Limited Site Investigation

Surtronics, Inc.

4001 Beryl Road

Raleigh, North Carolina

Terracon Project No. 70137337

August 14, 2013

Prepared for:
Surtronics, Inc.
Raleigh, NC

Prepared by:
Terracon Consultants, Inc.
Raleigh, North Carolina

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Terracon

August 14, 2013

Surtronics, Inc.
4001 Beryl Road
Raleigh, NC 27606

Attn: Ms. Angela Stanley

RE: Limited Site Investigation (LSI)
Surtronics, Inc.
Raleigh, Wake County, North Carolina
Terracon Project No. 70137337

Dear Ms. Stanley,

Terracon Consultants, Inc. (Terracon) is pleased to submit this Limited Site Investigation (LSI) report for the above-referenced Raleigh, NC site. This report includes the findings of the investigation, our conclusions, and recommendations.

Terracon appreciates the opportunity to provide these services to Surtronics, Inc. If you have any questions concerning this report or need additional information, please contact us at 919-873-2211.

Sincerely,

Terracon Consultants, Inc.

Prepared by:

Michael T. Jordan, P.G.
Senior Geologist
NC Registration 1930

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Chuck Clymer Jr., P.G.
Senior Principal
NC Registration 289

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LIMITED SITE INVESTIGATION
SURTRONICS, INC.
4001 BERYL ROAD
RALEIGH, NC

Project No. 70137337
August 14, 2013

1.0 INTRODUCTION

Surtronics, Inc. (Surtronics) retained Terracon Consultants, Inc. (Terracon) to conduct a Limited Site Investigation (LSI) at an active electroplating facility in Raleigh, North Carolina (Exhibit 1). The facility is located at 4001 Beryl Road and is owned by Smith and Wade. The purpose of the investigation was to assess potential groundwater impacts from historic plating operations prior to purchase by Surtronics. This report summarizes the investigation activities and results.

1.1 SITE DESCRIPTION

The site is comprised of three parcels that total approximately 3.39 acres (site) at the intersection of Method Road and Beryl Road. Surtronics, Inc. (Surtronics) currently occupies the site for use as an active electroplating and anodizing facility.

Two buildings totaling approximately 40,000 square feet occupy the majority of the site. Loading docks are present on the west wall of the western building and eastern wall of the eastern building. Site access to the employee parking lot is achieved via Beryl Road. The rear of the facility (northern portion) is secured by a chain-link fence with a rolling gate. A one-way, asphalt driveway passes through the gate along the northern property boundary and exits along the western property boundary onto Beryl Road. A railroad runs east-west on the north side of Beryl Road.

The site topography is characterized as relatively flat, sloping from the southwest to the northeast with approximately ten feet of relief. The site is at an elevation of approximately 470 feet above mean sea level. No surface water features are on-site. The nearest surface water is an intermittent stream located approximately 1,900 feet east of the site. Surface water run-off in the building vicinity is routed to a 38,000 gallon underground, concrete vault. It is treated via an on-site wastewater treatment system and subsequently discharged to a publicly owned treatment works (POTW). The remainder of stormwater flows over land to a catch basin located in the northeast property corner.

A topographic map is included as Exhibit 1 of Appendix A.

1.2 SITE BACKGROUND INFORMATION

Electroplating operations began in 1973 and continue through the present. A fire occurred on June 16, 2013 in the eastern portion of facility.

Site operations require the use of various chemicals including strong mineral acids, strong alkalis, oxidizers (nitric acid, hydrogen peroxide, and chromic acid), various metal salts, various non-TTO containing inorganics, and cyanide salts. Electroplating activities require the use of multiple plastic dip tanks (baths) located throughout the building. The facility utilizes an on-site wastewater treatment system prior to discharging to the City of Raleigh sewer system. Process wastewater is routed to an above ground equalization tank prior to treatment.

An in-ground concrete containment system with a total capacity of 38,000 gallons is available as a containment unit for any potential releases. Diking and diversion piping route several floor trenches and sumps to the system. Additionally, stormwater in the vicinity of the building is routed to the system. Liquids in the system are treated with the on-site wastewater treatment system and subsequently discharged to the sanitary sewer system.

Several diked containment pits are located beneath the cyanide process tanks to segregate cyanide process water from the remaining wastewater streams. Liquid wastes containing cyanide are not allowed to be discharged. They are contained in 55-gallon drums for off-site disposal. Additionally, waste solids and sludges generated in the water treatment process are contained in 55-gallon drums for off-site disposal.

1.2 PURPOSE AND OBJECTIVES

The objective of this LSI is to screen for potential releases to the groundwater near locations where the storage, handling, and usage of various chemicals occurred during historic and current operations. Mr. Cliff Grissom, a member of the Surtronics Safety and Purchasing Surtronics staff, provided information regarding chemical usage and storage during a site visit on July 3, 2013. At the request of Surtronics, boring locations were limited to the exterior of the buildings. Sample locations were selected around the building perimeter in close proximity to the chemical handling locations. As boring locations were outside of suspected source areas, soil samples were only field screened and not submitted for laboratory analyses.

1.3 STANDARD OF CARE

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These LSI services were performed in accordance with the scope of

work agreed with you, our client, as reflected in our proposal and were not restricted by ASTM E1903-11.

1.4 ADDITIONAL SCOPE LIMITATIONS

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable, or not present during these services. We cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this LSI. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations, or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

1.5 RELIANCE

This report has been prepared for the exclusive use of Surtronics, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Surtronics and Terracon. Any unauthorized distribution or reuse is at Surtronics sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, LSI report, and the Agreement for Services between Surtronics and Terracon. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to Surtronics and all relying parties unless otherwise agreed in writing.

2.0 FIELD ACTIVITIES

Field activities were conducted on July 16 through July 19, 2013. Activities included boring layout, request for public utility locate by *North Carolina 811*, oversight of a private utility locate, advancement of soil borings, and installation of monitoring wells. Exhibit 2 depicts the layout of the site and sample locations (Appendix A). Sample locations were approximately located via measurements relative to site structures, but have not been surveyed.

2.1 SOIL BORINGS

Terracon oversaw the advancement of 6 soil borings (MW-1 through MW-6) by a North Carolina licensed driller, Regional Probing, utilizing a truck-mounted direct-push GeoProbe® 5410 drill rig. Borings extended to depths of 19 to 34 feet below land surface (ft bls). Soil borings were completed on July 17, 2013 in the following locations:

- MW-1: loading dock for raw material unloading;
- MW-2: downgradient of drum wash area;
- MW-3: downgradient of 38,000-gallon concrete vault;
- MW-4: downgradient of trichloroethene (TCE) sump and adjacent to sanitary sewer line;
- MW-5: adjacent to cyanide process area; and
- MW-6: topographic low point on-site and adjacent to storm drain.

At each boring location, continuous soil cores were collected using Macro-Core® samplers from the land surface to the boring termination or refusal. The soil cores were logged for soil type, relative moisture content, and other characteristics. Additionally, soil samples collected above the water table were screened at two intervals with a photo-ionization detector (PID). Soil samples from each interval were placed into a dedicated, re-sealable plastic bag. After the bag was allowed to warm for a period of 30 minutes, the head space was screened for organic vapors using an 11.7 eV PID. A summary of PID readings is included on the soil boring logs in Appendix D and discussed in Section 3.

Typically materials encountered in the borings were characterized as approximately 5 to 10 feet of red, tan, and brown silty clay underlain by red, orange, and grey micaceaous sandy silt and/or silty sand until boring termination. Layers of graphite were encountered in the bottom three feet of borings MW-5 and MW-6. Drilling refusal was encountered at depths of 21 and 19 ft bls at borings MW-5 and MW-6, respectively. No obvious olfactory and/or visual evidence of impacts were noted in soils logged during the field activities. According to the *Preliminary Bedrock Geology map of the Raleigh 30'x60' Quadrangle* (NCGS Open File Report 2004-02), the site is underlain by a fine grained white mica phyllite and schist that locally includes slaty graphite schist.

As boring locations were outside of suspected source areas, soil samples were not submitted for laboratory analyses. Soil cuttings were contained in a labeled, 55-gallon drum pending analysis. One soil sample was collected for waste characterization and was analyzed for:

- Volatile organic compounds via EPA Method 8260;
- 13 Priority Pollutant metals via EPA Method 200.7;
- Hexavalent Chromium via Standard Method 3500-Cr; and,
- Cyanide via EPA Method 335.4.

All drilling equipment used in the field at the site was thoroughly decontaminated prior to use and between each sample collection point. All non-dedicated sampling equipment was decontaminated using a Liquinox®/water wash followed by a distilled water rinse. Rinse water was disposed of in the on-site wastewater treatment system.

2.2 MONITORING WELL INSTALLATION

Following the completion of the soil borings, Terracon installed six permanent monitoring wells to depths of 19 to 34 ft bls to facilitate the collection of groundwater samples. The wells were installed in the soil boring locations as described above in Section 2.2 and as depicted on Exhibit 2 in Appendix A. Wells were constructed as follows:

- Installation of 1-inch diameter, 0.010-inch machine slotted schedule 40 PVC well screen with a pre-packed sand filter with sand to one-foot above the screen;
- Installation of 1-inch diameter, threaded, flush-joint PVC riser pipe to the ground surface;
- Installation of hydrated bentonite seal using No. 20 bentonite pellets to 3 ft bls and neat cement grout above the bentonite to the land surface; and,
- Installation of a flush-mount protective cover and locking expansion plug.

The well construction details are included on Table 1. All drilling equipment used in the field at the site was thoroughly decontaminated prior to use and between each sample collection point. All non-dedicated sampling equipment was decontaminated using a Liquinox®/water wash followed by a distilled water rinse. Rinse water was disposed of in the on-site wastewater treatment system.

2.3 MONITORING WELL DEVELOPMENT AND SAMPLING

Monitoring wells were developed on July 17 and 18, 2013 by a combination of pumping and surging. Well development continued until fluids appeared to be relatively free of fine-grained sediment (turbidity values of less than 10 NTUs) or wells went dry. Approximately 5 to 7 well volumes were removed during development activities.

Each monitoring well was purged with a peristaltic pump using low flow sampling techniques (i.e., <200 milliliters per minute) prior to sampling. Water levels were monitored at approximate three to five minute intervals and a steady flow rate was maintained. Field parameters (temperature, pH, specific conductance, dissolved oxygen [DO], and oxidation reduction potential [ORP]) were measured to ensure collection of a sample representative of formation water. Each well was considered ready for sampling when turbidity values were less than 10 NTUs and the parameters had stabilized to within 10 percent for three consecutive readings or if the well purged dry. Field parameters were recorded on field data sheets. After purging, groundwater samples were collected directly into laboratory supplied containers at low flow sampling rates. Groundwater samples were containerized, preserved, and shipped to a NC-certified laboratory for analysis of:

- Volatile organic compounds via EPA Method 8260;
- 13 Priority Pollutant metals via EPA Method 200.7;
- Hexavalent Chromium via Standard Method 3500-Cr; and,
- Cyanide via EPA Method 335.4.

Additionally, one groundwater sample was collected from each well for field analysis of hexavalent chromium using HACH colorimetric analysis via Method 8023 (equivalent to Standard Method 3500 Cr). A sampling and analysis plan is presented on Table 2.

Sampling equipment was thoroughly decontaminated with phosphate-free soap and distilled water prior to fieldwork and between wells to prevent cross-contamination. Decontamination water and purge water was disposed of in the on-site wastewater treatment system.

On July 19, 2013, following the completion and development of the six monitoring wells, depth to groundwater measurements were collected. The depth to groundwater at the site ranged between 12.30 (MW-6) to 23.35 (MW-2) feet below top of casing.

3.0 DATA EVALUATION

The following sections discuss the field and laboratory results. Laboratory analytical reports from Shealy Environmental Services, Inc. and field data associated with samples collected by Terracon personnel were reviewed to ensure that specific data-quality objectives were met. Laboratory analytical reports are provided in Appendix D. Reported concentrations in groundwater were compared to the North Carolina Administrative Code 2L groundwater standards (2L standards) or the EPA regional screening levels (RSLs), May 2013 edition.

3.1 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples were collected from the site monitoring wells on July 17 and 18, 2013. Field parameters, including temperature, DO, pH, conductivity, ORP, and turbidity were recorded during the sampling events and are presented in Table 3. pH values ranged from 4.99 standard units (SUs) in MW-1 to 6.19 SU in MW-6. Aquifer conditions were generally aerobic and oxidizing with average dissolved oxygen concentrations of 3.6 milligrams per liter and ORP average of 56.8 millivolts.

A summary of laboratory data compared to the 2L standards or RSLs is presented on Table 3. A summary of groundwater data compared to the vapor intrusion screening concentrations is presented on Table 4. The following is a summary of the groundwater monitoring results.

<u>Metals and Hexavalent Chromium</u>
Antimony and beryllium were not detected at reportable concentrations. Five metals (chromium, copper, mercury, silver, and zinc) were detected at concentrations below their applicable

standards. Seven metals were detected at concentrations greater than their standards:

- **Arsenic** was detected in six samples with concentrations between 0.0047 milligrams per liter (mg/L) and 0.011 mg/L. Arsenic was detected above its 2L standard of 0.01 mg/L in one sample (MW-3).
- **Cadmium** was detected in one well (MW-3) at a concentration of 0.13 mg/L, which exceeds its 2L standard of 0.002 mg/L.
- **Lead** was detected in six samples with concentrations between 0.0068 mg/L and 0.019 mg/L. Lead was detected above its 2L standard of 0.015 mg/L in wells MW-2 (0.016 mg/L), MW-3 (0.019 mg/L), and MW-5 (0.016 mg/L).
- **Nickel** was detected in six samples with concentrations between 0.014 mg/L and 2.2 mg/L. Nickel was detected above its 2L standard of 0.1 mg/L in MW-2 (2.2 mg/L).
- **Selenium** was detected below its 2L standard of 0.02 mg/L in MW-3 (0.005 mg/L) and above its 2L standard in MW-5 (0.044 mg/L).
- **Thallium** does not have a 2L standard. It was detected in six samples with concentrations between 0.00066 mg/L and 0.041 mg/L.
- **Hexavalent chromium** was detected in laboratory samples collected from MW-1 (0.0047 mg/L) and MW-6 (0.0062 mg/L). Hexavalent chromium does not have a 2L standard. The EPA established RSL for hexavalent chromium is 0.00003 mg/L. Hexavalent chromium was also analyzed for in the field. It was detected in five of six samples during the field analysis. Field analyses generally did not have good agreement with the hexavalent chromium laboratory analytical data. While field analysis is deemed a good screening tool, data may be limited by potential interferences from naturally occurring organics or elevated concentrations of other transition metals (USGS Water Resources Investigations Report 03-4018).

