium	7440-28-0	6020A	0.13	J	0.15	0.0090	mg/kg	1
Zinc	7440-66-6	6020A	48		2.8	0.074	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-001
Description: SB-14-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1205	% Solids: 84.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1548	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.094	0.0071	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH12021-002
Description: SB-14-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1700	% Solids: 86.0 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1425	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 0623	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 0623	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.56	J	1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.38	J	1.2	0.29	mg/kg	1
Nitrate - N (soluble)		300.0	0.14	J	0.23	0.028	mg/kg	1
Sulfate (soluble)		300.0	ND		12	5.8	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-002
Description: SB-14-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1700	% Solids: 86.0 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B (SIM)	1	08/15/2016 1848	SES		19853	4.61

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		25	16	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		128	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-002
Description: SB-14-1.5
Matrix: Solid
Date Sampled: 08/11/2016 1700
% Solids: 86.0 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1601	ALL		19838	5.32

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		22	4.4	ug/kg	1
Benzene	71-43-2	8260B	ND		5.5	2.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.5	2.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.5	2.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.5	2.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		22	4.4	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.5	2.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.5	2.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.5	2.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.5	2.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.5	2.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.5	2.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.5	2.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.5	2.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.5	2.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.5	2.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.5	2.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.5	2.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.5	2.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.5	2.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.5	2.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.5	2.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.5	2.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.5	2.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.5	2.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.5	2.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.5	2.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.5	2.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.5	2.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	4.4	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.5	2.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.5	2.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.5	2.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	4.4	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.5	2.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.5	2.2	ug/kg	1
Styrene	100-42-5	8260B	ND		5.5	2.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.5	2.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.5	2.2	ug/kg	1
Toluene	108-88-3	8260B	ND		5.5	2.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.5	2.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.5	2.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.5	2.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.5	2.2	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-002
Description: SB-14-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1700	% Solids: 86.0 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1601	ALL		19838	5.32

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.5	2.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.5	2.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.5	2.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	4.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		106	47-138
Toluene-d8		105	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-002
Description: SB-14-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1700	% Solids: 86.0 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20009

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-002
Description: SB-14-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1700	% Solids: 86.0 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1315	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	380				ug/kg	1
Unknown		8270D	520				ug/kg	1
Triacetin		8270D	85				ug/kg	1
Unknown		8270D	130				ug/kg	1
n-Hexadecanoic acid		8270D	79				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	220				ug/kg	1
9-Octadecenamide, (Z)-		8270D	160				ug/kg	1
Eicosane		8270D	86				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-002
Description: SB-14-1.5
Matrix: Solid
Date Sampled: 08/11/2016 1700
% Solids: 86.0 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1315	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		37	1.9	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		37	2.0	ug/kg	1
Acetophenone	98-86-2	8270D	ND		37	14	ug/kg	1
Anthracene	120-12-7	8270D	ND		37	2.2	ug/kg	1
Atrazine	1912-24-9	8270D	ND		37	5.0	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		37	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		37	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		37	1.6	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		37	1.7	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		37	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		37	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		37	12	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		37	8.9	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		76	9.7	ug/kg	1
Caprolactam	105-60-2	8270D	ND		37	8.3	ug/kg	1
Carbazole	86-74-8	8270D	ND		37	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		37	6.9	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		37	3.5	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		37	9.1	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		37	8.9	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		37	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		37	7.0	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		37	6.7	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		37	7.8	ug/kg	1
Chrysene	218-01-9	8270D	ND		37	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		37	2.1	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		37	7.2	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		190	41	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		37	6.6	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		37	4.6	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		37	7.4	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		37	11	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		37	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		190	46	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		190	78	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		76	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		76	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		37	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		37	16	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		37	1.0	ug/kg	1
Fluorene	86-73-7	8270D	ND		37	2.2	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		37	9.7	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		37	8.9	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		190	60	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-002
Description: SB-14-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1700	% Solids: 86.0 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1315	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		37	6.5	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		37	1.5	ug/kg	1
Isophorone	78-59-1	8270D	ND		37	9.5	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		37	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		37	8.0	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		76	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		37	1.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		76	10	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		76	7.3	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		76	6.8	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		37	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		76	16	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		190	47	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		37	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		37	8.3	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		190	50	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		37	2.1	ug/kg	1
Phenol	108-95-2	8270D	ND		37	7.8	ug/kg	1
Pyrene	129-00-0	8270D	ND		37	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		37	6.8	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		37	5.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		42	33-102
2-Fluorophenol		40	28-104
Nitrobenzene-d5		46	22-109
Phenol-d5		47	27-103
Terphenyl-d14		68	41-120
2,4,6-Tribromophenol		57	30-117

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-002
Description: SB-14-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1700	% Solids: 86.0 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0347	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0122	BNW	08/15/2016 1115	19752
3	3050B	6020A	20	08/19/2016 1434	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.031	J	0.29	0.017	mg/kg	1
Arsenic	7440-38-2	6020A	ND		5.7	0.73	mg/kg	3
Beryllium	7440-41-7	6020A	1.1		1.1	0.091	mg/kg	2
Cadmium	7440-43-9	6020A	ND		0.57	0.046	mg/kg	3
Chromium	7440-47-3	6020A	37		30	0.66	mg/kg	3
Copper	7440-50-8	6020A	52		0.29	0.025	mg/kg	1
Iron	7439-89-6	6020A	39000		110	9.8	mg/kg	3
Lead	7439-92-1	6020A	8.6		0.29	0.0068	mg/kg	1
Manganese	7439-96-5	6020A	540		30	5.5	mg/kg	3
Nickel	7440-02-0	6020A	22	J	30	0.62	mg/kg	3
Selenium	7782-49-2	6020A	ND		5.7	0.87	mg/kg	3
Silver	7440-22-4	6020A	ND		5.7	0.46	mg/kg	3
Thallium	7440-28-0	6020A	0.078	J	0.15	0.0091	mg/kg	1
Zinc	7440-66-6	6020A	41		2.9	0.075	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-002
Description: SB-14-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1700	% Solids: 86.0 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1600	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.012	J	0.091	0.0069	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH12021-003
Description:	SB-14-2-4	Matrix:	Solid
Date Sampled:	08/11/2016 1715	% Solids:	80.3 08/13/2016 1626
Date Received:	08/12/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1431	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 0735	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 0735	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	9.1		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.83	J	1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	0.066	J	0.25	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.2	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-003
Description: SB-14-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1715	% Solids: 80.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/13/2016 0524	JJG		19771	4.89

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		25	16	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-003
Description: SB-14-2-4
Matrix: Solid
Date Sampled: 08/11/2016 1715
% Solids: 80.3 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1624	ALL		19838	6.07

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	18	J	21	4.1	ug/kg	1
Benzene	71-43-2	8260B	ND		5.1	2.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.1	2.1	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.1	2.1	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.1	2.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		21	4.1	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.1	2.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.1	2.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.1	2.1	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.1	2.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.1	2.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.1	2.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.1	2.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.1	2.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.1	2.1	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.1	2.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.1	2.1	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.1	2.1	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.1	2.1	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.1	2.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.1	2.1	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.1	2.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.1	2.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.1	2.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.1	2.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.1	2.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.1	2.1	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.1	2.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.1	2.1	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	4.1	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.1	2.1	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.1	2.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.1	2.1	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	4.1	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.1	2.1	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.1	2.1	ug/kg	1
Styrene	100-42-5	8260B	ND		5.1	2.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.1	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.1	2.1	ug/kg	1
Toluene	108-88-3	8260B	ND		5.1	2.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.1	2.1	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.1	2.1	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.1	2.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.1	2.1	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-003
Description: SB-14-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1715	% Solids: 80.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1624	ALL		19838	6.07

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.1	2.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.1	2.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.1	2.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	4.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		108	47-138
Toluene-d8		105	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client:	CDM Smith	Laboratory ID:	RH12021-003
Description:	SB-14-2-4	Matrix:	Solid
Date Sampled:	08/11/2016 1715	% Solids:	80.3 08/13/2016 1626
Date Received:	08/12/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20009

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-003
Description: SB-14-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1715	% Solids: 80.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1340	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	150				ug/kg	1
Unknown		8270D	650				ug/kg	1
Triacetin		8270D	99				ug/kg	1
10,18-Bisnorabieta-5,7,9(10),11,13-penta		8270D	200				ug/kg	1
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa		8270D	81				ug/kg	1
13-Docosenamide, (Z)-		8270D	200				ug/kg	1
Pentacosane		8270D	150				ug/kg	1
Tricosane		8270D	130				ug/kg	1
Unknown		8270D	110				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-003
Description: SB-14-2-4
Matrix: Solid
Date Sampled: 08/11/2016 1715
% Solids: 80.3 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1340	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		40	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		40	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		40	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		40	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		40	5.4	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		40	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		40	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		40	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		40	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		40	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		40	1.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		40	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		40	9.6	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		81	10	ug/kg	1
Caprolactam	105-60-2	8270D	ND		40	8.9	ug/kg	1
Carbazole	86-74-8	8270D	ND		40	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		40	7.3	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		40	3.7	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		40	9.8	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		40	9.6	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		40	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		40	7.5	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		40	7.2	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		40	8.4	ug/kg	1
Chrysene	218-01-9	8270D	ND		40	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		40	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		40	7.7	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	44	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		40	7.1	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		40	5.0	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		40	7.9	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		40	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		40	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	49	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	84	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		81	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		81	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		40	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		40	17	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		40	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		40	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		40	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		40	9.5	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	64	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-003
Description: SB-14-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1715	% Solids: 80.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1340	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		40	7.0	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		40	1.6	ug/kg	1
Isophorone	78-59-1	8270D	ND		40	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		40	1.8	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		40	8.5	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		81	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		40	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		81	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		81	7.8	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		81	7.3	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		40	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		81	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	50	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		40	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		40	8.9	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	53	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		40	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		40	8.4	ug/kg	1
Pyrene	129-00-0	8270D	ND		40	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		40	7.3	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		40	5.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		51	33-102
2-Fluorophenol		50	28-104
Nitrobenzene-d5		52	22-109
Phenol-d5		53	27-103
Terphenyl-d14		72	41-120
2,4,6-Tribromophenol		66	30-117

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-003
Description: SB-14-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1715	% Solids: 80.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0404	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0127	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.041	J	0.30	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	1.3	J	3.0	0.38	mg/kg	2
Beryllium	7440-41-7	6020A	0.40		0.12	0.0095	mg/kg	1
Cadmium	7440-43-9	6020A	ND		0.30	0.024	mg/kg	2
Chromium	7440-47-3	6020A	35		16	0.35	mg/kg	2
Copper	7440-50-8	6020A	44		0.30	0.026	mg/kg	1
Iron	7439-89-6	6020A	43000		60	5.1	mg/kg	2
Lead	7439-92-1	6020A	16		0.30	0.0072	mg/kg	1
Manganese	7439-96-5	6020A	520		16	2.9	mg/kg	2
Nickel	7440-02-0	6020A	18		16	0.32	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.0	0.45	mg/kg	2
Silver	7440-22-4	6020A	ND		3.0	0.24	mg/kg	2
Thallium	7440-28-0	6020A	0.18		0.16	0.0095	mg/kg	1
Zinc	7440-66-6	6020A	31		3.0	0.079	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-003
Description: SB-14-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1715	% Solids: 80.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1603	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.057	J	0.096	0.0073	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH12021-004
Description:	SB-14-10-12	Matrix:	Solid
Date Sampled:	08/11/2016 1725	% Solids:	87.4 08/13/2016 1626
Date Received:	08/12/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1433	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 0759	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 0759	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	11		1.1	0.11	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.1	0.29	mg/kg	1
Nitrate - N (soluble)		300.0	0.048	J	0.23	0.028	mg/kg	1
Sulfate (soluble)		300.0	ND		11	5.7	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-004
Description: SB-14-10-12	Matrix: Solid
Date Sampled: 08/11/2016 1725	% Solids: 87.4 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1231	SES		19853	5.72

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		20	12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		115	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-004
Description: SB-14-10-12	Matrix: Solid
Date Sampled: 08/11/2016 1725	% Solids: 87.4 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1647	ALL		19838	5.28

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	26		22	4.3	ug/kg	1
Benzene	71-43-2	8260B	ND		5.4	2.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.4	2.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.4	2.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.4	2.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		22	4.3	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.4	2.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.4	2.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.4	2.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.4	2.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.4	2.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.4	2.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.4	2.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.4	2.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.4	2.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.4	2.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.4	2.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.4	2.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.4	2.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.4	2.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.4	2.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.4	2.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.4	2.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.4	2.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	4.3	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.4	2.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.4	2.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.4	2.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	4.3	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.4	2.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.4	2.2	ug/kg	1
Styrene	100-42-5	8260B	ND		5.4	2.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.4	2.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.4	2.2	ug/kg	1
Toluene	108-88-3	8260B	ND		5.4	2.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.4	2.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.4	2.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.4	2.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.4	2.2	ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-004
Description: SB-14-10-12	Matrix: Solid
Date Sampled: 08/11/2016 1725	% Solids: 87.4 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1647	ALL		19838	5.28

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.4	2.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.4	2.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.4	2.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	4.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		106	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-004
Description: SB-14-10-12	Matrix: Solid
Date Sampled: 08/11/2016 1725	% Solids: 87.4 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20009

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-004
Description: SB-14-10-12	Matrix: Solid
Date Sampled: 08/11/2016 1725	% Solids: 87.4 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1405	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Propylene Glycol		8270D	87				ug/kg	1
Unknown		8270D	610				ug/kg	1
Stigmast-4-en-3-one		8270D	110				ug/kg	1
Unknown		8270D	91				ug/kg	1
13-Docosenamide, (Z)-		8270D	360				ug/kg	1
Friedelan-3-one		8270D	290				ug/kg	1
Unknown		8270D	250				ug/kg	1
Unknown		8270D	420				ug/kg	1
Unknown		8270D	76				ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-004
Description: SB-14-10-12
Matrix: Solid
Date Sampled: 08/11/2016 1725
% Solids: 87.4 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1405	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		37	1.9	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		37	1.9	ug/kg	1
Acetophenone	98-86-2	8270D	ND		37	13	ug/kg	1
Anthracene	120-12-7	8270D	ND		37	2.2	ug/kg	1
Atrazine	1912-24-9	8270D	ND		37	5.0	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		37	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		37	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		37	1.6	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		37	1.7	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		37	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		37	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		37	12	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		37	8.9	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		75	9.6	ug/kg	1
Caprolactam	105-60-2	8270D	ND		37	8.2	ug/kg	1
Carbazole	86-74-8	8270D	ND		37	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		37	6.8	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		37	3.4	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		37	9.1	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		37	8.8	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		37	10	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		37	6.9	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		37	6.7	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		37	7.7	ug/kg	1
Chrysene	218-01-9	8270D	ND		37	1.2	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		37	2.0	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		37	7.2	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		190	41	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		37	6.6	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		37	4.6	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		37	7.3	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		37	11	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		37	13	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		190	45	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		190	78	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		75	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		75	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		37	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		37	16	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		37	1.0	ug/kg	1
Fluorene	86-73-7	8270D	ND		37	2.2	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		37	9.6	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		37	8.8	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		190	60	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: SB-14-10-12
Date Sampled: 08/11/2016 1725
Date Received: 08/12/2016

Laboratory ID: RH12021-004
Matrix: Solid
% Solids: 87.4 08/13/2016 1626

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1405	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		37	6.4	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		37	1.5	ug/kg	1
Isophorone	78-59-1	8270D	ND		37	9.4	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		37	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		37	7.9	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		75	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		37	1.7	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		75	10	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		75	7.2	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		75	6.7	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		37	14	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		75	16	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		190	46	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		37	13	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		37	8.2	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		190	49	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		37	2.0	ug/kg	1
Phenol	108-95-2	8270D	ND		37	7.7	ug/kg	1
Pyrene	129-00-0	8270D	ND		37	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		37	6.8	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		37	5.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		51	33-102
2-Fluorophenol		52	28-104
Nitrobenzene-d5		53	22-109
Phenol-d5		59	27-103
Terphenyl-d14		66	41-120
2,4,6-Tribromophenol		62	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-004
Description: SB-14-10-12	Matrix: Solid
Date Sampled: 08/11/2016 1725	% Solids: 87.4 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0410	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0150	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.28	0.017	mg/kg	1
Arsenic	7440-38-2	6020A	ND		2.8	0.36	mg/kg	2
Beryllium	7440-41-7	6020A	1.6		1.1	0.090	mg/kg	2
Cadmium	7440-43-9	6020A	0.047	J	0.28	0.022	mg/kg	2
Chromium	7440-47-3	6020A	26		15	0.33	mg/kg	2
Copper	7440-50-8	6020A	48		0.28	0.025	mg/kg	1
Iron	7439-89-6	6020A	30000		56	4.8	mg/kg	2
Lead	7439-92-1	6020A	7.4		0.28	0.0067	mg/kg	1
Manganese	7439-96-5	6020A	700		15	2.7	mg/kg	2
Nickel	7440-02-0	6020A	19		15	0.30	mg/kg	2
Selenium	7782-49-2	6020A	ND		2.8	0.43	mg/kg	2
Silver	7440-22-4	6020A	ND		2.8	0.22	mg/kg	2
Thallium	7440-28-0	6020A	0.049	J	0.15	0.0090	mg/kg	1
Zinc	7440-66-6	6020A	54		2.8	0.074	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-004
Description: SB-14-10-12	Matrix: Solid
Date Sampled: 08/11/2016 1725	% Solids: 87.4 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1605	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.094	0.0071	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH12021-005
Description: SB-14-20-22	Matrix: Solid
Date Sampled: 08/11/2016 1745	% Solids: 80.6 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1435	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 0823	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 0823	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	1.9		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.61	J	1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	0.11	J	0.25	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.2	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-005
Description: SB-14-20-22	Matrix: Solid
Date Sampled: 08/11/2016 1745	% Solids: 80.6 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1254	SES		19853	6.04

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		21	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		124	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-005
Description: SB-14-20-22	Matrix: Solid
Date Sampled: 08/11/2016 1745	% Solids: 80.6 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1710	ALL		19838	6.65

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	82		19	3.7	ug/kg	1
Benzene	71-43-2	8260B	ND		4.7	1.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.7	1.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.7	1.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.7	1.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	11	J	19	3.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.7	1.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.7	1.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.7	1.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.7	1.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.7	1.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.7	1.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.7	1.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.7	1.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.7	1.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.7	1.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.7	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.7	1.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.7	1.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.7	1.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.7	1.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.7	1.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.7	1.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.7	1.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.3	3.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.7	1.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.7	1.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.7	1.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.3	3.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.7	1.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.7	1.9	ug/kg	1
Styrene	100-42-5	8260B	ND		4.7	1.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.7	1.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.7	1.9	ug/kg	1
Toluene	108-88-3	8260B	ND		4.7	1.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.7	1.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.7	1.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.7	1.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.7	1.9	ug/kg	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
ND = Not detected at or above the MDL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-005
Description: SB-14-20-22	Matrix: Solid
Date Sampled: 08/11/2016 1745	% Solids: 80.6 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1710	ALL		19838	6.65

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.7	1.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.7	1.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.7	1.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.3	3.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		102	47-138
Toluene-d8		104	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-005
Description: SB-14-20-22	Matrix: Solid
Date Sampled: 08/11/2016 1745	% Solids: 80.6 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/15/2016 1710	SES		20009

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1R-.alpha.-Pinene		8260B	61				ug/kg	1
Camphene		8260B	26				ug/kg	1
.beta.-Pinene		8260B	23				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-005
Description: SB-14-20-22	Matrix: Solid
Date Sampled: 08/11/2016 1745	% Solids: 80.6 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1430	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	660				ug/kg	1
Unknown		8270D	120				ug/kg	1
18-Norabietane		8270D	400				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	860				ug/kg	1
10,18-Bisnorabieta-5,7,9(10),11,13-penta		8270D	110				ug/kg	1
Phenanthrene, 1-methyl-7-(1-methylethyl)		8270D	220				ug/kg	1
Unknown		8270D	130				ug/kg	1
13-Docosenamide, (Z)-		8270D	450				ug/kg	1
Heneicosane		8270D	110				ug/kg	1
Pentacosane		8270D	88				ug/kg	1
Tetracosane		8270D	88				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-005
Description: SB-14-20-22
Matrix: Solid
Date Sampled: 08/11/2016 1745
% Solids: 80.6 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1430	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		40	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		40	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		40	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		40	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		40	5.4	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		40	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		40	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		40	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		40	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		40	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		40	1.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		40	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		40	9.7	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		82	10	ug/kg	1
Caprolactam	105-60-2	8270D	ND		40	9.0	ug/kg	1
Carbazole	86-74-8	8270D	ND		40	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		40	7.4	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		40	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		40	9.9	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		40	9.7	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		40	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		40	7.6	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		40	7.3	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		40	8.5	ug/kg	1
Chrysene	218-01-9	8270D	ND		40	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		40	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		40	7.8	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	44	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		40	7.2	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		40	5.0	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		40	8.0	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		40	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		40	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	49	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	85	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		82	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		82	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		40	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		40	18	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		40	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		40	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		40	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		40	9.6	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	65	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-005
Description: SB-14-20-22	Matrix: Solid
Date Sampled: 08/11/2016 1745	% Solids: 80.6 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1430	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		40	7.0	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		40	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		40	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		40	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		40	8.6	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		82	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		40	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		82	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		82	7.9	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		82	7.4	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		40	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		82	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	51	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		40	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		40	9.0	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	54	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		40	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		40	8.4	ug/kg	1
Pyrene	129-00-0	8270D	ND		40	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		40	7.4	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		40	5.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		45	33-102
2-Fluorophenol		46	28-104
Nitrobenzene-d5		50	22-109
Phenol-d5		54	27-103
Terphenyl-d14		67	41-120
2,4,6-Tribromophenol		61	30-117

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-005
Description: SB-14-20-22	Matrix: Solid
Date Sampled: 08/11/2016 1745	% Solids: 80.6 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0415	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0155	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.28	0.017	mg/kg	1
Arsenic	7440-38-2	6020A	ND		2.8	0.36	mg/kg	2
Beryllium	7440-41-7	6020A	0.24		0.11	0.0091	mg/kg	1
Cadmium	7440-43-9	6020A	ND		0.28	0.023	mg/kg	2
Chromium	7440-47-3	6020A	13	J	15	0.33	mg/kg	2
Copper	7440-50-8	6020A	7.6		0.28	0.025	mg/kg	1
Iron	7439-89-6	6020A	7400		57	4.9	mg/kg	2
Lead	7439-92-1	6020A	3.3		0.28	0.0068	mg/kg	1
Manganese	7439-96-5	6020A	63		15	2.7	mg/kg	2
Nickel	7440-02-0	6020A	6.4	J	15	0.31	mg/kg	2
Selenium	7782-49-2	6020A	ND		2.8	0.43	mg/kg	2
Silver	7440-22-4	6020A	ND		2.8	0.23	mg/kg	2
Thallium	7440-28-0	6020A	0.036	J	0.15	0.0091	mg/kg	1
Zinc	7440-66-6	6020A	10		2.8	0.075	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-005
Description: SB-14-20-22	Matrix: Solid
Date Sampled: 08/11/2016 1745	% Solids: 80.6 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1607	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.096	0.0073	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH12021-006
Description: SB-14-22-24	Matrix: Solid
Date Sampled: 08/11/2016 1755	% Solids: 65.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1443	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 0847	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 0847	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	32		1.5	0.15	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.62	J	1.5	0.38	mg/kg	1
Nitrate - N (soluble)		300.0	0.19	J	0.30	0.037	mg/kg	1
Sulfate (soluble)		300.0	ND		15	7.6	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-006
Description: SB-14-22-24	Matrix: Solid
Date Sampled: 08/11/2016 1755	% Solids: 65.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1316	SES		19853	3.48

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		44	27	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Description: SB-14-22-24
Date Sampled: 08/11/2016 1755
Date Received: 08/12/2016

Laboratory ID: RH12021-006
Matrix: Solid
% Solids: 65.7 08/13/2016 1626

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1732	ALL		19838	5.12

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	290		30	5.9	ug/kg	1
Benzene	71-43-2	8260B	ND		7.4	3.0	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		7.4	3.0	ug/kg	1
Bromoform	75-25-2	8260B	ND		7.4	3.0	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		7.4	3.0	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	34		30	5.9	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		7.4	3.0	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		7.4	3.0	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		7.4	3.0	ug/kg	1
Chloroethane	75-00-3	8260B	ND		7.4	3.0	ug/kg	1
Chloroform	67-66-3	8260B	ND		7.4	3.0	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		7.4	3.0	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		7.4	3.0	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		7.4	3.0	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		7.4	3.0	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		7.4	3.0	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		7.4	3.0	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		7.4	3.0	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		7.4	3.0	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		7.4	3.0	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		7.4	3.0	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		7.4	3.0	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		7.4	3.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		7.4	3.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		7.4	3.0	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		7.4	3.0	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		7.4	3.0	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		7.4	3.0	ug/kg	1
Ethylbenzene	100-41-4	8260B	4.9	J	7.4	3.0	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		15	5.9	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		7.4	3.0	ug/kg	1
Methyl acetate	79-20-9	8260B	5.0	J	7.4	3.0	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		7.4	3.0	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		15	5.9	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		7.4	3.0	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		7.4	3.0	ug/kg	1
Styrene	100-42-5	8260B	ND		7.4	3.0	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		7.4	3.0	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		7.4	3.0	ug/kg	1
Toluene	108-88-3	8260B	ND		7.4	3.0	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		7.4	3.0	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		7.4	3.0	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		7.4	3.0	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		7.4	3.0	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-006
Description: SB-14-22-24	Matrix: Solid
Date Sampled: 08/11/2016 1755	% Solids: 65.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1732	ALL		19838	5.12

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		7.4	3.0	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		7.4	3.0	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		7.4	3.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		15	5.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		104	47-138
Toluene-d8		103	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-006
Description: SB-14-22-24	Matrix: Solid
Date Sampled: 08/11/2016 1755	% Solids: 65.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/15/2016 1732	SES		20009

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
4-Octene, 2,6-dimethyl-, [S-(Z)]-		8260B	12				ug/kg	1
Tricyclo[2.2.1.0(2,6)]heptane, 1,7,7-tri		8260B	81				ug/kg	1
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me		8260B	43				ug/kg	1
Cyclohexene, 1-methyl-4-(1-methylethylid		8260B	8.6				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-006
Description: SB-14-22-24	Matrix: Solid
Date Sampled: 08/11/2016 1755	% Solids: 65.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1903	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1R-.alpha.-Pinene		8270D	1100				ug/kg	1
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me		8270D	3200				ug/kg	1
Unknown		8270D	1000				ug/kg	1
Unknown		8270D	1900				ug/kg	1
18-Norabietane		8270D	10000				ug/kg	1
4b,8-Dimethyl-2-isopropylphenanthrene, 4		8270D	2400				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	690				ug/kg	1
5-Bromo-4-oxo-4,5,6,7-tetrahydrobenzofur		8270D	400				ug/kg	1
Phenanthrene, 1-methyl-7-(1-methylethyl)		8270D	4000				ug/kg	1
Unknown		8270D	370				ug/kg	1
Acridin-9-amine, 1,2,3,4-tetrahydro-5,8-		8270D	530				ug/kg	1
Unknown		8270D	540				ug/kg	1
Unknown		8270D	600				ug/kg	1
Tridecane, 7-propyl-		8270D	680				ug/kg	1
1-Phenanthrenecarboxylic acid, 1,2,3,4,4		8270D	1000				ug/kg	1
4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-d		8270D	840				ug/kg	1
Abietic acid		8270D	840				ug/kg	1
Unknown		8270D	370				ug/kg	1
1-Docosene		8270D	490				ug/kg	1
13-Docosenamide, (Z)-		8270D	510				ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-006
Description: SB-14-22-24
Matrix: Solid
Date Sampled: 08/11/2016 1755
% Solids: 65.7 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1903	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		50	2.6	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		50	2.6	ug/kg	1
Acetophenone	98-86-2	8270D	ND		50	18	ug/kg	1
Anthracene	120-12-7	8270D	ND		50	3.0	ug/kg	1
Atrazine	1912-24-9	8270D	ND		50	6.7	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		50	21	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	7.0	J	50	1.7	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	6.6	J	50	2.2	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	15	J	50	2.2	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		50	1.7	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		50	2.2	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		50	17	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		50	12	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		100	13	ug/kg	1
Caprolactam	105-60-2	8270D	ND		50	11	ug/kg	1
Carbazole	86-74-8	8270D	ND		50	14	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		50	9.2	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		50	4.7	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		50	12	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		50	12	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		50	14	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		50	9.4	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		50	9.0	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		50	10	ug/kg	1
Chrysene	218-01-9	8270D	7.8	J	50	1.7	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		50	2.8	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		50	9.7	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		260	55	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		50	8.9	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		50	6.2	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		50	9.9	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		50	15	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		50	18	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		260	61	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		260	100	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		100	16	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		100	17	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		50	15	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	39	J	50	22	ug/kg	1
Fluoranthene	206-44-0	8270D	33	J	50	1.3	ug/kg	1
Fluorene	86-73-7	8270D	ND		50	3.0	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		50	13	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		50	12	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		260	81	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-006
Description: SB-14-22-24	Matrix: Solid
Date Sampled: 08/11/2016 1755	% Solids: 65.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1903	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		50	8.7	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		50	2.1	ug/kg	1
Isophorone	78-59-1	8270D	ND		50	13	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		50	2.3	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		50	11	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	28	J	100	15	ug/kg	1
Naphthalene	91-20-3	8270D	ND		50	2.4	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		100	13	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		100	9.8	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		100	9.1	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		50	20	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		100	22	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		260	63	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		50	18	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		50	11	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		260	67	ug/kg	1
Phenanthrene	85-01-8	8270D	7.3	J	50	2.8	ug/kg	1
Phenol	108-95-2	8270D	ND		50	10	ug/kg	1
Pyrene	129-00-0	8270D	14	J	50	1.7	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		50	9.2	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		50	7.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		42	33-102
2-Fluorophenol		41	28-104
Nitrobenzene-d5		42	22-109
Phenol-d5		47	27-103
Terphenyl-d14		65	41-120
2,4,6-Tribromophenol		67	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-006
Description: SB-14-22-24	Matrix: Solid
Date Sampled: 08/11/2016 1755	% Solids: 65.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0421	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0201	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.35	0.021	mg/kg	1
Arsenic	7440-38-2	6020A	0.68	J	3.5	0.45	mg/kg	2
Beryllium	7440-41-7	6020A	0.41		0.14	0.011	mg/kg	1
Cadmium	7440-43-9	6020A	0.058	J	0.35	0.028	mg/kg	2
Chromium	7440-47-3	6020A	24		18	0.41	mg/kg	2
Copper	7440-50-8	6020A	21		0.35	0.031	mg/kg	1
Iron	7439-89-6	6020A	17000		71	6.1	mg/kg	2
Lead	7439-92-1	6020A	18		0.35	0.0085	mg/kg	1
Manganese	7439-96-5	6020A	450		18	3.4	mg/kg	2
Nickel	7440-02-0	6020A	10	J	18	0.38	mg/kg	2
Selenium	7782-49-2	6020A	0.56	J	3.5	0.54	mg/kg	2
Silver	7440-22-4	6020A	ND		3.5	0.28	mg/kg	2
Thallium	7440-28-0	6020A	0.11	J	0.18	0.011	mg/kg	1
Zinc	7440-66-6	6020A	29		3.5	0.093	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-006
Description: SB-14-22-24	Matrix: Solid
Date Sampled: 08/11/2016 1755	% Solids: 65.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1610	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.031	J	0.12	0.0095	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH12021-007
Description:	SB-7-0.5	Matrix:	Solid
Date Sampled:	08/11/2016 1800	% Solids:	83.8 08/13/2016 1626
Date Received:	08/12/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1445	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 0959	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 0959	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.90	J	1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.60	J	1.2	0.30	mg/kg	1
Nitrate - N (soluble)		300.0	0.39		0.24	0.029	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.0	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-007
Description: SB-7-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1800	% Solids: 83.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1338	SES		19853	4.72

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		25	16	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-007
Description: SB-7-0.5
Matrix: Solid
Date Sampled: 08/11/2016 1800
% Solids: 83.8 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1755	ALL		19838	4.54

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		26	5.3	ug/kg	1
Benzene	71-43-2	8260B	ND		6.6	2.6	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.6	2.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.6	2.6	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.6	2.6	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		26	5.3	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.6	2.6	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.6	2.6	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.6	2.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.6	2.6	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.6	2.6	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.6	2.6	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.6	2.6	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.6	2.6	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.6	2.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.6	2.6	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.6	2.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.6	2.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.6	2.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.6	2.6	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.6	2.6	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.6	2.6	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.6	2.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.6	2.6	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.6	2.6	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.6	2.6	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.6	2.6	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.6	2.6	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.6	2.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	5.3	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.6	2.6	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.6	2.6	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.6	2.6	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	5.3	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.6	2.6	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.6	2.6	ug/kg	1
Styrene	100-42-5	8260B	ND		6.6	2.6	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.6	2.6	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.6	2.6	ug/kg	1
Toluene	108-88-3	8260B	ND		6.6	2.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.6	2.6	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.6	2.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.6	2.6	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.6	2.6	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-007
Description: SB-7-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1800	% Solids: 83.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1755	ALL		19838	4.54

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.6	2.6	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.6	2.6	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.6	2.6	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	5.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		99	47-138
Toluene-d8		103	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-007
Description: SB-7-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1800	% Solids: 83.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20009

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-007
Description: SB-7-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1800	% Solids: 83.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1928	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	580				ug/kg	1
n-Hexadecanoic acid		8270D	100				ug/kg	1
4b,8-Dimethyl-2-isopropylphenanthrene, 4		8270D	93				ug/kg	1
Dodecane, 2-methyl-8-propyl-		8270D	100				ug/kg	1
Unknown		8270D	210				ug/kg	1
Unknown		8270D	100				ug/kg	1
Hexadecanoic acid, butyl ester		8270D	110				ug/kg	1
Octadecanoic acid, butyl ester		8270D	110				ug/kg	1
1-Heneicosanol		8270D	140				ug/kg	1
Eicosane		8270D	86				ug/kg	1
Z-14-Nonacosane		8270D	350				ug/kg	1
13-Docosenamide, (Z)-		8270D	430				ug/kg	1
Unknown		8270D	180				ug/kg	1
Friedelan-3-one		8270D	590				ug/kg	1
Octacosane		8270D	440				ug/kg	1
Unknown		8270D	150				ug/kg	1
Unknown		8270D	140				ug/kg	1
Unknown		8270D	180				ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-007
Description: SB-7-0.5
Matrix: Solid
Date Sampled: 08/11/2016 1800
% Solids: 83.8 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1928	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		39	2.0	ug/kg	1
Acenaphthylene	208-96-8	8270D	6.9	J	39	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		39	14	ug/kg	1
Anthracene	120-12-7	8270D	9.8	J	39	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		39	5.3	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		39	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	52		39	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	67		39	1.7	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	79		39	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	22	J	39	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	36	J	39	1.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		39	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		39	9.4	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		80	10	ug/kg	1
Caprolactam	105-60-2	8270D	ND		39	8.8	ug/kg	1
Carbazole	86-74-8	8270D	ND		39	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		39	7.2	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		39	3.7	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		39	9.6	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		39	9.4	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		39	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		39	7.4	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		39	7.1	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		39	8.2	ug/kg	1
Chrysene	218-01-9	8270D	54		39	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		39	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		39	7.6	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		200	43	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		39	7.0	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		39	4.9	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		39	7.8	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		39	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	30	J	39	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		200	48	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		200	82	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		80	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		80	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		39	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	31	J	39	17	ug/kg	1
Fluoranthene	206-44-0	8270D	86		39	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		39	2.3	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		39	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		39	9.3	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		200	63	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-007
Description: SB-7-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1800	% Solids: 83.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1928	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		39	6.9	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	22	J	39	1.6	ug/kg	1
Isophorone	78-59-1	8270D	ND		39	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		39	1.8	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		39	8.4	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		80	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		39	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		80	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		80	7.7	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		80	7.2	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		39	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		80	17	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		200	49	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		39	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		39	8.8	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		200	53	ug/kg	1
Phenanthrene	85-01-8	8270D	36	J	39	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		39	8.2	ug/kg	1
Pyrene	129-00-0	8270D	81		39	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		39	7.2	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		39	5.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		48	33-102
2-Fluorophenol		48	28-104
Nitrobenzene-d5		50	22-109
Phenol-d5		52	27-103
Terphenyl-d14		66	41-120
2,4,6-Tribromophenol		62	30-117

PQL = Practical quantitation limit
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-007
Description: SB-7-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1800	% Solids: 83.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0426	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0206	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.28	0.017	mg/kg	1
Arsenic	7440-38-2	6020A	1.3	J	2.8	0.36	mg/kg	2
Beryllium	7440-41-7	6020A	0.24		0.11	0.0089	mg/kg	1
Cadmium	7440-43-9	6020A	0.27	J	0.28	0.022	mg/kg	2
Chromium	7440-47-3	6020A	32		14	0.32	mg/kg	2
Copper	7440-50-8	6020A	38		0.28	0.024	mg/kg	1
Iron	7439-89-6	6020A	32000		56	4.8	mg/kg	2
Lead	7439-92-1	6020A	51		0.28	0.0067	mg/kg	1
Manganese	7439-96-5	6020A	490		14	2.7	mg/kg	2
Nickel	7440-02-0	6020A	14		14	0.30	mg/kg	2
Selenium	7782-49-2	6020A	ND		2.8	0.42	mg/kg	2
Silver	7440-22-4	6020A	ND		2.8	0.22	mg/kg	2
Thallium	7440-28-0	6020A	0.10	J	0.14	0.0089	mg/kg	1
Zinc	7440-66-6	6020A	890		28	0.73	mg/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-007
Description: SB-7-0.5	Matrix: Solid
Date Sampled: 08/11/2016 1800	% Solids: 83.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1612	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.054	J	0.096	0.0073	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH12021-008
Description: SB-7-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1805	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1451	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 1023	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 1023	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.45	J	1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.82	J	1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	0.81		0.25	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.2	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-008
Description: SB-7-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1805	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1400	SES		19853	4.62

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		27	16	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		125	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-008
Description: SB-7-1.5
Matrix: Solid
Date Sampled: 08/11/2016 1805
% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1818	ALL		19838	4.21

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		29	5.9	ug/kg	1
Benzene	71-43-2	8260B	ND		7.3	2.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		7.3	2.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		7.3	2.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		7.3	2.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		29	5.9	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		7.3	2.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		7.3	2.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		7.3	2.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		7.3	2.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		7.3	2.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		7.3	2.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		7.3	2.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		7.3	2.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		7.3	2.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		7.3	2.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		7.3	2.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		7.3	2.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		7.3	2.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		7.3	2.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		7.3	2.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		7.3	2.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		7.3	2.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		7.3	2.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		7.3	2.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		7.3	2.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		7.3	2.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		7.3	2.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		7.3	2.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		15	5.9	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		7.3	2.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		7.3	2.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		7.3	2.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		15	5.9	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		7.3	2.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		7.3	2.9	ug/kg	1
Styrene	100-42-5	8260B	ND		7.3	2.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		7.3	2.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		7.3	2.9	ug/kg	1
Toluene	108-88-3	8260B	ND		7.3	2.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		7.3	2.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		7.3	2.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		7.3	2.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		7.3	2.9	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-008
Description: SB-7-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1805	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 1818	ALL		19838	4.21

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		7.3	2.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		7.3	2.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		7.3	2.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		15	5.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		97	47-138
Toluene-d8		103	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-008
Description: SB-7-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1805	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20009

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-008
Description: SB-7-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1805	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	5	08/18/2016 1953	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	520				ug/kg	1
Heptacosane		8270D	630				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-008
Description: SB-7-1.5
Matrix: Solid
Date Sampled: 08/11/2016 1805
% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	5	08/18/2016 1953	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		200	10	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		200	11	ug/kg	1
Acetophenone	98-86-2	8270D	ND		200	73	ug/kg	1
Anthracene	120-12-7	8270D	ND		200	12	ug/kg	1
Atrazine	1912-24-9	8270D	ND		200	27	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		200	84	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	56	J	200	6.9	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	59	J	200	8.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	78	J	200	9.0	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	28	J	200	6.9	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	35	J	200	8.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		200	67	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		200	48	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		410	52	ug/kg	1
Caprolactam	105-60-2	8270D	ND		200	45	ug/kg	1
Carbazole	86-74-8	8270D	ND		200	57	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		200	37	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		200	19	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		200	49	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		200	48	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		200	57	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		200	38	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		200	36	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		200	42	ug/kg	1
Chrysene	218-01-9	8270D	49	J	200	6.8	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		200	11	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		200	39	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		1000	220	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		200	36	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		200	25	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		200	40	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		200	61	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		200	73	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1000	250	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1000	420	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		410	66	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		410	70	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		200	59	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	120	J	200	87	ug/kg	1
Fluoranthene	206-44-0	8270D	93	J	200	5.4	ug/kg	1
Fluorene	86-73-7	8270D	ND		200	12	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		200	52	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		200	48	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1000	320	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-008
Description: SB-7-1.5
Matrix: Solid
Date Sampled: 08/11/2016 1805
% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	5	08/18/2016 1953	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		200	35	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	22	J	200	8.3	ug/kg	1
Isophorone	78-59-1	8270D	ND		200	51	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		200	9.2	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		200	43	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		410	62	ug/kg	1
Naphthalene	91-20-3	8270D	ND		200	9.5	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		410	54	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		410	39	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		410	37	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		200	79	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		410	88	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1000	250	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		200	73	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		200	45	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1000	270	ug/kg	1
Phenanthrene	85-01-8	8270D	31	J	200	11	ug/kg	1
Phenol	108-95-2	8270D	ND		200	42	ug/kg	1
Pyrene	129-00-0	8270D	81	J	200	7.0	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		200	37	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		200	28	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		51	33-102
2-Fluorophenol		46	28-104
Nitrobenzene-d5		48	22-109
Phenol-d5		51	27-103
Terphenyl-d14		68	41-120
2,4,6-Tribromophenol		67	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-008
Description: SB-7-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1805	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0432	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0212	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.31	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	2.2	J	3.1	0.39	mg/kg	2
Beryllium	7440-41-7	6020A	0.27		0.12	0.0098	mg/kg	1
Cadmium	7440-43-9	6020A	0.25	J	0.31	0.025	mg/kg	2
Chromium	7440-47-3	6020A	87		16	0.36	mg/kg	2
Copper	7440-50-8	6020A	34		0.31	0.027	mg/kg	1
Iron	7439-89-6	6020A	37000		61	5.3	mg/kg	2
Lead	7439-92-1	6020A	49		0.31	0.0074	mg/kg	1
Manganese	7439-96-5	6020A	320		16	2.9	mg/kg	2
Nickel	7440-02-0	6020A	13	J	16	0.33	mg/kg	2
Selenium	7782-49-2	6020A	0.63	J	3.1	0.47	mg/kg	2
Silver	7440-22-4	6020A	ND		3.1	0.25	mg/kg	2
Thallium	7440-28-0	6020A	0.098	J	0.16	0.0098	mg/kg	1
Zinc	7440-66-6	6020A	88		3.1	0.081	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-008
Description: SB-7-1.5	Matrix: Solid
Date Sampled: 08/11/2016 1805	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1614	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.24		0.099	0.0075	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH12021-009
Description: SB-7-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1815	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1453	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 1135	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 1135	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	6.2		1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.72	J	1.3	0.33	mg/kg	1
Nitrate - N (soluble)		300.0	0.53		0.26	0.032	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.5	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-009
Description: SB-7-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1815	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1422	SES		19853	4.76

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		27	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		130	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Description: SB-7-2-4
Date Sampled: 08/11/2016 1815
Date Received: 08/12/2016

Laboratory ID: RH12021-009
Matrix: Solid
% Solids: 76.7 08/13/2016 1626

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 2251	JJG		19897	6.85

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	77		19	3.8	ug/kg	1
Benzene	71-43-2	8260B	ND		4.8	1.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.8	1.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.8	1.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.8	1.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	11	J	19	3.8	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.8	1.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.8	1.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.8	1.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.8	1.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.8	1.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.8	1.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.8	1.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.8	1.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.8	1.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.8	1.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.8	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.8	1.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.8	1.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.8	1.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.8	1.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.8	1.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.8	1.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.8	1.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.5	3.8	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.8	1.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.8	1.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.8	1.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.5	3.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.8	1.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.8	1.9	ug/kg	1
Styrene	100-42-5	8260B	ND		4.8	1.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.8	1.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.8	1.9	ug/kg	1
Toluene	108-88-3	8260B	ND		4.8	1.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.8	1.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.8	1.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.8	1.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.8	1.9	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-009
Description: SB-7-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1815	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 2251	JJG		19897	6.85

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.8	1.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.8	1.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.8	1.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.5	3.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		100	47-138
Toluene-d8		105	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-009
Description: SB-7-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1815	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/15/2016 2251	SES		20007

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
2-Pentanone		8260B	4.0				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-009
Description: SB-7-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1815	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1455	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Propylene Glycol		8270D	120				ug/kg	1
Unknown		8270D	500				ug/kg	1
n-Hexadecanoic acid		8270D	1400				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	2200				ug/kg	1
Octadecanoic acid		8270D	350				ug/kg	1
Unknown		8270D	99				ug/kg	1
Unknown		8270D	100				ug/kg	1
Unknown		8270D	460				ug/kg	1
Octadecanoic acid, butyl ester		8270D	120				ug/kg	1
Heneicosane		8270D	360				ug/kg	1
Oxirane, hexadecyl-		8270D	130				ug/kg	1
13-Docosenamide, (Z)-		8270D	1200				ug/kg	1
Squalene		8270D	160				ug/kg	1
Unknown		8270D	590				ug/kg	1
Heptacosane		8270D	99				ug/kg	1
Unknown		8270D	180				ug/kg	1
Unknown		8270D	140				ug/kg	1
Unknown		8270D	120				ug/kg	1
Unknown		8270D	140				ug/kg	1
Stigmasterol, 22,23-dihydro-		8270D	690				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-009
Description: SB-7-2-4
Matrix: Solid
Date Sampled: 08/11/2016 1815
% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1455	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		43	2.2	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		43	2.3	ug/kg	1
Acetophenone	98-86-2	8270D	ND		43	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		43	2.6	ug/kg	1
Atrazine	1912-24-9	8270D	ND		43	5.7	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		43	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	5.4	J	43	1.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		43	1.9	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		43	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		43	1.5	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		43	1.9	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		43	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		43	10	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		87	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		43	9.5	ug/kg	1
Carbazole	86-74-8	8270D	ND		43	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		43	7.9	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		43	4.0	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		43	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		43	10	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		43	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		43	8.0	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		43	7.7	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		43	9.0	ug/kg	1
Chrysene	218-01-9	8270D	3.2	J	43	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		43	2.4	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		43	8.3	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		220	47	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		43	7.6	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		43	5.3	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		43	8.5	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		43	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	17	J	43	16	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		220	52	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		220	90	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		87	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		87	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		43	13	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	20	J	43	19	ug/kg	1
Fluoranthene	206-44-0	8270D	5.3	J	43	1.2	ug/kg	1
Fluorene	86-73-7	8270D	ND		43	2.5	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		43	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		43	10	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		220	69	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-009
Description: SB-7-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1815	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1455	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		43	7.5	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		43	1.8	ug/kg	1
Isophorone	78-59-1	8270D	ND		43	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		43	2.0	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		43	9.2	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		87	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		43	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		87	12	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		87	8.4	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		87	7.8	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		43	17	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		87	19	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		220	54	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		43	16	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		43	9.5	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		220	57	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		43	2.4	ug/kg	1
Phenol	108-95-2	8270D	ND		43	9.0	ug/kg	1
Pyrene	129-00-0	8270D	5.8	J	43	1.5	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		43	7.8	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		43	6.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		49	33-102
2-Fluorophenol		45	28-104
Nitrobenzene-d5		51	22-109
Phenol-d5		51	27-103
Terphenyl-d14		66	41-120
2,4,6-Tribromophenol		66	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-009
Description: SB-7-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1815	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0437	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0218	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.31	0.019	mg/kg	1
Arsenic	7440-38-2	6020A	0.97	J	3.1	0.39	mg/kg	2
Beryllium	7440-41-7	6020A	0.18		0.12	0.0099	mg/kg	1
Cadmium	7440-43-9	6020A	0.033	J	0.31	0.025	mg/kg	2
Chromium	7440-47-3	6020A	20		16	0.36	mg/kg	2
Copper	7440-50-8	6020A	17		0.31	0.027	mg/kg	1
Iron	7439-89-6	6020A	18000		62	5.3	mg/kg	2
Lead	7439-92-1	6020A	9.4		0.31	0.0074	mg/kg	1
Manganese	7439-96-5	6020A	260		16	2.9	mg/kg	2
Nickel	7440-02-0	6020A	6.8	J	16	0.33	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.1	0.47	mg/kg	2
Silver	7440-22-4	6020A	ND		3.1	0.25	mg/kg	2
Thallium	7440-28-0	6020A	0.065	J	0.16	0.0099	mg/kg	1
Zinc	7440-66-6	6020A	21		3.1	0.081	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-009
Description: SB-7-2-4	Matrix: Solid
Date Sampled: 08/11/2016 1815	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1617	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.047	J	0.10	0.0078	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH12021-010
Description:	SB-7-6-8	Matrix:	Solid
Date Sampled:	08/11/2016 1820	% Solids:	81.1 08/13/2016 1626
Date Received:	08/12/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1455	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 1159	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 1159	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	15		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.44	J	1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	0.76		0.25	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.2	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-010
Description: SB-7-6-8	Matrix: Solid
Date Sampled: 08/11/2016 1820	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1444	SES		19853	5.28

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		23	14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		119	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-010
Description: SB-7-6-8
Matrix: Solid
Date Sampled: 08/11/2016 1820
% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 2314	JJG		19897	4.73

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	130		26	5.2	ug/kg	1
Benzene	71-43-2	8260B	ND		6.5	2.6	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.5	2.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.5	2.6	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.5	2.6	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	15	J	26	5.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.5	2.6	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.5	2.6	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.5	2.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.5	2.6	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.5	2.6	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.5	2.6	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.5	2.6	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.5	2.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.5	2.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.5	2.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.5	2.6	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.5	2.6	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.5	2.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.5	2.6	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.5	2.6	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.5	2.6	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.5	2.6	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.5	2.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	5.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.5	2.6	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.5	2.6	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.5	2.6	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	5.2	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.5	2.6	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.5	2.6	ug/kg	1
Styrene	100-42-5	8260B	ND		6.5	2.6	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.5	2.6	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.5	2.6	ug/kg	1
Toluene	108-88-3	8260B	ND		6.5	2.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.5	2.6	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.5	2.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.5	2.6	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.5	2.6	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-010
Description: SB-7-6-8	Matrix: Solid
Date Sampled: 08/11/2016 1820	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 2314	JJG		19897	4.73

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.5	2.6	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.5	2.6	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.5	2.6	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	5.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		103	47-138
Toluene-d8		105	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-010
Description: SB-7-6-8	Matrix: Solid
Date Sampled: 08/11/2016 1820	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/15/2016 2314	SES		20007

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
.beta.-Pinene		8260B	6.2				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-010
Description: SB-7-6-8	Matrix: Solid
Date Sampled: 08/11/2016 1820	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1237	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
R-(-)-1,2-propanediol		8270D	130				ug/kg	1
Unknown		8270D	580				ug/kg	1
Unknown		8270D	86				ug/kg	1
Tetradecanoic acid		8270D	200				ug/kg	1
18-Norabietane		8270D	99				ug/kg	1
Hexadecanoic acid, butyl ester		8270D	97				ug/kg	1
Octadecanoic acid, butyl ester		8270D	110				ug/kg	1
Unknown		8270D	160				ug/kg	1
Unknown		8270D	99				ug/kg	1
13-Docosenamide, (Z)-		8270D	500				ug/kg	1
Nonadecane		8270D	93				ug/kg	1
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-		8270D	200				ug/kg	1
Unknown		8270D	95				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-010
Description: SB-7-6-8
Matrix: Solid
Date Sampled: 08/11/2016 1820
% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1237	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		40	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		40	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		40	15	ug/kg	1
Anthracene	120-12-7	8270D	5.8	J	40	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		40	5.4	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		40	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	28	J	40	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	35	J	40	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	46		40	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	20	J	40	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	18	J	40	1.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		40	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		40	9.7	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		82	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		40	9.0	ug/kg	1
Carbazole	86-74-8	8270D	ND		40	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		40	7.4	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		40	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		40	9.9	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		40	9.7	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		40	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		40	7.6	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		40	7.3	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		40	8.5	ug/kg	1
Chrysene	218-01-9	8270D	33	J	40	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		40	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		40	7.8	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	44	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		40	7.2	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		40	5.0	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		40	8.0	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		40	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	18	J	40	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	49	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	85	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		82	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		82	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		40	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	700		40	18	ug/kg	1
Fluoranthene	206-44-0	8270D	50		40	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		40	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		40	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		40	9.6	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	65	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-010
Description: SB-7-6-8	Matrix: Solid
Date Sampled: 08/11/2016 1820	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1237	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		40	7.0	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	18	J	40	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		40	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		40	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		40	8.6	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		82	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		40	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		82	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		82	7.9	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		82	7.4	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		40	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		82	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	51	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		40	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		40	9.0	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	54	ug/kg	1
Phenanthrene	85-01-8	8270D	21	J	40	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		40	8.4	ug/kg	1
Pyrene	129-00-0	8270D	48		40	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		40	7.4	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		40	5.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		54	33-102
2-Fluorophenol		57	28-104
Nitrobenzene-d5		61	22-109
Phenol-d5		60	27-103
Terphenyl-d14		79	41-120
2,4,6-Tribromophenol		76	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-010
Description: SB-7-6-8	Matrix: Solid
Date Sampled: 08/11/2016 1820	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0443	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0223	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.30	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	2.4	J	3.0	0.38	mg/kg	2
Beryllium	7440-41-7	6020A	0.23		0.12	0.0096	mg/kg	1
Cadmium	7440-43-9	6020A	0.092	J	0.30	0.024	mg/kg	2
Chromium	7440-47-3	6020A	50		16	0.35	mg/kg	2
Copper	7440-50-8	6020A	41		0.30	0.026	mg/kg	1
Iron	7439-89-6	6020A	39000		60	5.2	mg/kg	2
Lead	7439-92-1	6020A	22		0.30	0.0072	mg/kg	1
Manganese	7439-96-5	6020A	360		16	2.9	mg/kg	2
Nickel	7440-02-0	6020A	17		16	0.32	mg/kg	2
Selenium	7782-49-2	6020A	0.47	J	3.0	0.46	mg/kg	2
Silver	7440-22-4	6020A	ND		3.0	0.24	mg/kg	2
Thallium	7440-28-0	6020A	0.098	J	0.16	0.0096	mg/kg	1
Zinc	7440-66-6	6020A	78		3.0	0.079	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-010
Description: SB-7-6-8	Matrix: Solid
Date Sampled: 08/11/2016 1820	% Solids: 81.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1619	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.031	J	0.092	0.0070	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH12021-011
Description:	SB-7-12-14	Matrix:	Solid
Date Sampled:	08/11/2016 1830	% Solids:	76.7 08/13/2016 1626
Date Received:	08/12/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1457	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 1223	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 1223	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	4.5		1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	1.0	J	1.3	0.33	mg/kg	1
Nitrate - N (soluble)		300.0	0.99		0.26	0.032	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.5	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-011
Description: SB-7-12-14	Matrix: Solid
Date Sampled: 08/11/2016 1830	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1507	SES		19853	6.75

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		19	12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		124	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-011
Description: SB-7-12-14
Matrix: Solid
Date Sampled: 08/11/2016 1830
% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 2337	JJG		19897	6.85

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	86		19	3.8	ug/kg	1
Benzene	71-43-2	8260B	ND		4.8	1.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.8	1.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.8	1.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.8	1.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	10	J	19	3.8	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.8	1.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.8	1.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.8	1.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.8	1.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.8	1.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.8	1.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.8	1.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.8	1.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.8	1.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.8	1.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.8	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.8	1.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.8	1.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.8	1.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.8	1.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.8	1.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.8	1.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.8	1.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.5	3.8	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.8	1.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.8	1.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.8	1.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.5	3.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.8	1.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.8	1.9	ug/kg	1
Styrene	100-42-5	8260B	ND		4.8	1.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.8	1.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.8	1.9	ug/kg	1
Toluene	108-88-3	8260B	6.1		4.8	1.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.8	1.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.8	1.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.8	1.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.8	1.9	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-011
Description: SB-7-12-14	Matrix: Solid
Date Sampled: 08/11/2016 1830	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/15/2016 2337	JJG		19897	6.85

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.8	1.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.8	1.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.8	1.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.5	3.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		104	47-138
Toluene-d8		103	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-011
Description: SB-7-12-14	Matrix: Solid
Date Sampled: 08/11/2016 1830	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/15/2016 2337	SES		20007

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Camphene		8260B	5.2				ug/kg	1
.beta.-Pinene		8260B	5.2				ug/kg	1
2-Nonanone		8260B	3.8				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-011
Description: SB-7-12-14	Matrix: Solid
Date Sampled: 08/11/2016 1830	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1302	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2,4-Metheno-1H-indene, octahydro-1,7a-		8270D	2700				ug/kg	1
Cyclohexane, 1-ethenyl-1-methyl-2,4-bis(		8270D	1600				ug/kg	1
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene		8270D	570				ug/kg	1
Naphthalene, 1,2,4a,5,8,8a-hexahydro-4,7		8270D	590				ug/kg	1
.alpha.-Muurolene		8270D	1800				ug/kg	1
Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-		8270D	2300				ug/kg	1
Naphthalene, 1,2,3,4-tetrahydro-1,6-dime		8270D	1800				ug/kg	1
.alpha.-Cadinol		8270D	850				ug/kg	1
Phenol, 2,6-dimethoxy-4-(2-propenyl)-		8270D	670				ug/kg	1
Tetradecanoic acid		8270D	730				ug/kg	1
n-Hexadecanoic acid		8270D	5900				ug/kg	1
Unknown		8270D	1000				ug/kg	1
2H-Inden-2-one, 1,4,5,6,7,7a-hexahydro-7		8270D	3200				ug/kg	1
Unknown		8270D	510				ug/kg	1
Unknown		8270D	2500				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	850				ug/kg	1
Unknown		8270D	970				ug/kg	1
13-Docosenamide, (Z)-		8270D	880				ug/kg	1
Unknown		8270D	750				ug/kg	1
.beta.-Sitosterol		8270D	2000				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-011
Description: SB-7-12-14
Matrix: Solid
Date Sampled: 08/11/2016 1830
% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1302	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		42	2.2	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		42	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		42	15	ug/kg	1
Anthracene	120-12-7	8270D	6.1	J	42	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		42	5.6	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		42	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	20	J	42	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	25	J	42	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	24	J	42	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		42	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	15	J	42	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		42	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		42	10	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		85	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		42	9.3	ug/kg	1
Carbazole	86-74-8	8270D	ND		42	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		42	7.7	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		42	3.9	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		42	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		42	10	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		42	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		42	7.9	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		42	7.5	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		42	8.8	ug/kg	1
Chrysene	218-01-9	8270D	18	J	42	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		42	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		42	8.1	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		220	46	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		42	7.4	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		42	5.2	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		42	8.3	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		42	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	40	J	42	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		220	51	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		220	88	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		85	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		85	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		42	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	67		42	18	ug/kg	1
Fluoranthene	206-44-0	8270D	40	J	42	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		42	2.5	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		42	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		42	9.9	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		220	67	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: SB-7-12-14
Date Sampled: 08/11/2016 1830
Date Received: 08/12/2016

Laboratory ID: RH12021-011
Matrix: Solid
% Solids: 76.7 08/13/2016 1626

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1302	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		42	7.3	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	8.5	J	42	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		42	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		42	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		42	9.0	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	53	J	85	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		42	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		85	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		85	8.2	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		85	7.6	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		42	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		85	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		220	52	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		42	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		42	9.3	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		220	56	ug/kg	1
Phenanthrene	85-01-8	8270D	25	J	42	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		42	8.8	ug/kg	1
Pyrene	129-00-0	8270D	34	J	42	1.5	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		42	7.7	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		42	5.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		57	33-102
2-Fluorophenol		51	28-104
Nitrobenzene-d5		55	22-109
Phenol-d5		57	27-103
Terphenyl-d14		74	41-120
2,4,6-Tribromophenol		80	30-117

PQL = Practical quantitation limit
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-011
Description: SB-7-12-14	Matrix: Solid
Date Sampled: 08/11/2016 1830	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0449	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0229	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.32	0.019	mg/kg	1
Arsenic	7440-38-2	6020A	0.95		0.32	0.041	mg/kg	1
Beryllium	7440-41-7	6020A	0.18		0.13	0.010	mg/kg	1
Cadmium	7440-43-9	6020A	0.012	J	0.032	0.0026	mg/kg	1
Chromium	7440-47-3	6020A	21		1.7	0.037	mg/kg	1
Copper	7440-50-8	6020A	19		0.32	0.028	mg/kg	1
Iron	7439-89-6	6020A	22000		64	5.5	mg/kg	2
Lead	7439-92-1	6020A	5.8		0.32	0.0077	mg/kg	1
Manganese	7439-96-5	6020A	73		1.7	0.31	mg/kg	1
Nickel	7440-02-0	6020A	5.7		1.7	0.035	mg/kg	1
Selenium	7782-49-2	6020A	0.25	J	0.32	0.049	mg/kg	1
Silver	7440-22-4	6020A	ND		3.2	0.26	mg/kg	2
Thallium	7440-28-0	6020A	0.093	J	0.17	0.010	mg/kg	1
Zinc	7440-66-6	6020A	23		3.2	0.085	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-011
Description: SB-7-12-14	Matrix: Solid
Date Sampled: 08/11/2016 1830	% Solids: 76.7 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1622	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.022	J	0.095	0.0072	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH12021-012
Description:	SB-7-22	Matrix:	Solid
Date Sampled:	08/11/2016 1835	% Solids:	77.8 08/13/2016 1626
Date Received:	08/12/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1459	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 1247	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 1247	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.87	J	1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.3	0.32	mg/kg	1
Nitrate - N (soluble)		300.0	0.10	J	0.26	0.032	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.4	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-012
Description: SB-7-22	Matrix: Solid
Date Sampled: 08/11/2016 1835	% Solids: 77.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1529	SES		19853	7.05

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		18	11	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		123	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-012
Description: SB-7-22
Matrix: Solid
Date Sampled: 08/11/2016 1835
% Solids: 77.8 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	08/16/2016 1823	SES		19936	6.43

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	44		20	4.0	ug/kg	2
Benzene	71-43-2	8260B	ND		5.0	2.0	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		5.0	2.0	ug/kg	2
Bromoform	75-25-2	8260B	ND		5.0	2.0	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	2.0	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	ND		20	4.0	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		5.0	2.0	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		5.0	2.0	ug/kg	2
Chlorobenzene	108-90-7	8260B	ND		5.0	2.0	ug/kg	2
Chloroethane	75-00-3	8260B	ND		5.0	2.0	ug/kg	2
Chloroform	67-66-3	8260B	ND		5.0	2.0	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	2.0	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		5.0	2.0	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	2.0	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		5.0	2.0	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	2.0	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	2.0	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	2.0	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	2.0	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	2.0	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	2.0	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	2.0	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	2.0	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	2.0	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	2.0	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	2.0	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	2.0	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	2.0	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		5.0	2.0	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		10	4.0	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		5.0	2.0	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		5.0	2.0	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	2.0	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	4.0	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		5.0	2.0	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		5.0	2.0	ug/kg	2
Styrene	100-42-5	8260B	ND		5.0	2.0	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	2.0	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		5.0	2.0	ug/kg	2
Toluene	108-88-3	8260B	ND		5.0	2.0	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	2.0	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	2.0	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	2.0	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	2.0	ug/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-012
Description: SB-7-22	Matrix: Solid
Date Sampled: 08/11/2016 1835	% Solids: 77.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	08/16/2016 1823	SES		19936	6.43

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	2.0	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	2.0	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		5.0	2.0	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		10	4.0	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		105	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-012
Description: SB-7-22	Matrix: Solid
Date Sampled: 08/11/2016 1835	% Solids: 77.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/16/2016 1823	SES		19938

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Cyclobutane, methyl-		8260B	31				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-012
Description: SB-7-22	Matrix: Solid
Date Sampled: 08/11/2016 1835	% Solids: 77.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1610	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
R-(-)-1,2-propanediol		8270D	120				ug/kg	1
Unknown		8270D	490				ug/kg	1
13-Docosenamide, (Z)-		8270D	500				ug/kg	1
Unknown		8270D	670				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-012
Description: SB-7-22
Matrix: Solid
Date Sampled: 08/11/2016 1835
% Solids: 77.8 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1610	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		42	2.2	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		42	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		42	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		42	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		42	5.7	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		42	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		42	1.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		42	1.9	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		42	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		42	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		42	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		42	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		42	10	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		86	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		42	9.4	ug/kg	1
Carbazole	86-74-8	8270D	ND		42	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		42	7.8	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		42	3.9	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		42	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		42	10	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		42	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		42	7.9	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		42	7.6	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		42	8.9	ug/kg	1
Chrysene	218-01-9	8270D	ND		42	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		42	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		42	8.2	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		220	46	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		42	7.5	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		42	5.2	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		42	8.4	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		42	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	17	J	42	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		220	52	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		220	89	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		86	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		86	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		42	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		42	18	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		42	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		42	2.5	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		42	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		42	10	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		220	68	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-012
Description: SB-7-22
Matrix: Solid
Date Sampled: 08/11/2016 1835
% Solids: 77.8 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1610	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		42	7.4	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		42	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		42	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		42	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		42	9.0	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		86	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		42	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		86	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		86	8.2	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		86	7.7	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		42	17	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		86	19	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		220	53	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		42	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		42	9.4	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		220	56	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		42	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		42	8.8	ug/kg	1
Pyrene	129-00-0	8270D	ND		42	1.5	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		42	7.7	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		42	6.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		51	33-102
2-Fluorophenol		51	28-104
Nitrobenzene-d5		54	22-109
Phenol-d5		57	27-103
Terphenyl-d14		66	41-120
2,4,6-Tribromophenol		63	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-012
Description: SB-7-22	Matrix: Solid
Date Sampled: 08/11/2016 1835	% Solids: 77.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0454	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0234	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.32	0.019	mg/kg	1
Arsenic	7440-38-2	6020A	ND		3.2	0.41	mg/kg	2
Beryllium	7440-41-7	6020A	0.29		0.13	0.010	mg/kg	1
Cadmium	7440-43-9	6020A	ND		0.32	0.025	mg/kg	2
Chromium	7440-47-3	6020A	15	J	16	0.37	mg/kg	2
Copper	7440-50-8	6020A	17		0.32	0.028	mg/kg	1
Iron	7439-89-6	6020A	8800		63	5.4	mg/kg	2
Lead	7439-92-1	6020A	5.6		0.32	0.0076	mg/kg	1
Manganese	7439-96-5	6020A	69		16	3.0	mg/kg	2
Nickel	7440-02-0	6020A	7.9	J	16	0.34	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.2	0.48	mg/kg	2
Silver	7440-22-4	6020A	ND		3.2	0.25	mg/kg	2
Thallium	7440-28-0	6020A	0.066	J	0.16	0.010	mg/kg	1
Zinc	7440-66-6	6020A	15		3.2	0.084	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-012
Description: SB-7-22	Matrix: Solid
Date Sampled: 08/11/2016 1835	% Solids: 77.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1629	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.098	0.0075	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH12021-013
Description: SB-9-5	Matrix: Solid
Date Sampled: 08/11/2016 1905	% Solids: 76.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1507	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/17/2016 1010	BWS	08/16/2016 0925	19904
1		(Nitrate - N) 300.0	1	08/16/2016 1311	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 1311	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	18		1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.75	J	1.3	0.33	mg/kg	1
Nitrate - N (soluble)		300.0	0.66		0.26	0.032	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.6	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-013
Description: SB-9-5	Matrix: Solid
Date Sampled: 08/11/2016 1905	% Solids: 76.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1551	SES		19853	5.70

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		23	14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4	N	132	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-013
Description: SB-9-5
Matrix: Solid
Date Sampled: 08/11/2016 1905
% Solids: 76.3 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0022	JJG		19897	5.15

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	77		25	5.1	ug/kg	1
Benzene	71-43-2	8260B	ND		6.4	2.5	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.4	2.5	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.4	2.5	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.4	2.5	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	9.2	J	25	5.1	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.4	2.5	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.4	2.5	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.4	2.5	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.4	2.5	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.4	2.5	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.4	2.5	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.4	2.5	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.4	2.5	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.4	2.5	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.4	2.5	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.4	2.5	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.4	2.5	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.4	2.5	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.4	2.5	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.4	2.5	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.4	2.5	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.4	2.5	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.4	2.5	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.4	2.5	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.4	2.5	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.4	2.5	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.4	2.5	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.4	2.5	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	5.1	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.4	2.5	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.4	2.5	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.4	2.5	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	5.1	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.4	2.5	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.4	2.5	ug/kg	1
Styrene	100-42-5	8260B	ND		6.4	2.5	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.4	2.5	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.4	2.5	ug/kg	1
Toluene	108-88-3	8260B	ND		6.4	2.5	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.4	2.5	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.4	2.5	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.4	2.5	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.4	2.5	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-013
Description: SB-9-5	Matrix: Solid
Date Sampled: 08/11/2016 1905	% Solids: 76.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0022	JJG		19897	5.15

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.4	2.5	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.4	2.5	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.4	2.5	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	5.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	53-142
Bromofluorobenzene		107	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-013
Description: SB-9-5	Matrix: Solid
Date Sampled: 08/11/2016 1905	% Solids: 76.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20007

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-013
Description: SB-9-5	Matrix: Solid
Date Sampled: 08/11/2016 1905	% Solids: 76.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1635	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	470				ug/kg	1
Diethyltoluamide		8270D	92				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	330				ug/kg	1
Hexadecanoic acid, butyl ester		8270D	160				ug/kg	1
Octadecanoic acid, butyl ester		8270D	170				ug/kg	1
Unknown		8270D	90				ug/kg	1
13-Docosenamide, (Z)-		8270D	370				ug/kg	1
Unknown		8270D	100				ug/kg	1
Heneicosane, 11-pentyl-		8270D	170				ug/kg	1
Guaia-3,9-diene		8270D	100				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-013
Description: SB-9-5
Matrix: Solid
Date Sampled: 08/11/2016 1905
% Solids: 76.3 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1635	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		42	2.2	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		42	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		42	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		42	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		42	5.7	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		42	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	5.9	J	42	1.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	5.5	J	42	1.9	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	9.0	J	42	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	2.8	J	42	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		42	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		42	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		42	10	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		86	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		42	9.4	ug/kg	1
Carbazole	86-74-8	8270D	ND		42	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		42	7.8	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		42	3.9	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		42	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		42	10	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		42	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		42	7.9	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		42	7.6	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		42	8.8	ug/kg	1
Chrysene	218-01-9	8270D	ND		42	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		42	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		42	8.2	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		220	46	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		42	7.5	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		42	5.2	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		42	8.4	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		42	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		42	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		220	52	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		220	88	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		86	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		86	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		42	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		42	18	ug/kg	1
Fluoranthene	206-44-0	8270D	6.2	J	42	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		42	2.5	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		42	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		42	10	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		220	68	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-013
Description: SB-9-5
Matrix: Solid
Date Sampled: 08/11/2016 1905
% Solids: 76.3 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1635	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		42	7.4	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		42	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		42	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		42	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		42	9.0	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		86	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		42	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		86	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		86	8.2	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		86	7.7	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		42	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		86	19	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		220	53	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		42	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		42	9.4	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		220	56	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		42	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		42	8.8	ug/kg	1
Pyrene	129-00-0	8270D	8.4	J	42	1.5	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		42	7.7	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		42	6.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		42	33-102
2-Fluorophenol		44	28-104
Nitrobenzene-d5		46	22-109
Phenol-d5		49	27-103
Terphenyl-d14		56	41-120
2,4,6-Tribromophenol		55	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-013
Description: SB-9-5	Matrix: Solid
Date Sampled: 08/11/2016 1905	% Solids: 76.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0511	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0240	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.039	J	0.32	0.019	mg/kg	1
Arsenic	7440-38-2	6020A	1.2	J	3.2	0.41	mg/kg	2
Beryllium	7440-41-7	6020A	0.33		0.13	0.010	mg/kg	1
Cadmium	7440-43-9	6020A	0.078	J	0.32	0.025	mg/kg	2
Chromium	7440-47-3	6020A	42		17	0.37	mg/kg	2
Copper	7440-50-8	6020A	40		0.32	0.028	mg/kg	1
Iron	7439-89-6	6020A	30000		63	5.5	mg/kg	2
Lead	7439-92-1	6020A	20		0.32	0.0076	mg/kg	1
Manganese	7439-96-5	6020A	320		17	3.0	mg/kg	2
Nickel	7440-02-0	6020A	14	J	17	0.34	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.2	0.48	mg/kg	2
Silver	7440-22-4	6020A	ND		3.2	0.25	mg/kg	2
Thallium	7440-28-0	6020A	0.10	J	0.17	0.010	mg/kg	1
Zinc	7440-66-6	6020A	56		3.2	0.084	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-013
Description: SB-9-5	Matrix: Solid
Date Sampled: 08/11/2016 1905	% Solids: 76.3 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1631	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.035	J	0.095	0.0072	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH12021-014
Description:	SB-9-10	Matrix:	Solid
Date Sampled:	08/11/2016 1915	% Solids:	75.8 08/13/2016 1626
Date Received:	08/12/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1509	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/16/2016 1335	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 1335	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	22		1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.98	J	1.3	0.33	mg/kg	1
Nitrate - N (soluble)		300.0	1.2		0.26	0.032	mg/kg	1
Sulfate (soluble)		300.0	26		13	6.6	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-014
Description: SB-9-10	Matrix: Solid
Date Sampled: 08/11/2016 1915	% Solids: 75.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1613	SES		19853	6.28