<u>VOCs</u>

Fourteen VOCs were detected above the method detection limit. Five VOCs were detected at concentrations below their respective standards including: 1,1,1-trichloroethane, 1,2-dichloropropane, acetone, benzene, cis-1,2-dichloroethene. Nine VOCs were detected at concentrations greater than their standards:

- **1,1-Dichloroethane (1,1-DCA)** was detected a concentration below its 2L standard of 6 μg/L in MW-1 (1.5 μg/L) and above its standard in MW-3 (27 μg/L).
- **1,1-Dichloroethene (1,1-DCE)** was detected above its 2L standard of 7 μg/L in MW-1 and MW-3 at concentrations of 11 and 24 μg/L, respectively.
- **1,2-Dichloroethane (1,2-DCA)** was detected above its 2L standard of 0.4 μg/L in MW-2 at a concentration of 1.1 μg/L.
- **Bromodichloromethane** was detected above its 2L standard of 0.6 μg/L in MW-1 at a concentration of 5.3 μg/L.

- **Chloroform** was detected below its 2L standard in wells MW-2 and MW-6 and above its standard of 70 μg/L in MW-1 (220 μg/L) and MW-3 (500 μg/L).
- **Methyl tertiary butyl ether (MTBE)** was detected above its 2L standard of 20 μg/L in MW-2 (62 μg/L).
- **Methylene chloride** was detected above its 2L standard of 5 μg/L in MW-3 (16 μg/L).
- **Trichloroethene (TCE)** was detected above its 2L standard of 3 μg/L in wells MW-1 (560 μg/L), MW-3 (62 μg/L), and MW-4 (8.4 μg/L).
- **Vinyl Chloride** was detected above its 2L standard of 0.03 μg/L in MW-3 (1.6 μg/L).

VOCs were detected in groundwater samples collected from five of the six shallow wells. Trichloroethene and its breakdown products cis-1,2-DCE, 1,1-DCE, and vinyl chloride were detected in monitor wells MW-1, MW-3, and MW-4. 1,1,1-Trichloroethane and its breakdown products 1,1-DCA, and 1,2-DCA were also detected. Though carbon tetrachloride was not detected, its breakdown products methylene chloride and chloroform were detected. The highest concentration of total VOCs was in well MW-1, which is located on the south side of the building at the caustic loading dock.

In addition to TCE and chloroform concentrations exceeding their 2L groundwater standards, they also exceed the industrial screening concentrations for vapor intrusion. Based on the proximity of MW-1 to the building and the inferred direction of groundwater flow, there is a potential for intrusion of VOC vapors into the facility.

<u>Cyanide</u>
Cyanide was detected in one well (MW-3) at a concentration of 0.043 μg/L, which is below its 2L standard of 70 μg/L.

4.0 SUMMARY AND CONCLUSIONS

The findings and conclusions of this investigation are discussed below:

- Soils encountered in the borings are characterized as 5 to 10 feet of silty clay underlain by micaceaous sandy silt and/or silty sand until boring termination. No obvious olfactory and/or visual evidence of impacts were noted in soils logged during the field activities. Shallow groundwater was encountered in the six groundwater monitoring wells at depths ranging from 12.30 to 23.35 ft bls.
- Seven metals were detected at concentrations greater than their standards (arsenic, cadmium, lead, nickel, selenium, thallium, and hexavalent chromium). Based on the frequency of detections, low concentrations, and narrow concentration range, arsenic detections may be naturally occurring. The extent of metals is not horizontally or vertically defined within the monitoring well network.
- Nine VOCs were detected at concentrations greater than their standards (1,1-DCA, 1,1-

DCE, 1,2-DCA, bromodichloromethane, chloroform, MTBE, methylene chloride, TCE, and vinyl chloride). The extent of VOCs is not horizontally or vertically defined within the monitoring well network.

- Based on detections of metals and VOCs in groundwater, there is a possibility for soil impacts at source areas.
- Based on the inferred direction of groundwater flow to the north and elevated concentrations of VOCs in MW-1, there is a potential for vapor intrusion into the facility.

5.0 RECOMMENDATIONS

- Based on the findings of this LSI and in accordance with North Carolina law, Terracon recommends that the owner and/or operator notify the North Carolina Department of Environment and Natural Resources Division of Waste Management Inactive Hazardous Sites Branch (IHSB) within 90 days that a release was identified.
- IHSB guidance specifies that the complete vertical and horizontal extent of soil and groundwater impacts be delineated.
- Due to groundwater exceedances of the IHSB vapor intrusion screening standards and per IHSB guidance, installation of sub-slab vapor points recommended to further evaluate the potential for vapor intrusion.

UNITED STATES — DEPARTMENT OF THE INTERIOR — GEOLOGICAL SURVEY

SCALE 1:24 000

1 .5 0 KILOMETERS 1 2

1000 0 METERS 1000 2000

1 .5 0 1

MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000

FEET

CONTOUR INTERVAL 10 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

N

QUADRANGLE

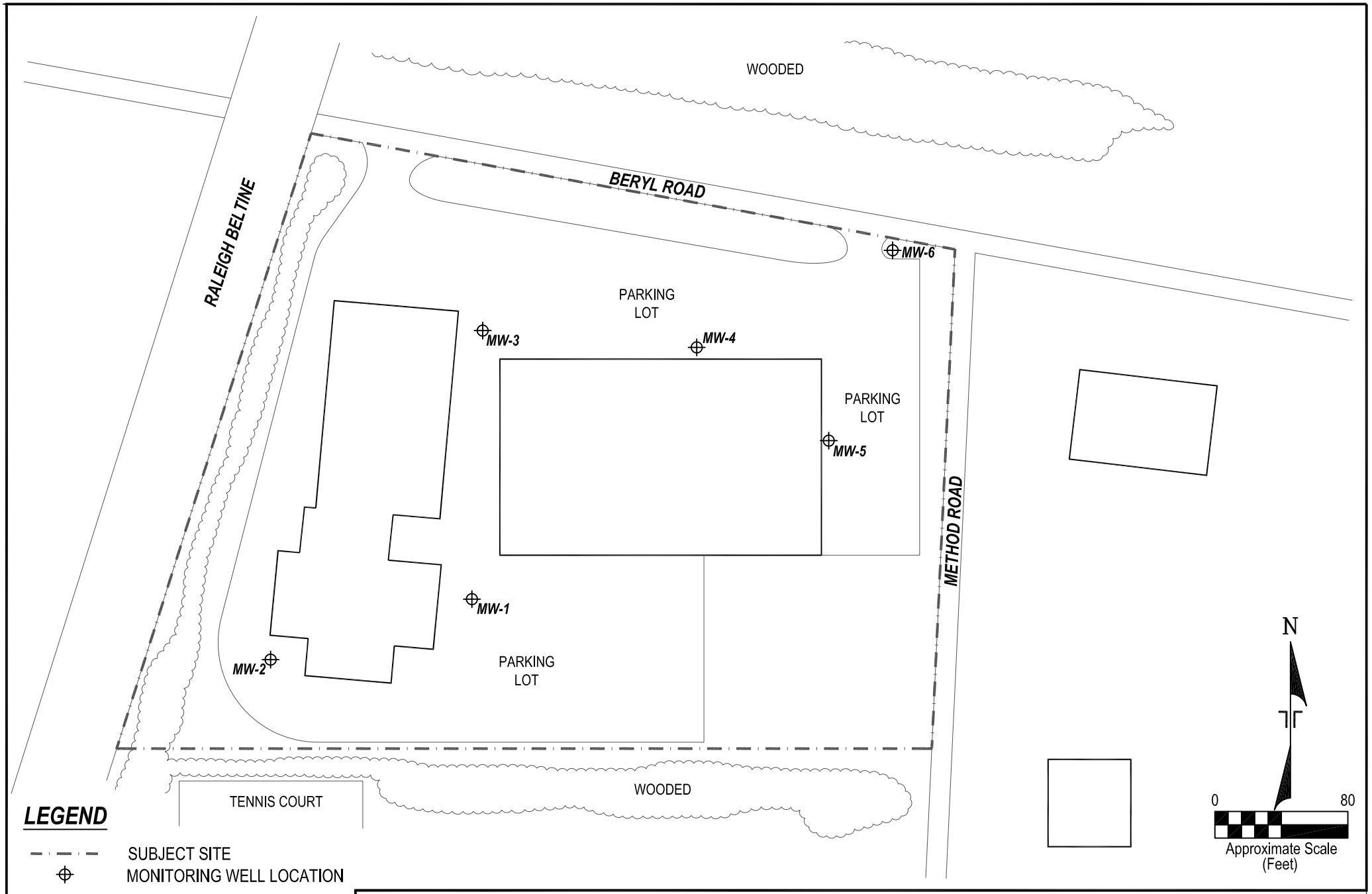
RALEIGH WEST, NC

1993

7.5 MINUTE SERIES (TOPOGRAPHIC)

*INDICATES WHICH MAP SITE IS LOCATED ON

Project Mngr: LCH	Project No. 70137337	Terracon Consulting Engineers and Scientists	TOPOGRAPHIC VICINITY MAP	EXHIBIT
Drawn By: RLW	Scale: AS SHOWN	2401 Brentwood Road, Suite 107 Raleigh, NC 27604	LIMITED SITE INVESTIGATION	
Checked By: LCH/MRF	File No. LSI70137337-1	(919) 873-2211 (919) 873-9555	SURTRONICS LSI	
Approved By: LCH	Date: AUG 2013		4001 BERYL ROAD	1
			RALEIGH, WAKE COUNTY, NC	



LEGEND

SUBJECT SITE

MONITORING WELL LOCATION

THIS DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Mngr:	LCH
Drawn By:	RLW
Checked By:	LCH/MRF
Approved By:	LCH

Project No.	70137337
Scale:	AS SHOWN
File No.	ESA70137337-2
Date:	AUG 2013

Terracon
Consulting Engineers and Scientists

2401 Brentwood Road, Suite 107 Raleigh, NC 27604
(919) 873-2211 (919) 873-9555

SITE DIAGRAM

LIMITED SITE INVESTIGATION
SURTRONICS LSI
4001 BERYL ROAD
RALEIGH, WAKE COUNTY, NC

EXHIBIT

2

Table 1
Summary of Well Construction Details and Water Levels
Surtronics, Inc.
4001 Beryl Road
Raleigh, North Carolina
Terracon Project No. 70137337

Well ID	Date Installed	Drilling Method	Total Depth (ft bls)	Screen Interval (ft bls)	Well Diameter (inches)	Top of Casing Elevation (ft msl) *	Depth to Water (ft bTOC) **	Groundwater Elevation (ft msl)
MW-1	07/17/13	DPT	31	21-31	1	NS	19.95	NC
MW-2	07/17/13	DPT	34	24-34	1	NS	23.35	NC
MW-3	07/17/13	DPT	34	24-34	1	NS	20.30	NC
MW-4	07/17/13	DPT	29.5	19.5-29.5	1	NS	15.90	NC
MW-5	07/17/13	DPT	20	15-20	1	NS	14.80	NC
MW-6	07/17/13	DPT	19	14-19	1	NS	12.30	NC

Notes: bls - below land surface
ft - feet
bTOC - below top of casing
msl - mean sea level
NC - not calculated
NS - not surveyed
DPT - direct push technology
Depth to water measurements collected on July 19, 2013

Table 2
Sampling and Analysis Plan
Surtronics, Inc.
4001 Beryl Road
Raleigh, North Carolina
Terracon Project No. 70137337

Location	Sample #	Matrix	Analysis						Water Level	Collection Method
			VOCs - 8260B	13 Priority Polluntant Metals (6010) - unfiltered	Hexavalent Chromium (SM 3500 - Cr)	Cyanide (SM 4500 - CN)	Hexavalent Chromium - HACH 8023 (Field)	Temperature, pH, DO ORP, & Conductivity + turbidity (Field)		Low Flow Method - Peristaltic
Shallow Wells										
MW-1	MW-1 (07-13)	GW	X	X	X	X	X	X	X	X
MW-2	MW-2 (07-13)	GW	X	X	X	X	X	X	X	X
MW-3	MW-3 (07-13)	GW	X	X	X	X	X	X	X	X
MW-4	MW-4 (07-13)	GW	X	X	X	X	X	X	X	X
MW-5	MW-5 (07-13)	GW	X	X	X	X	X	X	X	X
MW-6	MW-6 (07-13)	GW	X	X	X	X	X	X	X	X
Quality Control Samples										
MW-4	DUP-1	GW	X	X	X	X				
Lab	TB-1	GW	X							
IDW Samples										
Soil Drum	S-1	soil	X	X						

Notes:

Table 3
Summary of Groundwater Results
Surtronics, Inc.
4001 Beryl Road
Raleigh, North Carolina
Terracon Project No. 70137337

Analysis	Analytical Method	Units	Standard	Well:	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
				Date:	07/18/13	07/18/13	07/18/13	07/18/13	07/18/13	07/18/13
				Method	peristaltic	peristaltic	peristaltic	peristaltic	peristaltic	peristaltic
Field Parameters										
Temperature	YSI 556	°C	NS		20.5	23.7	21.7	20.9	23.0	22.9
pH	YSI 557	SU	NS		4.99	5.34	5.18	5.47	5.94	6.19
Dissolved Oxygen	YSI 558	mg/L	NS		2.8	2.7	2.7	4.0	4.9	4.8
Specific Conductivity	YSI 559	µmhos/cm	NS		1,069	213	9,440	98	520	372
Oxidation Reducton Potential	YSI 560	mV	NS		-4.4	64.3	98.5	16.4	-8.5	-109.5
Turbidity	HACH 2100P	NTU	NS		2.50	1.52	3.90	6.39	8.55	8.36
Metals										
Antimony*	6010	mg/L	0.0006		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Arsenic	6010		0.01		0.0047	0.0057	0.011	0.0047	0.0057	0.0044
Beryllium*	6010		0.0016		< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Cadmium	6010		0.002		< 0.002	< 0.002	0.13	< 0.002	< 0.002	< 0.002
Chromium (total)	6010		0.01		< 0.005	< 0.005	0.0021	< 0.005	< 0.005	< 0.005
Copper	6010		1		0.0042	0.0037	0.0067	0.0019	0.0037	0.0019
Lead	6010		0.015		0.01	0.016	0.019	0.0079	0.016	0.0068
Mercury	7471B		0.001		< 0.0001	< 0.0001	0.00013	< 0.0001	< 0.0001	< 0.0001
Nickel	6010		0.1		0.017	0.044	2.2	0.014	0.027	0.014
Selenium	6010		0.02		< 0.01	< 0.01	0.005	< 0.01	0.044	< 0.01
Silver	6010		0.02		0.0052	0.00066	0.0027	0.0057	< 0.01	0.0042
Thallium*	6010		NS		0.021	0.016	0.041	0.019	0.00066	0.013
Zinc	6010		1		0.048	0.043	0.26	0.031	0.016	0.022
Hexavalent Chromium* (field)	HACH 8023		0.00003		<0.01	0.03	0.05	0.12	0.13	0.19
Hexavalent Chromium*	SM 3500 - Cr		0.00003		0.0047	< 0.01	< 0.01	< 0.01	< 0.01	0.0062
Cyanide	SM 4500 - CN	µg/L	70		< 0.01	< 0.01	0.043	< 0.01	< 0.01	< 0.01
Volatile Organic Compounds										
1,1,1-Trichloroethane	8260	µg/L	200		< 5	< 5	0.99	< 5	< 5	< 5
1,1-Dichloroethane			6		1.5	< 5	27	< 5	< 5	< 5
1,1-Dichloroethene			7		11	< 5	24	< 5	< 5	< 5
1,2-Dichloroethane			0.4		< 5	1.1	< 5	< 5	< 5	< 5
1,2-Dichloropropane			0.6		< 5	< 5	0.42	< 5	< 5	< 5
Acetone			6,000		< 20	< 20	12	< 20	< 20	< 20
Benzene			1		< 5	< 5	0.22	< 5	< 5	< 5
Bromodichloromethane			0.6		5.3	< 5	< 5	< 5	< 5	< 5
Chloroform			70		220	3.1	500	< 5	< 5	11
cis-1,2-Dichloroethene			70		7.3	< 5	0.44	< 5	< 5	< 5
Methyl tertiary butyl ether (MTBE)			20		< 5	62	< 5	< 5	< 5	< 5
Methylene chloride			5		< 5	< 5	16	< 5	< 5	< 5
Trichloroethene			3		560	< 5	62	8.4	< 5	< 5
Vinyl chloride			0.03		< 2	< 2	1.6	< 2	< 2	< 2