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		21	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4	N	134	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-014
Description: SB-9-10
Matrix: Solid
Date Sampled: 08/11/2016 1915
% Solids: 75.8 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	08/16/2016 1846	SES		19936	5.54

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	170		24	4.8	ug/kg	2
Benzene	71-43-2	8260B	ND		6.0	2.4	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		6.0	2.4	ug/kg	2
Bromoform	75-25-2	8260B	ND		6.0	2.4	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.0	2.4	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	22	J	24	4.8	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		6.0	2.4	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		6.0	2.4	ug/kg	2
Chlorobenzene	108-90-7	8260B	17		6.0	2.4	ug/kg	2
Chloroethane	75-00-3	8260B	ND		6.0	2.4	ug/kg	2
Chloroform	67-66-3	8260B	ND		6.0	2.4	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.0	2.4	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		6.0	2.4	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.0	2.4	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		6.0	2.4	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.0	2.4	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.0	2.4	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.0	2.4	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	9.0		6.0	2.4	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		6.0	2.4	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		6.0	2.4	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		6.0	2.4	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		6.0	2.4	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.0	2.4	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.0	2.4	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		6.0	2.4	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.0	2.4	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.0	2.4	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		6.0	2.4	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		12	4.8	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		6.0	2.4	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		6.0	2.4	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.0	2.4	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	4.8	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		6.0	2.4	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		6.0	2.4	ug/kg	2
Styrene	100-42-5	8260B	ND		6.0	2.4	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.0	2.4	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		6.0	2.4	ug/kg	2
Toluene	108-88-3	8260B	ND		6.0	2.4	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.0	2.4	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.0	2.4	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.0	2.4	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.0	2.4	ug/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-014
Description: SB-9-10	Matrix: Solid
Date Sampled: 08/11/2016 1915	% Solids: 75.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	08/16/2016 1846	SES		19936	5.54

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.0	2.4	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		6.0	2.4	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		6.0	2.4	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		12	4.8	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		104	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client:	CDM Smith	Laboratory ID:	RH12021-014
Description:	SB-9-10	Matrix:	Solid
Date Sampled:	08/11/2016 1915	% Solids:	75.8 08/13/2016 1626
Date Received:	08/12/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				19938

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-014
Description: SB-9-10	Matrix: Solid
Date Sampled: 08/11/2016 1915	% Solids: 75.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	5	08/18/2016 2017	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	470				ug/kg	1
Unknown		8270D	830				ug/kg	1
Unknown		8270D	610				ug/kg	1
28-Nor-17.beta.(H)-hopane		8270D	800				ug/kg	1
1-Cyclohexene, 1,3,3-trimethyl-2-(1-meth		8270D	730				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-014
Description: SB-9-10
Matrix: Solid
Date Sampled: 08/11/2016 1915
% Solids: 75.8 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	5	08/18/2016 2017	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		220	11	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		220	11	ug/kg	1
Acetophenone	98-86-2	8270D	ND		220	79	ug/kg	1
Anthracene	120-12-7	8270D	ND		220	13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		220	29	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		220	92	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		220	7.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		220	9.6	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	67	J	220	9.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		220	7.5	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		220	9.4	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		220	72	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		220	52	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		440	57	ug/kg	1
Caprolactam	105-60-2	8270D	ND		220	49	ug/kg	1
Carbazole	86-74-8	8270D	ND		220	62	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		220	40	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		220	20	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		220	53	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		220	52	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		220	62	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		220	41	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		220	39	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		220	46	ug/kg	1
Chrysene	218-01-9	8270D	30	J	220	7.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		220	12	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		220	42	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		1100	240	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		220	39	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		220	27	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		220	43	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		220	66	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		220	79	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1100	270	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1100	460	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		440	72	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		440	76	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		220	64	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		220	95	ug/kg	1
Fluoranthene	206-44-0	8270D	30	J	220	5.9	ug/kg	1
Fluorene	86-73-7	8270D	ND		220	13	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		220	57	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		220	52	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1100	350	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-014
Description: SB-9-10	Matrix: Solid
Date Sampled: 08/11/2016 1915	% Solids: 75.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	5	08/18/2016 2017	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		220	38	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		220	9.0	ug/kg	1
Isophorone	78-59-1	8270D	ND		220	56	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		220	10	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		220	47	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		440	67	ug/kg	1
Naphthalene	91-20-3	8270D	ND		220	10	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		440	59	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		440	43	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		440	40	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		220	85	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		440	96	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1100	270	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		220	79	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		220	49	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1100	290	ug/kg	1
Phenanthrene	85-01-8	8270D	25	J	220	12	ug/kg	1
Phenol	108-95-2	8270D	ND		220	46	ug/kg	1
Pyrene	129-00-0	8270D	45	J	220	7.6	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		220	40	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		220	31	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		47	33-102
2-Fluorophenol		41	28-104
Nitrobenzene-d5		41	22-109
Phenol-d5		47	27-103
Terphenyl-d14		64	41-120
2,4,6-Tribromophenol		62	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-014
Description: SB-9-10	Matrix: Solid
Date Sampled: 08/11/2016 1915	% Solids: 75.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0517	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0257	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.33	0.020	mg/kg	1
Arsenic	7440-38-2	6020A	1.2	J	3.3	0.42	mg/kg	2
Beryllium	7440-41-7	6020A	0.29		0.13	0.011	mg/kg	1
Cadmium	7440-43-9	6020A	0.18	J	0.33	0.026	mg/kg	2
Chromium	7440-47-3	6020A	25		17	0.38	mg/kg	2
Copper	7440-50-8	6020A	51		0.33	0.029	mg/kg	1
Iron	7439-89-6	6020A	32000		66	5.6	mg/kg	2
Lead	7439-92-1	6020A	22		0.33	0.0079	mg/kg	1
Manganese	7439-96-5	6020A	490		17	3.1	mg/kg	2
Nickel	7440-02-0	6020A	14	J	17	0.35	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.3	0.50	mg/kg	2
Silver	7440-22-4	6020A	ND		3.3	0.26	mg/kg	2
Thallium	7440-28-0	6020A	0.18		0.17	0.011	mg/kg	1
Zinc	7440-66-6	6020A	44		3.3	0.087	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-014
Description: SB-9-10	Matrix: Solid
Date Sampled: 08/11/2016 1915	% Solids: 75.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1633	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.054	J	0.11	0.0082	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH12021-015
Description: SB-9-15	Matrix: Solid
Date Sampled: 08/11/2016 1920	% Solids: 74.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1511	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/16/2016 1447	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 1447	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	46		1.4	0.14	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	1.4		1.4	0.34	mg/kg	1
Nitrate - N (soluble)		300.0	1.3		0.27	0.033	mg/kg	1
Sulfate (soluble)		300.0	94		14	6.8	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-015
Description: SB-9-15	Matrix: Solid
Date Sampled: 08/11/2016 1920	% Solids: 74.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1635	SES		19853	5.79

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		23	14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		122	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-015
Description: SB-9-15
Matrix: Solid
Date Sampled: 08/11/2016 1920
% Solids: 74.1 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0107	JJG		19897	6.02

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	100		22	4.5	ug/kg	1
Benzene	71-43-2	8260B	ND		5.6	2.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.6	2.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.6	2.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.6	2.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	12	J	22	4.5	ug/kg	1
Carbon disulfide	75-15-0	8260B	3.5	J	5.6	2.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.6	2.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	58		5.6	2.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.6	2.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.6	2.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.6	2.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.6	2.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.6	2.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.6	2.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.6	2.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.6	2.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.6	2.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.6	2.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.6	2.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.6	2.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.6	2.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.6	2.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.6	2.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.6	2.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	4.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.6	2.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.6	2.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.6	2.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	4.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.6	2.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.6	2.2	ug/kg	1
Styrene	100-42-5	8260B	ND		5.6	2.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.6	2.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.6	2.2	ug/kg	1
Toluene	108-88-3	8260B	ND		5.6	2.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.6	2.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.6	2.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.6	2.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.6	2.2	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-015
Description: SB-9-15	Matrix: Solid
Date Sampled: 08/11/2016 1920	% Solids: 74.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0107	JJG		19897	6.02

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.6	2.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.6	2.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.6	2.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	4.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	53-142
Bromofluorobenzene		100	47-138
Toluene-d8		104	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-015
Description: SB-9-15	Matrix: Solid
Date Sampled: 08/11/2016 1920	% Solids: 74.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20007

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-015
Description: SB-9-15	Matrix: Solid
Date Sampled: 08/11/2016 1920	% Solids: 74.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1659	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
R-(-)-1,2-propanediol		8270D	110				ug/kg	1
Unknown		8270D	1400				ug/kg	1
Diethyltoluamide		8270D	97				ug/kg	1
Hexadecanoic acid, butyl ester		8270D	250				ug/kg	1
Octadecanoic acid, butyl ester		8270D	210				ug/kg	1
Silane, trichlorooctadecyl-		8270D	130				ug/kg	1
7H-Furo[3,2-g][1]benzopyran-7-one, 2-(1-		8270D	160				ug/kg	1
Cyclohexadecane		8270D	180				ug/kg	1
Unknown		8270D	450				ug/kg	1
Cyclotetradecane		8270D	150				ug/kg	1
Unknown		8270D	160				ug/kg	1
Z-12-Pentacosene		8270D	130				ug/kg	1
1-Heptadecanol, acetate		8270D	93				ug/kg	1
Unknown		8270D	140				ug/kg	1
Dodecanoic acid, hexadecyl ester		8270D	120				ug/kg	1
Octadecane		8270D	170				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-015
Description: SB-9-15
Matrix: Solid
Date Sampled: 08/11/2016 1920
% Solids: 74.1 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1659	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		43	2.2	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		43	2.3	ug/kg	1
Acetophenone	98-86-2	8270D	ND		43	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		43	2.6	ug/kg	1
Atrazine	1912-24-9	8270D	ND		43	5.8	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		43	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	45		43	1.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	45		43	1.9	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	86		43	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	21	J	43	1.5	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	28	J	43	1.9	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		43	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		43	10	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		88	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		43	9.7	ug/kg	1
Carbazole	86-74-8	8270D	ND		43	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		43	8.0	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		43	4.0	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		43	11	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		43	10	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		43	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		43	8.1	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		43	7.8	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		43	9.1	ug/kg	1
Chrysene	218-01-9	8270D	54		43	1.5	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		43	2.4	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		43	8.4	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		220	48	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		43	7.7	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		43	5.4	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		43	8.6	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		43	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		43	16	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		220	53	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		220	91	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		88	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		88	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		43	13	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	25	J	43	19	ug/kg	1
Fluoranthene	206-44-0	8270D	97		43	1.2	ug/kg	1
Fluorene	86-73-7	8270D	ND		43	2.6	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		43	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		43	10	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		220	70	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-015
Description: SB-9-15
Matrix: Solid
Date Sampled: 08/11/2016 1920
% Solids: 74.1 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1659	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		43	7.6	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	21	J	43	1.8	ug/kg	1
Isophorone	78-59-1	8270D	ND		43	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		43	2.0	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		43	9.3	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		88	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		43	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		88	12	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		88	8.5	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		88	7.9	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		43	17	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		88	19	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		220	54	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		43	16	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		43	9.6	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		220	58	ug/kg	1
Phenanthrene	85-01-8	8270D	27	J	43	2.4	ug/kg	1
Phenol	108-95-2	8270D	ND		43	9.1	ug/kg	1
Pyrene	129-00-0	8270D	71		43	1.5	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		43	7.9	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		43	6.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		49	33-102
2-Fluorophenol		49	28-104
Nitrobenzene-d5		52	22-109
Phenol-d5		55	27-103
Terphenyl-d14		63	41-120
2,4,6-Tribromophenol		64	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-015
Description: SB-9-15	Matrix: Solid
Date Sampled: 08/11/2016 1920	% Solids: 74.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0522	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0302	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.31	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	1.1	J	3.1	0.39	mg/kg	2
Beryllium	7440-41-7	6020A	0.37		0.12	0.0098	mg/kg	1
Cadmium	7440-43-9	6020A	0.29	J	0.31	0.025	mg/kg	2
Chromium	7440-47-3	6020A	39		16	0.36	mg/kg	2
Copper	7440-50-8	6020A	39		0.31	0.027	mg/kg	1
Iron	7439-89-6	6020A	32000		62	5.3	mg/kg	2
Lead	7439-92-1	6020A	33		0.31	0.0074	mg/kg	1
Manganese	7439-96-5	6020A	1000		16	2.9	mg/kg	2
Nickel	7440-02-0	6020A	15	J	16	0.33	mg/kg	2
Selenium	7782-49-2	6020A	0.51	J	3.1	0.47	mg/kg	2
Silver	7440-22-4	6020A	ND		3.1	0.25	mg/kg	2
Thallium	7440-28-0	6020A	0.16		0.16	0.0098	mg/kg	1
Zinc	7440-66-6	6020A	64		3.1	0.081	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-015
Description: SB-9-15	Matrix: Solid
Date Sampled: 08/11/2016 1920	% Solids: 74.1 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1636	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.054	J	0.097	0.0074	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH12021-016
Description:	SB-9-18-20	Matrix:	Solid
Date Sampled:	08/11/2016 1925	% Solids:	79.9 08/13/2016 1626
Date Received:	08/12/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	350.1	(Ammonia - N) 350.1	2	08/19/2016 1914	MJI		20328
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/16/2016 1511	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 1511	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	72		2.5	0.25	mg/kg	2
Hexavalent Chromium	18540-29-9	7196A	1.0	J	1.3	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	0.10	J	0.25	0.031	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.3	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-016
Description: SB-9-18-20	Matrix: Solid
Date Sampled: 08/11/2016 1925	% Solids: 79.9 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1657	SES		19853	6.14

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		20	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		124	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-016
Description: SB-9-18-20
Matrix: Solid
Date Sampled: 08/11/2016 1925
% Solids: 79.9 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0130	JJG		19897	6.70

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	70		19	3.7	ug/kg	1
Benzene	71-43-2	8260B	ND		4.7	1.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.7	1.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.7	1.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.7	1.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	11	J	19	3.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.7	1.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.7	1.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	11		4.7	1.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.7	1.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.7	1.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.7	1.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.7	1.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.7	1.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.7	1.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.7	1.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.7	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.7	1.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.7	1.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.7	1.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.7	1.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.7	1.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.7	1.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.7	1.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.3	3.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.7	1.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.7	1.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.7	1.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.3	3.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.7	1.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.7	1.9	ug/kg	1
Styrene	100-42-5	8260B	ND		4.7	1.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.7	1.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.7	1.9	ug/kg	1
Toluene	108-88-3	8260B	ND		4.7	1.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.7	1.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.7	1.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.7	1.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.7	1.9	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-016
Description: SB-9-18-20	Matrix: Solid
Date Sampled: 08/11/2016 1925	% Solids: 79.9 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0130	JJG		19897	6.70

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.7	1.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.7	1.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.7	1.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.3	3.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		101	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client:	CDM Smith	Laboratory ID:	RH12021-016
Description:	SB-9-18-20	Matrix:	Solid
Date Sampled:	08/11/2016 1925	% Solids:	79.9 08/13/2016 1626
Date Received:	08/12/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20007

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-016
Description: SB-9-18-20	Matrix: Solid
Date Sampled: 08/11/2016 1925	% Solids: 79.9 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1724	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	96				ug/kg	1
R-(-)-1,2-propanediol		8270D	110				ug/kg	1
Unknown		8270D	550				ug/kg	1
1,2,3-Propanetriol, diacetate		8270D	100				ug/kg	1
n-Hexadecanoic acid		8270D	92				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	230				ug/kg	1
Hexadecanoic acid, butyl ester		8270D	100				ug/kg	1
Cyclooctadecane, ethyl-		8270D	100				ug/kg	1
1-Nonadecene		8270D	110				ug/kg	1
Unknown		8270D	140				ug/kg	1
13-Docosenamide, (Z)-		8270D	170				ug/kg	1
Docosane		8270D	93				ug/kg	1
Perylene		8270D	500				ug/kg	1
Hexatriacontane		8270D	120				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-016
Description: SB-9-18-20
Matrix: Solid
Date Sampled: 08/11/2016 1925
% Solids: 79.9 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1724	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		41	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		41	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		41	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		41	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		41	5.6	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		41	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		41	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		41	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		41	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		41	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		41	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		41	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		41	9.9	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		84	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		41	9.2	ug/kg	1
Carbazole	86-74-8	8270D	ND		41	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		41	7.6	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		41	3.9	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		41	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		41	9.9	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		41	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		41	7.8	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		41	7.4	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		41	8.7	ug/kg	1
Chrysene	218-01-9	8270D	ND		41	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		41	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		41	8.0	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	45	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		41	7.4	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		41	5.1	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		41	8.2	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		41	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	22	J	41	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	51	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	87	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		84	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		84	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		41	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		41	18	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		41	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		41	2.5	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		41	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		41	9.8	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	67	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-016
Description: SB-9-18-20	Matrix: Solid
Date Sampled: 08/11/2016 1925	% Solids: 79.9 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1724	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		41	7.2	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		41	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		41	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		41	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		41	8.9	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		84	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		41	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		84	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		84	8.1	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		84	7.5	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		41	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		84	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	52	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		41	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		41	9.2	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	55	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		41	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		41	8.7	ug/kg	1
Pyrene	129-00-0	8270D	ND		41	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		41	7.6	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		41	5.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		48	33-102
2-Fluorophenol		50	28-104
Nitrobenzene-d5		53	22-109
Phenol-d5		53	27-103
Terphenyl-d14		67	41-120
2,4,6-Tribromophenol		60	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH12021-016
Description: SB-9-18-20	Matrix: Solid
Date Sampled: 08/11/2016 1925	% Solids: 79.9 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0528	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0308	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.30	0.018	mg/kg	1
Arsenic	7440-38-2	6020A	ND		3.0	0.39	mg/kg	2
Beryllium	7440-41-7	6020A	0.71		0.12	0.0096	mg/kg	1
Cadmium	7440-43-9	6020A	ND		0.30	0.024	mg/kg	2
Chromium	7440-47-3	6020A	24		16	0.35	mg/kg	2
Copper	7440-50-8	6020A	8.9		0.30	0.027	mg/kg	1
Iron	7439-89-6	6020A	11000		60	5.2	mg/kg	2
Lead	7439-92-1	6020A	11		0.30	0.0072	mg/kg	1
Manganese	7439-96-5	6020A	110		16	2.9	mg/kg	2
Nickel	7440-02-0	6020A	8.2	J	16	0.33	mg/kg	2
Selenium	7782-49-2	6020A	ND		3.0	0.46	mg/kg	2
Silver	7440-22-4	6020A	ND		3.0	0.24	mg/kg	2
Thallium	7440-28-0	6020A	0.13	J	0.16	0.0096	mg/kg	1
Zinc	7440-66-6	6020A	22		3.0	0.080	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-016
Description: SB-9-18-20	Matrix: Solid
Date Sampled: 08/11/2016 1925	% Solids: 79.9 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1638	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.0091	J	0.096	0.0073	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH12021-017
Description: DUP-2	Matrix: Solid
Date Sampled: 08/11/2016 0800	% Solids: 81.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1515	MJI		20279
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/16/2016 1535	TAF		20099
1		(Sulfate (sol) 300.0	1	08/16/2016 1535	TAF		20110

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	13		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.44	J	1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	0.085	J	0.24	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.1	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-017
Description: DUP-2	Matrix: Solid
Date Sampled: 08/11/2016 0800	% Solids: 81.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/15/2016 1719	SES		19853	5.55

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		22	14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		124	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-017
Description: DUP-2
Matrix: Solid
Date Sampled: 08/11/2016 0800
% Solids: 81.8 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0152	JJG		19897	6.82

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	37		18	3.6	ug/kg	1
Benzene	71-43-2	8260B	ND		4.5	1.8	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.5	1.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.5	1.8	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.5	1.8	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	3.9	J	18	3.6	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.5	1.8	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.5	1.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.5	1.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.5	1.8	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.5	1.8	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.5	1.8	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.5	1.8	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.5	1.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.5	1.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.5	1.8	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.5	1.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.5	1.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.5	1.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.5	1.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.5	1.8	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.5	1.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.5	1.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.5	1.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.5	1.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.5	1.8	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.5	1.8	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.5	1.8	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.5	1.8	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.0	3.6	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.5	1.8	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.5	1.8	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.5	1.8	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.0	3.6	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.5	1.8	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.5	1.8	ug/kg	1
Styrene	100-42-5	8260B	ND		4.5	1.8	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.5	1.8	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.5	1.8	ug/kg	1
Toluene	108-88-3	8260B	ND		4.5	1.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.5	1.8	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.5	1.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.5	1.8	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.5	1.8	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12021-017
Description: DUP-2	Matrix: Solid
Date Sampled: 08/11/2016 0800	% Solids: 81.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/16/2016 0152	JJG		19897	6.82

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.5	1.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.5	1.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.5	1.8	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.0	3.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		108	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-017
Description: DUP-2	Matrix: Solid
Date Sampled: 08/11/2016 0800	% Solids: 81.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20007

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH12021-017
Description: DUP-2	Matrix: Solid
Date Sampled: 08/11/2016 0800	% Solids: 81.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1839	JCG		20022

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	500				ug/kg	1
Hexadecanoic acid, butyl ester		8270D	110				ug/kg	1
13-Docosenamide, (Z)-		8270D	260				ug/kg	1
Friedelan-3-one		8270D	180				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-017
Description: DUP-2
Matrix: Solid
Date Sampled: 08/11/2016 0800
% Solids: 81.8 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1839	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		40	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		40	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		40	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		40	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		40	5.4	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		40	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		40	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		40	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		40	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		40	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		40	1.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		40	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		40	9.6	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		81	10	ug/kg	1
Caprolactam	105-60-2	8270D	ND		40	8.9	ug/kg	1
Carbazole	86-74-8	8270D	ND		40	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		40	7.4	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		40	3.7	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		40	9.8	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		40	9.6	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		40	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		40	7.5	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		40	7.2	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		40	8.4	ug/kg	1
Chrysene	218-01-9	8270D	ND		40	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		40	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		40	7.8	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	44	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		40	7.1	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		40	5.0	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		40	7.9	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		40	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		40	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	49	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	84	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		81	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		81	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		40	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		40	17	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		40	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		40	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		40	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		40	9.5	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	64	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12021-017
Description: DUP-2
Matrix: Solid
Date Sampled: 08/11/2016 0800
% Solids: 81.8 08/13/2016 1626
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/18/2016 1839	JCG	08/16/2016 1740	19957

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		40	7.0	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		40	1.6	ug/kg	1
Isophorone	78-59-1	8270D	ND		40	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		40	1.8	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		40	8.6	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		81	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		40	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		81	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		81	7.8	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		81	7.3	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		40	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		81	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	50	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		40	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		40	8.9	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	53	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		40	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		40	8.4	ug/kg	1
Pyrene	129-00-0	8270D	ND		40	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		40	7.3	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		40	5.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		41	33-102
2-Fluorophenol		45	28-104
Nitrobenzene-d5		46	22-109
Phenol-d5		48	27-103
Terphenyl-d14		65	41-120
2,4,6-Tribromophenol		58	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith
Description: DUP-2
Date Sampled: 08/11/2016 0800
Date Received: 08/12/2016

Laboratory ID: RH12021-017
Matrix: Solid
% Solids: 81.8 08/13/2016 1626

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/19/2016 0533	BNW	08/15/2016 1115	19752
2	3050B	6020A	10	08/19/2016 0314	BNW	08/15/2016 1115	19752

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		0.29	0.017	mg/kg	1
Arsenic	7440-38-2	6020A	ND		2.9	0.37	mg/kg	2
Beryllium	7440-41-7	6020A	0.71		0.12	0.0093	mg/kg	1
Cadmium	7440-43-9	6020A	0.033	J	0.29	0.023	mg/kg	2
Chromium	7440-47-3	6020A	27		15	0.34	mg/kg	2
Copper	7440-50-8	6020A	55		0.29	0.026	mg/kg	1
Iron	7439-89-6	6020A	34000		58	5.0	mg/kg	2
Lead	7439-92-1	6020A	10		0.29	0.0070	mg/kg	1
Manganese	7439-96-5	6020A	510		15	2.8	mg/kg	2
Nickel	7440-02-0	6020A	20		15	0.31	mg/kg	2
Selenium	7782-49-2	6020A	ND		2.9	0.44	mg/kg	2
Silver	7440-22-4	6020A	ND		2.9	0.23	mg/kg	2
Thallium	7440-28-0	6020A	0.053	J	0.15	0.0093	mg/kg	1
Zinc	7440-66-6	6020A	55		2.9	0.077	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH12021-017
Description: DUP-2	Matrix: Solid
Date Sampled: 08/11/2016 0800	% Solids: 81.8 08/13/2016 1626
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/18/2016 1640	COH	08/17/2016 1219	20059

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.094	0.0071	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ19904-001
Batch: 19904
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/16/2016 925

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Hexavalent Chromium	0.36	J	1	1.0	0.25	mg/kg	08/17/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19904-002
Batch: 19904
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/16/2016 925

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	4.0	3.8		1	96	90-110	08/17/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - Duplicate

Sample ID: RH12021-002DU
Batch: 19904
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/16/2016 925

Parameter	Sample Amount (mg/kg)	Result (mg/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Hexavalent Chromium	0.38	4.4	+	1	170	20	08/17/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH12021-004MS
Batch: 19904
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/16/2016 925

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	ND	4.6	1.5	N	1	33	75-125	08/17/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH12021-004MD
Batch: 19904
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/16/2016 925

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexavalent Chromium	ND	4.6	1.7	N	1	37	12	75-125	20	08/17/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20085-001
Batch: 20085
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/18/2016 1210

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Hexavalent Chromium	ND		1	1.0	0.25	mg/kg	08/19/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20085-002
Batch: 20085
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/18/2016 1210

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	4.0	3.9		1	97	90-110	08/19/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - Duplicate

Sample ID: RH12021-017DU
Batch: 20085
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/18/2016 1210

Parameter	Sample Amount (mg/kg)	Result (mg/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Hexavalent Chromium	0.44	9.3	+	1	180	20	08/19/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20099-001
Batch: 20099
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.20	0.025	mg/kg	08/16/2016 0534

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20099-002
Batch: 20099
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.82		1	102	90-110	08/16/2016 0510

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH12021-002MS
Batch: 20099
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.14	8.0	8.0		1	99	90-110	08/16/2016 0647

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH12021-002MD
Batch: 20099
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N (soluble)	0.14	8.0	8.1		1	100	1.1	90-110	20	08/16/2016 0711

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH12021-008MS
Batch: 20099
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.81	8.0	9.2		1	107	90-110	08/16/2016 1047

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH12021-008MD
Batch: 20099
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N (soluble)	0.81	8.0	8.7		1	101	5.9	90-110	20	08/16/2016 1111

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20110-001
Batch: 20110
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate (soluble)	ND		1	10	5.0	mg/kg	08/16/2016 0534

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20110-002
Batch: 20110
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	200	180		1	90	90-110	08/16/2016 0510

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH12021-002MS
Batch: 20110
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	ND	200	140	N	1	72	90-110	08/16/2016 0647

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH12021-002MD
Batch: 20110
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate (soluble)	ND	200	140	N	1	69	5.6	90-110	20	08/16/2016 0711

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH12021-008MS
Batch: 20110
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	ND	200	170	N	1	86	90-110	08/16/2016 1047

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH12021-008MD
Batch: 20110
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate (soluble)	ND	200	160	N	1	78	9.6	90-110	20	08/16/2016 1111

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20279-001
Batch: 20279
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	0.22	J	1	1.0	0.10	mg/kg	08/19/2016 1419

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20279-002
Batch: 20279
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	10	9.9		1	99	90-110	08/19/2016 1421

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH12021-002MS
Batch: 20279
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	0.56	12	13		1	109	90-110	08/19/2016 1427

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH12021-002MD
Batch: 20279
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ammonia - N (gas diffusion)	0.56	12	13	N	1	111	1.2	90-110	20	08/19/2016 1429

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH12021-007MS
Batch: 20279
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	0.90	12	13		1	103	90-110	08/19/2016 1447

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH12021-007MD
Batch: 20279
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ammonia - N (gas diffusion)	0.90	12	13		1	102	0.29	90-110	20	08/19/2016 1449

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20328-001
Batch: 20328
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	0.22	J	1	1.0	0.10	mg/kg	08/19/2016 1419

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20328-002
Batch: 20328
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	10	9.9		1	99	90-110	08/19/2016 1421

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19771-001
Batch: 19771
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	20	12	ug/kg	08/12/2016 2145

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		105	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19771-002
Batch: 19771
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	100	95		1	95	70-130	08/12/2016 2106

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19838-001
Batch: 19838
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	4.0	ug/kg	08/15/2016 1030
Benzene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Bromodichloromethane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Bromoform	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Bromomethane (Methyl bromide)	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
2-Butanone (MEK)	ND		1	20	4.0	ug/kg	08/15/2016 1030
Carbon disulfide	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Carbon tetrachloride	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Chlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Chloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Chloroform	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Chloromethane (Methyl chloride)	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Cyclohexane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Dibromochloromethane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,2-Dibromoethane (EDB)	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,4-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,3-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,2-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Dichlorodifluoromethane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,2-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,1-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
trans-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
cis-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,1-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,2-Dichloropropane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
trans-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
cis-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Ethylbenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
2-Hexanone	ND		1	10	4.0	ug/kg	08/15/2016 1030
Isopropylbenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Methyl acetate	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
4-Methyl-2-pentanone	ND		1	10	4.0	ug/kg	08/15/2016 1030
Methylcyclohexane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Methylene chloride	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Styrene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,1,2,2-Tetrachloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Tetrachloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Toluene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,2,4-Trichlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,1,2-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
1,1,1-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19838-001
Batch: 19838
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Trichlorofluoromethane	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Vinyl chloride	ND		1	5.0	2.0	ug/kg	08/15/2016 1030
Xylenes (total)	ND		1	10	4.0	ug/kg	08/15/2016 1030

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		108	47-138
1,2-Dichloroethane-d4		98	53-142
Toluene-d8		105	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19838-002
Batch: 19838
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	104	60-140	08/15/2016 0933
Benzene	50	50		1	100	69-123	08/15/2016 0933
Bromodichloromethane	50	51		1	103	69-121	08/15/2016 0933
Bromoform	50	46		1	92	61-119	08/15/2016 0933
Bromomethane (Methyl bromide)	50	52		1	105	10-168	08/15/2016 0933
2-Butanone (MEK)	100	94		1	94	57-148	08/15/2016 0933
Carbon disulfide	50	52		1	104	58-122	08/15/2016 0933
Carbon tetrachloride	50	51		1	103	58-136	08/15/2016 0933
Chlorobenzene	50	51		1	102	59-129	08/15/2016 0933
Chloroethane	50	55		1	110	60-140	08/15/2016 0933
Chloroform	50	49		1	97	71-125	08/15/2016 0933
Chloromethane (Methyl chloride)	50	55		1	110	34-134	08/15/2016 0933
Cyclohexane	50	55		1	110	53-139	08/15/2016 0933
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	95	55-125	08/15/2016 0933
Dibromochloromethane	50	50		1	100	66-119	08/15/2016 0933
1,2-Dibromoethane (EDB)	50	48		1	96	74-124	08/15/2016 0933
1,4-Dichlorobenzene	50	52		1	104	52-133	08/15/2016 0933
1,3-Dichlorobenzene	50	52		1	104	51-134	08/15/2016 0933
1,2-Dichlorobenzene	50	52		1	104	57-131	08/15/2016 0933
Dichlorodifluoromethane	50	63		1	126	10-157	08/15/2016 0933
1,2-Dichloroethane	50	48		1	96	67-129	08/15/2016 0933
1,1-Dichloroethane	50	51		1	102	71-127	08/15/2016 0933
trans-1,2-Dichloroethene	50	51		1	101	68-131	08/15/2016 0933
cis-1,2-Dichloroethene	50	49		1	97	70-122	08/15/2016 0933
1,1-Dichloroethene	50	52		1	104	69-138	08/15/2016 0933
1,2-Dichloropropane	50	51		1	101	72-124	08/15/2016 0933
trans-1,3-Dichloropropene	50	50		1	99	70-124	08/15/2016 0933
cis-1,3-Dichloropropene	50	51		1	102	70-126	08/15/2016 0933
Ethylbenzene	50	51		1	102	59-128	08/15/2016 0933
2-Hexanone	100	93		1	93	54-137	08/15/2016 0933
Isopropylbenzene	50	53		1	107	50-136	08/15/2016 0933
Methyl acetate	50	48		1	96	59-137	08/15/2016 0933
Methyl tertiary butyl ether (MTBE)	50	44		1	88	70-130	08/15/2016 0933
4-Methyl-2-pentanone	100	97		1	97	60-134	08/15/2016 0933
Methylcyclohexane	50	58		1	115	41-144	08/15/2016 0933
Methylene chloride	50	47		1	94	70-130	08/15/2016 0933
Styrene	50	52		1	104	54-136	08/15/2016 0933
1,1,2,2-Tetrachloroethane	50	48		1	97	69-132	08/15/2016 0933
Tetrachloroethene	50	55		1	109	45-150	08/15/2016 0933
Toluene	50	52		1	103	61-129	08/15/2016 0933
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	55		1	110	49-136	08/15/2016 0933
1,2,4-Trichlorobenzene	50	55		1	109	34-145	08/15/2016 0933
1,1,2-Trichloroethane	50	49		1	97	55-128	08/15/2016 0933
1,1,1-Trichloroethane	50	51		1	102	63-128	08/15/2016 0933

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19838-002
Batch: 19838
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	54		1	107	62-126	08/15/2016 0933
Trichlorofluoromethane	50	62		1	124	45-138	08/15/2016 0933
Vinyl chloride	50	54		1	108	42-132	08/15/2016 0933
Xylenes (total)	100	100		1	103	58-128	08/15/2016 0933

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		108	47-138
1,2-Dichloroethane-d4		95	53-142
Toluene-d8		104	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19853-001
Batch: 19853
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	20	12	ug/kg	08/15/2016 1153

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		120	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19853-002
Batch: 19853
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	100	110		1	113	70-130	08/15/2016 1056

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19897-001
Batch: 19897
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	4.0	ug/kg	08/15/2016 2155
Benzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Bromodichloromethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Bromoform	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Bromomethane (Methyl bromide)	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
2-Butanone (MEK)	ND		1	20	4.0	ug/kg	08/15/2016 2155
Carbon disulfide	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Carbon tetrachloride	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Chlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Chloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Chloroform	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Chloromethane (Methyl chloride)	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Cyclohexane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Dibromochloromethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,2-Dibromoethane (EDB)	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,4-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,3-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,2-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Dichlorodifluoromethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,2-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,1-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
trans-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
cis-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,1-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,2-Dichloropropane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
trans-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
cis-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Ethylbenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
2-Hexanone	ND		1	10	4.0	ug/kg	08/15/2016 2155
Isopropylbenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Methyl acetate	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
4-Methyl-2-pentanone	ND		1	10	4.0	ug/kg	08/15/2016 2155
Methylcyclohexane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Methylene chloride	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Styrene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,1,2,2-Tetrachloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Tetrachloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Toluene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,2,4-Trichlorobenzene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,1,2-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
1,1,1-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19897-001
Batch: 19897
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Trichlorofluoromethane	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Vinyl chloride	ND		1	5.0	2.0	ug/kg	08/15/2016 2155
Xylenes (total)	ND		1	10	4.0	ug/kg	08/15/2016 2155

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		109	47-138
1,2-Dichloroethane-d4		99	53-142
Toluene-d8		108	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19897-002
Batch: 19897
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	98		1	98	60-140	08/15/2016 2049
Benzene	50	51		1	101	69-123	08/15/2016 2049
Bromodichloromethane	50	52		1	104	69-121	08/15/2016 2049
Bromoform	50	46		1	91	61-119	08/15/2016 2049
Bromomethane (Methyl bromide)	50	50		1	100	10-168	08/15/2016 2049
2-Butanone (MEK)	100	95		1	95	57-148	08/15/2016 2049
Carbon disulfide	50	50		1	99	58-122	08/15/2016 2049
Carbon tetrachloride	50	51		1	102	58-136	08/15/2016 2049
Chlorobenzene	50	52		1	103	59-129	08/15/2016 2049
Chloroethane	50	53		1	106	60-140	08/15/2016 2049
Chloroform	50	49		1	98	71-125	08/15/2016 2049
Chloromethane (Methyl chloride)	50	52		1	103	34-134	08/15/2016 2049
Cyclohexane	50	55		1	109	53-139	08/15/2016 2049
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	95	55-125	08/15/2016 2049
Dibromochloromethane	50	50		1	100	66-119	08/15/2016 2049
1,2-Dibromoethane (EDB)	50	48		1	96	74-124	08/15/2016 2049
1,4-Dichlorobenzene	50	53		1	107	52-133	08/15/2016 2049
1,3-Dichlorobenzene	50	53		1	106	51-134	08/15/2016 2049
1,2-Dichlorobenzene	50	52		1	104	57-131	08/15/2016 2049
Dichlorodifluoromethane	50	61		1	123	10-157	08/15/2016 2049
1,2-Dichloroethane	50	48		1	96	67-129	08/15/2016 2049
1,1-Dichloroethane	50	51		1	102	71-127	08/15/2016 2049
trans-1,2-Dichloroethene	50	51		1	102	68-131	08/15/2016 2049
cis-1,2-Dichloroethene	50	49		1	98	70-122	08/15/2016 2049
1,1-Dichloroethene	50	53		1	106	69-138	08/15/2016 2049
1,2-Dichloropropane	50	51		1	101	72-124	08/15/2016 2049
trans-1,3-Dichloropropene	50	50		1	101	70-124	08/15/2016 2049
cis-1,3-Dichloropropene	50	51		1	103	70-126	08/15/2016 2049
Ethylbenzene	50	53		1	106	59-128	08/15/2016 2049
2-Hexanone	100	96		1	96	54-137	08/15/2016 2049
Isopropylbenzene	50	54		1	108	50-136	08/15/2016 2049
Methyl acetate	50	46		1	93	59-137	08/15/2016 2049
Methyl tertiary butyl ether (MTBE)	50	43		1	87	70-130	08/15/2016 2049
4-Methyl-2-pentanone	100	97		1	97	60-134	08/15/2016 2049
Methylcyclohexane	50	58		1	117	41-144	08/15/2016 2049
Methylene chloride	50	46		1	92	70-130	08/15/2016 2049
Styrene	50	52		1	105	54-136	08/15/2016 2049
1,1,2,2-Tetrachloroethane	50	48		1	96	69-132	08/15/2016 2049
Tetrachloroethene	50	56		1	113	45-150	08/15/2016 2049
Toluene	50	53		1	106	61-129	08/15/2016 2049
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	56		1	112	49-136	08/15/2016 2049
1,2,4-Trichlorobenzene	50	55		1	109	34-145	08/15/2016 2049
1,1,2-Trichloroethane	50	48		1	96	55-128	08/15/2016 2049
1,1,1-Trichloroethane	50	50		1	100	63-128	08/15/2016 2049

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19897-002
Batch: 19897
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	54		1	108	62-126	08/15/2016 2049
Trichlorofluoromethane	50	59		1	118	45-138	08/15/2016 2049
Vinyl chloride	50	53		1	105	42-132	08/15/2016 2049
Xylenes (total)	100	100		1	104	58-128	08/15/2016 2049

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		108	47-138
1,2-Dichloroethane-d4		96	53-142
Toluene-d8		107	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19936-001
Batch: 19936
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	4.0	ug/kg	08/16/2016 1209
Benzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Bromodichloromethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Bromoform	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Bromomethane (Methyl bromide)	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
2-Butanone (MEK)	ND		1	20	4.0	ug/kg	08/16/2016 1209
Carbon disulfide	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Carbon tetrachloride	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Chlorobenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Chloroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Chloroform	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Chloromethane (Methyl chloride)	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Cyclohexane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Dibromochloromethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,2-Dibromoethane (EDB)	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,3-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,4-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,2-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Dichlorodifluoromethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,2-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,1-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
trans-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
cis-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,1-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,2-Dichloropropane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
cis-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
trans-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Ethylbenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
2-Hexanone	ND		1	10	4.0	ug/kg	08/16/2016 1209
Isopropylbenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Methyl acetate	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
4-Methyl-2-pentanone	ND		1	10	4.0	ug/kg	08/16/2016 1209
Methylcyclohexane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Methylene chloride	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Styrene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,1,2,2-Tetrachloroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Tetrachloroethene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Toluene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,2,4-Trichlorobenzene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,1,1-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
1,1,2-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19936-001
Batch: 19936
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Trichlorofluoromethane	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Vinyl chloride	ND		1	5.0	2.0	ug/kg	08/16/2016 1209
Xylenes (total)	ND		1	10	4.0	ug/kg	08/16/2016 1209

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		107	47-138
1,2-Dichloroethane-d4		98	53-142
Toluene-d8		106	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19936-002
Batch: 19936
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	120		1	119	60-140	08/16/2016 1113
Benzene	50	50		1	99	69-123	08/16/2016 1113
Bromodichloromethane	50	52		1	104	69-121	08/16/2016 1113
Bromoform	50	49		1	97	61-119	08/16/2016 1113
Bromomethane (Methyl bromide)	50	47		1	95	10-168	08/16/2016 1113
2-Butanone (MEK)	100	110		1	108	57-148	08/16/2016 1113
Carbon disulfide	50	47		1	95	58-122	08/16/2016 1113
Carbon tetrachloride	50	48		1	97	58-136	08/16/2016 1113
Chlorobenzene	50	51		1	102	59-129	08/16/2016 1113
Chloroethane	50	49		1	97	60-140	08/16/2016 1113
Chloroform	50	49		1	98	71-125	08/16/2016 1113
Chloromethane (Methyl chloride)	50	48		1	96	34-134	08/16/2016 1113
Cyclohexane	50	50		1	99	53-139	08/16/2016 1113
1,2-Dibromo-3-chloropropane (DBCP)	50	54		1	107	55-125	08/16/2016 1113
Dibromochloromethane	50	52		1	104	66-119	08/16/2016 1113
1,2-Dibromoethane (EDB)	50	51		1	103	74-124	08/16/2016 1113
1,3-Dichlorobenzene	50	51		1	101	51-134	08/16/2016 1113
1,4-Dichlorobenzene	50	51		1	102	52-133	08/16/2016 1113
1,2-Dichlorobenzene	50	52		1	103	57-131	08/16/2016 1113
Dichlorodifluoromethane	50	50		1	100	10-157	08/16/2016 1113
1,2-Dichloroethane	50	50		1	100	67-129	08/16/2016 1113
1,1-Dichloroethane	50	50		1	100	71-127	08/16/2016 1113
trans-1,2-Dichloroethene	50	49		1	98	68-131	08/16/2016 1113
cis-1,2-Dichloroethene	50	48		1	96	70-122	08/16/2016 1113
1,1-Dichloroethene	50	50		1	100	69-138	08/16/2016 1113
1,2-Dichloropropane	50	51		1	102	72-124	08/16/2016 1113
cis-1,3-Dichloropropene	50	51		1	102	70-126	08/16/2016 1113
trans-1,3-Dichloropropene	50	51		1	102	70-124	08/16/2016 1113
Ethylbenzene	50	50		1	99	59-128	08/16/2016 1113
2-Hexanone	100	110		1	107	54-137	08/16/2016 1113
Isopropylbenzene	50	52		1	103	50-136	08/16/2016 1113
Methyl acetate	50	54		1	109	59-137	08/16/2016 1113
Methyl tertiary butyl ether (MTBE)	50	47		1	93	70-130	08/16/2016 1113
4-Methyl-2-pentanone	100	110		1	109	60-134	08/16/2016 1113
Methylcyclohexane	50	51		1	103	41-144	08/16/2016 1113
Methylene chloride	50	47		1	95	70-130	08/16/2016 1113
Styrene	50	51		1	101	54-136	08/16/2016 1113
1,1,2,2-Tetrachloroethane	50	52		1	104	69-132	08/16/2016 1113
Tetrachloroethene	50	51		1	103	45-150	08/16/2016 1113
Toluene	50	51		1	101	61-129	08/16/2016 1113
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	49		1	99	49-136	08/16/2016 1113
1,2,4-Trichlorobenzene	50	50		1	99	34-145	08/16/2016 1113
1,1,1-Trichloroethane	50	48		1	97	63-128	08/16/2016 1113
1,1,2-Trichloroethane	50	50		1	101	55-128	08/16/2016 1113

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19936-002
Batch: 19936
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	53		1	105	62-126	08/16/2016 1113
Trichlorofluoromethane	50	51		1	101	45-138	08/16/2016 1113
Vinyl chloride	50	46		1	93	42-132	08/16/2016 1113
Xylenes (total)	100	100		1	101	58-128	08/16/2016 1113

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		105	47-138
1,2-Dichloroethane-d4		95	53-142
Toluene-d8		105	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19957-001
Batch: 19957
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 1740

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	33	11	ug/kg	08/17/2016 1119
2,4,5-Trichlorophenol	ND		1	33	6.1	ug/kg	08/17/2016 1119
2,4,6-Trichlorophenol	ND		1	33	4.7	ug/kg	08/17/2016 1119
2,4-Dichlorophenol	ND		1	33	5.9	ug/kg	08/17/2016 1119
2,4-Dimethylphenol	ND		1	33	10	ug/kg	08/17/2016 1119
2,4-Dinitrophenol	ND		1	170	69	ug/kg	08/17/2016 1119
2,4-Dinitrotoluene	ND		1	67	11	ug/kg	08/17/2016 1119
2,6-Dinitrotoluene	ND		1	67	11	ug/kg	08/17/2016 1119
2-Chloronaphthalene	ND		1	33	6.2	ug/kg	08/17/2016 1119
2-Chlorophenol	ND		1	33	6.0	ug/kg	08/17/2016 1119
2-Methylnaphthalene	ND		1	33	1.5	ug/kg	08/17/2016 1119
2-Methylphenol	ND		1	33	7.1	ug/kg	08/17/2016 1119
2-Nitroaniline	ND		1	67	8.9	ug/kg	08/17/2016 1119
2-Nitrophenol	ND		1	67	15	ug/kg	08/17/2016 1119
3+4-Methylphenol	ND		1	67	10	ug/kg	08/17/2016 1119
3,3'-Dichlorobenzidine	ND		1	170	36	ug/kg	08/17/2016 1119
3-Nitroaniline	ND		1	67	6.5	ug/kg	08/17/2016 1119
4,6-Dinitro-2-methylphenol	ND		1	170	40	ug/kg	08/17/2016 1119
4-Bromophenyl phenyl ether	ND		1	33	7.9	ug/kg	08/17/2016 1119
4-Chloro-3-methyl phenol	ND		1	33	6.1	ug/kg	08/17/2016 1119
4-Chloroaniline	ND		1	33	3.1	ug/kg	08/17/2016 1119
4-Chlorophenyl phenyl ether	ND		1	33	6.9	ug/kg	08/17/2016 1119
4-Nitroaniline	ND		1	67	6.0	ug/kg	08/17/2016 1119
4-Nitrophenol	ND		1	170	41	ug/kg	08/17/2016 1119
Acenaphthene	ND		1	33	1.7	ug/kg	08/17/2016 1119
Acenaphthylene	ND		1	33	1.7	ug/kg	08/17/2016 1119
Acetophenone	ND		1	33	12	ug/kg	08/17/2016 1119
Anthracene	ND		1	33	2.0	ug/kg	08/17/2016 1119
Atrazine	ND		1	33	4.4	ug/kg	08/17/2016 1119
Benzaldehyde	ND		1	33	14	ug/kg	08/17/2016 1119
Benzo(a)anthracene	ND		1	33	1.1	ug/kg	08/17/2016 1119
Benzo(a)pyrene	ND		1	33	1.5	ug/kg	08/17/2016 1119
Benzo(b)fluoranthene	ND		1	33	1.5	ug/kg	08/17/2016 1119
Benzo(g,h,i)perylene	ND		1	33	1.1	ug/kg	08/17/2016 1119
Benzo(k)fluoranthene	ND		1	33	1.4	ug/kg	08/17/2016 1119
bis (2-Chloro-1-methylethyl) ether	ND		1	33	9.3	ug/kg	08/17/2016 1119
bis(2-Chloroethoxy)methane	ND		1	33	8.1	ug/kg	08/17/2016 1119
bis(2-Chloroethyl)ether	ND		1	33	7.9	ug/kg	08/17/2016 1119
bis(2-Ethylhexyl)phthalate	ND		1	33	14	ug/kg	08/17/2016 1119
Butyl benzyl phthalate	ND		1	67	8.6	ug/kg	08/17/2016 1119
Caprolactam	ND		1	33	7.4	ug/kg	08/17/2016 1119
Carbazole	ND		1	33	9.4	ug/kg	08/17/2016 1119
Chrysene	ND		1	33	1.1	ug/kg	08/17/2016 1119
Di-n-butyl phthalate	ND		1	33	12	ug/kg	08/17/2016 1119

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19957-001
Batch: 19957
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 1740

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	33	9.8	ug/kg	08/17/2016 1119
Dibenzo(a,h)anthracene	ND		1	33	1.8	ug/kg	08/17/2016 1119
Dibenzofuran	ND		1	33	6.4	ug/kg	08/17/2016 1119
Diethylphthalate	ND		1	33	4.1	ug/kg	08/17/2016 1119
Dimethyl phthalate	ND		1	33	6.6	ug/kg	08/17/2016 1119
Fluoranthene	ND		1	33	0.89	ug/kg	08/17/2016 1119
Fluorene	ND		1	33	2.0	ug/kg	08/17/2016 1119
Hexachlorobenzene	ND		1	33	8.6	ug/kg	08/17/2016 1119
Hexachlorobutadiene	ND		1	33	7.9	ug/kg	08/17/2016 1119
Hexachlorocyclopentadiene	ND		1	170	53	ug/kg	08/17/2016 1119
Hexachloroethane	ND		1	33	5.8	ug/kg	08/17/2016 1119
Indeno(1,2,3-c,d)pyrene	ND		1	33	1.4	ug/kg	08/17/2016 1119
Isophorone	ND		1	33	8.4	ug/kg	08/17/2016 1119
N-Nitrosodi-n-propylamine	ND		1	33	12	ug/kg	08/17/2016 1119
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	33	7.4	ug/kg	08/17/2016 1119
Naphthalene	ND		1	33	1.6	ug/kg	08/17/2016 1119
Nitrobenzene	ND		1	33	13	ug/kg	08/17/2016 1119
Pentachlorophenol	ND		1	170	44	ug/kg	08/17/2016 1119
Phenanthrene	ND		1	33	1.8	ug/kg	08/17/2016 1119
Phenol	ND		1	33	6.9	ug/kg	08/17/2016 1119
Pyrene	ND		1	33	1.2	ug/kg	08/17/2016 1119

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		55	30-117
2-Fluorobiphenyl		54	33-102
2-Fluorophenol		55	28-104
Nitrobenzene-d5		60	22-109
Phenol-d5		59	27-103
Terphenyl-d14		77	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19957-002
Batch: 19957
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 1740

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	330	200		1	60	30-130	08/17/2016 1144
2,4,5-Trichlorophenol	330	210		1	64	46-122	08/17/2016 1144
2,4,6-Trichlorophenol	330	190		1	58	38-115	08/17/2016 1144
2,4-Dichlorophenol	670	370		1	56	41-113	08/17/2016 1144
2,4-Dimethylphenol	330	230		1	68	33-123	08/17/2016 1144
2,4-Dinitrophenol	330	230		1	69	30-130	08/17/2016 1144
2,4-Dinitrotoluene	330	260		1	79	48-124	08/17/2016 1144
2,6-Dinitrotoluene	330	240		1	71	47-125	08/17/2016 1144
2-Chloronaphthalene	330	190		1	58	31-127	08/17/2016 1144
2-Chlorophenol	330	190		1	58	37-106	08/17/2016 1144
2-Methylnaphthalene	330	190		1	57	40-106	08/17/2016 1144
2-Methylphenol	330	260		1	79	32-107	08/17/2016 1144
2-Nitroaniline	330	230		1	69	45-128	08/17/2016 1144
2-Nitrophenol	330	190		1	58	35-108	08/17/2016 1144
3+4-Methylphenol	330	200		1	61	39-108	08/17/2016 1144
3,3'-Dichlorobenzidine	330	260		1	79	30-130	08/17/2016 1144
3-Nitroaniline	330	210		1	62	24-127	08/17/2016 1144
4,6-Dinitro-2-methylphenol	330	280		1	84	40-130	08/17/2016 1144
4-Bromophenyl phenyl ether	330	230		1	68	46-118	08/17/2016 1144
4-Chloro-3-methyl phenol	330	240		1	72	49-118	08/17/2016 1144
4-Chloroaniline	330	220		1	65	10-125	08/17/2016 1144
4-Chlorophenyl phenyl ether	330	190		1	59	47-116	08/17/2016 1144
4-Nitroaniline	330	250		1	76	48-127	08/17/2016 1144
4-Nitrophenol	670	630		1	94	18-154	08/17/2016 1144
Acenaphthene	330	210		1	64	46-114	08/17/2016 1144
Acenaphthylene	330	220		1	66	44-122	08/17/2016 1144
Acetophenone	330	190		1	57	30-130	08/17/2016 1144
Anthracene	330	260		1	78	50-119	08/17/2016 1144
Atrazine	330	280		1	83	30-130	08/17/2016 1144
Benzaldehyde	330	200		1	61	40-117	08/17/2016 1144
Benzo(a)anthracene	330	280		1	83	47-121	08/17/2016 1144
Benzo(a)pyrene	330	290		1	88	55-134	08/17/2016 1144
Benzo(b)fluoranthene	330	300		1	89	28-139	08/17/2016 1144
Benzo(g,h,i)perylene	330	350		1	104	36-125	08/17/2016 1144
Benzo(k)fluoranthene	330	280		1	85	47-130	08/17/2016 1144
bis (2-Chloro-1-methylethyl) ether	330	220		1	66	31-102	08/17/2016 1144
bis(2-Chloroethoxy)methane	330	220		1	65	39-108	08/17/2016 1144
bis(2-Chloroethyl)ether	330	220		1	65	32-105	08/17/2016 1144
bis(2-Ethylhexyl)phthalate	330	340		1	101	45-128	08/17/2016 1144
Butyl benzyl phthalate	330	330		1	98	46-128	08/17/2016 1144
Caprolactam	330	290		1	88	30-130	08/17/2016 1144
Carbazole	330	280		1	84	30-130	08/17/2016 1144
Chrysene	330	280		1	83	45-126	08/17/2016 1144
Di-n-butyl phthalate	330	320		1	95	51-129	08/17/2016 1144

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19957-002
Batch: 19957
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 1740

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Di-n-octylphthalate	330	290		1	86	49-142	08/17/2016 1144
Dibenzo(a,h)anthracene	330	230		1	68	30-130	08/17/2016 1144
Dibenzofuran	330	200		1	60	45-112	08/17/2016 1144
Diethylphthalate	330	270		1	80	49-123	08/17/2016 1144
Dimethyl phthalate	330	250		1	74	48-120	08/17/2016 1144
Fluoranthene	330	270		1	80	50-123	08/17/2016 1144
Fluorene	330	210		1	62	48-117	08/17/2016 1144
Hexachlorobenzene	330	240		1	72	44-122	08/17/2016 1144
Hexachlorobutadiene	330	170		1	52	33-103	08/17/2016 1144
Hexachlorocyclopentadiene	1700	750		1	45	18-121	08/17/2016 1144
Hexachloroethane	330	180		1	53	30-96	08/17/2016 1144
Indeno(1,2,3-c,d)pyrene	330	310		1	92	45-123	08/17/2016 1144
Isophorone	330	200		1	60	30-130	08/17/2016 1144
N-Nitrosodi-n-propylamine	330	260		1	78	32-115	08/17/2016 1144
N-Nitrosodiphenylamine (Diphenylamine)	330	260		1	77	53-150	08/17/2016 1144
Naphthalene	330	190		1	57	36-110	08/17/2016 1144
Nitrobenzene	330	210		1	64	33-114	08/17/2016 1144
Pentachlorophenol	670	480		1	72	27-138	08/17/2016 1144
Phenanthrene	330	250		1	75	49-117	08/17/2016 1144
Phenol	330	200		1	61	36-108	08/17/2016 1144
Pyrene	330	280		1	84	47-119	08/17/2016 1144

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		67	30-117
2-Fluorobiphenyl		54	33-102
2-Fluorophenol		54	28-104
Nitrobenzene-d5		60	22-109
Phenol-d5		59	27-103
Terphenyl-d14		73	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: RH12021-016MS
Batch: 19957
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 1740

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	410	150		1	38	30-130	08/18/2016 1749
Acenaphthylene	ND	410	160		1	38	30-130	08/18/2016 1749
Acetophenone	ND	410	130		1	31	30-130	08/18/2016 1749
Anthracene	ND	410	260		1	64	30-130	08/18/2016 1749
Atrazine	ND	410	270		1	68	30-130	08/18/2016 1749
Benzaldehyde	ND	410	140	N	1	35	40-117	08/18/2016 1749
Benzo(a)anthracene	ND	410	310		1	76	30-130	08/18/2016 1749
Benzo(a)pyrene	ND	410	330		1	80	30-130	08/18/2016 1749
Benzo(b)fluoranthene	ND	410	360		1	88	30-130	08/18/2016 1749
Benzo(g,h,i)perylene	ND	410	200		1	49	30-130	08/18/2016 1749
Benzo(k)fluoranthene	ND	410	340		1	83	30-130	08/18/2016 1749
1,1'-Biphenyl	ND	410	130		1	33	30-130	08/18/2016 1749
4-Bromophenyl phenyl ether	ND	410	200		1	50	30-130	08/18/2016 1749
Butyl benzyl phthalate	ND	410	350		1	86	30-130	08/18/2016 1749
Caprolactam	ND	410	290		1	72	30-130	08/18/2016 1749
Carbazole	ND	410	290		1	71	30-130	08/18/2016 1749
4-Chloro-3-methyl phenol	ND	410	210		1	53	30-130	08/18/2016 1749
4-Chloroaniline	ND	410	46		1	11	10-130	08/18/2016 1749
bis(2-Chloroethoxy)methane	ND	410	140		1	35	30-130	08/18/2016 1749
bis(2-Chloroethyl)ether	ND	410	120	N	1	29	30-130	08/18/2016 1749
bis (2-Chloro-1-methylethyl) ether	ND	410	110	N	1	27	30-130	08/18/2016 1749
2-Chloronaphthalene	ND	410	130		1	32	30-130	08/18/2016 1749
2-Chlorophenol	ND	410	130		1	31	30-130	08/18/2016 1749
4-Chlorophenyl phenyl ether	ND	410	150		1	38	30-130	08/18/2016 1749
Chrysene	ND	410	310		1	76	30-130	08/18/2016 1749
Dibenzo(a,h)anthracene	ND	410	160		1	40	30-130	08/18/2016 1749
Dibenzofuran	ND	410	160		1	39	30-130	08/18/2016 1749
3,3'-Dichlorobenzidine	ND	410	220		1	54	30-130	08/18/2016 1749
2,4-Dichlorophenol	ND	810	290		1	35	30-130	08/18/2016 1749
Diethylphthalate	ND	410	240		1	60	30-130	08/18/2016 1749
Dimethyl phthalate	ND	410	200		1	50	30-130	08/18/2016 1749
2,4-Dimethylphenol	ND	410	170		1	41	30-130	08/18/2016 1749
Di-n-butyl phthalate	22	410	340		1	79	30-130	08/18/2016 1749
4,6-Dinitro-2-methylphenol	ND	410	97	N	1	24	30-130	08/18/2016 1749
2,4-Dinitrophenol	ND	410	69	N	1	17	30-130	08/18/2016 1749
2,4-Dinitrotoluene	ND	410	220		1	54	30-130	08/18/2016 1749
2,6-Dinitrotoluene	ND	410	180		1	45	30-130	08/18/2016 1749
Di-n-octylphthalate	ND	410	390		1	95	30-130	08/18/2016 1749
bis(2-Ethylhexyl)phthalate	ND	410	380		1	94	30-130	08/18/2016 1749
Fluoranthene	ND	410	290		1	72	30-130	08/18/2016 1749
Fluorene	ND	410	170		1	41	30-130	08/18/2016 1749
Hexachlorobenzene	ND	410	220		1	54	30-130	08/18/2016 1749
Hexachlorobutadiene	ND	410	67	N	1	16	30-130	08/18/2016 1749
Hexachlorocyclopentadiene	ND	410	ND	N	1	0.00	30-130	08/18/2016 1749

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: RH12021-016MS
Batch: 19957
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 1740

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachloroethane	ND	410	25	N	1	6.2	30-130	08/18/2016 1749
Indeno(1,2,3-c,d)pyrene	ND	410	210		1	52	30-130	08/18/2016 1749
Isophorone	ND	410	150		1	38	30-130	08/18/2016 1749
2-Methylnaphthalene	ND	410	120	N	1	29	30-130	08/18/2016 1749
2-Methylphenol	ND	410	160		1	40	30-130	08/18/2016 1749
3+4-Methylphenol	ND	410	160		1	39	30-130	08/18/2016 1749
Naphthalene	ND	410	100	N	1	25	30-130	08/18/2016 1749
2-Nitroaniline	ND	410	210		1	52	30-130	08/18/2016 1749
3-Nitroaniline	ND	410	150		1	37	30-130	08/18/2016 1749
4-Nitroaniline	ND	410	210		1	51	30-130	08/18/2016 1749
Nitrobenzene	ND	410	130		1	31	30-130	08/18/2016 1749
2-Nitrophenol	ND	410	120	N	1	29	30-130	08/18/2016 1749
4-Nitrophenol	ND	810	730		1	90	30-130	08/18/2016 1749
N-Nitrosodi-n-propylamine	ND	410	170		1	42	30-130	08/18/2016 1749
N-Nitrosodiphenylamine (Diphenylamine)	ND	410	230		1	56	30-130	08/18/2016 1749
Pentachlorophenol	ND	810	590		1	73	30-130	08/18/2016 1749
Phenanthrene	ND	410	240		1	60	30-130	08/18/2016 1749
Phenol	ND	410	150		1	36	30-130	08/18/2016 1749
Pyrene	ND	410	300		1	73	30-130	08/18/2016 1749
2,4,5-Trichlorophenol	ND	410	190		1	47	30-130	08/18/2016 1749
2,4,6-Trichlorophenol	ND	410	170		1	43	30-130	08/18/2016 1749

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl	N	29	33-102
2-Fluorophenol		29	28-104
Nitrobenzene-d5		30	22-109
Phenol-d5		32	27-103
Terphenyl-d14		64	41-120
2,4,6-Tribromophenol		54	30-117

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: RH12021-016MD
Batch: 19957
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 1740

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	400	170		1	43	13	30-130	40	08/18/2016 1814
Acenaphthylene	ND	400	180		1	46	17	30-130	40	08/18/2016 1814
Acetophenone	ND	400	170		1	41	29	30-130	40	08/18/2016 1814
Anthracene	ND	400	260		1	65	0.19	30-130	40	08/18/2016 1814
Atrazine	ND	400	290		1	71	4.3	30-130	40	08/18/2016 1814
Benzaldehyde	ND	400	200		1	48	33	40-117	40	08/18/2016 1814
Benzo(a)anthracene	ND	400	300		1	74	3.8	30-130	40	08/18/2016 1814
Benzo(a)pyrene	ND	400	320		1	79	2.3	30-130	40	08/18/2016 1814
Benzo(b)fluoranthene	ND	400	330		1	83	7.0	30-130	40	08/18/2016 1814
Benzo(g,h,i)perylene	ND	400	190		1	47	4.0	30-130	40	08/18/2016 1814
Benzo(k)fluoranthene	ND	400	320		1	79	4.7	30-130	40	08/18/2016 1814
1,1'-Biphenyl	ND	400	160		1	39	18	30-130	40	08/18/2016 1814
4-Bromophenyl phenyl ether	ND	400	210		1	52	5.0	30-130	40	08/18/2016 1814
Butyl benzyl phthalate	ND	400	340		1	85	1.0	30-130	40	08/18/2016 1814
Caprolactam	ND	400	340		1	84	15	30-130	40	08/18/2016 1814
Carbazole	ND	400	290		1	72	1.9	30-130	40	08/18/2016 1814
4-Chloro-3-methyl phenol	ND	400	230		1	58	8.6	30-130	40	08/18/2016 1814
4-Chloroaniline	ND	400	65		1	16	33	10-130	40	08/18/2016 1814
bis(2-Chloroethoxy)methane	ND	400	190		1	47	28	30-130	40	08/18/2016 1814
bis(2-Chloroethyl)ether	ND	400	160		1	39	28	30-130	40	08/18/2016 1814
bis (2-Chloro-1-methylethyl) ether	ND	400	150		1	37	30	30-130	40	08/18/2016 1814
2-Chloronaphthalene	ND	400	160		1	38	19	30-130	40	08/18/2016 1814
2-Chlorophenol	ND	400	170		1	41	27	30-130	40	08/18/2016 1814
4-Chlorophenyl phenyl ether	ND	400	170		1	43	13	30-130	40	08/18/2016 1814
Chrysene	ND	400	300		1	73	4.9	30-130	40	08/18/2016 1814
Dibenzo(a,h)anthracene	ND	400	160		1	39	3.7	30-130	40	08/18/2016 1814
Dibenzofuran	ND	400	180		1	44	12	30-130	40	08/18/2016 1814
3,3'-Dichlorobenzidine	ND	400	250		1	62	13	30-130	40	08/18/2016 1814
2,4-Dichlorophenol	ND	810	370		1	46	26	30-130	40	08/18/2016 1814
Diethylphthalate	ND	400	260		1	63	5.4	30-130	40	08/18/2016 1814
Dimethyl phthalate	ND	400	220		1	55	9.5	30-130	40	08/18/2016 1814
2,4-Dimethylphenol	ND	400	220		1	55	29	30-130	40	08/18/2016 1814
Di-n-butyl phthalate	22	400	340		1	78	1.6	30-130	40	08/18/2016 1814
4,6-Dinitro-2-methylphenol	ND	400	120	N	1	29	18	30-130	40	08/18/2016 1814
2,4-Dinitrophenol	ND	400	77	N	1	19	12	30-130	40	08/18/2016 1814
2,4-Dinitrotoluene	ND	400	230		1	57	5.3	30-130	40	08/18/2016 1814
2,6-Dinitrotoluene	ND	400	210		1	51	13	30-130	40	08/18/2016 1814
Di-n-octylphthalate	ND	400	360		1	88	7.8	30-130	40	08/18/2016 1814
bis(2-Ethylhexyl)phthalate	ND	400	370		1	90	4.6	30-130	40	08/18/2016 1814
Fluoranthene	ND	400	290		1	73	0.040	30-130	40	08/18/2016 1814
Fluorene	ND	400	190		1	47	11	30-130	40	08/18/2016 1814
Hexachlorobenzene	ND	400	230		1	57	5.4	30-130	40	08/18/2016 1814
Hexachlorobutadiene	ND	400	87	N	1	21	26	30-130	40	08/18/2016 1814
Hexachlorocyclopentadiene	ND	2000	27	N,+	1	1.3	200	30-130	40	08/18/2016 1814

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: RH12021-016MD
Batch: 19957
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/16/2016 1740

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexachloroethane	ND	400	39	N,+	1	9.7	44	30-130	40	08/18/2016 1814
Indeno(1,2,3-c,d)pyrene	ND	400	210		1	51	1.3	30-130	40	08/18/2016 1814
Isophorone	ND	400	200		1	49	25	30-130	40	08/18/2016 1814
2-Methylnaphthalene	ND	400	150		1	37	25	30-130	40	08/18/2016 1814
2-Methylphenol	ND	400	220		1	53	28	30-130	40	08/18/2016 1814
3+4-Methylphenol	ND	400	200		1	50	25	30-130	40	08/18/2016 1814
Naphthalene	ND	400	130		1	31	23	30-130	40	08/18/2016 1814
2-Nitroaniline	ND	400	240		1	59	12	30-130	40	08/18/2016 1814
3-Nitroaniline	ND	400	170		1	41	12	30-130	40	08/18/2016 1814
4-Nitroaniline	ND	400	220		1	55	8.0	30-130	40	08/18/2016 1814
Nitrobenzene	ND	400	170		1	42	28	30-130	40	08/18/2016 1814
2-Nitrophenol	ND	400	160		1	40	30	30-130	40	08/18/2016 1814
4-Nitrophenol	ND	810	740		1	91	0.97	30-130	40	08/18/2016 1814
N-Nitrosodi-n-propylamine	ND	400	220		1	54	26	30-130	40	08/18/2016 1814
N-Nitrosodiphenylamine (Diphenylamine)	ND	400	240		1	58	3.4	30-130	40	08/18/2016 1814
Pentachlorophenol	ND	810	570		1	70	4.6	30-130	40	08/18/2016 1814
Phenanthrene	ND	400	240		1	60	0.075	30-130	40	08/18/2016 1814
Phenol	ND	400	190		1	47	26	30-130	40	08/18/2016 1814
Pyrene	ND	400	280		1	69	5.8	30-130	40	08/18/2016 1814
2,4,5-Trichlorophenol	ND	400	210		1	52	9.1	30-130	40	08/18/2016 1814
2,4,6-Trichlorophenol	ND	400	200		1	49	13	30-130	40	08/18/2016 1814

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		37	33-102
2-Fluorophenol		41	28-104
Nitrobenzene-d5		41	22-109
Phenol-d5		44	27-103
Terphenyl-d14		61	41-120
2,4,6-Tribromophenol		56	30-117

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MB

Sample ID: RQ19752-001
Batch: 19752
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/15/2016 1115

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	0.016	J	1	0.25	0.015	mg/kg	08/18/2016 2122
Arsenic	ND		1	0.25	0.032	mg/kg	08/18/2016 2122
Beryllium	ND		1	0.10	0.0080	mg/kg	08/18/2016 2122
Cadmium	ND		1	0.025	0.0020	mg/kg	08/18/2016 2122
Chromium	0.080	J	1	1.3	0.029	mg/kg	08/18/2016 2122
Copper	0.10	J	1	0.25	0.022	mg/kg	08/18/2016 2122
Lead	0.11	J	1	0.25	0.0060	mg/kg	08/18/2016 2122
Manganese	0.36	J	1	1.3	0.24	mg/kg	08/18/2016 2122
Nickel	0.11	J	1	1.3	0.027	mg/kg	08/18/2016 2122
Selenium	ND		1	0.25	0.038	mg/kg	08/18/2016 2122
Silver	0.44		1	0.25	0.020	mg/kg	08/18/2016 2122
Thallium	0.034	J	1	0.13	0.0080	mg/kg	08/18/2016 2122
Zinc	0.39	J	1	2.5	0.066	mg/kg	08/18/2016 2122

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - LCS

Sample ID: RQ19752-002
Batch: 19752
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/15/2016 1115

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	9.3	9.1		5	98	80-120	08/18/2016 2133
Arsenic	9.3	9.1		5	97	80-120	08/18/2016 2133
Beryllium	9.3	9.1		5	98	80-120	08/18/2016 2133
Cadmium	9.3	8.6		5	93	80-120	08/18/2016 2133
Chromium	9.3	9.4		5	101	80-120	08/18/2016 2133
Copper	9.3	10		5	110	80-120	08/18/2016 2133
Iron	93	110		1	120	80-120	08/18/2016 2128
Lead	9.3	9.5		5	102	80-120	08/18/2016 2133
Manganese	9.3	9.6		5	103	80-120	08/18/2016 2133
Nickel	9.3	9.6		5	102	80-120	08/18/2016 2133
Selenium	9.3	8.4		5	90	80-120	08/18/2016 2133
Silver	9.3	9.7		5	104	80-120	08/18/2016 2133
Thallium	9.3	9.0		5	97	80-120	08/18/2016 2133
Zinc	9.3	9.1		5	97	80-120	08/18/2016 2133

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MS

Sample ID: RH12021-001MS
Batch: 19752
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/15/2016 1115

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	ND	12	0.47	N	1	4.0	75-125	08/19/2016 0325
Arsenic	0.69	12	9.0	N	10	71	75-125	08/19/2016 0059
Beryllium	0.89	12	11		10	90	75-125	08/19/2016 0059
Cadmium	0.035	12	10		10	89	75-125	08/19/2016 0059
Chromium	49	12	50	N	10	11	75-125	08/19/2016 0059
Copper	51	12	59	N	1	65	75-125	08/19/2016 0325
Lead	7.7	12	20		1	107	75-125	08/19/2016 0325
Manganese	540	12	430	N	10	-978	75-125	08/19/2016 0059
Nickel	43	12	41	N	10	-20	75-125	08/19/2016 0059
Selenium	ND	12	8.3	N	10	72	75-125	08/19/2016 0059
Silver	ND	12	10		10	90	75-125	08/19/2016 1355
Thallium	0.13	12	10		1	86	75-125	08/19/2016 0325
Zinc	48	12	51	N	1	30	75-125	08/19/2016 0325

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MSD

Sample ID: RH12021-001MD
Batch: 19752
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/15/2016 1115

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Antimony	ND	11	0.48	N	1	4.3	2.2	75-125	20	08/19/2016 0330
Arsenic	0.69	11	7.9	N	10	65	13	75-125	20	08/19/2016 0105
Beryllium	0.89	11	11		10	91	3.9	75-125	20	08/19/2016 0105
Cadmium	0.035	11	10		10	91	2.3	75-125	20	08/19/2016 0105
Chromium	49	11	62	+	10	122	22	75-125	20	08/19/2016 0105
Copper	51	11	70	N	1	172	18	75-125	20	08/19/2016 0330
Lead	7.7	11	19		1	106	3.9	75-125	20	08/19/2016 0330
Manganese	540	11	430	N	10	-1050	0.46	75-125	20	08/19/2016 0105
Nickel	43	11	49	N	10	52	18	75-125	20	08/19/2016 0105
Selenium	ND	11	7.6	N	10	69	9.0	75-125	20	08/19/2016 0105
Silver	ND	11	9.9		10	90	5.1	75-125	20	08/19/2016 1400
Thallium	0.13	11	9.5		1	84	6.7	75-125	20	08/19/2016 0330
Zinc	48	11	59		1	105	15	75-125	20	08/19/2016 0330

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MB

Sample ID: RQ20059-001
Batch: 20059
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/17/2016 1219

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	ND		1	0.083	0.0063	mg/kg	08/18/2016 1544

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - LCS

Sample ID: RQ20059-002
Batch: 20059
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/17/2016 1219

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.83	0.90		1	107	80-120	08/18/2016 1546

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MS

Sample ID: RH12021-001MS
Batch: 20059
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/17/2016 1219

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	ND	0.92	1.0		1	112	80-120	08/18/2016 1551

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MSD

Sample ID: RH12021-001MD
Batch: 20059
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/17/2016 1219

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	ND	0.99	1.0		1	105	0.44	80-120	20	08/18/2016 1553

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Chain of Custody
and
Miscellaneous Documents

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63421

Client: CDM Smith
Report to Contact: Dan Forbes
Telephone No. / E-mail: forbes@cdmsmith.com
Quote No.:
Address: 5400 Glenwood Ave, Suite 400
City: Raleigh | State: NC | Zip Code: 27612
Sampler's Signature: x Janelle Bauer
Printed Name: Janelle Bauer
Project Name: Bud Holdings
Project No.: Soil
P.O. No.:
Analysis (Attach list if more space is needed)
Page 1 of 2
RH12021

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	NaOH	HNO3	HCl	NaOH	SOB KI	VOC	VOC 1,4-D	SVOC + Hex Cr	Nichols NH3, SO4, NO3	Remarks / Cooler I.D.
SB-14-0.5	8-11-16	1205	G		x									x	x	x	x	
SB-14-1.5		1700	G		x									x	x	x	x	
SB-14-2-4		1715	G		x									x	x	x	x	
SB-14-10-12		1725	G		x									x	x	x	x	
SB-14-20-22		1745	G		x									x	x	x	x	
SB-14-22-24		1755	G		x									x	x	x	x	
SB-7-0.5		1800	G		x									x	x	x	x	
SB-7-1.5		1805	G		x									x	x	x	x	
SB-7-2-4		1815	G		x									x	x	x	x	
SB-7-6-8		1820	G		x									x	x	x	x	

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☐ Standard ☒ Rush (Specify) 5 days

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

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

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished by: Janelle Bauer	8-11-16	2000	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEX	8/12/16	0950	4. Laboratory received by: [illegible]	8/12/16	0950

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) (Yes) No Ice Pack
Receipt Temp. 2.3 °C 2.4 S3

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63422

Client	See pg. 1
Address	
City / State / Zip Code	
Project Name	
Project No.	
P.O. No.	
Report to Contact	
Sampler's Signature	X Janelle Bauer
Printed Name	Janelle Bauer
Telephone No. / E-mail	
Quote No.	
Page	2 of 2
	RH12021

Analysis (Attach list if more space is needed)

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab / Composite	Matrix: Aqueous	Soils	Non-Aqueous	No of Containers by Preservative Type: Unpres.	HCl/Cl	HNO3	H2O	NaOH	SCS KI	VOC	VOC 1,4-D	SVOC Hex Cr	Metals NH3, SO4, NO3	Remarks / Cooler I.D.
SB-7-12-14	8-11-16	1830			X								+	+	+	X	
SB-7-22		1835			X								+	+	+	X	
SB-9-5		1905			X								+	+	+	X	
SB-9-10		1915			X								+	+	+	X	
SB-9-15		1920			X								+	+	+	X	
SB-9-18-20		1925			X								+	+	+	X	
DUP-2		0800			X								+	+	+	X	
Trip Blank				X									+				

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☒ Rush (Specify) 5 days

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Janelle Bauer	8-11-16	2000	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEX	8/12/16	0950	4. Laboratory received by	8/12/16	0950

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack
Receipt Temp 2.3 °C 5.3 2.4

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: CDM Smith Cooler Inspected by/date: mam/08/12/16 Lot #: RH 12021

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: _____ Cl strip ID: _____

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

1 53/5.3°C 1 23/2.3°C 1 24/2.4°C / / °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☑	No ☐	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)? _____
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☑	No ☐		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☑	No ☐		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☐	No ☐	NA ☑	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☑	No ☐	NA ☐	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☑	No ☐	N/A	22. Was the quote number used taken from the container label?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be > 2 by _____ Date: _____

Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR# _____

Sample labels applied by: mam Verified by: _____ Date: 8/12/16

Comments: trip blank was not received

Report of Analysis

CDM Smith
5400 Glenwood Avenue
Suite 400
Raleigh, NC 27612
Attention: Matthew Colone

Project Name: Bud Holdings

Lot Number: RH17016

Date Completed: 08/25/2016

Nisreen Saikaly
Project Manager

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The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
CDM Smith
Lot Number: RH17016

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary
CDM Smith
Lot Number: RH17016

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	DUP	Solid	08/16/2016 0800	08/17/2016
002	BG-1-0.5	Solid	08/16/2016 0850	08/17/2016
003	BG-1-1.5	Solid	08/16/2016 0900	08/17/2016
004	BG-1-5	Solid	08/16/2016 0910	08/17/2016
005	BG-1-10	Solid	08/16/2016 0920	08/17/2016
006	BG-1-15	Solid	08/16/2016 0935	08/17/2016
007	BG-1-20	Solid	08/16/2016 0940	08/17/2016
008	BG-2-0.5	Solid	08/16/2016 1010	08/17/2016
009	BG-2-1.5	Solid	08/16/2016 1020	08/17/2016
010	BG-2-5	Solid	08/16/2016 1045	08/17/2016
011	BG-2-10	Solid	08/16/2016 1100	08/17/2016
012	BG-2-15	Solid	08/16/2016 1110	08/17/2016
013	BG-2-20	Solid	08/16/2016 1120	08/17/2016
014	BG-3-0.5	Solid	08/16/2016 1315	08/17/2016
015	BG-3-1.5	Solid	08/16/2016 1325	08/17/2016
016	BG-3-5	Solid	08/16/2016 1340	08/17/2016
017	BG-3-10	Solid	08/16/2016 1350	08/17/2016
018	BG-3-15	Solid	08/16/2016 1400	08/17/2016
019	BG-3-20	Solid	08/16/2016 1410	08/17/2016
020	SB-16-0.5	Solid	08/16/2016 1230	08/17/2016
021	SB16-1-5	Solid	08/16/2016 1240	08/17/2016
022	TRIP BLANK(SH1432)	Aqueous	08/16/2016	08/17/2016
023	TRIP BLANK(SH1992)	Aqueous	08/16/2016	08/17/2016

(23 samples)

Executive Summary
CDM Smith
Lot Number: RH17016

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	DUP	Solid	Ammonia - N (gas	350.1	1.3	J	mg/kg	15
001	DUP	Solid	Hexavalent Chromium	7196A	0.38	J	mg/kg	15
001	DUP	Solid	Nitrate - N (soluble)	300.0	0.24	J	mg/kg	15
001	DUP	Solid	Acetone	8260B	64		ug/kg	17
001	DUP	Solid	2-Butanone (MEK)	8260B	5.8	J	ug/kg	17
001	DUP	Solid	Ethanol	8260B	55		ug/kg	19
001	DUP	Solid	3-Octanone	8260B	11		ug/kg	19
001	DUP	Solid	Unknown	8270D	280		ug/kg	20
001	DUP	Solid	Unknown	8270D	1500		ug/kg	20
001	DUP	Solid	2,5-Hexanedione	8270D	150		ug/kg	20
001	DUP	Solid	Caryophyllene	8270D	220		ug/kg	20
001	DUP	Solid	Unknown	8270D	150		ug/kg	20
001	DUP	Solid	Naphthalene, 1,2,3,5,6,8a-	8270D	92		ug/kg	20
001	DUP	Solid	n-Hexadecanoic acid	8270D	170		ug/kg	20
001	DUP	Solid	6-Octadecenoic acid, (Z)-	8270D	470		ug/kg	20
001	DUP	Solid	Unknown	8270D	250		ug/kg	20
001	DUP	Solid	13-Docosenamide, (Z)-	8270D	410		ug/kg	20
001	DUP	Solid	Unknown	8270D	390		ug/kg	20
001	DUP	Solid	Antimony	6020A	0.081	BJ	mg/kg	23
001	DUP	Solid	Arsenic	6020A	0.44	J	mg/kg	23
001	DUP	Solid	Beryllium	6020A	1.5		mg/kg	23
001	DUP	Solid	Chromium	6020A	71		mg/kg	23
001	DUP	Solid	Copper	6020A	8.8		mg/kg	23
001	DUP	Solid	Iron	6020A	49000	B	mg/kg	23
001	DUP	Solid	Lead	6020A	5.9	B	mg/kg	23
001	DUP	Solid	Manganese	6020A	690		mg/kg	23
001	DUP	Solid	Nickel	6020A	91		mg/kg	23
001	DUP	Solid	Selenium	6020A	0.34		mg/kg	23
001	DUP	Solid	Thallium	6020A	0.047	J	mg/kg	23
001	DUP	Solid	Zinc	6020A	47		mg/kg	23
002	BG-1-0.5	Solid	Ammonia - N (gas	350.1	0.33	J	mg/kg	25
002	BG-1-0.5	Solid	Hexavalent Chromium	7196A	0.39	J	mg/kg	25
002	BG-1-0.5	Solid	Nitrate - N (soluble)	300.0	0.035	J	mg/kg	25
002	BG-1-0.5	Solid	Acetone	8260B	5.8	J	ug/kg	27
002	BG-1-0.5	Solid	Unknown	8270D	1200		ug/kg	30
002	BG-1-0.5	Solid	2,5-Hexanedione	8270D	110		ug/kg	30
002	BG-1-0.5	Solid	Unknown	8270D	93		ug/kg	30
002	BG-1-0.5	Solid	n-Hexadecanoic acid	8270D	83		ug/kg	30
002	BG-1-0.5	Solid	9-Octadecenoic acid, (E)-	8270D	540		ug/kg	30
002	BG-1-0.5	Solid	13-Docosenamide, (Z)-	8270D	420		ug/kg	30
002	BG-1-0.5	Solid	Hentriacontane	8270D	130		ug/kg	30
002	BG-1-0.5	Solid	Caprolactam	8270D	30	J	ug/kg	31
002	BG-1-0.5	Solid	Antimony	6020A	0.021	BJ	mg/kg	33
002	BG-1-0.5	Solid	Arsenic	6020A	0.55	J	mg/kg	33
002	BG-1-0.5	Solid	Beryllium	6020A	0.47	J	mg/kg	33

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	BG-1-0.5	Solid	Cadmium	6020A	0.035	J	mg/kg	33
002	BG-1-0.5	Solid	Chromium	6020A	39		mg/kg	33
002	BG-1-0.5	Solid	Copper	6020A	35		mg/kg	33
002	BG-1-0.5	Solid	Iron	6020A	23000	B	mg/kg	33
002	BG-1-0.5	Solid	Lead	6020A	5.4	B	mg/kg	33
002	BG-1-0.5	Solid	Manganese	6020A	420		mg/kg	33
002	BG-1-0.5	Solid	Nickel	6020A	19		mg/kg	33
002	BG-1-0.5	Solid	Selenium	6020A	0.27		mg/kg	33
002	BG-1-0.5	Solid	Thallium	6020A	0.053	J	mg/kg	33
002	BG-1-0.5	Solid	Zinc	6020A	30		mg/kg	33
003	BG-1-1.5	Solid	Hexavalent Chromium	7196A	0.49	J	mg/kg	35
003	BG-1-1.5	Solid	Nitrate - N (soluble)	300.0	0.093	J	mg/kg	35
003	BG-1-1.5	Solid	Unknown	8270D	780		ug/kg	40
003	BG-1-1.5	Solid	9-Octadecenoic acid, (E)-	8270D	85		ug/kg	40
003	BG-1-1.5	Solid	Unknown	8270D	79		ug/kg	40
003	BG-1-1.5	Solid	13-Docosenamide, (Z)-	8270D	91		ug/kg	40
003	BG-1-1.5	Solid	Heptacosane	8270D	97		ug/kg	40
003	BG-1-1.5	Solid	Naphthalene,	8270D	200		ug/kg	40
003	BG-1-1.5	Solid	Benzo(a)anthracene	8270D	5.3	J	ug/kg	41
003	BG-1-1.5	Solid	Benzo(a)pyrene	8270D	4.0	J	ug/kg	41
003	BG-1-1.5	Solid	Benzo(b)fluoranthene	8270D	8.0	J	ug/kg	41
003	BG-1-1.5	Solid	Chrysene	8270D	3.3	J	ug/kg	41
003	BG-1-1.5	Solid	Fluoranthene	8270D	6.2	J	ug/kg	41
003	BG-1-1.5	Solid	Pyrene	8270D	5.5	J	ug/kg	42
003	BG-1-1.5	Solid	Antimony	6020A	0.026	BJ	mg/kg	43
003	BG-1-1.5	Solid	Arsenic	6020A	0.54	J	mg/kg	43
003	BG-1-1.5	Solid	Beryllium	6020A	0.56	J	mg/kg	43
003	BG-1-1.5	Solid	Cadmium	6020A	0.051	J	mg/kg	43
003	BG-1-1.5	Solid	Chromium	6020A	36		mg/kg	43
003	BG-1-1.5	Solid	Copper	6020A	31		mg/kg	43
003	BG-1-1.5	Solid	Iron	6020A	24000	B	mg/kg	43
003	BG-1-1.5	Solid	Lead	6020A	12	B	mg/kg	43
003	BG-1-1.5	Solid	Manganese	6020A	430		mg/kg	43
003	BG-1-1.5	Solid	Nickel	6020A	15		mg/kg	43
003	BG-1-1.5	Solid	Selenium	6020A	0.28		mg/kg	43
003	BG-1-1.5	Solid	Thallium	6020A	0.070	J	mg/kg	43
003	BG-1-1.5	Solid	Zinc	6020A	30		mg/kg	43
003	BG-1-1.5	Solid	Mercury	7471B	0.011	J	mg/kg	44
004	BG-1-5	Solid	Ammonia - N (gas	350.1	92		mg/kg	45
004	BG-1-5	Solid	Nitrate - N (soluble)	300.0	0.054	J	mg/kg	45
004	BG-1-5	Solid	Acetone	8260B	160		ug/kg	47
004	BG-1-5	Solid	2-Butanone (MEK)	8260B	23		ug/kg	47
004	BG-1-5	Solid	Ethylbenzene	8260B	2.7	J	ug/kg	47
004	BG-1-5	Solid	Benzene, propyl-	8260B	16		ug/kg	49
004	BG-1-5	Solid	4-Undecene, 4-methyl-	8260B	5.4		ug/kg	49
004	BG-1-5	Solid	Unknown	8270D	180		ug/kg	50
004	BG-1-5	Solid	Unknown	8270D	820		ug/kg	50
004	BG-1-5	Solid	Caryophyllene	8270D	230		ug/kg	50

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
004	BG-1-5	Solid	Unknown	8270D	240		ug/kg	50
004	BG-1-5	Solid	Naphthalene, 1,2,4a,5,6,8a-	8270D	160		ug/kg	50
004	BG-1-5	Solid	Naphthalene, 1,2,3,5,6,8a-	8270D	120		ug/kg	50
004	BG-1-5	Solid	Naphthalene, 1,2,3,4-	8270D	690		ug/kg	50
004	BG-1-5	Solid	Cedrol	8270D	130		ug/kg	50
004	BG-1-5	Solid	Unknown	8270D	130		ug/kg	50
004	BG-1-5	Solid	n-Hexadecanoic acid	8270D	190		ug/kg	50
004	BG-1-5	Solid	2-Phenanthrenol,	8270D	180		ug/kg	50
004	BG-1-5	Solid	Cyclohexadecane	8270D	240		ug/kg	50
004	BG-1-5	Solid	Unknown	8270D	200		ug/kg	50
004	BG-1-5	Solid	2- Chloropropionic acid,	8270D	150		ug/kg	50
004	BG-1-5	Solid	13-Docosenamide, (Z)-	8270D	240		ug/kg	50
004	BG-1-5	Solid	Tetracosapentaene,	8270D	150		ug/kg	50
004	BG-1-5	Solid	Hentriacontane	8270D	600		ug/kg	50
004	BG-1-5	Solid	Unknown	8270D	120		ug/kg	50
004	BG-1-5	Solid	Heptacosane	8270D	230		ug/kg	50
004	BG-1-5	Solid	Unknown	8270D	450		ug/kg	50
004	BG-1-5	Solid	Benzo(b)fluoranthene	8270D	5.1	J	ug/kg	51
004	BG-1-5	Solid	Antimony	6020A	0.036	BJ	mg/kg	53
004	BG-1-5	Solid	Arsenic	6020A	0.71	J	mg/kg	53
004	BG-1-5	Solid	Beryllium	6020A	1.1		mg/kg	53
004	BG-1-5	Solid	Cadmium	6020A	0.065	J	mg/kg	53
004	BG-1-5	Solid	Chromium	6020A	33		mg/kg	53
004	BG-1-5	Solid	Copper	6020A	51		mg/kg	53
004	BG-1-5	Solid	Iron	6020A	38000	B	mg/kg	53
004	BG-1-5	Solid	Lead	6020A	20	B	mg/kg	53
004	BG-1-5	Solid	Manganese	6020A	870		mg/kg	53
004	BG-1-5	Solid	Nickel	6020A	17	J	mg/kg	53
004	BG-1-5	Solid	Selenium	6020A	0.47		mg/kg	53
004	BG-1-5	Solid	Thallium	6020A	0.11	J	mg/kg	53
004	BG-1-5	Solid	Zinc	6020A	38		mg/kg	53
004	BG-1-5	Solid	Mercury	7471B	0.0099	J	mg/kg	54
005	BG-1-10	Solid	Ammonia - N (gas	350.1	3.0		mg/kg	55
005	BG-1-10	Solid	Hexavalent Chromium	7196A	0.37	J	mg/kg	55
005	BG-1-10	Solid	Nitrate - N (soluble)	300.0	0.077	J	mg/kg	55
005	BG-1-10	Solid	Acetone	8260B	89		ug/kg	57
005	BG-1-10	Solid	2-Butanone (MEK)	8260B	9.1	J	ug/kg	57
005	BG-1-10	Solid	Butane, 2-methyl-	8260B	9.5		ug/kg	59
005	BG-1-10	Solid	1R-.alpha.-Pinene	8260B	6.3		ug/kg	59
005	BG-1-10	Solid	Unknown	8270D	370		ug/kg	60
005	BG-1-10	Solid	Unknown	8270D	940		ug/kg	60
005	BG-1-10	Solid	2,5-Hexanedione	8270D	110		ug/kg	60
005	BG-1-10	Solid	Caryophyllene	8270D	450		ug/kg	60
005	BG-1-10	Solid	Naphthalene, 1,2,3,5,6,8a-	8270D	95		ug/kg	60
005	BG-1-10	Solid	n-Hexadecanoic acid	8270D	91		ug/kg	60
005	BG-1-10	Solid	9-Octadecenoic acid, (E)-	8270D	330		ug/kg	60
005	BG-1-10	Solid	Squalene	8270D	130		ug/kg	60
005	BG-1-10	Solid	Lup-20(29)-en-28-oic acid,	8270D	200		ug/kg	60

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
005	BG-1-10	Solid	Friedelan-3-one	8270D	110		ug/kg	60
005	BG-1-10	Solid	Naphthalene,	8270D	220		ug/kg	60
005	BG-1-10	Solid	Antimony	6020A	0.021	BJ	mg/kg	63
005	BG-1-10	Solid	Beryllium	6020A	1.3		mg/kg	63
005	BG-1-10	Solid	Chromium	6020A	50		mg/kg	63
005	BG-1-10	Solid	Copper	6020A	18		mg/kg	63
005	BG-1-10	Solid	Iron	6020A	30000	B	mg/kg	63
005	BG-1-10	Solid	Lead	6020A	16	B	mg/kg	63
005	BG-1-10	Solid	Manganese	6020A	920		mg/kg	63
005	BG-1-10	Solid	Nickel	6020A	46		mg/kg	63
005	BG-1-10	Solid	Selenium	6020A	0.29		mg/kg	63
005	BG-1-10	Solid	Thallium	6020A	0.089	J	mg/kg	63
005	BG-1-10	Solid	Zinc	6020A	25		mg/kg	63
006	BG-1-15	Solid	Ammonia - N (gas	350.1	0.48	J	mg/kg	65
006	BG-1-15	Solid	Hexavalent Chromium	7196A	0.51	J	mg/kg	65
006	BG-1-15	Solid	Nitrate - N (soluble)	300.0	0.096	J	mg/kg	65
006	BG-1-15	Solid	Acetone	8260B	25		ug/kg	67
006	BG-1-15	Solid	Unknown	8270D	180		ug/kg	70
006	BG-1-15	Solid	Unknown	8270D	1100		ug/kg	70
006	BG-1-15	Solid	2,5-Hexanedione	8270D	110		ug/kg	70
006	BG-1-15	Solid	Caryophyllene	8270D	160		ug/kg	70
006	BG-1-15	Solid	n-Hexadecanoic acid	8270D	96		ug/kg	70
006	BG-1-15	Solid	Octadec-9-enoic acid	8270D	810		ug/kg	70
006	BG-1-15	Solid	13-Docosenamide, (Z)-	8270D	130		ug/kg	70
006	BG-1-15	Solid	Unknown	8270D	530		ug/kg	70
006	BG-1-15	Solid	Antimony	6020A	0.021	BJ	mg/kg	73
006	BG-1-15	Solid	Arsenic	6020A	0.30	J	mg/kg	73
006	BG-1-15	Solid	Beryllium	6020A	2.5		mg/kg	73
006	BG-1-15	Solid	Cadmium	6020A	0.031	J	mg/kg	73
006	BG-1-15	Solid	Chromium	6020A	69		mg/kg	73
006	BG-1-15	Solid	Copper	6020A	2.8		mg/kg	73
006	BG-1-15	Solid	Iron	6020A	41000	B	mg/kg	73
006	BG-1-15	Solid	Lead	6020A	11	B	mg/kg	73
006	BG-1-15	Solid	Manganese	6020A	1500		mg/kg	73
006	BG-1-15	Solid	Nickel	6020A	130		mg/kg	73
006	BG-1-15	Solid	Selenium	6020A	0.072	J	mg/kg	73
006	BG-1-15	Solid	Thallium	6020A	0.043	J	mg/kg	73
006	BG-1-15	Solid	Zinc	6020A	44		mg/kg	73
007	BG-1-20	Solid	Nitrate - N (soluble)	300.0	0.032	J	mg/kg	75
007	BG-1-20	Solid	Acetone	8260B	18	J	ug/kg	77
007	BG-1-20	Solid	Unknown	8270D	1900		ug/kg	80
007	BG-1-20	Solid	2,5-Hexanedione	8270D	190		ug/kg	80
007	BG-1-20	Solid	Unknown	8270D	96		ug/kg	80
007	BG-1-20	Solid	14-Pentadecenoic acid	8270D	100		ug/kg	80
007	BG-1-20	Solid	13-Docosenamide, (Z)-	8270D	610		ug/kg	80
007	BG-1-20	Solid	Di-n-octylphthalate	8270D	22	J	ug/kg	81
007	BG-1-20	Solid	Antimony	6020A	0.053	BJ	mg/kg	83
007	BG-1-20	Solid	Beryllium	6020A	1.4		mg/kg	83

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
007	BG-1-20	Solid	Cadmium	6020A	0.025		mg/kg	83
007	BG-1-20	Solid	Chromium	6020A	38		mg/kg	83
007	BG-1-20	Solid	Copper	6020A	19		mg/kg	83
007	BG-1-20	Solid	Iron	6020A	33000	B	mg/kg	83
007	BG-1-20	Solid	Lead	6020A	6.1	B	mg/kg	83
007	BG-1-20	Solid	Manganese	6020A	710		mg/kg	83
007	BG-1-20	Solid	Nickel	6020A	49		mg/kg	83
007	BG-1-20	Solid	Selenium	6020A	0.069	J	mg/kg	83
007	BG-1-20	Solid	Silver	6020A	0.019	J	mg/kg	83
007	BG-1-20	Solid	Thallium	6020A	0.015	J	mg/kg	83
007	BG-1-20	Solid	Zinc	6020A	40		mg/kg	83
008	BG-2-0.5	Solid	Nitrate - N (soluble)	300.0	0.056	J	mg/kg	85
008	BG-2-0.5	Solid	Unknown	8270D	890		ug/kg	90
008	BG-2-0.5	Solid	2,5-Hexanedione	8270D	76		ug/kg	90
008	BG-2-0.5	Solid	n-Hexadecanoic acid	8270D	90		ug/kg	90
008	BG-2-0.5	Solid	6-Octadecenoic acid, (Z)-	8270D	260		ug/kg	90
008	BG-2-0.5	Solid	13-Docosenamide, (Z)-	8270D	310		ug/kg	90
008	BG-2-0.5	Solid	Squalene	8270D	170		ug/kg	90
008	BG-2-0.5	Solid	Heneicosane	8270D	160		ug/kg	90
008	BG-2-0.5	Solid	Di-n-octylphthalate	8270D	27	J	ug/kg	91
008	BG-2-0.5	Solid	Antimony	6020A	0.022	BJ	mg/kg	93
008	BG-2-0.5	Solid	Beryllium	6020A	1.4		mg/kg	93
008	BG-2-0.5	Solid	Cadmium	6020A	0.028	J	mg/kg	93
008	BG-2-0.5	Solid	Chromium	6020A	29		mg/kg	93
008	BG-2-0.5	Solid	Copper	6020A	38		mg/kg	93
008	BG-2-0.5	Solid	Iron	6020A	25000	B	mg/kg	93
008	BG-2-0.5	Solid	Lead	6020A	12	B	mg/kg	93
008	BG-2-0.5	Solid	Manganese	6020A	440		mg/kg	93
008	BG-2-0.5	Solid	Nickel	6020A	14		mg/kg	93
008	BG-2-0.5	Solid	Selenium	6020A	0.22		mg/kg	93
008	BG-2-0.5	Solid	Thallium	6020A	0.025	J	mg/kg	93
008	BG-2-0.5	Solid	Zinc	6020A	37		mg/kg	93
009	BG-2-1.5	Solid	Nitrate - N (soluble)	300.0	0.48		mg/kg	95
009	BG-2-1.5	Solid	2-Pentanone, 4-hydroxy-4-	8270D	920		ug/kg	100
009	BG-2-1.5	Solid	2,5-Hexanedione	8270D	77		ug/kg	100
009	BG-2-1.5	Solid	13-Docosenamide, (Z)-	8270D	540		ug/kg	100
009	BG-2-1.5	Solid	Tetracosane	8270D	100		ug/kg	100
009	BG-2-1.5	Solid	Antimony	6020A	0.021	BJ	mg/kg	103
009	BG-2-1.5	Solid	Arsenic	6020A	0.33	J	mg/kg	103
009	BG-2-1.5	Solid	Beryllium	6020A	1.7		mg/kg	103
009	BG-2-1.5	Solid	Cadmium	6020A	0.023	J	mg/kg	103
009	BG-2-1.5	Solid	Chromium	6020A	28		mg/kg	103
009	BG-2-1.5	Solid	Copper	6020A	27		mg/kg	103
009	BG-2-1.5	Solid	Iron	6020A	31000	B	mg/kg	103
009	BG-2-1.5	Solid	Lead	6020A	12	B	mg/kg	103
009	BG-2-1.5	Solid	Manganese	6020A	390		mg/kg	103
009	BG-2-1.5	Solid	Nickel	6020A	13		mg/kg	103
009	BG-2-1.5	Solid	Selenium	6020A	0.23		mg/kg	103

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
009	BG-2-1.5	Solid	Thallium	6020A	0.025	J	mg/kg	103
009	BG-2-1.5	Solid	Zinc	6020A	45		mg/kg	103
010	BG-2-5	Solid	Nitrate - N (soluble)	300.0	0.17	J	mg/kg	105
010	BG-2-5	Solid	Acetone	8260B	13	J	ug/kg	107
010	BG-2-5	Solid	Unknown	8270D	950		ug/kg	110
010	BG-2-5	Solid	2,5-Hexanedione	8270D	98		ug/kg	110
010	BG-2-5	Solid	Unknown	8270D	120		ug/kg	110
010	BG-2-5	Solid	6-Octadecenoic acid, (Z)-	8270D	210		ug/kg	110
010	BG-2-5	Solid	13-Docosenamide, (Z)-	8270D	120		ug/kg	110
010	BG-2-5	Solid	Naphthalene,	8270D	85		ug/kg	110
010	BG-2-5	Solid	Antimony	6020A	0.048	BJ	mg/kg	113
010	BG-2-5	Solid	Arsenic	6020A	2.1	J	mg/kg	113
010	BG-2-5	Solid	Beryllium	6020A	1.1		mg/kg	113
010	BG-2-5	Solid	Cadmium	6020A	0.0077	J	mg/kg	113
010	BG-2-5	Solid	Chromium	6020A	15		mg/kg	113
010	BG-2-5	Solid	Copper	6020A	42		mg/kg	113
010	BG-2-5	Solid	Iron	6020A	67000	B	mg/kg	113
010	BG-2-5	Solid	Lead	6020A	61	B	mg/kg	113
010	BG-2-5	Solid	Manganese	6020A	14000		mg/kg	113
010	BG-2-5	Solid	Nickel	6020A	3.8		mg/kg	113
010	BG-2-5	Solid	Selenium	6020A	0.56		mg/kg	113
010	BG-2-5	Solid	Thallium	6020A	0.81		mg/kg	113
010	BG-2-5	Solid	Zinc	6020A	21		mg/kg	113
010	BG-2-5	Solid	Mercury	7471B	0.013	J	mg/kg	114
011	BG-2-10	Solid	Acetone	8260B	11	J	ug/kg	117
011	BG-2-10	Solid	Unknown	8270D	1200		ug/kg	120
011	BG-2-10	Solid	2,5-Hexanedione	8270D	110		ug/kg	120
011	BG-2-10	Solid	9-Octadecenamide, (Z)-	8270D	130		ug/kg	120
011	BG-2-10	Solid	Di-n-octylphthalate	8270D	24	J	ug/kg	121
011	BG-2-10	Solid	Antimony	6020A	0.020	BJ	mg/kg	123
011	BG-2-10	Solid	Beryllium	6020A	1.7		mg/kg	123
011	BG-2-10	Solid	Chromium	6020A	7.3	J	mg/kg	123
011	BG-2-10	Solid	Copper	6020A	30		mg/kg	123
011	BG-2-10	Solid	Iron	6020A	39000	B	mg/kg	123
011	BG-2-10	Solid	Lead	6020A	20	B	mg/kg	123
011	BG-2-10	Solid	Manganese	6020A	770		mg/kg	123
011	BG-2-10	Solid	Nickel	6020A	7.2	J	mg/kg	123
011	BG-2-10	Solid	Selenium	6020A	0.54		mg/kg	123
011	BG-2-10	Solid	Thallium	6020A	0.043	J	mg/kg	123
011	BG-2-10	Solid	Zinc	6020A	62		mg/kg	123
012	BG-2-15	Solid	Nitrate - N (soluble)	300.0	0.039	J	mg/kg	125
012	BG-2-15	Solid	Acetone	8260B	8.5	J	ug/kg	127
012	BG-2-15	Solid	Unknown	8270D	850		ug/kg	130
012	BG-2-15	Solid	2,5-Hexanedione	8270D	75		ug/kg	130
012	BG-2-15	Solid	Unknown	8270D	82		ug/kg	130
012	BG-2-15	Solid	9-Octadecenoic acid, (E)-	8270D	170		ug/kg	130
012	BG-2-15	Solid	13-Docosenamide, (Z)-	8270D	200		ug/kg	130
012	BG-2-15	Solid	Di-n-octylphthalate	8270D	23	J	ug/kg	131

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
012	BG-2-15	Solid	Antimony	6020A	0.015	BJ	mg/kg	133
012	BG-2-15	Solid	Beryllium	6020A	0.78		mg/kg	133
012	BG-2-15	Solid	Chromium	6020A	5.6	J	mg/kg	133
012	BG-2-15	Solid	Copper	6020A	12		mg/kg	133
012	BG-2-15	Solid	Iron	6020A	13000	B	mg/kg	133
012	BG-2-15	Solid	Lead	6020A	20	B	mg/kg	133
012	BG-2-15	Solid	Manganese	6020A	230		mg/kg	133
012	BG-2-15	Solid	Nickel	6020A	2.2	J	mg/kg	133
012	BG-2-15	Solid	Selenium	6020A	0.28		mg/kg	133
012	BG-2-15	Solid	Thallium	6020A	0.014	J	mg/kg	133
012	BG-2-15	Solid	Zinc	6020A	21		mg/kg	133
013	BG-2-20	Solid	Hexavalent Chromium	7196A	0.37	J	mg/kg	135
013	BG-2-20	Solid	Acetone	8260B	13	J	ug/kg	137
013	BG-2-20	Solid	Unknown	8270D	830		ug/kg	140
013	BG-2-20	Solid	2,5-Hexanedione	8270D	87		ug/kg	140
013	BG-2-20	Solid	13-Docosenamide, (Z)-	8270D	100		ug/kg	140
013	BG-2-20	Solid	Antimony	6020A	0.014	BJ	mg/kg	143
013	BG-2-20	Solid	Beryllium	6020A	0.79		mg/kg	143
013	BG-2-20	Solid	Chromium	6020A	3.2	J	mg/kg	143
013	BG-2-20	Solid	Copper	6020A	4.5		mg/kg	143
013	BG-2-20	Solid	Iron	6020A	10000	B	mg/kg	143
013	BG-2-20	Solid	Lead	6020A	25	B	mg/kg	143
013	BG-2-20	Solid	Manganese	6020A	190		mg/kg	143
013	BG-2-20	Solid	Nickel	6020A	2.5	J	mg/kg	143
013	BG-2-20	Solid	Selenium	6020A	0.23		mg/kg	143
013	BG-2-20	Solid	Thallium	6020A	0.010	J	mg/kg	143
013	BG-2-20	Solid	Zinc	6020A	20		mg/kg	143
014	BG-3-0.5	Solid	Ammonia - N (gas	350.1	0.72	J	mg/kg	145
014	BG-3-0.5	Solid	Nitrate - N (soluble)	300.0	0.046	J	mg/kg	145
014	BG-3-0.5	Solid	Unknown	8270D	970		ug/kg	150
014	BG-3-0.5	Solid	2,5-Hexanedione	8270D	93		ug/kg	150
014	BG-3-0.5	Solid	Oleic Acid	8270D	90		ug/kg	150
014	BG-3-0.5	Solid	Hexadecanoic acid, butyl	8270D	90		ug/kg	150
014	BG-3-0.5	Solid	13-Docosenamide, (Z)-	8270D	570		ug/kg	150
014	BG-3-0.5	Solid	Heptacosane	8270D	81		ug/kg	150
014	BG-3-0.5	Solid	Antimony	6020A	0.013	BJ	mg/kg	153
014	BG-3-0.5	Solid	Arsenic	6020A	0.32	J	mg/kg	153
014	BG-3-0.5	Solid	Beryllium	6020A	0.33	J	mg/kg	153
014	BG-3-0.5	Solid	Chromium	6020A	16		mg/kg	153
014	BG-3-0.5	Solid	Copper	6020A	27		mg/kg	153
014	BG-3-0.5	Solid	Iron	6020A	19000	B	mg/kg	153
014	BG-3-0.5	Solid	Lead	6020A	3.0	B	mg/kg	153
014	BG-3-0.5	Solid	Manganese	6020A	310		mg/kg	153
014	BG-3-0.5	Solid	Nickel	6020A	9.7		mg/kg	153
014	BG-3-0.5	Solid	Selenium	6020A	0.19		mg/kg	153
014	BG-3-0.5	Solid	Thallium	6020A	0.044	J	mg/kg	153
014	BG-3-0.5	Solid	Zinc	6020A	29		mg/kg	153
015	BG-3-1.5	Solid	Ammonia - N (gas	350.1	0.37	J	mg/kg	155

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
015	BG-3-1.5	Solid	Nitrate - N (soluble)	300.0	0.043	J	mg/kg	155
015	BG-3-1.5	Solid	Acetone	8260B	12	J	ug/kg	157
015	BG-3-1.5	Solid	Unknown	8270D	780		ug/kg	160
015	BG-3-1.5	Solid	9-Oxononanoic acid	8270D	95		ug/kg	160
015	BG-3-1.5	Solid	Di-n-octylphthalate	8270D	23	J	ug/kg	161
015	BG-3-1.5	Solid	Antimony	6020A	0.016	BJ	mg/kg	163
015	BG-3-1.5	Solid	Arsenic	6020A	0.35	J	mg/kg	163
015	BG-3-1.5	Solid	Beryllium	6020A	1.0		mg/kg	163
015	BG-3-1.5	Solid	Chromium	6020A	22		mg/kg	163
015	BG-3-1.5	Solid	Copper	6020A	36		mg/kg	163
015	BG-3-1.5	Solid	Iron	6020A	24000	B	mg/kg	163
015	BG-3-1.5	Solid	Lead	6020A	11	B	mg/kg	163
015	BG-3-1.5	Solid	Manganese	6020A	530		mg/kg	163
015	BG-3-1.5	Solid	Nickel	6020A	12	J	mg/kg	163
015	BG-3-1.5	Solid	Selenium	6020A	0.31		mg/kg	163
015	BG-3-1.5	Solid	Thallium	6020A	0.056	J	mg/kg	163
015	BG-3-1.5	Solid	Zinc	6020A	32		mg/kg	163
016	BG-3-5	Solid	Ammonia - N (gas	350.1	7.3		mg/kg	165
016	BG-3-5	Solid	Nitrate - N (soluble)	300.0	0.19	J	mg/kg	165
016	BG-3-5	Solid	Acetone	8260B	14	J	ug/kg	167
016	BG-3-5	Solid	Unknown	8270D	180		ug/kg	170
016	BG-3-5	Solid	Unknown	8270D	1100		ug/kg	170
016	BG-3-5	Solid	2,5-Hexanedione	8270D	110		ug/kg	170
016	BG-3-5	Solid	9-Oxononanoic acid	8270D	110		ug/kg	170
016	BG-3-5	Solid	6-Octadecenoic acid, (Z)-	8270D	720		ug/kg	170
016	BG-3-5	Solid	13-Docosenamide, (Z)-	8270D	150		ug/kg	170
016	BG-3-5	Solid	Antimony	6020A	0.054	BJ	mg/kg	173
016	BG-3-5	Solid	Arsenic	6020A	1.7		mg/kg	173
016	BG-3-5	Solid	Beryllium	6020A	0.80		mg/kg	173
016	BG-3-5	Solid	Chromium	6020A	40		mg/kg	173
016	BG-3-5	Solid	Copper	6020A	39		mg/kg	173
016	BG-3-5	Solid	Iron	6020A	48000	B	mg/kg	173
016	BG-3-5	Solid	Lead	6020A	18	B	mg/kg	173
016	BG-3-5	Solid	Manganese	6020A	530		mg/kg	173
016	BG-3-5	Solid	Nickel	6020A	12		mg/kg	173
016	BG-3-5	Solid	Selenium	6020A	0.40		mg/kg	173
016	BG-3-5	Solid	Thallium	6020A	0.21		mg/kg	173
016	BG-3-5	Solid	Zinc	6020A	24		mg/kg	173
017	BG-3-10	Solid	Ammonia - N (gas	350.1	0.63	J	mg/kg	175
017	BG-3-10	Solid	Acetone	8260B	17	J	ug/kg	177
017	BG-3-10	Solid	Unknown	8270D	1100		ug/kg	180
017	BG-3-10	Solid	2,5-Hexanedione	8270D	110		ug/kg	180
017	BG-3-10	Solid	9-Oxononanoic acid	8270D	170		ug/kg	180
017	BG-3-10	Solid	1,2-Benzenedicarboxylic	8270D	79		ug/kg	180
017	BG-3-10	Solid	n-Hexadecanoic acid	8270D	120		ug/kg	180
017	BG-3-10	Solid	9-Octadecenoic acid, (E)-	8270D	190		ug/kg	180
017	BG-3-10	Solid	13-Docosenamide, (Z)-	8270D	180		ug/kg	180
017	BG-3-10	Solid	Antimony	6020A	0.051	BJ	mg/kg	183

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
017	BG-3-10	Solid	Beryllium	6020A	1.6		mg/kg	183
017	BG-3-10	Solid	Cadmium	6020A	0.028	J	mg/kg	183
017	BG-3-10	Solid	Chromium	6020A	59		mg/kg	183
017	BG-3-10	Solid	Copper	6020A	24		mg/kg	183
017	BG-3-10	Solid	Iron	6020A	32000	B	mg/kg	183
017	BG-3-10	Solid	Lead	6020A	10	B	mg/kg	183
017	BG-3-10	Solid	Manganese	6020A	1100		mg/kg	183
017	BG-3-10	Solid	Nickel	6020A	39		mg/kg	183
017	BG-3-10	Solid	Selenium	6020A	0.33		mg/kg	183
017	BG-3-10	Solid	Thallium	6020A	0.042	J	mg/kg	183
017	BG-3-10	Solid	Zinc	6020A	46		mg/kg	183
018	BG-3-15	Solid	Ammonia - N (gas	350.1	0.54	J	mg/kg	185
018	BG-3-15	Solid	Hexavalent Chromium	7196A	0.75	BJ	mg/kg	185
018	BG-3-15	Solid	Nitrate - N (soluble)	300.0	0.070	J	mg/kg	185
018	BG-3-15	Solid	Acetone	8260B	13	J	ug/kg	187
018	BG-3-15	Solid	Unknown	8270D	1100		ug/kg	190
018	BG-3-15	Solid	2,5-Hexanedione	8270D	110		ug/kg	190
018	BG-3-15	Solid	Unknown	8270D	120		ug/kg	190
018	BG-3-15	Solid	Diethyltoluamide	8270D	290		ug/kg	190
018	BG-3-15	Solid	6-Octadecenoic acid, (Z)-	8270D	260		ug/kg	190
018	BG-3-15	Solid	Octadecanoic acid	8270D	99		ug/kg	190
018	BG-3-15	Solid	13-Docosenamide, (Z)-	8270D	360		ug/kg	190
018	BG-3-15	Solid	Antimony	6020A	0.034	BJ	mg/kg	193
018	BG-3-15	Solid	Beryllium	6020A	2.3		mg/kg	193
018	BG-3-15	Solid	Chromium	6020A	190		mg/kg	193
018	BG-3-15	Solid	Copper	6020A	36		mg/kg	193
018	BG-3-15	Solid	Iron	6020A	41000	B	mg/kg	193
018	BG-3-15	Solid	Lead	6020A	10	B	mg/kg	193
018	BG-3-15	Solid	Manganese	6020A	1400		mg/kg	193
018	BG-3-15	Solid	Nickel	6020A	93		mg/kg	193
018	BG-3-15	Solid	Selenium	6020A	0.26		mg/kg	193
018	BG-3-15	Solid	Thallium	6020A	0.021	J	mg/kg	193
018	BG-3-15	Solid	Zinc	6020A	62		mg/kg	193
019	BG-3-20	Solid	Ammonia - N (gas	350.1	0.50	J	mg/kg	195
019	BG-3-20	Solid	Acetone	8260B	14	J	ug/kg	197
019	BG-3-20	Solid	Unknown	8270D	1600		ug/kg	200
019	BG-3-20	Solid	2,5-Hexanedione	8270D	140		ug/kg	200
019	BG-3-20	Solid	Unknown	8270D	83		ug/kg	200
019	BG-3-20	Solid	Diethyltoluamide	8270D	220		ug/kg	200
019	BG-3-20	Solid	13-Docosenamide, (Z)-	8270D	390		ug/kg	200
019	BG-3-20	Solid	Antimony	6020A	0.037	BJ	mg/kg	203
019	BG-3-20	Solid	Arsenic	6020A	0.37	J	mg/kg	203
019	BG-3-20	Solid	Beryllium	6020A	1.4		mg/kg	203
019	BG-3-20	Solid	Cadmium	6020A	0.021	J	mg/kg	203
019	BG-3-20	Solid	Chromium	6020A	22		mg/kg	203
019	BG-3-20	Solid	Copper	6020A	90		mg/kg	203
019	BG-3-20	Solid	Iron	6020A	34000	B	mg/kg	203
019	BG-3-20	Solid	Lead	6020A	8.9	B	mg/kg	203

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
019	BG-3-20	Solid	Manganese	6020A	560		mg/kg	203
019	BG-3-20	Solid	Nickel	6020A	18		mg/kg	203
019	BG-3-20	Solid	Selenium	6020A	0.22	J	mg/kg	203
019	BG-3-20	Solid	Thallium	6020A	0.015	J	mg/kg	203
019	BG-3-20	Solid	Zinc	6020A	59		mg/kg	203
020	SB-16-0.5	Solid	Ammonia - N (gas	350.1	0.56	J	mg/kg	205
020	SB-16-0.5	Solid	Nitrate - N (soluble)	300.0	1.2		mg/kg	205
020	SB-16-0.5	Solid	Acetone	8260B	9.5	J	ug/kg	207
020	SB-16-0.5	Solid	Unknown	8270D	81		ug/kg	210
020	SB-16-0.5	Solid	Unknown	8270D	1300		ug/kg	210
020	SB-16-0.5	Solid	2,5-Hexanedione	8270D	110		ug/kg	210
020	SB-16-0.5	Solid	9-Oxononanoic acid	8270D	130		ug/kg	210
020	SB-16-0.5	Solid	Diethyltoluamide	8270D	78		ug/kg	210
020	SB-16-0.5	Solid	n-Hexadecanoic acid	8270D	300		ug/kg	210
020	SB-16-0.5	Solid	6-Octadecenoic acid, (Z)-	8270D	180		ug/kg	210
020	SB-16-0.5	Solid	Octadecanoic acid	8270D	170		ug/kg	210
020	SB-16-0.5	Solid	13-Docosenamide, (Z)-	8270D	760		ug/kg	210
020	SB-16-0.5	Solid	Unknown	8270D	76		ug/kg	210
020	SB-16-0.5	Solid	Antimony	6020A	0.024	BJ	mg/kg	213
020	SB-16-0.5	Solid	Arsenic	6020A	0.43	J	mg/kg	213
020	SB-16-0.5	Solid	Beryllium	6020A	0.57	J	mg/kg	213
020	SB-16-0.5	Solid	Chromium	6020A	58		mg/kg	213
020	SB-16-0.5	Solid	Copper	6020A	63		mg/kg	213
020	SB-16-0.5	Solid	Iron	6020A	35000	B	mg/kg	213
020	SB-16-0.5	Solid	Lead	6020A	4.6	B	mg/kg	213
020	SB-16-0.5	Solid	Manganese	6020A	380		mg/kg	213
020	SB-16-0.5	Solid	Nickel	6020A	28		mg/kg	213
020	SB-16-0.5	Solid	Selenium	6020A	0.26		mg/kg	213
020	SB-16-0.5	Solid	Thallium	6020A	0.043	J	mg/kg	213
020	SB-16-0.5	Solid	Zinc	6020A	49		mg/kg	213
021	SB16-1-5	Solid	Ammonia - N (gas	350.1	1.4		mg/kg	215
021	SB16-1-5	Solid	Hexavalent Chromium	7196A	0.90	BJ	mg/kg	215
021	SB16-1-5	Solid	Nitrate - N (soluble)	300.0	0.47		mg/kg	215
021	SB16-1-5	Solid	Sulfate (soluble)	300.0	17		mg/kg	215
021	SB16-1-5	Solid	Carbon tetrachloride	8260B	6.4		ug/kg	217
021	SB16-1-5	Solid	Cyclopentane	8260B	5.4		ug/kg	219
021	SB16-1-5	Solid	Unknown	8270D	920		ug/kg	220
021	SB16-1-5	Solid	Unknown	8270D	88		ug/kg	220
021	SB16-1-5	Solid	n-Hexadecanoic acid	8270D	87		ug/kg	220
021	SB16-1-5	Solid	13-Docosenamide, (Z)-	8270D	870		ug/kg	220
021	SB16-1-5	Solid	Hentriacontane	8270D	130		ug/kg	220
021	SB16-1-5	Solid	D-Friedoolean-14-ene, 3-	8270D	82		ug/kg	220
021	SB16-1-5	Solid	Benzo(a)pyrene	8270D	3.7	J	ug/kg	221
021	SB16-1-5	Solid	Benzo(b)fluoranthene	8270D	6.1	J	ug/kg	221
021	SB16-1-5	Solid	Benzo(g,h,i)perylene	8270D	4.3	J	ug/kg	221
021	SB16-1-5	Solid	Fluoranthene	8270D	6.3	J	ug/kg	221
021	SB16-1-5	Solid	Indeno(1,2,3-c,d)pyrene	8270D	3.6	J	ug/kg	222
021	SB16-1-5	Solid	Pyrene	8270D	4.8	J	ug/kg	222

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
021	SB16-1-5	Solid	Antimony	6020A	0.036	BJ	mg/kg	223
021	SB16-1-5	Solid	Arsenic	6020A	0.75	J	mg/kg	223
021	SB16-1-5	Solid	Beryllium	6020A	0.92		mg/kg	223
021	SB16-1-5	Solid	Cadmium	6020A	0.038	J	mg/kg	223
021	SB16-1-5	Solid	Chromium	6020A	27		mg/kg	223
021	SB16-1-5	Solid	Copper	6020A	59		mg/kg	223
021	SB16-1-5	Solid	Iron	6020A	36000	B	mg/kg	223
021	SB16-1-5	Solid	Lead	6020A	18	B	mg/kg	223
021	SB16-1-5	Solid	Manganese	6020A	410		mg/kg	223
021	SB16-1-5	Solid	Nickel	6020A	13	J	mg/kg	223
021	SB16-1-5	Solid	Selenium	6020A	0.60		mg/kg	223
021	SB16-1-5	Solid	Thallium	6020A	0.066	J	mg/kg	223
021	SB16-1-5	Solid	Zinc	6020A	37		mg/kg	223
022	TRIP BLANK(SH1432)	Aqueous	Acetone	8260B	2.0	J	ug/L	225

(491 detections)

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-001
Description: DUP	Matrix: Solid
Date Sampled: 08/16/2016 0800	% Solids: 71.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1832	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/19/2016 1010	AMM1	08/18/2016 1210	20085
1		(Nitrate - N) 300.0	1	08/22/2016 0957	TAF		20582
1		(Sulfate (sol) 300.0	1	08/22/2016 0957	TAF		20580

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	1.3	J	1.4	0.14	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.38	J	1.4	0.35	mg/kg	1
Nitrate - N (soluble)		300.0	0.24	J	0.28	0.034	mg/kg	1
Sulfate (soluble)		300.0	ND		14	7.0	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-001
Description: DUP	Matrix: Solid
Date Sampled: 08/16/2016 0800	% Solids: 71.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/18/2016 0400	JJG		20113	6.74

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		21	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4	N	146	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-001
Description: DUP
Matrix: Solid
Date Sampled: 08/16/2016 0800
% Solids: 71.3 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2028	ECP		20111	5.36

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	64		26	5.2	ug/kg	1
Benzene	71-43-2	8260B	ND		6.5	2.6	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.5	2.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.5	2.6	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.5	2.6	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	5.8	J	26	5.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.5	2.6	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.5	2.6	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.5	2.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.5	2.6	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.5	2.6	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.5	2.6	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.5	2.6	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.5	2.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.5	2.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.5	2.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.5	2.6	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.5	2.6	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.5	2.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.5	2.6	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.5	2.6	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.5	2.6	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.5	2.6	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.5	2.6	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.5	2.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	5.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.5	2.6	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.5	2.6	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.5	2.6	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	5.2	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.5	2.6	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.5	2.6	ug/kg	1
Styrene	100-42-5	8260B	ND		6.5	2.6	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.5	2.6	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.5	2.6	ug/kg	1
Toluene	108-88-3	8260B	ND		6.5	2.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.5	2.6	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.5	2.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.5	2.6	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.5	2.6	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-001
Description: DUP	Matrix: Solid
Date Sampled: 08/16/2016 0800	% Solids: 71.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2028	ECP		20111	5.36

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.5	2.6	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.5	2.6	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.5	2.6	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	5.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		109	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
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J = Estimated result < PQL and ≥ MDL
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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-001
Description: DUP	Matrix: Solid
Date Sampled: 08/16/2016 0800	% Solids: 71.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/17/2016 2028	ALL		20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ethanol		8260B	55				ug/kg	1
3-Octanone		8260B	11				ug/kg	1

PQL = Practical quantitation limit
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E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-001
Description: DUP	Matrix: Solid
Date Sampled: 08/16/2016 0800	% Solids: 71.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1327	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	280				ug/kg	1
Unknown		8270D	1500				ug/kg	1
2,5-Hexanedione		8270D	150				ug/kg	1
Caryophyllene		8270D	220				ug/kg	1
Unknown		8270D	150				ug/kg	1
Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-		8270D	92				ug/kg	1
n-Hexadecanoic acid		8270D	170				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	470				ug/kg	1
Unknown		8270D	250				ug/kg	1
13-Docosenamide, (Z)-		8270D	410				ug/kg	1
Unknown		8270D	390				ug/kg	1

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-001
Description: DUP
Matrix: Solid
Date Sampled: 08/16/2016 0800
% Solids: 71.3 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1327	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		45	2.3	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		45	2.4	ug/kg	1
Acetophenone	98-86-2	8270D	ND		45	17	ug/kg	1
Anthracene	120-12-7	8270D	ND		45	2.7	ug/kg	1
Atrazine	1912-24-9	8270D	ND		45	6.1	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		45	19	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		45	1.6	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		45	2.0	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		45	2.0	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		45	1.5	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		45	2.0	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		45	15	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		45	11	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		92	12	ug/kg	1
Caprolactam	105-60-2	8270D	ND		45	10	ug/kg	1
Carbazole	86-74-8	8270D	ND		45	13	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		45	8.3	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		45	4.2	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		45	11	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		45	11	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		45	13	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		45	8.5	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		45	8.2	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		45	9.5	ug/kg	1
Chrysene	218-01-9	8270D	ND		45	1.5	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		45	2.5	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		45	8.8	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		230	50	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		45	8.1	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		45	5.6	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		45	9.0	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		45	14	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		45	17	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		230	55	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		230	95	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		92	15	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		92	16	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		45	13	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		45	20	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		45	1.2	ug/kg	1
Fluorene	86-73-7	8270D	ND		45	2.7	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		45	12	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		45	11	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		230	73	ug/kg	1

PQL = Practical quantitation limit
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-001
Description: DUP
Matrix: Solid
Date Sampled: 08/16/2016 0800
% Solids: 71.3 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1327	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		45	7.9	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		45	1.9	ug/kg	1
Isophorone	78-59-1	8270D	ND		45	12	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		45	2.1	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		45	9.7	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		92	14	ug/kg	1
Naphthalene	91-20-3	8270D	ND		45	2.1	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		92	12	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		92	8.8	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		92	8.3	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		45	18	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		92	20	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		230	57	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		45	16	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		45	10	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		230	61	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		45	2.5	ug/kg	1
Phenol	108-95-2	8270D	ND		45	9.5	ug/kg	1
Pyrene	129-00-0	8270D	ND		45	1.6	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		45	8.3	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		45	6.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		69	33-102
2-Fluorophenol		68	28-104
Nitrobenzene-d5		72	22-109
Phenol-d5		72	27-103
Terphenyl-d14		89	41-120
2,4,6-Tribromophenol		82	30-117

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-001
Description: DUP	Matrix: Solid
Date Sampled: 08/16/2016 0800	% Solids: 71.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/23/2016 2258	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1627	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.081	BJ	0.31	0.019	mg/kg	1
Arsenic	7440-38-2	6020A	0.44	J	3.1	0.40	mg/kg	2
Beryllium	7440-41-7	6020A	1.5		1.2	0.099	mg/kg	2
Cadmium	7440-43-9	6020A	ND		0.31	0.025	mg/kg	2
Chromium	7440-47-3	6020A	71		16	0.36	mg/kg	2
Copper	7440-50-8	6020A	8.8		0.31	0.027	mg/kg	1
Iron	7439-89-6	6020A	49000	B	62	5.3	mg/kg	2
Lead	7439-92-1	6020A	5.9	B	0.31	0.0074	mg/kg	1
Manganese	7439-96-5	6020A	690		16	3.0	mg/kg	2
Nickel	7440-02-0	6020A	91		16	0.33	mg/kg	2
Selenium	7782-49-2	6020A	0.34		0.31	0.047	mg/kg	1
Silver	7440-22-4	6020A	ND		3.1	0.25	mg/kg	2
Thallium	7440-28-0	6020A	0.047	J	0.16	0.0099	mg/kg	1
Zinc	7440-66-6	6020A	47		3.1	0.081	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
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CVAA

Client: CDM Smith	Laboratory ID: RH17016-001
Description: DUP	Matrix: Solid
Date Sampled: 08/16/2016 0800	% Solids: 71.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1709	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.11	0.0081	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-002
Description: BG-1-0.5	Matrix: Solid
Date Sampled: 08/16/2016 0850	% Solids: 91.6 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1834	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/22/2016 1021	TAF		20582
1		(Sulfate (sol) 300.0	1	08/22/2016 1021	TAF		20580

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.33	J	1.1	0.11	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.39	J	1.1	0.27	mg/kg	1
Nitrate - N (soluble)		300.0	0.035	J	0.22	0.027	mg/kg	1
Sulfate (soluble)		300.0	ND		11	5.5	mg/kg	1

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B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-002
Description: BG-1-0.5	Matrix: Solid
Date Sampled: 08/16/2016 0850	% Solids: 91.6 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/17/2016 2101	JJG		20113	5.65

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		19	12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-002
Description: BG-1-0.5	Matrix: Solid
Date Sampled: 08/16/2016 0850	% Solids: 91.6 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2051	ECP		20111	6.19

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	5.8	J	18	3.5	ug/kg	1
Benzene	71-43-2	8260B	ND		4.4	1.8	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.4	1.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.4	1.8	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.4	1.8	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		18	3.5	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.4	1.8	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.4	1.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.4	1.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.4	1.8	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.4	1.8	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.4	1.8	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.4	1.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.4	1.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.4	1.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.4	1.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.4	1.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.4	1.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.4	1.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.4	1.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.4	1.8	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.4	1.8	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.4	1.8	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.4	1.8	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.8	3.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.4	1.8	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.4	1.8	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.4	1.8	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.8	3.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.4	1.8	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.4	1.8	ug/kg	1
Styrene	100-42-5	8260B	ND		4.4	1.8	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.4	1.8	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.4	1.8	ug/kg	1
Toluene	108-88-3	8260B	ND		4.4	1.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.4	1.8	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.4	1.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.4	1.8	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.4	1.8	ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-002
Description: BG-1-0.5	Matrix: Solid
Date Sampled: 08/16/2016 0850	% Solids: 91.6 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2051	ECP		20111	6.19

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.4	1.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.4	1.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.4	1.8	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.8	3.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		109	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-002
Description: BG-1-0.5	Matrix: Solid
Date Sampled: 08/16/2016 0850	% Solids: 91.6 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-002
Description: BG-1-0.5	Matrix: Solid
Date Sampled: 08/16/2016 0850	% Solids: 91.6 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1351	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	1200				ug/kg	1
2,5-Hexanedione		8270D	110				ug/kg	1
Unknown		8270D	93				ug/kg	1
n-Hexadecanoic acid		8270D	83				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	540				ug/kg	1
13-Docosenamide, (Z)-		8270D	420				ug/kg	1
Hentriacontane		8270D	130				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-002
Description: BG-1-0.5
Matrix: Solid
Date Sampled: 08/16/2016 0850
% Solids: 91.6 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1351	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		36	1.9	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		36	1.9	ug/kg	1
Acetophenone	98-86-2	8270D	ND		36	13	ug/kg	1
Anthracene	120-12-7	8270D	ND		36	2.2	ug/kg	1
Atrazine	1912-24-9	8270D	ND		36	4.8	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		36	15	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		36	1.2	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		36	1.6	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		36	1.6	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		36	1.2	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		36	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		36	12	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		36	8.6	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		73	9.4	ug/kg	1
Caprolactam	105-60-2	8270D	30	J	36	8.0	ug/kg	1
Carbazole	86-74-8	8270D	ND		36	10	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		36	6.6	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		36	3.4	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		36	8.8	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		36	8.6	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		36	10	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		36	6.8	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		36	6.5	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		36	7.5	ug/kg	1
Chrysene	218-01-9	8270D	ND		36	1.2	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		36	2.0	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		36	7.0	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		190	39	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		36	6.4	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		36	4.5	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		36	7.1	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		36	11	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		36	13	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		190	44	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		190	75	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		73	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		73	12	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		36	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		36	16	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		36	0.97	ug/kg	1
Fluorene	86-73-7	8270D	ND		36	2.1	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		36	9.3	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		36	8.5	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		190	58	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: BG-1-0.5
Date Sampled: 08/16/2016 0850
Date Received: 08/17/2016

Laboratory ID: RH17016-002
Matrix: Solid
% Solids: 91.6 08/17/2016 1825

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1351	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		36	6.3	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		36	1.5	ug/kg	1
Isophorone	78-59-1	8270D	ND		36	9.2	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		36	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		36	7.7	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		73	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		36	1.7	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		73	9.7	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		73	7.0	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		73	6.6	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		36	14	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		73	16	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		190	45	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		36	13	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		36	8.0	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		190	48	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		36	2.0	ug/kg	1
Phenol	108-95-2	8270D	ND		36	7.5	ug/kg	1
Pyrene	129-00-0	8270D	ND		36	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		36	6.6	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		36	5.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	33-102
2-Fluorophenol		60	28-104
Nitrobenzene-d5		67	22-109
Phenol-d5		62	27-103
Terphenyl-d14		75	41-120
2,4,6-Tribromophenol		74	30-117

PQL = Practical quantitation limit
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-002
Description: BG-1-0.5	Matrix: Solid
Date Sampled: 08/16/2016 0850	% Solids: 91.6 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/23/2016 2326	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1655	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.021	BJ	0.18	0.011	mg/kg	1
Arsenic	7440-38-2	6020A	0.55	J	1.8	0.23	mg/kg	2
Beryllium	7440-41-7	6020A	0.47	J	0.72	0.058	mg/kg	2
Cadmium	7440-43-9	6020A	0.035	J	0.18	0.014	mg/kg	2
Chromium	7440-47-3	6020A	39		9.4	0.21	mg/kg	2
Copper	7440-50-8	6020A	35		0.18	0.016	mg/kg	1
Iron	7439-89-6	6020A	23000	B	36	3.1	mg/kg	2
Lead	7439-92-1	6020A	5.4	B	0.18	0.0043	mg/kg	1
Manganese	7439-96-5	6020A	420		9.4	1.7	mg/kg	2
Nickel	7440-02-0	6020A	19		9.4	0.19	mg/kg	2
Selenium	7782-49-2	6020A	0.27		0.18	0.027	mg/kg	1
Silver	7440-22-4	6020A	ND		1.8	0.14	mg/kg	2
Thallium	7440-28-0	6020A	0.053	J	0.094	0.0058	mg/kg	1
Zinc	7440-66-6	6020A	30		1.8	0.047	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-002
Description: BG-1-0.5	Matrix: Solid
Date Sampled: 08/16/2016 0850	% Solids: 91.6 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1619	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.082	0.0063	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-003
Description: BG-1-1.5	Matrix: Solid
Date Sampled: 08/16/2016 0900	% Solids: 88.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1836	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/22/2016 1045	TAF		20582
1		(Sulfate (sol) 300.0	1	08/22/2016 1045	TAF		20580

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		1.1	0.11	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.49	J	1.1	0.28	mg/kg	1
Nitrate - N (soluble)		300.0	0.093	J	0.23	0.028	mg/kg	1
Sulfate (soluble)		300.0	ND		11	5.6	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-003
Description: BG-1-1.5	Matrix: Solid
Date Sampled: 08/16/2016 0900	% Solids: 88.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/17/2016 2123	JJG		20113	5.90

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		19	12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		83	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-003
Description: BG-1-1.5	Matrix: Solid
Date Sampled: 08/16/2016 0900	% Solids: 88.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2113	ECP		20111	6.64

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		17	3.4	ug/kg	1
Benzene	71-43-2	8260B	ND		4.2	1.7	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.2	1.7	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.2	1.7	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.2	1.7	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		17	3.4	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.2	1.7	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.2	1.7	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.2	1.7	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.2	1.7	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.2	1.7	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.2	1.7	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.2	1.7	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.2	1.7	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.2	1.7	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.2	1.7	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.2	1.7	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.2	1.7	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.2	1.7	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.2	1.7	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.2	1.7	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.2	1.7	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.2	1.7	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.2	1.7	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.2	1.7	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.2	1.7	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.2	1.7	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.2	1.7	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.2	1.7	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.5	3.4	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.2	1.7	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.2	1.7	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.2	1.7	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.5	3.4	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.2	1.7	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.2	1.7	ug/kg	1
Styrene	100-42-5	8260B	ND		4.2	1.7	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.2	1.7	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.2	1.7	ug/kg	1
Toluene	108-88-3	8260B	ND		4.2	1.7	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.2	1.7	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.2	1.7	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.2	1.7	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.2	1.7	ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-003
Description: BG-1-1.5	Matrix: Solid
Date Sampled: 08/16/2016 0900	% Solids: 88.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2113	ECP		20111	6.64

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.2	1.7	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.2	1.7	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.2	1.7	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.5	3.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		106	47-138
Toluene-d8		105	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-003
Description: BG-1-1.5	Matrix: Solid
Date Sampled: 08/16/2016 0900	% Solids: 88.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-003
Description: BG-1-1.5	Matrix: Solid
Date Sampled: 08/16/2016 0900	% Solids: 88.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1416	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	780				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	85				ug/kg	1
Unknown		8270D	79				ug/kg	1
13-Docosenamide, (Z)-		8270D	91				ug/kg	1
Heptacosane		8270D	97				ug/kg	1
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-		8270D	200				ug/kg	1

PQL = Practical quantitation limit
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-003
Description: BG-1-1.5
Matrix: Solid
Date Sampled: 08/16/2016 0900
% Solids: 88.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1416	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		37	1.9	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		37	2.0	ug/kg	1
Acetophenone	98-86-2	8270D	ND		37	14	ug/kg	1
Anthracene	120-12-7	8270D	ND		37	2.2	ug/kg	1
Atrazine	1912-24-9	8270D	ND		37	5.0	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		37	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	5.3	J	37	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	4.0	J	37	1.6	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	8.0	J	37	1.7	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		37	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		37	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		37	12	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		37	8.9	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		76	9.7	ug/kg	1
Caprolactam	105-60-2	8270D	ND		37	8.3	ug/kg	1
Carbazole	86-74-8	8270D	ND		37	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		37	6.9	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		37	3.5	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		37	9.1	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		37	8.9	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		37	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		37	7.0	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		37	6.7	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		37	7.8	ug/kg	1
Chrysene	218-01-9	8270D	3.3	J	37	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		37	2.1	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		37	7.2	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		190	41	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		37	6.6	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		37	4.6	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		37	7.4	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		37	11	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		37	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		190	46	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		190	78	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		76	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		76	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		37	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		37	16	ug/kg	1
Fluoranthene	206-44-0	8270D	6.2	J	37	1.0	ug/kg	1
Fluorene	86-73-7	8270D	ND		37	2.2	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		37	9.7	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		37	8.8	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		190	60	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-003
Description: BG-1-1.5
Matrix: Solid
Date Sampled: 08/16/2016 0900
% Solids: 88.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1416	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		37	6.5	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		37	1.5	ug/kg	1
Isophorone	78-59-1	8270D	ND		37	9.5	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		37	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		37	8.0	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		76	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		37	1.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		76	10	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		76	7.3	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		76	6.8	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		37	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		76	16	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		190	47	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		37	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		37	8.3	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		190	50	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		37	2.1	ug/kg	1
Phenol	108-95-2	8270D	ND		37	7.8	ug/kg	1
Pyrene	129-00-0	8270D	5.5	J	37	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		37	6.8	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		37	5.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		40	33-102
2-Fluorophenol		38	28-104
Nitrobenzene-d5		42	22-109
Phenol-d5		41	27-103
Terphenyl-d14		61	41-120
2,4,6-Tribromophenol		58	30-117