Notes:
1) Only detected compounds are shown
2) Bold values indicates concentration detected above method detection limit
3) Shaded values indicate concentration in excess of regulatory standard
4) NS - regulatory standard has not been established for this analyte
5) Standard is the North Carolina Administrative Code 2L Groundwater Standards (April 2013) except those compounds denoted with a *, which are the EPA Regional Screening Levels for tapwater (May 2013)

Table 4
Comparison of Groundwater Results with Vapor Screening Standards
Surtronics, Inc.
4001 Beryl Road
Raleigh, North Carolina
Terracon Project No. 70137337

Analysis	Analytical Method	Units	Standard	Well:	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
				Date:	07/18/13	07/18/13	07/18/13	07/18/13	07/18/13	07/18/13
				Method	peristaltic	peristaltic	peristaltic	peristaltic	peristaltic	peristaltic
Volatile Organic Compounds										
1,1,1-Trichloroethane	8260	µg/L	6,300		< 5	< 5	0.99	< 5	< 5	< 5
1,1-Dichloroethane			330		1.5	< 5	27	< 5	< 5	< 5
1,1-Dichloroethene			160		11	< 5	24	< 5	< 5	< 5
1,2-Dichloroethane			98		< 5	1.1	< 5	< 5	< 5	< 5
1,2-Dichloropropane			30		< 5	< 5	0.42	< 5	< 5	< 5
Acetone			2.0E+07		< 20	< 20	12	< 20	< 20	< 20
Benzene			70		< 5	< 5	0.22	< 5	< 5	< 5
Bromodichloromethane			38		5.3	< 5	< 5	< 5	< 5	< 5
Chloroform			35		220	3.1	500	< 5	< 5	11
cis-1,2-Dichloroethene			140		7.3	< 5	0.44	< 5	< 5	< 5
Methyl tertiary butyl ether (MTBE)			20,000		< 5	62	< 5	< 5	< 5	< 5
Methylene chloride			4,000		< 5	< 5	16	< 5	< 5	< 5
Trichloroethene			4.4		560	< 5	62	8.4	< 5	< 5
Vinyl chloride			25		< 2	< 2	1.6	< 2	< 2	< 2

Notes:
1) Only detected compounds are shown
2) Bold values indicates concentration detected above method detection limit
3) Shaded values indicate concentration in excess of regulatory standard
4) NS - regulatory standard has not been established for this analyte
5) Standard is the NCDENR IHSB Industrial/Commercial Vapor Instrusion Screening Table (July 2012)

WELL LOG NO. MW-1

PROJECT: Surtronics LSI

CLIENT: Surtronics Inc

SITE: 4001 Beryl Road
Raleigh, North Carolina

LOCATION South side of building next to loading dock

INSTALLATION DETAILS

Well Completion: Flush Mount

DEPTH	MATERIAL DESCRIPTION	OVA/PID (ppm)
0.8	Concrete	
	SILTY CLAY, Tan, brown, dry, silty clay, with a 4" lens of brown silt at 7.5'	20.4
		12.1
		16.5
		20.7
11.0	Slightly micaceous	19.3
	SANDY SILT (ML), Red grey, dry, micaceous, fine sandy silty	18.5
		11.5
16.0		11.3
	SANDY SILT (ML), Red, orange and grey, moist, fine, micaceous, sandy silt	13.6
		24.9
22.0		23.1
	SAND, White and black, moist, coarse, sand with quartz fragments	
24.0		
	SANDY SILT (ML), Tan and brown, wet, fine sandy silt	
	4" thick lens of quartz and black nodules	
32.0		
	Boring Terminated at 32 Feet	

Cement/Bentonite Grout

No. 20 Bentonite Pellets

10-Slot with Prepacked Sand Filter

DEPTH (ft): 5, 10, 15, 20, 25, 30

WATER LEVEL OBSERVATIONS | SAMPLE TYPE | RECOVERY (%)

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
DPT

Abandonment Method:

Notes:
Borehole diameter: 3"
Well Diameter: 1"

WATER LEVEL OBSERVATIONS

Terracon
2401 Brentwood Road, Suite 107
Raleigh, North Carolina

Well Started: 7/17/2013	Well Completed: 7/17/2013
Drill Rig: Geoprobe 5410	Driller: Regional Probing
Project No.: 70137337	Exhibit: B-1

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. ENVIRONMENTAL SMART LOG 70137337.GPJ ENV STANDARD 2012.GDT 7/26/13

WELL LOG NO. MW-2

PROJECT: Surtronics LSI

CLIENT: Surtronics Inc

SITE: 4001 Beryl Road
Raleigh, North Carolina

LOCATION SW building corner

DEPTH	MATERIAL DESCRIPTION	INSTALLATION DETAILS	OVA/PID (ppm)
0.3	Asphalt		
	SANDY CLAY (CL), Red and orange, dry, fine sandy clay	Cement/Bentonite Grout	4.4
4.0			2.6
	SANDY SILT (ML), Tan and orange, dry, fine sandy silt		6.8
6.0			8.3
	SANDY SILT (ML), White and red, dry, silty, micaceous, fine sandy silt		10.7
9.0			8.1
	SANDY SILT (ML), White, orange, red, moist, fine micaceous sandy silt	No. 20 Bentonite Pellets	4.7
			5.8
			5.4
			4.4
			12.6
24.0			
	SANDY SILT (ML), White, orange and red, wet, micaceous, fine sandy silt	10-Slot with Prepacked Sand Filter	
34.0			
	Boring Terminated at 34 Feet		

Well Completion: Flush Mount

DEPTH (ft): 5, 10, 15, 20, 25, 30

WATER LEVEL OBSERVATIONS | SAMPLE TYPE | RECOVERY (%)

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
DPT

Abandonment Method:

Notes:
Borehole diameter: 3"
Well Diameter: 1"

WATER LEVEL OBSERVATIONS

Terracon
2401 Brentwood Road, Suite 107
Raleigh, North Carolina

Well Started: 7/17/2013	Well Completed: 7/17/2013
Drill Rig: Geoprobe 5410	Driller: Regional Probing
Project No.: 70137337	Exhibit: B-2

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. ENVIRONMENTAL SMART LOG 70137337.GPJ ENV STANDARD 2012.GDT 7/26/13

WELL LOG NO. MW-3

PROJECT: Surtronics LSI

CLIENT: Surtronics Inc

SITE: 4001 Beryl Road
Raleigh, North Carolina

LOCATION North of 38,000 gallon storage vault

INSTALLATION DETAILS

Well Completion:
Flush Mount

DEPTH	MATERIAL DESCRIPTION	INSTALLATION DETAILS	OVA/PID (ppm)
0.3	Mulch/Topsoil		
	SAND CLAY (CL), Red-brown, moist, fine sandy clay	Cement/Bentonite Grout	2.4
			4.3
			6.8
8.0			3.6
	SANDY SILT (ML), Grey and orange, moist, micaceous, fine sandy silt		2.5
			5.1
			3.7
		No. 20 Bentonite Pellets	3.8
			6.8
22.0			5.8
	SILTY SAND (SM), Grey, orange and red, moist, micaceous, silty fine sand		
26.0			
	SILTY CLAY AND SILTY SAND (CL/SM), Alternating 3-6" layers of grey, moist, micaceous, silty clay and orange and grey, moist to wet, micaceous, silty fine sand	10-Slot with Prepacked Sand Filter	
34.0			
	Boring Terminated at 34 Feet		

DEPTH (ft): 5, 10, 15, 20, 25, 30

WATER LEVEL OBSERVATIONS | SAMPLE TYPE | RECOVERY (%)

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
DPT

Abandonment Method:

Notes:
Borehole diameter: 3"
Well Diameter: 1"

WATER LEVEL OBSERVATIONS

Terracon
2401 Brentwood Road, Suite 107
Raleigh, North Carolina

Well Started: 7/17/2013	Well Completed: 7/17/2013
Drill Rig: Geoprobe 5410	Driller: Regional Probing
Project No.: 70137337	Exhibit: B-3

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WELL LOG NO. MW-4

PROJECT: Surtronics LSI

CLIENT: Surtronics Inc

SITE: 4001 Beryl Road
Raleigh, North Carolina

LOCATION North central of buiding adjacent to sanitary sewer

INSTALLATION DETAILS

Well Completion: Flush Mount

DEPTH	MATERIAL DESCRIPTION	INSTALLATION DETAILS	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (%)	OVA/PID (ppm)
0.3	Mulch/Topsoil						
	SANDY CLAY (SC), Red and orange, moist, micaceous, fine sandy clay	Cement/Bentonite Grout					1.4
							2.7
			5				
6.0							
	SANDY SILT (SM), Grey and orange moist, micaceous fine sandy silt						1.2
							1.9
10.0							
	SILTY SAND (SM), Alternating 3-6" layers of grey and orange, moist micaceous silty fine sand	No. 20 Bentonite Pellets	10				0.8
							2.7
							3.4
16.0			15				3.7
	SANDY SILT AND SILTY SAND (ML/SM), Red, grey and orange, moist, micaceous fine sandy silt and silty fine sand						
		10-Slot with Prepacked Sand Filter	20				
			25				
29.5							
	Boring Terminated at 29.5 Feet						

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
DPT

Abandonment Method:

Notes:
Borehole diameter: 3"
Well Diameter: 1"

WATER LEVEL OBSERVATIONS

Terracon
2401 Brentwood Road, Suite 107
Raleigh, North Carolina

Well Started: 7/17/2013	Well Completed: 7/17/2013
Drill Rig: Geoprobe 5410	Driller: Regional Probing
Project No.: 70137337	Exhibit: B-4

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WELL LOG NO. MW-5

PROJECT: Surtronics LSI

CLIENT: Surtronics Inc

SITE: 4001 Beryl Road
Raleigh, North Carolina

LOCATION East side of building

INSTALLATION DETAILS

Well Completion: Flush Mount

DEPTH	MATERIAL DESCRIPTION	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (%)	OVA/PID (ppm)
0.3	Mulch/Topsoil					
	SANDY CLAY (CL), Tan, moist to wet, fine sandy clay					<0.1
4.0						0.1
	SANDY CLAY (CL), Tan and orange, wet, fine sandy clay	5				0.2
						<0.1
10.0		10				0.1
	SILTY SAND (SM), Red, grey and orange, moist, micaceous, silty fine sand					<0.1
14.0						<0.1
	SILTY SAND (SM), Alternating layers 3-12" thick of orange and grey, moist, silty fine sand	15				0.1
	3" quartz vein					
21.0	Dark grey graphite layer	20				
	DPT Refusal at 21 Feet					

Cement/Bentonite Grout

No. 20 Bentonite Pellets

10-Slot with Prepacked Sand Filter

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
DPT

Abandonment Method:

Notes:
Borehole diameter: 3"
Well Diameter: 1"

WATER LEVEL OBSERVATIONS

Terracon
2401 Brentwood Road, Suite 107
Raleigh, North Carolina

Well Started: 7/17/2013 | Well Completed: 7/17/2013
Drill Rig: Geoprobe 5410 | Driller: Regional Probing
Project No.: 70137337 | Exhibit: B-5

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WELL LOG NO. MW-6

PROJECT: Surtronics LSI

CLIENT: Surtronics Inc

SITE: 4001 Beryl Road
Raleigh, North Carolina

LOCATION NE property corner adjacent to storm drain

DEPTH	MATERIAL DESCRIPTION	INSTALLATION DETAILS	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (%)	OVA/PID (ppm)
0.5	Topsoil/gravel	Well Completion: Flush Mount					
	CLAY (CL), Red-brown, wet clay	Cement/Bentonite Grout					6.0
4.0							12.4
	SILTY CLAY (CL), Orange-red, sandy silty clay		5				
6.5							9.4
	SILTY CLAY (CL), Grey, sandy silty clay						
8.0							8.1
	SILT (ML), Grey, micaceous, silt with graphite	No. 20 Bentonite Pellets					
10.0			10				6.4
	SANDY SILT (ML), Red-brown to dark gray, fine sandy silt						12.6
		Riser Pipe					12.8
16.0			15				11.2
	SANDY SILT (ML), 6-8" lens of Quartz/Partially Weather Rock Red-brown, dark grey, fine sandy silt with graphite	10-Slot with Prepacked Sand Filter					
19.0							
	DPT Refusal at 19 Feet						

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
DPT

Abandonment Method:

Notes:
Borehole diameter: 3"
Well Diameter: 1"

WATER LEVEL OBSERVATIONS

Terracon
2401 Brentwood Road, Suite 107
Raleigh, North Carolina

Well Started: 7/17/2013	Well Completed: 7/17/2013
Drill Rig: Geoprobe 5410	Driller: Regional Probing
Project No.: 70137337	Exhibit: B-6

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. ENVIRONMENTAL SMART LOG 70137337.GPJ ENV STANDARD 2012.GDT 7/26/13

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Terracon Consultants, Inc.
2401 Brentwood Road
Suite 107 I
Raleigh, NC 27604
Attention: Michael Jordan, P.G.

Lot Number:**OG19007**

Date Completed:**08/01/2013**

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.

OG19007

Case Narrative
Terracon Consultants, Inc.
Lot Number: OG19007

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.

Hexavalent Chromium

The MS/MSD recoveries in batch 25450 were outside acceptance criteria. All other QA/QC criteria for the batch were within acceptance criteria and method control limits. The MS/MSD recovery results are attributed to matrix interference. The associated sample results were reported and no corrective action was required.

Sample Summary
Terracon Consultants, Inc.
Lot Number: OG19007

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	MW-1	Aqueous	07/18/2013 1320	07/19/2013
002	MW-2	Aqueous	07/18/2013 1420	07/19/2013
003	MW-3	Aqueous	07/18/2013 1500	07/19/2013
004	MW-4	Aqueous	07/18/2013 1535	07/19/2013
005	MW-5	Aqueous	07/18/2013 1655	07/19/2013
006	MW-6	Aqueous	07/18/2013 1825	07/19/2013
007	MW-7	Aqueous	07/18/2013 1540	07/19/2013
008	TRIP	Aqueous	07/18/2013	07/19/2013
009	S-1	Solid	07/18/2013 1600	07/19/2013

(9 samples)

Executive Summary
Terracon Consultants, Inc.
Lot Number: OG19007

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	MW-1	Aqueous	Hexavalent Chromium	SM 3500-Cr B-	0.0047	J	mg/L	7
001	MW-1	Aqueous	Bromodichloromethane	8260B	5.3		ug/L	8
001	MW-1	Aqueous	Chloroform	8260B	220		ug/L	8
001	MW-1	Aqueous	1,1-Dichloroethane	8260B	1.5	J	ug/L	8
001	MW-1	Aqueous	1,1-Dichloroethene	8260B	11		ug/L	8
001	MW-1	Aqueous	cis-1,2-Dichloroethene	8260B	7.3		ug/L	8
001	MW-1	Aqueous	Trichloroethene	8260B	560		ug/L	9
001	MW-1	Aqueous	Arsenic	6010C	0.0047	J	mg/L	10
001	MW-1	Aqueous	Copper	6010C	0.0042	BJ	mg/L	10
001	MW-1	Aqueous	Lead	6010C	0.010	B	mg/L	10
001	MW-1	Aqueous	Nickel	6010C	0.017	J	mg/L	10
001	MW-1	Aqueous	Silver	6010C	0.0052	B	mg/L	10
001	MW-1	Aqueous	Thallium	6010C	0.021	BJ	mg/L	10
001	MW-1	Aqueous	Zinc	6010C	0.048		mg/L	10
002	MW-2	Aqueous	Chloroform	8260B	3.1	J	ug/L	12
002	MW-2	Aqueous	1,2-Dichloroethane	8260B	1.1	J	ug/L	12
002	MW-2	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	62		ug/L	12
002	MW-2	Aqueous	Arsenic	6010C	0.0057	J	mg/L	14
002	MW-2	Aqueous	Copper	6010C	0.0037	BJ	mg/L	14
002	MW-2	Aqueous	Lead	6010C	0.016	B	mg/L	14
002	MW-2	Aqueous	Nickel	6010C	0.044		mg/L	14
002	MW-2	Aqueous	Silver	6010C	0.00066	BJ	mg/L	14
002	MW-2	Aqueous	Thallium	6010C	0.016	BJ	mg/L	14
002	MW-2	Aqueous	Zinc	6010C	0.043		mg/L	14
003	MW-3	Aqueous	Cyanide (free)	SM 4500-CN	0.043		mg/L	15
003	MW-3	Aqueous	Acetone	8260B	12	J	ug/L	16
003	MW-3	Aqueous	Benzene	8260B	0.22	J	ug/L	16
003	MW-3	Aqueous	Chloroform	8260B	500		ug/L	16
003	MW-3	Aqueous	1,1-Dichloroethane	8260B	27		ug/L	16
003	MW-3	Aqueous	1,1-Dichloroethene	8260B	24		ug/L	16
003	MW-3	Aqueous	cis-1,2-Dichloroethene	8260B	0.44	J	ug/L	16
003	MW-3	Aqueous	1,2-Dichloropropane	8260B	0.42	J	ug/L	16
003	MW-3	Aqueous	Methylene chloride	8260B	16		ug/L	16
003	MW-3	Aqueous	1,1,1-Trichloroethane	8260B	0.99	J	ug/L	16
003	MW-3	Aqueous	Trichloroethene	8260B	62		ug/L	17
003	MW-3	Aqueous	Vinyl chloride	8260B	1.6	J	ug/L	17
003	MW-3	Aqueous	Arsenic	6010C	0.011		mg/L	18
003	MW-3	Aqueous	Cadmium	6010C	0.13		mg/L	18
003	MW-3	Aqueous	Chromium	6010C	0.0021	J	mg/L	18
003	MW-3	Aqueous	Copper	6010C	0.0067	B	mg/L	18
003	MW-3	Aqueous	Lead	6010C	0.019	B	mg/L	18
003	MW-3	Aqueous	Mercury	7470A	0.00013		mg/L	18
003	MW-3	Aqueous	Nickel	6010C	2.2		mg/L	18
003	MW-3	Aqueous	Selenium	6010C	0.0050	J	mg/L	18
003	MW-3	Aqueous	Silver	6010C	0.0027	BJ	mg/L	18

Executive Summary (Continued)

Lot Number: OG19007

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	MW-3	Aqueous	Thallium	6010C	0.041	BJ	mg/L	18
003	MW-3	Aqueous	Zinc	6010C	0.26		mg/L	18
004	MW-4	Aqueous	Trichloroethene	8260B	8.4		ug/L	21
004	MW-4	Aqueous	Arsenic	6010C	0.0047	J	mg/L	22
004	MW-4	Aqueous	Copper	6010C	0.0019	BJ	mg/L	22
004	MW-4	Aqueous	Lead	6010C	0.0079	BJ	mg/L	22
004	MW-4	Aqueous	Nickel	6010C	0.014	J	mg/L	22
004	MW-4	Aqueous	Silver	6010C	0.0057	B	mg/L	22
004	MW-4	Aqueous	Thallium	6010C	0.019	BJ	mg/L	22
004	MW-4	Aqueous	Zinc	6010C	0.031		mg/L	22
005	MW-5	Aqueous	Arsenic	6010C	0.0066	J	mg/L	26
005	MW-5	Aqueous	Copper	6010C	0.0031	BJ	mg/L	26
005	MW-5	Aqueous	Lead	6010C	0.0088	BJ	mg/L	26
005	MW-5	Aqueous	Nickel	6010C	0.027	J	mg/L	26
005	MW-5	Aqueous	Silver	6010C	0.0023	BJ	mg/L	26
005	MW-5	Aqueous	Thallium	6010C	0.021	BJ	mg/L	26
005	MW-5	Aqueous	Zinc	6010C	0.018	J	mg/L	26
006	MW-6	Aqueous	Hexavalent Chromium	SM 3500-Cr B-	0.0062	J	mg/L	27
006	MW-6	Aqueous	Chloroform	8260B	11		ug/L	28
006	MW-6	Aqueous	Arsenic	6010C	0.0044	J	mg/L	30
006	MW-6	Aqueous	Copper	6010C	0.0019	BJ	mg/L	30
006	MW-6	Aqueous	Lead	6010C	0.0068	BJ	mg/L	30
006	MW-6	Aqueous	Nickel	6010C	0.014	J	mg/L	30
006	MW-6	Aqueous	Silver	6010C	0.0042	BJ	mg/L	30
006	MW-6	Aqueous	Thallium	6010C	0.013	BJ	mg/L	30
006	MW-6	Aqueous	Zinc	6010C	0.022		mg/L	30
007	MW-7	Aqueous	Hexavalent Chromium	SM 3500-Cr B-	0.0047	J	mg/L	31
007	MW-7	Aqueous	Trichloroethene	8260B	9.2		ug/L	33
007	MW-7	Aqueous	Arsenic	6010C	0.0054	J	mg/L	34
007	MW-7	Aqueous	Copper	6010C	0.0016	BJ	mg/L	34
007	MW-7	Aqueous	Lead	6010C	0.0098	BJ	mg/L	34
007	MW-7	Aqueous	Nickel	6010C	0.011	J	mg/L	34
007	MW-7	Aqueous	Silver	6010C	0.0053	B	mg/L	34
007	MW-7	Aqueous	Thallium	6010C	0.017	BJ	mg/L	34
007	MW-7	Aqueous	Zinc	6010C	0.024		mg/L	34
009	S-1	Solid	Hexavalent Chromium	7196A	0.46	BJ	mg/kg	37
009	S-1	Solid	Antimony	6010C	1.5		mg/kg	39
009	S-1	Solid	Arsenic	6010C	5.5		mg/kg	39
009	S-1	Solid	Beryllium	6010C	0.38	J	mg/kg	39
009	S-1	Solid	Chromium	6010C	23	B	mg/kg	39
009	S-1	Solid	Copper	6010C	45		mg/kg	39
009	S-1	Solid	Lead	6010C	14	B	mg/kg	39
009	S-1	Solid	Nickel	6010C	12		mg/kg	39
009	S-1	Solid	Selenium	6010C	3.3		mg/kg	39
009	S-1	Solid	Silver	6010C	2.2		mg/kg	39
009	S-1	Solid	Zinc	6010C	23		mg/kg	39

Executive Summary (Continued)

Lot Number: OG19007

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page

(91 detections)

Inorganic non-metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-001**
Description: **MW-1**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1320**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	9012B	(Cyanide (fre) SM 4500-CN	1	07/26/2013 2150	HBB	07/26/2013 1215	25845
1		(Hexavalent C) SM 3500-Cr	1	07/19/2013 1114	HBB		25450

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Cyanide (free)	57-12-5	SM 4500-CN	ND		0.010	0.0028	mg/L	1
Hexavalent Chromium	**18540-29-9**	**SM 3500-Cr**	**0.0047**	**J**	**0.010**	**0.0046**	**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

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-001**
Description: **MW-1**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1320**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	07/31/2013 1947	JAC		26251
2	5030B	8260B	1	08/01/2013 1212	JHD		26307

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	2
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	2
Bromodichloromethane	**75-27-4**	**8260B**	**5.3**		**5.0**	**1.7**	**ug/L**	**2**
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.80	ug/L	2
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	2
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	ug/L	2
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	2
Chlorobenzene	108-90-7	8260B	ND		5.0	1.7	ug/L	2
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	2
Chloroform	**67-66-3**	**8260B**	**220**		**100**	**34**	**ug/L**	**1**
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	2
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	2
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	2
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	2
1,1-Dichloroethane	**75-34-3**	**8260B**	**1.5**	**J**	**5.0**	**0.30**	**ug/L**	**2**
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	2
1,1-Dichloroethene	**75-35-4**	**8260B**	**11**		**5.0**	**0.50**	**ug/L**	**2**
cis-1,2-Dichloroethene	**156-59-2**	**8260B**	**7.3**		**5.0**	**0.20**	**ug/L**	**2**
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	2
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.30	ug/L	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	2
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	2
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	2
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	2
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.80	ug/L	2
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	2
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	2
Styrene	100-42-5	8260B	ND		5.0	0.10	ug/L	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	2
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	2
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	2

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: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-001**
Description: **MW-1**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1320**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	07/31/2013 1947	JAC		26251
2	5030B	8260B	1	08/01/2013 1212	JHD		26307

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	ug/L	2
Trichloroethene	**79-01-6**	**8260B**	**560**		**100**	**6.0**	**ug/L**	**1**
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	2
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	2
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130		97	70-130
Bromofluorobenzene		100	70-130		92	70-130
Toluene-d8		105	70-130		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"

Priority Pollutant Metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-001**
Description: **MW-1**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1320**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	07/22/2013 1534	COH	07/22/2013 1132	25524
1	3005A	6010C	1	07/19/2013 1956	BNW	07/19/2013 1226	25447

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6010C	ND		0.010	0.0028	mg/L	1
Arsenic	**7440-38-2**	**6010C**	**0.0047**	**J**	**0.010**	**0.0040**	**mg/L**	**1**
Beryllium	7440-41-7	6010C	ND		0.0040	0.0012	mg/L	1
Cadmium	7440-43-9	6010C	ND		0.0020	0.00060	mg/L	1
Chromium	7440-47-3	6010C	ND		0.0050	0.0021	mg/L	1
Copper	**7440-50-8**	**6010C**	**0.0042**	**BJ**	**0.0050**	**0.0015**	**mg/L**	**1**
Lead	**7439-92-1**	**6010C**	**0.010**	**B**	**0.010**	**0.0019**	**mg/L**	**1**
Mercury	7439-97-6	7470A	ND		0.00010	0.000015	mg/L	1
Nickel	**7440-02-0**	**6010C**	**0.017**	**J**	**0.040**	**0.010**	**mg/L**	**1**
Selenium	7782-49-2	6010C	ND		0.010	0.0026	mg/L	1
Silver	**7440-22-4**	**6010C**	**0.0052**	**B**	**0.0050**	**0.00040**	**mg/L**	**1**
Thallium	**7440-28-0**	**6010C**	**0.021**	**BJ**	**0.050**	**0.0045**	**mg/L**	**1**
Zinc	**7440-66-6**	**6010C**	**0.048**		**0.020**	**0.0045**	**mg/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"

Inorganic non-metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-002**
Description: **MW-2**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1420**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	9012B	(Cyanide (fre) SM 4500-CN	1	07/26/2013 2151	HBB	07/26/2013 1215	25845
1		(Hexavalent C) SM 3500-Cr	1	07/19/2013 1114	HBB		25450

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Cyanide (free)	57-12-5	SM 4500-CN	ND		0.010	0.0028	mg/L	1
Hexavalent Chromium	18540-29-9	SM 3500-Cr	ND		0.010	0.0046	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

Client: **Terracon Consultants, Inc.** Laboratory ID: **OG19007-002**

Description: **MW-2** Matrix: **Aqueous**

Date Sampled: **07/18/2013 1420**

Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1735	JAC		26251

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	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	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	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	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	**67-66-3**	**8260B**	**3.1**	**J**	**5.0**	**1.7**	**ug/L**	**1**
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	**107-06-2**	**8260B**	**1.1**	**J**	**5.0**	**0.30**	**ug/L**	**1**
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	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	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**62**		**5.0**	**0.40**	**ug/L**	**1**
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.10	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	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	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: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-002**
Description: **MW-2**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1420**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1735	JAC		26251

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.30	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		104	70-130

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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"

Priority Pollutant Metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-002**
Description: **MW-2**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1420**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	07/22/2013 1537	COH	07/22/2013 1132	25524
1	3005A	6010C	1	07/19/2013 2011	BNW	07/19/2013 1226	25447

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6010C	ND		0.010	0.0028	mg/L	1
Arsenic	**7440-38-2**	**6010C**	**0.0057**	**J**	**0.010**	**0.0040**	**mg/L**	**1**
Beryllium	7440-41-7	6010C	ND		0.0040	0.0012	mg/L	1
Cadmium	7440-43-9	6010C	ND		0.0020	0.00060	mg/L	1
Chromium	7440-47-3	6010C	ND		0.0050	0.0021	mg/L	1
Copper	**7440-50-8**	**6010C**	**0.0037**	**BJ**	**0.0050**	**0.0015**	**mg/L**	**1**
Lead	**7439-92-1**	**6010C**	**0.016**	**B**	**0.010**	**0.0019**	**mg/L**	**1**
Mercury	7439-97-6	7470A	ND		0.00010	0.000015	mg/L	1
Nickel	**7440-02-0**	**6010C**	**0.044**		**0.040**	**0.010**	**mg/L**	**1**
Selenium	7782-49-2	6010C	ND		0.010	0.0026	mg/L	1
Silver	**7440-22-4**	**6010C**	**0.00066**	**BJ**	**0.0050**	**0.00040**	**mg/L**	**1**
Thallium	**7440-28-0**	**6010C**	**0.016**	**BJ**	**0.050**	**0.0045**	**mg/L**	**1**
Zinc	**7440-66-6**	**6010C**	**0.043**		**0.020**	**0.0045**	**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: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-003**
Description: **MW-3**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1500**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	9012B	(Cyanide (fre) SM 4500-CN	1	07/26/2013 2152	HBB	07/26/2013 1215	25845
1		(Hexavalent C) SM 3500-Cr	1	07/19/2013 1114	HBB		25450