PQL = Practical quantitation limit
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-003
Description: BG-1-1.5	Matrix: Solid
Date Sampled: 08/16/2016 0900	% Solids: 88.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/23/2016 2331	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1701	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.026	BJ	0.20	0.012	mg/kg	1
Arsenic	7440-38-2	6020A	0.54	J	2.0	0.26	mg/kg	2
Beryllium	7440-41-7	6020A	0.56	J	0.80	0.064	mg/kg	2
Cadmium	7440-43-9	6020A	0.051	J	0.20	0.016	mg/kg	2
Chromium	7440-47-3	6020A	36		10	0.23	mg/kg	2
Copper	7440-50-8	6020A	31		0.20	0.018	mg/kg	1
Iron	7439-89-6	6020A	24000	B	40	3.5	mg/kg	2
Lead	7439-92-1	6020A	12	B	0.20	0.0048	mg/kg	1
Manganese	7439-96-5	6020A	430		10	1.9	mg/kg	2
Nickel	7440-02-0	6020A	15		10	0.22	mg/kg	2
Selenium	7782-49-2	6020A	0.28		0.20	0.031	mg/kg	1
Silver	7440-22-4	6020A	ND		2.0	0.16	mg/kg	2
Thallium	7440-28-0	6020A	0.070	J	0.10	0.0064	mg/kg	1
Zinc	7440-66-6	6020A	30		2.0	0.053	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-003
Description: BG-1-1.5	Matrix: Solid
Date Sampled: 08/16/2016 0900	% Solids: 88.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1621	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.011	J	0.090	0.0068	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-004
Description: BG-1-5	Matrix: Solid
Date Sampled: 08/16/2016 0910	% Solids: 72.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	2	08/19/2016 1916	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/22/2016 1109	TAF		20582
1		(Sulfate (sol) 300.0	1	08/22/2016 1109	TAF		20580

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	92		2.8	0.28	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.4	0.35	mg/kg	1
Nitrate - N (soluble)		300.0	0.054	J	0.28	0.034	mg/kg	1
Sulfate (soluble)		300.0	ND		14	6.9	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-004
Description: BG-1-5	Matrix: Solid
Date Sampled: 08/16/2016 0910	% Solids: 72.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B (SIM)	1	08/18/2016 1149	SES		20172	6.76

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		20	13	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4	N	149	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-004
Description: BG-1-5
Matrix: Solid
Date Sampled: 08/16/2016 0910
% Solids: 72.3 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2136	ECP		20111	5.91

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	160		23	4.7	ug/kg	1
Benzene	71-43-2	8260B	ND		5.9	2.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.9	2.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.9	2.3	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.9	2.3	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	23		23	4.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.9	2.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.9	2.3	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.9	2.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.9	2.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.9	2.3	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.9	2.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.9	2.3	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.9	2.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.9	2.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.9	2.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.9	2.3	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.9	2.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.9	2.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.9	2.3	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.9	2.3	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.9	2.3	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.9	2.3	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.9	2.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	2.7	J	5.9	2.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	4.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.9	2.3	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.9	2.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.9	2.3	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	4.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.9	2.3	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.9	2.3	ug/kg	1
Styrene	100-42-5	8260B	ND		5.9	2.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.9	2.3	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.9	2.3	ug/kg	1
Toluene	108-88-3	8260B	ND		5.9	2.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.9	2.3	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.9	2.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.9	2.3	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.9	2.3	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-004
Description: BG-1-5	Matrix: Solid
Date Sampled: 08/16/2016 0910	% Solids: 72.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2136	ECP		20111	5.91

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.9	2.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.9	2.3	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.9	2.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		12	4.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		108	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-004
Description: BG-1-5	Matrix: Solid
Date Sampled: 08/16/2016 0910	% Solids: 72.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/17/2016 2136	ALL		20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene, propyl-		8260B	16				ug/kg	1
4-Undecene, 4-methyl-		8260B	5.4				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-004
Description: BG-1-5	Matrix: Solid
Date Sampled: 08/16/2016 0910	% Solids: 72.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1531	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	180				ug/kg	1
Unknown		8270D	820				ug/kg	1
Caryophyllene		8270D	230				ug/kg	1
Unknown		8270D	240				ug/kg	1
Naphthalene, 1,2,4a,5,6,8a-hexahydro-4,7		8270D	160				ug/kg	1
Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-		8270D	120				ug/kg	1
Naphthalene, 1,2,3,4-tetrahydro-1,6-dime		8270D	690				ug/kg	1
Cedrol		8270D	130				ug/kg	1
Unknown		8270D	130				ug/kg	1
n-Hexadecanoic acid		8270D	190				ug/kg	1
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa		8270D	180				ug/kg	1
Cyclohexadecane		8270D	240				ug/kg	1
Unknown		8270D	200				ug/kg	1
2- Chloropropionic acid, octadecyl ester		8270D	150				ug/kg	1
13-Docosenamide, (Z)-		8270D	240				ug/kg	1
Tetracosapentaene, 2,6,10,15,19,23-hexam		8270D	150				ug/kg	1
Hentriacontane		8270D	600				ug/kg	1
Unknown		8270D	120				ug/kg	1
Heptacosane		8270D	230				ug/kg	1
Unknown		8270D	450				ug/kg	1

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-004
Description: BG-1-5
Matrix: Solid
Date Sampled: 08/16/2016 0910
% Solids: 72.3 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1531	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		45	2.3	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		45	2.4	ug/kg	1
Acetophenone	98-86-2	8270D	ND		45	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		45	2.7	ug/kg	1
Atrazine	1912-24-9	8270D	ND		45	6.0	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		45	19	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		45	1.6	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		45	2.0	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	5.1	J	45	2.0	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		45	1.5	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		45	1.9	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		45	15	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		45	11	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		91	12	ug/kg	1
Caprolactam	105-60-2	8270D	ND		45	10	ug/kg	1
Carbazole	86-74-8	8270D	ND		45	13	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		45	8.3	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		45	4.2	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		45	11	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		45	11	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		45	13	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		45	8.4	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		45	8.1	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		45	9.4	ug/kg	1
Chrysene	218-01-9	8270D	ND		45	1.5	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		45	2.5	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		45	8.7	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		230	49	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		45	8.0	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		45	5.6	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		45	8.9	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		45	14	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		45	16	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		230	55	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		230	94	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		91	15	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		91	16	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		45	13	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		45	20	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		45	1.2	ug/kg	1
Fluorene	86-73-7	8270D	ND		45	2.7	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		45	12	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		45	11	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		230	72	ug/kg	1

PQL = Practical quantitation limit
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: BG-1-5
Date Sampled: 08/16/2016 0910
Date Received: 08/17/2016

Laboratory ID: RH17016-004
Matrix: Solid
% Solids: 72.3 08/17/2016 1825

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1531	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		45	7.8	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		45	1.9	ug/kg	1
Isophorone	78-59-1	8270D	ND		45	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		45	2.1	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		45	9.6	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		91	14	ug/kg	1
Naphthalene	91-20-3	8270D	ND		45	2.1	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		91	12	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		91	8.8	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		91	8.2	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		45	18	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		91	20	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		230	56	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		45	16	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		45	10	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		230	60	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		45	2.5	ug/kg	1
Phenol	108-95-2	8270D	ND		45	9.4	ug/kg	1
Pyrene	129-00-0	8270D	ND		45	1.6	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		45	8.2	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		45	6.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		41	33-102
2-Fluorophenol		39	28-104
Nitrobenzene-d5		42	22-109
Phenol-d5		42	27-103
Terphenyl-d14		56	41-120
2,4,6-Tribromophenol		54	30-117

PQL = Practical quantitation limit
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-004
Description: BG-1-5	Matrix: Solid
Date Sampled: 08/16/2016 0910	% Solids: 72.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/23/2016 2337	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1717	BNW	08/22/2016 1604	20119
3	3050B	6020A	20	08/23/2016 2235	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.036	BJ	0.27	0.016	mg/kg	1
Arsenic	7440-38-2	6020A	0.71	J	5.4	0.70	mg/kg	3
Beryllium	7440-41-7	6020A	1.1		1.1	0.087	mg/kg	2
Cadmium	7440-43-9	6020A	0.065	J	0.54	0.043	mg/kg	3
Chromium	7440-47-3	6020A	33		28	0.63	mg/kg	3
Copper	7440-50-8	6020A	51		0.27	0.024	mg/kg	1
Iron	7439-89-6	6020A	38000	B	110	9.4	mg/kg	3
Lead	7439-92-1	6020A	20	B	0.27	0.0065	mg/kg	1
Manganese	7439-96-5	6020A	870		28	5.2	mg/kg	3
Nickel	7440-02-0	6020A	17	J	28	0.59	mg/kg	3
Selenium	7782-49-2	6020A	0.47		0.27	0.041	mg/kg	1
Silver	7440-22-4	6020A	ND		5.4	0.43	mg/kg	3
Thallium	7440-28-0	6020A	0.11	J	0.14	0.0087	mg/kg	1
Zinc	7440-66-6	6020A	38		2.7	0.072	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
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ND = Not detected at or above the MDL
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-004
Description: BG-1-5	Matrix: Solid
Date Sampled: 08/16/2016 0910	% Solids: 72.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1624	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.0099	J	0.11	0.0085	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-005
Description: BG-1-10	Matrix: Solid
Date Sampled: 08/16/2016 0920	% Solids: 75.9 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1844	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/22/2016 1133	TAF		20582
1		(Sulfate (sol) 300.0	1	08/22/2016 1133	TAF		20580

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	3.0		1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.37	J	1.3	0.33	mg/kg	1
Nitrate - N (soluble)		300.0	0.077	J	0.26	0.032	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.6	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-005
Description: BG-1-10	Matrix: Solid
Date Sampled: 08/16/2016 0920	% Solids: 75.9 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/17/2016 2207	JJG		20113	6.27

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		21	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-005
Description: BG-1-10
Matrix: Solid
Date Sampled: 08/16/2016 0920
% Solids: 75.9 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2159	ECP		20111	5.54

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	89		24	4.8	ug/kg	1
Benzene	71-43-2	8260B	ND		5.9	2.4	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.9	2.4	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.9	2.4	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.9	2.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	9.1	J	24	4.8	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.9	2.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.9	2.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.9	2.4	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.9	2.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.9	2.4	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.9	2.4	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.9	2.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.9	2.4	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.9	2.4	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.9	2.4	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.9	2.4	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.9	2.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.9	2.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.9	2.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.9	2.4	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.9	2.4	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.9	2.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.9	2.4	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	4.8	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.9	2.4	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.9	2.4	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.9	2.4	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	4.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.9	2.4	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.9	2.4	ug/kg	1
Styrene	100-42-5	8260B	ND		5.9	2.4	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.9	2.4	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.9	2.4	ug/kg	1
Toluene	108-88-3	8260B	ND		5.9	2.4	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.9	2.4	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.9	2.4	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.9	2.4	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.9	2.4	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-005
Description: BG-1-10	Matrix: Solid
Date Sampled: 08/16/2016 0920	% Solids: 75.9 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2159	ECP		20111	5.54

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.9	2.4	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.9	2.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.9	2.4	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		12	4.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		109	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-005
Description: BG-1-10	Matrix: Solid
Date Sampled: 08/16/2016 0920	% Solids: 75.9 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/17/2016 2159	ALL		20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Butane, 2-methyl-		8260B	9.5				ug/kg	1
1R-.alpha.-Pinene		8260B	6.3				ug/kg	1

PQL = Practical quantitation limit
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-005
Description: BG-1-10	Matrix: Solid
Date Sampled: 08/16/2016 0920	% Solids: 75.9 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1556	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	370				ug/kg	1
Unknown		8270D	940				ug/kg	1
2,5-Hexanedione		8270D	110				ug/kg	1
Caryophyllene		8270D	450				ug/kg	1
Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-		8270D	95				ug/kg	1
n-Hexadecanoic acid		8270D	91				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	330				ug/kg	1
Squalene		8270D	130				ug/kg	1
Lup-20(29)-en-28-oic acid, 3-hydroxy-, m		8270D	200				ug/kg	1
Friedelan-3-one		8270D	110				ug/kg	1
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-		8270D	220				ug/kg	1

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-005
Description: BG-1-10
Matrix: Solid
Date Sampled: 08/16/2016 0920
% Solids: 75.9 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1556	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		43	2.2	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		43	2.3	ug/kg	1
Acetophenone	98-86-2	8270D	ND		43	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		43	2.6	ug/kg	1
Atrazine	1912-24-9	8270D	ND		43	5.8	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		43	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		43	1.5	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		43	1.9	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		43	1.9	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		43	1.5	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		43	1.9	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		43	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		43	10	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		87	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		43	9.6	ug/kg	1
Carbazole	86-74-8	8270D	ND		43	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		43	7.9	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		43	4.0	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		43	11	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		43	10	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		43	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		43	8.1	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		43	7.8	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		43	9.0	ug/kg	1
Chrysene	218-01-9	8270D	ND		43	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		43	2.4	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		43	8.4	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		220	47	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		43	7.7	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		43	5.3	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		43	8.6	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		43	13	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		43	16	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		220	53	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		220	90	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		87	14	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		87	15	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		43	13	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		43	19	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		43	1.2	ug/kg	1
Fluorene	86-73-7	8270D	ND		43	2.6	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		43	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		43	10	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		220	69	ug/kg	1

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-005
Description: BG-1-10
Matrix: Solid
Date Sampled: 08/16/2016 0920
% Solids: 75.9 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1556	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		43	7.5	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		43	1.8	ug/kg	1
Isophorone	78-59-1	8270D	ND		43	11	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		43	2.0	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		43	9.2	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		87	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		43	2.0	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		87	12	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		87	8.4	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		87	7.9	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		43	17	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		87	19	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		220	54	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		43	16	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		43	9.6	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		220	58	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		43	2.4	ug/kg	1
Phenol	108-95-2	8270D	ND		43	9.0	ug/kg	1
Pyrene	129-00-0	8270D	ND		43	1.5	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		43	7.9	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		43	6.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		55	33-102
2-Fluorophenol		50	28-104
Nitrobenzene-d5		56	22-109
Phenol-d5		57	27-103
Terphenyl-d14		74	41-120
2,4,6-Tribromophenol		72	30-117

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ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-005
Description: BG-1-10	Matrix: Solid
Date Sampled: 08/16/2016 0920	% Solids: 75.9 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/23/2016 2342	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1723	BNW	08/22/2016 1604	20119
3	3050B	6020A	20	08/23/2016 1903	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.021	BJ	0.20	0.012	mg/kg	1
Arsenic	7440-38-2	6020A	ND		4.0	0.51	mg/kg	3
Beryllium	7440-41-7	6020A	1.3		0.80	0.064	mg/kg	2
Cadmium	7440-43-9	6020A	ND		0.40	0.032	mg/kg	3
Chromium	7440-47-3	6020A	50		21	0.46	mg/kg	3
Copper	7440-50-8	6020A	18		0.20	0.017	mg/kg	1
Iron	7439-89-6	6020A	30000	B	80	6.8	mg/kg	3
Lead	7439-92-1	6020A	16	B	0.20	0.0048	mg/kg	1
Manganese	7439-96-5	6020A	920		21	3.8	mg/kg	3
Nickel	7440-02-0	6020A	46		21	0.43	mg/kg	3
Selenium	7782-49-2	6020A	0.29		0.20	0.030	mg/kg	1
Silver	7440-22-4	6020A	ND		4.0	0.32	mg/kg	3
Thallium	7440-28-0	6020A	0.089	J	0.10	0.0064	mg/kg	1
Zinc	7440-66-6	6020A	25		2.0	0.052	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-005
Description: BG-1-10	Matrix: Solid
Date Sampled: 08/16/2016 0920	% Solids: 75.9 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1626	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.11	0.0081	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-006
Description: BG-1-15	Matrix: Solid
Date Sampled: 08/16/2016 0935	% Solids: 79.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1852	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/22/2016 1157	TAF		20582
1		(Sulfate (sol) 300.0	1	08/22/2016 1157	TAF		20580

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.48	J	1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.51	J	1.3	0.32	mg/kg	1
Nitrate - N (soluble)		300.0	0.096	J	0.25	0.031	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.3	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-006
Description: BG-1-15	Matrix: Solid
Date Sampled: 08/16/2016 0935	% Solids: 79.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/17/2016 2229	JJG		20113	6.36

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		20	12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-006
Description: BG-1-15	Matrix: Solid
Date Sampled: 08/16/2016 0935	% Solids: 79.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2222	ECP		20111	6.81

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	25		18	3.7	ug/kg	1
Benzene	71-43-2	8260B	ND		4.6	1.8	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.6	1.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.6	1.8	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.6	1.8	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		18	3.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.6	1.8	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.6	1.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.6	1.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.6	1.8	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.6	1.8	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.6	1.8	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.6	1.8	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.6	1.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.6	1.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.6	1.8	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.6	1.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.6	1.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.6	1.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.6	1.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.6	1.8	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.6	1.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.6	1.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.6	1.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.6	1.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.6	1.8	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.6	1.8	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.6	1.8	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.6	1.8	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.2	3.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.6	1.8	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.6	1.8	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.6	1.8	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.2	3.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.6	1.8	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.6	1.8	ug/kg	1
Styrene	100-42-5	8260B	ND		4.6	1.8	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.6	1.8	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.6	1.8	ug/kg	1
Toluene	108-88-3	8260B	ND		4.6	1.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.6	1.8	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.6	1.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.6	1.8	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.6	1.8	ug/kg	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
ND = Not detected at or above the MDL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-006
Description: BG-1-15	Matrix: Solid
Date Sampled: 08/16/2016 0935	% Solids: 79.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2222	ECP		20111	6.81

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.6	1.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.6	1.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.6	1.8	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.2	3.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	53-142
Bromofluorobenzene		111	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-006
Description: BG-1-15	Matrix: Solid
Date Sampled: 08/16/2016 0935	% Solids: 79.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-006
Description: BG-1-15	Matrix: Solid
Date Sampled: 08/16/2016 0935	% Solids: 79.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1620	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	180				ug/kg	1
Unknown		8270D	1100				ug/kg	1
2,5-Hexanedione		8270D	110				ug/kg	1
Caryophyllene		8270D	160				ug/kg	1
n-Hexadecanoic acid		8270D	96				ug/kg	1
Octadec-9-enoic acid		8270D	810				ug/kg	1
13-Docosenamide, (Z)-		8270D	130				ug/kg	1
Unknown		8270D	530				ug/kg	1

PQL = Practical quantitation limit
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-006
Description: BG-1-15
Matrix: Solid
Date Sampled: 08/16/2016 0935
% Solids: 79.8 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1620	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		41	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		41	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		41	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		41	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		41	5.5	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		41	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		41	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		41	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		41	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		41	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		41	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		41	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		41	9.8	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		83	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		41	9.1	ug/kg	1
Carbazole	86-74-8	8270D	ND		41	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		41	7.5	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		41	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		41	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		41	9.8	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		41	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		41	7.7	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		41	7.4	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		41	8.6	ug/kg	1
Chrysene	218-01-9	8270D	ND		41	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		41	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		41	8.0	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	45	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		41	7.3	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		41	5.1	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		41	8.1	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		41	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		41	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	50	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	86	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		83	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		83	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		41	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		41	18	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		41	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		41	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		41	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		41	9.7	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	66	ug/kg	1

PQL = Practical quantitation limit
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: BG-1-15
Date Sampled: 08/16/2016 0935
Date Received: 08/17/2016

Laboratory ID: RH17016-006
Matrix: Solid
% Solids: 79.8 08/17/2016 1825

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1620	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		41	7.2	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		41	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		41	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		41	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		41	8.8	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		83	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		41	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		83	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		83	8.0	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		83	7.5	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		41	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		83	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	51	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		41	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		41	9.1	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	55	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		41	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		41	8.6	ug/kg	1
Pyrene	129-00-0	8270D	ND		41	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		41	7.5	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		41	5.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		56	33-102
2-Fluorophenol		53	28-104
Nitrobenzene-d5		69	22-109
Phenol-d5		50	27-103
Terphenyl-d14		71	41-120
2,4,6-Tribromophenol		65	30-117

PQL = Practical quantitation limit
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-006
Description: BG-1-15	Matrix: Solid
Date Sampled: 08/16/2016 0935	% Solids: 79.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/23/2016 2348	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1729	BNW	08/22/2016 1604	20119
3	3050B	6020A	50	08/23/2016 1909	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.021	BJ	0.23	0.014	mg/kg	1
Arsenic	7440-38-2	6020A	0.30	J	2.3	0.30	mg/kg	2
Beryllium	7440-41-7	6020A	2.5		0.93	0.075	mg/kg	2
Cadmium	7440-43-9	6020A	0.031	J	0.23	0.019	mg/kg	2
Chromium	7440-47-3	6020A	69		12	0.27	mg/kg	2
Copper	7440-50-8	6020A	2.8		0.23	0.021	mg/kg	1
Iron	7439-89-6	6020A	41000	B	47	4.0	mg/kg	2
Lead	7439-92-1	6020A	11	B	0.23	0.0056	mg/kg	1
Manganese	7439-96-5	6020A	1500		61	11	mg/kg	3
Nickel	7440-02-0	6020A	130		12	0.25	mg/kg	2
Selenium	7782-49-2	6020A	0.072	J	0.23	0.035	mg/kg	1
Silver	7440-22-4	6020A	ND		2.3	0.19	mg/kg	2
Thallium	7440-28-0	6020A	0.043	J	0.12	0.0075	mg/kg	1
Zinc	7440-66-6	6020A	44		2.3	0.062	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-006
Description: BG-1-15	Matrix: Solid
Date Sampled: 08/16/2016 0935	% Solids: 79.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1629	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.097	0.0074	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-007
Description: BG-1-20	Matrix: Solid
Date Sampled: 08/16/2016 0940	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1854	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/22/2016 1221	TAF		20582
1		(Sulfate (sol) 300.0	1	08/22/2016 1221	TAF		20580

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.2	0.29	mg/kg	1
Nitrate - N (soluble)		300.0	0.032	J	0.23	0.028	mg/kg	1
Sulfate (soluble)		300.0	ND		12	5.8	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-007
Description: BG-1-20	Matrix: Solid
Date Sampled: 08/16/2016 0940	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/17/2016 2252	JJG		20113	5.09

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		23	14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-007
Description: BG-1-20
Matrix: Solid
Date Sampled: 08/16/2016 0940
% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2244	ECP		20111	4.31

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	18	J	27	5.4	ug/kg	1
Benzene	71-43-2	8260B	ND		6.7	2.7	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.7	2.7	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.7	2.7	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.7	2.7	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		27	5.4	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.7	2.7	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.7	2.7	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.7	2.7	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.7	2.7	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.7	2.7	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.7	2.7	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.7	2.7	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.7	2.7	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.7	2.7	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.7	2.7	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.7	2.7	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.7	2.7	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.7	2.7	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.7	2.7	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.7	2.7	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.7	2.7	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.7	2.7	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.7	2.7	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.7	2.7	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.7	2.7	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.7	2.7	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.7	2.7	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.7	2.7	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	5.4	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.7	2.7	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.7	2.7	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.7	2.7	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	5.4	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.7	2.7	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.7	2.7	ug/kg	1
Styrene	100-42-5	8260B	ND		6.7	2.7	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.7	2.7	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.7	2.7	ug/kg	1
Toluene	108-88-3	8260B	ND		6.7	2.7	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.7	2.7	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.7	2.7	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.7	2.7	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.7	2.7	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-007
Description: BG-1-20	Matrix: Solid
Date Sampled: 08/16/2016 0940	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2244	ECP		20111	4.31

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.7	2.7	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.7	2.7	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.7	2.7	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	5.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	53-142
Bromofluorobenzene		112	47-138
Toluene-d8		108	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-007
Description: BG-1-20	Matrix: Solid
Date Sampled: 08/16/2016 0940	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-007
Description: BG-1-20	Matrix: Solid
Date Sampled: 08/16/2016 0940	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1645	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	1900				ug/kg	1
2,5-Hexanedione		8270D	190				ug/kg	1
Unknown		8270D	96				ug/kg	1
14-Pentadecenoic acid		8270D	100				ug/kg	1
13-Docosenamide, (Z)-		8270D	610				ug/kg	1

PQL = Practical quantitation limit
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-007
Description: BG-1-20
Matrix: Solid
Date Sampled: 08/16/2016 0940
% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1645	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		37	1.9	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		37	2.0	ug/kg	1
Acetophenone	98-86-2	8270D	ND		37	14	ug/kg	1
Anthracene	120-12-7	8270D	ND		37	2.3	ug/kg	1
Atrazine	1912-24-9	8270D	ND		37	5.0	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		37	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		37	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		37	1.6	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		37	1.7	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		37	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		37	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		37	12	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		37	9.0	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		76	9.7	ug/kg	1
Caprolactam	105-60-2	8270D	ND		37	8.3	ug/kg	1
Carbazole	86-74-8	8270D	ND		37	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		37	6.9	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		37	3.5	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		37	9.2	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		37	8.9	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		37	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		37	7.0	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		37	6.7	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		37	7.8	ug/kg	1
Chrysene	218-01-9	8270D	ND		37	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		37	2.1	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		37	7.2	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		190	41	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		37	6.6	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		37	4.6	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		37	7.4	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		37	11	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		37	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		190	46	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		190	78	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		76	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		76	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	22	J	37	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		37	16	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		37	1.0	ug/kg	1
Fluorene	86-73-7	8270D	ND		37	2.2	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		37	9.7	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		37	8.9	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		190	60	ug/kg	1

PQL = Practical quantitation limit
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: BG-1-20
Date Sampled: 08/16/2016 0940
Date Received: 08/17/2016

Laboratory ID: RH17016-007
Matrix: Solid
% Solids: 86.1 08/17/2016 1825

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1645	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		37	6.5	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		37	1.5	ug/kg	1
Isophorone	78-59-1	8270D	ND		37	9.5	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		37	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		37	8.0	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		76	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		37	1.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		76	10	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		76	7.3	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		76	6.8	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		37	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		76	16	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		190	47	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		37	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		37	8.3	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		190	50	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		37	2.1	ug/kg	1
Phenol	108-95-2	8270D	ND		37	7.8	ug/kg	1
Pyrene	129-00-0	8270D	ND		37	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		37	6.9	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		37	5.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		55	33-102
2-Fluorophenol		53	28-104
Nitrobenzene-d5		64	22-109
Phenol-d5		54	27-103
Terphenyl-d14		71	41-120
2,4,6-Tribromophenol		64	30-117

PQL = Practical quantitation limit
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-007
Description: BG-1-20	Matrix: Solid
Date Sampled: 08/16/2016 0940	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0005	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1734	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.053	BJ	0.24	0.015	mg/kg	1
Arsenic	7440-38-2	6020A	ND		2.4	0.31	mg/kg	2
Beryllium	7440-41-7	6020A	1.4		0.97	0.077	mg/kg	2
Cadmium	7440-43-9	6020A	0.025		0.024	0.0019	mg/kg	1
Chromium	7440-47-3	6020A	38		1.3	0.028	mg/kg	1
Copper	7440-50-8	6020A	19		0.24	0.021	mg/kg	1
Iron	7439-89-6	6020A	33000	B	48	4.2	mg/kg	2
Lead	7439-92-1	6020A	6.1	B	0.24	0.0058	mg/kg	1
Manganese	7439-96-5	6020A	710		13	2.3	mg/kg	2
Nickel	7440-02-0	6020A	49		1.3	0.026	mg/kg	1
Selenium	7782-49-2	6020A	0.069	J	0.24	0.037	mg/kg	1
Silver	7440-22-4	6020A	0.019	J	0.24	0.019	mg/kg	1
Thallium	7440-28-0	6020A	0.015	J	0.13	0.0077	mg/kg	1
Zinc	7440-66-6	6020A	40		2.4	0.064	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-007
Description: BG-1-20	Matrix: Solid
Date Sampled: 08/16/2016 0940	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1636	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.085	0.0064	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-008
Description: BG-2-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1010	% Solids: 95.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1856	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/22/2016 1245	TAF		20582
1		(Sulfate (sol) 300.0	1	08/22/2016 1245	TAF		20580

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		1.1	0.11	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.1	0.26	mg/kg	1
Nitrate - N (soluble)		300.0	0.056	J	0.21	0.026	mg/kg	1
Sulfate (soluble)		300.0	ND		11	5.3	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-008
Description: BG-2-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1010	% Solids: 95.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/17/2016 2314	JJG		20113	6.76

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		16	9.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-008
Description: BG-2-0.5
Matrix: Solid
Date Sampled: 08/16/2016 1010
% Solids: 95.1 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2307	ECP		20111	5.50

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		19	3.8	ug/kg	1
Benzene	71-43-2	8260B	ND		4.8	1.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.8	1.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.8	1.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.8	1.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		19	3.8	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.8	1.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.8	1.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.8	1.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.8	1.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.8	1.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.8	1.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.8	1.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.8	1.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.8	1.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.8	1.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.8	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.8	1.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.8	1.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.8	1.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.8	1.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.8	1.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.8	1.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.8	1.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.6	3.8	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.8	1.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.8	1.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.8	1.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.6	3.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.8	1.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.8	1.9	ug/kg	1
Styrene	100-42-5	8260B	ND		4.8	1.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.8	1.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.8	1.9	ug/kg	1
Toluene	108-88-3	8260B	ND		4.8	1.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.8	1.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.8	1.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.8	1.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.8	1.9	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-008
Description: BG-2-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1010	% Solids: 95.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2307	ECP		20111	5.50

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.8	1.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.8	1.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.8	1.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.6	3.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		109	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-008
Description: BG-2-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1010	% Solids: 95.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-008
Description: BG-2-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1010	% Solids: 95.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1710	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	890				ug/kg	1
2,5-Hexanedione		8270D	76				ug/kg	1
n-Hexadecanoic acid		8270D	90				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	260				ug/kg	1
13-Docosenamide, (Z)-		8270D	310				ug/kg	1
Squalene		8270D	170				ug/kg	1
Heneicosane		8270D	160				ug/kg	1

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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-008
Description: BG-2-0.5
Matrix: Solid
Date Sampled: 08/16/2016 1010
% Solids: 95.1 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1710	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		34	1.8	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		34	1.8	ug/kg	1
Acetophenone	98-86-2	8270D	ND		34	12	ug/kg	1
Anthracene	120-12-7	8270D	ND		34	2.1	ug/kg	1
Atrazine	1912-24-9	8270D	ND		34	4.6	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		34	14	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		34	1.2	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		34	1.5	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		34	1.5	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		34	1.2	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		34	1.5	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		34	11	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		34	8.2	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		69	8.9	ug/kg	1
Caprolactam	105-60-2	8270D	ND		34	7.6	ug/kg	1
Carbazole	86-74-8	8270D	ND		34	9.7	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		34	6.3	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		34	3.2	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		34	8.4	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		34	8.2	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		34	9.7	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		34	6.4	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		34	6.2	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		34	7.2	ug/kg	1
Chrysene	218-01-9	8270D	ND		34	1.1	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		34	1.9	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		34	6.6	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		180	37	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		34	6.1	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		34	4.2	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		34	6.8	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		34	10	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		34	12	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		180	42	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		180	72	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		69	11	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		69	12	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	27	J	34	10	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		34	15	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		34	0.92	ug/kg	1
Fluorene	86-73-7	8270D	ND		34	2.0	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		34	8.9	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		34	8.1	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		180	55	ug/kg	1

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-008
Description: BG-2-0.5
Matrix: Solid
Date Sampled: 08/16/2016 1010
% Solids: 95.1 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1710	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		34	6.0	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		34	1.4	ug/kg	1
Isophorone	78-59-1	8270D	ND		34	8.7	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		34	1.6	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		34	7.3	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		69	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		34	1.6	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		69	9.2	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		69	6.7	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		69	6.2	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		34	13	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		69	15	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		180	43	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		34	12	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		34	7.6	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		180	46	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		34	1.9	ug/kg	1
Phenol	108-95-2	8270D	ND		34	7.2	ug/kg	1
Pyrene	129-00-0	8270D	ND		34	1.2	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		34	6.3	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		34	4.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		38	33-102
2-Fluorophenol		36	28-104
Nitrobenzene-d5		39	22-109
Phenol-d5		40	27-103
Terphenyl-d14		63	41-120
2,4,6-Tribromophenol		58	30-117

PQL = Practical quantitation limit
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-008
Description: BG-2-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1010	% Solids: 95.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0010	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1740	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.022	BJ	0.18	0.011	mg/kg	1
Arsenic	7440-38-2	6020A	ND		1.8	0.23	mg/kg	2
Beryllium	7440-41-7	6020A	1.4		0.71	0.056	mg/kg	2
Cadmium	7440-43-9	6020A	0.028	J	0.18	0.014	mg/kg	2
Chromium	7440-47-3	6020A	29		9.2	0.20	mg/kg	2
Copper	7440-50-8	6020A	38		0.18	0.016	mg/kg	1
Iron	7439-89-6	6020A	25000	B	35	3.0	mg/kg	2
Lead	7439-92-1	6020A	12	B	0.18	0.0042	mg/kg	1
Manganese	7439-96-5	6020A	440		9.2	1.7	mg/kg	2
Nickel	7440-02-0	6020A	14		9.2	0.19	mg/kg	2
Selenium	7782-49-2	6020A	0.22		0.18	0.027	mg/kg	1
Silver	7440-22-4	6020A	ND		1.8	0.14	mg/kg	2
Thallium	7440-28-0	6020A	0.025	J	0.092	0.0056	mg/kg	1
Zinc	7440-66-6	6020A	37		1.8	0.047	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-008
Description: BG-2-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1010	% Solids: 95.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1638	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.087	0.0066	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-009
Description: BG-2-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1020	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1858	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/24/2016 0153	TAF		20588
1		(Sulfate (sol) 300.0	1	08/24/2016 0153	TAF		20589

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		1.1	0.11	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.1	0.29	mg/kg	1
Nitrate - N (soluble)		300.0	0.48		0.23	0.028	mg/kg	1
Sulfate (soluble)		300.0	ND		11	5.7	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-009
Description: BG-2-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1020	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/17/2016 2336	JJG		20113	6.61

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		17	11	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		116	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-009
Description: BG-2-1.5
Matrix: Solid
Date Sampled: 08/16/2016 1020
% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2330	ECP		20111	6.10

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		19	3.7	ug/kg	1
Benzene	71-43-2	8260B	ND		4.7	1.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.7	1.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.7	1.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.7	1.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		19	3.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.7	1.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.7	1.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.7	1.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.7	1.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.7	1.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.7	1.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.7	1.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.7	1.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.7	1.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.7	1.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.7	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.7	1.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.7	1.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.7	1.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.7	1.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.7	1.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.7	1.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.7	1.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.3	3.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.7	1.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.7	1.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.7	1.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.3	3.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.7	1.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.7	1.9	ug/kg	1
Styrene	100-42-5	8260B	ND		4.7	1.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.7	1.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.7	1.9	ug/kg	1
Toluene	108-88-3	8260B	ND		4.7	1.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.7	1.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.7	1.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.7	1.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.7	1.9	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-009
Description: BG-2-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1020	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2330	ECP		20111	6.10

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.7	1.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.7	1.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.7	1.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.3	3.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		107	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-009
Description: BG-2-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1020	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-009
Description: BG-2-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1020	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1735	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
2-Pentanone, 4-hydroxy-4-methyl-		8270D	920				ug/kg	1
2,5-Hexanedione		8270D	77				ug/kg	1
13-Docosenamide, (Z)-		8270D	540				ug/kg	1
Tetracosane		8270D	100				ug/kg	1

PQL = Practical quantitation limit
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-009
Description: BG-2-1.5
Matrix: Solid
Date Sampled: 08/16/2016 1020
% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1735	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		37	1.9	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		37	2.0	ug/kg	1
Acetophenone	98-86-2	8270D	ND		37	14	ug/kg	1
Anthracene	120-12-7	8270D	ND		37	2.2	ug/kg	1
Atrazine	1912-24-9	8270D	ND		37	5.0	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		37	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		37	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		37	1.6	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		37	1.7	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		37	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		37	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		37	12	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		37	8.9	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		76	9.7	ug/kg	1
Caprolactam	105-60-2	8270D	ND		37	8.3	ug/kg	1
Carbazole	86-74-8	8270D	ND		37	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		37	6.9	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		37	3.5	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		37	9.1	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		37	8.9	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		37	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		37	7.0	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		37	6.7	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		37	7.8	ug/kg	1
Chrysene	218-01-9	8270D	ND		37	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		37	2.1	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		37	7.2	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		190	41	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		37	6.6	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		37	4.6	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		37	7.4	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		37	11	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		37	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		190	46	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		190	78	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		76	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		76	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		37	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		37	16	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		37	1.0	ug/kg	1
Fluorene	86-73-7	8270D	ND		37	2.2	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		37	9.7	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		37	8.9	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		190	60	ug/kg	1

PQL = Practical quantitation limit
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-009
Description: BG-2-1.5
Matrix: Solid
Date Sampled: 08/16/2016 1020
% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1735	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		37	6.5	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		37	1.5	ug/kg	1
Isophorone	78-59-1	8270D	ND		37	9.5	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		37	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		37	8.0	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		76	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		37	1.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		76	10	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		76	7.3	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		76	6.8	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		37	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		76	16	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		190	47	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		37	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		37	8.3	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		190	50	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		37	2.1	ug/kg	1
Phenol	108-95-2	8270D	ND		37	7.8	ug/kg	1
Pyrene	129-00-0	8270D	ND		37	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		37	6.8	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		37	5.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		38	33-102
2-Fluorophenol		36	28-104
Nitrobenzene-d5		43	22-109
Phenol-d5		40	27-103
Terphenyl-d14		67	41-120
2,4,6-Tribromophenol		59	30-117

PQL = Practical quantitation limit
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E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-009
Description: BG-2-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1020	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0016	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1745	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.021	BJ	0.22	0.013	mg/kg	1
Arsenic	7440-38-2	6020A	0.33	J	2.2	0.29	mg/kg	2
Beryllium	7440-41-7	6020A	1.7		0.90	0.072	mg/kg	2
Cadmium	7440-43-9	6020A	0.023	J	0.22	0.018	mg/kg	2
Chromium	7440-47-3	6020A	28		12	0.26	mg/kg	2
Copper	7440-50-8	6020A	27		0.22	0.020	mg/kg	1
Iron	7439-89-6	6020A	31000	B	45	3.9	mg/kg	2
Lead	7439-92-1	6020A	12	B	0.22	0.0054	mg/kg	1
Manganese	7439-96-5	6020A	390		12	2.1	mg/kg	2
Nickel	7440-02-0	6020A	13		12	0.24	mg/kg	2
Selenium	7782-49-2	6020A	0.23		0.22	0.034	mg/kg	1
Silver	7440-22-4	6020A	ND		2.2	0.18	mg/kg	2
Thallium	7440-28-0	6020A	0.025	J	0.12	0.0072	mg/kg	1
Zinc	7440-66-6	6020A	45		2.2	0.059	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-009
Description: BG-2-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1020	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1640	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.092	0.0070	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-010
Description: BG-2-5	Matrix: Solid
Date Sampled: 08/16/2016 1045	% Solids: 79.2 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1900	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/24/2016 0217	TAF		20588
1		(Sulfate (sol) 300.0	1	08/24/2016 0217	TAF		20589

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		1.3	0.13	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.3	0.32	mg/kg	1
Nitrate - N (soluble)		300.0	0.17	J	0.25	0.031	mg/kg	1
Sulfate (soluble)		300.0	ND		13	6.3	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-010
Description: BG-2-5	Matrix: Solid
Date Sampled: 08/16/2016 1045	% Solids: 79.2 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/17/2016 2358	JJG		20113	5.82

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		22	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-010
Description: BG-2-5
Matrix: Solid
Date Sampled: 08/16/2016 1045
% Solids: 79.2 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2353	ECP		20111	5.37

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	13	J	24	4.7	ug/kg	1
Benzene	71-43-2	8260B	ND		5.9	2.4	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.9	2.4	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.9	2.4	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.9	2.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		24	4.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.9	2.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.9	2.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.9	2.4	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.9	2.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.9	2.4	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.9	2.4	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.9	2.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.9	2.4	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.9	2.4	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.9	2.4	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.9	2.4	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.9	2.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.9	2.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.9	2.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.9	2.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.9	2.4	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.9	2.4	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.9	2.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.9	2.4	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	4.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.9	2.4	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.9	2.4	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.9	2.4	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	4.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.9	2.4	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.9	2.4	ug/kg	1
Styrene	100-42-5	8260B	ND		5.9	2.4	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.9	2.4	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.9	2.4	ug/kg	1
Toluene	108-88-3	8260B	ND		5.9	2.4	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.9	2.4	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.9	2.4	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.9	2.4	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.9	2.4	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-010
Description: BG-2-5	Matrix: Solid
Date Sampled: 08/16/2016 1045	% Solids: 79.2 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/17/2016 2353	ECP		20111	5.37

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.9	2.4	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.9	2.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.9	2.4	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		12	4.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		108	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-010
Description: BG-2-5	Matrix: Solid
Date Sampled: 08/16/2016 1045	% Solids: 79.2 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-010
Description: BG-2-5	Matrix: Solid
Date Sampled: 08/16/2016 1045	% Solids: 79.2 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1759	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	950				ug/kg	1
2,5-Hexanedione		8270D	98				ug/kg	1
Unknown		8270D	120				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	210				ug/kg	1
13-Docosenamide, (Z)-		8270D	120				ug/kg	1
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-		8270D	85				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-010
Description: BG-2-5
Matrix: Solid
Date Sampled: 08/16/2016 1045
% Solids: 79.2 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1759	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		41	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		41	2.2	ug/kg	1
Acetophenone	98-86-2	8270D	ND		41	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		41	2.5	ug/kg	1
Atrazine	1912-24-9	8270D	ND		41	5.5	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		41	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		41	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		41	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		41	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		41	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		41	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		41	14	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		41	9.8	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		83	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		41	9.1	ug/kg	1
Carbazole	86-74-8	8270D	ND		41	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		41	7.5	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		41	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		41	10	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		41	9.8	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		41	12	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		41	7.7	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		41	7.4	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		41	8.6	ug/kg	1
Chrysene	218-01-9	8270D	ND		41	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		41	2.3	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		41	8.0	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	45	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		41	7.3	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		41	5.1	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		41	8.1	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		41	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		41	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	50	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	86	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		83	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		83	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		41	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		41	18	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		41	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		41	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		41	11	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		41	9.7	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	66	ug/kg	1

PQL = Practical quantitation limit
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-010
Description: BG-2-5
Matrix: Solid
Date Sampled: 08/16/2016 1045
% Solids: 79.2 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1759	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		41	7.1	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		41	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		41	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		41	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		41	8.8	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		83	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		41	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		83	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		83	8.0	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		83	7.5	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		41	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		83	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	51	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		41	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		41	9.1	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	55	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		41	2.3	ug/kg	1
Phenol	108-95-2	8270D	ND		41	8.6	ug/kg	1
Pyrene	129-00-0	8270D	ND		41	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		41	7.5	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		41	5.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		48	33-102
2-Fluorophenol		43	28-104
Nitrobenzene-d5		51	22-109
Phenol-d5		50	27-103
Terphenyl-d14		66	41-120
2,4,6-Tribromophenol		62	30-117

PQL = Practical quantitation limit
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-010
Description: BG-2-5	Matrix: Solid
Date Sampled: 08/16/2016 1045	% Solids: 79.2 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0022	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1751	BNW	08/22/2016 1604	20119
3	3050B	6020A	500	08/23/2016 1914	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.048	BJ	0.26	0.016	mg/kg	1
Arsenic	7440-38-2	6020A	2.1	J	2.6	0.33	mg/kg	2
Beryllium	7440-41-7	6020A	1.1		1.0	0.084	mg/kg	2
Cadmium	7440-43-9	6020A	0.0077	J	0.026	0.0021	mg/kg	1
Chromium	7440-47-3	6020A	15		1.4	0.030	mg/kg	1
Copper	7440-50-8	6020A	42		0.26	0.023	mg/kg	1
Iron	7439-89-6	6020A	67000	B	2600	220	mg/kg	3
Lead	7439-92-1	6020A	61	B	2.6	0.063	mg/kg	2
Manganese	7439-96-5	6020A	14000		680	120	mg/kg	3
Nickel	7440-02-0	6020A	3.8		1.4	0.028	mg/kg	1
Selenium	7782-49-2	6020A	0.56		0.26	0.040	mg/kg	1
Silver	7440-22-4	6020A	ND		0.26	0.021	mg/kg	1
Thallium	7440-28-0	6020A	0.81		0.14	0.0084	mg/kg	1
Zinc	7440-66-6	6020A	21		2.6	0.069	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-010
Description: BG-2-5	Matrix: Solid
Date Sampled: 08/16/2016 1045	% Solids: 79.2 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1643	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.013	J	0.094	0.0072	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-011
Description: BG-2-10	Matrix: Solid
Date Sampled: 08/16/2016 1100	% Solids: 81.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1902	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/24/2016 0241	TAF		20588
1		(Sulfate (sol) 300.0	1	08/24/2016 0241	TAF		20589

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	ND		0.24	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.1	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-011
Description: BG-2-10	Matrix: Solid
Date Sampled: 08/16/2016 1100	% Solids: 81.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B (SIM)	1	08/18/2016 1211	SES		20172	5.65

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		22	13	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-011
Description: BG-2-10
Matrix: Solid
Date Sampled: 08/16/2016 1100
% Solids: 81.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0015	ECP		20111	5.27

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	11	J	23	4.6	ug/kg	1
Benzene	71-43-2	8260B	ND		5.8	2.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.8	2.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.8	2.3	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.8	2.3	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		23	4.6	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.8	2.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.8	2.3	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.8	2.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.8	2.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.8	2.3	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.8	2.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.8	2.3	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.8	2.3	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.8	2.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.8	2.3	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.8	2.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.8	2.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.8	2.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.8	2.3	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.8	2.3	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.8	2.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.8	2.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.8	2.3	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.8	2.3	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.8	2.3	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.8	2.3	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.8	2.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.8	2.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	4.6	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.8	2.3	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.8	2.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.8	2.3	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	4.6	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.8	2.3	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.8	2.3	ug/kg	1
Styrene	100-42-5	8260B	ND		5.8	2.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.8	2.3	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.8	2.3	ug/kg	1
Toluene	108-88-3	8260B	ND		5.8	2.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.8	2.3	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.8	2.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.8	2.3	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.8	2.3	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-011
Description: BG-2-10	Matrix: Solid
Date Sampled: 08/16/2016 1100	% Solids: 81.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0015	ECP		20111	5.27

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.8	2.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.8	2.3	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.8	2.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		12	4.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		108	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-011
Description: BG-2-10	Matrix: Solid
Date Sampled: 08/16/2016 1100	% Solids: 81.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-011
Description: BG-2-10	Matrix: Solid
Date Sampled: 08/16/2016 1100	% Solids: 81.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1824	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	1200				ug/kg	1
2,5-Hexanedione		8270D	110				ug/kg	1
9-Octadecenamide, (Z)-		8270D	130				ug/kg	1

PQL = Practical quantitation limit
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ND = Not detected at or above the MDL
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-011
Description: BG-2-10
Matrix: Solid
Date Sampled: 08/16/2016 1100
% Solids: 81.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1824	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		40	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		40	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		40	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		40	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		40	5.4	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		40	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		40	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		40	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		40	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		40	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		40	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		40	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		40	9.7	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		82	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		40	9.0	ug/kg	1
Carbazole	86-74-8	8270D	ND		40	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		40	7.4	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		40	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		40	9.9	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		40	9.7	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		40	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		40	7.6	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		40	7.3	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		40	8.5	ug/kg	1
Chrysene	218-01-9	8270D	ND		40	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		40	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		40	7.8	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	44	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		40	7.2	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		40	5.0	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		40	8.0	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		40	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		40	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	50	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	85	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		82	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		82	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	24	J	40	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		40	18	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		40	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		40	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		40	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		40	9.6	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	65	ug/kg	1

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: BG-2-10
Date Sampled: 08/16/2016 1100
Date Received: 08/17/2016

Laboratory ID: RH17016-011
Matrix: Solid
% Solids: 81.7 08/17/2016 1825

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1824	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		40	7.1	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		40	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		40	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		40	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		40	8.7	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		82	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		40	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		82	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		82	7.9	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		82	7.4	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		40	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		82	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	51	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		40	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		40	9.0	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	54	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		40	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		40	8.5	ug/kg	1
Pyrene	129-00-0	8270D	ND		40	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		40	7.4	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		40	5.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		58	33-102
2-Fluorophenol		56	28-104
Nitrobenzene-d5		66	22-109
Phenol-d5		57	27-103
Terphenyl-d14		70	41-120
2,4,6-Tribromophenol		64	30-117

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ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-011
Description: BG-2-10	Matrix: Solid
Date Sampled: 08/16/2016 1100	% Solids: 81.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0027	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1756	BNW	08/22/2016 1604	20119
3	3050B	6020A	20	08/23/2016 1953	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.020	BJ	0.20	0.012	mg/kg	1
Arsenic	7440-38-2	6020A	ND		3.9	0.50	mg/kg	3
Beryllium	7440-41-7	6020A	1.7		0.79	0.063	mg/kg	2
Cadmium	7440-43-9	6020A	ND		0.39	0.032	mg/kg	3
Chromium	7440-47-3	6020A	7.3	J	21	0.46	mg/kg	3
Copper	7440-50-8	6020A	30		0.20	0.017	mg/kg	1
Iron	7439-89-6	6020A	39000	B	79	6.8	mg/kg	3
Lead	7439-92-1	6020A	20	B	0.20	0.0047	mg/kg	1
Manganese	7439-96-5	6020A	770		21	3.8	mg/kg	3
Nickel	7440-02-0	6020A	7.2	J	21	0.43	mg/kg	3
Selenium	7782-49-2	6020A	0.54		0.20	0.030	mg/kg	1
Silver	7440-22-4	6020A	ND		3.9	0.32	mg/kg	3
Thallium	7440-28-0	6020A	0.043	J	0.10	0.0063	mg/kg	1
Zinc	7440-66-6	6020A	62		2.0	0.052	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-011
Description: BG-2-10	Matrix: Solid
Date Sampled: 08/16/2016 1100	% Solids: 81.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1645	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.096	0.0073	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-012
Description: BG-2-15	Matrix: Solid
Date Sampled: 08/16/2016 1110	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1904	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/24/2016 0305	TAF		20588
1		(Sulfate (sol) 300.0	1	08/24/2016 0305	TAF		20589

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		1.1	0.11	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.1	0.27	mg/kg	1
Nitrate - N (soluble)		300.0	0.039	J	0.22	0.027	mg/kg	1
Sulfate (soluble)		300.0	ND		11	5.5	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-012
Description: BG-2-15	Matrix: Solid
Date Sampled: 08/16/2016 1110	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/18/2016 0042	JJG		20113	5.25

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		21	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-012
Description: BG-2-15
Matrix: Solid
Date Sampled: 08/16/2016 1110
% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0037	ECP		20111	5.40

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	8.5	J	20	4.0	ug/kg	1
Benzene	71-43-2	8260B	ND		5.0	2.0	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	2.0	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.0	2.0	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	2.0	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		20	4.0	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.0	2.0	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	2.0	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.0	2.0	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.0	2.0	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.0	2.0	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	2.0	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.0	2.0	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	2.0	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	2.0	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	2.0	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	2.0	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	2.0	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	2.0	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	2.0	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	2.0	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	2.0	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	2.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	2.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	2.0	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	2.0	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	2.0	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	2.0	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.0	2.0	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	4.0	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	2.0	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.0	2.0	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	2.0	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	4.0	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	2.0	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.0	2.0	ug/kg	1
Styrene	100-42-5	8260B	ND		5.0	2.0	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	2.0	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	2.0	ug/kg	1
Toluene	108-88-3	8260B	ND		5.0	2.0	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	2.0	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	2.0	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	2.0	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	2.0	ug/kg	1

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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-012
Description: BG-2-15	Matrix: Solid
Date Sampled: 08/16/2016 1110	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0037	ECP		20111	5.40

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	2.0	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	2.0	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.0	2.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	4.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	53-142
Bromofluorobenzene		109	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-012
Description: BG-2-15	Matrix: Solid
Date Sampled: 08/16/2016 1110	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-012
Description: BG-2-15	Matrix: Solid
Date Sampled: 08/16/2016 1110	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1849	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	850				ug/kg	1
2,5-Hexanedione		8270D	75				ug/kg	1
Unknown		8270D	82				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	170				ug/kg	1
13-Docosenamide, (Z)-		8270D	200				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-012
Description: BG-2-15
Matrix: Solid
Date Sampled: 08/16/2016 1110
% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1849	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		36	1.9	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		36	1.9	ug/kg	1
Acetophenone	98-86-2	8270D	ND		36	13	ug/kg	1
Anthracene	120-12-7	8270D	ND		36	2.2	ug/kg	1
Atrazine	1912-24-9	8270D	ND		36	4.8	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		36	15	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		36	1.2	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		36	1.6	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		36	1.6	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		36	1.2	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		36	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		36	12	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		36	8.6	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		73	9.4	ug/kg	1
Caprolactam	105-60-2	8270D	ND		36	8.0	ug/kg	1
Carbazole	86-74-8	8270D	ND		36	10	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		36	6.6	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		36	3.4	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		36	8.8	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		36	8.6	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		36	10	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		36	6.8	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		36	6.5	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		36	7.6	ug/kg	1
Chrysene	218-01-9	8270D	ND		36	1.2	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		36	2.0	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		36	7.0	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		190	40	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		36	6.4	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		36	4.5	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		36	7.2	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		36	11	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		36	13	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		190	44	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		190	76	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		73	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		73	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	23	J	36	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		36	16	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		36	0.97	ug/kg	1
Fluorene	86-73-7	8270D	ND		36	2.1	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		36	9.3	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		36	8.6	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		190	58	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-012
Description: BG-2-15
Matrix: Solid
Date Sampled: 08/16/2016 1110
% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1849	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		36	6.3	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		36	1.5	ug/kg	1
Isophorone	78-59-1	8270D	ND		36	9.2	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		36	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		36	7.7	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		73	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		36	1.7	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		73	9.7	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		73	7.0	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		73	6.6	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		36	14	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		73	16	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		190	45	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		36	13	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		36	8.0	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		190	48	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		36	2.0	ug/kg	1
Phenol	108-95-2	8270D	ND		36	7.5	ug/kg	1
Pyrene	129-00-0	8270D	ND		36	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		36	6.6	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		36	5.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		38	33-102
2-Fluorophenol		36	28-104
Nitrobenzene-d5		44	22-109
Phenol-d5		39	27-103
Terphenyl-d14		67	41-120
2,4,6-Tribromophenol		54	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-012
Description: BG-2-15	Matrix: Solid
Date Sampled: 08/16/2016 1110	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0033	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1802	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.015	BJ	0.17	0.010	mg/kg	1
Arsenic	7440-38-2	6020A	ND		1.7	0.22	mg/kg	2
Beryllium	7440-41-7	6020A	0.78		0.67	0.054	mg/kg	2
Cadmium	7440-43-9	6020A	ND		0.17	0.013	mg/kg	2
Chromium	7440-47-3	6020A	5.6	J	8.8	0.20	mg/kg	2
Copper	7440-50-8	6020A	12		0.17	0.015	mg/kg	1
Iron	7439-89-6	6020A	13000	B	34	2.9	mg/kg	2
Lead	7439-92-1	6020A	20	B	1.7	0.040	mg/kg	2
Manganese	7439-96-5	6020A	230		8.8	1.6	mg/kg	2
Nickel	7440-02-0	6020A	2.2	J	8.8	0.18	mg/kg	2
Selenium	7782-49-2	6020A	0.28		0.17	0.026	mg/kg	1
Silver	7440-22-4	6020A	ND		1.7	0.13	mg/kg	2
Thallium	7440-28-0	6020A	0.014	J	0.088	0.0054	mg/kg	1
Zinc	7440-66-6	6020A	21		1.7	0.045	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-012
Description: BG-2-15	Matrix: Solid
Date Sampled: 08/16/2016 1110	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1647	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.086	0.0065	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-013
Description: BG-2-20	Matrix: Solid
Date Sampled: 08/16/2016 1120	% Solids: 87.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/19/2016 1906	MJI		20306
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/24/2016 0329	TAF		20588
1		(Sulfate (sol) 300.0	1	08/24/2016 0329	TAF		20589

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		1.1	0.11	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.37	J	1.1	0.29	mg/kg	1
Nitrate - N (soluble)		300.0	ND		0.23	0.028	mg/kg	1
Sulfate (soluble)		300.0	ND		11	5.7	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-013
Description: BG-2-20	Matrix: Solid
Date Sampled: 08/16/2016 1120	% Solids: 87.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/18/2016 0104	JJG		20113	5.60

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		20	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-013
Description: BG-2-20
Matrix: Solid
Date Sampled: 08/16/2016 1120
% Solids: 87.3 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0100	ECP		20111	5.50

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	13	J	21	4.2	ug/kg	1
Benzene	71-43-2	8260B	ND		5.2	2.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.2	2.1	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.2	2.1	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.2	2.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		21	4.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.2	2.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.2	2.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.2	2.1	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.2	2.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.2	2.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.2	2.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.2	2.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.2	2.1	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.2	2.1	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.2	2.1	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.2	2.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.2	2.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.2	2.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.2	2.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.2	2.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.2	2.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.2	2.1	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.2	2.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.2	2.1	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	4.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.2	2.1	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.2	2.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.2	2.1	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	4.2	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.2	2.1	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.2	2.1	ug/kg	1
Styrene	100-42-5	8260B	ND		5.2	2.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.2	2.1	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.2	2.1	ug/kg	1
Toluene	108-88-3	8260B	ND		5.2	2.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.2	2.1	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.2	2.1	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.2	2.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.2	2.1	ug/kg	1

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B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-013
Description: BG-2-20	Matrix: Solid
Date Sampled: 08/16/2016 1120	% Solids: 87.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0100	ECP		20111	5.50

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.2	2.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.2	2.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.2	2.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	4.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		106	47-138
Toluene-d8		104	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-013
Description: BG-2-20	Matrix: Solid
Date Sampled: 08/16/2016 1120	% Solids: 87.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-013
Description: BG-2-20	Matrix: Solid
Date Sampled: 08/16/2016 1120	% Solids: 87.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1913	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	830				ug/kg	1
2,5-Hexanedione		8270D	87				ug/kg	1
13-Docosenamide, (Z)-		8270D	100				ug/kg	1

PQL = Practical quantitation limit
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-013
Description: BG-2-20
Matrix: Solid
Date Sampled: 08/16/2016 1120
% Solids: 87.3 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1913	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		37	1.9	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		37	2.0	ug/kg	1
Acetophenone	98-86-2	8270D	ND		37	14	ug/kg	1
Anthracene	120-12-7	8270D	ND		37	2.3	ug/kg	1
Atrazine	1912-24-9	8270D	ND		37	5.0	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		37	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		37	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		37	1.6	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		37	1.7	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		37	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		37	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		37	12	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		37	9.0	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		76	9.7	ug/kg	1
Caprolactam	105-60-2	8270D	ND		37	8.3	ug/kg	1
Carbazole	86-74-8	8270D	ND		37	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		37	6.9	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		37	3.5	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		37	9.2	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		37	8.9	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		37	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		37	7.0	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		37	6.7	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		37	7.8	ug/kg	1
Chrysene	218-01-9	8270D	ND		37	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		37	2.1	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		37	7.2	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		190	41	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		37	6.6	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		37	4.6	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		37	7.4	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		37	11	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		37	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		190	46	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		190	78	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		76	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		76	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		37	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		37	16	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		37	1.0	ug/kg	1
Fluorene	86-73-7	8270D	ND		37	2.2	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		37	9.7	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		37	8.9	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		190	60	ug/kg	1

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B = Detected in the method blank
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: BG-2-20
Date Sampled: 08/16/2016 1120
Date Received: 08/17/2016

Laboratory ID: RH17016-013
Matrix: Solid
% Solids: 87.3 08/17/2016 1825

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1913	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		37	6.5	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		37	1.5	ug/kg	1
Isophorone	78-59-1	8270D	ND		37	9.5	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		37	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		37	8.0	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		76	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		37	1.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		76	10	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		76	7.3	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		76	6.8	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		37	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		76	16	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		190	47	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		37	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		37	8.3	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		190	50	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		37	2.1	ug/kg	1
Phenol	108-95-2	8270D	ND		37	7.8	ug/kg	1
Pyrene	129-00-0	8270D	ND		37	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		37	6.9	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		37	5.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		37	33-102
2-Fluorophenol		38	28-104
Nitrobenzene-d5		38	22-109
Phenol-d5		44	27-103
Terphenyl-d14		67	41-120
2,4,6-Tribromophenol		53	30-117

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J = Estimated result < PQL and ≥ MDL
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-013
Description: BG-2-20	Matrix: Solid
Date Sampled: 08/16/2016 1120	% Solids: 87.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0038	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1807	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.014	BJ	0.17	0.0099	mg/kg	1
Arsenic	7440-38-2	6020A	ND		1.7	0.21	mg/kg	2
Beryllium	7440-41-7	6020A	0.79		0.66	0.053	mg/kg	2
Cadmium	7440-43-9	6020A	ND		0.17	0.013	mg/kg	2
Chromium	7440-47-3	6020A	3.2	J	8.6	0.19	mg/kg	2
Copper	7440-50-8	6020A	4.5		0.17	0.015	mg/kg	1
Iron	7439-89-6	6020A	10000	B	33	2.9	mg/kg	2
Lead	7439-92-1	6020A	25	B	1.7	0.040	mg/kg	2
Manganese	7439-96-5	6020A	190		8.6	1.6	mg/kg	2
Nickel	7440-02-0	6020A	2.5	J	8.6	0.18	mg/kg	2
Selenium	7782-49-2	6020A	0.23		0.17	0.025	mg/kg	1
Silver	7440-22-4	6020A	ND		1.7	0.13	mg/kg	2
Thallium	7440-28-0	6020A	0.010	J	0.086	0.0053	mg/kg	1
Zinc	7440-66-6	6020A	20		1.7	0.044	mg/kg	1

PQL = Practical quantitation limit
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E = Quantitation of compound exceeded the calibration range
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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-013
Description: BG-2-20	Matrix: Solid
Date Sampled: 08/16/2016 1120	% Solids: 87.3 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1650	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.084	0.0064	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH17016-014
Description:	BG-3-0.5	Matrix:	Solid
Date Sampled:	08/16/2016 1315	% Solids:	87.7 08/17/2016 1825
Date Received:	08/17/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/24/2016 1314	MJI		20514
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/24/2016 0441	TAF		20588
1		(Sulfate (sol) 300.0	1	08/24/2016 0441	TAF		20589

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.72	J	1.1	0.11	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.1	0.29	mg/kg	1
Nitrate - N (soluble)		300.0	0.046	J	0.23	0.028	mg/kg	1
Sulfate (soluble)		300.0	ND		11	5.7	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-014
Description: BG-3-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1315	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/18/2016 0126	JJG		20113	5.28

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		22	13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		120	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
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H = Out of holding time
ND = Not detected at or above the MDL
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-014
Description: BG-3-0.5
Matrix: Solid
Date Sampled: 08/16/2016 1315
% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0123	ECP		20111	6.48

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		18	3.5	ug/kg	1
Benzene	71-43-2	8260B	ND		4.4	1.8	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.4	1.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.4	1.8	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.4	1.8	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		18	3.5	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.4	1.8	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.4	1.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.4	1.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.4	1.8	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.4	1.8	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.4	1.8	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.4	1.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.4	1.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.4	1.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.4	1.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.4	1.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.4	1.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.4	1.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.4	1.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.4	1.8	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.4	1.8	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.4	1.8	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.4	1.8	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.8	3.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.4	1.8	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.4	1.8	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.4	1.8	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.8	3.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.4	1.8	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.4	1.8	ug/kg	1
Styrene	100-42-5	8260B	ND		4.4	1.8	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.4	1.8	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.4	1.8	ug/kg	1
Toluene	108-88-3	8260B	ND		4.4	1.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.4	1.8	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.4	1.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.4	1.8	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.4	1.8	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-014
Description: BG-3-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1315	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0123	ECP		20111	6.48

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.4	1.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.4	1.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.4	1.8	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.8	3.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		108	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-014
Description: BG-3-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1315	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-014
Description: BG-3-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1315	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1938	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	970				ug/kg	1
2,5-Hexanedione		8270D	93				ug/kg	1
Oleic Acid		8270D	90				ug/kg	1
Hexadecanoic acid, butyl ester		8270D	90				ug/kg	1
13-Docosenamide, (Z)-		8270D	570				ug/kg	1
Heptacosane		8270D	81				ug/kg	1

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-014
Description: BG-3-0.5
Matrix: Solid
Date Sampled: 08/16/2016 1315
% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1938	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		38	1.9	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		38	2.0	ug/kg	1
Acetophenone	98-86-2	8270D	ND		38	14	ug/kg	1
Anthracene	120-12-7	8270D	ND		38	2.3	ug/kg	1
Atrazine	1912-24-9	8270D	ND		38	5.1	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		38	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		38	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		38	1.7	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		38	1.7	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		38	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		38	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		38	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		38	9.0	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		76	9.8	ug/kg	1
Caprolactam	105-60-2	8270D	ND		38	8.4	ug/kg	1
Carbazole	86-74-8	8270D	ND		38	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		38	6.9	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		38	3.5	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		38	9.2	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		38	9.0	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		38	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		38	7.1	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		38	6.8	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		38	7.9	ug/kg	1
Chrysene	218-01-9	8270D	ND		38	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		38	2.1	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		38	7.3	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		190	41	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		38	6.7	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		38	4.7	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		38	7.5	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		38	11	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		38	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		190	46	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		190	79	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		76	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		76	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		38	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		38	16	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		38	1.0	ug/kg	1
Fluorene	86-73-7	8270D	ND		38	2.2	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		38	9.8	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		38	8.9	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		190	61	ug/kg	1

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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-014
Description: BG-3-0.5
Matrix: Solid
Date Sampled: 08/16/2016 1315
% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 1938	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		38	6.6	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		38	1.5	ug/kg	1
Isophorone	78-59-1	8270D	ND		38	9.6	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		38	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		38	8.1	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		76	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		38	1.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		76	10	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		76	7.4	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		76	6.9	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		38	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		76	17	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		190	47	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		38	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		38	8.4	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		190	50	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		38	2.1	ug/kg	1
Phenol	108-95-2	8270D	ND		38	7.9	ug/kg	1
Pyrene	129-00-0	8270D	ND		38	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		38	6.9	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		38	5.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		48	33-102
2-Fluorophenol		43	28-104
Nitrobenzene-d5		50	22-109
Phenol-d5		49	27-103
Terphenyl-d14		64	41-120
2,4,6-Tribromophenol		62	30-117

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ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-014
Description: BG-3-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1315	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0044	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1824	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.013	BJ	0.18	0.011	mg/kg	1
Arsenic	7440-38-2	6020A	0.32	J	1.8	0.23	mg/kg	2
Beryllium	7440-41-7	6020A	0.33	J	0.73	0.059	mg/kg	2
Cadmium	7440-43-9	6020A	ND		0.18	0.015	mg/kg	2
Chromium	7440-47-3	6020A	16		9.5	0.21	mg/kg	2
Copper	7440-50-8	6020A	27		0.18	0.016	mg/kg	1
Iron	7439-89-6	6020A	19000	B	37	3.2	mg/kg	2
Lead	7439-92-1	6020A	3.0	B	0.18	0.0044	mg/kg	1
Manganese	7439-96-5	6020A	310		9.5	1.8	mg/kg	2
Nickel	7440-02-0	6020A	9.7		9.5	0.20	mg/kg	2
Selenium	7782-49-2	6020A	0.19		0.18	0.028	mg/kg	1
Silver	7440-22-4	6020A	ND		1.8	0.15	mg/kg	2
Thallium	7440-28-0	6020A	0.044	J	0.095	0.0059	mg/kg	1
Zinc	7440-66-6	6020A	29		1.8	0.048	mg/kg	1

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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-014
Description: BG-3-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1315	% Solids: 87.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1652	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.084	0.0064	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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P = The RPD between two GC columns exceeds 40%
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-015
Description: BG-3-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1325	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/24/2016 1252	MJI		20514
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/24/2016 0553	TAF		20588
1		(Sulfate (sol) 300.0	1	08/24/2016 0553	TAF		20589

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.37	J	1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.2	0.29	mg/kg	1
Nitrate - N (soluble)		300.0	0.043	J	0.23	0.028	mg/kg	1
Sulfate (soluble)		300.0	ND		12	5.8	mg/kg	1

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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-015
Description: BG-3-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1325	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/18/2016 0148	JJG		20113	5.76

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		20	12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130

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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-015
Description: BG-3-1.5
Matrix: Solid
Date Sampled: 08/16/2016 1325
% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0146	ECP		20111	6.61

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	12	J	18	3.5	ug/kg	1
Benzene	71-43-2	8260B	ND		4.4	1.8	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.4	1.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.4	1.8	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.4	1.8	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		18	3.5	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.4	1.8	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.4	1.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.4	1.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.4	1.8	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.4	1.8	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.4	1.8	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.4	1.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.4	1.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.4	1.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.4	1.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.4	1.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.4	1.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.4	1.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.4	1.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.4	1.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.4	1.8	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.4	1.8	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.4	1.8	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.4	1.8	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.8	3.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.4	1.8	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.4	1.8	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.4	1.8	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.8	3.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.4	1.8	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.4	1.8	ug/kg	1
Styrene	100-42-5	8260B	ND		4.4	1.8	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.4	1.8	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.4	1.8	ug/kg	1
Toluene	108-88-3	8260B	ND		4.4	1.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.4	1.8	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.4	1.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.4	1.8	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.4	1.8	ug/kg	1

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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-015
Description: BG-3-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1325	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0146	ECP		20111	6.61

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.4	1.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.4	1.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.4	1.8	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.8	3.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		107	68-124

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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-015
Description: BG-3-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1325	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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Library Search

Client: CDM Smith	Laboratory ID: RH17016-015
Description: BG-3-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1325	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 2003	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	780				ug/kg	1
9-Oxononanoic acid		8270D	95				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-015
Description: BG-3-1.5
Matrix: Solid
Date Sampled: 08/16/2016 1325
% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 2003	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		37	1.9	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		37	2.0	ug/kg	1
Acetophenone	98-86-2	8270D	ND		37	14	ug/kg	1
Anthracene	120-12-7	8270D	ND		37	2.3	ug/kg	1
Atrazine	1912-24-9	8270D	ND		37	5.0	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		37	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		37	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		37	1.6	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		37	1.7	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		37	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		37	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		37	12	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		37	9.0	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		76	9.8	ug/kg	1
Caprolactam	105-60-2	8270D	ND		37	8.4	ug/kg	1
Carbazole	86-74-8	8270D	ND		37	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		37	6.9	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		37	3.5	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		37	9.2	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		37	9.0	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		37	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		37	7.0	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		37	6.8	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		37	7.9	ug/kg	1
Chrysene	218-01-9	8270D	ND		37	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		37	2.1	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		37	7.3	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		190	41	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		37	6.7	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		37	4.7	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		37	7.4	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		37	11	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		37	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		190	46	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		190	79	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		76	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		76	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	23	J	37	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		37	16	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		37	1.0	ug/kg	1
Fluorene	86-73-7	8270D	ND		37	2.2	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		37	9.7	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		37	8.9	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		190	60	ug/kg	1

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B = Detected in the method blank
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-015
Description: BG-3-1.5
Matrix: Solid
Date Sampled: 08/16/2016 1325
% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 2003	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		37	6.5	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		37	1.5	ug/kg	1
Isophorone	78-59-1	8270D	ND		37	9.6	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		37	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		37	8.0	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		76	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		37	1.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		76	10	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		76	7.3	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		76	6.8	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		37	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		76	16	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		190	47	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		37	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		37	8.4	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		190	50	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		37	2.1	ug/kg	1
Phenol	108-95-2	8270D	ND		37	7.9	ug/kg	1
Pyrene	129-00-0	8270D	ND		37	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		37	6.9	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		37	5.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		40	33-102
2-Fluorophenol		39	28-104
Nitrobenzene-d5		43	22-109
Phenol-d5		45	27-103
Terphenyl-d14		59	41-120
2,4,6-Tribromophenol		51	30-117