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Cyanide (free)	**57-12-5**	**SM 4500-CN**	**0.043**		**0.010**	**0.0028**	**mg/L**	**1**
Hexavalent Chromium	18540-29-9	SM 3500-Cr	ND		0.010	0.0046	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

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-003**
Description: **MW-3**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1500**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1925	JAC		26251
2	5030B	8260B	10	08/01/2013 1148	JHD		26307

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**12**	**J**	**20**	**6.7**	**ug/L**	**1**
Benzene	**71-43-2**	**8260B**	**0.22**	**J**	**5.0**	**0.20**	**ug/L**	**1**
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	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	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	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	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	**67-66-3**	**8260B**	**500**		**50**	**17**	**ug/L**	**2**
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	**75-34-3**	**8260B**	**27**		**5.0**	**0.30**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	**75-35-4**	**8260B**	**24**		**5.0**	**0.50**	**ug/L**	**1**
cis-1,2-Dichloroethene	**156-59-2**	**8260B**	**0.44**	**J**	**5.0**	**0.20**	**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**	**0.42**	**J**	**5.0**	**0.30**	**ug/L**	**1**
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	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	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	**75-09-2**	**8260B**	**16**		**5.0**	**1.7**	**ug/L**	**1**
Styrene	100-42-5	8260B	ND		5.0	0.10	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	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	**71-55-6**	**8260B**	**0.99**	**J**	**5.0**	**0.20**	**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"

Volatile Organic Compounds by GC/MS

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-003**
Description: **MW-3**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1500**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1925	JAC		26251
2	5030B	8260B	10	08/01/2013 1148	JHD		26307

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	ug/L	1
Trichloroethene	**79-01-6**	**8260B**	**62**		**5.0**	**0.30**	**ug/L**	**1**
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	**75-01-4**	**8260B**	**1.6**	**J**	**2.0**	**0.10**	**ug/L**	**1**
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130		97	70-130
Bromofluorobenzene		102	70-130		91	70-130
Toluene-d8		105	70-130		100	70-130

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

Priority Pollutant Metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-003**
Description: **MW-3**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1500**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	07/22/2013 1539	COH	07/22/2013 1132	25524
1	3005A	6010C	1	07/19/2013 2015	BNW	07/19/2013 1226	25447

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6010C	ND		0.010	0.0028	mg/L	1
Arsenic	**7440-38-2**	**6010C**	**0.011**		**0.010**	**0.0040**	**mg/L**	**1**
Beryllium	7440-41-7	6010C	ND		0.0040	0.0012	mg/L	1
Cadmium	**7440-43-9**	**6010C**	**0.13**		**0.0020**	**0.00060**	**mg/L**	**1**
Chromium	**7440-47-3**	**6010C**	**0.0021**	**J**	**0.0050**	**0.0021**	**mg/L**	**1**
Copper	**7440-50-8**	**6010C**	**0.0067**	**B**	**0.0050**	**0.0015**	**mg/L**	**1**
Lead	**7439-92-1**	**6010C**	**0.019**	**B**	**0.010**	**0.0019**	**mg/L**	**1**
Mercury	**7439-97-6**	**7470A**	**0.00013**		**0.00010**	**0.000015**	**mg/L**	**1**
Nickel	**7440-02-0**	**6010C**	**2.2**		**0.040**	**0.010**	**mg/L**	**1**
Selenium	**7782-49-2**	**6010C**	**0.0050**	**J**	**0.010**	**0.0026**	**mg/L**	**1**
Silver	**7440-22-4**	**6010C**	**0.0027**	**BJ**	**0.0050**	**0.00040**	**mg/L**	**1**
Thallium	**7440-28-0**	**6010C**	**0.041**	**BJ**	**0.050**	**0.0045**	**mg/L**	**1**
Zinc	**7440-66-6**	**6010C**	**0.26**		**0.020**	**0.0045**	**mg/L**	**1**

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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: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-004**
Description: **MW-4**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1535**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	9012B	(Cyanide (fre) SM 4500-CN	1	07/26/2013 2153	HBB	07/26/2013 1215	25845
1		(Hexavalent C) SM 3500-Cr	1	07/19/2013 1114	HBB		25450

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Cyanide (free)	57-12-5	SM 4500-CN	ND		0.010	0.0028	mg/L	1
Hexavalent Chromium	18540-29-9	SM 3500-Cr	ND		0.010	0.0046	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
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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: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-004**
Description: **MW-4**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1535**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1757	JAC		26251

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	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	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	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	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	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	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	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	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.10	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	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	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"

Volatile Organic Compounds by GC/MS

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-004**
Description: **MW-4**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1535**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1757	JAC		26251

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	**79-01-6**	**8260B**	**8.4**		**5.0**	**0.30**	**ug/L**	**1**
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		102	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"

Priority Pollutant Metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-004**
Description: **MW-4**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1535**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	07/22/2013 1541	COH	07/22/2013 1132	25524
1	3005A	6010C	1	07/19/2013 2018	BNW	07/19/2013 1226	25447

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6010C	ND		0.010	0.0028	mg/L	1
Arsenic	**7440-38-2**	**6010C**	**0.0047**	**J**	**0.010**	**0.0040**	**mg/L**	**1**
Beryllium	7440-41-7	6010C	ND		0.0040	0.0012	mg/L	1
Cadmium	7440-43-9	6010C	ND		0.0020	0.00060	mg/L	1
Chromium	7440-47-3	6010C	ND		0.0050	0.0021	mg/L	1
Copper	**7440-50-8**	**6010C**	**0.0019**	**BJ**	**0.0050**	**0.0015**	**mg/L**	**1**
Lead	**7439-92-1**	**6010C**	**0.0079**	**BJ**	**0.010**	**0.0019**	**mg/L**	**1**
Mercury	7439-97-6	7470A	ND		0.00010	0.000015	mg/L	1
Nickel	**7440-02-0**	**6010C**	**0.014**	**J**	**0.040**	**0.010**	**mg/L**	**1**
Selenium	7782-49-2	6010C	ND		0.010	0.0026	mg/L	1
Silver	**7440-22-4**	**6010C**	**0.0057**	**B**	**0.0050**	**0.00040**	**mg/L**	**1**
Thallium	**7440-28-0**	**6010C**	**0.019**	**BJ**	**0.050**	**0.0045**	**mg/L**	**1**
Zinc	**7440-66-6**	**6010C**	**0.031**		**0.020**	**0.0045**	**mg/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"

Inorganic non-metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-005**
Description: **MW-5**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1655**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	9012B	(Cyanide (fre) SM 4500-CN	1	07/26/2013 2154	HBB	07/26/2013 1215	25845
1		(Hexavalent C) SM 3500-Cr	1	07/19/2013 1114	HBB		25450

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Cyanide (free)	57-12-5	SM 4500-CN	ND		0.010	0.0028	mg/L	1
Hexavalent Chromium	18540-29-9	SM 3500-Cr	ND		0.010	0.0046	mg/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
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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: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-005**
Description: **MW-5**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1655**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1819	JAC		26251

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	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	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	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	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	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	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	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	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.10	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	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	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: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-005**
Description: **MW-5**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1655**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1819	JAC		26251

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.30	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		102	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"

Priority Pollutant Metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-005**
Description: **MW-5**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1655**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	07/22/2013 1544	COH	07/22/2013 1132	25524
1	3005A	6010C	1	07/19/2013 2030	BNW	07/19/2013 1226	25447

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6010C	ND		0.010	0.0028	mg/L	1
Arsenic	**7440-38-2**	**6010C**	**0.0066**	**J**	**0.010**	**0.0040**	**mg/L**	**1**
Beryllium	7440-41-7	6010C	ND		0.0040	0.0012	mg/L	1
Cadmium	7440-43-9	6010C	ND		0.0020	0.00060	mg/L	1
Chromium	7440-47-3	6010C	ND		0.0050	0.0021	mg/L	1
Copper	**7440-50-8**	**6010C**	**0.0031**	**BJ**	**0.0050**	**0.0015**	**mg/L**	**1**
Lead	**7439-92-1**	**6010C**	**0.0088**	**BJ**	**0.010**	**0.0019**	**mg/L**	**1**
Mercury	7439-97-6	7470A	ND		0.00010	0.000015	mg/L	1
Nickel	**7440-02-0**	**6010C**	**0.027**	**J**	**0.040**	**0.010**	**mg/L**	**1**
Selenium	7782-49-2	6010C	ND		0.010	0.0026	mg/L	1
Silver	**7440-22-4**	**6010C**	**0.0023**	**BJ**	**0.0050**	**0.00040**	**mg/L**	**1**
Thallium	**7440-28-0**	**6010C**	**0.021**	**BJ**	**0.050**	**0.0045**	**mg/L**	**1**
Zinc	**7440-66-6**	**6010C**	**0.018**	**J**	**0.020**	**0.0045**	**mg/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"

Inorganic non-metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-006**
Description: **MW-6**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1825**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	9012B	(Cyanide (fre) SM 4500-CN	1	07/26/2013 2155	HBB	07/26/2013 1215	25845
1		(Hexavalent C) SM 3500-Cr	1	07/19/2013 1114	HBB		25450

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Cyanide (free)	57-12-5	SM 4500-CN	ND		0.010	0.0028	mg/L	1
Hexavalent Chromium	**18540-29-9**	**SM 3500-Cr**	**0.0062**	**J**	**0.010**	**0.0046**	**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

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-006**
Description: **MW-6**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1825**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1841	JAC		26251

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	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	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	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	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	**67-66-3**	**8260B**	**11**		**5.0**	**1.7**	**ug/L**	**1**
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	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	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	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	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.10	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	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	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: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-006**
Description: **MW-6**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1825**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1841	JAC		26251

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.30	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

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

PQL = Practical quantitation limit
B = Detected in the method blank
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"

Priority Pollutant Metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-006**
Description: **MW-6**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1825**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	07/22/2013 1547	COH	07/22/2013 1132	25524
1	3005A	6010C	1	07/19/2013 2034	BNW	07/19/2013 1226	25447

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6010C	ND		0.010	0.0028	mg/L	1
Arsenic	**7440-38-2**	**6010C**	**0.0044**	**J**	**0.010**	**0.0040**	**mg/L**	**1**
Beryllium	7440-41-7	6010C	ND		0.0040	0.0012	mg/L	1
Cadmium	7440-43-9	6010C	ND		0.0020	0.00060	mg/L	1
Chromium	7440-47-3	6010C	ND		0.0050	0.0021	mg/L	1
Copper	**7440-50-8**	**6010C**	**0.0019**	**BJ**	**0.0050**	**0.0015**	**mg/L**	**1**
Lead	**7439-92-1**	**6010C**	**0.0068**	**BJ**	**0.010**	**0.0019**	**mg/L**	**1**
Mercury	7439-97-6	7470A	ND		0.00010	0.000015	mg/L	1
Nickel	**7440-02-0**	**6010C**	**0.014**	**J**	**0.040**	**0.010**	**mg/L**	**1**
Selenium	7782-49-2	6010C	ND		0.010	0.0026	mg/L	1
Silver	**7440-22-4**	**6010C**	**0.0042**	**BJ**	**0.0050**	**0.00040**	**mg/L**	**1**
Thallium	**7440-28-0**	**6010C**	**0.013**	**BJ**	**0.050**	**0.0045**	**mg/L**	**1**
Zinc	**7440-66-6**	**6010C**	**0.022**		**0.020**	**0.0045**	**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: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-007**
Description: **MW-7**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1540**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	9012B	(Cyanide (fre) SM 4500-CN	1	07/26/2013 2159	HBB	07/26/2013 1215	25845
1		(Hexavalent C) SM 3500-Cr	1	07/19/2013 1114	HBB		25450

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Cyanide (free)	57-12-5	SM 4500-CN	ND		0.010	0.0028	mg/L	1
Hexavalent Chromium	**18540-29-9**	**SM 3500-Cr**	**0.0047**	**J**	**0.010**	**0.0046**	**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

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-007**
Description: **MW-7**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1540**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1903	JAC		26251

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	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	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	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	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	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	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	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	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.10	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	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	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: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-007**
Description: **MW-7**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1540**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1903	JAC		26251

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	**79-01-6**	**8260B**	**9.2**		**5.0**	**0.30**	**ug/L**	**1**
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		100	70-130

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"

Priority Pollutant Metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-007**
Description: **MW-7**
Matrix: **Aqueous**
Date Sampled: **07/18/2013 1540**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	07/22/2013 1549	COH	07/22/2013 1132	25524
1	3005A	6010C	1	07/19/2013 2038	BNW	07/19/2013 1226	25447

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	7440-36-0	6010C	ND		0.010	0.0028	mg/L	1
Arsenic	**7440-38-2**	**6010C**	**0.0054**	**J**	**0.010**	**0.0040**	**mg/L**	**1**
Beryllium	7440-41-7	6010C	ND		0.0040	0.0012	mg/L	1
Cadmium	7440-43-9	6010C	ND		0.0020	0.00060	mg/L	1
Chromium	7440-47-3	6010C	ND		0.0050	0.0021	mg/L	1
Copper	**7440-50-8**	**6010C**	**0.0016**	**BJ**	**0.0050**	**0.0015**	**mg/L**	**1**
Lead	**7439-92-1**	**6010C**	**0.0098**	**BJ**	**0.010**	**0.0019**	**mg/L**	**1**
Mercury	7439-97-6	7470A	ND		0.00010	0.000015	mg/L	1
Nickel	**7440-02-0**	**6010C**	**0.011**	**J**	**0.040**	**0.010**	**mg/L**	**1**
Selenium	7782-49-2	6010C	ND		0.010	0.0026	mg/L	1
Silver	**7440-22-4**	**6010C**	**0.0053**	**B**	**0.0050**	**0.00040**	**mg/L**	**1**
Thallium	**7440-28-0**	**6010C**	**0.017**	**BJ**	**0.050**	**0.0045**	**mg/L**	**1**
Zinc	**7440-66-6**	**6010C**	**0.024**		**0.020**	**0.0045**	**mg/L**	**1**

PQL = Practical quantitation limit
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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"

Volatile Organic Compounds by GC/MS

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-008**
Description: **TRIP**
Matrix: **Aqueous**
Date Sampled: **07/18/2013**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1713	JAC		26251

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	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	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	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	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	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	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	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	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.10	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	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	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: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-008**
Description: **TRIP**
Matrix: **Aqueous**
Date Sampled: **07/18/2013**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/31/2013 1713	JAC		26251

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.30	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		105	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"

Inorganic non-metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-009**
Description: **S-1**
Matrix: **Solid**
Date Sampled: **07/18/2013 1600**
% Solids: **77.5** **07/23/2013 2200**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	9012B	(Cyanide - To) 9012B	1	07/26/2013 2221	HBB	07/26/2013 1215	25847
1	3060A	(Hexavalent C) 7196A	1	07/29/2013 1555	KES	07/19/2013 1700	26061

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Cyanide - Total	57-12-5	9012B	ND		0.65	0.080	mg/kg	1
Hexavalent Chromium	**18540-29-9**	**7196A**	**0.46**	**BJ**	**1.3**	**0.32**	**mg/kg**	**1**

PQL = Practical quantitation limit
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Volatile Organic Compounds by GC/MS

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-009**
Description: **S-1**
Matrix: **Solid**
Date Sampled: **07/18/2013 1600**
% Solids: **77.5** **07/23/2013 2200**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/22/2013 2347	AWM		25617	5.92

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		22	7.3	ug/kg	1
Benzene	71-43-2	8260B	ND		5.5	1.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.5	1.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.5	0.76	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.5	2.0	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		11	2.6	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.5	1.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.5	2.0	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.5	1.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.5	1.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.5	0.90	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.5	1.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.5	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.5	0.80	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.5	1.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.5	1.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.5	0.83	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.5	1.6	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.5	0.99	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.5	0.74	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.5	0.89	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.5	1.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	1.4	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	1.6	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.5	2.8	ug/kg	1
Styrene	100-42-5	8260B	ND		5.5	1.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.5	0.51	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.5	0.55	ug/kg	1
Toluene	108-88-3	8260B	ND		5.5	1.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.5	0.93	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.5	0.86	ug/kg	1
Trichloroethene	79-01-6	8260B	ND		5.5	2.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.5	0.94	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.5	3.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	53-142
Bromofluorobenzene		104	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"

TAL Metals

Client: **Terracon Consultants, Inc.**
Laboratory ID: **OG19007-009**
Description: **S-1**
Matrix: **Solid**
Date Sampled: **07/18/2013 1600**
% Solids: **77.5** **07/23/2013 2200**
Date Received: **07/19/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	07/22/2013 1121	COH	07/22/2013 0951	25522
1	3050B	6010C	2	07/23/2013 0010	CDF	07/19/2013 1207	25445

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Antimony	**7440-36-0**	**6010C**	**1.5**		**1.2**	**0.43**	**mg/kg**	**1**
Arsenic	**7440-38-2**	**6010C**	**5.5**		**1.2**	**0.46**	**mg/kg**	**1**
Beryllium	**7440-41-7**	**6010C**	**0.38**	**J**	**0.49**	**0.068**	**mg/kg**	**1**
Cadmium	7440-43-9	6010C	ND		0.24	0.026	mg/kg	1
Chromium	**7440-47-3**	**6010C**	**23**	**B**	**0.61**	**0.12**	**mg/kg**	**1**
Copper	**7440-50-8**	**6010C**	**45**		**0.61**	**0.12**	**mg/kg**	**1**
Lead	**7439-92-1**	**6010C**	**14**	**B**	**1.2**	**0.23**	**mg/kg**	**1**
Mercury	7439-97-6	7471B	ND		0.099	0.0070	mg/kg	1
Nickel	**7440-02-0**	**6010C**	**12**		**4.9**	**0.37**	**mg/kg**	**1**
Selenium	**7782-49-2**	**6010C**	**3.3**		**1.2**	**0.42**	**mg/kg**	**1**
Silver	**7440-22-4**	**6010C**	**2.2**		**0.61**	**0.10**	**mg/kg**	**1**
Thallium	7440-28-0	6010C	ND		6.1	0.62	mg/kg	1
Zinc	**7440-66-6**	**6010C**	**23**		**6.1**	**0.83**	**mg/kg**	**1**

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: OQ25450-001
Batch: 25450
Analytical Method: SM 3500-Cr B-2011
Matrix: Aqueous

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Hexavalent Chromium	ND		1	0.010	0.0046	mg/L	07/19/2013 1114

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported 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: OQ25450-002
Batch: 25450
Analytical Method: SM 3500-Cr B-2011

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	0.10	0.10		1	104	90-110	07/19/2013 1114

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

Where applicable, all soil sample analysis are reported 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 - LCSD

Sample ID: OQ25450-003
Batch: 25450
Analytical Method: SM 3500-Cr B-2011
Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexavalent Chromium	0.10	0.10		1	104	0.40	90-110	20	07/19/2013 1114

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported 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: OG19007-007MS
Batch: 25450
Analytical Method: SM 3500-Cr B-2011
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	0.0047	0.10	0.0029	N	1	-1.8	75-125	07/19/2013 1116

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported 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: OG19007-007MD
Batch: 25450
Analytical Method: SM 3500-Cr B-2011
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexavalent Chromium	0.0047	0.10	0.0028	N	1	-1.9	1.4	75-125	20	07/19/2013 1116

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported 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: OQ25845-001
Batch: 25845
Analytical Method: SM 4500-CN G-2011

Matrix: Aqueous
Prep Method: 9012B
Prep Date: 07/26/2013 1215

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Cyanide (free)	ND		1	0.010	0.0028	mg/L	07/26/2013 2147

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

Where applicable, all soil sample analysis are reported 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: OG19007-001DU
Batch: 25845
Analytical Method: SM 4500-CN G-2011

Matrix: Aqueous
Prep Method: 9012B
Prep Date: 07/26/2013 1215

Parameter	Sample Amount (mg/L)	Result	Q	Dil	% RPD	% RPD Limit	Analysis Date
Cyanide (free)	ND	ND		1	0.00	20	07/26/2013 2151

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

Where applicable, all soil sample analysis are reported 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: OQ25847-001
Batch: 25847
Analytical Method: 9012B

Matrix: Solid
Prep Method: 9012B
Prep Date: 07/26/2013 1215

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Cyanide - Total	ND		1	0.50	0.062	mg/kg	07/26/2013 2213

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

Where applicable, all soil sample analysis are reported 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: OQ25847-002
Batch: 25847
Analytical Method: 9012B

Matrix: Solid
Prep Method: 9012B
Prep Date: 07/26/2013 1215

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Cyanide - Total	5.0	5.0		1	100	90-110	07/26/2013 2214

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

Where applicable, all soil sample analysis are reported 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 - LCSD

Sample ID: OQ25847-003
Batch: 25847
Analytical Method: 9012B

Matrix: Solid
Prep Method: 9012B
Prep Date: 07/26/2013 1215

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Cyanide - Total	5.0	4.9		1	98	1.3	90-110	20	07/26/2013 2215

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

Where applicable, all soil sample analysis are reported 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: OG19007-009MS
Batch: 25847
Analytical Method: 9012B

Matrix: Solid
Prep Method: 9012B
Prep Date: 07/26/2013 1215

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Cyanide - Total	ND	6.5	6.1		1	95	70-130	07/26/2013 2222

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

Where applicable, all soil sample analysis are reported 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: OG19007-009MD
Batch: 25847
Analytical Method: 9012B

Matrix: Solid
Prep Method: 9012B
Prep Date: 07/26/2013 1215

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Cyanide - Total	ND	6.5	6.2		1	97	1.6	70-130	20	07/26/2013 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

Inorganic non-metals - MB

Sample ID: OQ26061-001
Batch: 26061
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 07/19/2013 1700

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Hexavalent Chromium	**0.28**	**J**	**1**	**1.0**	**0.25**	**mg/kg**	**07/29/2013 1555**

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

Where applicable, all soil sample analysis are reported 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: OQ26061-002
Batch: 26061
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 07/19/2013 1700

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	4.0	4.3		1	107	90-110	07/29/2013 1555

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

Where applicable, all soil sample analysis are reported 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 - LCSD

Sample ID: OQ26061-003
Batch: 26061
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 07/19/2013 1700

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexavalent Chromium	4.0	4.0		1	101	5.8	90-110	20	07/29/2013 1555

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

Where applicable, all soil sample analysis are reported 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: OG19007-009MS
Batch: 26061
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 07/19/2013 1700

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexavalent Chromium	0.46	5.2	4.9		1	86	75-125	07/29/2013 1555

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

Where applicable, all soil sample analysis are reported 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: OG19007-009MD
Batch: 26061
Analytical Method: 7196A

Matrix: Solid
Prep Method: 3060A
Prep Date: 07/19/2013 1700

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexavalent Chromium	0.46	5.2	4.8		1	85	1.3	75-125	20	07/29/2013 1555

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

Where applicable, all soil sample analysis are reported 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: OQ25617-001
Batch: 25617
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	6.7	ug/kg	07/22/2013 2012
Benzene	ND		1	5.0	1.1	ug/kg	07/22/2013 2012
Bromodichloromethane	ND		1	5.0	1.7	ug/kg	07/22/2013 2012
Bromoform	ND		1	5.0	0.70	ug/kg	07/22/2013 2012
Bromomethane (Methyl bromide)	ND		1	5.0	1.8	ug/kg	07/22/2013 2012
2-Butanone (MEK)	ND		1	10	2.4	ug/kg	07/22/2013 2012
Carbon disulfide	ND		1	5.0	1.3	ug/kg	07/22/2013 2012
Carbon tetrachloride	ND		1	5.0	1.8	ug/kg	07/22/2013 2012
Chlorobenzene	ND		1	5.0	1.7	ug/kg	07/22/2013 2012
Chloroethane	ND		1	5.0	1.3	ug/kg	07/22/2013 2012
Chloroform	ND		1	5.0	0.83	ug/kg	07/22/2013 2012
Chloromethane (Methyl chloride)	ND		1	5.0	1.0	ug/kg	07/22/2013 2012
Dibromochloromethane	ND		1	5.0	1.7	ug/kg	07/22/2013 2012
1,2-Dichloroethane	ND		1	5.0	1.0	ug/kg	07/22/2013 2012
1,1-Dichloroethane	ND		1	5.0	0.73	ug/kg	07/22/2013 2012
trans-1,2-Dichloroethene	ND		1	5.0	1.5	ug/kg	07/22/2013 2012
cis-1,2-Dichloroethene	ND		1	5.0	0.76	ug/kg	07/22/2013 2012
1,1-Dichloroethene	ND		1	5.0	1.7	ug/kg	07/22/2013 2012
1,2-Dichloropropane	ND		1	5.0	0.91	ug/kg	07/22/2013 2012
trans-1,3-Dichloropropene	ND		1	5.0	0.82	ug/kg	07/22/2013 2012
cis-1,3-Dichloropropene	ND		1	5.0	0.68	ug/kg	07/22/2013 2012
Ethylbenzene	ND		1	5.0	1.7	ug/kg	07/22/2013 2012
2-Hexanone	ND		1	10	1.3	ug/kg	07/22/2013 2012
4-Methyl-2-pentanone	ND		1	10	1.5	ug/kg	07/22/2013 2012
Methylene chloride	ND		1	5.0	2.6	ug/kg	07/22/2013 2012
Styrene	ND		1	5.0	1.1	ug/kg	07/22/2013 2012
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.47	ug/kg	07/22/2013 2012
Tetrachloroethene	ND		1	5.0	0.50	ug/kg	07/22/2013 2012
Toluene	ND		1	5.0	1.7	ug/kg	07/22/2013 2012
1,1,2-Trichloroethane	ND		1	5.0	0.79	ug/kg	07/22/2013 2012
1,1,1-Trichloroethane	ND		1	5.0	0.85	ug/kg	07/22/2013 2012
Trichloroethene	ND		1	5.0	1.9	ug/kg	07/22/2013 2012
Vinyl chloride	ND		1	5.0	0.86	ug/kg	07/22/2013 2012
Xylenes (total)	ND		1	5.0	2.9	ug/kg	07/22/2013 2012

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		105	47-138
1,2-Dichloroethane-d4		111	53-142
Toluene-d8		112	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: OQ25617-002
Batch: 25617
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	42-149	07/22/2013 1901
Benzene	50	51		1	103	69-123	07/22/2013 1901
Bromodichloromethane	50	52		1	103	69-121	07/22/2013 1901
Bromoform	50	53		1	105	61-119	07/22/2013 1901
Bromomethane (Methyl bromide)	50	52		1	104	10-168	07/22/2013 1901
2-Butanone (MEK)	100	110		1	113	57-148	07/22/2013 1901
Carbon disulfide	50	49		1	97	58-122	07/22/2013 1901
Carbon tetrachloride	50	49		1	98	58-136	07/22/2013 1901
Chlorobenzene	50	51		1	101	59-129	07/22/2013 1901
Chloroethane	50	54		1	107	42-163	07/22/2013 1901
Chloroform	50	52		1	104	71-125	07/22/2013 1901
Chloromethane (Methyl chloride)	50	54		1	109	34-134	07/22/2013 1901
Dibromochloromethane	50	52		1	104	66-119	07/22/2013 1901
1,2-Dichloroethane	50	53		1	105	67-129	07/22/2013 1901
1,1-Dichloroethane	50	51		1	103	71-127	07/22/2013 1901
trans-1,2-Dichloroethene	50	51		1	103	68-131	07/22/2013 1901
cis-1,2-Dichloroethene	50	49		1	98	70-122	07/22/2013 1901
1,1-Dichloroethene	50	51		1	101	69-138	07/22/2013 1901
1,2-Dichloropropane	50	52		1	104	72-124	07/22/2013 1901
trans-1,3-Dichloropropene	50	51		1	102	70-124	07/22/2013 1901
cis-1,3-Dichloropropene	50	51		1	102	70-126	07/22/2013 1901
Ethylbenzene	50	50		1	100	59-128	07/22/2013 1901
2-Hexanone	100	120		1	117	54-137	07/22/2013 1901
4-Methyl-2-pentanone	100	120		1	116	60-134	07/22/2013 1901
Methylene chloride	50	53		1	107	70-130	07/22/2013 1901
Styrene	50	50		1	99	54-136	07/22/2013 1901
1,1,2,2-Tetrachloroethane	50	53		1	105	69-132	07/22/2013 1901
Tetrachloroethene	50	51		1	102	45-150	07/22/2013 1901
Toluene	50	51		1	102	61-129	07/22/2013 1901
1,1,2-Trichloroethane	50	51		1	101	55-128	07/22/2013 1901
1,1,1-Trichloroethane	50	52		1	103	63-128	07/22/2013 1901
Trichloroethene	50	50		1	100	62-126	07/22/2013 1901
Vinyl chloride	50	55		1	110	42-132	07/22/2013 1901
Xylenes (total)	100	100		1	101	58-128	07/22/2013 1901

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		104	47-138
1,2-Dichloroethane-d4		107	53-142
Toluene-d8		111	68-124