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ICP-MS

Client: CDM Smith
Laboratory ID: RH17016-015
Description: BG-3-1.5
Matrix: Solid
Date Sampled: 08/16/2016 1325
% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0050	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1830	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.016	BJ	0.26	0.015	mg/kg	1
Arsenic	7440-38-2	6020A	0.35	J	2.6	0.33	mg/kg	2
Beryllium	7440-41-7	6020A	1.0		1.0	0.082	mg/kg	2
Cadmium	7440-43-9	6020A	ND		0.26	0.021	mg/kg	2
Chromium	7440-47-3	6020A	22		13	0.30	mg/kg	2
Copper	7440-50-8	6020A	36		0.26	0.023	mg/kg	1
Iron	7439-89-6	6020A	24000	B	51	4.4	mg/kg	2
Lead	7439-92-1	6020A	11	B	0.26	0.0062	mg/kg	1
Manganese	7439-96-5	6020A	530		13	2.5	mg/kg	2
Nickel	7440-02-0	6020A	12	J	13	0.28	mg/kg	2
Selenium	7782-49-2	6020A	0.31		0.26	0.039	mg/kg	1
Silver	7440-22-4	6020A	ND		2.6	0.21	mg/kg	2
Thallium	7440-28-0	6020A	0.056	J	0.13	0.0082	mg/kg	1
Zinc	7440-66-6	6020A	32		2.6	0.068	mg/kg	1

PQL = Practical quantitation limit
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-015
Description: BG-3-1.5	Matrix: Solid
Date Sampled: 08/16/2016 1325	% Solids: 86.1 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1655	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.090	0.0068	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-016
Description: BG-3-5	Matrix: Solid
Date Sampled: 08/16/2016 1340	% Solids: 81.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/24/2016 1254	MJI		20514
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1054	AMM1	08/23/2016 0954	20478
1		(Nitrate - N) 300.0	1	08/24/2016 0617	TAF		20588
1		(Sulfate (sol) 300.0	1	08/24/2016 0617	TAF		20589

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	7.3		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.2	0.31	mg/kg	1
Nitrate - N (soluble)		300.0	0.19	J	0.25	0.030	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.1	mg/kg	1

PQL = Practical quantitation limit
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-016
Description: BG-3-5	Matrix: Solid
Date Sampled: 08/16/2016 1340	% Solids: 81.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B (SIM)	1	08/18/2016 1233	SES		20172	6.96

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		18	11	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		115	70-130

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B = Detected in the method blank
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-016
Description: BG-3-5
Matrix: Solid
Date Sampled: 08/16/2016 1340
% Solids: 81.4 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	08/18/2016 1537	SES		20160	6.49

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	14	J	19	3.8	ug/kg	2
Benzene	71-43-2	8260B	ND		4.7	1.9	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		4.7	1.9	ug/kg	2
Bromoform	75-25-2	8260B	ND		4.7	1.9	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.7	1.9	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	ND		19	3.8	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		4.7	1.9	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		4.7	1.9	ug/kg	2
Chlorobenzene	108-90-7	8260B	ND		4.7	1.9	ug/kg	2
Chloroethane	75-00-3	8260B	ND		4.7	1.9	ug/kg	2
Chloroform	67-66-3	8260B	ND		4.7	1.9	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.7	1.9	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		4.7	1.9	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.7	1.9	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		4.7	1.9	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.7	1.9	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.7	1.9	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.7	1.9	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.7	1.9	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		4.7	1.9	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		4.7	1.9	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		4.7	1.9	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		4.7	1.9	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.7	1.9	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.7	1.9	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		4.7	1.9	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.7	1.9	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.7	1.9	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		4.7	1.9	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		9.5	3.8	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		4.7	1.9	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		4.7	1.9	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.7	1.9	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.5	3.8	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		4.7	1.9	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		4.7	1.9	ug/kg	2
Styrene	100-42-5	8260B	ND		4.7	1.9	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.7	1.9	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		4.7	1.9	ug/kg	2
Toluene	108-88-3	8260B	ND		4.7	1.9	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.7	1.9	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.7	1.9	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.7	1.9	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.7	1.9	ug/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-016
Description: BG-3-5	Matrix: Solid
Date Sampled: 08/16/2016 1340	% Solids: 81.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	08/18/2016 1537	SES		20160	6.49

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.7	1.9	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		4.7	1.9	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		4.7	1.9	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		9.5	3.8	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		106	47-138
Toluene-d8		108	68-124

PQL = Practical quantitation limit
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-016
Description: BG-3-5	Matrix: Solid
Date Sampled: 08/16/2016 1340	% Solids: 81.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-016
Description: BG-3-5	Matrix: Solid
Date Sampled: 08/16/2016 1340	% Solids: 81.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 2027	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	180				ug/kg	1
Unknown		8270D	1100				ug/kg	1
2,5-Hexanedione		8270D	110				ug/kg	1
9-Oxononanoic acid		8270D	110				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	720				ug/kg	1
13-Docosenamide, (Z)-		8270D	150				ug/kg	1

PQL = Practical quantitation limit
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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-016
Description: BG-3-5
Matrix: Solid
Date Sampled: 08/16/2016 1340
% Solids: 81.4 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 2027	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		40	2.1	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		40	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		40	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		40	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		40	5.4	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		40	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		40	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		40	1.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		40	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		40	1.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		40	1.8	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		40	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		40	9.7	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		82	11	ug/kg	1
Caprolactam	105-60-2	8270D	ND		40	9.0	ug/kg	1
Carbazole	86-74-8	8270D	ND		40	12	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		40	7.4	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		40	3.8	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		40	9.9	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		40	9.7	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		40	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		40	7.6	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		40	7.3	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		40	8.5	ug/kg	1
Chrysene	218-01-9	8270D	ND		40	1.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		40	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		40	7.8	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		210	44	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		40	7.2	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		40	5.0	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		40	8.0	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		40	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		40	15	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		210	50	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		210	85	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		82	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		82	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		40	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		40	18	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		40	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		40	2.4	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		40	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		40	9.6	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		210	65	ug/kg	1

PQL = Practical quantitation limit
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-016
Description: BG-3-5
Matrix: Solid
Date Sampled: 08/16/2016 1340
% Solids: 81.4 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 2027	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		40	7.1	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		40	1.7	ug/kg	1
Isophorone	78-59-1	8270D	ND		40	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		40	1.9	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		40	8.7	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		82	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		40	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		82	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		82	7.9	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		82	7.4	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		40	16	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		82	18	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		210	51	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		40	15	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		40	9.0	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		210	54	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		40	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		40	8.5	ug/kg	1
Pyrene	129-00-0	8270D	ND		40	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		40	7.4	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		40	5.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		55	33-102
2-Fluorophenol		54	28-104
Nitrobenzene-d5		61	22-109
Phenol-d5		61	27-103
Terphenyl-d14		72	41-120
2,4,6-Tribromophenol		66	30-117

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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-016
Description: BG-3-5	Matrix: Solid
Date Sampled: 08/16/2016 1340	% Solids: 81.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0055	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1835	BNW	08/22/2016 1604	20119
3	3050B	6020A	20	08/23/2016 2010	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.054	BJ	0.17	0.010	mg/kg	1
Arsenic	7440-38-2	6020A	1.7		1.7	0.22	mg/kg	2
Beryllium	7440-41-7	6020A	0.80		0.70	0.056	mg/kg	2
Cadmium	7440-43-9	6020A	ND		0.17	0.014	mg/kg	2
Chromium	7440-47-3	6020A	40		9.1	0.20	mg/kg	2
Copper	7440-50-8	6020A	39		1.7	0.15	mg/kg	2
Iron	7439-89-6	6020A	48000	B	70	6.0	mg/kg	3
Lead	7439-92-1	6020A	18	B	0.17	0.0042	mg/kg	1
Manganese	7439-96-5	6020A	530		9.1	1.7	mg/kg	2
Nickel	7440-02-0	6020A	12		9.1	0.19	mg/kg	2
Selenium	7782-49-2	6020A	0.40		0.17	0.027	mg/kg	1
Silver	7440-22-4	6020A	ND		1.7	0.14	mg/kg	2
Thallium	7440-28-0	6020A	0.21		0.091	0.0056	mg/kg	1
Zinc	7440-66-6	6020A	24		1.7	0.046	mg/kg	1

PQL = Practical quantitation limit
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-016
Description: BG-3-5	Matrix: Solid
Date Sampled: 08/16/2016 1340	% Solids: 81.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1657	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.098	0.0074	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-017
Description: BG-3-10	Matrix: Solid
Date Sampled: 08/16/2016 1350	% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/24/2016 1256	MJI		20514
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1210	AMM1	08/23/2016 0954	20480
1		(Nitrate - N) 300.0	1	08/24/2016 0641	TAF		20588
1		(Sulfate (sol) 300.0	1	08/24/2016 0641	TAF		20589

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.63	J	1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.2	0.29	mg/kg	1
Nitrate - N (soluble)		300.0	ND		0.23	0.029	mg/kg	1
Sulfate (soluble)		300.0	ND		12	5.9	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-017
Description: BG-3-10	Matrix: Solid
Date Sampled: 08/16/2016 1350	% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/18/2016 0232	JJG		20113	6.16

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		19	12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		122	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-017
Description: BG-3-10
Matrix: Solid
Date Sampled: 08/16/2016 1350
% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0232	ECP		20111	6.12

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	17	J	19	3.8	ug/kg	1
Benzene	71-43-2	8260B	ND		4.8	1.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.8	1.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.8	1.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.8	1.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		19	3.8	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.8	1.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.8	1.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.8	1.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.8	1.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.8	1.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.8	1.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.8	1.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.8	1.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.8	1.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.8	1.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.8	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.8	1.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.8	1.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.8	1.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.8	1.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.8	1.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.8	1.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.8	1.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.8	1.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.6	3.8	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.8	1.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.8	1.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.8	1.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.6	3.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.8	1.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.8	1.9	ug/kg	1
Styrene	100-42-5	8260B	ND		4.8	1.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.8	1.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.8	1.9	ug/kg	1
Toluene	108-88-3	8260B	ND		4.8	1.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.8	1.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.8	1.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.8	1.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.8	1.9	ug/kg	1

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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-017
Description: BG-3-10	Matrix: Solid
Date Sampled: 08/16/2016 1350	% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0232	ECP		20111	6.12

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.8	1.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.8	1.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.8	1.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.6	3.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-017
Description: BG-3-10	Matrix: Solid
Date Sampled: 08/16/2016 1350	% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-017
Description: BG-3-10	Matrix: Solid
Date Sampled: 08/16/2016 1350	% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 2052	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	1100				ug/kg	1
2,5-Hexanedione		8270D	110				ug/kg	1
9-Oxononanoic acid		8270D	170				ug/kg	1
1,2-Benzenedicarboxylic acid, bis(2-meth		8270D	79				ug/kg	1
n-Hexadecanoic acid		8270D	120				ug/kg	1
9-Octadecenoic acid, (E)-		8270D	190				ug/kg	1
13-Docosenamide, (Z)-		8270D	180				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-017
Description: BG-3-10
Matrix: Solid
Date Sampled: 08/16/2016 1350
% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 2052	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		39	2.0	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		39	2.0	ug/kg	1
Acetophenone	98-86-2	8270D	ND		39	14	ug/kg	1
Anthracene	120-12-7	8270D	ND		39	2.3	ug/kg	1
Atrazine	1912-24-9	8270D	ND		39	5.2	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		39	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		39	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		39	1.7	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		39	1.7	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		39	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		39	1.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		39	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		39	9.2	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		78	10	ug/kg	1
Caprolactam	105-60-2	8270D	ND		39	8.6	ug/kg	1
Carbazole	86-74-8	8270D	ND		39	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		39	7.1	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		39	3.6	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		39	9.5	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		39	9.2	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		39	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		39	7.2	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		39	6.9	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		39	8.1	ug/kg	1
Chrysene	218-01-9	8270D	ND		39	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		39	2.1	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		39	7.5	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		200	42	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		39	6.9	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		39	4.8	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		39	7.7	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		39	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		39	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		200	47	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		200	81	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		78	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		78	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		39	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		39	17	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		39	1.0	ug/kg	1
Fluorene	86-73-7	8270D	ND		39	2.3	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		39	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		39	9.2	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		200	62	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: BG-3-10
Date Sampled: 08/16/2016 1350
Date Received: 08/17/2016

Laboratory ID: RH17016-017
Matrix: Solid
% Solids: 85.4 08/17/2016 1825

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 2052	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		39	6.7	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		39	1.6	ug/kg	1
Isophorone	78-59-1	8270D	ND		39	9.8	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		39	1.8	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		39	8.3	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		78	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		39	1.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		78	10	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		78	7.5	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		78	7.0	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		39	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		78	17	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		200	48	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		39	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		39	8.6	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		200	52	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		39	2.1	ug/kg	1
Phenol	108-95-2	8270D	ND		39	8.1	ug/kg	1
Pyrene	129-00-0	8270D	ND		39	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		39	7.1	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		39	5.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		55	33-102
2-Fluorophenol		52	28-104
Nitrobenzene-d5		62	22-109
Phenol-d5		60	27-103
Terphenyl-d14		75	41-120
2,4,6-Tribromophenol		69	30-117

PQL = Practical quantitation limit
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-017
Description: BG-3-10	Matrix: Solid
Date Sampled: 08/16/2016 1350	% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0112	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1841	BNW	08/22/2016 1604	20119
3	3050B	6020A	50	08/23/2016 1959	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.051	BJ	0.22	0.013	mg/kg	1
Arsenic	7440-38-2	6020A	ND		2.2	0.29	mg/kg	2
Beryllium	7440-41-7	6020A	1.6		0.89	0.071	mg/kg	2
Cadmium	7440-43-9	6020A	0.028	J	0.22	0.018	mg/kg	2
Chromium	7440-47-3	6020A	59		12	0.26	mg/kg	2
Copper	7440-50-8	6020A	24		2.2	0.20	mg/kg	2
Iron	7439-89-6	6020A	32000	B	45	3.8	mg/kg	2
Lead	7439-92-1	6020A	10	B	0.22	0.0053	mg/kg	1
Manganese	7439-96-5	6020A	1100		58	11	mg/kg	3
Nickel	7440-02-0	6020A	39		12	0.24	mg/kg	2
Selenium	7782-49-2	6020A	0.33		0.22	0.034	mg/kg	1
Silver	7440-22-4	6020A	ND		2.2	0.18	mg/kg	2
Thallium	7440-28-0	6020A	0.042	J	0.12	0.0071	mg/kg	1
Zinc	7440-66-6	6020A	46		2.2	0.059	mg/kg	1

PQL = Practical quantitation limit
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-017
Description: BG-3-10	Matrix: Solid
Date Sampled: 08/16/2016 1350	% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1704	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.094	0.0071	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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H = Out of holding time
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-018
Description: BG-3-15	Matrix: Solid
Date Sampled: 08/16/2016 1400	% Solids: 84.0 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/24/2016 1258	MJI		20514
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1210	AMM1	08/23/2016 0954	20480
1		(Nitrate - N) 300.0	1	08/24/2016 0705	TAF		20588
1		(Sulfate (sol) 300.0	1	08/24/2016 0705	TAF		20589

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.54	J	1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.75	BJ	1.2	0.30	mg/kg	1
Nitrate - N (soluble)		300.0	0.070	J	0.24	0.029	mg/kg	1
Sulfate (soluble)		300.0	ND		12	6.0	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-018
Description: BG-3-15	Matrix: Solid
Date Sampled: 08/16/2016 1400	% Solids: 84.0 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/18/2016 0254	JJG		20113	5.93

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		20	12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-018
Description: BG-3-15
Matrix: Solid
Date Sampled: 08/16/2016 1400
% Solids: 84.0 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0255	ECP		20111	6.86

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	13	J	17	3.5	ug/kg	1
Benzene	71-43-2	8260B	ND		4.3	1.7	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.3	1.7	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.3	1.7	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.3	1.7	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		17	3.5	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.3	1.7	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.3	1.7	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.3	1.7	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.3	1.7	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.3	1.7	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.3	1.7	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.3	1.7	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.3	1.7	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.3	1.7	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.3	1.7	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.3	1.7	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.3	1.7	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.3	1.7	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.3	1.7	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.3	1.7	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.3	1.7	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.3	1.7	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.3	1.7	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.3	1.7	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.3	1.7	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.3	1.7	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.3	1.7	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.3	1.7	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.7	3.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.3	1.7	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.3	1.7	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.3	1.7	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.7	3.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.3	1.7	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.3	1.7	ug/kg	1
Styrene	100-42-5	8260B	ND		4.3	1.7	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.3	1.7	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.3	1.7	ug/kg	1
Toluene	108-88-3	8260B	ND		4.3	1.7	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.3	1.7	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.3	1.7	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.3	1.7	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.3	1.7	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-018
Description: BG-3-15	Matrix: Solid
Date Sampled: 08/16/2016 1400	% Solids: 84.0 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0255	ECP		20111	6.86

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.3	1.7	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.3	1.7	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.3	1.7	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.7	3.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-018
Description: BG-3-15	Matrix: Solid
Date Sampled: 08/16/2016 1400	% Solids: 84.0 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-018
Description: BG-3-15	Matrix: Solid
Date Sampled: 08/16/2016 1400	% Solids: 84.0 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 2116	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	1100				ug/kg	1
2,5-Hexanedione		8270D	110				ug/kg	1
Unknown		8270D	120				ug/kg	1
Diethyltoluamide		8270D	290				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	260				ug/kg	1
Octadecanoic acid		8270D	99				ug/kg	1
13-Docosenamide, (Z)-		8270D	360				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-018
Description: BG-3-15
Matrix: Solid
Date Sampled: 08/16/2016 1400
% Solids: 84.0 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 2116	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		39	2.0	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		39	2.1	ug/kg	1
Acetophenone	98-86-2	8270D	ND		39	14	ug/kg	1
Anthracene	120-12-7	8270D	ND		39	2.4	ug/kg	1
Atrazine	1912-24-9	8270D	ND		39	5.3	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		39	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		39	1.4	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		39	1.7	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		39	1.8	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		39	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		39	1.7	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		39	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		39	9.4	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		80	10	ug/kg	1
Caprolactam	105-60-2	8270D	ND		39	8.8	ug/kg	1
Carbazole	86-74-8	8270D	ND		39	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		39	7.2	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		39	3.7	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		39	9.6	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		39	9.4	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		39	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		39	7.4	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		39	7.1	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		39	8.2	ug/kg	1
Chrysene	218-01-9	8270D	ND		39	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		39	2.2	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		39	7.6	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		200	43	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		39	7.0	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		39	4.9	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		39	7.8	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		39	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		39	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		200	48	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		200	83	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		80	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		80	14	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		39	12	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		39	17	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		39	1.1	ug/kg	1
Fluorene	86-73-7	8270D	ND		39	2.3	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		39	10	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		39	9.3	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		200	63	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Description: BG-3-15
Date Sampled: 08/16/2016 1400
Date Received: 08/17/2016

Laboratory ID: RH17016-018
Matrix: Solid
% Solids: 84.0 08/17/2016 1825

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/19/2016 2116	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		39	6.9	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		39	1.6	ug/kg	1
Isophorone	78-59-1	8270D	ND		39	10	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		39	1.8	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		39	8.4	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		80	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		39	1.9	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		80	11	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		80	7.7	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		80	7.2	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		39	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		80	17	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		200	49	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		39	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		39	8.8	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		200	53	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		39	2.2	ug/kg	1
Phenol	108-95-2	8270D	ND		39	8.2	ug/kg	1
Pyrene	129-00-0	8270D	ND		39	1.4	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		39	7.2	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		39	5.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		55	33-102
2-Fluorophenol		53	28-104
Nitrobenzene-d5		61	22-109
Phenol-d5		58	27-103
Terphenyl-d14		74	41-120
2,4,6-Tribromophenol		62	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-018
Description: BG-3-15	Matrix: Solid
Date Sampled: 08/16/2016 1400	% Solids: 84.0 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0118	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1846	BNW	08/22/2016 1604	20119
3	3050B	6020A	50	08/23/2016 2005	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.034	BJ	0.23	0.014	mg/kg	1
Arsenic	7440-38-2	6020A	ND		12	1.5	mg/kg	3
Beryllium	7440-41-7	6020A	2.3		0.93	0.074	mg/kg	2
Cadmium	7440-43-9	6020A	ND		0.23	0.019	mg/kg	2
Chromium	7440-47-3	6020A	190		12	0.27	mg/kg	2
Copper	7440-50-8	6020A	36		2.3	0.20	mg/kg	2
Iron	7439-89-6	6020A	41000	B	46	4.0	mg/kg	2
Lead	7439-92-1	6020A	10	B	0.23	0.0056	mg/kg	1
Manganese	7439-96-5	6020A	1400		60	11	mg/kg	3
Nickel	7440-02-0	6020A	93		12	0.25	mg/kg	2
Selenium	7782-49-2	6020A	0.26		0.23	0.035	mg/kg	1
Silver	7440-22-4	6020A	ND		2.3	0.19	mg/kg	2
Thallium	7440-28-0	6020A	0.021	J	0.12	0.0074	mg/kg	1
Zinc	7440-66-6	6020A	62		2.3	0.061	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-018
Description: BG-3-15	Matrix: Solid
Date Sampled: 08/16/2016 1400	% Solids: 84.0 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/19/2016 1706	COH	08/19/2016 1503	20238

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.097	0.0073	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith	Laboratory ID: RH17016-019
Description: BG-3-20	Matrix: Solid
Date Sampled: 08/16/2016 1410	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/24/2016 1300	MJI		20514
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1210	AMM1	08/23/2016 0954	20480
1		(Nitrate - N) 300.0	1	08/24/2016 0730	TAF		20588
1		(Sulfate (sol) 300.0	1	08/24/2016 0730	TAF		20589

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.50	J	1.1	0.11	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.1	0.27	mg/kg	1
Nitrate - N (soluble)		300.0	ND		0.22	0.027	mg/kg	1
Sulfate (soluble)		300.0	ND		11	5.4	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-019
Description: BG-3-20	Matrix: Solid
Date Sampled: 08/16/2016 1410	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/18/2016 0316	JJG		20113	6.46

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		17	10	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-019
Description: BG-3-20	Matrix: Solid
Date Sampled: 08/16/2016 1410	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0317	ECP		20111	5.77

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	14	J	19	3.8	ug/kg	1
Benzene	71-43-2	8260B	ND		4.7	1.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.7	1.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.7	1.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.7	1.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		19	3.8	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.7	1.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.7	1.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.7	1.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.7	1.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.7	1.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.7	1.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.7	1.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.7	1.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.7	1.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.7	1.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.7	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.7	1.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.7	1.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.7	1.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.7	1.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.7	1.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.7	1.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.7	1.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.7	1.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.4	3.8	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.7	1.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.7	1.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.7	1.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.4	3.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.7	1.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.7	1.9	ug/kg	1
Styrene	100-42-5	8260B	ND		4.7	1.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.7	1.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.7	1.9	ug/kg	1
Toluene	108-88-3	8260B	ND		4.7	1.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.7	1.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.7	1.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.7	1.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.7	1.9	ug/kg	1

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
ND = Not detected at or above the MDL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-019
Description: BG-3-20	Matrix: Solid
Date Sampled: 08/16/2016 1410	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 0317	ECP		20111	5.77

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.7	1.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.7	1.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.7	1.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.4	3.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		108	47-138
Toluene-d8		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-019
Description: BG-3-20	Matrix: Solid
Date Sampled: 08/16/2016 1410	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20175

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-019
Description: BG-3-20	Matrix: Solid
Date Sampled: 08/16/2016 1410	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/22/2016 1046	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	1600				ug/kg	1
2,5-Hexanedione		8270D	140				ug/kg	1
Unknown		8270D	83				ug/kg	1
Diethyltoluamide		8270D	220				ug/kg	1
13-Docosenamide, (Z)-		8270D	390				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-019
Description: BG-3-20
Matrix: Solid
Date Sampled: 08/16/2016 1410
% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/22/2016 1046	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		36	1.8	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		36	1.9	ug/kg	1
Acetophenone	98-86-2	8270D	ND		36	13	ug/kg	1
Anthracene	120-12-7	8270D	ND		36	2.2	ug/kg	1
Atrazine	1912-24-9	8270D	ND		36	4.8	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		36	15	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		36	1.2	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		36	1.6	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		36	1.6	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		36	1.2	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		36	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		36	12	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		36	8.6	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		73	9.3	ug/kg	1
Caprolactam	105-60-2	8270D	ND		36	8.0	ug/kg	1
Carbazole	86-74-8	8270D	ND		36	10	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		36	6.6	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		36	3.3	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		36	8.8	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		36	8.6	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		36	10	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		36	6.7	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		36	6.5	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		36	7.5	ug/kg	1
Chrysene	218-01-9	8270D	ND		36	1.2	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		36	2.0	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		36	7.0	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		180	39	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		36	6.4	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		36	4.5	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		36	7.1	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		36	11	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		36	13	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		180	44	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		180	75	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		73	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		73	12	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		36	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		36	16	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		36	0.97	ug/kg	1
Fluorene	86-73-7	8270D	ND		36	2.1	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		36	9.3	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		36	8.5	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		180	58	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-019
Description: BG-3-20
Matrix: Solid
Date Sampled: 08/16/2016 1410
% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/22/2016 1046	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		36	6.3	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		36	1.5	ug/kg	1
Isophorone	78-59-1	8270D	ND		36	9.1	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		36	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		36	7.7	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		73	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		36	1.7	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		73	9.7	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		73	7.0	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		73	6.6	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		36	14	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		73	16	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		180	45	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		36	13	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		36	8.0	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		180	48	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		36	2.0	ug/kg	1
Phenol	108-95-2	8270D	ND		36	7.5	ug/kg	1
Pyrene	129-00-0	8270D	ND		36	1.2	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		36	6.6	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		36	5.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		72	33-102
2-Fluorophenol		67	28-104
Nitrobenzene-d5		78	22-109
Phenol-d5		77	27-103
Terphenyl-d14		97	41-120
2,4,6-Tribromophenol		77	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-019
Description: BG-3-20	Matrix: Solid
Date Sampled: 08/16/2016 1410	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0123	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1852	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.037	BJ	0.24	0.014	mg/kg	1
Arsenic	7440-38-2	6020A	0.37	J	2.4	0.31	mg/kg	2
Beryllium	7440-41-7	6020A	1.4		0.96	0.076	mg/kg	2
Cadmium	7440-43-9	6020A	0.021	J	0.024	0.0019	mg/kg	1
Chromium	7440-47-3	6020A	22		1.2	0.028	mg/kg	1
Copper	7440-50-8	6020A	90		2.4	0.21	mg/kg	2
Iron	7439-89-6	6020A	34000	B	48	4.1	mg/kg	2
Lead	7439-92-1	6020A	8.9	B	0.24	0.0057	mg/kg	1
Manganese	7439-96-5	6020A	560		12	2.3	mg/kg	2
Nickel	7440-02-0	6020A	18		1.2	0.026	mg/kg	1
Selenium	7782-49-2	6020A	0.22	J	0.24	0.036	mg/kg	1
Silver	7440-22-4	6020A	ND		0.24	0.019	mg/kg	1
Thallium	7440-28-0	6020A	0.015	J	0.12	0.0076	mg/kg	1
Zinc	7440-66-6	6020A	59		2.4	0.063	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-019
Description: BG-3-20	Matrix: Solid
Date Sampled: 08/16/2016 1410	% Solids: 91.7 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/23/2016 1711	COH	08/23/2016 1553	20442

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.088	0.0067	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH17016-020
Description:	SB-16-0.5	Matrix:	Solid
Date Sampled:	08/16/2016 1230	% Solids:	88.8 08/17/2016 1825
Date Received:	08/17/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/24/2016 1310	MJI		20514
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1210	AMM1	08/23/2016 0954	20480
1		(Nitrate - N) 300.0	1	08/24/2016 0842	TAF		20588
1		(Sulfate (sol) 300.0	1	08/24/2016 0842	TAF		20589

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.56	J	1.1	0.11	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	ND		1.1	0.28	mg/kg	1
Nitrate - N (soluble)		300.0	1.2		0.23	0.028	mg/kg	1
Sulfate (soluble)		300.0	ND		11	5.6	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-020
Description: SB-16-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1230	% Solids: 88.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/18/2016 0338	JJG		20113	5.65

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		20	12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Description: SB-16-0.5
Date Sampled: 08/16/2016 1230
Date Received: 08/17/2016

Laboratory ID: RH17016-020
Matrix: Solid
% Solids: 88.8 08/17/2016 1825

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	08/18/2016 1600	SES		20160	6.76

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	9.5	J	17	3.3	ug/kg	2
Benzene	71-43-2	8260B	ND		4.2	1.7	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		4.2	1.7	ug/kg	2
Bromoform	75-25-2	8260B	ND		4.2	1.7	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.2	1.7	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	ND		17	3.3	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		4.2	1.7	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		4.2	1.7	ug/kg	2
Chlorobenzene	108-90-7	8260B	ND		4.2	1.7	ug/kg	2
Chloroethane	75-00-3	8260B	ND		4.2	1.7	ug/kg	2
Chloroform	67-66-3	8260B	ND		4.2	1.7	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.2	1.7	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		4.2	1.7	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.2	1.7	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		4.2	1.7	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.2	1.7	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.2	1.7	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.2	1.7	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.2	1.7	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		4.2	1.7	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		4.2	1.7	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		4.2	1.7	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		4.2	1.7	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.2	1.7	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.2	1.7	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		4.2	1.7	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.2	1.7	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.2	1.7	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		4.2	1.7	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		8.3	3.3	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		4.2	1.7	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		4.2	1.7	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.2	1.7	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.3	3.3	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		4.2	1.7	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		4.2	1.7	ug/kg	2
Styrene	100-42-5	8260B	ND		4.2	1.7	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.2	1.7	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		4.2	1.7	ug/kg	2
Toluene	108-88-3	8260B	ND		4.2	1.7	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.2	1.7	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.2	1.7	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.2	1.7	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.2	1.7	ug/kg	2

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-020
Description: SB-16-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1230	% Solids: 88.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	08/18/2016 1600	SES		20160	6.76

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.2	1.7	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		4.2	1.7	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		4.2	1.7	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		8.3	3.3	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		106	47-138
Toluene-d8		106	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-020
Description: SB-16-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1230	% Solids: 88.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1				20187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-020
Description: SB-16-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1230	% Solids: 88.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/22/2016 1110	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	81				ug/kg	1
Unknown		8270D	1300				ug/kg	1
2,5-Hexanedione		8270D	110				ug/kg	1
9-Oxononanoic acid		8270D	130				ug/kg	1
Diethyltoluamide		8270D	78				ug/kg	1
n-Hexadecanoic acid		8270D	300				ug/kg	1
6-Octadecenoic acid, (Z)-		8270D	180				ug/kg	1
Octadecanoic acid		8270D	170				ug/kg	1
13-Docosenamide, (Z)-		8270D	760				ug/kg	1
Unknown		8270D	76				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-020
Description: SB-16-0.5
Matrix: Solid
Date Sampled: 08/16/2016 1230
% Solids: 88.8 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/22/2016 1110	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		37	1.9	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		37	1.9	ug/kg	1
Acetophenone	98-86-2	8270D	ND		37	13	ug/kg	1
Anthracene	120-12-7	8270D	ND		37	2.2	ug/kg	1
Atrazine	1912-24-9	8270D	ND		37	5.0	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		37	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		37	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		37	1.6	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		37	1.7	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		37	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		37	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		37	12	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		37	8.9	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		75	9.6	ug/kg	1
Caprolactam	105-60-2	8270D	ND		37	8.2	ug/kg	1
Carbazole	86-74-8	8270D	ND		37	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		37	6.8	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		37	3.4	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		37	9.1	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		37	8.8	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		37	10	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		37	6.9	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		37	6.7	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		37	7.7	ug/kg	1
Chrysene	218-01-9	8270D	ND		37	1.2	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		37	2.0	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		37	7.2	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		190	41	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		37	6.6	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		37	4.6	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		37	7.3	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		37	11	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		37	13	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		190	45	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		190	77	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		75	12	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		75	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		37	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		37	16	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		37	1.0	ug/kg	1
Fluorene	86-73-7	8270D	ND		37	2.2	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		37	9.6	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		37	8.8	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		190	60	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-020
Description: SB-16-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1230	% Solids: 88.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/22/2016 1110	RBH	08/18/2016 1206	20142

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		37	6.4	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		37	1.5	ug/kg	1
Isophorone	78-59-1	8270D	ND		37	9.4	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		37	1.7	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		37	7.9	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		75	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		37	1.7	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		75	10	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		75	7.2	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		75	6.7	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		37	14	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		75	16	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		190	46	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		37	13	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		37	8.2	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		190	49	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		37	2.0	ug/kg	1
Phenol	108-95-2	8270D	ND		37	7.7	ug/kg	1
Pyrene	129-00-0	8270D	ND		37	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		37	6.8	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		37	5.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		61	33-102
2-Fluorophenol		57	28-104
Nitrobenzene-d5		67	22-109
Phenol-d5		62	27-103
Terphenyl-d14		88	41-120
2,4,6-Tribromophenol		79	30-117

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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-020
Description: SB-16-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1230	% Solids: 88.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0129	BNW	08/22/2016 1604	20119
2	3050B	6020A	10	08/23/2016 1858	BNW	08/22/2016 1604	20119

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.024	BJ	0.21	0.012	mg/kg	1
Arsenic	7440-38-2	6020A	0.43	J	2.1	0.26	mg/kg	2
Beryllium	7440-41-7	6020A	0.57	J	0.83	0.066	mg/kg	2
Cadmium	7440-43-9	6020A	ND		0.21	0.017	mg/kg	2
Chromium	7440-47-3	6020A	58		11	0.24	mg/kg	2
Copper	7440-50-8	6020A	63		2.1	0.18	mg/kg	2
Iron	7439-89-6	6020A	35000	B	41	3.6	mg/kg	2
Lead	7439-92-1	6020A	4.6	B	0.21	0.0050	mg/kg	1
Manganese	7439-96-5	6020A	380		11	2.0	mg/kg	2
Nickel	7440-02-0	6020A	28		11	0.22	mg/kg	2
Selenium	7782-49-2	6020A	0.26		0.21	0.031	mg/kg	1
Silver	7440-22-4	6020A	ND		2.1	0.17	mg/kg	2
Thallium	7440-28-0	6020A	0.043	J	0.11	0.0066	mg/kg	1
Zinc	7440-66-6	6020A	49		2.1	0.055	mg/kg	1

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B = Detected in the method blank
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-020
Description: SB-16-0.5	Matrix: Solid
Date Sampled: 08/16/2016 1230	% Solids: 88.8 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/23/2016 1713	COH	08/23/2016 1553	20442

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.084	0.0064	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client:	CDM Smith	Laboratory ID:	RH17016-021
Description:	SB16-1-5	Matrix:	Solid
Date Sampled:	08/16/2016 1240	% Solids:	85.4 08/17/2016 1825
Date Received:	08/17/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/24/2016 1312	MJI		20514
1	3060A	(Hexavalent C) 7196A	1	08/24/2016 1210	AMM1	08/23/2016 0954	20480
2		(Nitrate - N) 300.0	1	08/25/2016 1306	SLU		20700
2		(Sulfate (sol) 300.0	1	08/25/2016 1306	SLU		20703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	1.4		1.2	0.12	mg/kg	1
Hexavalent Chromium	18540-29-9	7196A	0.90	BJ	1.2	0.29	mg/kg	1
Nitrate - N (soluble)		300.0	0.47		0.23	0.029	mg/kg	2
Sulfate (soluble)		300.0	17		12	5.9	mg/kg	2

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B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-021
Description: SB16-1-5	Matrix: Solid
Date Sampled: 08/16/2016 1240	% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B (SIM)	1	08/18/2016 1127	SES		20172	5.22

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM)	ND		22	14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-021
Description: SB16-1-5
Matrix: Solid
Date Sampled: 08/16/2016 1240
% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 1235	SES		20160	5.41

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		22	4.3	ug/kg	1
Benzene	71-43-2	8260B	ND		5.4	2.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.4	2.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.4	2.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.4	2.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		22	4.3	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.4	2.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	6.4		5.4	2.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.4	2.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.4	2.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.4	2.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.4	2.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.4	2.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.4	2.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.4	2.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.4	2.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.4	2.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.4	2.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.4	2.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.4	2.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.4	2.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.4	2.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.4	2.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.4	2.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.4	2.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	4.3	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.4	2.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.4	2.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.4	2.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	4.3	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.4	2.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.4	2.2	ug/kg	1
Styrene	100-42-5	8260B	ND		5.4	2.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.4	2.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.4	2.2	ug/kg	1
Toluene	108-88-3	8260B	ND		5.4	2.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.4	2.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.4	2.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.4	2.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.4	2.2	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH17016-021
Description: SB16-1-5	Matrix: Solid
Date Sampled: 08/16/2016 1240	% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	08/18/2016 1235	SES		20160	5.41

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.4	2.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.4	2.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.4	2.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	4.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	53-142
Bromofluorobenzene		104	47-138
Toluene-d8		104	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client:	CDM Smith	Laboratory ID:	RH17016-021
Description:	SB16-1-5	Matrix:	Solid
Date Sampled:	08/16/2016 1240	% Solids:	85.4 08/17/2016 1825
Date Received:	08/17/2016		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	08/18/2016 1235	SES		20187

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Cyclopentane		8260B	5.4				ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith	Laboratory ID: RH17016-021
Description: SB16-1-5	Matrix: Solid
Date Sampled: 08/16/2016 1240	% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/22/2016 1135	RBH		20264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	920				ug/kg	1
Unknown		8270D	88				ug/kg	1
n-Hexadecanoic acid		8270D	87				ug/kg	1
13-Docosenamide, (Z)-		8270D	870				ug/kg	1
Hentriacontane		8270D	130				ug/kg	1
D-Friedoolean-14-ene, 3-methoxy-, (3.bet		8270D	82				ug/kg	1

PQL = Practical quantitation limit
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E = Quantitation of compound exceeded the calibration range
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-021
Description: SB16-1-5
Matrix: Solid
Date Sampled: 08/16/2016 1240
% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/22/2016 1135	RBH	08/18/2016 1829	20208

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		38	2.0	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		38	2.0	ug/kg	1
Acetophenone	98-86-2	8270D	ND		38	14	ug/kg	1
Anthracene	120-12-7	8270D	ND		38	2.3	ug/kg	1
Atrazine	1912-24-9	8270D	ND		38	5.1	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		38	16	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		38	1.3	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	3.7	J	38	1.7	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	6.1	J	38	1.7	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	4.3	J	38	1.3	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		38	1.6	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		38	13	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		38	9.1	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		77	9.9	ug/kg	1
Caprolactam	105-60-2	8270D	ND		38	8.5	ug/kg	1
Carbazole	86-74-8	8270D	ND		38	11	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		38	7.0	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		38	3.5	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		38	9.3	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		38	9.1	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		38	11	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		38	7.2	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		38	6.9	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		38	8.0	ug/kg	1
Chrysene	218-01-9	8270D	ND		38	1.3	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		38	2.1	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		38	7.4	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		200	42	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		38	6.8	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		38	4.7	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		38	7.6	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		38	12	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		38	14	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		200	47	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		200	80	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		77	13	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		77	13	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		38	11	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		38	17	ug/kg	1
Fluoranthene	206-44-0	8270D	6.3	J	38	1.0	ug/kg	1
Fluorene	86-73-7	8270D	ND		38	2.3	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		38	9.9	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		38	9.0	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		200	61	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-021
Description: SB16-1-5
Matrix: Solid
Date Sampled: 08/16/2016 1240
% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	08/22/2016 1135	RBH	08/18/2016 1829	20208

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		38	6.6	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	3.6	J	38	1.6	ug/kg	1
Isophorone	78-59-1	8270D	ND		38	9.7	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		38	1.8	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		38	8.1	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		77	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		38	1.8	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		77	10	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		77	7.4	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		77	6.9	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		38	15	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		77	17	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		200	48	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		38	14	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		38	8.5	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		200	51	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		38	2.1	ug/kg	1
Phenol	108-95-2	8270D	ND		38	8.0	ug/kg	1
Pyrene	129-00-0	8270D	4.8	J	38	1.3	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		38	7.0	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		38	5.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		40	33-102
2-Fluorophenol		39	28-104
Nitrobenzene-d5		45	22-109
Phenol-d5		43	27-103
Terphenyl-d14		50	41-120
2,4,6-Tribromophenol		48	30-117

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith	Laboratory ID: RH17016-021
Description: SB16-1-5	Matrix: Solid
Date Sampled: 08/16/2016 1240	% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6020A	1	08/24/2016 0134	BNW	08/22/2016 1604	20234
2	3050B	6020A	10	08/23/2016 1948	BNW	08/22/2016 1604	20234
3	3050B	6020A	20	08/23/2016 2016	BNW	08/22/2016 1604	20234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.036	BJ	0.19	0.012	mg/kg	1
Arsenic	7440-38-2	6020A	0.75	J	3.8	0.49	mg/kg	3
Beryllium	7440-41-7	6020A	0.92		0.77	0.061	mg/kg	2
Cadmium	7440-43-9	6020A	0.038	J	0.38	0.031	mg/kg	3
Chromium	7440-47-3	6020A	27		20	0.45	mg/kg	3
Copper	7440-50-8	6020A	59		1.9	0.17	mg/kg	2
Iron	7439-89-6	6020A	36000	B	77	6.6	mg/kg	3
Lead	7439-92-1	6020A	18	B	0.19	0.0046	mg/kg	1
Manganese	7439-96-5	6020A	410		20	3.7	mg/kg	3
Nickel	7440-02-0	6020A	13	J	20	0.41	mg/kg	3
Selenium	7782-49-2	6020A	0.60		0.19	0.029	mg/kg	1
Silver	7440-22-4	6020A	ND		3.8	0.31	mg/kg	3
Thallium	7440-28-0	6020A	0.066	J	0.10	0.0061	mg/kg	1
Zinc	7440-66-6	6020A	37		1.9	0.051	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith	Laboratory ID: RH17016-021
Description: SB16-1-5	Matrix: Solid
Date Sampled: 08/16/2016 1240	% Solids: 85.4 08/17/2016 1825
Date Received: 08/17/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	08/23/2016 1715	COH	08/23/2016 1553	20442

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.091	0.0069	mg/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-022
Description: TRIP BLANK(SH1432)
Matrix: Aqueous
Date Sampled: 08/16/2016
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/18/2016 1058	TML		20150

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	2.0	J	20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-022
Description: TRIP BLANK(SH1432)
Matrix: Aqueous
Date Sampled: 08/16/2016
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/18/2016 1058	TML		20150

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-023
Description: TRIP BLANK(SH1992)
Matrix: Aqueous
Date Sampled: 08/16/2016
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/18/2016 1121	TML		20150

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH17016-023
Description: TRIP BLANK(SH1992)
Matrix: Aqueous
Date Sampled: 08/16/2016
Date Received: 08/17/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/18/2016 1121	TML		20150

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ20085-001
Batch: 20085
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/18/2016 1210

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Hexavalent Chromium	ND		1	1.0	0.25	mg/kg	08/19/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20085-002
Batch: 20085
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/18/2016 1210

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	4.0	3.9		1	97	90-110	08/19/2016 1010

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20306-001
Batch: 20306
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	ND		1	1.0	0.10	mg/kg	08/19/2016 1804

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20306-002
Batch: 20306
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	10	10		1	103	90-110	08/19/2016 1806

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH17016-003MS
Batch: 20306
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	ND	10	9.3		1	93	90-110	08/19/2016 1838

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH17016-003MD
Batch: 20306
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ammonia - N (gas diffusion)	ND	10	9.8		1	98	4.6	90-110	20	08/19/2016 1840

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20478-001
Batch: 20478
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/23/2016 954

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Hexavalent Chromium	ND		1	1.0	0.25	mg/kg	08/24/2016 1054

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20478-002
Batch: 20478
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/23/2016 954

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	4.0	3.9		1	98	90-110	08/24/2016 1054

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH17016-009MS
Batch: 20478
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/23/2016 954

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	ND	4.6	4.0		1	88	75-125	08/24/2016 1054

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH17016-009MD
Batch: 20478
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/23/2016 954

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexavalent Chromium	ND	4.6	4.3		1	94	6.0	75-125	20	08/24/2016 1054

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH17016-012MS
Batch: 20478
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/23/2016 954

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	ND	760	510	N	50	67	75-125	08/24/2016 1054

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH17016-013MS
Batch: 20478
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/23/2016 954

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	0.37	4.6	4.3		1	87	75-125	08/24/2016 1054

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20480-001
Batch: 20480
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/23/2016 954

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Hexavalent Chromium	0.32	J	1	1.0	0.25	mg/kg	08/24/2016 1210

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20480-002
Batch: 20480
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/23/2016 954

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	4.0	4.0		1	101	90-110	08/24/2016 1210

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH17016-017MS
Batch: 20480
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/23/2016 954

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	ND	810	620		50	76	75-125	08/24/2016 1210

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH17016-018MS
Batch: 20480
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/23/2016 954

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	0.75	4.8	4.9		1	86	75-125	08/24/2016 1210

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH17016-020MS
Batch: 20480
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/23/2016 954

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	ND	4.5	4.2		1	94	75-125	08/24/2016 1210

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH17016-020MD
Batch: 20480
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 08/23/2016 954

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexavalent Chromium	ND	4.5	4.5		1	99	5.1	75-125	20	08/24/2016 1210

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20514-001
Batch: 20514
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	0.26	J	1	1.0	0.10	mg/kg	08/24/2016 1232

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20514-002
Batch: 20514
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	10	9.6		1	96	90-110	08/24/2016 1234

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH17016-014MS
Batch: 20514
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	0.72	10	11		1	100	90-110	08/24/2016 1242

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH17016-014MD
Batch: 20514
Analytical Method: 350.1

Matrix: Solid
Prep Method: 350.1

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ammonia - N (gas diffusion)	0.72	10	11		1	104	3.8	90-110	20	08/24/2016 1244

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20580-001
Batch: 20580
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate (soluble)	ND		1	10	5.0	mg/kg	08/22/2016 0933

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20580-002
Batch: 20580
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	200	190		1	96	90-110	08/22/2016 0909

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20582-001
Batch: 20582
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.20	0.025	mg/kg	08/22/2016 0933

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20582-002
Batch: 20582
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.84		1	104	90-110	08/22/2016 0909

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20588-001
Batch: 20588
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.20	0.025	mg/kg	08/24/2016 0129

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20588-002
Batch: 20588
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.81		1	102	90-110	08/24/2016 0105

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH17016-013MS
Batch: 20588
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	ND	8.0	7.7		1	97	90-110	08/24/2016 0353

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH17016-013MD
Batch: 20588
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N (soluble)	ND	8.0	7.4		1	93	4.2	90-110	20	08/24/2016 0417

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH17016-019MS
Batch: 20588
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	ND	8.0	8.5		1	106	90-110	08/24/2016 0754

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH17016-019MD
Batch: 20588
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N (soluble)	ND	8.0	8.5		1	106	0.73	90-110	20	08/24/2016 0818

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20589-001
Batch: 20589
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate (soluble)	ND		1	10	5.0	mg/kg	08/24/2016 0129

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20589-002
Batch: 20589
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	200	190		1	94	90-110	08/24/2016 0105

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH17016-013MS
Batch: 20589
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	ND	200	180		1	92	90-110	08/24/2016 0353

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH17016-013MD
Batch: 20589
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate (soluble)	ND	200	180		1	90	2.9	90-110	20	08/24/2016 0417

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH17016-019MS
Batch: 20589
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	ND	200	190		1	94	90-110	08/24/2016 0754

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH17016-019MD
Batch: 20589
Analytical Method: 300.0

Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate (soluble)	ND	200	180		1	91	3.3	90-110	20	08/24/2016 0818

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20700-001
Batch: 20700
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.20	0.025	mg/kg	08/25/2016 1242

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20700-002
Batch: 20700
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.84		1	105	90-110	08/25/2016 1218

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20703-001
Batch: 20703
Analytical Method: 300.0

Matrix: Solid

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate (soluble)	ND		1	10	5.0	mg/kg	08/25/2016 1242

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20703-002
Batch: 20703
Analytical Method: 300.0

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate (soluble)	200	190		1	95	90-110	08/25/2016 1218

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ20111-001
Batch: 20111
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	4.0	ug/kg	08/17/2016 1946
Benzene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Bromodichloromethane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Bromoform	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Bromomethane (Methyl bromide)	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
2-Butanone (MEK)	ND		1	20	4.0	ug/kg	08/17/2016 1946
Carbon disulfide	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Carbon tetrachloride	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Chlorobenzene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Chloroethane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Chloroform	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Chloromethane (Methyl chloride)	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Cyclohexane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Dibromochloromethane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,2-Dibromoethane (EDB)	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,4-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,3-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,2-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Dichlorodifluoromethane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,2-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,1-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
trans-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
cis-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,1-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,2-Dichloropropane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
trans-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
cis-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Ethylbenzene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
2-Hexanone	ND		1	10	4.0	ug/kg	08/17/2016 1946
Isopropylbenzene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Methyl acetate	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
4-Methyl-2-pentanone	ND		1	10	4.0	ug/kg	08/17/2016 1946
Methylcyclohexane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Methylene chloride	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Styrene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,1,2,2-Tetrachloroethane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Tetrachloroethene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Toluene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,2,4-Trichlorobenzene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,1,2-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
1,1,1-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ20111-001
Batch: 20111
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Trichlorofluoromethane	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Vinyl chloride	ND		1	5.0	2.0	ug/kg	08/17/2016 1946
Xylenes (total)	ND		1	10	4.0	ug/kg	08/17/2016 1946

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		108	47-138
1,2-Dichloroethane-d4		98	53-142
Toluene-d8		106	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ20111-002
Batch: 20111
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	113	60-140	08/17/2016 1848
Benzene	50	53		1	107	69-123	08/17/2016 1848
Bromodichloromethane	50	54		1	109	69-121	08/17/2016 1848
Bromoform	50	50		1	99	61-119	08/17/2016 1848
Bromomethane (Methyl bromide)	50	51		1	102	10-168	08/17/2016 1848
2-Butanone (MEK)	100	100		1	102	57-148	08/17/2016 1848
Carbon disulfide	50	51		1	102	58-122	08/17/2016 1848
Carbon tetrachloride	50	53		1	105	58-136	08/17/2016 1848
Chlorobenzene	50	55		1	110	59-129	08/17/2016 1848
Chloroethane	50	54		1	108	60-140	08/17/2016 1848
Chloroform	50	51		1	101	71-125	08/17/2016 1848
Chloromethane (Methyl chloride)	50	53		1	107	34-134	08/17/2016 1848
Cyclohexane	50	55		1	110	53-139	08/17/2016 1848
1,2-Dibromo-3-chloropropane (DBCP)	50	52		1	104	55-125	08/17/2016 1848
Dibromochloromethane	50	54		1	107	66-119	08/17/2016 1848
1,2-Dibromoethane (EDB)	50	52		1	104	74-124	08/17/2016 1848
1,4-Dichlorobenzene	50	56		1	112	52-133	08/17/2016 1848
1,3-Dichlorobenzene	50	56		1	111	51-134	08/17/2016 1848
1,2-Dichlorobenzene	50	55		1	109	57-131	08/17/2016 1848
Dichlorodifluoromethane	50	65		1	130	10-157	08/17/2016 1848
1,2-Dichloroethane	50	49		1	98	67-129	08/17/2016 1848
1,1-Dichloroethane	50	52		1	104	71-127	08/17/2016 1848
trans-1,2-Dichloroethene	50	53		1	106	68-131	08/17/2016 1848
cis-1,2-Dichloroethene	50	50		1	101	70-122	08/17/2016 1848
1,1-Dichloroethene	50	55		1	109	69-138	08/17/2016 1848
1,2-Dichloropropane	50	53		1	106	72-124	08/17/2016 1848
trans-1,3-Dichloropropene	50	53		1	107	70-124	08/17/2016 1848
cis-1,3-Dichloropropene	50	54		1	109	70-126	08/17/2016 1848
Ethylbenzene	50	56		1	113	59-128	08/17/2016 1848
2-Hexanone	100	100		1	103	54-137	08/17/2016 1848
Isopropylbenzene	50	58		1	117	50-136	08/17/2016 1848
Methyl acetate	50	49		1	99	59-137	08/17/2016 1848
Methyl tertiary butyl ether (MTBE)	50	46		1	92	70-130	08/17/2016 1848
4-Methyl-2-pentanone	100	100		1	104	60-134	08/17/2016 1848
Methylcyclohexane	50	61		1	122	41-144	08/17/2016 1848
Methylene chloride	50	46		1	92	70-130	08/17/2016 1848
Styrene	50	55		1	109	54-136	08/17/2016 1848
1,1,2,2-Tetrachloroethane	50	53		1	106	69-132	08/17/2016 1848
Tetrachloroethene	50	61		1	122	45-150	08/17/2016 1848
Toluene	50	56		1	111	61-129	08/17/2016 1848
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	57		1	115	49-136	08/17/2016 1848
1,2,4-Trichlorobenzene	50	57		1	113	34-145	08/17/2016 1848
1,1,2-Trichloroethane	50	52		1	104	55-128	08/17/2016 1848
1,1,1-Trichloroethane	50	52		1	103	63-128	08/17/2016 1848

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ20111-002
Batch: 20111
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	58		1	115	62-126	08/17/2016 1848
Trichlorofluoromethane	50	62		1	123	45-138	08/17/2016 1848
Vinyl chloride	50	54		1	108	42-132	08/17/2016 1848
Xylenes (total)	100	110		1	111	58-128	08/17/2016 1848

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		107	47-138
1,2-Dichloroethane-d4		96	53-142
Toluene-d8		106	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: RH17016-001DU
Batch: 20111
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Acetone	64	32	+	1	65	20	08/18/2016 0403
Benzene	ND	ND		1	0.00	20	08/18/2016 0403
Bromodichloromethane	ND	ND		1	0.00	20	08/18/2016 0403
Bromoform	ND	ND		1	0.00	20	08/18/2016 0403
Bromomethane (Methyl bromide)	ND	ND		1	0.00	20	08/18/2016 0403
2-Butanone (MEK)	5.8	ND		1	0.00	20	08/18/2016 0403
Carbon disulfide	ND	ND		1	0.00	20	08/18/2016 0403
Carbon tetrachloride	ND	ND		1	0.00	20	08/18/2016 0403
Chlorobenzene	ND	ND		1	0.00	20	08/18/2016 0403
Chloroethane	ND	ND		1	0.00	20	08/18/2016 0403
Chloroform	ND	ND		1	0.00	20	08/18/2016 0403
Chloromethane (Methyl chloride)	ND	ND		1	0.00	20	08/18/2016 0403
Cyclohexane	ND	ND		1	0.00	20	08/18/2016 0403
1,2-Dibromo-3-chloropropane (DBCP)	ND	ND		1	0.00	20	08/18/2016 0403
Dibromochloromethane	ND	ND		1	0.00	20	08/18/2016 0403
1,2-Dibromoethane (EDB)	ND	ND		1	0.00	20	08/18/2016 0403
1,2-Dichlorobenzene	ND	ND		1	0.00	20	08/18/2016 0403
1,3-Dichlorobenzene	ND	ND		1	0.00	20	08/18/2016 0403
1,4-Dichlorobenzene	ND	ND		1	0.00	20	08/18/2016 0403
Dichlorodifluoromethane	ND	ND		1	0.00	20	08/18/2016 0403
1,1-Dichloroethane	ND	ND		1	0.00	20	08/18/2016 0403
1,2-Dichloroethane	ND	ND		1	0.00	20	08/18/2016 0403
1,1-Dichloroethene	ND	ND		1	0.00	20	08/18/2016 0403
cis-1,2-Dichloroethene	ND	ND		1	0.00	20	08/18/2016 0403
trans-1,2-Dichloroethene	ND	ND		1	0.00	20	08/18/2016 0403
1,2-Dichloropropane	ND	ND		1	0.00	20	08/18/2016 0403
cis-1,3-Dichloropropene	ND	ND		1	0.00	20	08/18/2016 0403
trans-1,3-Dichloropropene	ND	ND		1	0.00	20	08/18/2016 0403
Ethylbenzene	ND	ND		1	0.00	20	08/18/2016 0403
2-Hexanone	ND	ND		1	0.00	20	08/18/2016 0403
Isopropylbenzene	ND	ND		1	0.00	20	08/18/2016 0403
Methyl acetate	ND	ND		1	0.00	20	08/18/2016 0403
Methyl tertiary butyl ether (MTBE)	ND	ND		1	0.00	20	08/18/2016 0403
4-Methyl-2-pentanone	ND	ND		1	0.00	20	08/18/2016 0403
Methylcyclohexane	ND	ND		1	0.00	20	08/18/2016 0403
Methylene chloride	ND	ND		1	0.00	20	08/18/2016 0403
Styrene	ND	ND		1	0.00	20	08/18/2016 0403
1,1,2,2-Tetrachloroethane	ND	ND		1	0.00	20	08/18/2016 0403
Tetrachloroethene	ND	ND		1	0.00	20	08/18/2016 0403
Toluene	ND	ND		1	0.00	20	08/18/2016 0403
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND		1	0.00	20	08/18/2016 0403
1,2,4-Trichlorobenzene	ND	ND		1	0.00	20	08/18/2016 0403
1,1,1-Trichloroethane	ND	ND		1	0.00	20	08/18/2016 0403
1,1,2-Trichloroethane	ND	ND		1	0.00	20	08/18/2016 0403

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: RH17016-001DU
Batch: 20111
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Trichloroethene	ND	ND		1	0.00	20	08/18/2016 0403
Trichlorofluoromethane	ND	ND		1	0.00	20	08/18/2016 0403
Vinyl chloride	ND	ND		1	0.00	20	08/18/2016 0403
Xylenes (total)	ND	ND		1	0.00	20	08/18/2016 0403

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		106	47-138
Toluene-d8		105	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ20113-001
Batch: 20113
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	20	12	ug/kg	08/17/2016 2019

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		92	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ20113-002
Batch: 20113
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	100	110		1	107	70-130	08/17/2016 1917

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		91	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: RH17016-002DU
Batch: 20113
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
1,4-Dioxane	ND	ND		1	0.00	40	08/18/2016 0423

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		116	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MS

Sample ID: RH17016-003MS
Batch: 20113
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	ND	92	110		1	114	70-130	08/18/2016 0445

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		123	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ20150-001
Batch: 20150
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	2.0	ug/L	08/18/2016 1002
Benzene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Bromodichloromethane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Bromoform	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Bromomethane (Methyl bromide)	ND		1	5.0	0.40	ug/L	08/18/2016 1002
2-Butanone (MEK)	ND		1	10	2.0	ug/L	08/18/2016 1002
Carbon disulfide	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Chlorobenzene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Chloroethane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Chloroform	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Chloromethane (Methyl chloride)	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Cyclohexane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Dibromochloromethane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,2-Dibromoethane (EDB)	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,4-Dichlorobenzene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,3-Dichlorobenzene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,2-Dichlorobenzene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Dichlorodifluoromethane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,2-Dichloroethane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,1-Dichloroethane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
cis-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,1-Dichloroethene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,2-Dichloropropane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
trans-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
cis-1,3-Dichloropropene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Ethylbenzene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
2-Hexanone	ND		1	10	2.0	ug/L	08/18/2016 1002
Isopropylbenzene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Methyl acetate	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	08/18/2016 1002
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	08/18/2016 1002
Methylcyclohexane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Methylene chloride	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Styrene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Tetrachloroethene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Toluene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,2,4-Trichlorobenzene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,1,2-Trichloroethane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
1,1,1-Trichloroethane	ND		1	5.0	0.40	ug/L	08/18/2016 1002

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ20150-001
Batch: 20150
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Trichlorofluoromethane	ND		1	5.0	0.40	ug/L	08/18/2016 1002
Vinyl chloride	ND		1	2.0	0.40	ug/L	08/18/2016 1002
Xylenes (total)	ND		1	5.0	0.40	ug/L	08/18/2016 1002

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ20150-002
Batch: 20150
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	40	36		1	90	60-140	08/18/2016 0910
Benzene	20	18		1	89	70-130	08/18/2016 0910
Bromodichloromethane	20	19		1	97	70-130	08/18/2016 0910
Bromoform	20	19		1	94	70-130	08/18/2016 0910
Bromomethane (Methyl bromide)	20	19		1	95	60-140	08/18/2016 0910
2-Butanone (MEK)	40	37		1	91	60-140	08/18/2016 0910
Carbon disulfide	20	19		1	95	60-140	08/18/2016 0910
Carbon tetrachloride	20	19		1	93	70-130	08/18/2016 0910
Chlorobenzene	20	19		1	95	70-130	08/18/2016 0910
Chloroethane	20	20		1	99	60-140	08/18/2016 0910
Chloroform	20	18		1	91	70-130	08/18/2016 0910
Chloromethane (Methyl chloride)	20	22		1	110	60-140	08/18/2016 0910
Cyclohexane	20	19		1	94	70-130	08/18/2016 0910
1,2-Dibromo-3-chloropropane (DBCP)	20	20		1	102	70-130	08/18/2016 0910
Dibromochloromethane	20	20		1	98	70-130	08/18/2016 0910
1,2-Dibromoethane (EDB)	20	19		1	93	70-130	08/18/2016 0910
1,4-Dichlorobenzene	20	19		1	94	70-130	08/18/2016 0910
1,3-Dichlorobenzene	20	20		1	98	70-130	08/18/2016 0910
1,2-Dichlorobenzene	20	19		1	97	70-130	08/18/2016 0910
Dichlorodifluoromethane	20	25		1	127	60-140	08/18/2016 0910
1,2-Dichloroethane	20	19		1	94	70-130	08/18/2016 0910
1,1-Dichloroethane	20	19		1	93	70-130	08/18/2016 0910
trans-1,2-Dichloroethene	20	18		1	90	70-130	08/18/2016 0910
cis-1,2-Dichloroethene	20	18		1	91	70-130	08/18/2016 0910
1,1-Dichloroethene	20	18		1	91	70-130	08/18/2016 0910
1,2-Dichloropropane	20	19		1	95	70-130	08/18/2016 0910
trans-1,3-Dichloropropene	20	19		1	97	70-130	08/18/2016 0910
cis-1,3-Dichloropropene	20	19		1	96	70-130	08/18/2016 0910
Ethylbenzene	20	19		1	94	70-130	08/18/2016 0910
2-Hexanone	40	38		1	94	60-140	08/18/2016 0910
Isopropylbenzene	20	20		1	98	70-130	08/18/2016 0910
Methyl acetate	20	18		1	92	60-140	08/18/2016 0910
Methyl tertiary butyl ether (MTBE)	20	17		1	86	70-130	08/18/2016 0910
4-Methyl-2-pentanone	40	38		1	96	60-140	08/18/2016 0910
Methylcyclohexane	20	19		1	94	70-130	08/18/2016 0910
Methylene chloride	20	18		1	91	70-130	08/18/2016 0910
Styrene	20	19		1	96	70-130	08/18/2016 0910
1,1,2,2-Tetrachloroethane	20	19		1	94	70-130	08/18/2016 0910
Tetrachloroethene	20	19		1	96	70-130	08/18/2016 0910
Toluene	20	19		1	95	70-130	08/18/2016 0910
1,1,2-Trichloro-1,2,2-Trifluoroethane	20	18		1	88	70-130	08/18/2016 0910
1,2,4-Trichlorobenzene	20	20		1	100	70-130	08/18/2016 0910
1,1,2-Trichloroethane	20	19		1	95	70-130	08/18/2016 0910
1,1,1-Trichloroethane	20	19		1	93	70-130	08/18/2016 0910

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ20150-002
Batch: 20150
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	20	19		1	97	70-130	08/18/2016 0910
Trichlorofluoromethane	20	23		1	115	70-130	08/18/2016 0910
Vinyl chloride	20	20		1	98	70-130	08/18/2016 0910
Xylenes (total)	40	38		1	95	70-130	08/18/2016 0910

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ20160-001
Batch: 20160
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	4.0	ug/kg	08/18/2016 1029
Benzene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Bromodichloromethane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Bromoform	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Bromomethane (Methyl bromide)	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
2-Butanone (MEK)	ND		1	20	4.0	ug/kg	08/18/2016 1029
Carbon disulfide	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Carbon tetrachloride	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Chlorobenzene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Chloroethane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Chloroform	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Chloromethane (Methyl chloride)	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Cyclohexane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Dibromochloromethane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,2-Dibromoethane (EDB)	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,2-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,3-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,4-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Dichlorodifluoromethane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,2-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,1-Dichloroethane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,1-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
trans-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
cis-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,2-Dichloropropane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
cis-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
trans-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Ethylbenzene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
2-Hexanone	ND		1	10	4.0	ug/kg	08/18/2016 1029
Isopropylbenzene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Methyl acetate	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
4-Methyl-2-pentanone	ND		1	10	4.0	ug/kg	08/18/2016 1029
Methylcyclohexane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Methylene chloride	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Styrene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,1,2,2-Tetrachloroethane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Tetrachloroethene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Toluene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,2,4-Trichlorobenzene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,1,2-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
1,1,1-Trichloroethane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ20160-001
Batch: 20160
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Trichlorofluoromethane	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Vinyl chloride	ND		1	5.0	2.0	ug/kg	08/18/2016 1029
Xylenes (total)	ND		1	10	4.0	ug/kg	08/18/2016 1029

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		111	47-138
1,2-Dichloroethane-d4		100	53-142
Toluene-d8		107	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ20160-002
Batch: 20160
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	99		1	99	60-140	08/18/2016 0930
Benzene	50	49		1	98	69-123	08/18/2016 0930
Bromodichloromethane	50	51		1	101	69-121	08/18/2016 0930
Bromoform	50	46		1	92	61-119	08/18/2016 0930
Bromomethane (Methyl bromide)	50	52		1	104	10-168	08/18/2016 0930
2-Butanone (MEK)	100	93		1	93	57-148	08/18/2016 0930
Carbon disulfide	50	49		1	98	58-122	08/18/2016 0930
Carbon tetrachloride	50	49		1	98	58-136	08/18/2016 0930
Chlorobenzene	50	51		1	101	59-129	08/18/2016 0930
Chloroethane	50	54		1	109	60-140	08/18/2016 0930
Chloroform	50	47		1	94	71-125	08/18/2016 0930
Chloromethane (Methyl chloride)	50	54		1	109	34-134	08/18/2016 0930
Cyclohexane	50	52		1	104	53-139	08/18/2016 0930
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	93	55-125	08/18/2016 0930
Dibromochloromethane	50	49		1	98	66-119	08/18/2016 0930
1,2-Dibromoethane (EDB)	50	48		1	96	74-124	08/18/2016 0930
1,2-Dichlorobenzene	50	51		1	102	57-131	08/18/2016 0930
1,3-Dichlorobenzene	50	51		1	103	51-134	08/18/2016 0930
1,4-Dichlorobenzene	50	51		1	103	52-133	08/18/2016 0930
Dichlorodifluoromethane	50	63		1	125	10-157	08/18/2016 0930
1,2-Dichloroethane	50	46		1	92	67-129	08/18/2016 0930
1,1-Dichloroethane	50	49		1	98	71-127	08/18/2016 0930
1,1-Dichloroethene	50	50		1	101	69-138	08/18/2016 0930
trans-1,2-Dichloroethene	50	48		1	97	68-131	08/18/2016 0930
cis-1,2-Dichloroethene	50	47		1	94	70-122	08/18/2016 0930
1,2-Dichloropropane	50	49		1	99	72-124	08/18/2016 0930
cis-1,3-Dichloropropene	50	50		1	100	70-126	08/18/2016 0930
trans-1,3-Dichloropropene	50	50		1	99	70-124	08/18/2016 0930
Ethylbenzene	50	52		1	104	59-128	08/18/2016 0930
2-Hexanone	100	95		1	95	54-137	08/18/2016 0930
Isopropylbenzene	50	53		1	107	50-136	08/18/2016 0930
Methyl acetate	50	46		1	92	59-137	08/18/2016 0930
Methyl tertiary butyl ether (MTBE)	50	43		1	86	70-130	08/18/2016 0930
4-Methyl-2-pentanone	100	97		1	97	60-134	08/18/2016 0930
Methylcyclohexane	50	56		1	112	41-144	08/18/2016 0930
Methylene chloride	50	45		1	90	70-130	08/18/2016 0930
Styrene	50	51		1	102	54-136	08/18/2016 0930
1,1,2,2-Tetrachloroethane	50	49		1	98	69-132	08/18/2016 0930
Tetrachloroethene	50	54		1	108	45-150	08/18/2016 0930
Toluene	50	51		1	102	61-129	08/18/2016 0930
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	53		1	106	49-136	08/18/2016 0930
1,2,4-Trichlorobenzene	50	50		1	100	34-145	08/18/2016 0930
1,1,2-Trichloroethane	50	48		1	97	55-128	08/18/2016 0930
1,1,1-Trichloroethane	50	49		1	98	63-128	08/18/2016 0930

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ20160-002
Batch: 20160
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	52		1	104	62-126	08/18/2016 0930
Trichlorofluoromethane	50	58		1	117	45-138	08/18/2016 0930
Vinyl chloride	50	54		1	107	42-132	08/18/2016 0930
Xylenes (total)	100	100		1	103	58-128	08/18/2016 0930

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		108	47-138
1,2-Dichloroethane-d4		96	53-142
Toluene-d8		106	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ20172-001
Batch: 20172
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	20	12	ug/kg	08/18/2016 1030

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		103	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ20172-002
Batch: 20172
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	100	120		1	118	70-130	08/18/2016 0932

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		95	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: RQ20172-003
Batch: 20172
Analytical Method: 8260B (SIM)

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,4-Dioxane	100	120		1	123	3.9	70-130	40	08/18/2016 1255

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		102	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ20142-001
Batch: 20142
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/18/2016 1206

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	33	11	ug/kg	08/19/2016 1123
2,4,5-Trichlorophenol	ND		1	33	6.1	ug/kg	08/19/2016 1123
2,4,6-Trichlorophenol	ND		1	33	4.7	ug/kg	08/19/2016 1123
2,4-Dichlorophenol	ND		1	33	5.9	ug/kg	08/19/2016 1123
2,4-Dimethylphenol	ND		1	33	10	ug/kg	08/19/2016 1123
2,4-Dinitrophenol	ND		1	170	69	ug/kg	08/19/2016 1123
2,4-Dinitrotoluene	ND		1	67	11	ug/kg	08/19/2016 1123
2,6-Dinitrotoluene	ND		1	67	11	ug/kg	08/19/2016 1123
2-Chloronaphthalene	ND		1	33	6.2	ug/kg	08/19/2016 1123
2-Chlorophenol	ND		1	33	6.0	ug/kg	08/19/2016 1123
2-Methylnaphthalene	ND		1	33	1.5	ug/kg	08/19/2016 1123
2-Methylphenol	ND		1	33	7.1	ug/kg	08/19/2016 1123
2-Nitroaniline	ND		1	67	8.9	ug/kg	08/19/2016 1123
2-Nitrophenol	ND		1	67	15	ug/kg	08/19/2016 1123
3+4-Methylphenol	ND		1	67	10	ug/kg	08/19/2016 1123
3,3'-Dichlorobenzidine	ND		1	170	36	ug/kg	08/19/2016 1123
3-Nitroaniline	ND		1	67	6.5	ug/kg	08/19/2016 1123
4,6-Dinitro-2-methylphenol	ND		1	170	40	ug/kg	08/19/2016 1123
4-Bromophenyl phenyl ether	ND		1	33	7.9	ug/kg	08/19/2016 1123
4-Chloro-3-methyl phenol	ND		1	33	6.1	ug/kg	08/19/2016 1123
4-Chloroaniline	ND		1	33	3.1	ug/kg	08/19/2016 1123
4-Chlorophenyl phenyl ether	ND		1	33	6.9	ug/kg	08/19/2016 1123
4-Nitroaniline	ND		1	67	6.0	ug/kg	08/19/2016 1123
4-Nitrophenol	ND		1	170	41	ug/kg	08/19/2016 1123
Acenaphthene	ND		1	33	1.7	ug/kg	08/19/2016 1123
Acenaphthylene	ND		1	33	1.7	ug/kg	08/19/2016 1123
Acetophenone	ND		1	33	12	ug/kg	08/19/2016 1123
Anthracene	ND		1	33	2.0	ug/kg	08/19/2016 1123
Atrazine	ND		1	33	4.4	ug/kg	08/19/2016 1123
Benzaldehyde	ND		1	33	14	ug/kg	08/19/2016 1123
Benzo(a)anthracene	ND		1	33	1.1	ug/kg	08/19/2016 1123
Benzo(a)pyrene	ND		1	33	1.5	ug/kg	08/19/2016 1123
Benzo(b)fluoranthene	ND		1	33	1.5	ug/kg	08/19/2016 1123
Benzo(g,h,i)perylene	ND		1	33	1.1	ug/kg	08/19/2016 1123
Benzo(k)fluoranthene	ND		1	33	1.4	ug/kg	08/19/2016 1123
bis (2-Chloro-1-methylethyl) ether	ND		1	33	9.3	ug/kg	08/19/2016 1123
bis(2-Chloroethoxy)methane	ND		1	33	8.1	ug/kg	08/19/2016 1123
bis(2-Chloroethyl)ether	ND		1	33	7.9	ug/kg	08/19/2016 1123
bis(2-Ethylhexyl)phthalate	ND		1	33	14	ug/kg	08/19/2016 1123
Butyl benzyl phthalate	ND		1	67	8.6	ug/kg	08/19/2016 1123
Caprolactam	ND		1	33	7.4	ug/kg	08/19/2016 1123
Carbazole	ND		1	33	9.4	ug/kg	08/19/2016 1123
Chrysene	ND		1	33	1.1	ug/kg	08/19/2016 1123
Di-n-butyl phthalate	ND		1	33	12	ug/kg	08/19/2016 1123