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 - LCSD

Sample ID: OQ25617-003
Batch: 25617
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	130		1	126	5.4	42-149	20	07/22/2013 1925
Benzene	50	50		1	100	2.4	69-123	20	07/22/2013 1925
Bromodichloromethane	50	51		1	103	0.49	69-121	20	07/22/2013 1925
Bromoform	50	53		1	106	1.0	61-119	20	07/22/2013 1925
Bromomethane (Methyl bromide)	50	45		1	91	13	10-168	20	07/22/2013 1925
2-Butanone (MEK)	100	110		1	111	1.3	57-148	20	07/22/2013 1925
Carbon disulfide	50	47		1	94	2.9	58-122	20	07/22/2013 1925
Carbon tetrachloride	50	48		1	95	2.8	58-136	20	07/22/2013 1925
Chlorobenzene	50	51		1	102	0.43	59-129	20	07/22/2013 1925
Chloroethane	50	51		1	102	5.3	42-163	20	07/22/2013 1925
Chloroform	50	52		1	104	0.17	71-125	20	07/22/2013 1925
Chloromethane (Methyl chloride)	50	56		1	112	2.5	34-134	20	07/22/2013 1925
Dibromochloromethane	50	53		1	106	1.4	66-119	20	07/22/2013 1925
1,2-Dichloroethane	50	52		1	104	0.77	67-129	20	07/22/2013 1925
1,1-Dichloroethane	50	51		1	101	1.4	71-127	20	07/22/2013 1925
trans-1,2-Dichloroethene	50	50		1	100	2.2	68-131	20	07/22/2013 1925
cis-1,2-Dichloroethene	50	49		1	98	0.30	70-122	20	07/22/2013 1925
1,1-Dichloroethene	50	50		1	99	1.8	69-138	20	07/22/2013 1925
1,2-Dichloropropane	50	51		1	102	2.1	72-124	20	07/22/2013 1925
trans-1,3-Dichloropropene	50	52		1	104	2.2	70-124	20	07/22/2013 1925
cis-1,3-Dichloropropene	50	52		1	103	0.74	70-126	20	07/22/2013 1925
Ethylbenzene	50	50		1	99	0.67	59-128	20	07/22/2013 1925
2-Hexanone	100	120		1	121	3.3	54-137	20	07/22/2013 1925
4-Methyl-2-pentanone	100	110		1	113	2.2	60-134	20	07/22/2013 1925
Methylene chloride	50	53		1	106	0.77	70-130	20	07/22/2013 1925
Styrene	50	50		1	100	1.1	54-136	20	07/22/2013 1925
1,1,2,2-Tetrachloroethane	50	52		1	105	0.64	69-132	20	07/22/2013 1925
Tetrachloroethene	50	51		1	101	1.0	45-150	20	07/22/2013 1925
Toluene	50	50		1	100	1.2	61-129	20	07/22/2013 1925
1,1,2-Trichloroethane	50	51		1	102	1.2	55-128	20	07/22/2013 1925
1,1,1-Trichloroethane	50	49		1	98	5.2	63-128	20	07/22/2013 1925
Trichloroethene	50	49		1	99	1.5	62-126	20	07/22/2013 1925
Vinyl chloride	50	54		1	108	1.4	42-132	20	07/22/2013 1925
Xylenes (total)	100	100		1	100	0.33	58-128	20	07/22/2013 1925

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		108	47-138
1,2-Dichloroethane-d4		108	53-142
Toluene-d8		110	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: OQ26251-001
Batch: 26251
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	6.7	ug/L	07/31/2013 1650
Benzene	ND		1	5.0	0.20	ug/L	07/31/2013 1650
Bromodichloromethane	ND		1	5.0	1.7	ug/L	07/31/2013 1650
Bromoform	ND		1	5.0	0.40	ug/L	07/31/2013 1650
Bromomethane (Methyl bromide)	ND		1	5.0	0.80	ug/L	07/31/2013 1650
2-Butanone (MEK)	ND		1	10	1.8	ug/L	07/31/2013 1650
Carbon disulfide	ND		1	5.0	0.30	ug/L	07/31/2013 1650
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	07/31/2013 1650
Chlorobenzene	ND		1	5.0	1.7	ug/L	07/31/2013 1650
Chloroethane	ND		1	5.0	0.50	ug/L	07/31/2013 1650
Chloroform	ND		1	5.0	1.7	ug/L	07/31/2013 1650
Chloromethane (Methyl chloride)	ND		1	5.0	0.30	ug/L	07/31/2013 1650
Cyclohexane	ND		1	5.0	0.98	ug/L	07/31/2013 1650
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.60	ug/L	07/31/2013 1650
Dibromochloromethane	ND		1	5.0	1.7	ug/L	07/31/2013 1650
1,2-Dibromoethane (EDB)	ND		1	5.0	0.30	ug/L	07/31/2013 1650
1,4-Dichlorobenzene	ND		1	5.0	1.7	ug/L	07/31/2013 1650
1,3-Dichlorobenzene	ND		1	5.0	1.7	ug/L	07/31/2013 1650
1,2-Dichlorobenzene	ND		1	5.0	1.7	ug/L	07/31/2013 1650
Dichlorodifluoromethane	ND		1	5.0	0.20	ug/L	07/31/2013 1650
1,2-Dichloroethane	ND		1	5.0	0.30	ug/L	07/31/2013 1650
1,1-Dichloroethane	ND		1	5.0	0.30	ug/L	07/31/2013 1650
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	07/31/2013 1650
cis-1,2-Dichloroethene	ND		1	5.0	0.20	ug/L	07/31/2013 1650
1,1-Dichloroethene	ND		1	5.0	0.50	ug/L	07/31/2013 1650
1,2-Dichloropropane	ND		1	5.0	0.30	ug/L	07/31/2013 1650
trans-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	07/31/2013 1650
cis-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	07/31/2013 1650
Ethylbenzene	ND		1	5.0	1.7	ug/L	07/31/2013 1650
2-Hexanone	ND		1	10	1.0	ug/L	07/31/2013 1650
Isopropylbenzene	ND		1	5.0	1.0	ug/L	07/31/2013 1650
Methyl acetate	ND		1	5.0	0.72	ug/L	07/31/2013 1650
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	07/31/2013 1650
4-Methyl-2-pentanone	ND		1	10	0.80	ug/L	07/31/2013 1650
Methylcyclohexane	ND		1	5.0	0.95	ug/L	07/31/2013 1650
Methylene chloride	ND		1	5.0	1.7	ug/L	07/31/2013 1650
Styrene	ND		1	5.0	0.10	ug/L	07/31/2013 1650
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	07/31/2013 1650
Tetrachloroethene	ND		1	5.0	0.40	ug/L	07/31/2013 1650
Toluene	ND		1	5.0	1.7	ug/L	07/31/2013 1650
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.30	ug/L	07/31/2013 1650
1,2,4-Trichlorobenzene	ND		1	5.0	1.7	ug/L	07/31/2013 1650
1,1,2-Trichloroethane	ND		1	5.0	0.30	ug/L	07/31/2013 1650
1,1,1-Trichloroethane	ND		1	5.0	0.20	ug/L	07/31/2013 1650

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

Where applicable, all soil sample analysis are reported 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: OQ26251-001
Batch: 26251
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.30	ug/L	07/31/2013 1650
Trichlorofluoromethane	ND		1	5.0	0.30	ug/L	07/31/2013 1650
Vinyl chloride	ND		1	2.0	0.10	ug/L	07/31/2013 1650
Xylenes (total)	ND		1	5.0	1.7	ug/L	07/31/2013 1650

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		104	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: OQ26251-002
Batch: 26251
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	98		1	98	70-130	07/31/2013 1519
Benzene	50	52		1	104	70-130	07/31/2013 1519
Bromodichloromethane	50	56		1	113	70-130	07/31/2013 1519
Bromoform	50	47		1	94	70-130	07/31/2013 1519
Bromomethane (Methyl bromide)	50	52		1	103	60-140	07/31/2013 1519
2-Butanone (MEK)	100	110		1	110	60-140	07/31/2013 1519
Carbon disulfide	50	59		1	117	60-140	07/31/2013 1519
Carbon tetrachloride	50	56		1	112	70-130	07/31/2013 1519
Chlorobenzene	50	51		1	102	70-130	07/31/2013 1519
Chloroethane	50	55		1	109	42-163	07/31/2013 1519
Chloroform	50	52		1	105	70-130	07/31/2013 1519
Chloromethane (Methyl chloride)	50	55		1	111	60-140	07/31/2013 1519
Cyclohexane	50	53		1	107	70-130	07/31/2013 1519
1,2-Dibromo-3-chloropropane (DBCP)	50	54		1	108	70-130	07/31/2013 1519
Dibromochloromethane	50	50		1	99	70-130	07/31/2013 1519
1,2-Dibromoethane (EDB)	50	58		1	116	70-130	07/31/2013 1519
1,4-Dichlorobenzene	50	51		1	102	70-130	07/31/2013 1519
1,3-Dichlorobenzene	50	53		1	105	70-130	07/31/2013 1519
1,2-Dichlorobenzene	50	51		1	101	70-130	07/31/2013 1519
Dichlorodifluoromethane	50	52		1	104	60-140	07/31/2013 1519
1,2-Dichloroethane	50	52		1	103	70-130	07/31/2013 1519
1,1-Dichloroethane	50	52		1	104	70-130	07/31/2013 1519
trans-1,2-Dichloroethene	50	54		1	108	70-130	07/31/2013 1519
cis-1,2-Dichloroethene	50	54		1	107	70-130	07/31/2013 1519
1,1-Dichloroethene	50	55		1	109	70-130	07/31/2013 1519
1,2-Dichloropropane	50	53		1	106	70-130	07/31/2013 1519
trans-1,3-Dichloropropene	50	50		1	101	70-130	07/31/2013 1519
cis-1,3-Dichloropropene	50	50		1	101	70-130	07/31/2013 1519
Ethylbenzene	50	54		1	108	70-130	07/31/2013 1519
2-Hexanone	100	110		1	108	60-140	07/31/2013 1519
Isopropylbenzene	50	61		1	121	70-130	07/31/2013 1519
Methyl acetate	50	60		1	120	70-130	07/31/2013 1519
Methyl tertiary butyl ether (MTBE)	50	56		1	111	70-130	07/31/2013 1519
4-Methyl-2-pentanone	100	120		1	122	60-140	07/31/2013 1519
Methylcyclohexane	50	55		1	110	70-130	07/31/2013 1519
Methylene chloride	50	54		1	109	70-130	07/31/2013 1519
Styrene	50	50		1	100	70-130	07/31/2013 1519
1,1,2,2-Tetrachloroethane	50	57		1	113	70-130	07/31/2013 1519
Tetrachloroethene	50	54		1	108	70-130	07/31/2013 1519
Toluene	50	54		1	108	70-130	07/31/2013 1519
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	56		1	112	70-130	07/31/2013 1519
1,2,4-Trichlorobenzene	50	43		1	85	70-130	07/31/2013 1519
1,1,2-Trichloroethane	50	54		1	108	70-130	07/31/2013 1519
1,1,1-Trichloroethane	50	55		1	110	70-130	07/31/2013 1519

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: OQ26251-002
Batch: 26251
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	105	70-130	07/31/2013 1519
Trichlorofluoromethane	50	55		1	110	70-130	07/31/2013 1519
Vinyl chloride	50	57		1	114	70-130	07/31/2013 1519
Xylenes (total)	100	110		1	106	70-130	07/31/2013 1519

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		107	70-130
1,2-Dichloroethane-d4		97	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 - LCSD

Sample ID: OQ26251-003
Batch: 26251
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	98		1	98	0.27	70-130	20	07/31/2013 1542
Benzene	50	51		1	102	1.9	70-130	20	07/31/2013 1542
Bromodichloromethane	50	55		1	109	2.9	70-130	20	07/31/2013 1542
Bromoform	50	46		1	92	2.1	70-130	20	07/31/2013 1542
Bromomethane (Methyl bromide)	50	48		1	95	8.0	60-140	20	07/31/2013 1542
2-Butanone (MEK)	100	110		1	107	2.3	60-140	20	07/31/2013 1542
Carbon disulfide	50	56		1	113	4.1	60-140	20	07/31/2013 1542
Carbon tetrachloride	50	54		1	108	3.9	70-130	20	07/31/2013 1542
Chlorobenzene	50	50		1	101	1.5	70-130	20	07/31/2013 1542
Chloroethane	50	51		1	102	7.1	42-163	20	07/31/2013 1542
Chloroform	50	51		1	103	1.8	70-130	20	07/31/2013 1542
Chloromethane (Methyl chloride)	50	53		1	106	4.0	60-140	20	07/31/2013 1542
Cyclohexane	50	51		1	102	5.0	70-130	20	07/31/2013 1542
1,2-Dibromo-3-chloropropane (DBCP)	50	57		1	114	5.2	70-130	20	07/31/2013 1542
Dibromochloromethane	50	49		1	98	1.3	70-130	20	07/31/2013 1542
1,2-Dibromoethane (EDB)	50	58		1	115	0.94	70-130	20	07/31/2013 1542
1,4-Dichlorobenzene	50	51		1	102	0.0059	70-130	20	07/31/2013 1542
1,3-Dichlorobenzene	50	53		1	106	0.92	70-130	20	07/31/2013 1542
1,2-Dichlorobenzene	50	51		1	101	0.016	70-130	20	07/31/2013 1542
Dichlorodifluoromethane	50	49		1	98	5.2	60-140	20	07/31/2013 1542
1,2-Dichloroethane	50	50		1	99	3.9	70-130	20	07/31/2013 1542
1,1-Dichloroethane	50	50		1	100	3.5	70-130	20	07/31/2013 1542
trans-1,2-Dichloroethene	50	53		1	106	2.5	70-130	20	07/31/2013 1542
cis-1,2-Dichloroethene	50	52		1	104	2.7	70-130	20	07/31/2013 1542
1,1-Dichloroethene	50	53		1	105	3.8	70-130	20	07/31/2013 1542
1,2-Dichloropropane	50	52		1	103	3.2	70-130	20	07/31/2013 1542
trans-1,3-Dichloropropene	50	50		1	101	0.063	70-130	20	07/31/2013 1542
cis-1,3-Dichloropropene	50	49		1	98	3.2	70-130	20	07/31/2013 1542
Ethylbenzene	50	53		1	106	1.6	70-130	20	07/31/2013 1542
2-Hexanone	100	100		1	105	3.2	60-140	20	07/31/2013 1542
Isopropylbenzene	50	57		1	115	5.6	70-130	20	07/31/2013 1542
Methyl acetate	50	57		1	114	4.8	70-130	20	07/31/2013 1542
Methyl tertiary butyl ether (MTBE)	50	54		1	108	3.2	70-130	20	07/31/2013 1542
4-Methyl-2-pentanone	100	110		1	114	6.5	60-140	20	07/31/2013 1542
Methylcyclohexane	50	53		1	107	2.8	70-130	20	07/31/2013 1542
Methylene chloride	50	53		1	106	2.6	70-130	20	07/31/2013 1542
Styrene	50	49		1	99	1.3	70-130	20	07/31/2013 1542
1,1,2,2-Tetrachloroethane	50	54		1	108	4.2	70-130	20	07/31/2013 1542
Tetrachloroethene	50	55		1	109	1.3	70-130	20	07/31/2013 1542
Toluene	50	52		1	105	2.9	70-130	20	07/31/2013 1542
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	53		1	106	5.2	70-130	20	07/31/2013 1542
1,2,4-Trichlorobenzene	50	53	+	1	106	21	70-130	20	07/31/2013 1542
1,1,2-Trichloroethane	50	53		1	107	1.3	70-130	20	07/31/2013 1542
1,1,1-Trichloroethane	50	54		1	108	2.1	70-130	20	07/31/2013 1542