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ20142-001
Batch: 20142
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/18/2016 1206

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	33	9.8	ug/kg	08/19/2016 1123
Dibenzo(a,h)anthracene	ND		1	33	1.8	ug/kg	08/19/2016 1123
Dibenzofuran	ND		1	33	6.4	ug/kg	08/19/2016 1123
Diethylphthalate	ND		1	33	4.1	ug/kg	08/19/2016 1123
Dimethyl phthalate	ND		1	33	6.6	ug/kg	08/19/2016 1123
Fluoranthene	ND		1	33	0.89	ug/kg	08/19/2016 1123
Fluorene	ND		1	33	2.0	ug/kg	08/19/2016 1123
Hexachlorobenzene	ND		1	33	8.6	ug/kg	08/19/2016 1123
Hexachlorobutadiene	ND		1	33	7.9	ug/kg	08/19/2016 1123
Hexachlorocyclopentadiene	ND		1	170	53	ug/kg	08/19/2016 1123
Hexachloroethane	ND		1	33	5.8	ug/kg	08/19/2016 1123
Indeno(1,2,3-c,d)pyrene	ND		1	33	1.4	ug/kg	08/19/2016 1123
Isophorone	ND		1	33	8.4	ug/kg	08/19/2016 1123
N-Nitrosodi-n-propylamine	ND		1	33	12	ug/kg	08/19/2016 1123
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	33	7.4	ug/kg	08/19/2016 1123
Naphthalene	ND		1	33	1.6	ug/kg	08/19/2016 1123
Nitrobenzene	ND		1	33	13	ug/kg	08/19/2016 1123
Pentachlorophenol	ND		1	170	44	ug/kg	08/19/2016 1123
Phenanthrene	ND		1	33	1.8	ug/kg	08/19/2016 1123
Phenol	ND		1	33	6.9	ug/kg	08/19/2016 1123
Pyrene	ND		1	33	1.2	ug/kg	08/19/2016 1123

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		59	30-117
2-Fluorobiphenyl		64	33-102
2-Fluorophenol		58	28-104
Nitrobenzene-d5		68	22-109
Phenol-d5		64	27-103
Terphenyl-d14		78	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ20142-002
Batch: 20142
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/18/2016 1206

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	330	220		1	67	30-130	08/19/2016 1148
2,4,5-Trichlorophenol	330	240		1	73	46-122	08/19/2016 1148
2,4,6-Trichlorophenol	330	240		1	71	38-115	08/19/2016 1148
2,4-Dichlorophenol	670	430		1	64	41-113	08/19/2016 1148
2,4-Dimethylphenol	330	240		1	73	33-123	08/19/2016 1148
2,4-Dinitrophenol	330	260		1	77	30-130	08/19/2016 1148
2,4-Dinitrotoluene	330	280		1	85	48-124	08/19/2016 1148
2,6-Dinitrotoluene	330	260		1	78	47-125	08/19/2016 1148
2-Chloronaphthalene	330	220		1	66	31-127	08/19/2016 1148
2-Chlorophenol	330	220		1	65	37-106	08/19/2016 1148
2-Methylnaphthalene	330	220		1	66	40-106	08/19/2016 1148
2-Methylphenol	330	300		1	90	32-107	08/19/2016 1148
2-Nitroaniline	330	260		1	77	45-128	08/19/2016 1148
2-Nitrophenol	330	220		1	67	35-108	08/19/2016 1148
3+4-Methylphenol	330	250		1	76	39-108	08/19/2016 1148
3,3'-Dichlorobenzidine	330	260		1	77	30-130	08/19/2016 1148
3-Nitroaniline	330	220		1	66	24-127	08/19/2016 1148
4,6-Dinitro-2-methylphenol	330	310		1	92	40-130	08/19/2016 1148
4-Bromophenyl phenyl ether	330	240		1	72	46-118	08/19/2016 1148
4-Chloro-3-methyl phenol	330	270		1	82	49-118	08/19/2016 1148
4-Chloroaniline	330	240		1	72	10-125	08/19/2016 1148
4-Chlorophenyl phenyl ether	330	220		1	66	47-116	08/19/2016 1148
4-Nitroaniline	330	270		1	80	48-127	08/19/2016 1148
4-Nitrophenol	670	740		1	111	18-154	08/19/2016 1148
Acenaphthene	330	230		1	70	46-114	08/19/2016 1148
Acenaphthylene	330	250		1	75	44-122	08/19/2016 1148
Acetophenone	330	210		1	64	30-130	08/19/2016 1148
Anthracene	330	280		1	85	50-119	08/19/2016 1148
Atrazine	330	280		1	83	30-130	08/19/2016 1148
Benzaldehyde	330	240		1	72	40-117	08/19/2016 1148
Benzo(a)anthracene	330	290		1	87	47-121	08/19/2016 1148
Benzo(a)pyrene	330	310		1	93	55-134	08/19/2016 1148
Benzo(b)fluoranthene	330	320		1	95	28-139	08/19/2016 1148
Benzo(g,h,i)perylene	330	340		1	102	36-125	08/19/2016 1148
Benzo(k)fluoranthene	330	300		1	91	47-130	08/19/2016 1148
bis (2-Chloro-1-methylethyl) ether	330	240		1	73	31-102	08/19/2016 1148
bis(2-Chloroethoxy)methane	330	250		1	74	39-108	08/19/2016 1148
bis(2-Chloroethyl)ether	330	240		1	71	32-105	08/19/2016 1148
bis(2-Ethylhexyl)phthalate	330	360		1	107	45-128	08/19/2016 1148
Butyl benzyl phthalate	330	350		1	104	46-128	08/19/2016 1148
Caprolactam	330	230		1	70	30-130	08/19/2016 1148
Carbazole	330	290		1	87	30-130	08/19/2016 1148
Chrysene	330	280		1	85	45-126	08/19/2016 1148
Di-n-butyl phthalate	330	330		1	98	51-129	08/19/2016 1148

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ20142-002
Batch: 20142
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/18/2016 1206

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Di-n-octylphthalate	330	320		1	95	49-142	08/19/2016 1148
Dibenzo(a,h)anthracene	330	230		1	71	30-130	08/19/2016 1148
Dibenzofuran	330	220		1	67	45-112	08/19/2016 1148
Diethylphthalate	330	280		1	85	49-123	08/19/2016 1148
Dimethyl phthalate	330	260		1	78	48-120	08/19/2016 1148
Fluoranthene	330	280		1	85	50-123	08/19/2016 1148
Fluorene	330	230		1	70	48-117	08/19/2016 1148
Hexachlorobenzene	330	260		1	77	44-122	08/19/2016 1148
Hexachlorobutadiene	330	190		1	57	33-103	08/19/2016 1148
Hexachlorocyclopentadiene	1700	790		1	47	18-121	08/19/2016 1148
Hexachloroethane	330	200		1	61	30-96	08/19/2016 1148
Indeno(1,2,3-c,d)pyrene	330	320		1	95	45-123	08/19/2016 1148
Isophorone	330	240		1	72	30-130	08/19/2016 1148
N-Nitrosodi-n-propylamine	330	280		1	84	32-115	08/19/2016 1148
N-Nitrosodiphenylamine (Diphenylamine)	330	270		1	80	53-150	08/19/2016 1148
Naphthalene	330	220		1	65	36-110	08/19/2016 1148
Nitrobenzene	330	240		1	72	33-114	08/19/2016 1148
Pentachlorophenol	670	510		1	76	27-138	08/19/2016 1148
Phenanthrene	330	270		1	80	49-117	08/19/2016 1148
Phenol	330	230		1	68	36-108	08/19/2016 1148
Pyrene	330	290		1	87	47-119	08/19/2016 1148

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		74	30-117
2-Fluorobiphenyl		62	33-102
2-Fluorophenol		57	28-104
Nitrobenzene-d5		70	22-109
Phenol-d5		65	27-103
Terphenyl-d14		78	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: RH17016-003MS
Batch: 20142
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/18/2016 1206

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	370	240		1	65	30-130	08/19/2016 1441
Acenaphthylene	ND	370	250		1	67	30-130	08/19/2016 1441
Acetophenone	ND	370	230		1	63	30-130	08/19/2016 1441
Anthracene	ND	370	300		1	81	30-130	08/19/2016 1441
Atrazine	ND	370	280		1	77	30-130	08/19/2016 1441
Benzaldehyde	ND	370	240		1	64	40-117	08/19/2016 1441
Benzo(a)anthracene	5.3	370	310		1	82	30-130	08/19/2016 1441
Benzo(a)pyrene	4.0	370	320		1	87	30-130	08/19/2016 1441
Benzo(b)fluoranthene	8.0	370	340		1	90	30-130	08/19/2016 1441
Benzo(g,h,i)perylene	ND	370	210		1	57	30-130	08/19/2016 1441
Benzo(k)fluoranthene	ND	370	320		1	87	30-130	08/19/2016 1441
1,1'-Biphenyl	ND	370	230		1	61	30-130	08/19/2016 1441
4-Bromophenyl phenyl ether	ND	370	260		1	69	30-130	08/19/2016 1441
Butyl benzyl phthalate	ND	370	340		1	93	30-130	08/19/2016 1441
Caprolactam	ND	370	340		1	91	30-130	08/19/2016 1441
Carbazole	ND	370	290		1	79	30-130	08/19/2016 1441
4-Chloro-3-methyl phenol	ND	370	290		1	78	30-130	08/19/2016 1441
4-Chloroaniline	ND	370	64		1	17	10-130	08/19/2016 1441
bis(2-Chloroethoxy)methane	ND	370	250		1	69	30-130	08/19/2016 1441
bis(2-Chloroethyl)ether	ND	370	230		1	64	30-130	08/19/2016 1441
bis (2-Chloro-1-methylethyl) ether	ND	370	240		1	66	30-130	08/19/2016 1441
2-Chloronaphthalene	ND	370	230		1	61	30-130	08/19/2016 1441
2-Chlorophenol	ND	370	230		1	63	30-130	08/19/2016 1441
4-Chlorophenyl phenyl ether	ND	370	230		1	62	30-130	08/19/2016 1441
Chrysene	3.3	370	310		1	82	30-130	08/19/2016 1441
Dibenzo(a,h)anthracene	ND	370	160		1	44	30-130	08/19/2016 1441
Dibenzofuran	ND	370	240		1	64	30-130	08/19/2016 1441
3,3'-Dichlorobenzidine	ND	370	160		1	44	30-130	08/19/2016 1441
2,4-Dichlorophenol	ND	740	440		1	59	30-130	08/19/2016 1441
Diethylphthalate	ND	370	300		1	82	30-130	08/19/2016 1441
Dimethyl phthalate	ND	370	280		1	76	30-130	08/19/2016 1441
2,4-Dimethylphenol	ND	370	250		1	68	30-130	08/19/2016 1441
Di-n-butyl phthalate	ND	370	330		1	89	30-130	08/19/2016 1441
4,6-Dinitro-2-methylphenol	ND	370	190		1	52	30-130	08/19/2016 1441
2,4-Dinitrophenol	ND	370	140		1	38	30-130	08/19/2016 1441
2,4-Dinitrotoluene	ND	370	290		1	79	30-130	08/19/2016 1441
2,6-Dinitrotoluene	ND	370	260		1	70	30-130	08/19/2016 1441
Di-n-octylphthalate	ND	370	350		1	95	30-130	08/19/2016 1441
bis(2-Ethylhexyl)phthalate	ND	370	360		1	97	30-130	08/19/2016 1441
Fluoranthene	6.2	370	310		1	82	30-130	08/19/2016 1441
Fluorene	ND	370	250		1	68	30-130	08/19/2016 1441
Hexachlorobenzene	ND	370	270		1	73	30-130	08/19/2016 1441
Hexachlorobutadiene	ND	370	190		1	51	30-130	08/19/2016 1441
Hexachlorocyclopentadiene	ND	1800	110	N	1	5.8	30-130	08/19/2016 1441

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: RH17016-003MS
Batch: 20142
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/18/2016 1206

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachloroethane	ND	370	140		1	37	30-130	08/19/2016 1441
Indeno(1,2,3-c,d)pyrene	ND	370	220		1	60	30-130	08/19/2016 1441
Isophorone	ND	370	250		1	69	30-130	08/19/2016 1441
2-Methylnaphthalene	ND	370	230		1	62	30-130	08/19/2016 1441
2-Methylphenol	ND	370	310		1	84	30-130	08/19/2016 1441
3+4-Methylphenol	ND	370	250		1	69	30-130	08/19/2016 1441
Naphthalene	ND	370	210		1	57	30-130	08/19/2016 1441
2-Nitroaniline	ND	370	260		1	71	30-130	08/19/2016 1441
3-Nitroaniline	ND	370	170		1	46	30-130	08/19/2016 1441
4-Nitroaniline	ND	370	230		1	64	30-130	08/19/2016 1441
Nitrobenzene	ND	370	240		1	66	30-130	08/19/2016 1441
2-Nitrophenol	ND	370	230		1	61	30-130	08/19/2016 1441
4-Nitrophenol	ND	740	750		1	102	30-130	08/19/2016 1441
N-Nitrosodi-n-propylamine	ND	370	300		1	81	30-130	08/19/2016 1441
N-Nitrosodiphenylamine (Diphenylamine)	ND	370	260		1	71	30-130	08/19/2016 1441
Pentachlorophenol	ND	740	530		1	71	30-130	08/19/2016 1441
Phenanthrene	ND	370	290		1	78	30-130	08/19/2016 1441
Phenol	ND	370	250		1	67	30-130	08/19/2016 1441
Pyrene	5.5	370	310		1	83	30-130	08/19/2016 1441
2,4,5-Trichlorophenol	ND	370	260		1	71	30-130	08/19/2016 1441
2,4,6-Trichlorophenol	ND	370	240		1	66	30-130	08/19/2016 1441

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		53	33-102
2-Fluorophenol		54	28-104
Nitrobenzene-d5		60	22-109
Phenol-d5		61	27-103
Terphenyl-d14		68	41-120
2,4,6-Tribromophenol		70	30-117

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: RH17016-003MD
Batch: 20142
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/18/2016 1206

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	380	140	+	1	39	49	30-130	40	08/19/2016 1506
Acenaphthylene	ND	380	140	+	1	39	52	30-130	40	08/19/2016 1506
Acetophenone	ND	380	100	N,+	1	27	79	30-130	40	08/19/2016 1506
Anthracene	ND	380	240		1	64	21	30-130	40	08/19/2016 1506
Atrazine	ND	380	250		1	65	14	30-130	40	08/19/2016 1506
Benzaldehyde	ND	380	110	N,+	1	29	75	40-117	40	08/19/2016 1506
Benzo(a)anthracene	5.3	380	250		1	66	20	30-130	40	08/19/2016 1506
Benzo(a)pyrene	4.0	380	270		1	71	18	30-130	40	08/19/2016 1506
Benzo(b)fluoranthene	8.0	380	270		1	71	22	30-130	40	08/19/2016 1506
Benzo(g,h,i)perylene	ND	380	180		1	47	17	30-130	40	08/19/2016 1506
Benzo(k)fluoranthene	ND	380	270		1	72	17	30-130	40	08/19/2016 1506
1,1'-Biphenyl	ND	380	120	+	1	32	62	30-130	40	08/19/2016 1506
4-Bromophenyl phenyl ether	ND	380	200		1	53	24	30-130	40	08/19/2016 1506
Butyl benzyl phthalate	ND	380	290		1	77	17	30-130	40	08/19/2016 1506
Caprolactam	ND	380	180	+	1	48	61	30-130	40	08/19/2016 1506
Carbazole	ND	380	250		1	66	17	30-130	40	08/19/2016 1506
4-Chloro-3-methyl phenol	ND	380	210		1	55	32	30-130	40	08/19/2016 1506
4-Chloroaniline	ND	380	56		1	15	14	10-130	40	08/19/2016 1506
bis(2-Chloroethoxy)methane	ND	380	140	+	1	37	58	30-130	40	08/19/2016 1506
bis(2-Chloroethyl)ether	ND	380	100	N,+	1	27	79	30-130	40	08/19/2016 1506
bis (2-Chloro-1-methylethyl) ether	ND	380	110	N,+	1	28	79	30-130	40	08/19/2016 1506
2-Chloronaphthalene	ND	380	110	+	1	30	66	30-130	40	08/19/2016 1506
2-Chlorophenol	ND	380	100	N,+	1	27	80	30-130	40	08/19/2016 1506
4-Chlorophenyl phenyl ether	ND	380	160		1	42	37	30-130	40	08/19/2016 1506
Chrysene	3.3	380	250		1	66	19	30-130	40	08/19/2016 1506
Dibenzo(a,h)anthracene	ND	380	140		1	37	15	30-130	40	08/19/2016 1506
Dibenzofuran	ND	380	150	+	1	41	43	30-130	40	08/19/2016 1506
3,3'-Dichlorobenzidine	ND	380	120		1	32	30	30-130	40	08/19/2016 1506
2,4-Dichlorophenol	ND	750	260	+	1	35	49	30-130	40	08/19/2016 1506
Diethylphthalate	ND	380	240		1	63	24	30-130	40	08/19/2016 1506
Dimethyl phthalate	ND	380	210		1	56	29	30-130	40	08/19/2016 1506
2,4-Dimethylphenol	ND	380	150	+	1	39	53	30-130	40	08/19/2016 1506
Di-n-butyl phthalate	ND	380	280		1	74	16	30-130	40	08/19/2016 1506
4,6-Dinitro-2-methylphenol	ND	380	110	+	1	31	50	30-130	40	08/19/2016 1506
2,4-Dinitrophenol	ND	380	66	N,+	1	17	72	30-130	40	08/19/2016 1506
2,4-Dinitrotoluene	ND	380	230		1	60	26	30-130	40	08/19/2016 1506
2,6-Dinitrotoluene	ND	380	200		1	52	28	30-130	40	08/19/2016 1506
Di-n-octylphthalate	ND	380	290		1	77	19	30-130	40	08/19/2016 1506
bis(2-Ethylhexyl)phthalate	ND	380	300		1	80	18	30-130	40	08/19/2016 1506
Fluoranthene	6.2	380	250		1	65	21	30-130	40	08/19/2016 1506
Fluorene	ND	380	170		1	45	39	30-130	40	08/19/2016 1506
Hexachlorobenzene	ND	380	210		1	57	23	30-130	40	08/19/2016 1506
Hexachlorobutadiene	ND	380	83	N,+	1	22	77	30-130	40	08/19/2016 1506
Hexachlorocyclopentadiene	ND	1900	31	N,+	1	1.7	110	30-130	40	08/19/2016 1506

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: RH17016-003MD
Batch: 20142
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/18/2016 1206

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexachloroethane	ND	380	55	N,+	1	15	85	30-130	40	08/19/2016 1506
Indeno(1,2,3-c,d)pyrene	ND	380	190		1	51	14	30-130	40	08/19/2016 1506
Isophorone	ND	380	160	+	1	42	47	30-130	40	08/19/2016 1506
2-Methylnaphthalene	ND	380	110	N,+	1	28	72	30-130	40	08/19/2016 1506
2-Methylphenol	ND	380	150	+	1	39	72	30-130	40	08/19/2016 1506
3+4-Methylphenol	ND	380	150	+	1	41	49	30-130	40	08/19/2016 1506
Naphthalene	ND	380	92	N,+	1	25	78	30-130	40	08/19/2016 1506
2-Nitroaniline	ND	380	210		1	56	21	30-130	40	08/19/2016 1506
3-Nitroaniline	ND	380	150		1	40	14	30-130	40	08/19/2016 1506
4-Nitroaniline	ND	380	190		1	50	22	30-130	40	08/19/2016 1506
Nitrobenzene	ND	380	110	N,+	1	28	78	30-130	40	08/19/2016 1506
2-Nitrophenol	ND	380	100	N,+	1	27	76	30-130	40	08/19/2016 1506
4-Nitrophenol	ND	750	530		1	71	34	30-130	40	08/19/2016 1506
N-Nitrosodi-n-propylamine	ND	380	160	+	1	43	60	30-130	40	08/19/2016 1506
N-Nitrosodiphenylamine (Diphenylamine)	ND	380	220		1	58	18	30-130	40	08/19/2016 1506
Pentachlorophenol	ND	750	390		1	52	29	30-130	40	08/19/2016 1506
Phenanthrene	ND	380	230		1	60	24	30-130	40	08/19/2016 1506
Phenol	ND	380	120	+	1	33	67	30-130	40	08/19/2016 1506
Pyrene	5.5	380	250		1	65	22	30-130	40	08/19/2016 1506
2,4,5-Trichlorophenol	ND	380	180		1	48	36	30-130	40	08/19/2016 1506
2,4,6-Trichlorophenol	ND	380	160	+	1	42	43	30-130	40	08/19/2016 1506

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl	N	28	33-102
2-Fluorophenol	N	23	28-104
Nitrobenzene-d5		26	22-109
Phenol-d5		30	27-103
Terphenyl-d14		56	41-120
2,4,6-Tribromophenol		49	30-117

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ20208-001
Batch: 20208
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/18/2016 1829

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	33	11	ug/kg	08/23/2016 1546
2,4,5-Trichlorophenol	ND		1	33	6.1	ug/kg	08/23/2016 1546
2,4,6-Trichlorophenol	ND		1	33	4.7	ug/kg	08/23/2016 1546
2,4-Dichlorophenol	ND		1	33	5.9	ug/kg	08/23/2016 1546
2,4-Dimethylphenol	ND		1	33	10	ug/kg	08/23/2016 1546
2,4-Dinitrophenol	ND		1	170	69	ug/kg	08/23/2016 1546
2,4-Dinitrotoluene	ND		1	67	11	ug/kg	08/23/2016 1546
2,6-Dinitrotoluene	ND		1	67	11	ug/kg	08/23/2016 1546
2-Chloronaphthalene	ND		1	33	6.2	ug/kg	08/23/2016 1546
2-Chlorophenol	ND		1	33	6.0	ug/kg	08/23/2016 1546
2-Methylnaphthalene	ND		1	33	1.5	ug/kg	08/23/2016 1546
2-Methylphenol	ND		1	33	7.1	ug/kg	08/23/2016 1546
2-Nitroaniline	ND		1	67	8.9	ug/kg	08/23/2016 1546
2-Nitrophenol	ND		1	67	15	ug/kg	08/23/2016 1546
3+4-Methylphenol	ND		1	67	10	ug/kg	08/23/2016 1546
3,3'-Dichlorobenzidine	ND		1	170	36	ug/kg	08/23/2016 1546
3-Nitroaniline	ND		1	67	6.5	ug/kg	08/23/2016 1546
4,6-Dinitro-2-methylphenol	ND		1	170	40	ug/kg	08/23/2016 1546
4-Bromophenyl phenyl ether	ND		1	33	7.9	ug/kg	08/23/2016 1546
4-Chloro-3-methyl phenol	ND		1	33	6.1	ug/kg	08/23/2016 1546
4-Chloroaniline	ND		1	33	3.1	ug/kg	08/23/2016 1546
4-Chlorophenyl phenyl ether	ND		1	33	6.9	ug/kg	08/23/2016 1546
4-Nitroaniline	ND		1	67	6.0	ug/kg	08/23/2016 1546
4-Nitrophenol	ND		1	170	41	ug/kg	08/23/2016 1546
Acenaphthene	ND		1	33	1.7	ug/kg	08/23/2016 1546
Acenaphthylene	ND		1	33	1.7	ug/kg	08/23/2016 1546
Acetophenone	ND		1	33	12	ug/kg	08/23/2016 1546
Anthracene	ND		1	33	2.0	ug/kg	08/23/2016 1546
Atrazine	ND		1	33	4.4	ug/kg	08/23/2016 1546
Benzaldehyde	ND		1	33	14	ug/kg	08/23/2016 1546
Benzo(a)anthracene	ND		1	33	1.1	ug/kg	08/23/2016 1546
Benzo(a)pyrene	ND		1	33	1.5	ug/kg	08/23/2016 1546
Benzo(b)fluoranthene	ND		1	33	1.5	ug/kg	08/23/2016 1546
Benzo(g,h,i)perylene	ND		1	33	1.1	ug/kg	08/23/2016 1546
Benzo(k)fluoranthene	ND		1	33	1.4	ug/kg	08/23/2016 1546
bis (2-Chloro-1-methylethyl) ether	ND		1	33	9.3	ug/kg	08/23/2016 1546
bis(2-Chloroethoxy)methane	ND		1	33	8.1	ug/kg	08/23/2016 1546
bis(2-Chloroethyl)ether	ND		1	33	7.9	ug/kg	08/23/2016 1546
bis(2-Ethylhexyl)phthalate	ND		1	33	14	ug/kg	08/23/2016 1546
Butyl benzyl phthalate	ND		1	67	8.6	ug/kg	08/23/2016 1546
Caprolactam	ND		1	33	7.4	ug/kg	08/23/2016 1546
Carbazole	ND		1	33	9.4	ug/kg	08/23/2016 1546
Chrysene	ND		1	33	1.1	ug/kg	08/23/2016 1546
Di-n-butyl phthalate	ND		1	33	12	ug/kg	08/23/2016 1546

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ20208-001
Batch: 20208
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/18/2016 1829

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	33	9.8	ug/kg	08/23/2016 1546
Dibenzo(a,h)anthracene	ND		1	33	1.8	ug/kg	08/23/2016 1546
Dibenzofuran	ND		1	33	6.4	ug/kg	08/23/2016 1546
Diethylphthalate	ND		1	33	4.1	ug/kg	08/23/2016 1546
Dimethyl phthalate	ND		1	33	6.6	ug/kg	08/23/2016 1546
Fluoranthene	ND		1	33	0.89	ug/kg	08/23/2016 1546
Fluorene	ND		1	33	2.0	ug/kg	08/23/2016 1546
Hexachlorobenzene	ND		1	33	8.6	ug/kg	08/23/2016 1546
Hexachlorobutadiene	ND		1	33	7.9	ug/kg	08/23/2016 1546
Hexachlorocyclopentadiene	ND		1	170	53	ug/kg	08/23/2016 1546
Hexachloroethane	ND		1	33	5.8	ug/kg	08/23/2016 1546
Indeno(1,2,3-c,d)pyrene	ND		1	33	1.4	ug/kg	08/23/2016 1546
Isophorone	ND		1	33	8.4	ug/kg	08/23/2016 1546
N-Nitrosodi-n-propylamine	ND		1	33	12	ug/kg	08/23/2016 1546
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	33	7.4	ug/kg	08/23/2016 1546
Naphthalene	ND		1	33	1.6	ug/kg	08/23/2016 1546
Nitrobenzene	ND		1	33	13	ug/kg	08/23/2016 1546
Pentachlorophenol	ND		1	170	44	ug/kg	08/23/2016 1546
Phenanthrene	ND		1	33	1.8	ug/kg	08/23/2016 1546
Phenol	ND		1	33	6.9	ug/kg	08/23/2016 1546
Pyrene	ND		1	33	1.2	ug/kg	08/23/2016 1546

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		61	30-117
2-Fluorobiphenyl		62	33-102
2-Fluorophenol		62	28-104
Nitrobenzene-d5		73	22-109
Phenol-d5		66	27-103
Terphenyl-d14		74	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ20208-002
Batch: 20208
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/18/2016 1829

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	330	240		1	72	30-130	08/23/2016 1611
2,4,5-Trichlorophenol	330	240		1	73	46-122	08/23/2016 1611
2,4,6-Trichlorophenol	330	250		1	74	38-115	08/23/2016 1611
2,4-Dichlorophenol	670	460		1	69	41-113	08/23/2016 1611
2,4-Dimethylphenol	330	260		1	79	33-123	08/23/2016 1611
2,4-Dinitrophenol	330	220		1	67	30-130	08/23/2016 1611
2,4-Dinitrotoluene	330	270		1	81	48-124	08/23/2016 1611
2,6-Dinitrotoluene	330	260		1	78	47-125	08/23/2016 1611
2-Chloronaphthalene	330	230		1	70	31-127	08/23/2016 1611
2-Chlorophenol	330	240		1	71	37-106	08/23/2016 1611
2-Methylnaphthalene	330	230		1	70	40-106	08/23/2016 1611
2-Methylphenol	330	290		1	86	32-107	08/23/2016 1611
2-Nitroaniline	330	270		1	81	45-128	08/23/2016 1611
2-Nitrophenol	330	230		1	69	35-108	08/23/2016 1611
3+4-Methylphenol	330	280		1	84	39-108	08/23/2016 1611
3,3'-Dichlorobenzidine	330	250		1	76	30-130	08/23/2016 1611
3-Nitroaniline	330	230		1	68	24-127	08/23/2016 1611
4,6-Dinitro-2-methylphenol	330	280		1	83	40-130	08/23/2016 1611
4-Bromophenyl phenyl ether	330	250		1	77	46-118	08/23/2016 1611
4-Chloro-3-methyl phenol	330	270		1	82	49-118	08/23/2016 1611
4-Chloroaniline	330	210		1	62	10-125	08/23/2016 1611
4-Chlorophenyl phenyl ether	330	220		1	65	47-116	08/23/2016 1611
4-Nitroaniline	330	250		1	76	48-127	08/23/2016 1611
4-Nitrophenol	670	760		1	114	18-154	08/23/2016 1611
Acenaphthene	330	250		1	74	46-114	08/23/2016 1611
Acenaphthylene	330	250		1	75	44-122	08/23/2016 1611
Acetophenone	330	230		1	69	30-130	08/23/2016 1611
Anthracene	330	280		1	85	50-119	08/23/2016 1611
Atrazine	330	270		1	82	30-130	08/23/2016 1611
Benzaldehyde	330	250		1	75	40-117	08/23/2016 1611
Benzo(a)anthracene	330	290		1	87	47-121	08/23/2016 1611
Benzo(a)pyrene	330	310		1	92	55-134	08/23/2016 1611
Benzo(b)fluoranthene	330	300		1	90	28-139	08/23/2016 1611
Benzo(g,h,i)perylene	330	300		1	90	36-125	08/23/2016 1611
Benzo(k)fluoranthene	330	290		1	88	47-130	08/23/2016 1611
bis (2-Chloro-1-methylethyl) ether	330	260		1	78	31-102	08/23/2016 1611
bis(2-Chloroethoxy)methane	330	270		1	80	39-108	08/23/2016 1611
bis(2-Chloroethyl)ether	330	260		1	77	32-105	08/23/2016 1611
bis(2-Ethylhexyl)phthalate	330	360		1	108	45-128	08/23/2016 1611
Butyl benzyl phthalate	330	350		1	104	46-128	08/23/2016 1611
Caprolactam	330	310		1	94	30-130	08/23/2016 1611
Carbazole	330	290		1	87	30-130	08/23/2016 1611
Chrysene	330	300		1	89	45-126	08/23/2016 1611
Di-n-butyl phthalate	330	330		1	99	51-129	08/23/2016 1611

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ20208-002
Batch: 20208
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 08/18/2016 1829

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Di-n-octylphthalate	330	330		1	99	49-142	08/23/2016 1611
Dibenzo(a,h)anthracene	330	240		1	71	30-130	08/23/2016 1611
Dibenzofuran	330	230		1	69	45-112	08/23/2016 1611
Diethylphthalate	330	290		1	86	49-123	08/23/2016 1611
Dimethyl phthalate	330	260		1	79	48-120	08/23/2016 1611
Fluoranthene	330	280		1	85	50-123	08/23/2016 1611
Fluorene	330	240		1	73	48-117	08/23/2016 1611
Hexachlorobenzene	330	270		1	80	44-122	08/23/2016 1611
Hexachlorobutadiene	330	200		1	61	33-103	08/23/2016 1611
Hexachlorocyclopentadiene	1700	870		1	52	18-121	08/23/2016 1611
Hexachloroethane	330	200		1	61	30-96	08/23/2016 1611
Indeno(1,2,3-c,d)pyrene	330	300		1	91	45-123	08/23/2016 1611
Isophorone	330	260		1	79	30-130	08/23/2016 1611
N-Nitrosodi-n-propylamine	330	320		1	96	32-115	08/23/2016 1611
N-Nitrosodiphenylamine (Diphenylamine)	330	270		1	81	53-150	08/23/2016 1611
Naphthalene	330	230		1	68	36-110	08/23/2016 1611
Nitrobenzene	330	260		1	78	33-114	08/23/2016 1611
Pentachlorophenol	670	510		1	76	27-138	08/23/2016 1611
Phenanthrene	330	270		1	82	49-117	08/23/2016 1611
Phenol	330	250		1	74	36-108	08/23/2016 1611
Pyrene	330	300		1	90	47-119	08/23/2016 1611

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		69	30-117
2-Fluorobiphenyl		61	33-102
2-Fluorophenol		62	28-104
Nitrobenzene-d5		71	22-109
Phenol-d5		69	27-103
Terphenyl-d14		80	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MB

Sample ID: RQ20119-001
Batch: 20119
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/22/2016 1604

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	0.033	J	1	0.25	0.015	mg/kg	08/23/2016 1611
Arsenic	ND		1	0.25	0.032	mg/kg	08/23/2016 1611
Beryllium	ND		1	0.10	0.0080	mg/kg	08/23/2016 1611
Cadmium	ND		1	0.025	0.0020	mg/kg	08/23/2016 1611
Chromium	ND		1	1.3	0.029	mg/kg	08/23/2016 1611
Copper	ND		1	0.25	0.022	mg/kg	08/23/2016 1611
Iron	0.58	J	1	5.0	0.43	mg/kg	08/23/2016 1611
Lead	0.0064	J	1	0.25	0.0060	mg/kg	08/23/2016 1611
Manganese	ND		1	1.3	0.24	mg/kg	08/23/2016 1611
Nickel	ND		1	1.3	0.027	mg/kg	08/23/2016 1611
Selenium	ND		1	0.25	0.038	mg/kg	08/23/2016 1611
Silver	ND		1	0.25	0.020	mg/kg	08/23/2016 1611
Thallium	ND		1	0.13	0.0080	mg/kg	08/23/2016 1611
Zinc	ND		1	2.5	0.066	mg/kg	08/23/2016 1611

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - LCS

Sample ID: RQ20119-002
Batch: 20119
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/22/2016 1604

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	10	8.3		1	83	80-120	08/23/2016 1616
Arsenic	10	9.7		5	97	80-120	08/23/2016 1622
Beryllium	10	10		1	100	80-120	08/23/2016 1616
Cadmium	10	8.2		1	82	80-120	08/23/2016 1616
Chromium	10	10		1	100	80-120	08/23/2016 1616
Copper	10	8.6		1	86	80-120	08/23/2016 1616
Iron	100	110		1	106	80-120	08/23/2016 1616
Lead	10	11		1	105	80-120	08/23/2016 1616
Manganese	10	10		1	102	80-120	08/23/2016 1616
Nickel	10	9.2		1	92	80-120	08/23/2016 1616
Selenium	10	8.9		5	89	80-120	08/23/2016 1622
Silver	10	9.2		1	92	80-120	08/23/2016 1616
Thallium	10	10		1	100	80-120	08/23/2016 1616
Zinc	10	9.5		5	95	80-120	08/23/2016 1622

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MS

Sample ID: RH17016-001MS
Batch: 20119
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/22/2016 1604

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	0.081	13	3.2	N	1	24	75-125	08/23/2016 2303
Arsenic	0.44	13	9.3	N	10	70	75-125	08/23/2016 1633
Beryllium	1.5	13	14		10	95	75-125	08/23/2016 1633
Cadmium	ND	13	11		10	90	75-125	08/23/2016 1633
Chromium	71	13	81		10	80	75-125	08/23/2016 1633
Copper	8.8	13	21		1	96	75-125	08/23/2016 2303
Iron	49000	130	53000	N	10	3290	75-125	08/23/2016 1633
Lead	5.9	13	18		1	99	75-125	08/23/2016 2303
Manganese	690	13	1100	N	10	3020	75-125	08/23/2016 1633
Nickel	91	13	94	N	10	26	75-125	08/23/2016 1633
Selenium	0.34	13	7.9	N	1	60	75-125	08/23/2016 2303
Silver	ND	13	10		10	80	75-125	08/23/2016 1633
Thallium	0.047	13	11		1	90	75-125	08/23/2016 2303
Zinc	47	13	47	N	1	0.89	75-125	08/23/2016 2303

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MSD

Sample ID: RH17016-001MD
Batch: 20119
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/22/2016 1604

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Antimony	0.081	12	2.7	N	1	22	18	75-125	20	08/23/2016 2309
Arsenic	0.44	12	8.8	N	10	71	5.2	75-125	20	08/23/2016 1638
Beryllium	1.5	12	13		10	101	0.91	75-125	20	08/23/2016 1638
Cadmium	ND	12	11		10	94	2.9	75-125	20	08/23/2016 1638
Chromium	71	12	110	N,+	10	336	31	75-125	20	08/23/2016 1638
Copper	8.8	12	20		1	93	6.3	75-125	20	08/23/2016 2309
Iron	49000	120	55000	N	10	4750	2.6	75-125	20	08/23/2016 1638
Lead	5.9	12	18		1	107	0.20	75-125	20	08/23/2016 2309
Manganese	690	12	880	N	10	1640	19	75-125	20	08/23/2016 1638
Nickel	91	12	130	N,+	10	323	31	75-125	20	08/23/2016 1638
Selenium	0.34	12	7.0	N	1	57	12	75-125	20	08/23/2016 2309
Silver	ND	12	9.7		10	83	4.5	75-125	20	08/23/2016 1638
Thallium	0.047	12	9.7		1	83	16	75-125	20	08/23/2016 2309
Zinc	47	12	61	+	1	121	26	75-125	20	08/23/2016 2309

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MB

Sample ID: RQ20234-001
Batch: 20234
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/22/2016 1604

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	0.030	J	1	0.25	0.015	mg/kg	08/23/2016 1931
Arsenic	ND		1	0.25	0.032	mg/kg	08/23/2016 1931
Beryllium	ND		1	0.10	0.0080	mg/kg	08/23/2016 1931
Cadmium	ND		1	0.025	0.0020	mg/kg	08/23/2016 1931
Chromium	ND		1	1.3	0.029	mg/kg	08/23/2016 1931
Copper	ND		1	0.25	0.022	mg/kg	08/23/2016 1931
Iron	0.81	J	1	5.0	0.43	mg/kg	08/23/2016 1931
Lead	0.0063	J	1	0.25	0.0060	mg/kg	08/23/2016 1931
Manganese	ND		1	1.3	0.24	mg/kg	08/23/2016 1931
Nickel	ND		1	1.3	0.027	mg/kg	08/23/2016 1931
Selenium	ND		1	0.25	0.038	mg/kg	08/23/2016 1931
Silver	ND		1	0.25	0.020	mg/kg	08/23/2016 1931
Thallium	ND		1	0.13	0.0080	mg/kg	08/23/2016 1931
Zinc	ND		1	2.5	0.066	mg/kg	08/23/2016 1931

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - LCS

Sample ID: RQ20234-002
Batch: 20234
Analytical Method: 6020A

Matrix: Solid
Prep Method: 3050B
Prep Date: 08/22/2016 1604

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	10	8.4		1	84	80-120	08/23/2016 1937
Arsenic	10	9.5		5	95	80-120	08/23/2016 1942
Beryllium	10	11		1	110	80-120	08/23/2016 1937
Cadmium	10	8.3		1	83	80-120	08/23/2016 1937
Chromium	10	9.9		1	99	80-120	08/23/2016 1937
Copper	10	8.2		1	82	80-120	08/23/2016 1937
Iron	100	110		1	111	80-120	08/23/2016 1937
Lead	10	10		1	104	80-120	08/23/2016 1937
Manganese	10	10		1	104	80-120	08/23/2016 1937
Nickel	10	9.2		1	92	80-120	08/23/2016 1937
Selenium	10	9.0		5	90	80-120	08/23/2016 1942
Silver	10	9.1		1	91	80-120	08/23/2016 1937
Thallium	10	10		1	100	80-120	08/23/2016 1937
Zinc	10	9.9		5	99	80-120	08/23/2016 1942

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MB

Sample ID: RQ20238-001
Batch: 20238
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/19/2016 1503

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	ND		1	0.083	0.0063	mg/kg	08/19/2016 1558

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - LCS

Sample ID: RQ20238-002
Batch: 20238
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/19/2016 1503

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.83	0.83		1	100	80-120	08/19/2016 1600

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MS

Sample ID: RH17016-001MS
Batch: 20238
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/19/2016 1503

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	ND	1.1	1.1		1	104	80-120	08/19/2016 1711

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MSD

Sample ID: RH17016-001MD
Batch: 20238
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/19/2016 1503

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	ND	1.1	1.1		1	99	0.32	80-120	20	08/19/2016 1714

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MB

Sample ID: RQ20442-001
Batch: 20442
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/23/2016 1553

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	ND		1	0.083	0.0063	mg/kg	08/23/2016 1707

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - LCS

Sample ID: RQ20442-002
Batch: 20442
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 08/23/2016 1553

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.83	0.90		1	108	80-120	08/23/2016 1709

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Chain of Custody
and
Miscellaneous Documents

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

SHEALY **Chain of Custody Record**

Number 63429

Client: CDM Smith	Report to Contact: Dan Forbes	Telephone No. / E-mail: forbesd@cdmsmith.com	Quote No.
Address: 5400 Glenwood Ave, Suite 400	Sampler's Signature: x Janelle Farley	Analysis (Attach list if more space is needed)	Page 1 of 3
City: Raleigh; State: NC; Zip Code: 27612	Printed Name: Janelle Farley		RH17016
Project Name: Bud Holdings			
Project No.	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Matrix: Aqueous	Solid	Non-Aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	NaS2O3		VOC	VOC 1,4-D	SVOC Hex Cr	Metals NH3, SO4, NO3					Remarks / Cooler I.D.
DUP	8-16-16	0800	G		x									x	x	x	x					
BG-1-0.5	8-16-16	0850	G		x									x	x	x	x					
BG-1-1.5	8-16-16	0900	G		x									x	x	x	x					
BG-1-5	8-16-16	0910	G		x									x	x	x	x					
BG-1-10	8-16-16	0920	G		x									x	x	x	x					
BG-1-15	8-16-16	0935	G		x									x	x	x	x					
BG-1-20	8-16-16	0940	G		x									x	x	x	x					
BG-2-0.5	8-16-16	1010	G		x									x	x	x	x					
BG-2-1.5	8-16-16	1020	G		x									x	x	x	x					
BG-2-5	8-16-16	1045	G		x									x	x	x	x					

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☐ Standard ☒ Rush (Specify) 5 days

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Janelle Farley	8-16-16	1830	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEx	8/17/16	0920	4. Laboratory received by	8/17/16	0920

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle): (Yes) No Ice Pack
Receipt Temp. 4.2 °C
2.6

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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Chain of Custody Record

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106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63423

Client	CDM Smith
Address	5400 Glenwood Ave, Suite 400
City	Raleigh
State	NC
Zip Code	27612
Project Name	Bud Holdings
Project No.	
P.O. No.	
Report to Contact	Dan Forbes
Sampler's Signature	x Janelle Farley
Printed Name	Janelle Farley
Telephone No. / E-mail	forbesd@cdmsmith.com
Quote No.	
Page	2 of 3

RH17016

Analysis (Attach list if more space is needed)

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab/Composite	Aqueous	Solid	Non-Aqueous	Unpres.	H2SO4	HNO3	HCl	NaOH	NaS2O3		VOC	VOC 1,4-D	SVOC Hex Cr	Metals NH3, TON NO3						Remarks / Cooler I.D.
BG-2-10	8-16-16	1100	G		x									x	x	x	x						
BG-2-15		1110	G		x									x	x	x	x						
BG-2-20		1120	G		x									x	x	x	x						
BG-3-0.5		1315	G		x									x	x	x	x						
BG-3-1.5		1325	G		x									x	x	x	x						
BG-3-5		1340	G		x									x	x	x	x						
BG-3-10		1350	G		x									x	x	x	x						
BG-3-15		1400	G		x									x	x	x	x						
BG-3-20		1410	G		x									x	x	x	x						
SB-16-0.5		1230	G		x									x	x	x	x						

Turn Around Time Required (Prior lab approval required for expedited TAT.)
☐ Standard ☒ Rush (Specify) 5 days

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Janelle Farley	8-16-16	1830	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEx	8/17/16	0920	4. Laboratory received by	8/17/16	0920

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) Yes No Ice Pack
Receipt Temp. 4.0 °C M32 2.6 1992

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63431

Client: CDM Smith	Report to Contact: Dan Fabes	Telephone No. / E-mail: forocsd@cdmsmith.com	Quote No.
Address: 5400 Glenwood Ave Suite 400	Sampler's Signature: x Janelle Farley	Analysis (Attach list if more space is needed)	Page 3 of 3
City: Raleigh; State: NC; Zip Code: 27612	Printed Name: Janelle Farley		RH17016
Project Name: Bud Holdings			
Project No.	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Matrix: Aqueous	Solid	Wipe Aqueous	Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC	VOC 1,4-D	SVOC Hex Cr	Metals, NH3, NO3	Remarks / Cooler I.D.
SB-16-1.5	8-16-16	1240	G		x								x	x	x	x	
Trip Blank	—	—		x									x				

Turn Around Time Required (Prior lab approval required for expedited TAT.)	Sample Disposal	Possible Hazard Identification	QC Requirements (Specify)
☐ Standard ☒ Rush (Specify) 5 days	☐ Return to Client ☐ Disposal by Lab	☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown	

	Date	Time		Date	Time
1. Relinquished by: Janelle Farley	8-16-16	1630	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEx	8/17/16	0920	4. Laboratory received by	8/17/16	0920

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) Yes No Ice Pack Receipt Temp. 4.8 °C
2.6

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: MT0018C-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: CDM Smith Cooler Inspected by/date: mcm/ 08/17/16 Lot #: RH17016

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Other

mcm 8/17/16	Yes ☑	No ☑		1. Were custody seals present on the cooler?
mcm 8/17/16	Yes ☑	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: _____ Cl strip ID: _____

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

M32 / 4.8/4.8 °C 992/2.6/2.6 °C ____ / ____ / ____ °C ____ / ____ / ____ °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☑	No ☐	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☑	No ☐		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
mcm 8/17/16 Yes ☑	No ☑		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☑	No ☐	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☑	No ☐	NA ☐	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☑	No ☐	9101	22. Was the quote number used taken from the container label?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) 022, 023(2) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be ≥ 2 by _____ Date: _____

Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR# _____

Sample labels applied by: _____ Verified by: _____ Date: _____

Comments: SR received extra set of trip blanks

Report of Analysis

CDM Smith
5400 Glenwood Avenue
Suite 400
Raleigh, NC 27612
Attention: Dan Forbes

Project Name: Bud Holding

Lot Number: RH12010

Date Completed: 08/19/2016

Nisreen Saikaly
Project Manager

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The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
CDM Smith
Lot Number: RH12010

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary
CDM Smith
Lot Number: RH12010

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	TW-6	Aqueous	08/11/2016 0935	08/12/2016
002	TW-1	Aqueous	08/11/2016 1100	08/12/2016
003	DUP-1	Aqueous	08/11/2016 0800	08/12/2016
004	TW-3	Aqueous	08/11/2016 1605	08/12/2016
005	TW-4	Aqueous	08/11/2016 1715	08/12/2016
006	TRIP BLANK	Aqueous	08/11/2016	08/12/2016

(6 samples)

Executive Summary
CDM Smith
Lot Number: RH12010

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	TW-6	Aqueous	Ammonia - N (gas	350.1	2.4		mg/L	6
001	TW-6	Aqueous	Nitrate - N	300.0	0.0063	J	mg/L	6
001	TW-6	Aqueous	Sulfate	300.0	1.8		mg/L	6
001	TW-6	Aqueous	Acetone	8260B	3.1	J	ug/L	8
001	TW-6	Aqueous	Butane, 2-chloro-2-methyl-	8270D	3.3		ug/L	11
001	TW-6	Aqueous	Unknown	8270D	2.4		ug/L	11
001	TW-6	Aqueous	Butanoic acid	8270D	2.3		ug/L	11
001	TW-6	Aqueous	Butanoic acid, 3-methyl-	8270D	2.5		ug/L	11
001	TW-6	Aqueous	Diethyltoluamide	8270D	9.4		ug/L	11
001	TW-6	Aqueous	9-Octadecenoic acid, (E)-	8270D	7.2		ug/L	11
002	TW-1	Aqueous	Ammonia - N (gas	350.1	0.15		mg/L	14
002	TW-1	Aqueous	Nitrate - N	300.0	0.44		mg/L	14
002	TW-1	Aqueous	Sulfate	300.0	6.6		mg/L	14
002	TW-1	Aqueous	Butane, 2-chloro-2-methyl-	8270D	3.5		ug/L	19
002	TW-1	Aqueous	Oleic Acid	8270D	3.2		ug/L	19
003	DUP-1	Aqueous	Ammonia - N (gas	350.1	0.14		mg/L	22
003	DUP-1	Aqueous	Nitrate - N	300.0	0.45		mg/L	22
003	DUP-1	Aqueous	Sulfate	300.0	6.7		mg/L	22
003	DUP-1	Aqueous	Acetone	8260B	4.0	J	ug/L	24
003	DUP-1	Aqueous	Unknown	8270D	2.7		ug/L	27
003	DUP-1	Aqueous	Diethyltoluamide	8270D	2.2		ug/L	27
004	TW-3	Aqueous	Nitrate - N	300.0	0.13		mg/L	30
004	TW-3	Aqueous	Sulfate	300.0	29		mg/L	30
004	TW-3	Aqueous	Acetone	8260B	2.5	J	ug/L	32
004	TW-3	Aqueous	Unknown	8270D	3.4		ug/L	35
004	TW-3	Aqueous	Chloroiodomethane	8270D	3.6		ug/L	35
004	TW-3	Aqueous	Unknown	8270D	2.5		ug/L	35
004	TW-3	Aqueous	Butanoic acid	8270D	6.0		ug/L	35
004	TW-3	Aqueous	Unknown	8270D	4.6		ug/L	35
004	TW-3	Aqueous	9-Octadecenoic acid, (E)-	8270D	9.9		ug/L	35
004	TW-3	Aqueous	Cadmium	6020A	0.052	J	ug/L	38
004	TW-3	Aqueous	Chromium	6020A	1.1	J	ug/L	38
004	TW-3	Aqueous	Copper	6020A	1.9		ug/L	38
004	TW-3	Aqueous	Iron	6020A	550		ug/L	38
004	TW-3	Aqueous	Lead	6020A	0.18	J	ug/L	38
004	TW-3	Aqueous	Manganese	6020A	280		ug/L	38
004	TW-3	Aqueous	Nickel	6020A	7.8		ug/L	38
004	TW-3	Aqueous	Zinc	6020A	5.6	J	ug/L	38
004	TW-3	Aqueous	Mercury	7470A	0.000073	J	mg/L	39
005	TW-4	Aqueous	Nitrate - N	300.0	0.80		mg/L	40
005	TW-4	Aqueous	Sulfate	300.0	23		mg/L	40
005	TW-4	Aqueous	Acetone	8260B	2.6	J	ug/L	42
005	TW-4	Aqueous	Butane, 2-chloro-2-methyl-	8270D	3.4		ug/L	45
005	TW-4	Aqueous	Unknown	8270D	3.3		ug/L	45

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page

(44 detections)

Inorganic non-metals

Client: CDM Smith
Laboratory ID: RH12010-001
Description: TW-6
Matrix: Aqueous
Date Sampled: 08/11/2016 0935
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/18/2016 2024	MJI		20216
1		(Nitrate - N) 300.0	1	08/12/2016 2050	TAF		19788
1		(Sulfate) 300.0	1	08/12/2016 2050	TAF		19787

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	2.4		0.10	0.050	mg/L	1
Nitrate - N		300.0	0.0063	J	0.020	0.0025	mg/L	1
Sulfate		300.0	1.8		1.0	0.28	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: CDM Smith
Laboratory ID: RH12010-001
Description: TW-6
Matrix: Aqueous
Date Sampled: 08/11/2016 0935
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/12/2016 1312	ALL		19719

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		123	70-130

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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-001
Description: TW-6
Matrix: Aqueous
Date Sampled: 08/11/2016 0935
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/12/2016 2325	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	3.1	J	10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-001
Description: TW-6
Matrix: Aqueous
Date Sampled: 08/11/2016 0935
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/12/2016 2325	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		110	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH12010-001
Description: TW-6
Matrix: Aqueous
Date Sampled: 08/11/2016 0935
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				20001

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH12010-001
Description: TW-6
Matrix: Aqueous
Date Sampled: 08/11/2016 0935
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1258	JCG		20020

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Butane, 2-chloro-2-methyl-		8270D	3.3				ug/L	1
Unknown		8270D	2.4				ug/L	1
Butanoic acid		8270D	2.3				ug/L	1
Butanoic acid, 3-methyl-		8270D	2.5				ug/L	1
Diethyltoluamide		8270D	9.4				ug/L	1
9-Octadecenoic acid, (E)-		8270D	7.2				ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-001
Description: TW-6
Matrix: Aqueous
Date Sampled: 08/11/2016 0935
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1258	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.0	0.040	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		1.0	0.040	ug/L	1
Acetophenone	98-86-2	8270D	ND		1.0	0.23	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	0.060	ug/L	1
Atrazine	1912-24-9	8270D	ND		1.0	0.20	ug/L	1
Benzaldehyde	100-52-7	8270D	ND		5.0	0.27	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	0.040	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	0.070	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	0.040	ug/L	1
1,1'-Biphenyl	92-52-4	8270D	ND		1.0	0.21	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.0	0.15	ug/L	1
Butyl benzyl phthalate	85-68-7	8270D	ND		5.0	0.21	ug/L	1
Caprolactam	105-60-2	8270D	ND		5.0	0.71	ug/L	1
Carbazole	86-74-8	8270D	ND		1.0	0.040	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.0	0.26	ug/L	1
4-Chloroaniline	106-47-8	8270D	ND		1.0	0.13	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.0	0.060	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.0	0.16	ug/L	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.0	0.17	ug/L	1
2-Chloronaphthalene	91-58-7	8270D	ND		1.0	0.15	ug/L	1
2-Chlorophenol	95-57-8	8270D	ND		1.0	0.15	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.0	0.16	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	0.030	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	0.030	ug/L	1
Dibenzofuran	132-64-9	8270D	ND		1.0	0.16	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		5.0	0.81	ug/L	1
2,4-Dichlorophenol	120-83-2	8270D	ND		1.0	0.19	ug/L	1
Diethylphthalate	84-66-2	8270D	ND		5.0	0.19	ug/L	1
Dimethyl phthalate	131-11-3	8270D	ND		5.0	0.18	ug/L	1
2,4-Dimethylphenol	105-67-9	8270D	ND		1.0	0.15	ug/L	1
Di-n-butyl phthalate	84-74-2	8270D	ND		5.0	0.42	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		5.0	0.89	ug/L	1
2,4-Dinitrophenol	51-28-5	8270D	ND		5.0	1.3	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.0	0.36	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.0	0.34	ug/L	1
Di-n-octylphthalate	117-84-0	8270D	ND		5.0	0.48	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		5.0	0.38	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	0.21	ug/L	1
Fluorene	86-73-7	8270D	ND		1.0	0.030	ug/L	1
Hexachlorobenzene	118-74-1	8270D	ND		1.0	0.15	ug/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		5.0	1.1	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-001
Description: TW-6
Matrix: Aqueous
Date Sampled: 08/11/2016 0935
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1258	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		1.0	0.17	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	0.040	ug/L	1
Isophorone	78-59-1	8270D	ND		1.0	0.22	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	0.040	ug/L	1
2-Methylphenol	95-48-7	8270D	ND		1.0	0.21	ug/L	1
3+4-Methylphenol	106-44-5	8270D	ND		2.0	0.46	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.0	0.050	ug/L	1
2-Nitroaniline	88-74-4	8270D	ND		2.0	0.66	ug/L	1
3-Nitroaniline	99-09-2	8270D	ND		2.0	0.15	ug/L	1
4-Nitroaniline	100-01-6	8270D	ND		2.0	1.3	ug/L	1
Nitrobenzene	98-95-3	8270D	ND		1.0	0.17	ug/L	1
2-Nitrophenol	88-75-5	8270D	ND		2.0	0.44	ug/L	1
4-Nitrophenol	100-02-7	8270D	ND		5.0	2.1	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.0	0.28	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.0	0.84	ug/L	1
Pentachlorophenol	87-86-5	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	0.060	ug/L	1
Phenol	108-95-2	8270D	ND		1.0	0.19	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.0	0.19	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.0	0.22	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		66	37-129
2-Fluorophenol		58	24-127
Nitrobenzene-d5		73	38-127
Phenol-d5		60	28-128
Terphenyl-d14		66	10-148
2,4,6-Tribromophenol		73	41-144

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith
Laboratory ID: RH12010-002
Description: TW-1
Matrix: Aqueous
Date Sampled: 08/11/2016 1100
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/18/2016 2026	MJI		20216
1		(Nitrate - N) 300.0	1	08/12/2016 2115	TAF		19788
1		(Sulfate) 300.0	1	08/12/2016 2115	TAF		19787

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.15		0.10	0.050	mg/L	1
Nitrate - N		300.0	0.44		0.020	0.0025	mg/L	1
Sulfate		300.0	6.6		1.0	0.28	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: CDM Smith
Laboratory ID: RH12010-002
Description: TW-1
Matrix: Aqueous
Date Sampled: 08/11/2016 1100
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/12/2016 1336	ALL		19719

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		120	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-002
Description: TW-1
Matrix: Aqueous
Date Sampled: 08/11/2016 1100
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/12/2016 2348	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-002
Description: TW-1
Matrix: Aqueous
Date Sampled: 08/11/2016 1100
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/12/2016 2348	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		112	70-130
Toluene-d8		111	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH12010-002
Description: TW-1
Matrix: Aqueous
Date Sampled: 08/11/2016 1100
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				20001

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH12010-002
Description: TW-1
Matrix: Aqueous
Date Sampled: 08/11/2016 1100
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1323	JCG		20020

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Butane, 2-chloro-2-methyl-		8270D	3.5				ug/L	1
Oleic Acid		8270D	3.2				ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-002
Description: TW-1
Matrix: Aqueous
Date Sampled: 08/11/2016 1100
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1323	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.0	0.040	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		1.0	0.040	ug/L	1
Acetophenone	98-86-2	8270D	ND		1.0	0.23	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	0.060	ug/L	1
Atrazine	1912-24-9	8270D	ND		1.0	0.20	ug/L	1
Benzaldehyde	100-52-7	8270D	ND		5.0	0.27	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	0.040	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	0.070	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	0.040	ug/L	1
1,1'-Biphenyl	92-52-4	8270D	ND		1.0	0.21	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.0	0.15	ug/L	1
Butyl benzyl phthalate	85-68-7	8270D	ND		5.0	0.21	ug/L	1
Caprolactam	105-60-2	8270D	ND		5.0	0.71	ug/L	1
Carbazole	86-74-8	8270D	ND		1.0	0.040	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.0	0.26	ug/L	1
4-Chloroaniline	106-47-8	8270D	ND		1.0	0.13	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.0	0.060	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.0	0.16	ug/L	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.0	0.17	ug/L	1
2-Chloronaphthalene	91-58-7	8270D	ND		1.0	0.15	ug/L	1
2-Chlorophenol	95-57-8	8270D	ND		1.0	0.15	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.0	0.16	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	0.030	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	0.030	ug/L	1
Dibenzofuran	132-64-9	8270D	ND		1.0	0.16	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		5.0	0.81	ug/L	1
2,4-Dichlorophenol	120-83-2	8270D	ND		1.0	0.19	ug/L	1
Diethylphthalate	84-66-2	8270D	ND		5.0	0.19	ug/L	1
Dimethyl phthalate	131-11-3	8270D	ND		5.0	0.18	ug/L	1
2,4-Dimethylphenol	105-67-9	8270D	ND		1.0	0.15	ug/L	1
Di-n-butyl phthalate	84-74-2	8270D	ND		5.0	0.42	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		5.0	0.89	ug/L	1
2,4-Dinitrophenol	51-28-5	8270D	ND		5.0	1.3	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.0	0.36	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.0	0.34	ug/L	1
Di-n-octylphthalate	117-84-0	8270D	ND		5.0	0.48	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		5.0	0.38	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	0.21	ug/L	1
Fluorene	86-73-7	8270D	ND		1.0	0.030	ug/L	1
Hexachlorobenzene	118-74-1	8270D	ND		1.0	0.15	ug/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		5.0	1.1	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-002
Description: TW-1
Matrix: Aqueous
Date Sampled: 08/11/2016 1100
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1323	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		1.0	0.17	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	0.040	ug/L	1
Isophorone	78-59-1	8270D	ND		1.0	0.22	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	0.040	ug/L	1
2-Methylphenol	95-48-7	8270D	ND		1.0	0.21	ug/L	1
3+4-Methylphenol	106-44-5	8270D	ND		2.0	0.46	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.0	0.050	ug/L	1
2-Nitroaniline	88-74-4	8270D	ND		2.0	0.66	ug/L	1
3-Nitroaniline	99-09-2	8270D	ND		2.0	0.15	ug/L	1
4-Nitroaniline	100-01-6	8270D	ND		2.0	1.3	ug/L	1
Nitrobenzene	98-95-3	8270D	ND		1.0	0.17	ug/L	1
2-Nitrophenol	88-75-5	8270D	ND		2.0	0.44	ug/L	1
4-Nitrophenol	100-02-7	8270D	ND		5.0	2.1	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.0	0.28	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.0	0.84	ug/L	1
Pentachlorophenol	87-86-5	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	0.060	ug/L	1
Phenol	108-95-2	8270D	ND		1.0	0.19	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.0	0.19	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.0	0.22	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		65	37-129
2-Fluorophenol		57	24-127
Nitrobenzene-d5		69	38-127
Phenol-d5		63	28-128
Terphenyl-d14		72	10-148
2,4,6-Tribromophenol		78	41-144

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith
Laboratory ID: RH12010-003
Description: DUP-1
Matrix: Aqueous
Date Sampled: 08/11/2016 0800
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/18/2016 2028	MJI		20216
1		(Nitrate - N) 300.0	1	08/12/2016 2139	TAF		19788
1		(Sulfate) 300.0	1	08/12/2016 2139	TAF		19787

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.14		0.10	0.050	mg/L	1
Nitrate - N		300.0	0.45		0.020	0.0025	mg/L	1
Sulfate		300.0	6.7		1.0	0.28	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: CDM Smith
Laboratory ID: RH12010-003
Description: DUP-1
Matrix: Aqueous
Date Sampled: 08/11/2016 0800
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/12/2016 1401	ALL		19719

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		121	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-003
Description: DUP-1
Matrix: Aqueous
Date Sampled: 08/11/2016 0800
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/13/2016 0011	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	4.0	J	10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith	Laboratory ID: RH12010-003
Description: DUP-1	Matrix: Aqueous
Date Sampled: 08/11/2016 0800	
Date Received: 08/12/2016	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/13/2016 0011	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		102	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH12010-003
Description: DUP-1
Matrix: Aqueous
Date Sampled: 08/11/2016 0800
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				20001

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH12010-003
Description: DUP-1
Matrix: Aqueous
Date Sampled: 08/11/2016 0800
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1348	JCG		20020

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	2.7				ug/L	1
Diethyltoluamide		8270D	2.2				ug/L	1

PQL = Practical quantitation limit
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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-003
Description: DUP-1
Matrix: Aqueous
Date Sampled: 08/11/2016 0800
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1348	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.0	0.040	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		1.0	0.040	ug/L	1
Acetophenone	98-86-2	8270D	ND		1.0	0.23	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	0.060	ug/L	1
Atrazine	1912-24-9	8270D	ND		1.0	0.20	ug/L	1
Benzaldehyde	100-52-7	8270D	ND		5.0	0.27	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	0.040	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	0.070	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	0.040	ug/L	1
1,1'-Biphenyl	92-52-4	8270D	ND		1.0	0.21	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.0	0.15	ug/L	1
Butyl benzyl phthalate	85-68-7	8270D	ND		5.0	0.21	ug/L	1
Caprolactam	105-60-2	8270D	ND		5.0	0.71	ug/L	1
Carbazole	86-74-8	8270D	ND		1.0	0.040	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.0	0.26	ug/L	1
4-Chloroaniline	106-47-8	8270D	ND		1.0	0.13	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.0	0.060	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.0	0.16	ug/L	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.0	0.17	ug/L	1
2-Chloronaphthalene	91-58-7	8270D	ND		1.0	0.15	ug/L	1
2-Chlorophenol	95-57-8	8270D	ND		1.0	0.15	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.0	0.16	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	0.030	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	0.030	ug/L	1
Dibenzofuran	132-64-9	8270D	ND		1.0	0.16	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		5.0	0.81	ug/L	1
2,4-Dichlorophenol	120-83-2	8270D	ND		1.0	0.19	ug/L	1
Diethylphthalate	84-66-2	8270D	ND		5.0	0.19	ug/L	1
Dimethyl phthalate	131-11-3	8270D	ND		5.0	0.18	ug/L	1
2,4-Dimethylphenol	105-67-9	8270D	ND		1.0	0.15	ug/L	1
Di-n-butyl phthalate	84-74-2	8270D	ND		5.0	0.42	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		5.0	0.89	ug/L	1
2,4-Dinitrophenol	51-28-5	8270D	ND		5.0	1.3	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.0	0.36	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.0	0.34	ug/L	1
Di-n-octylphthalate	117-84-0	8270D	ND		5.0	0.48	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		5.0	0.38	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	0.21	ug/L	1
Fluorene	86-73-7	8270D	ND		1.0	0.030	ug/L	1
Hexachlorobenzene	118-74-1	8270D	ND		1.0	0.15	ug/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		5.0	1.1	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-003
Description: DUP-1
Matrix: Aqueous
Date Sampled: 08/11/2016 0800
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1348	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		1.0	0.17	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	0.040	ug/L	1
Isophorone	78-59-1	8270D	ND		1.0	0.22	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	0.040	ug/L	1
2-Methylphenol	95-48-7	8270D	ND		1.0	0.21	ug/L	1
3+4-Methylphenol	106-44-5	8270D	ND		2.0	0.46	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.0	0.050	ug/L	1
2-Nitroaniline	88-74-4	8270D	ND		2.0	0.66	ug/L	1
3-Nitroaniline	99-09-2	8270D	ND		2.0	0.15	ug/L	1
4-Nitroaniline	100-01-6	8270D	ND		2.0	1.3	ug/L	1
Nitrobenzene	98-95-3	8270D	ND		1.0	0.17	ug/L	1
2-Nitrophenol	88-75-5	8270D	ND		2.0	0.44	ug/L	1
4-Nitrophenol	100-02-7	8270D	ND		5.0	2.1	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.0	0.28	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.0	0.84	ug/L	1
Pentachlorophenol	87-86-5	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	0.060	ug/L	1
Phenol	108-95-2	8270D	ND		1.0	0.19	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.0	0.19	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.0	0.22	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		57	37-129
2-Fluorophenol		48	24-127
Nitrobenzene-d5		62	38-127
Phenol-d5		55	28-128
Terphenyl-d14		69	10-148
2,4,6-Tribromophenol		65	41-144

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith
Laboratory ID: RH12010-004
Description: TW-3
Matrix: Aqueous
Date Sampled: 08/11/2016 1605
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/18/2016 2030	MJI		20216
1		(Nitrate - N) 300.0	1	08/12/2016 2251	TAF		19788
1		(Sulfate) 300.0	1	08/12/2016 2251	TAF		19787

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		0.10	0.050	mg/L	1
Nitrate - N		300.0	0.13		0.020	0.0025	mg/L	1
Sulfate		300.0	29		1.0	0.28	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: CDM Smith
Laboratory ID: RH12010-004
Description: TW-3
Matrix: Aqueous
Date Sampled: 08/11/2016 1605
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/12/2016 1425	ALL		19719

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		124	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-004
Description: TW-3
Matrix: Aqueous
Date Sampled: 08/11/2016 1605
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/13/2016 0034	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	2.5	J	10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-004
Description: TW-3
Matrix: Aqueous
Date Sampled: 08/11/2016 1605
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/13/2016 0034	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		102	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH12010-004
Description: TW-3
Matrix: Aqueous
Date Sampled: 08/11/2016 1605
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				20001

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH12010-004
Description: TW-3
Matrix: Aqueous
Date Sampled: 08/11/2016 1605
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1412	JCG		20020

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	3.4				ug/L	1
Chloroiodomethane		8270D	3.6				ug/L	1
Unknown		8270D	2.5				ug/L	1
Butanoic acid		8270D	6.0				ug/L	1
Unknown		8270D	4.6				ug/L	1
9-Octadecenoic acid, (E)-		8270D	9.9				ug/L	1

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B = Detected in the method blank
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J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-004
Description: TW-3
Matrix: Aqueous
Date Sampled: 08/11/2016 1605
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1412	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.0	0.040	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		1.0	0.040	ug/L	1
Acetophenone	98-86-2	8270D	ND		1.0	0.23	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	0.060	ug/L	1
Atrazine	1912-24-9	8270D	ND		1.0	0.20	ug/L	1
Benzaldehyde	100-52-7	8270D	ND		5.0	0.27	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	0.040	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	0.070	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	0.040	ug/L	1
1,1'-Biphenyl	92-52-4	8270D	ND		1.0	0.21	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.0	0.15	ug/L	1
Butyl benzyl phthalate	85-68-7	8270D	ND		5.0	0.21	ug/L	1
Caprolactam	105-60-2	8270D	ND		5.0	0.71	ug/L	1
Carbazole	86-74-8	8270D	ND		1.0	0.040	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.0	0.26	ug/L	1
4-Chloroaniline	106-47-8	8270D	ND		1.0	0.13	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.0	0.060	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.0	0.16	ug/L	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.0	0.17	ug/L	1
2-Chloronaphthalene	91-58-7	8270D	ND		1.0	0.15	ug/L	1
2-Chlorophenol	95-57-8	8270D	ND		1.0	0.15	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.0	0.16	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	0.030	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	0.030	ug/L	1
Dibenzofuran	132-64-9	8270D	ND		1.0	0.16	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		5.0	0.81	ug/L	1
2,4-Dichlorophenol	120-83-2	8270D	ND		1.0	0.19	ug/L	1
Diethylphthalate	84-66-2	8270D	ND		5.0	0.19	ug/L	1
Dimethyl phthalate	131-11-3	8270D	ND		5.0	0.18	ug/L	1
2,4-Dimethylphenol	105-67-9	8270D	ND		1.0	0.15	ug/L	1
Di-n-butyl phthalate	84-74-2	8270D	ND		5.0	0.42	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		5.0	0.89	ug/L	1
2,4-Dinitrophenol	51-28-5	8270D	ND		5.0	1.3	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.0	0.36	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.0	0.34	ug/L	1
Di-n-octylphthalate	117-84-0	8270D	ND		5.0	0.48	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		5.0	0.38	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	0.21	ug/L	1
Fluorene	86-73-7	8270D	ND		1.0	0.030	ug/L	1
Hexachlorobenzene	118-74-1	8270D	ND		1.0	0.15	ug/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		5.0	1.1	ug/L	1

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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-004
Description: TW-3
Matrix: Aqueous
Date Sampled: 08/11/2016 1605
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1412	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		1.0	0.17	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	0.040	ug/L	1
Isophorone	78-59-1	8270D	ND		1.0	0.22	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	0.040	ug/L	1
2-Methylphenol	95-48-7	8270D	ND		1.0	0.21	ug/L	1
3+4-Methylphenol	106-44-5	8270D	ND		2.0	0.46	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.0	0.050	ug/L	1
2-Nitroaniline	88-74-4	8270D	ND		2.0	0.66	ug/L	1
3-Nitroaniline	99-09-2	8270D	ND		2.0	0.15	ug/L	1
4-Nitroaniline	100-01-6	8270D	ND		2.0	1.3	ug/L	1
Nitrobenzene	98-95-3	8270D	ND		1.0	0.17	ug/L	1
2-Nitrophenol	88-75-5	8270D	ND		2.0	0.44	ug/L	1
4-Nitrophenol	100-02-7	8270D	ND		5.0	2.1	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.0	0.28	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.0	0.84	ug/L	1
Pentachlorophenol	87-86-5	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	0.060	ug/L	1
Phenol	108-95-2	8270D	ND		1.0	0.19	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.0	0.19	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.0	0.22	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		70	37-129
2-Fluorophenol		58	24-127
Nitrobenzene-d5		73	38-127
Phenol-d5		63	28-128
Terphenyl-d14		77	10-148
2,4,6-Tribromophenol		81	41-144

PQL = Practical quantitation limit
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith
Laboratory ID: RH12010-004
Description: TW-3
Matrix: Aqueous
Date Sampled: 08/11/2016 1605
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1840	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		1.0	0.17	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	0.052	J	0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	1.1	J	5.0	0.63	ug/L	1
Copper	7440-50-8	6020A	1.9		1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	550		20	6.3	ug/L	1
Lead	7439-92-1	6020A	0.18	J	1.0	0.15	ug/L	1
Manganese	7439-96-5	6020A	280		5.0	0.54	ug/L	1
Nickel	7440-02-0	6020A	7.8		5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	7440-66-6	6020A	5.6	J	10	1.6	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith
Laboratory ID: RH12010-004
Description: TW-3
Matrix: Aqueous
Date Sampled: 08/11/2016 1605
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/18/2016 1855	CLM	08/18/2016 1005	20127

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	0.000073	J	0.00010	0.000028	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith
Laboratory ID: RH12010-005
Description: TW-4
Matrix: Aqueous
Date Sampled: 08/11/2016 1715
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/18/2016 2032	MJI		20216
1		(Nitrate - N) 300.0	1	08/12/2016 2315	TAF		19788
1		(Sulfate) 300.0	1	08/12/2016 2315	TAF		19787

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	ND		0.10	0.050	mg/L	1
Nitrate - N		300.0	0.80		0.020	0.0025	mg/L	1
Sulfate		300.0	23		1.0	0.28	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: CDM Smith
Laboratory ID: RH12010-005
Description: TW-4
Matrix: Aqueous
Date Sampled: 08/11/2016 1715
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/12/2016 1449	ALL		19719

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		121	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-005
Description: TW-4
Matrix: Aqueous
Date Sampled: 08/11/2016 1715
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/13/2016 0056	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	2.6	J	10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-005
Description: TW-4
Matrix: Aqueous
Date Sampled: 08/11/2016 1715
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/13/2016 0056	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
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P = The RPD between two GC columns exceeds 40%
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH12010-005
Description: TW-4
Matrix: Aqueous
Date Sampled: 08/11/2016 1715
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				20001

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/L	1

PQL = Practical quantitation limit
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ND = Not detected at or above the MDL
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH12010-005
Description: TW-4
Matrix: Aqueous
Date Sampled: 08/11/2016 1715
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1437	JCG		20020

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Butane, 2-chloro-2-methyl-		8270D	3.4				ug/L	1
Unknown		8270D	3.3				ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-005
Description: TW-4
Matrix: Aqueous
Date Sampled: 08/11/2016 1715
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1437	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.0	0.040	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		1.0	0.040	ug/L	1
Acetophenone	98-86-2	8270D	ND		1.0	0.23	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	0.060	ug/L	1
Atrazine	1912-24-9	8270D	ND		1.0	0.20	ug/L	1
Benzaldehyde	100-52-7	8270D	ND		5.0	0.27	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	0.040	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	0.070	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	0.040	ug/L	1
1,1'-Biphenyl	92-52-4	8270D	ND		1.0	0.21	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.0	0.15	ug/L	1
Butyl benzyl phthalate	85-68-7	8270D	ND		5.0	0.21	ug/L	1
Caprolactam	105-60-2	8270D	ND		5.0	0.71	ug/L	1
Carbazole	86-74-8	8270D	ND		1.0	0.040	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.0	0.26	ug/L	1
4-Chloroaniline	106-47-8	8270D	ND		1.0	0.13	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.0	0.060	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.0	0.16	ug/L	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.0	0.17	ug/L	1
2-Chloronaphthalene	91-58-7	8270D	ND		1.0	0.15	ug/L	1
2-Chlorophenol	95-57-8	8270D	ND		1.0	0.15	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.0	0.16	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	0.030	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	0.030	ug/L	1
Dibenzofuran	132-64-9	8270D	ND		1.0	0.16	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		5.0	0.81	ug/L	1
2,4-Dichlorophenol	120-83-2	8270D	ND		1.0	0.19	ug/L	1
Diethylphthalate	84-66-2	8270D	ND		5.0	0.19	ug/L	1
Dimethyl phthalate	131-11-3	8270D	ND		5.0	0.18	ug/L	1
2,4-Dimethylphenol	105-67-9	8270D	ND		1.0	0.15	ug/L	1
Di-n-butyl phthalate	84-74-2	8270D	ND		5.0	0.42	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		5.0	0.89	ug/L	1
2,4-Dinitrophenol	51-28-5	8270D	ND		5.0	1.3	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.0	0.36	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.0	0.34	ug/L	1
Di-n-octylphthalate	117-84-0	8270D	ND		5.0	0.48	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		5.0	0.38	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	0.21	ug/L	1
Fluorene	86-73-7	8270D	ND		1.0	0.030	ug/L	1
Hexachlorobenzene	118-74-1	8270D	ND		1.0	0.15	ug/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		5.0	1.1	ug/L	1

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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-005
Description: TW-4
Matrix: Aqueous
Date Sampled: 08/11/2016 1715
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1437	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		1.0	0.17	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	0.040	ug/L	1
Isophorone	78-59-1	8270D	ND		1.0	0.22	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	0.040	ug/L	1
2-Methylphenol	95-48-7	8270D	ND		1.0	0.21	ug/L	1
3+4-Methylphenol	106-44-5	8270D	ND		2.0	0.46	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.0	0.050	ug/L	1
2-Nitroaniline	88-74-4	8270D	ND		2.0	0.66	ug/L	1
3-Nitroaniline	99-09-2	8270D	ND		2.0	0.15	ug/L	1
4-Nitroaniline	100-01-6	8270D	ND		2.0	1.3	ug/L	1
Nitrobenzene	98-95-3	8270D	ND		1.0	0.17	ug/L	1
2-Nitrophenol	88-75-5	8270D	ND		2.0	0.44	ug/L	1
4-Nitrophenol	100-02-7	8270D	ND		5.0	2.1	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.0	0.28	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.0	0.84	ug/L	1
Pentachlorophenol	87-86-5	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	0.060	ug/L	1
Phenol	108-95-2	8270D	ND		1.0	0.19	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.0	0.19	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.0	0.22	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		59	37-129
2-Fluorophenol		52	24-127
Nitrobenzene-d5		64	38-127
Phenol-d5		52	28-128
Terphenyl-d14		61	10-148
2,4,6-Tribromophenol		63	41-144

PQL = Practical quantitation limit
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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-006
Description: TRIP BLANK
Matrix: Aqueous
Date Sampled: 08/11/2016
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/12/2016 2216	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH12010-006
Description: TRIP BLANK
Matrix: Aqueous
Date Sampled: 08/11/2016
Date Received: 08/12/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/12/2016 2216	ECP		19770

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		107	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ19787-001
Batch: 19787
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.28	mg/L	08/12/2016 2002

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19787-002
Batch: 19787
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	19		1	94	90-110	08/12/2016 2026

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH12010-003MS
Batch: 19787
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	6.7	20	26		1	98	90-110	08/12/2016 2203

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH12010-003MD
Batch: 19787
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	6.7	20	26		1	97	0.37	90-110	20	08/12/2016 2227

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ19788-001
Batch: 19788
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N	ND		1	0.020	0.0025	mg/L	08/12/2016 2002

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19788-002
Batch: 19788
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	0.80	0.81		1	102	90-110	08/12/2016 2026

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH12010-003MS
Batch: 19788
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	0.45	0.80	1.2		1	100	90-110	08/12/2016 2203

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH12010-003MD
Batch: 19788
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	0.45	0.80	1.2		1	99	0.64	90-110	20	08/12/2016 2227

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20216-001
Batch: 20216
Analytical Method: 350.1

Matrix: Aqueous
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	ND		1	0.10	0.050	mg/L	08/18/2016 1936

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20216-002
Batch: 20216
Analytical Method: 350.1

Matrix: Aqueous
Prep Method: 350.1

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	1.0	1.0		1	104	90-110	08/18/2016 1938

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS (SIM with isotope dilution) - MB

Sample ID: RQ19719-001
Batch: 19719
Analytical Method: 8260B (SIM iso.)

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	3.0	0.85	ug/L	08/12/2016 1007

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		122	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS (SIM with isotope dilution) - LCS

Sample ID: RQ19719-002
Batch: 19719
Analytical Method: 8260B (SIM iso.)

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	50	47		1	93	70-130	08/12/2016 0933

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		118	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19770-001
Batch: 19770
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	10	2.0	ug/L	08/12/2016 2135
Benzene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Bromodichloromethane	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Bromoform	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Bromomethane (Methyl bromide)	ND		1	0.50	0.40	ug/L	08/12/2016 2135
2-Butanone (MEK)	ND		1	10	2.0	ug/L	08/12/2016 2135
Carbon disulfide	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Carbon tetrachloride	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Chlorobenzene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Chloroethane	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Chloroform	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Chloromethane (Methyl chloride)	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Cyclohexane	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Dibromochloromethane	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,2-Dibromoethane (EDB)	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,3-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,4-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,2-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Dichlorodifluoromethane	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,1-Dichloroethane	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,2-Dichloroethane	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,1-Dichloroethene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
trans-1,2-Dichloroethene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
cis-1,2-Dichloroethene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,2-Dichloropropane	ND		1	0.50	0.40	ug/L	08/12/2016 2135
cis-1,3-Dichloropropene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
trans-1,3-Dichloropropene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Ethylbenzene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
2-Hexanone	ND		1	10	2.0	ug/L	08/12/2016 2135
Isopropylbenzene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Methyl acetate	ND		1	1.0	0.40	ug/L	08/12/2016 2135
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.40	ug/L	08/12/2016 2135
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	08/12/2016 2135
Methylcyclohexane	ND		1	5.0	0.40	ug/L	08/12/2016 2135
Methylene chloride	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Styrene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,1,2,2-Tetrachloroethane	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Tetrachloroethene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Toluene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	0.40	ug/L	08/12/2016 2135
1,2,4-Trichlorobenzene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,1,2-Trichloroethane	ND		1	0.50	0.40	ug/L	08/12/2016 2135
1,1,1-Trichloroethane	ND		1	0.50	0.40	ug/L	08/12/2016 2135

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19770-001
Batch: 19770
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Trichlorofluoromethane	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Vinyl chloride	ND		1	0.50	0.40	ug/L	08/12/2016 2135
Xylenes (total)	ND		1	1.0	0.40	ug/L	08/12/2016 2135

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		107	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19770-002
Batch: 19770
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	113	60-140	08/12/2016 2034
Benzene	50	44		1	88	70-130	08/12/2016 2034
Bromodichloromethane	50	46		1	92	70-130	08/12/2016 2034
Bromoform	50	37		1	73	70-130	08/12/2016 2034
Bromomethane (Methyl bromide)	50	40		1	79	60-140	08/12/2016 2034
2-Butanone (MEK)	100	120		1	118	60-140	08/12/2016 2034
Carbon disulfide	50	43		1	85	60-140	08/12/2016 2034
Carbon tetrachloride	50	43		1	87	70-130	08/12/2016 2034
Chlorobenzene	50	43		1	86	70-130	08/12/2016 2034
Chloroethane	50	39		1	79	60-140	08/12/2016 2034
Chloroform	50	44		1	88	70-130	08/12/2016 2034
Chloromethane (Methyl chloride)	50	44		1	88	50-130	08/12/2016 2034
Cyclohexane	50	40		1	79	70-130	08/12/2016 2034
1,2-Dibromo-3-chloropropane (DBCP)	50	42		1	84	70-130	08/12/2016 2034
Dibromochloromethane	50	45		1	91	70-130	08/12/2016 2034
1,2-Dibromoethane (EDB)	50	43		1	86	70-130	08/12/2016 2034
1,3-Dichlorobenzene	50	42		1	85	70-130	08/12/2016 2034
1,4-Dichlorobenzene	50	41		1	82	70-130	08/12/2016 2034
1,2-Dichlorobenzene	50	45		1	89	70-130	08/12/2016 2034
Dichlorodifluoromethane	50	53		1	107	60-140	08/12/2016 2034
1,1-Dichloroethane	50	46		1	93	70-130	08/12/2016 2034
1,2-Dichloroethane	50	45		1	89	70-130	08/12/2016 2034
1,1-Dichloroethene	50	45		1	91	70-130	08/12/2016 2034
trans-1,2-Dichloroethene	50	45		1	91	70-130	08/12/2016 2034
cis-1,2-Dichloroethene	50	47		1	95	70-130	08/12/2016 2034
1,2-Dichloropropane	50	45		1	90	70-130	08/12/2016 2034
cis-1,3-Dichloropropene	50	48		1	96	70-130	08/12/2016 2034
trans-1,3-Dichloropropene	50	43		1	87	70-130	08/12/2016 2034
Ethylbenzene	50	43		1	85	70-130	08/12/2016 2034
2-Hexanone	100	92		1	92	60-140	08/12/2016 2034
Isopropylbenzene	50	43		1	85	70-130	08/12/2016 2034
Methyl acetate	50	52		1	104	60-140	08/12/2016 2034
Methyl tertiary butyl ether (MTBE)	50	42		1	84	70-130	08/12/2016 2034
4-Methyl-2-pentanone	100	99		1	99	60-140	08/12/2016 2034
Methylcyclohexane	50	42		1	85	70-130	08/12/2016 2034
Methylene chloride	50	43		1	86	70-130	08/12/2016 2034
Styrene	50	45		1	90	70-130	08/12/2016 2034
1,1,2,2-Tetrachloroethane	50	45		1	90	70-130	08/12/2016 2034
Tetrachloroethene	50	44		1	88	70-130	08/12/2016 2034
Toluene	50	43		1	87	70-130	08/12/2016 2034
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	45		1	91	70-130	08/12/2016 2034
1,2,4-Trichlorobenzene	50	42		1	84	70-130	08/12/2016 2034
1,1,2-Trichloroethane	50	43		1	87	70-130	08/12/2016 2034
1,1,1-Trichloroethane	50	43		1	86	70-130	08/12/2016 2034

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19770-002
Batch: 19770
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	47		1	95	70-130	08/12/2016 2034
Trichlorofluoromethane	50	48		1	96	60-140	08/12/2016 2034
Vinyl chloride	50	43		1	86	60-140	08/12/2016 2034
Xylenes (total)	100	86		1	86	70-130	08/12/2016 2034

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		113	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		112	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19864-001
Batch: 19864
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/15/2016 1547

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	1.0	0.21	ug/L	08/17/2016 0941
2,4,5-Trichlorophenol	ND		1	1.0	0.19	ug/L	08/17/2016 0941
2,4,6-Trichlorophenol	ND		1	1.0	0.22	ug/L	08/17/2016 0941
2,4-Dichlorophenol	ND		1	1.0	0.19	ug/L	08/17/2016 0941
2,4-Dimethylphenol	ND		1	1.0	0.15	ug/L	08/17/2016 0941
2,4-Dinitrophenol	ND		1	5.0	1.3	ug/L	08/17/2016 0941
2,4-Dinitrotoluene	ND		1	2.0	0.36	ug/L	08/17/2016 0941
2,6-Dinitrotoluene	ND		1	2.0	0.34	ug/L	08/17/2016 0941
2-Chloronaphthalene	ND		1	1.0	0.15	ug/L	08/17/2016 0941
2-Chlorophenol	ND		1	1.0	0.15	ug/L	08/17/2016 0941
2-Methylnaphthalene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
2-Methylphenol	ND		1	1.0	0.21	ug/L	08/17/2016 0941
2-Nitroaniline	ND		1	2.0	0.66	ug/L	08/17/2016 0941
2-Nitrophenol	ND		1	2.0	0.44	ug/L	08/17/2016 0941
3+4-Methylphenol	ND		1	2.0	0.46	ug/L	08/17/2016 0941
3,3'-Dichlorobenzidine	ND		1	5.0	0.81	ug/L	08/17/2016 0941
3-Nitroaniline	ND		1	2.0	0.15	ug/L	08/17/2016 0941
4,6-Dinitro-2-methylphenol	ND		1	5.0	0.89	ug/L	08/17/2016 0941
4-Bromophenyl phenyl ether	ND		1	1.0	0.15	ug/L	08/17/2016 0941
4-Chloro-3-methyl phenol	ND		1	1.0	0.26	ug/L	08/17/2016 0941
4-Chloroaniline	ND		1	1.0	0.13	ug/L	08/17/2016 0941
4-Chlorophenyl phenyl ether	ND		1	1.0	0.16	ug/L	08/17/2016 0941
4-Nitroaniline	ND		1	2.0	1.3	ug/L	08/17/2016 0941
4-Nitrophenol	ND		1	5.0	2.1	ug/L	08/17/2016 0941
Acenaphthene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Acenaphthylene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Acetophenone	ND		1	1.0	0.23	ug/L	08/17/2016 0941
Anthracene	ND		1	1.0	0.060	ug/L	08/17/2016 0941
Atrazine	ND		1	1.0	0.20	ug/L	08/17/2016 0941
Benzaldehyde	ND		1	5.0	0.27	ug/L	08/17/2016 0941
Benzo(a)anthracene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Benzo(a)pyrene	ND		1	1.0	0.070	ug/L	08/17/2016 0941
Benzo(b)fluoranthene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Benzo(g,h,i)perylene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Benzo(k)fluoranthene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
bis (2-Chloro-1-methylethyl) ether	ND		1	1.0	0.17	ug/L	08/17/2016 0941
bis(2-Chloroethoxy)methane	ND		1	1.0	0.060	ug/L	08/17/2016 0941
bis(2-Chloroethyl)ether	ND		1	1.0	0.16	ug/L	08/17/2016 0941
bis(2-Ethylhexyl)phthalate	ND		1	5.0	0.38	ug/L	08/17/2016 0941
Butyl benzyl phthalate	ND		1	5.0	0.21	ug/L	08/17/2016 0941
Caprolactam	ND		1	5.0	0.71	ug/L	08/17/2016 0941
Carbazole	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Chrysene	ND		1	1.0	0.030	ug/L	08/17/2016 0941
Di-n-butyl phthalate	ND		1	5.0	0.42	ug/L	08/17/2016 0941

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19864-001
Batch: 19864
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/15/2016 1547

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	5.0	0.48	ug/L	08/17/2016 0941
Dibenzo(a,h)anthracene	ND		1	1.0	0.030	ug/L	08/17/2016 0941
Dibenzofuran	ND		1	1.0	0.16	ug/L	08/17/2016 0941
Diethylphthalate	ND		1	5.0	0.19	ug/L	08/17/2016 0941
Dimethyl phthalate	ND		1	5.0	0.18	ug/L	08/17/2016 0941
Fluoranthene	ND		1	1.0	0.21	ug/L	08/17/2016 0941
Fluorene	ND		1	1.0	0.030	ug/L	08/17/2016 0941
Hexachlorobenzene	ND		1	1.0	0.15	ug/L	08/17/2016 0941
Hexachlorobutadiene	ND		1	1.0	0.17	ug/L	08/17/2016 0941
Hexachlorocyclopentadiene	ND		1	5.0	1.1	ug/L	08/17/2016 0941
Hexachloroethane	ND		1	1.0	0.17	ug/L	08/17/2016 0941
Indeno(1,2,3-c,d)pyrene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Isophorone	ND		1	1.0	0.22	ug/L	08/17/2016 0941
N-Nitrosodi-n-propylamine	ND		1	1.0	0.28	ug/L	08/17/2016 0941
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	1.0	0.84	ug/L	08/17/2016 0941
Naphthalene	ND		1	1.0	0.050	ug/L	08/17/2016 0941
Nitrobenzene	ND		1	1.0	0.17	ug/L	08/17/2016 0941
Pentachlorophenol	ND		1	5.0	1.3	ug/L	08/17/2016 0941
Phenanthrene	ND		1	1.0	0.060	ug/L	08/17/2016 0941
Phenol	ND		1	1.0	0.19	ug/L	08/17/2016 0941
Pyrene	ND		1	1.0	0.16	ug/L	08/17/2016 0941

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		67	41-144
2-Fluorobiphenyl		75	37-129
2-Fluorophenol		64	24-127
Nitrobenzene-d5		82	38-127
Phenol-d5		72	28-128
Terphenyl-d14		87	10-148

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19864-002
Batch: 19864
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/15/2016 1547

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	10	7.6		1	76	42-120	08/17/2016 1209
2,4,5-Trichlorophenol	10	8.5		1	85	56-118	08/17/2016 1209
2,4,6-Trichlorophenol	10	7.7		1	77	55-121	08/17/2016 1209
2,4-Dichlorophenol	20	15		1	76	55-117	08/17/2016 1209
2,4-Dimethylphenol	10	9.2		1	92	36-170	08/17/2016 1209
2,4-Dinitrophenol	10	7.9		1	79	47-133	08/17/2016 1209
2,4-Dinitrotoluene	10	9.6		1	96	59-127	08/17/2016 1209
2,6-Dinitrotoluene	10	8.8		1	88	59-126	08/17/2016 1209
2-Chloronaphthalene	10	7.4		1	74	46-100	08/17/2016 1209
2-Chlorophenol	10	8.1		1	81	50-117	08/17/2016 1209
2-Methylnaphthalene	10	7.5		1	75	57-115	08/17/2016 1209
2-Methylphenol	10	10		1	100	56-119	08/17/2016 1209
2-Nitroaniline	10	8.6		1	86	60-124	08/17/2016 1209
2-Nitrophenol	10	8.3		1	83	51-118	08/17/2016 1209
3+4-Methylphenol	10	10		1	101	53-119	08/17/2016 1209
3-Nitroaniline	10	4.7		1	47	43-123	08/17/2016 1209
4,6-Dinitro-2-methylphenol	10	10		1	105	56-128	08/17/2016 1209
4-Bromophenyl phenyl ether	10	8.6		1	86	55-121	08/17/2016 1209
4-Chloro-3-methyl phenol	10	8.7		1	87	58-125	08/17/2016 1209
4-Chloroaniline	10	8.4		1	84	10-128	08/17/2016 1209
4-Chlorophenyl phenyl ether	10	7.7		1	77	55-121	08/17/2016 1209
4-Nitroaniline	10	8.6		1	86	60-135	08/17/2016 1209
4-Nitrophenol	20	22		1	108	53-130	08/17/2016 1209
Acenaphthene	10	8.4		1	84	54-118	08/17/2016 1209
Acenaphthylene	10	8.5		1	85	48-155	08/17/2016 1209
Acetophenone	10	9.0		1	90	52-125	08/17/2016 1209
Anthracene	10	9.4		1	94	55-122	08/17/2016 1209
Atrazine	10	8.1		1	81	25-121	08/17/2016 1209
Benzaldehyde	10	11		1	106	45-115	08/17/2016 1209
Benzo(a)anthracene	10	9.6		1	96	56-123	08/17/2016 1209
Benzo(a)pyrene	10	8.6		1	86	54-124	08/17/2016 1209
Benzo(b)fluoranthene	10	9.4		1	94	55-136	08/17/2016 1209
Benzo(g,h,i)perylene	10	10		1	103	42-129	08/17/2016 1209
Benzo(k)fluoranthene	10	9.1		1	91	53-132	08/17/2016 1209
bis (2-Chloro-1-methylethyl) ether	10	9.5		1	95	42-124	08/17/2016 1209
bis(2-Chloroethoxy)methane	10	9.1		1	91	44-127	08/17/2016 1209
bis(2-Chloroethyl)ether	10	9.2		1	92	46-120	08/17/2016 1209
bis(2-Ethylhexyl)phthalate	10	7.6		1	76	56-128	08/17/2016 1209
Butyl benzyl phthalate	10	11		1	112	54-135	08/17/2016 1209
Caprolactam	10	9.7		1	97	44-152	08/17/2016 1209
Carbazole	10	9.4		1	94	45-101	08/17/2016 1209
Chrysene	10	9.7		1	97	54-120	08/17/2016 1209
Di-n-butyl phthalate	10	11		1	109	60-131	08/17/2016 1209
Di-n-octylphthalate	10	6.7		1	67	50-136	08/17/2016 1209

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19864-002
Batch: 19864
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/15/2016 1547

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Dibenzo(a,h)anthracene	10	6.7		1	67	50-127	08/17/2016 1209
Dibenzofuran	10	8.0		1	80	58-118	08/17/2016 1209
Diethylphthalate	10	9.6		1	96	60-125	08/17/2016 1209
Dimethyl phthalate	10	8.9		1	89	60-122	08/17/2016 1209
Fluoranthene	10	9.2		1	92	58-124	08/17/2016 1209
Fluorene	10	8.2		1	82	57-119	08/17/2016 1209
Hexachlorobenzene	10	9.3		1	93	55-118	08/17/2016 1209
Hexachlorobutadiene	10	6.5		1	65	53-116	08/17/2016 1209
Hexachlorocyclopentadiene	50	15		1	30	16-96	08/17/2016 1209
Hexachloroethane	10	7.1		1	71	31-110	08/17/2016 1209
Indeno(1,2,3-c,d)pyrene	10	9.6		1	96	48-126	08/17/2016 1209
Isophorone	10	9.5		1	95	57-123	08/17/2016 1209
N-Nitrosodi-n-propylamine	10	11		1	109	54-127	08/17/2016 1209
N-Nitrosodiphenylamine (Diphenylamine)	10	3.9		1	39	35-146	08/17/2016 1209
Naphthalene	10	7.7		1	77	52-109	08/17/2016 1209
Nitrobenzene	10	9.4		1	94	51-122	08/17/2016 1209
Pentachlorophenol	20	18		1	91	42-131	08/17/2016 1209
Phenanthrene	10	8.9		1	89	56-119	08/17/2016 1209
Phenol	10	8.0		1	80	49-117	08/17/2016 1209
Pyrene	10	9.9		1	99	55-127	08/17/2016 1209

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		80	41-144
2-Fluorobiphenyl		76	37-129
2-Fluorophenol		71	24-127
Nitrobenzene-d5		90	38-127
Phenol-d5		77	28-128
Terphenyl-d14		87	10-148

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MB

Sample ID: RQ19846-001
Batch: 19846
Analytical Method: 6020A

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 08/15/2016 1302

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	0.19	J	1	1.0	0.17	ug/L	08/18/2016 1801
Arsenic	ND		1	1.0	0.26	ug/L	08/18/2016 1801
Beryllium	ND		1	0.40	0.12	ug/L	08/18/2016 1801
Cadmium	ND		1	0.10	0.044	ug/L	08/18/2016 1801
Chromium	ND		1	5.0	0.63	ug/L	08/18/2016 1801
Copper	0.19	J	1	1.0	0.15	ug/L	08/18/2016 1801
Iron	8.8	J	1	20	6.3	ug/L	08/18/2016 1801
Lead	0.88	J	1	1.0	0.15	ug/L	08/18/2016 1801
Manganese	0.83	J	1	5.0	0.54	ug/L	08/18/2016 1801
Nickel	ND		1	5.0	0.63	ug/L	08/18/2016 1801
Selenium	ND		1	1.0	0.95	ug/L	08/18/2016 1801
Silver	ND		1	1.0	0.17	ug/L	08/18/2016 1801
Thallium	ND		1	0.50	0.075	ug/L	08/18/2016 1801
Zinc	2.0	J	1	10	1.6	ug/L	08/18/2016 1801

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - LCS

Sample ID: RQ19846-002
Batch: 19846
Analytical Method: 6020A

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 08/15/2016 1302

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	100	100		1	102	80-120	08/18/2016 1807
Arsenic	100	110		1	108	80-120	08/18/2016 1807
Beryllium	100	110		1	110	80-120	08/18/2016 1807
Cadmium	100	100		1	103	80-120	08/18/2016 1807
Chromium	100	100		1	105	80-120	08/18/2016 1807
Copper	100	100		1	105	80-120	08/18/2016 1807
Iron	1000	1100		1	111	80-120	08/18/2016 1807
Lead	100	100		1	105	80-120	08/18/2016 1807
Manganese	100	110		1	106	80-120	08/18/2016 1807
Nickel	100	100		1	104	80-120	08/18/2016 1807
Selenium	100	110		1	114	80-120	08/18/2016 1807
Silver	100	110		1	107	80-120	08/18/2016 1807
Thallium	100	110		1	105	80-120	08/18/2016 1807
Zinc	100	110		1	111	80-120	08/18/2016 1807

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MB

Sample ID: RQ20127-001
Batch: 20127
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 08/18/2016 1005

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	0.000029	J	1	0.00010	0.000028	mg/L	08/18/2016 1850

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - LCS

Sample ID: RQ20127-002
Batch: 20127
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 08/18/2016 1005

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.0020	0.0019		1	97	80-120	08/18/2016 1853

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MS

Sample ID: RH12010-004MS
Batch: 20127
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 08/18/2016 1005

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.000073	0.0020	0.0017	N	1	83	85-115	08/18/2016 1858

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MSD

Sample ID: RH12010-004MD
Batch: 20127
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 08/18/2016 1005

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.000073	0.0020	0.0018	N	1	84	1.7	85-115	20	08/18/2016 1900

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Chain of Custody
and
Miscellaneous Documents

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63420

Client	CDM Smith
Address	5460 Glenwood Ave Ste 400
City	Raleigh
State	NC
Zip Code	27612
Project Name	Bad Holding
Project No.	
P.O. No.	
Report to Contact	Dan Forbes
Sampler's Signature	x Mark Dorazio
Printed Name	Mark Dorazio
Telephone No. / E-mail	Forbesd@cdmsmith.com
Quote No.	
Page	1 of 1
RH12010	

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab/Composite	Aqueous	Solid	Non-Aqueous	Unpres.	HCl/SO4	HNO3	HCl	NaOH	Specify	VOC	VOC LAB	SVOC	Metals	NO3	SO4	Ammonia	Remarks / Cooler I.D.
TW-6	8-11-16	0935	G	X									↓	↓	↓	↓	↓	↓	↓	
TW-1	↓	1100	↓	X																
DCP-1		0800		X																
TW-3		1605		X																
TW-4	↓	1715	↓	X																
Trip Blank				X									↓							

Turn Around Time Required (Prior lab approval required for expedited TAT.)	Sample Disposal	Possible Hazard Identification	QC Requirements (Specify)
☐ Standard ☒ Rush (Specify) 5 day	☐ Return to Client ☒ Disposal by Lab	☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown	

	Date	Time		Date	Time
1. Relinquished by: Mark Dorazio	8-11-16	2000	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEx	8-12-16	0950	4. Laboratory received by: B Elliott	8-12-16	0950

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) Yes No Ice Pack
Receipt Temp. 2.3 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 03-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: CDM Smith Cooler Inspected by/date: SBE / 8/12/16 Lot #: R1412 010

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: 16-982 Cl strip ID: 16-800

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

12.3/23 °C / / °C / / °C / / °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 16 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☑	No ☐	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☐	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☑	No ☐		15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☑	No ☐	NA ☐	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☑	No ☐	NA ☐	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☑	No ☐		22. Was the quote number used taken from the container label?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) -006 (2) were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be >12 by _____ Date: _____

Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR# _____

Sample labels applied by: SBE Verified by: _____ Date: _____

Comments: -001, 002, 003, 005 missing nitric bottles

Report of Analysis

CDM Smith
5400 Glenwood Avenue
Suite 400
Raleigh, NC 27612
Attention: Matthew Colone

Project Name: Bud Holding

Lot Number: RH13003

Date Completed: 08/19/2016

Nisreen Saikaly
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
CDM Smith
Lot Number: RH13003

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary
CDM Smith
Lot Number: RH13003

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	TW-2	Aqueous	08/12/2016 0800	08/13/2016
002	TW-5	Aqueous	08/12/2016 0845	08/13/2016
003	TW-7	Aqueous	08/12/2016 0930	08/13/2016
004	TW-1	Aqueous	08/12/2016 0700	08/13/2016
005	TW-6	Aqueous	08/12/2016 0705	08/13/2016
006	TW-4	Aqueous	08/12/2016 0710	08/13/2016
007	DUP-1	Aqueous	08/12/2016 0800	08/13/2016

(7 samples)

Executive Summary
CDM Smith
Lot Number: RH13003

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	TW-2	Aqueous	Ammonia - N (gas	350.1	0.055	J	mg/L	7
001	TW-2	Aqueous	Nitrate - N	300.0	0.034		mg/L	7
001	TW-2	Aqueous	Sulfate	300.0	85		mg/L	7
001	TW-2	Aqueous	Acetone	8260B	14		ug/L	9
001	TW-2	Aqueous	2-Butanone (MEK)	8260B	2.1	J	ug/L	9
001	TW-2	Aqueous	Unknown	8270D	3.0		ug/L	12
001	TW-2	Aqueous	Unknown	8270D	2.8		ug/L	12
001	TW-2	Aqueous	Unknown	8270D	5.0		ug/L	12
001	TW-2	Aqueous	Butane, 1,3-dibromo-	8270D	9.3		ug/L	12
001	TW-2	Aqueous	Silane, chlorotripropyl-	8270D	20		ug/L	12
001	TW-2	Aqueous	4-tert-Butylphenyl acetate	8270D	32		ug/L	12
001	TW-2	Aqueous	Unknown	8270D	9.6		ug/L	12
001	TW-2	Aqueous	Unknown	8270D	17		ug/L	12
001	TW-2	Aqueous	Phenol, 4-(1,1,3,3-	8270D	33		ug/L	12
001	TW-2	Aqueous	Unknown	8270D	44		ug/L	12
001	TW-2	Aqueous	Bis(3-chloro-1-propyl)(1-	8270D	7.8		ug/L	12
001	TW-2	Aqueous	7,9-Di-tert-butyl-1-	8270D	2.9		ug/L	12
001	TW-2	Aqueous	Oxybenzone	8270D	2.1		ug/L	12
001	TW-2	Aqueous	6-Octadecenoic acid, (Z)-	8270D	3.0		ug/L	12
001	TW-2	Aqueous	Cadmium	6020A	0.12		ug/L	15
001	TW-2	Aqueous	Chromium	6020A	1.0	J	ug/L	15
001	TW-2	Aqueous	Copper	6020A	4.2	B	ug/L	15
001	TW-2	Aqueous	Iron	6020A	1000	B	ug/L	15
001	TW-2	Aqueous	Lead	6020A	0.34	BJ	ug/L	15
001	TW-2	Aqueous	Manganese	6020A	5800	B	ug/L	15
001	TW-2	Aqueous	Nickel	6020A	7.2		ug/L	15
001	TW-2	Aqueous	Zinc	6020A	7.2	BJ	ug/L	15
001	TW-2	Aqueous	Mercury	7470A	0.000074	BJ	mg/L	16
002	TW-5	Aqueous	Ammonia - N (gas	350.1	2.8		mg/L	17
002	TW-5	Aqueous	Nitrate - N	300.0	0.0086	J	mg/L	17
002	TW-5	Aqueous	Sulfate	300.0	4.9		mg/L	17
002	TW-5	Aqueous	Acetone	8260B	9.1	J	ug/L	19
002	TW-5	Aqueous	Butane, 2-chloro-2-methyl-	8270D	3.5		ug/L	22
002	TW-5	Aqueous	Diethyltoluamide	8270D	14		ug/L	22
002	TW-5	Aqueous	Oxybenzone	8270D	2.7		ug/L	22
002	TW-5	Aqueous	6-Octadecenoic acid, (Z)-	8270D	8.6		ug/L	22
002	TW-5	Aqueous	Unknown	8270D	13		ug/L	22
002	TW-5	Aqueous	Unknown	8270D	15		ug/L	22
002	TW-5	Aqueous	Unknown	8270D	3.9		ug/L	22
002	TW-5	Aqueous	Unknown	8270D	5.2		ug/L	22
002	TW-5	Aqueous	Unknown	8270D	4.8		ug/L	22
002	TW-5	Aqueous	Cadmium	6020A	0.076	J	ug/L	25
002	TW-5	Aqueous	Chromium	6020A	1.6	J	ug/L	25
002	TW-5	Aqueous	Copper	6020A	5.7	B	ug/L	25
002	TW-5	Aqueous	Iron	6020A	4000	B	ug/L	25

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	TW-5	Aqueous	Lead	6020A	1.4	B	ug/L	25
002	TW-5	Aqueous	Manganese	6020A	1400	B	ug/L	25
002	TW-5	Aqueous	Nickel	6020A	3.8	J	ug/L	25
002	TW-5	Aqueous	Zinc	6020A	10	B	ug/L	25
002	TW-5	Aqueous	Mercury	7470A	0.000055	BJ	mg/L	26
003	TW-7	Aqueous	Ammonia - N (gas	350.1	0.061	J	mg/L	27
003	TW-7	Aqueous	Nitrate - N	300.0	0.034		mg/L	27
003	TW-7	Aqueous	Sulfate	300.0	7.0		mg/L	27
003	TW-7	Aqueous	Acetone	8260B	15		ug/L	29
003	TW-7	Aqueous	Unknown	8270D	2.8		ug/L	32
003	TW-7	Aqueous	Unknown	8270D	2.8		ug/L	32
003	TW-7	Aqueous	Diethyltoluamide	8270D	11		ug/L	32
003	TW-7	Aqueous	Silane, chlorotripropyl-	8270D	2.2		ug/L	32
003	TW-7	Aqueous	Unknown	8270D	3.3		ug/L	32
003	TW-7	Aqueous	Unknown	8270D	2.2		ug/L	32
003	TW-7	Aqueous	Oxybenzone	8270D	2.0		ug/L	32
003	TW-7	Aqueous	bis(2-Ethylhexyl)phthalate	8270D	0.77	J	ug/L	33
003	TW-7	Aqueous	Antimony	6020A	0.38	BJ	ug/L	35
003	TW-7	Aqueous	Beryllium	6020A	0.66		ug/L	35
003	TW-7	Aqueous	Cadmium	6020A	0.098	J	ug/L	35
003	TW-7	Aqueous	Chromium	6020A	21		ug/L	35
003	TW-7	Aqueous	Copper	6020A	22	B	ug/L	35
003	TW-7	Aqueous	Iron	6020A	18000	B	ug/L	35
003	TW-7	Aqueous	Lead	6020A	5.0	B	ug/L	35
003	TW-7	Aqueous	Manganese	6020A	4600	B	ug/L	35
003	TW-7	Aqueous	Nickel	6020A	31		ug/L	35
003	TW-7	Aqueous	Zinc	6020A	49	B	ug/L	35
003	TW-7	Aqueous	Mercury	7470A	0.000095	BJ	mg/L	36
004	TW-1	Aqueous	Copper	6020A	1.0	B	ug/L	37
004	TW-1	Aqueous	Iron	6020A	880	B	ug/L	37
004	TW-1	Aqueous	Lead	6020A	0.33	BJ	ug/L	37
004	TW-1	Aqueous	Manganese	6020A	300	B	ug/L	37
004	TW-1	Aqueous	Nickel	6020A	0.81	J	ug/L	37
004	TW-1	Aqueous	Zinc	6020A	2.8	BJ	ug/L	37
004	TW-1	Aqueous	Mercury	7470A	0.000038	BJ	mg/L	38
005	TW-6	Aqueous	Chromium	6020A	0.85	J	ug/L	39
005	TW-6	Aqueous	Copper	6020A	1.0	B	ug/L	39
005	TW-6	Aqueous	Iron	6020A	12000	B	ug/L	39
005	TW-6	Aqueous	Lead	6020A	0.57	BJ	ug/L	39
005	TW-6	Aqueous	Manganese	6020A	1100	B	ug/L	39
005	TW-6	Aqueous	Nickel	6020A	0.81	J	ug/L	39
005	TW-6	Aqueous	Zinc	6020A	7.6	BJ	ug/L	39
006	TW-4	Aqueous	Chromium	6020A	2.4	J	ug/L	41
006	TW-4	Aqueous	Copper	6020A	6.4	B	ug/L	41
006	TW-4	Aqueous	Iron	6020A	2300	B	ug/L	41
006	TW-4	Aqueous	Lead	6020A	1.6	B	ug/L	41
006	TW-4	Aqueous	Manganese	6020A	380	B	ug/L	41
006	TW-4	Aqueous	Nickel	6020A	3.7	J	ug/L	41

Executive Summary (Continued)

Lot Number: RH13003

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
006	TW-4	Aqueous	Zinc	6020A	11	B	ug/L	41
007	DUP-1	Aqueous	Copper	6020A	1.3	B	ug/L	43
007	DUP-1	Aqueous	Iron	6020A	1000	B	ug/L	43
007	DUP-1	Aqueous	Lead	6020A	0.97	BJ	ug/L	43
007	DUP-1	Aqueous	Manganese	6020A	300	B	ug/L	43
007	DUP-1	Aqueous	Nickel	6020A	0.79	J	ug/L	43
007	DUP-1	Aqueous	Zinc	6020A	4.4	BJ	ug/L	43
007	DUP-1	Aqueous	Mercury	7470A	0.000056	BJ	mg/L	44

(101 detections)

Inorganic non-metals

Client: CDM Smith
Laboratory ID: RH13003-001
Description: TW-2
Matrix: Aqueous
Date Sampled: 08/12/2016 0800
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/18/2016 1721	MJI		20207
1		(Nitrate - N) 300.0	1	08/13/2016 2107	TAF		19797
1		(Sulfate) 300.0	1	08/13/2016 2107	TAF		19796

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.055	J	0.10	0.050	mg/L	1
Nitrate - N		300.0	0.034		0.020	0.0025	mg/L	1
Sulfate		300.0	85		1.0	0.28	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: CDM Smith
Laboratory ID: RH13003-001
Description: TW-2
Matrix: Aqueous
Date Sampled: 08/12/2016 0800
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/15/2016 1040	ALL		19820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		114	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13003-001
Description: TW-2
Matrix: Aqueous
Date Sampled: 08/12/2016 0800
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/16/2016 0118	ECP		19893

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	14		10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	2.1	J	10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13003-001
Description: TW-2
Matrix: Aqueous
Date Sampled: 08/12/2016 0800
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/16/2016 0118	ECP		19893

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH13003-001
Description: TW-2
Matrix: Aqueous
Date Sampled: 08/12/2016 0800
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				20002

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH13003-001
Description: TW-2
Matrix: Aqueous
Date Sampled: 08/12/2016 0800
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1502	JCG		20020

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	3.0				ug/L	1
Unknown		8270D	2.8				ug/L	1
Unknown		8270D	5.0				ug/L	1
Butane, 1,3-dibromo-		8270D	9.3				ug/L	1
Silane, chlorotripropyl-		8270D	20				ug/L	1
4-tert-Butylphenyl acetate		8270D	32				ug/L	1
Unknown		8270D	9.6				ug/L	1
Unknown		8270D	17				ug/L	1
Phenol, 4-(1,1,3,3-tetramethylbutyl)-		8270D	33				ug/L	1
Unknown		8270D	44				ug/L	1
Bis(3-chloro-1-propyl)(1-chloro-2-propyl		8270D	7.8				ug/L	1
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,		8270D	2.9				ug/L	1
Oxybenzone		8270D	2.1				ug/L	1
6-Octadecenoic acid, (Z)-		8270D	3.0				ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13003-001
Description: TW-2
Matrix: Aqueous
Date Sampled: 08/12/2016 0800
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1502	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.0	0.040	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		1.0	0.040	ug/L	1
Acetophenone	98-86-2	8270D	ND		1.0	0.23	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	0.060	ug/L	1
Atrazine	1912-24-9	8270D	ND		1.0	0.20	ug/L	1
Benzaldehyde	100-52-7	8270D	ND		5.0	0.27	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	0.040	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	0.070	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	0.040	ug/L	1
1,1'-Biphenyl	92-52-4	8270D	ND		1.0	0.21	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.0	0.15	ug/L	1
Butyl benzyl phthalate	85-68-7	8270D	ND		5.0	0.21	ug/L	1
Caprolactam	105-60-2	8270D	ND		5.0	0.71	ug/L	1
Carbazole	86-74-8	8270D	ND		1.0	0.040	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.0	0.26	ug/L	1
4-Chloroaniline	106-47-8	8270D	ND		1.0	0.13	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.0	0.060	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.0	0.16	ug/L	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.0	0.17	ug/L	1
2-Chloronaphthalene	91-58-7	8270D	ND		1.0	0.15	ug/L	1
2-Chlorophenol	95-57-8	8270D	ND		1.0	0.15	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.0	0.16	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	0.030	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	0.030	ug/L	1
Dibenzofuran	132-64-9	8270D	ND		1.0	0.16	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		5.0	0.81	ug/L	1
2,4-Dichlorophenol	120-83-2	8270D	ND		1.0	0.19	ug/L	1
Diethylphthalate	84-66-2	8270D	ND		5.0	0.19	ug/L	1
Dimethyl phthalate	131-11-3	8270D	ND		5.0	0.18	ug/L	1
2,4-Dimethylphenol	105-67-9	8270D	ND		1.0	0.15	ug/L	1
Di-n-butyl phthalate	84-74-2	8270D	ND		5.0	0.42	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		5.0	0.89	ug/L	1
2,4-Dinitrophenol	51-28-5	8270D	ND		5.0	1.3	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.0	0.36	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.0	0.34	ug/L	1
Di-n-octylphthalate	117-84-0	8270D	ND		5.0	0.48	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		5.0	0.38	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	0.21	ug/L	1
Fluorene	86-73-7	8270D	ND		1.0	0.030	ug/L	1
Hexachlorobenzene	118-74-1	8270D	ND		1.0	0.15	ug/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		5.0	1.1	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13003-001
Description: TW-2
Matrix: Aqueous
Date Sampled: 08/12/2016 0800
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1502	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		1.0	0.17	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	0.040	ug/L	1
Isophorone	78-59-1	8270D	ND		1.0	0.22	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	0.040	ug/L	1
2-Methylphenol	95-48-7	8270D	ND		1.0	0.21	ug/L	1
3+4-Methylphenol	106-44-5	8270D	ND		2.0	0.46	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.0	0.050	ug/L	1
2-Nitroaniline	88-74-4	8270D	ND		2.0	0.66	ug/L	1
3-Nitroaniline	99-09-2	8270D	ND		2.0	0.15	ug/L	1
4-Nitroaniline	100-01-6	8270D	ND		2.0	1.3	ug/L	1
Nitrobenzene	98-95-3	8270D	ND		1.0	0.17	ug/L	1
2-Nitrophenol	88-75-5	8270D	ND		2.0	0.44	ug/L	1
4-Nitrophenol	100-02-7	8270D	ND		5.0	2.1	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.0	0.28	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.0	0.84	ug/L	1
Pentachlorophenol	87-86-5	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	0.060	ug/L	1
Phenol	108-95-2	8270D	ND		1.0	0.19	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.0	0.19	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.0	0.22	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		61	37-129
2-Fluorophenol		58	24-127
Nitrobenzene-d5		70	38-127
Phenol-d5		61	28-128
Terphenyl-d14		70	10-148
2,4,6-Tribromophenol		78	41-144

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith
Laboratory ID: RH13003-001
Description: TW-2
Matrix: Aqueous
Date Sampled: 08/12/2016 0800
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1846	BNW	08/15/2016 1302	19846
2	3005A	6020A	10	08/18/2016 2037	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		1.0	0.17	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	0.12		0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	1.0	J	5.0	0.63	ug/L	1
Copper	7440-50-8	6020A	4.2	B	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	1000	B	20	6.3	ug/L	1
Lead	7439-92-1	6020A	0.34	BJ	1.0	0.15	ug/L	1
Manganese	7439-96-5	6020A	5800	B	50	5.4	ug/L	2
Nickel	7440-02-0	6020A	7.2		5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	7440-66-6	6020A	7.2	BJ	10	1.6	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith
Laboratory ID: RH13003-001
Description: TW-2
Matrix: Aqueous
Date Sampled: 08/12/2016 0800
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/18/2016 1902	CLM	08/18/2016 1005	20127

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	0.000074	BJ	0.00010	0.000028	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith
Laboratory ID: RH13003-002
Description: TW-5
Matrix: Aqueous
Date Sampled: 08/12/2016 0845
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/18/2016 1727	MJI		20207
1		(Nitrate - N) 300.0	1	08/13/2016 2131	TAF		19797
1		(Sulfate) 300.0	1	08/13/2016 2131	TAF		19796

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	2.8		0.10	0.050	mg/L	1
Nitrate - N		300.0	0.0086	J	0.020	0.0025	mg/L	1
Sulfate		300.0	4.9		1.0	0.28	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: CDM Smith
Laboratory ID: RH13003-002
Description: TW-5
Matrix: Aqueous
Date Sampled: 08/12/2016 0845
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/15/2016 1105	ALL		19820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13003-002
Description: TW-5
Matrix: Aqueous
Date Sampled: 08/12/2016 0845
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/16/2016 0141	ECP		19893

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	9.1	J	10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13003-002
Description: TW-5
Matrix: Aqueous
Date Sampled: 08/12/2016 0845
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/16/2016 0141	ECP		19893

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		104	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH13003-002
Description: TW-5
Matrix: Aqueous
Date Sampled: 08/12/2016 0845
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				20002

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH13003-002
Description: TW-5
Matrix: Aqueous
Date Sampled: 08/12/2016 0845
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1616	JCG		20020

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Butane, 2-chloro-2-methyl-		8270D	3.5				ug/L	1
Diethyltoluamide		8270D	14				ug/L	1
Oxybenzone		8270D	2.7				ug/L	1
6-Octadecenoic acid, (Z)-		8270D	8.6				ug/L	1
Unknown		8270D	13				ug/L	1
Unknown		8270D	15				ug/L	1
Unknown		8270D	3.9				ug/L	1
Unknown		8270D	5.2				ug/L	1
Unknown		8270D	4.8				ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13003-002
Description: TW-5
Matrix: Aqueous
Date Sampled: 08/12/2016 0845
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1616	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.0	0.040	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		1.0	0.040	ug/L	1
Acetophenone	98-86-2	8270D	ND		1.0	0.23	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	0.060	ug/L	1
Atrazine	1912-24-9	8270D	ND		1.0	0.20	ug/L	1
Benzaldehyde	100-52-7	8270D	ND		5.0	0.27	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	0.040	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	0.070	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	0.040	ug/L	1
1,1'-Biphenyl	92-52-4	8270D	ND		1.0	0.21	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.0	0.15	ug/L	1
Butyl benzyl phthalate	85-68-7	8270D	ND		5.0	0.21	ug/L	1
Caprolactam	105-60-2	8270D	ND		5.0	0.71	ug/L	1
Carbazole	86-74-8	8270D	ND		1.0	0.040	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.0	0.26	ug/L	1
4-Chloroaniline	106-47-8	8270D	ND		1.0	0.13	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.0	0.060	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.0	0.16	ug/L	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.0	0.17	ug/L	1
2-Chloronaphthalene	91-58-7	8270D	ND		1.0	0.15	ug/L	1
2-Chlorophenol	95-57-8	8270D	ND		1.0	0.15	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.0	0.16	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	0.030	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	0.030	ug/L	1
Dibenzofuran	132-64-9	8270D	ND		1.0	0.16	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		5.0	0.81	ug/L	1
2,4-Dichlorophenol	120-83-2	8270D	ND		1.0	0.19	ug/L	1
Diethylphthalate	84-66-2	8270D	ND		5.0	0.19	ug/L	1
Dimethyl phthalate	131-11-3	8270D	ND		5.0	0.18	ug/L	1
2,4-Dimethylphenol	105-67-9	8270D	ND		1.0	0.15	ug/L	1
Di-n-butyl phthalate	84-74-2	8270D	ND		5.0	0.42	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		5.0	0.89	ug/L	1
2,4-Dinitrophenol	51-28-5	8270D	ND		5.0	1.3	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.0	0.36	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.0	0.34	ug/L	1
Di-n-octylphthalate	117-84-0	8270D	ND		5.0	0.48	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		5.0	0.38	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	0.21	ug/L	1
Fluorene	86-73-7	8270D	ND		1.0	0.030	ug/L	1
Hexachlorobenzene	118-74-1	8270D	ND		1.0	0.15	ug/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		5.0	1.1	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13003-002
Description: TW-5
Matrix: Aqueous
Date Sampled: 08/12/2016 0845
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1616	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		1.0	0.17	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	0.040	ug/L	1
Isophorone	78-59-1	8270D	ND		1.0	0.22	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	0.040	ug/L	1
2-Methylphenol	95-48-7	8270D	ND		1.0	0.21	ug/L	1
3+4-Methylphenol	106-44-5	8270D	ND		2.0	0.46	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.0	0.050	ug/L	1
2-Nitroaniline	88-74-4	8270D	ND		2.0	0.66	ug/L	1
3-Nitroaniline	99-09-2	8270D	ND		2.0	0.15	ug/L	1
4-Nitroaniline	100-01-6	8270D	ND		2.0	1.3	ug/L	1
Nitrobenzene	98-95-3	8270D	ND		1.0	0.17	ug/L	1
2-Nitrophenol	88-75-5	8270D	ND		2.0	0.44	ug/L	1
4-Nitrophenol	100-02-7	8270D	ND		5.0	2.1	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.0	0.28	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.0	0.84	ug/L	1
Pentachlorophenol	87-86-5	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	0.060	ug/L	1
Phenol	108-95-2	8270D	ND		1.0	0.19	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.0	0.19	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.0	0.22	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		73	37-129
2-Fluorophenol		61	24-127
Nitrobenzene-d5		78	38-127
Phenol-d5		67	28-128
Terphenyl-d14		68	10-148
2,4,6-Tribromophenol		91	41-144

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith
Laboratory ID: RH13003-002
Description: TW-5
Matrix: Aqueous
Date Sampled: 08/12/2016 0845
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1851	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		1.0	0.17	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	0.076	J	0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	1.6	J	5.0	0.63	ug/L	1
Copper	7440-50-8	6020A	5.7	B	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	4000	B	20	6.3	ug/L	1
Lead	7439-92-1	6020A	1.4	B	1.0	0.15	ug/L	1
Manganese	7439-96-5	6020A	1400	B	5.0	0.54	ug/L	1
Nickel	7440-02-0	6020A	3.8	J	5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	7440-66-6	6020A	10	B	10	1.6	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith
Laboratory ID: RH13003-002
Description: TW-5
Matrix: Aqueous
Date Sampled: 08/12/2016 0845
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/18/2016 1905	CLM	08/18/2016 1005	20127

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	0.000055	BJ	0.00010	0.000028	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: CDM Smith
Laboratory ID: RH13003-003
Description: TW-7
Matrix: Aqueous
Date Sampled: 08/12/2016 0930
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	350.1	(Ammonia - N) 350.1	1	08/18/2016 1729	MJI		20207
1		(Nitrate - N) 300.0	1	08/13/2016 2155	TAF		19797
1		(Sulfate) 300.0	1	08/13/2016 2155	TAF		19796

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ammonia - N (gas diffusion)		350.1	0.061	J	0.10	0.050	mg/L	1
Nitrate - N		300.0	0.034		0.020	0.0025	mg/L	1
Sulfate		300.0	7.0		1.0	0.28	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS (SIM with isotope dilution)

Client: CDM Smith
Laboratory ID: RH13003-003
Description: TW-7
Matrix: Aqueous
Date Sampled: 08/12/2016 0930
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B (SIM iso.)	1	08/15/2016 1129	ALL		19820

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dioxane	123-91-1	8260B (SIM	ND		3.0	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13003-003
Description: TW-7
Matrix: Aqueous
Date Sampled: 08/12/2016 0930
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/16/2016 0204	ECP		19893

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	15		10	2.0	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	0.40	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	0.40	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	0.40	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	0.40	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	0.40	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	0.40	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	0.40	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	0.40	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	0.40	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	0.40	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	0.40	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	0.40	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	0.40	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	0.40	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	0.40	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	0.40	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	0.40	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.40	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	2.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	0.40	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	2.0	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.40	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	0.40	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	0.40	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.40	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	0.40	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	0.40	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	0.40	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13003-003
Description: TW-7
Matrix: Aqueous
Date Sampled: 08/12/2016 0930
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/16/2016 0204	ECP		19893

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	0.40	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	0.40	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Laboratory ID: RH13003-003
Description: TW-7
Matrix: Aqueous
Date Sampled: 08/12/2016 0930
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1				20002

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
None Detected		8260B					ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Library Search

Client: CDM Smith
Description: TW-7
Date Sampled: 08/12/2016 0930
Date Received: 08/13/2016

Laboratory ID: RH13003-003
Matrix: Aqueous

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1641	JCG		20020

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Unknown		8270D	2.8				ug/L	1
Unknown		8270D	2.8				ug/L	1
Diethyltoluamide		8270D	11				ug/L	1
Silane, chlorotripropyl-		8270D	2.2				ug/L	1
Unknown		8270D	3.3				ug/L	1
Unknown		8270D	2.2				ug/L	1
Oxybenzone		8270D	2.0				ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13003-003
Description: TW-7
Matrix: Aqueous
Date Sampled: 08/12/2016 0930
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1641	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		1.0	0.040	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		1.0	0.040	ug/L	1
Acetophenone	98-86-2	8270D	ND		1.0	0.23	ug/L	1
Anthracene	120-12-7	8270D	ND		1.0	0.060	ug/L	1
Atrazine	1912-24-9	8270D	ND		1.0	0.20	ug/L	1
Benzaldehyde	100-52-7	8270D	ND		5.0	0.27	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		1.0	0.040	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		1.0	0.070	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		1.0	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		1.0	0.040	ug/L	1
1,1'-Biphenyl	92-52-4	8270D	ND		1.0	0.21	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		1.0	0.15	ug/L	1
Butyl benzyl phthalate	85-68-7	8270D	ND		5.0	0.21	ug/L	1
Caprolactam	105-60-2	8270D	ND		5.0	0.71	ug/L	1
Carbazole	86-74-8	8270D	ND		1.0	0.040	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		1.0	0.26	ug/L	1
4-Chloroaniline	106-47-8	8270D	ND		1.0	0.13	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		1.0	0.060	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		1.0	0.16	ug/L	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		1.0	0.17	ug/L	1
2-Chloronaphthalene	91-58-7	8270D	ND		1.0	0.15	ug/L	1
2-Chlorophenol	95-57-8	8270D	ND		1.0	0.15	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		1.0	0.16	ug/L	1
Chrysene	218-01-9	8270D	ND		1.0	0.030	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		1.0	0.030	ug/L	1
Dibenzofuran	132-64-9	8270D	ND		1.0	0.16	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		5.0	0.81	ug/L	1
2,4-Dichlorophenol	120-83-2	8270D	ND		1.0	0.19	ug/L	1
Diethylphthalate	84-66-2	8270D	ND		5.0	0.19	ug/L	1
Dimethyl phthalate	131-11-3	8270D	ND		5.0	0.18	ug/L	1
2,4-Dimethylphenol	105-67-9	8270D	ND		1.0	0.15	ug/L	1
Di-n-butyl phthalate	84-74-2	8270D	ND		5.0	0.42	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		5.0	0.89	ug/L	1
2,4-Dinitrophenol	51-28-5	8270D	ND		5.0	1.3	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		2.0	0.36	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		2.0	0.34	ug/L	1
Di-n-octylphthalate	117-84-0	8270D	ND		5.0	0.48	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	0.77	J	5.0	0.38	ug/L	1
Fluoranthene	206-44-0	8270D	ND		1.0	0.21	ug/L	1
Fluorene	86-73-7	8270D	ND		1.0	0.030	ug/L	1
Hexachlorobenzene	118-74-1	8270D	ND		1.0	0.15	ug/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		1.0	0.17	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		5.0	1.1	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: CDM Smith
Laboratory ID: RH13003-003
Description: TW-7
Matrix: Aqueous
Date Sampled: 08/12/2016 0930
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	08/17/2016 1641	JCG	08/15/2016 1547	19864

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane	67-72-1	8270D	ND		1.0	0.17	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		1.0	0.040	ug/L	1
Isophorone	78-59-1	8270D	ND		1.0	0.22	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		1.0	0.040	ug/L	1
2-Methylphenol	95-48-7	8270D	ND		1.0	0.21	ug/L	1
3+4-Methylphenol	106-44-5	8270D	ND		2.0	0.46	ug/L	1
Naphthalene	91-20-3	8270D	ND		1.0	0.050	ug/L	1
2-Nitroaniline	88-74-4	8270D	ND		2.0	0.66	ug/L	1
3-Nitroaniline	99-09-2	8270D	ND		2.0	0.15	ug/L	1
4-Nitroaniline	100-01-6	8270D	ND		2.0	1.3	ug/L	1
Nitrobenzene	98-95-3	8270D	ND		1.0	0.17	ug/L	1
2-Nitrophenol	88-75-5	8270D	ND		2.0	0.44	ug/L	1
4-Nitrophenol	100-02-7	8270D	ND		5.0	2.1	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		1.0	0.28	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		1.0	0.84	ug/L	1
Pentachlorophenol	87-86-5	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		1.0	0.060	ug/L	1
Phenol	108-95-2	8270D	ND		1.0	0.19	ug/L	1
Pyrene	129-00-0	8270D	ND		1.0	0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		1.0	0.19	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		1.0	0.22	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		56	37-129
2-Fluorophenol		51	24-127
Nitrobenzene-d5		63	38-127
Phenol-d5		53	28-128
Terphenyl-d14		60	10-148
2,4,6-Tribromophenol		67	41-144

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith
Laboratory ID: RH13003-003
Description: TW-7
Matrix: Aqueous
Date Sampled: 08/12/2016 0930
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1908	BNW	08/15/2016 1302	19846
2	3005A	6020A	10	08/18/2016 2048	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	0.38	BJ	1.0	0.17	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	0.66		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	0.098	J	0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	21		5.0	0.63	ug/L	1
Copper	7440-50-8	6020A	22	B	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	18000	B	20	6.3	ug/L	1
Lead	7439-92-1	6020A	5.0	B	1.0	0.15	ug/L	1
Manganese	7439-96-5	6020A	4600	B	50	5.4	ug/L	2
Nickel	7440-02-0	6020A	31		5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	7440-66-6	6020A	49	B	10	1.6	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith
Description: TW-7
Date Sampled: 08/12/2016 0930
Date Received: 08/13/2016

Laboratory ID: RH13003-003
Matrix: Aqueous

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/18/2016 1907	CLM	08/18/2016 1005	20127

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	0.000095	BJ	0.00010	0.000028	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith
Laboratory ID: RH13003-004
Description: TW-1
Matrix: Aqueous
Date Sampled: 08/12/2016 0700
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1914	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		1.0	0.17	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	ND		5.0	0.63	ug/L	1
Copper	7440-50-8	6020A	1.0	B	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	880	B	20	6.3	ug/L	1
Lead	7439-92-1	6020A	0.33	BJ	1.0	0.15	ug/L	1
Manganese	7439-96-5	6020A	300	B	5.0	0.54	ug/L	1
Nickel	7440-02-0	6020A	0.81	J	5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	7440-66-6	6020A	2.8	BJ	10	1.6	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith
Laboratory ID: RH13003-004
Description: TW-1
Matrix: Aqueous
Date Sampled: 08/12/2016 0700
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/18/2016 1910	CLM	08/18/2016 1005	20127

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	0.000038	BJ	0.00010	0.000028	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith
Description: TW-6
Date Sampled: 08/12/2016 0705
Date Received: 08/13/2016

Laboratory ID: RH13003-005
Matrix: Aqueous

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1919	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		1.0	0.17	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	0.85	J	5.0	0.63	ug/L	1
Copper	7440-50-8	6020A	1.0	B	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	12000	B	20	6.3	ug/L	1
Lead	7439-92-1	6020A	0.57	BJ	1.0	0.15	ug/L	1
Manganese	7439-96-5	6020A	1100	B	5.0	0.54	ug/L	1
Nickel	7440-02-0	6020A	0.81	J	5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	7440-66-6	6020A	7.6	BJ	10	1.6	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith
Description: TW-6
Date Sampled: 08/12/2016 0705
Date Received: 08/13/2016

Laboratory ID: RH13003-005
Matrix: Aqueous

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/18/2016 1912	CLM	08/18/2016 1005	20127

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	ND		0.00010	0.000028	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith
Description: TW-4
Date Sampled: 08/12/2016 0710
Date Received: 08/13/2016

Laboratory ID: RH13003-006
Matrix: Aqueous

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1925	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		1.0	0.17	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	2.4	J	5.0	0.63	ug/L	1
Copper	7440-50-8	6020A	6.4	B	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	2300	B	20	6.3	ug/L	1
Lead	7439-92-1	6020A	1.6	B	1.0	0.15	ug/L	1
Manganese	7439-96-5	6020A	380	B	5.0	0.54	ug/L	1
Nickel	7440-02-0	6020A	3.7	J	5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	7440-66-6	6020A	11	B	10	1.6	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith
Laboratory ID: RH13003-006
Description: TW-4
Matrix: Aqueous
Date Sampled: 08/12/2016 0710
Date Received: 08/13/2016

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/18/2016 1919	CLM	08/18/2016 1005	20127

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	ND		0.00010	0.000028	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-MS

Client: CDM Smith
Description: DUP-1
Date Sampled: 08/12/2016 0800
Date Received: 08/13/2016

Laboratory ID: RH13003-007
Matrix: Aqueous

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	08/18/2016 1930	BNW	08/15/2016 1302	19846

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6020A	ND		1.0	0.17	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.12	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.044	ug/L	1
Chromium	7440-47-3	6020A	ND		5.0	0.63	ug/L	1
Copper	7440-50-8	6020A	1.3	B	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	1000	B	20	6.3	ug/L	1
Lead	7439-92-1	6020A	0.97	BJ	1.0	0.15	ug/L	1
Manganese	7439-96-5	6020A	300	B	5.0	0.54	ug/L	1
Nickel	7440-02-0	6020A	0.79	J	5.0	0.63	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.95	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.17	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.075	ug/L	1
Zinc	7440-66-6	6020A	4.4	BJ	10	1.6	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

CVAA

Client: CDM Smith
Description: DUP-1
Date Sampled: 08/12/2016 0800
Date Received: 08/13/2016

Laboratory ID: RH13003-007
Matrix: Aqueous

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7470A	7470A	1	08/18/2016 1923	CLM	08/18/2016 1005	20127

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	0.000056	BJ	0.00010	0.000028	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Inorganic non-metals - MB

Sample ID: RQ19796-001
Batch: 19796
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.28	mg/L	08/13/2016 2019

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19796-002
Batch: 19796
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	20		1	99	90-110	08/13/2016 2043

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH13003-003MS
Batch: 19796
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	7.0	20	26		1	97	90-110	08/13/2016 2219

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH13003-003MD
Batch: 19796
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	7.0	20	26		1	93	2.8	90-110	20	08/13/2016 2243

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ19797-001
Batch: 19797
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N	ND		1	0.020	0.0025	mg/L	08/13/2016 2019

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ19797-002
Batch: 19797
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	0.80	0.81		1	102	90-110	08/13/2016 2043

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH13003-003MS
Batch: 19797
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	0.034	0.80	0.82		1	98	90-110	08/13/2016 2219

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH13003-003MD
Batch: 19797
Analytical Method: 300.0

Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	0.034	0.80	0.78		1	94	4.7	90-110	20	08/13/2016 2243

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MB

Sample ID: RQ20207-001
Batch: 20207
Analytical Method: 350.1

Matrix: Aqueous
Prep Method: 350.1

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ammonia - N (gas diffusion)	ND		1	0.10	0.050	mg/L	08/18/2016 1717

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - LCS

Sample ID: RQ20207-002
Batch: 20207
Analytical Method: 350.1

Matrix: Aqueous
Prep Method: 350.1

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	1.0	1.1		1	109	90-110	08/18/2016 1719

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MS

Sample ID: RH13003-001MS
Batch: 20207
Analytical Method: 350.1

Matrix: Aqueous
Prep Method: 350.1

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ammonia - N (gas diffusion)	0.055	1.0	0.97		1	92	90-110	08/18/2016 1723

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Inorganic non-metals - MSD

Sample ID: RH13003-001MD
Batch: 20207
Analytical Method: 350.1

Matrix: Aqueous
Prep Method: 350.1

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ammonia - N (gas diffusion)	0.055	1.0	0.99		1	94	2.2	90-110	20	08/18/2016 1725

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS (SIM with isotope dilution) - MB

Sample ID: RQ19820-001
Batch: 19820
Analytical Method: 8260B (SIM iso.)

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dioxane	ND		1	3.0	0.85	ug/L	08/15/2016 0938

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		112	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS (SIM with isotope dilution) - LCS

Sample ID: RQ19820-002
Batch: 19820
Analytical Method: 8260B (SIM iso.)

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dioxane	50	49		1	98	70-130	08/15/2016 0903

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		113	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19893-001
Batch: 19893
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	10	2.0	ug/L	08/15/2016 2241
Benzene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Bromodichloromethane	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Bromoform	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Bromomethane (Methyl bromide)	ND		1	0.50	0.40	ug/L	08/15/2016 2241
2-Butanone (MEK)	ND		1	10	2.0	ug/L	08/15/2016 2241
Carbon disulfide	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Carbon tetrachloride	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Chlorobenzene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Chloroethane	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Chloroform	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Chloromethane (Methyl chloride)	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Cyclohexane	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Dibromochloromethane	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,2-Dibromoethane (EDB)	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,4-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,2-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,3-Dichlorobenzene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Dichlorodifluoromethane	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,1-Dichloroethane	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,2-Dichloroethane	ND		1	0.50	0.40	ug/L	08/15/2016 2241
cis-1,2-Dichloroethene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
trans-1,2-Dichloroethene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,1-Dichloroethene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,2-Dichloropropane	ND		1	0.50	0.40	ug/L	08/15/2016 2241
trans-1,3-Dichloropropene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
cis-1,3-Dichloropropene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Ethylbenzene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
2-Hexanone	ND		1	10	2.0	ug/L	08/15/2016 2241
Isopropylbenzene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Methyl acetate	ND		1	1.0	0.40	ug/L	08/15/2016 2241
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.40	ug/L	08/15/2016 2241
4-Methyl-2-pentanone	ND		1	10	2.0	ug/L	08/15/2016 2241
Methylcyclohexane	ND		1	5.0	0.40	ug/L	08/15/2016 2241
Methylene chloride	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Styrene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,1,2,2-Tetrachloroethane	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Tetrachloroethene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Toluene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	0.40	ug/L	08/15/2016 2241
1,2,4-Trichlorobenzene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,1,2-Trichloroethane	ND		1	0.50	0.40	ug/L	08/15/2016 2241
1,1,1-Trichloroethane	ND		1	0.50	0.40	ug/L	08/15/2016 2241

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ19893-001
Batch: 19893
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Trichlorofluoromethane	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Vinyl chloride	ND		1	0.50	0.40	ug/L	08/15/2016 2241
Xylenes (total)	ND		1	1.0	0.40	ug/L	08/15/2016 2241

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19893-002
Batch: 19893
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	86		1	86	60-140	08/15/2016 2139
Benzene	50	44		1	89	70-130	08/15/2016 2139
Bromodichloromethane	50	46		1	92	70-130	08/15/2016 2139
Bromoform	50	39		1	78	70-130	08/15/2016 2139
Bromomethane (Methyl bromide)	50	42		1	84	60-140	08/15/2016 2139
2-Butanone (MEK)	100	95		1	95	60-140	08/15/2016 2139
Carbon disulfide	50	40		1	79	60-140	08/15/2016 2139
Carbon tetrachloride	50	41		1	82	70-130	08/15/2016 2139
Chlorobenzene	50	48		1	96	70-130	08/15/2016 2139
Chloroethane	50	42		1	83	60-140	08/15/2016 2139
Chloroform	50	41		1	83	70-130	08/15/2016 2139
Chloromethane (Methyl chloride)	50	45		1	91	50-130	08/15/2016 2139
Cyclohexane	50	37		1	74	70-130	08/15/2016 2139
1,2-Dibromo-3-chloropropane (DBCP)	50	45		1	90	70-130	08/15/2016 2139
Dibromochloromethane	50	50		1	100	70-130	08/15/2016 2139
1,2-Dibromoethane (EDB)	50	47		1	94	70-130	08/15/2016 2139
1,4-Dichlorobenzene	50	48		1	97	70-130	08/15/2016 2139
1,2-Dichlorobenzene	50	51		1	103	70-130	08/15/2016 2139
1,3-Dichlorobenzene	50	50		1	100	70-130	08/15/2016 2139
Dichlorodifluoromethane	50	59		1	117	60-140	08/15/2016 2139
1,1-Dichloroethane	50	43		1	86	70-130	08/15/2016 2139
1,2-Dichloroethane	50	44		1	87	70-130	08/15/2016 2139
cis-1,2-Dichloroethene	50	44		1	87	70-130	08/15/2016 2139
trans-1,2-Dichloroethene	50	43		1	86	70-130	08/15/2016 2139
1,1-Dichloroethene	50	43		1	86	70-130	08/15/2016 2139
1,2-Dichloropropane	50	46		1	91	70-130	08/15/2016 2139
trans-1,3-Dichloropropene	50	47		1	93	70-130	08/15/2016 2139
cis-1,3-Dichloropropene	50	48		1	96	70-130	08/15/2016 2139
Ethylbenzene	50	48		1	96	70-130	08/15/2016 2139
2-Hexanone	100	93		1	93	60-140	08/15/2016 2139
Isopropylbenzene	50	48		1	96	70-130	08/15/2016 2139
Methyl acetate	50	44		1	87	60-140	08/15/2016 2139
Methyl tertiary butyl ether (MTBE)	50	39		1	77	70-130	08/15/2016 2139
4-Methyl-2-pentanone	100	93		1	93	60-140	08/15/2016 2139
Methylcyclohexane	50	45		1	89	70-130	08/15/2016 2139
Methylene chloride	50	41		1	82	70-130	08/15/2016 2139
Styrene	50	50		1	100	70-130	08/15/2016 2139
1,1,2,2-Tetrachloroethane	50	51		1	102	70-130	08/15/2016 2139
Tetrachloroethene	50	49		1	99	70-130	08/15/2016 2139
Toluene	50	48		1	96	70-130	08/15/2016 2139
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	41		1	82	70-130	08/15/2016 2139
1,2,4-Trichlorobenzene	50	51		1	101	70-130	08/15/2016 2139
1,1,2-Trichloroethane	50	48		1	95	70-130	08/15/2016 2139
1,1,1-Trichloroethane	50	40		1	80	70-130	08/15/2016 2139

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19893-002
Batch: 19893
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	48		1	96	70-130	08/15/2016 2139
Trichlorofluoromethane	50	52		1	103	60-140	08/15/2016 2139
Vinyl chloride	50	45		1	89	60-140	08/15/2016 2139
Xylenes (total)	100	94		1	94	70-130	08/15/2016 2139

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19864-001
Batch: 19864
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/15/2016 1547

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	1.0	0.21	ug/L	08/17/2016 0941
2,4,5-Trichlorophenol	ND		1	1.0	0.19	ug/L	08/17/2016 0941
2,4,6-Trichlorophenol	ND		1	1.0	0.22	ug/L	08/17/2016 0941
2,4-Dichlorophenol	ND		1	1.0	0.19	ug/L	08/17/2016 0941
2,4-Dimethylphenol	ND		1	1.0	0.15	ug/L	08/17/2016 0941
2,4-Dinitrophenol	ND		1	5.0	1.3	ug/L	08/17/2016 0941
2,4-Dinitrotoluene	ND		1	2.0	0.36	ug/L	08/17/2016 0941
2,6-Dinitrotoluene	ND		1	2.0	0.34	ug/L	08/17/2016 0941
2-Chloronaphthalene	ND		1	1.0	0.15	ug/L	08/17/2016 0941
2-Chlorophenol	ND		1	1.0	0.15	ug/L	08/17/2016 0941
2-Methylnaphthalene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
2-Methylphenol	ND		1	1.0	0.21	ug/L	08/17/2016 0941
2-Nitroaniline	ND		1	2.0	0.66	ug/L	08/17/2016 0941
2-Nitrophenol	ND		1	2.0	0.44	ug/L	08/17/2016 0941
3+4-Methylphenol	ND		1	2.0	0.46	ug/L	08/17/2016 0941
3,3'-Dichlorobenzidine	ND		1	5.0	0.81	ug/L	08/17/2016 0941
3-Nitroaniline	ND		1	2.0	0.15	ug/L	08/17/2016 0941
4,6-Dinitro-2-methylphenol	ND		1	5.0	0.89	ug/L	08/17/2016 0941
4-Bromophenyl phenyl ether	ND		1	1.0	0.15	ug/L	08/17/2016 0941
4-Chloro-3-methyl phenol	ND		1	1.0	0.26	ug/L	08/17/2016 0941
4-Chloroaniline	ND		1	1.0	0.13	ug/L	08/17/2016 0941
4-Chlorophenyl phenyl ether	ND		1	1.0	0.16	ug/L	08/17/2016 0941
4-Nitroaniline	ND		1	2.0	1.3	ug/L	08/17/2016 0941
4-Nitrophenol	ND		1	5.0	2.1	ug/L	08/17/2016 0941
Acenaphthene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Acenaphthylene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Acetophenone	ND		1	1.0	0.23	ug/L	08/17/2016 0941
Anthracene	ND		1	1.0	0.060	ug/L	08/17/2016 0941
Atrazine	ND		1	1.0	0.20	ug/L	08/17/2016 0941
Benzaldehyde	ND		1	5.0	0.27	ug/L	08/17/2016 0941
Benzo(a)anthracene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Benzo(a)pyrene	ND		1	1.0	0.070	ug/L	08/17/2016 0941
Benzo(b)fluoranthene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Benzo(g,h,i)perylene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Benzo(k)fluoranthene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
bis (2-Chloro-1-methylethyl) ether	ND		1	1.0	0.17	ug/L	08/17/2016 0941
bis(2-Chloroethoxy)methane	ND		1	1.0	0.060	ug/L	08/17/2016 0941
bis(2-Chloroethyl)ether	ND		1	1.0	0.16	ug/L	08/17/2016 0941
bis(2-Ethylhexyl)phthalate	ND		1	5.0	0.38	ug/L	08/17/2016 0941
Butyl benzyl phthalate	ND		1	5.0	0.21	ug/L	08/17/2016 0941
Caprolactam	ND		1	5.0	0.71	ug/L	08/17/2016 0941
Carbazole	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Chrysene	ND		1	1.0	0.030	ug/L	08/17/2016 0941
Di-n-butyl phthalate	ND		1	5.0	0.42	ug/L	08/17/2016 0941

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ19864-001
Batch: 19864
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/15/2016 1547

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	5.0	0.48	ug/L	08/17/2016 0941
Dibenzo(a,h)anthracene	ND		1	1.0	0.030	ug/L	08/17/2016 0941
Dibenzofuran	ND		1	1.0	0.16	ug/L	08/17/2016 0941
Diethylphthalate	ND		1	5.0	0.19	ug/L	08/17/2016 0941
Dimethyl phthalate	ND		1	5.0	0.18	ug/L	08/17/2016 0941
Fluoranthene	ND		1	1.0	0.21	ug/L	08/17/2016 0941
Fluorene	ND		1	1.0	0.030	ug/L	08/17/2016 0941
Hexachlorobenzene	ND		1	1.0	0.15	ug/L	08/17/2016 0941
Hexachlorobutadiene	ND		1	1.0	0.17	ug/L	08/17/2016 0941
Hexachlorocyclopentadiene	ND		1	5.0	1.1	ug/L	08/17/2016 0941
Hexachloroethane	ND		1	1.0	0.17	ug/L	08/17/2016 0941
Indeno(1,2,3-c,d)pyrene	ND		1	1.0	0.040	ug/L	08/17/2016 0941
Isophorone	ND		1	1.0	0.22	ug/L	08/17/2016 0941
N-Nitrosodi-n-propylamine	ND		1	1.0	0.28	ug/L	08/17/2016 0941
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	1.0	0.84	ug/L	08/17/2016 0941
Naphthalene	ND		1	1.0	0.050	ug/L	08/17/2016 0941
Nitrobenzene	ND		1	1.0	0.17	ug/L	08/17/2016 0941
Pentachlorophenol	ND		1	5.0	1.3	ug/L	08/17/2016 0941
Phenanthrene	ND		1	1.0	0.060	ug/L	08/17/2016 0941
Phenol	ND		1	1.0	0.19	ug/L	08/17/2016 0941
Pyrene	ND		1	1.0	0.16	ug/L	08/17/2016 0941

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		67	41-144
2-Fluorobiphenyl		75	37-129
2-Fluorophenol		64	24-127
Nitrobenzene-d5		82	38-127
Phenol-d5		72	28-128
Terphenyl-d14		87	10-148

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19864-002
Batch: 19864
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/15/2016 1547

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	10	7.6		1	76	42-120	08/17/2016 1209
2,4,5-Trichlorophenol	10	8.5		1	85	56-118	08/17/2016 1209
2,4,6-Trichlorophenol	10	7.7		1	77	55-121	08/17/2016 1209
2,4-Dichlorophenol	20	15		1	76	55-117	08/17/2016 1209
2,4-Dimethylphenol	10	9.2		1	92	36-170	08/17/2016 1209
2,4-Dinitrophenol	10	7.9		1	79	47-133	08/17/2016 1209
2,4-Dinitrotoluene	10	9.6		1	96	59-127	08/17/2016 1209
2,6-Dinitrotoluene	10	8.8		1	88	59-126	08/17/2016 1209
2-Chloronaphthalene	10	7.4		1	74	46-100	08/17/2016 1209
2-Chlorophenol	10	8.1		1	81	50-117	08/17/2016 1209
2-Methylnaphthalene	10	7.5		1	75	57-115	08/17/2016 1209
2-Methylphenol	10	10		1	100	56-119	08/17/2016 1209
2-Nitroaniline	10	8.6		1	86	60-124	08/17/2016 1209
2-Nitrophenol	10	8.3		1	83	51-118	08/17/2016 1209
3+4-Methylphenol	10	10		1	101	53-119	08/17/2016 1209
3-Nitroaniline	10	4.7		1	47	43-123	08/17/2016 1209
4,6-Dinitro-2-methylphenol	10	10		1	105	56-128	08/17/2016 1209
4-Bromophenyl phenyl ether	10	8.6		1	86	55-121	08/17/2016 1209
4-Chloro-3-methyl phenol	10	8.7		1	87	58-125	08/17/2016 1209
4-Chloroaniline	10	8.4		1	84	10-128	08/17/2016 1209
4-Chlorophenyl phenyl ether	10	7.7		1	77	55-121	08/17/2016 1209
4-Nitroaniline	10	8.6		1	86	60-135	08/17/2016 1209
4-Nitrophenol	20	22		1	108	53-130	08/17/2016 1209
Acenaphthene	10	8.4		1	84	54-118	08/17/2016 1209
Acenaphthylene	10	8.5		1	85	48-155	08/17/2016 1209
Acetophenone	10	9.0		1	90	52-125	08/17/2016 1209
Anthracene	10	9.4		1	94	55-122	08/17/2016 1209
Atrazine	10	8.1		1	81	25-121	08/17/2016 1209
Benzaldehyde	10	11		1	106	45-115	08/17/2016 1209
Benzo(a)anthracene	10	9.6		1	96	56-123	08/17/2016 1209
Benzo(a)pyrene	10	8.6		1	86	54-124	08/17/2016 1209
Benzo(b)fluoranthene	10	9.4		1	94	55-136	08/17/2016 1209
Benzo(g,h,i)perylene	10	10		1	103	42-129	08/17/2016 1209
Benzo(k)fluoranthene	10	9.1		1	91	53-132	08/17/2016 1209
bis (2-Chloro-1-methylethyl) ether	10	9.5		1	95	42-124	08/17/2016 1209
bis(2-Chloroethoxy)methane	10	9.1		1	91	44-127	08/17/2016 1209
bis(2-Chloroethyl)ether	10	9.2		1	92	46-120	08/17/2016 1209
bis(2-Ethylhexyl)phthalate	10	7.6		1	76	56-128	08/17/2016 1209
Butyl benzyl phthalate	10	11		1	112	54-135	08/17/2016 1209
Caprolactam	10	9.7		1	97	44-152	08/17/2016 1209
Carbazole	10	9.4		1	94	45-101	08/17/2016 1209
Chrysene	10	9.7		1	97	54-120	08/17/2016 1209
Di-n-butyl phthalate	10	11		1	109	60-131	08/17/2016 1209
Di-n-octylphthalate	10	6.7		1	67	50-136	08/17/2016 1209

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ19864-002
Batch: 19864
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/15/2016 1547

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Dibenzo(a,h)anthracene	10	6.7		1	67	50-127	08/17/2016 1209
Dibenzofuran	10	8.0		1	80	58-118	08/17/2016 1209
Diethylphthalate	10	9.6		1	96	60-125	08/17/2016 1209
Dimethyl phthalate	10	8.9		1	89	60-122	08/17/2016 1209
Fluoranthene	10	9.2		1	92	58-124	08/17/2016 1209
Fluorene	10	8.2		1	82	57-119	08/17/2016 1209
Hexachlorobenzene	10	9.3		1	93	55-118	08/17/2016 1209
Hexachlorobutadiene	10	6.5		1	65	53-116	08/17/2016 1209
Hexachlorocyclopentadiene	50	15		1	30	16-96	08/17/2016 1209
Hexachloroethane	10	7.1		1	71	31-110	08/17/2016 1209
Indeno(1,2,3-c,d)pyrene	10	9.6		1	96	48-126	08/17/2016 1209
Isophorone	10	9.5		1	95	57-123	08/17/2016 1209
N-Nitrosodi-n-propylamine	10	11		1	109	54-127	08/17/2016 1209
N-Nitrosodiphenylamine (Diphenylamine)	10	3.9		1	39	35-146	08/17/2016 1209
Naphthalene	10	7.7		1	77	52-109	08/17/2016 1209
Nitrobenzene	10	9.4		1	94	51-122	08/17/2016 1209
Pentachlorophenol	20	18		1	91	42-131	08/17/2016 1209
Phenanthrene	10	8.9		1	89	56-119	08/17/2016 1209
Phenol	10	8.0		1	80	49-117	08/17/2016 1209
Pyrene	10	9.9		1	99	55-127	08/17/2016 1209

Surrogate	Q	% Rec	Acceptance Limit
2,4,6-Tribromophenol		80	41-144
2-Fluorobiphenyl		76	37-129
2-Fluorophenol		71	24-127
Nitrobenzene-d5		90	38-127
Phenol-d5		77	28-128
Terphenyl-d14		87	10-148

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: RH13003-001MS
Batch: 19864
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/15/2016 1547

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	21	15		1	71	54-118	08/17/2016 1527
Acenaphthylene	ND	21	16		1	74	48-155	08/17/2016 1527
Acetophenone	ND	21	15		1	71	52-125	08/17/2016 1527
Anthracene	ND	21	17		1	79	55-122	08/17/2016 1527
Atrazine	ND	21	16		1	73	25-121	08/17/2016 1527
Benzaldehyde	ND	21	16		1	75	45-115	08/17/2016 1527
Benzo(a)anthracene	ND	21	15		1	70	56-123	08/17/2016 1527
Benzo(a)pyrene	ND	21	10	N	1	49	54-124	08/17/2016 1527
Benzo(b)fluoranthene	ND	21	12		1	58	55-136	08/17/2016 1527
Benzo(g,h,i)perylene	ND	21	11		1	51	42-129	08/17/2016 1527
Benzo(k)fluoranthene	ND	21	12		1	57	53-132	08/17/2016 1527
1,1'-Biphenyl	ND	21	14		1	66	42-120	08/17/2016 1527
4-Bromophenyl phenyl ether	ND	21	15		1	71	55-121	08/17/2016 1527
Butyl benzyl phthalate	ND	21	19		1	92	54-135	08/17/2016 1527
Caprolactam	ND	21	16		1	76	44-152	08/17/2016 1527
Carbazole	ND	21	17		1	79	45-101	08/17/2016 1527
4-Chloro-3-methyl phenol	ND	21	17		1	79	58-125	08/17/2016 1527
4-Chloroaniline	ND	21	8.7		1	41	10-128	08/17/2016 1527
bis(2-Chloroethoxy)methane	ND	21	16		1	74	44-127	08/17/2016 1527
bis(2-Chloroethyl)ether	ND	21	15		1	72	46-120	08/17/2016 1527
bis (2-Chloro-1-methylethyl) ether	ND	21	16		1	74	42-124	08/17/2016 1527
2-Chloronaphthalene	ND	21	14		1	65	46-100	08/17/2016 1527
2-Chlorophenol	ND	21	14		1	65	50-117	08/17/2016 1527
4-Chlorophenyl phenyl ether	ND	21	14		1	64	55-121	08/17/2016 1527
Chrysene	ND	21	14		1	68	54-120	08/17/2016 1527
Dibenzo(a,h)anthracene	ND	21	7.1	N	1	34	50-127	08/17/2016 1527
Dibenzofuran	ND	21	14		1	67	58-118	08/17/2016 1527
2,4-Dichlorophenol	ND	43	27		1	65	55-117	08/17/2016 1527
Diethylphthalate	ND	21	17		1	82	60-125	08/17/2016 1527
Dimethyl phthalate	ND	21	16		1	75	60-122	08/17/2016 1527
2,4-Dimethylphenol	ND	21	15		1	71	36-170	08/17/2016 1527
Di-n-butyl phthalate	ND	21	17		1	82	60-131	08/17/2016 1527
4,6-Dinitro-2-methylphenol	ND	21	17		1	82	56-128	08/17/2016 1527
2,4-Dinitrophenol	ND	21	16		1	76	47-133	08/17/2016 1527
2,4-Dinitrotoluene	ND	21	17		1	80	59-127	08/17/2016 1527
2,6-Dinitrotoluene	ND	21	16		1	75	59-126	08/17/2016 1527
Di-n-octylphthalate	ND	21	9.2	N	1	43	50-136	08/17/2016 1527
bis(2-Ethylhexyl)phthalate	ND	21	11	N	1	51	56-128	08/17/2016 1527
Fluoranthene	ND	21	16		1	73	58-124	08/17/2016 1527
Fluorene	ND	21	15		1	71	57-119	08/17/2016 1527
Hexachlorobenzene	ND	21	15		1	70	55-118	08/17/2016 1527
Hexachlorobutadiene	ND	21	11	N	1	50	53-116	08/17/2016 1527
Hexachlorocyclopentadiene	ND	110	29		1	27	16-96	08/17/2016 1527
Hexachloroethane	ND	21	12		1	57	31-110	08/17/2016 1527

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: RH13003-001MS
Batch: 19864
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/15/2016 1547

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Indeno(1,2,3-c,d)pyrene	ND	21	10		1	48	48-126	08/17/2016 1527
Isophorone	ND	21	16		1	76	57-123	08/17/2016 1527
2-Methylnaphthalene	ND	21	14		1	66	57-115	08/17/2016 1527
2-Methylphenol	ND	21	19		1	89	56-119	08/17/2016 1527
3+4-Methylphenol	ND	21	17		1	82	53-119	08/17/2016 1527
Naphthalene	ND	21	13		1	63	52-109	08/17/2016 1527
2-Nitroaniline	ND	21	15		1	72	60-124	08/17/2016 1527
3-Nitroaniline	ND	21	13		1	61	43-123	08/17/2016 1527
4-Nitroaniline	ND	21	15		1	70	60-135	08/17/2016 1527
Nitrobenzene	ND	21	16		1	73	51-122	08/17/2016 1527
2-Nitrophenol	ND	21	14		1	68	51-118	08/17/2016 1527
4-Nitrophenol	ND	43	39		1	92	53-130	08/17/2016 1527
N-Nitrosodi-n-propylamine	ND	21	19		1	89	54-127	08/17/2016 1527
N-Nitrosodiphenylamine (Diphenylamine)	ND	21	12		1	55	35-146	08/17/2016 1527
Pentachlorophenol	ND	43	31		1	72	42-131	08/17/2016 1527
Phenanthrene	ND	21	16		1	75	56-119	08/17/2016 1527
Phenol	ND	21	14		1	64	49-117	08/17/2016 1527
Pyrene	ND	21	17		1	81	55-127	08/17/2016 1527
2,4,5-Trichlorophenol	ND	21	17		1	78	56-118	08/17/2016 1527
2,4,6-Trichlorophenol	ND	21	14		1	68	55-121	08/17/2016 1527

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		61	37-129
2-Fluorophenol		53	24-127
Nitrobenzene-d5		67	38-127
Phenol-d5		60	28-128
Terphenyl-d14		23	10-148
2,4,6-Tribromophenol		73	41-144

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: RH13003-001MD
Batch: 19864
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/15/2016 1547

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	20	15		1	74	0.39	54-118	40	08/17/2016 1551
Acenaphthylene	ND	20	16		1	78	0.85	48-155	40	08/17/2016 1551
Acetophenone	ND	20	16		1	79	5.8	52-125	40	08/17/2016 1551
Anthracene	ND	20	17		1	83	0.50	55-122	40	08/17/2016 1551
Atrazine	ND	20	16		1	77	0.41	25-121	40	08/17/2016 1551
Benzaldehyde	ND	20	16		1	80	2.8	45-115	40	08/17/2016 1551
Benzo(a)anthracene	ND	20	15		1	76	4.1	56-123	40	08/17/2016 1551
Benzo(a)pyrene	ND	20	12		1	58	12	54-124	40	08/17/2016 1551
Benzo(b)fluoranthene	ND	20	13		1	66	7.7	55-136	40	08/17/2016 1551
Benzo(g,h,i)perylene	ND	20	12		1	60	12	42-129	40	08/17/2016 1551
Benzo(k)fluoranthene	ND	20	13		1	65	8.9	53-132	40	08/17/2016 1551
1,1'-Biphenyl	ND	20	14		1	69	0.80	42-120	40	08/17/2016 1551
4-Bromophenyl phenyl ether	ND	20	15		1	73	1.5	55-121	40	08/17/2016 1551
Butyl benzyl phthalate	ND	20	20		1	98	2.8	54-135	40	08/17/2016 1551
Caprolactam	ND	20	18		1	88	11	44-152	40	08/17/2016 1551
Carbazole	ND	20	17		1	82	0.62	45-101	40	08/17/2016 1551
4-Chloro-3-methyl phenol	ND	20	18		1	87	6.0	58-125	40	08/17/2016 1551
4-Chloroaniline	ND	20	9.6		1	47	9.7	10-128	40	08/17/2016 1551
bis(2-Chloroethoxy)methane	ND	20	16		1	79	2.2	44-127	40	08/17/2016 1551
bis(2-Chloroethyl)ether	ND	20	16		1	77	2.8	46-120	40	08/17/2016 1551
bis (2-Chloro-1-methylethyl) ether	ND	20	16		1	80	3.0	42-124	40	08/17/2016 1551
2-Chloronaphthalene	ND	20	14		1	69	1.8	46-100	40	08/17/2016 1551
2-Chlorophenol	ND	20	14		1	71	3.9	50-117	40	08/17/2016 1551
4-Chlorophenyl phenyl ether	ND	20	14		1	69	3.5	55-121	40	08/17/2016 1551
Chrysene	ND	20	15		1	75	5.5	54-120	40	08/17/2016 1551
Dibenzo(a,h)anthracene	ND	20	7.9	N	1	39	10	50-127	40	08/17/2016 1551
Dibenzofuran	ND	20	15		1	72	2.1	58-118	40	08/17/2016 1551
2,4-Dichlorophenol	ND	41	29		1	70	4.5	55-117	40	08/17/2016 1551
Diethylphthalate	ND	20	17		1	84	1.6	60-125	40	08/17/2016 1551
Dimethyl phthalate	ND	20	16		1	80	1.2	60-122	40	08/17/2016 1551
2,4-Dimethylphenol	ND	20	16		1	77	4.6	36-170	40	08/17/2016 1551
Di-n-butyl phthalate	ND	20	18		1	87	1.5	60-131	40	08/17/2016 1551
4,6-Dinitro-2-methylphenol	ND	20	18		1	87	1.9	56-128	40	08/17/2016 1551
2,4-Dinitrophenol	ND	20	16		1	78	0.58	47-133	40	08/17/2016 1551
2,4-Dinitrotoluene	ND	20	17		1	84	0.35	59-127	40	08/17/2016 1551
2,6-Dinitrotoluene	ND	20	16		1	78	0.20	59-126	40	08/17/2016 1551
Di-n-octylphthalate	ND	20	9.9	N	1	49	7.3	50-136	40	08/17/2016 1551
bis(2-Ethylhexyl)phthalate	ND	20	12		1	57	6.6	56-128	40	08/17/2016 1551
Fluoranthene	ND	20	16		1	78	1.9	58-124	40	08/17/2016 1551
Fluorene	ND	20	15		1	74	0.91	57-119	40	08/17/2016 1551
Hexachlorobenzene	ND	20	15		1	74	1.4	55-118	40	08/17/2016 1551
Hexachlorobutadiene	ND	20	11		1	55	4.8	53-116	40	08/17/2016 1551
Hexachlorocyclopentadiene	ND	100	29		1	28	0.62	16-96	40	08/17/2016 1551
Hexachloroethane	ND	20	13		1	62	4.7	31-110	40	08/17/2016 1551

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: RH13003-001MD
Batch: 19864
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 08/15/2016 1547

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Indeno(1,2,3-c,d)pyrene	ND	20	11		1	55	10	48-126	40	08/17/2016 1551
Isophorone	ND	20	17		1	83	5.4	57-123	40	08/17/2016 1551
2-Methylnaphthalene	ND	20	15		1	71	4.0	57-115	40	08/17/2016 1551
2-Methylphenol	ND	20	19		1	95	2.2	56-119	40	08/17/2016 1551
3+4-Methylphenol	ND	20	18		1	88	3.1	53-119	40	08/17/2016 1551
Naphthalene	ND	20	14		1	69	4.2	52-109	40	08/17/2016 1551
2-Nitroaniline	ND	20	16		1	78	4.0	60-124	40	08/17/2016 1551
3-Nitroaniline	ND	20	13		1	62	2.5	43-123	40	08/17/2016 1551
4-Nitroaniline	ND	20	15		1	73	0.53	60-135	40	08/17/2016 1551
Nitrobenzene	ND	20	17		1	81	6.2	51-122	40	08/17/2016 1551
2-Nitrophenol	ND	20	15		1	73	3.7	51-118	40	08/17/2016 1551
4-Nitrophenol	ND	41	40		1	98	2.6	53-130	40	08/17/2016 1551
N-Nitrosodi-n-propylamine	ND	20	19		1	94	0.89	54-127	40	08/17/2016 1551
N-Nitrosodiphenylamine (Diphenylamine)	ND	20	13		1	66	13	35-146	40	08/17/2016 1551
Pentachlorophenol	ND	41	31		1	75	0.69	42-131	40	08/17/2016 1551
Phenanthrene	ND	20	16		1	79	1.2	56-119	40	08/17/2016 1551
Phenol	ND	20	14		1	70	5.2	49-117	40	08/17/2016 1551
Pyrene	ND	20	17		1	85	0.29	55-127	40	08/17/2016 1551
2,4,5-Trichlorophenol	ND	20	16		1	80	2.7	56-118	40	08/17/2016 1551
2,4,6-Trichlorophenol	ND	20	15		1	72	2.4	55-121	40	08/17/2016 1551

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		64	37-129
2-Fluorophenol		59	24-127
Nitrobenzene-d5		76	38-127
Phenol-d5		65	28-128
Terphenyl-d14		32	10-148
2,4,6-Tribromophenol		74	41-144

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - MB

Sample ID: RQ19846-001
Batch: 19846
Analytical Method: 6020A

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 08/15/2016 1302

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	0.19	J	1	1.0	0.17	ug/L	08/18/2016 1801
Arsenic	ND		1	1.0	0.26	ug/L	08/18/2016 1801
Beryllium	ND		1	0.40	0.12	ug/L	08/18/2016 1801
Cadmium	ND		1	0.10	0.044	ug/L	08/18/2016 1801
Chromium	ND		1	5.0	0.63	ug/L	08/18/2016 1801
Copper	0.19	J	1	1.0	0.15	ug/L	08/18/2016 1801
Iron	8.8	J	1	20	6.3	ug/L	08/18/2016 1801
Lead	0.88	J	1	1.0	0.15	ug/L	08/18/2016 1801
Manganese	0.83	J	1	5.0	0.54	ug/L	08/18/2016 1801
Nickel	ND		1	5.0	0.63	ug/L	08/18/2016 1801
Selenium	ND		1	1.0	0.95	ug/L	08/18/2016 1801
Silver	ND		1	1.0	0.17	ug/L	08/18/2016 1801
Thallium	ND		1	0.50	0.075	ug/L	08/18/2016 1801
Zinc	2.0	J	1	10	1.6	ug/L	08/18/2016 1801

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

ICP-MS - LCS

Sample ID: RQ19846-002
Batch: 19846
Analytical Method: 6020A

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 08/15/2016 1302

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	100	100		1	102	80-120	08/18/2016 1807
Arsenic	100	110		1	108	80-120	08/18/2016 1807
Beryllium	100	110		1	110	80-120	08/18/2016 1807
Cadmium	100	100		1	103	80-120	08/18/2016 1807
Chromium	100	100		1	105	80-120	08/18/2016 1807
Copper	100	100		1	105	80-120	08/18/2016 1807
Iron	1000	1100		1	111	80-120	08/18/2016 1807
Lead	100	100		1	105	80-120	08/18/2016 1807
Manganese	100	110		1	106	80-120	08/18/2016 1807
Nickel	100	100		1	104	80-120	08/18/2016 1807
Selenium	100	110		1	114	80-120	08/18/2016 1807
Silver	100	110		1	107	80-120	08/18/2016 1807
Thallium	100	110		1	105	80-120	08/18/2016 1807
Zinc	100	110		1	111	80-120	08/18/2016 1807

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - MB

Sample ID: RQ20127-001
Batch: 20127
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 08/18/2016 1005

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	0.000029	J	1	0.00010	0.000028	mg/L	08/18/2016 1850

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

CVAA - LCS

Sample ID: RQ20127-002
Batch: 20127
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 08/18/2016 1005

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.0020	0.0019		1	97	80-120	08/18/2016 1853

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

Chain of Custody
and
Miscellaneous Documents

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 63419

Client	CDM Smith
Address	5400 Glenwood Ave Ste 400
City	Raleigh
State	NC
Zip Code	27612
Project Name	Bad Holding
Project No.	
P.O. No.	
Report to Contact	Don Forbes
Sampler's Signature	x Mark Darwin
Printed Name	Mark Darwin
Telephone No. / E-mail	Forbesd@cdmsmith.com
Quote No.	
Page	1 of 1

Analysis (Attach list if more space is needed)

RH13003

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab/Comp Composite	Aqueous	Solid	Air	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC	VOC 1,4-D	SVOC	Metals	NO3	SO4	Ammonia	Remarks / Cooler I.D.
TW-2	8-12-16	0800	G	✓									✓	✓	✓	✓	✓	✓	✓	
TW-5	↓	0845	↓	↓									↓	↓	↓	↓	↓	↓	↓	
TW-7	↓	0930	↓	↓																
TW-1	↓	0700	↓	↓												↓				
TW-6	↓	0705	↓	↓												↓				
TW-4	↓	0710	↓	↓												↓				

Turn Around Time Required (Prior lab approval required for expedited TAT.)
☐ Standard ☒ Rush (Specify) 5 day

Sample Disposal
☐ Return to Client ☒ Disposal by Lab

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Mark Darwin	8-12-16	1700	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEx	8/13/16	0835	4. Laboratory received by: Tracy Dowling	8/13/16	0835

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) (Yes) No Ice Pack Receipt Temp. 2.1 °C 3.5°C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s), PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

Shealy Environmental Services, Inc.
Document Number: ME0018C-04

Page 1 of 1
Effective Date: 02/05/2016
Expiry Date: 02/05/2021

Sample Receipt Checklist (SRC)

Client: CDM Smith Cooler Inspected by/date: fgr / 8/13/16 Lot #: RH13003

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐	NA ☑	2. If custody seals were present, were they intact and unbroken?

pH strip ID: 16-986 Cl strip ID: 16-800

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

12.1/12.1 °C 13.5/13.5 °C / / °C / / °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM was notified by: phone / email / face-to-face (circle one).
Yes ☐	No ☑	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		13. Was adequate sample volume available?
Yes ☐	No ☑		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☑	No ☑	fgr 8/13/16	15. Were any samples containers missing/excess (circle one) samples not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☑	No ☐	NA ☐	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☑	No ☐	NA ☐	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☑	No ☐	19101	22. Was the quote number used taken from the container label?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4, HNO3, HCl, NaOH) using SR # _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SC Drinking Water Project Sample(s) pH verified to be ≥ 2 by _____ Date: _____
Sample(s) _____ were not received at a pH of <2 and were adjusted accordingly using SR# _____

Sample labels applied by: fgr Verified by: _____ Date: 8/13/16

Comments: Dup-1 not listed on COC. info taken from bottle

Appendix C
Boring Logs

SB-1 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/10/2016
Project No.:	127844-115212	End Date:	8/10/2016
Logged By:	Janelle Bauer	Total Depth:	12'
Location Code:	SB-1	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	3.0	CL-ML	--	**CLAY**, silty, trace gravel, brown and reddish brown, dry **(COVER SOIL)**
2				
3	5.6	ML-CL	10-5-5-9	**SILT**, clayey, gravely, trace sand, sand fine-to-coarse grained, brown and gray, stiff, dry
4				
5	7.0		3-4-3-3	
6		CL-ML		**CLAY**, silty, brown and dark green, medium stiff, dry
7	8.5	ML-CL	3-6-3-3	**SILT**, clayey, trace gravel, brown and dark green, stiff, dry
8				**Brick**, red, dry **(WASTE)**
9	7.6	CL-ML	1-2-4-4	**CLAY**, silty, grading to silty clay and trace gravel, brown, reddish brown, and dark green, medium stiff, dry **(NATIVE SOIL)**
10				
11	2.4		2-2-3-2	
12				
13	**Boring terminated at 12 feet.**			

SB-2 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/10/2016
Project No.:	127844-115212	End Date:	8/10/2016
Logged By:	Janelle Bauer	Total Depth:	14'
Location Code:	SB-2	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Formation Description
1	2.8	ML-CL	**SILT**, clayey, organics, dark brown, dry **(COVER SOIL)**
2			
3	3.6	ML-CL	**SILT**, clayey, trace gravel, dark brown, dry
4			
5	4.1		
6			
7	3.5	ML-CL	**SILT**, clayey, wood chips, metal, dark brown, wet **(WASTE)**
8			
9	6.2	CL-ML	**CLAY**, silty, metal, metal wire, wood chips, dark brown, moist
10			
11	7.0	CL-ML	**CLAY**, silty, trace gravel, trace wood chips, dark brown, moist
12			
13	562.0	ML-CL	**SILT**, clayey, wood chips, dark green, dry
14	13.1	ML-CL	**SILT**, clayey, brown, dry **(NATIVE SOIL)**
15	**Boring terminated at 14 feet.**		

Notes

1. Blow counts were not recorded.

SB-3 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/12/2016
Project No.:	127844-115212	End Date:	8/12/2016
Logged By:	Janelle Bauer	Total Depth:	12'
Location Code:	SB-3	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	2.9	ML	--	**SILT** and gravel, brown, medium stiff, dry **(COVER SOIL)**
2	2.8			
3	5.0		4-4-3-3	
4				
5	4.2	ML	2-4-4-5	**SILT** and gravel, clayey, reddish brown, stiff, dry
6				
7	4.3	ML-CL	7-14-7-4	**SILT**, clayey, asphalt, wood chips, trace gravel and fabric, dark gray and reddish brown, very stiff, dry **(WASTE)**
8				
9	3.8	ML-CL	1-1-6-5	**SILT**, clayey, asphalt, wood chips, trace gravel, dark gray and brown, medium stiff dry
10		ML		**SILT**, gray, medium stiff, moist **(NATIVE SOIL)**
11	4.3	ML	2-2-3-5	**SILT** and sand, sand fine-to-coarse grained, gray, medium stiff, moist
12				
13	**Boring terminated at 12 feet.**			

SB-5 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/12/2016
Project No.:	127844-115212	End Date:	8/12/2016
Logged By:	Janelle Bauer	Total Depth:	10'
Location Code:	SB-5	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	0.2	ML	--	**SILT**, trace clay and gravel, brown, dry
2				
3	1.3	CL	3-3-5-7	**CLAY** and gravel, silty, dark gray and pink, medium stiff, dry
4				
5	3.6	ML-CL	3-5-4-5	**SILT**, clayey, trace gravel, reddish brown, stiff, dry
6				
7	6.5	ML-CL	2-4-8-14	**SILT**, clayey, grading to silty sand, trace gravel, sand fine-to-medium grained, light pink, tan, light brown, and white, stiff grading to hard, dry
8				
9	4.9		7-14-16-17	
10				
11	**Boring terminated at 10 feet.**			

SB-6 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/11/2016
Project No.:	127844-115212	End Date:	8/11/2016
Logged By:	Janelle Bauer	Total Depth:	10'
Location Code:	SB-6	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	2.8	ML-CL	--	**SILT**, clayey, trace gravel, reddish brown, dry
2				
3	5.1	CL-ML	4-4-5-6	**CLAY**, silty, trace gravel, brown and gray, stiff, dry
4				
5	5.9	ML-CL	2-1-2-3	**SILT**, clayey, grading to silty clay, trace gravel, tan and reddish brown, soft, dry
6				
7	6.8	CL-ML	3-4-7-8	**CLAY**, silty, reddish brown grading to silt and gravel, trace clay, dark gray, pink, and dark brown, stiff, dry
8				
9	7.8	ML-CL	2-3-5-7	**SILT**, clayey, trace gravel, dark gray and brown, medium stiff, dry
10				
11	**Boring terminated at 10 feet.**			

SB-7 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/11/2016
Project No.:	127844-115212	End Date:	8/11/2016
Logged By:	Janelle Bauer	Total Depth:	22'
Location Code:	SB-7	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
	2.9	ML	--	**SILT**, clayey, trace gravel, brown, dry **(COVER SOIL)**
1				
2	4.5	ML-CL	--	**SILT**, clayey, trace gravel and asphalt, brown, dry **(WASTE)**
3	5.5	--	2-1-1-3	**WOOD CHIPS**, trace clayey silt, reddish brown, very soft, dry
4				
5		ML-CL	4-5-6-6	**SILT**, clayey, trace gravel and wood, brown, stiff, dry
6				
7	4.6	CL-ML	2-3-5-6	**CLAY** and silt, trace gravel and wood chips, reddish brown and brown, medium stiff, dry
8				
9	7.5	ML-CL	4-3-2-5	**SILT**, clayey, wood chips trace gravel, brown and dark gray, medium stiff, dry
10				
11	10.6	CL-ML	5-2-1-2	**CLAY**, silty, wood chips and brick, brown and dark gray, soft, dry
12				
13	5.7	CL-ML	10-33-50	**CLAY**, silty, wood, brick, plastic, trace gravel, reddish brown, hard, dry
14				
15	2.7	--	23-19-23-16	**WOOD**, trace clay, dark gray, hard, dry
16				
17	4.4	--	1-2-2-2	**ASPHALT**, black and dark gray, soft, dry
18				
19	4.8	CL	0-0-1-4	**CLAY**, trace wood chips, dark gray, very soft, dry
20				
21	3.8	SW	4-3-3-9	**SAND**, sand medium-to-coarse grained, gray, white, pink, and green, loose, wet **(NATIVE SOIL)**
22				
23	**Boring terminated at 22 feet.**			

SB-8 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/10/2016
Project No.:	127844-115212	End Date:	8/10/2016
Logged By:	Janelle Bauer	Total Depth:	22'
Location Code:	SB-8	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	2.5	ML-CL	0-0-0-0	**SILT**, clayey, trace gravel, brown, very soft, dry **(COVER SOIL)**
2				
3	3.0	ML-CL	3-3-4-7	**SILT**, clayey, trace gravel, sand, and plastic, sand fine-to-coarse grained, brown and dark green, medium stiff, dry **(WASTE)**
4				
5	2.8	ML-CL	1-2-2-4	**SILT**, clayey, grading to silty clay, wood chips, trace gravel, reddish brown and brown, soft, dry
6				
7	2.4	CL-ML	3-6-6-6	**CLAY**, silty, grading to clayey silt, trace gravel, tan grading to brown and dark gray, soft, dry
8				
9	2.5		2-2-2-2	
10				
11	3.8		1-1-1-1	
12				
13	3.9		0-0-0-0	
14				
15	4.5		0-2-2-2	
16				
17	4.6	CL-ML	1-2-2-2	**CLAY**, silty, trace gravel and wood chips, dark gray, soft, dry
18				
19	4.7	CL-ML	0-0-0-1	**CLAY**, silty, trace wood chips, dark gray, very soft, wet
20				
21	6.2	CL-ML	2-2-4-6	**CLAY**, silty, dark gray, medium stiff, wet **(NATIVE SOIL)**
22		SW		**SAND**, trace gravel, sand fine-to-medium grained, gray and white, loose, wet
23	**Boring terminated at 22 feet.**			

SB-9 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/10/2016
Project No.:	127844-115212	End Date:	8/10/2016
Logged By:	Bridget Wlosek	Total Depth:	20'
Location Code:	SB-9	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	2.0	ML-CL	--	**SILT**, clayey, trace sand and gravel, sand medium-grained, dark gray, dry **(COVER SOIL)**
2				
3	3.9	ML-CL	2-3-4-4	**SILT**, clayey, reddish brown, grading to clayey silt, trace gravel, yellowish brown, medium stiff, dry
4				
5	3.4	ML-CL	1-2-1-3	**SILT**, clayey, trace gravel, brown, grading to silty clay, trace wood, reddish brown, soft, dry
6				
7	6.0	CL-ML	1-2-6-5	**CLAY**, silty, reddish brown, stiff, dry
8				
9	8.0	CL-ML	2-12-9-11	**CLAY**, silty, trace gravel, wood, and nails, reddish brown, very stiff, dry **(WASTE)**
10				
11	8.2	CL-ML	2-0-0-0	**CLAY**, silty, trace gravel, brown and gray, very soft, dry
12				
13	8.0		9-0-0-2	
14				
15	11.1	CL-ML	15-0-0-2	**CLAY**, silty, trace gravel and plastic, gray, very soft, moist
16				
17	6.6	CL-ML	1-0-0-0	**CLAY**, silty, grading to sandy silt, sand fine-grained, gray, very soft, moist/wet **(NATIVE SOIL)**
18				
19	10.5		0-0-0-3	
20				
21	**Boring terminated at 20 feet.**			

SB-10 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/12/2016
Project No.:	127844-115212	End Date:	8/12/2016
Logged By:	Janelle Bauer	Total Depth:	20'
Location Code:	SB-10	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	2.4	ML	--	**SILT** and gravel, brown, dry **(COVER SOIL)**
2	2.7			
3	3.7	CL-ML	3-3-4-5	**CLAY**, silty, trace gravel, dark gray, medium stiff, dry
4				
5	4.6	CL-ML	2-1-2-4	**CLAY**, silty, trace gravel and wood chips, dark gray, soft, dry **(WASTE)**
6				
7	4.9	--	7-2-3-6	**WOOD**, trace silty clay and gravel, dark gray, medium stiff, dry
8				
9	4.7	ML-CL	2-3-5-7	**SILT**, clayey, trace gravel, dark gray and reddish brown grading to brown, stiff, dry
10				
11	4.6		2-3-5-4	
12				
13	6.0	ML-CL	3-5-5-5	**SILT**, clayey, grading to silty clay, trace gravel and wood chips, dark gray, brown, and light brown, stiff, dry
14				
15	5.6		3-3-6-7	
16				
17	7.2	CL-ML	2-3-5-5	**CLAY**, silty, grayish brown, stiff, dry **(NATIVE SOIL)**
18				
19	6.1	SM	4-5-3-2	**SAND**, silty, sand fine-grained, gray, stiff, wet
20				
21	**Boring terminated at 20 feet.**			

SB-11 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/12/2016
Project No.:	127844-115212	End Date:	8/12/2016
Logged By:	Janelle Bauer	Total Depth:	10'
Location Code:	SB-11	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	4.8	ML-CL	--	**SILT**, clayey, gravelly, brown, dry
2	3.9			
3	4.7	ML	3-4-5-7	**SILT**, trace sand and gravel, sand fine-to-medium grained, brown and white, stiff, dry
4				
5	6.1	ML-CL	2-3-5-6	**SILT**, clayey, gravelly, brown and dark gray, stiff, dry
6				
7	6.4	ML-CL	8-5-6-9	**SILT**, clayey, dark gray and reddish brown, stiff, dry
8				
9	5.4		5-7-7-8	
10				
13	**Boring terminated at 10 feet.**			

SB-13 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/11/2016
Project No.:	127844-115212	End Date:	8/11/2016
Logged By:	Janelle Bauer	Total Depth:	10'
Location Code:	SB-13	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	5.4	ML	--	**SILT**, trace sand and gravel, sand coarse grained, brown, dry
2				
3	8.0	ML	4-5-6-8	**SILT**, clayey, trace gravel, tan and reddish brown, stiff, dry
4				
5	5.1	CL-ML	2-2-4-8	**CLAY**, silty, trace gravel, reddish brown, dark gray, and pink, medium stiff grading to hard, dry
6				
7	7.1		6-8-7-9	
8				
9	10.2		8-33-17-8	
10				
11	**Boring terminated at 10 feet.**			

SB-14 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/11/2016
Project No.:	127844-115212	End Date:	8/11/2016
Logged By:	Janelle Bauer	Total Depth:	24'
Location Code:	SB-14	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	3.4	ML	--	**SILT** and gravel, trace clay, brown and reddish brown, dry **(COVER SOIL)**
2				
3	6.4	ML-CL	5-6-9-10	**SILT**, clayey, trace gravel and wood chips, brown and reddish brown, stiff, dry **(WASTE)**
4				
5	4.2	ML	2-4-9-31	**SILT** and sand, clayey, sand coarse grained, brown, stiff, dry
6		--		**ASPHALT**, gray and black, stiff, dry
7	5.2	ML	8-6-4-3	**SILT**, gravel, and sand, clayey, sand coarse-grained, brown and dark gray, stiff, dry
8				
9	2.9	CL-ML	0-0-2-4	**CLAY** and silt, trace gravel, brown and dark grayish green, very soft, dry
10				
11	5.7		2-6-7-8	
12		ML-CL		**SILT**, clayey, trace gravel, brown, stiff, dry
13	5.3	CL-ML	2-4-6-6	**CLAY**, silty, trace gravel, wood chips, plastic, and asphalt, dark gray and brown, stiff, dry
14				
15	5.7		3-4-7-50	
16				
17	--	CL-ML	3-2-1-2	**CLAY**, silty, brown and dark gray, soft, dry **(NATIVE SOIL)**
18				
19	--	CL-ML	3-2-2-3	**CLAY**, silty, brown and dark gray, soft, wet
20				
21	15.8		2-1-3-8	
22				
23	7.7	SM	5-25-32-38	**SAND** and silt, sand medium-to-coarse grained, gray and white, hard, wet
24		ML		**SILT**, brown and white, hard, dry
25	**Boring terminated at 24 feet.**			

SB-15 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/10/2016
Project No.:	127844-115212	End Date:	8/10/2016
Logged By:	Bridget Wlosek	Total Depth:	10'
Location Code:	SB-15	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	2.3	ML-CL	--	**SILT**, clayey, trace sand, sand medium-grained, brown, dry **(COVER SOIL)**
2	3.9	ML-CL	--	**SILT**, clayey, trace gravel, reddish brown, dry
3	2.2	ML-CL	3-2-3-4	**SILT**, clayey, brown and gray, medium stiff, dry
4				
5	1.5	CL-ML	2-1-2-2	**CLAY**, silty, trace gravel, reddish brown, soft, dry
6				
7	1.6	CL-ML	2-3-5-2	**CLAY**, silty, grading to clayey silt, trace gravel, brown and gray, medium stiff, dry
8				
9	4.6	CL-ML	1-1-1-0	**CLAY**, silty, trace gravel, reddish brown, very soft, dry
10				
11	**Boring terminated at 10 feet.**			

SB-16 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/16/2016
Project No.:	127844-115212	End Date:	8/16/2016
Logged By:	Janelle Bauer	Total Depth:	20'
Location Code:	SB-16	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Diedrich D50/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	3.4	ML	--	**SILT** and gravel, brown, dry **(COVER SOIL)**
2				
3	4.9	CL-ML	6-7-6-7	**CLAY**, silty, gravelly, trace wood chips, brown, stiff, dry **(WASTE)**
4				
5	6.7	CL	3-4-4-7	**CLAY**, trace metal, dark brown, stiff, dry
6				
7	4.1	CL-ML	5-8-7-12	**CLAY**, silty, trace gravel, dark gray and brown, very stiff grading to medium stiff, dry
8				
9	6.4		2-3-4-8	
10				
11	6.9	ML-CL	2-3-4-5	**SILT** and gravel, clayey, dark brown and brown, medium stiff, dry
12				
13	8.1	ML-CL	6-5-5-4	**SILT**, clayey, trace gravel and wood chips, dark gray, stiff grading to medium stiff, dry
14				
15	9.2		2-2-4-4	
16				
17	10.0		2-2-4-5	
18				
19	11.0		2-3-3-6	
20		CL		**CLAY**, gray, brown, tan, black, and white, medium stiff, dry **(NATIVE SOIL)**
21	**Boring terminated at 20 feet.**			

BG-1 (SB-4) Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/16/2016
Project No.:	127844-115212	End Date:	8/16/2016
Logged By:	Janelle Bauer	Total Depth:	20'
Location Code:	BG-1 (SB-4)	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Diedrich D50/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	1.5	ML	6-8-8-4	**SILT** and gravel, brown, very stiff, dry
2				
3	3.9	ML-CL	3-3-4-4	**SILT**, clayey, gravelly, brown, medium stiff, dry
4				
5	6.5	CL	1-2-2-2	**CLAY**, dark gray, medium stiff, dry
6				
7	5.5	CL-ML	4-4-4-4	**CLAY**, silty, gravelly, grading to clay, dark gray, stiff, dry
8				
9	3.5	CL-ML	2-2-3-8	**CLAY** and silt, dark gray and brown, medium stiff, dry
10				
11	7.7	ML-CL	5-8-23-25	**SILT**, clayey, grading to silt, dark gray, hard, dry
12				
13	6.7	CL	9-11-28-50	**CLAY** grading to silt, dark gray and brown, hard, dry
14				
15	2.2		14-24-36-50	
16				
17	10.5	ML	36-42-50	**SILT** and sand, trace gravel, sand fine-to-coarse grained, dark gray, pink, and brown, hard, dry
18				
19	4.0		18-50	
20				
21	**Boring terminated at 20 feet.**			

BG-2 (SB-12) Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/16/2016
Project No.:	127844-115212	End Date:	8/16/2016
Logged By:	Janelle Bauer	Total Depth:	20'
Location Code:	BG-2 (SB-12)	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

Drilling Rig/Method: Diedrich D50/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	1.8	ML	10-12-12-6	**SILT** and gravel, brown, very stiff, dry
2				
3	1.3	ML-CL	5-7-5-13	**SILT**, clayey, dark brown and brown, stiff, dry
4				
5	3.1		4-6-7-9	
6				
7	1.7	ML-CL	5--9-10-9	**SILT** and clay, brown, reddish brown, and black, very stiff, dry
8				
9	3.4	ML-CL	7-6-6-10	**SILT** and clay, trace sand, sand coarse-grained, brown and tan, stiff, dry
10				
11	1.9	ML	10-24-48-50	**SILT**, brown, very hard, dry
12		SP		**SAND** and gravel, sand coarse-grained, pink and brown, very dense, dry
13	4.2		18-43-36-50	
14				
15	1.5	ML	9-25-50	**SILT** and sand, sand fine-grained, brown and pinkish brown, hard, dry
16				
17	6.5	ML	45-50	**SILT** and sand, sand fine-to-medium grained, brown, very stiff, dry
18				
19	2.6	ML	25-22-8-15	**SILT**, sand, and gravel, sand fine-to-coarse grained, brown and pink, very stiff, dry
20				
21	**Boring terminated at 20 feet.**			

BG-3 (SB-17) Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/16/2016
Project No.:	127844-115212	End Date:	8/16/2016
Logged By:	Janelle Bauer	Total Depth:	20'
Location Code:	BG-3 (SB-17)	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	None
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	None

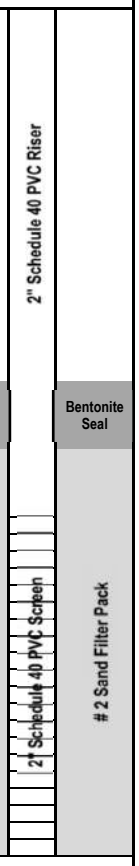
Drilling Rig/Method: Diedrich D50/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	2.3	ML	3-2-3-6	**SILT** and gravel, brown, soft, dry
2				
3	1.4	ML-CL	3-4-7-10	**SILT**, clayey, trace gravel, dark gray and reddish brown, stiff, dry
4				
5	2.5	CL-ML	6-5-6-8	**CLAY**, silty, trace gravel, brown and reddish brown, stiff grading to very stiff, dry
6				
7	2.2		9-10-11-13	
8				
9	1.8	ML	4-8-10-11	**SILT**, trace clay, brown and dark gray, very stiff, dry
10				
11	1.7		10-13-14-15	
12				
13	2.6	ML	9-15-13-14	**SILT** and gravel, clayey, brown, dark gray, tan, very stiff, dry
14				
15	2.1	ML-CL	5-7-18-18	**SILT**, clayey, gravelly, dark gray, brown, tan, and pink, very stiff, dry
16				
17	2.2	ML	25-28-47-50	**SILT** and gravel, brown, tan, and pink, hard, dry
18				
19	2.5		8-15-29-34	
20				
21	**Boring terminated at 20 feet.**			

TW-1 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/8/2016
Project No.:	127844-115212	End Date:	8/8/2016
Logged By:	Janelle Bauer	Total Depth:	25'
Location Code:	TW-1	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	2" PVC to 15'
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	2" PVC: 15'-25', 0.01"
Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger		Stabilized Water Level (bgs):	16.9 ft (8/11/2016)

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Formation Description	Temporary Well Construction Above-Grade Completion with Expansion Cap
1, 2, 3, 4, 5	19.9	CL	**CLAY**, trace silt and gravel, reddish brown, dry	
6, 7, 8, 9, 10	2.8	CL	**CLAY**, trace silt, gravel, and sand, sand coarse grained, reddish brown, dry	
11, 12, 13, 14, 15	2.0	CL-ML	**SILT**, clayey, grading to silty sand, sand medium-to-coarse grained, trace gravel, brown, dry	Bentonite Seal
16, 17, 18, 19, 20	5.4	CL	**CLAY**, trace sand and gravel, sand medium-grained, gray, moist	# 2 Sand Filter Pack
21, 22, 23, 24, 25	3.4	CL	**CLAY**, trace gravel, gray, moist	
26	**Boring terminated at 25 feet.**			



Notes

1. Blow counts were not recorded.

TW-2 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/8/2016
Project No.:	127844-115212	End Date:	8/8/2016
Logged By:	Janelle Bauer	Total Depth:	20'
Location Code:	TW-2	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	2" PVC to 10'
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	2" PVC: 10'-20', 0.01"
Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger		Stabilized Water Level (bgs):	12.6 ft (8/11/2016)

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Formation Description	Temporary Well Construction Above-Grade Completion with Expansion Cap
1	1.9	CL	**CLAY** grading to silty clay, trace sand, sand fine-grained, brown, dry	
2				
3				
4				
5				
6	2.0	CL	**CLAY** grading to clay with trace silt, reddish brown, moist	Bentonite Seal
7				
8				
9				
10				
11	2.5	CL-ML	**CLAY**, silty, sandy, trace gravel, sand fine-grained, reddish brown and gray, dry	# 2 Sand Filter Pack
12				
13				
14				
15				
16	2.2	CL-ML	**CLAY**, silty, trace sand, sand medium-grained, reddish brown, dry	
17				
18				
19				
20				
21	**Boring terminated at 20 feet.**			

2" Schedule 40 PVC Riser

2" Schedule 40 PVC Screen

Bentonite Seal

2 Sand Filter Pack

Notes

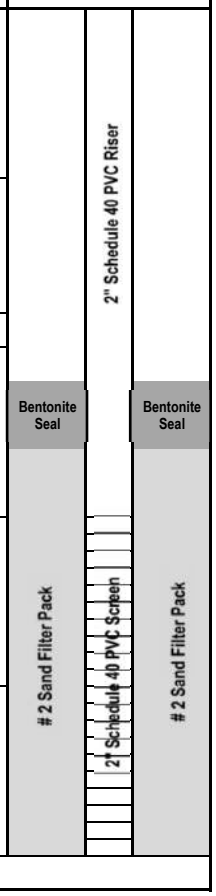
1. Blow counts were not recorded.

TW-3 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/9/2016
Project No.:	127844-115212	End Date:	8/9/2016
Logged By:	Janelle Bauer	Total Depth:	25'
Location Code:	TW-3	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	2" PVC to 15'
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	2" PVC: 15'-25', 0.01"
Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger		Stabilized Water Level (bgs):	10.2 ft (8/11/2016)

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Formation Description
1–5	6.1	ML-CL	**SILT**, clayey, grading to silty clay, brown and dark gray, dry
6–9	5.7	CL-ML	**CLAY**, silty, brown, dry
10		SW	**SAND**, trace silt, sand fine-to-medium grained, pink, white, and green, dry
11–15	8.7	ML	**SILT**, trace sand, sand fine-grained, pink and green, dry
16–20	6.9	ML-CL	**SILT**, clayey, grading to silt, pink and green, dry
21–25	6.3	ML	**SILT**, sandy, sand fine-grained, pink and green, dry
26	**Boring terminated at 25 feet.**		

Temporary Well Construction Above-Grade Completion with Expansion Cap



Notes
1. Blow counts were not recorded.

TW-4 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/9/2016
Project No.:	127844-115212	End Date:	8/9/2016
Logged By:	Janelle Bauer	Total Depth:	25'
Location Code:	TW-4	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	2" PVC to 15'
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	2" PVC: 15'-25', 0.01"
Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger		Stabilized Water Level (bgs):	14.1ft (8/11/2016)

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Formation Description	Temporary Well Construction Above-Grade Completion with Expansion Cap
1	5.3	SW	**SAND**, silty, trace gravel, sand fine-to-coarse grained, brown and white, dry	2" Schedule 40 PVC Riser
2				
3				
4				
5				
6	5.5	ML-CL	**SILT**, clayey, brown and tan grading to brown, dark green, and pink, dry to moist	
7				
8				
9				
10				
11	7.8			Bentonite Seal
12				
13				
14				# 2 Sand Filter Pack
15				
16	6.8			2" Schedule 40 PVC Screen
17				
18				
19				
20				
21	8.6	SW	**SAND**, trace silt, sand fine-to-coarse grained, pinkish brown and brown, moist	
22				
23				
24				
25				
26	**Boring terminated at 25 feet.**			

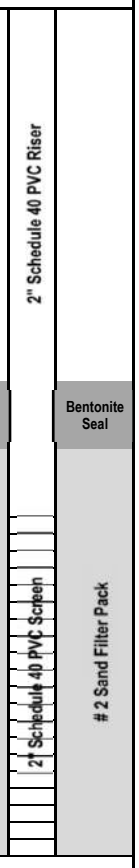
Notes

1. Blow counts were not recorded.

TW-5 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/9/2016
Project No.:	127844-115212	End Date:	8/9/2016
Logged By:	Janelle Bauer	Total Depth:	25'
Location Code:	TW-5	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	2" PVC to 15'
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	2" PVC: 15'-25', 0.01"
Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger		Stabilized Water Level (bgs):	17.3 ft (8/11/2016)

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Formation Description	Temporary Well Construction Above-Grade Completion with Expansion Cap
1, 2, 3, 4, 5	1.4	ML-CL	**SILT,** clayey, grading to silty clay, brown and reddish brown,dry	
6, 7, 8, 9, 10	1.8	ML-CL	**SILT**, clayey, grading to clay, trace silt, reddish brown, dry	
11, 12, 13, 14, 15	2.0	ML-CL	**CLAY**, silty, grading to clayey silt, brown and gray, dry	Bentonite Seal
16, 17, 18, 19, 20	2.5	ML-CL	**SILT**, clayey, reddish brown and gray, wet	# 2 Sand Filter Pack
21, 22, 23, 24, 25	2.5	CL	**CLAY**, trace gravel and silt, grading to clayey silt, trace gravel, dark gray, dry	
26	**Boring terminated at 25 feet.**			



Notes

1. Blow counts were not recorded.

TW-6 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/8/2016
Project No.:	127844-115212	End Date:	8/8/2016
Logged By:	Janelle Bauer	Total Depth:	25'
Location Code:	TW-6	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	2" PVC to 15'
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	2" PVC: 15'-25', 0.01"
Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger		Stabilized Water Level (bgs):	17.6 ft (8/11/2016)

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Formation Description	Temporary Well Construction Above-Grade Completion with Expansion Cap
1, 2, 3, 4, 5	1.8	ML-CL	**SILT**, clayey, trace gravel and sand, sand medium-grained, gray and brown, dry **(COVER SOIL)**	2" Schedule 40 PVC Riser
6, 7, 8, 9, 10	0.7	CL-ML	**CLAY**, silty, trace sand, sand coarse grained, brown and black, dry	2" Schedule 40 PVC Riser
11, 12, 13, 14, 15	0.9	CL	**CLAY**, trace silt and wood chips, gray, moist **(WASTE)**	Bentonite Seal; # 2 Sand Filter Pack; Bentonite Seal; # 2 Sand Filter Pack
16, 17, 18, 19, 20	1.2	CL	**CLAY**, trace silt, gray, moist **(NATIVE SOIL)**	# 2 Sand Filter Pack; 2" Schedule 40 PVC Screen; # 2 Sand Filter Pack
21, 22, 23, 24, 25	1.3	CL	**CLAY**, gray, wet	# 2 Sand Filter Pack; 2" Schedule 40 PVC Screen; # 2 Sand Filter Pack
26	**Boring terminated at 25 feet.**			

Notes

1. Blow counts were not recorded.

TW-7 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/9/2016
Project No.:	127844-115212	End Date:	8/9/2016
Logged By:	Janelle Bauer	Total Depth:	24'
Location Code:	TW-7	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	2" PVC to 14'
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	2" PVC: 14'-24', 0.01"
Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger		Stabilized Water Level (bgs):	18.0 ft (8/11/2016)

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Formation Description	Temporary Well Construction Above-Grade Completion with Expansion Cap
1	10.4	ML-CL	**SILT**, clayey, trace sand and gravel, sand fine-to-coarse grained, reddish brown grading to brown, dry	2" Schedule 40 PVC Riser
2				
3				
4				
5				
6	5.8			
7				
8				
9				
10				
11	4.0	SW	**SAND**, silty, sand fine-to-coarse grained, pinkish tan and white, dry	Bentonite Seal; # 2 Sand Filter Pack; 2" Schedule 40 PVC Screen; Bentonite Seal; # 2 Sand Filter Pack
12				
13				
14				
15				
16	7.0	ML-CL	**SILT**, clayey, trace sand, fine-to-coarse grained, brown and pinkish tan, dry	
17				
18				
19				
20				
21	5.2	SW	**SAND** and gravel, silty, sand fine-to-coarse grained, gray, dry	
22				
23				
24				
25	**Boring terminated at 24 feet.**			

Notes

1. Blow counts were not recorded.

GP-1 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/12/2016
Project No.:	127844-115212	End Date:	8/12/2016
Logged By:	Janelle Bauer	Total Depth:	11'
Location Code:	GP-1	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	1" PVC to 6'
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	1" PVC: 6'-11', 0.01"

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description	Well Construction Above-Grade Completion with Expansion Cap
1, 2	0.2	ML	--	**SILT**, trace clay and gravel, brown, dry	Portland Cement; 1" Schedule 40 PVC Riser; Portland Cement
3, 4	1.3	CL	3-3-5-7	**CLAY** and gravel, silty, dark gray and pink, medium stiff, dry	Bentonite Seal; Bentonite Seal
5, 6	3.6	ML-CL	3-5-4-5	**SILT**, clayey, trace gravel, reddish brown, stiff, dry	# 2 Sand Filter Pack; # 2 Sand Filter Pack
7, 8	6.5	ML-CL	2-4-8-14	**SILT**, clayey, grading to silty sand, trace gravel, sand fine-to-medium grained, light pink, tan, light brown, and white, stiff grading to hard, dry	1" Schedule 40 PVC Screen
9, 10, 11	4.9		7-14-16-17		
12	**Boring terminated at 11 feet.**				

GP-2 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/11/2016
Project No.:	127844-115212	End Date:	8/11/2016
Logged By:	Janelle Bauer	Total Depth:	11'
Location Code:	GP-2	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	1" PVC to 6'
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	1" PVC: 6'-11', 0.01"

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description	Well Construction Above-Grade Completion with Expansion Cap
1, 2	2.8	ML-CL	--	**SILT**, clayey, trace gravel, reddish brown, dry	Portland Cement; 1" Schedule 40 PVC Riser; Portland Cement
3, 4	5.1	CL-ML	4-4-5-6	**CLAY**, silty, trace gravel, brown and gray, stiff, dry	Bentonite Seal; Bentonite Seal
5, 6	5.9	ML-CL	2-1-2-3	**SILT**, clayey, grading to silty clay, trace gravel, tan and reddish brown, soft, dry	# 2 Sand Filter Pack; # 2 Sand Filter Pack
7, 8	6.8	CL-ML	3-4-7-8	**CLAY**, silty, reddish brown grading to silt and gravel, trace clay, dark gray, pink, and dark brown, stiff, dry	1" Schedule 40 PVC Screen
9, 10, 11	7.8	ML-CL	2-3-5-7	**SILT**, clayey, trace gravel, dark gray and brown, medium stiff, dry	
12	**Boring terminated at 11 feet.**				

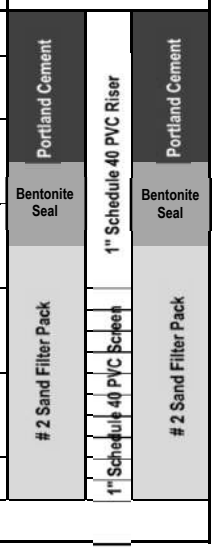
GP-3 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/11/2016
Project No.:	127844-115212	End Date:	8/11/2016
Logged By:	Janelle Bauer	Total Depth:	11'
Location Code:	GP-3	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	1" PVC to 6'
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	1" PVC: 6'-11', 0.01"

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	2.9	ML	--	**SILT**, clayey, trace gravel, brown, dry **(COVER SOIL)**
2	4.5	ML-CL	--	**SILT**, clayey, trace gravel and asphalt, brown, dry **(WASTE)**
3	5.5	--	2-1-1-3	**WOOD CHIPS**, trace clayey silt, reddish brown, very soft, dry
4				
5	--	ML-CL	4-5-6-6	**SILT**, clayey, trace gravel and wood, brown, stiff, dry
6				
7	4.6	CL-ML	2-3-5-6	**CLAY** and silt, trace gravel and wood chips, reddish brown and brown, medium stiff, dry
8				
9	7.5	ML-CL	4-3-2-5	**SILT**, clayey, wood chips trace gravel, brown and dark gray, medium stiff, dry
10				
11	10.6	CL-ML	5-2-1-2	**CLAY**, silty, wood chips and brick, brown and dark gray, soft, dry
12	**Boring terminated at 11 feet.**			

Well Construction Above-Grade Completion with Expansion Cap



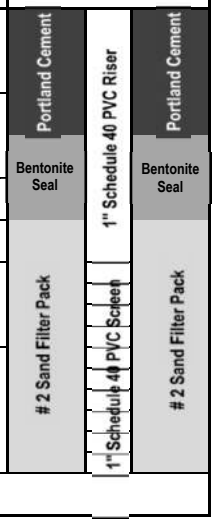
GP-4 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/11/2016
Project No.:	127844-115212	End Date:	8/11/2016
Logged By:	Janelle Bauer	Total Depth:	11'
Location Code:	GP-4	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	1" PVC to 6'
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	1" PVC: 6'-11', 0.01"

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description
1	3.4	ML	--	**SILT** and gravel, trace clay, brown and reddish brown, dry **(COVER SOIL)**
2				
3	6.4	ML-CL	5-6-9-10	**SILT**, clayey, trace gravel and wood chips, brown and reddish brown, stiff, dry **(WASTE)**
4				
5	4.2	ML	2-4-9-31	**SILT** and sand, clayey, sand coarse grained, brown, stiff, dry
6		--		**ASPHALT**, gray and black, stiff, dry
7	2.9	ML	8-6-4-3	**SILT**, gravel, and sand, clayey, sand coarse-grained, brown and dark gray, stiff, dry
8				
9	5.7	CL-ML	0-0-2-4	**CLAY** and silt, trace gravel, brown and dark grayish green, very soft, dry
10				
11	5.3		2-6-7-8	
12	**Boring terminated at 11 feet.**			

Well Construction Above-Grade Completion with Expansion Cap



GP-5 Boring Log

Project:	Bud Holding Company - Task Order 673DP-1	Start Date:	8/11/2016
Project No.:	127844-115212	End Date:	8/11/2016
Logged By:	Janelle Bauer	Total Depth:	11'
Location Code:	GP-5	Surface Casing Dia./Depth:	None
Location:	Greensboro, North Carolina	Well Casing Dia./Depth:	1" PVC to 6'
Driller:	Geologic Exploration	Screen Dia./Depth/Slot:	1" PVC: 6'-11', 0.01"

Drilling Rig/Method: Geoprobe 662DT/Hollow-Stem Auger

Depth (feet)	Photoionization Measurements (parts per million)	Unified Soil Classification System	Standard Penetration Test (blows per 6 inches)	Formation Description	Well Construction Above-Grade Completion with Expansion Cap
1	5.4	ML	--	**SILT**, trace sand and gravel, sand coarse grained, brown, dry	Portland Cement; 1" Schedule 40 PVC Riser; Portland Cement
2					
3	8.0	ML	4-5-6-8	**SILT**, clayey, trace gravel, tan and reddish brown, stiff, dry	Bentonite Seal; Bentonite Seal
4					
5	5.1	CL-ML	2-2-4-8	**CLAY**, silty, trace gravel, reddish brown, dark gray, and pink, medium stiff grading to hard, dry	# 2 Sand Filter Pack; # 2 Sand Filter Pack
6					
7	7.1		6-8-7-9		1" Schedule 40 PVC Screen
8					
9	10.2		8-33-17-8		
10					
11					
12	**Boring terminated at 11 feet.**				

Appendix D
Report Certification

Bud Holding Company
Site Identification Number: NONCD0000673

REPORT CERTIFICATION

Document Name: Remedial Investigation - Waste Delineation and Media Sampling

Site Name: Bud Holding Company

Site ID: NONCD0000673

Task Order: Task Order 673DP-2

I certify that, to the best of my knowledge, after thorough investigation, the information contained in or accompanying this certification is true, accurate, and complete.

Mathew F. Colone, P.G.
Project Manager

Signature 9/14/2016 *Date*

Before me personally appeared Mathew F. Colone to me known and known to me to be the person described in and who executed the foregoing instrument, and acknowledge to and before me that Mathew F. Colone executed said instrument for the purposes therein expressed.

Witness my hand and official seal this 14 day of SEPTEMBER, 2016.

Notary Public 3/31/19 *My Commission Expires On*

NORTH CAROLINA *State of* WAKE *County of*

JOSEPH N. JONES NOTARY PUBLIC My Comm. Exp. 03-31-2019 DURHAM COUNTY, NC