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 - LCSD

Sample ID: OQ26251-003
Batch: 26251
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	51		1	103	1.9	70-130	20	07/31/2013 1542
Trichlorofluoromethane	50	53		1	106	3.1	70-130	20	07/31/2013 1542
Vinyl chloride	50	54		1	107	6.2	70-130	20	07/31/2013 1542
Xylenes (total)	100	100		1	105	1.1	70-130	20	07/31/2013 1542

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		109	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		104	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: OG19007-001MS
Batch: 26251
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	ND	2000	1900		20	94	60-140	07/31/2013 2010
Benzene	ND	1000	1100		20	111	70-130	07/31/2013 2010
Bromodichloromethane	5.3	1000	1100		20	112	71-143	07/31/2013 2010
Bromoform	ND	1000	850		20	85	65-131	07/31/2013 2010
Bromomethane (Methyl bromide)	ND	1000	1000		20	102	36-168	07/31/2013 2010
2-Butanone (MEK)	ND	2000	2000		20	102	60-140	07/31/2013 2010
Carbon disulfide	ND	1000	1100		20	108	60-140	07/31/2013 2010
Carbon tetrachloride	ND	1000	1200		20	118	37-166	07/31/2013 2010
Chlorobenzene	ND	1000	1100		20	108	78-129	07/31/2013 2010
Chloroethane	ND	1000	1100		20	113	60-140	07/31/2013 2010
Chloroform	220	1000	1300		20	109	63-123	07/31/2013 2010
Chloromethane (Methyl chloride)	ND	1000	1200		20	117	20-158	07/31/2013 2010
Cyclohexane	ND	1000	1200		20	120	70-130	07/31/2013 2010
1,2-Dibromo-3-chloropropane (DBCP)	ND	1000	920		20	92	70-130	07/31/2013 2010
Dibromochloromethane	ND	1000	920		20	92	74-134	07/31/2013 2010
1,2-Dibromoethane (EDB)	ND	1000	1100		20	109	70-130	07/31/2013 2010
1,2-Dichlorobenzene	ND	1000	1000		20	102	70-130	07/31/2013 2010
1,3-Dichlorobenzene	ND	1000	1100		20	109	70-130	07/31/2013 2010
1,4-Dichlorobenzene	ND	1000	1100		20	106	70-130	07/31/2013 2010
Dichlorodifluoromethane	ND	1000	1100		20	114	10-158	07/31/2013 2010
1,1-Dichloroethane	1.5	1000	1100		20	109	69-132	07/31/2013 2010
1,2-Dichloroethane	ND	1000	1100		20	108	70-130	07/31/2013 2010
1,1-Dichloroethene	11	1000	1200		20	116	50-132	07/31/2013 2010
cis-1,2-Dichloroethene	7.3	1000	1100		20	113	70-130	07/31/2013 2010
trans-1,2-Dichloroethene	ND	1000	1200		20	115	70-130	07/31/2013 2010
1,2-Dichloropropane	ND	1000	1100		20	109	71-126	07/31/2013 2010
cis-1,3-Dichloropropene	ND	1000	970		20	97	69-130	07/31/2013 2010
trans-1,3-Dichloropropene	ND	1000	950		20	95	73-131	07/31/2013 2010
Ethylbenzene	ND	1000	1100		20	113	70-130	07/31/2013 2010
2-Hexanone	ND	2000	1900		20	95	60-140	07/31/2013 2010
Isopropylbenzene	ND	1000	1300		20	129	70-130	07/31/2013 2010
Methyl acetate	ND	1000	1100		20	110	15-128	07/31/2013 2010
Methyl tertiary butyl ether (MTBE)	ND	1000	1100		20	108	70-130	07/31/2013 2010
4-Methyl-2-pentanone	ND	2000	2300		20	113	60-140	07/31/2013 2010
Methylcyclohexane	ND	1000	1300		20	126	70-130	07/31/2013 2010
Methylene chloride	ND	1000	1100		20	111	69-129	07/31/2013 2010
Styrene	ND	1000	1000		20	101	70-130	07/31/2013 2010
1,1,2,2-Tetrachloroethane	ND	1000	1100		20	110	60-155	07/31/2013 2010
Tetrachloroethene	ND	1000	1100		20	114	70-130	07/31/2013 2010
Toluene	ND	1000	1200		20	117	70-130	07/31/2013 2010
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1000	1200		20	119	70-130	07/31/2013 2010
1,2,4-Trichlorobenzene	ND	1000	760		20	76	70-130	07/31/2013 2010
1,1,1-Trichloroethane	ND	1000	1200		20	120	77-132	07/31/2013 2010
1,1,2-Trichloroethane	ND	1000	1100		20	106	77-132	07/31/2013 2010

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

Where applicable, all soil sample analysis are reported 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: OG19007-001MS
Batch: 26251
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	560	1000	1600		20	108	73-124	07/31/2013 2010
Trichlorofluoromethane	ND	1000	1200		20	118	60-140	07/31/2013 2010
Vinyl chloride	ND	1000	1200		20	123	29-159	07/31/2013 2010
Xylenes (total)	ND	2000	2200		20	110	70-130	07/31/2013 2010

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		107	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 - MSD

Sample ID: OG19007-001MD
Batch: 26251
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	2000	2000		20	98	4.4	60-140	20	07/31/2013 2032
Benzene	ND	1000	1100		20	113	1.1	70-130	20	07/31/2013 2032
Bromodichloromethane	5.3	1000	1200		20	115	2.8	71-143	20	07/31/2013 2032
Bromoform	ND	1000	870		20	87	2.7	65-131	20	07/31/2013 2032
Bromomethane (Methyl bromide)	ND	1000	1100		20	112	10	36-168	20	07/31/2013 2032
2-Butanone (MEK)	ND	2000	2000		20	99	2.7	60-140	20	07/31/2013 2032
Carbon disulfide	ND	1000	1200		20	115	6.8	60-140	20	07/31/2013 2032
Carbon tetrachloride	ND	1000	1200		20	120	1.3	37-166	20	07/31/2013 2032
Chlorobenzene	ND	1000	1100		20	109	0.94	78-129	20	07/31/2013 2032
Chloroethane	ND	1000	1200		20	116	2.7	60-140	20	07/31/2013 2032
Chloroform	220	1000	1300		20	109	0.41	63-123	20	07/31/2013 2032
Chloromethane (Methyl chloride)	ND	1000	1200		20	118	1.3	20-158	20	07/31/2013 2032
Cyclohexane	ND	1000	1200		20	120	0.19	70-130	20	07/31/2013 2032
1,2-Dibromo-3-chloropropane (DBCP)	ND	1000	1100		20	107	15	70-130	20	07/31/2013 2032
Dibromochloromethane	ND	1000	940		20	94	2.0	74-134	20	07/31/2013 2032
1,2-Dibromoethane (EDB)	ND	1000	1100		20	113	3.3	70-130	20	07/31/2013 2032
1,2-Dichlorobenzene	ND	1000	1100		20	107	4.4	70-130	20	07/31/2013 2032
1,3-Dichlorobenzene	ND	1000	1100		20	109	0.10	70-130	20	07/31/2013 2032
1,4-Dichlorobenzene	ND	1000	1100		20	106	0.23	70-130	20	07/31/2013 2032
Dichlorodifluoromethane	ND	1000	1200		20	120	4.6	10-158	20	07/31/2013 2032
1,1-Dichloroethane	1.5	1000	1100		20	111	1.4	69-132	20	07/31/2013 2032
1,2-Dichloroethane	ND	1000	1100		20	106	2.5	70-130	20	07/31/2013 2032
1,1-Dichloroethene	11	1000	1200		20	119	2.9	50-132	20	07/31/2013 2032
cis-1,2-Dichloroethene	7.3	1000	1100		20	113	0.16	70-130	20	07/31/2013 2032
trans-1,2-Dichloroethene	ND	1000	1200		20	116	0.12	70-130	20	07/31/2013 2032
1,2-Dichloropropane	ND	1000	1100		20	111	1.7	71-126	20	07/31/2013 2032
cis-1,3-Dichloropropene	ND	1000	1000		20	100	3.2	69-130	20	07/31/2013 2032
trans-1,3-Dichloropropene	ND	1000	970		20	97	2.2	73-131	20	07/31/2013 2032
Ethylbenzene	ND	1000	1200		20	115	1.4	70-130	20	07/31/2013 2032
2-Hexanone	ND	2000	1900		20	94	0.39	60-140	20	07/31/2013 2032
Isopropylbenzene	ND	1000	1200		20	122	5.8	70-130	20	07/31/2013 2032
Methyl acetate	ND	1000	1100		20	110	0.13	15-128	20	07/31/2013 2032
Methyl tertiary butyl ether (MTBE)	ND	1000	1100		20	110	1.8	70-130	20	07/31/2013 2032
4-Methyl-2-pentanone	ND	2000	2200		20	112	1.5	60-140	20	07/31/2013 2032
Methylcyclohexane	ND	1000	1300		20	127	0.84	70-130	20	07/31/2013 2032
Methylene chloride	ND	1000	1100		20	112	1.1	69-129	20	07/31/2013 2032
Styrene	ND	1000	1000		20	104	2.3	70-130	20	07/31/2013 2032
1,1,2,2-Tetrachloroethane	ND	1000	1100		20	105	4.9	60-155	20	07/31/2013 2032
Tetrachloroethene	ND	1000	1100		20	114	0.12	70-130	20	07/31/2013 2032
Toluene	ND	1000	1200		20	119	1.7	70-130	20	07/31/2013 2032
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1000	1200		20	124	4.3	70-130	20	07/31/2013 2032
1,2,4-Trichlorobenzene	ND	1000	1200	+	20	119	44	70-130	20	07/31/2013 2032
1,1,1-Trichloroethane	ND	1000	1200		20	118	1.5	77-132	20	07/31/2013 2032
1,1,2-Trichloroethane	ND	1000	1100		20	105	1.2	77-132	20	07/31/2013 2032

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

Where applicable, all soil sample analysis are reported 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 - MSD

Sample ID: OG19007-001MD
Batch: 26251
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	560	1000	1600		20	108	0.057	73-124	20	07/31/2013 2032
Trichlorofluoromethane	ND	1000	1300		20	125	5.6	60-140	20	07/31/2013 2032
Vinyl chloride	ND	1000	1300		20	126	2.3	29-159	20	07/31/2013 2032
Xylenes (total)	ND	2000	2200		20	112	2.2	70-130	20	07/31/2013 2032

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		110	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 - MB

Sample ID: OQ26307-001
Batch: 26307
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	6.7	ug/L	08/01/2013 1123
Benzene	ND		1	5.0	0.20	ug/L	08/01/2013 1123
Bromodichloromethane	ND		1	5.0	1.7	ug/L	08/01/2013 1123
Bromoform	ND		1	5.0	0.40	ug/L	08/01/2013 1123
Bromomethane (Methyl bromide)	ND		1	5.0	0.80	ug/L	08/01/2013 1123
2-Butanone (MEK)	ND		1	10	1.8	ug/L	08/01/2013 1123
Carbon disulfide	ND		1	5.0	0.30	ug/L	08/01/2013 1123
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	08/01/2013 1123
Chlorobenzene	ND		1	5.0	1.7	ug/L	08/01/2013 1123
Chloroethane	ND		1	5.0	0.50	ug/L	08/01/2013 1123
Chloroform	ND		1	5.0	1.7	ug/L	08/01/2013 1123
Chloromethane (Methyl chloride)	ND		1	5.0	0.30	ug/L	08/01/2013 1123
Cyclohexane	ND		1	5.0	0.98	ug/L	08/01/2013 1123
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.60	ug/L	08/01/2013 1123
Dibromochloromethane	ND		1	5.0	1.7	ug/L	08/01/2013 1123
1,2-Dibromoethane (EDB)	ND		1	5.0	0.30	ug/L	08/01/2013 1123
1,4-Dichlorobenzene	ND		1	5.0	1.7	ug/L	08/01/2013 1123
1,3-Dichlorobenzene	ND		1	5.0	1.7	ug/L	08/01/2013 1123
1,2-Dichlorobenzene	ND		1	5.0	1.7	ug/L	08/01/2013 1123
Dichlorodifluoromethane	ND		1	5.0	0.20	ug/L	08/01/2013 1123
1,2-Dichloroethane	ND		1	5.0	0.30	ug/L	08/01/2013 1123
1,1-Dichloroethane	ND		1	5.0	0.30	ug/L	08/01/2013 1123
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	08/01/2013 1123
cis-1,2-Dichloroethene	ND		1	5.0	0.20	ug/L	08/01/2013 1123
1,1-Dichloroethene	ND		1	5.0	0.50	ug/L	08/01/2013 1123
1,2-Dichloropropane	ND		1	5.0	0.30	ug/L	08/01/2013 1123
trans-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	08/01/2013 1123
cis-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	08/01/2013 1123
Ethylbenzene	ND		1	5.0	1.7	ug/L	08/01/2013 1123
2-Hexanone	ND		1	10	1.0	ug/L	08/01/2013 1123
Isopropylbenzene	ND		1	5.0	1.0	ug/L	08/01/2013 1123
Methyl acetate	ND		1	5.0	0.72	ug/L	08/01/2013 1123
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	08/01/2013 1123
4-Methyl-2-pentanone	ND		1	10	0.80	ug/L	08/01/2013 1123
Methylcyclohexane	ND		1	5.0	0.95	ug/L	08/01/2013 1123
Methylene chloride	ND		1	5.0	1.7	ug/L	08/01/2013 1123
Styrene	ND		1	5.0	0.10	ug/L	08/01/2013 1123
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	08/01/2013 1123
Tetrachloroethene	ND		1	5.0	0.40	ug/L	08/01/2013 1123
Toluene	ND		1	5.0	1.7	ug/L	08/01/2013 1123
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.30	ug/L	08/01/2013 1123
1,2,4-Trichlorobenzene	ND		1	5.0	1.7	ug/L	08/01/2013 1123
1,1,2-Trichloroethane	ND		1	5.0	0.30	ug/L	08/01/2013 1123
1,1,1-Trichloroethane	ND		1	5.0	0.20	ug/L	08/01/2013 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

Volatile Organic Compounds by GC/MS - MB

Sample ID: OQ26307-001
Batch: 26307
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichlorofluoromethane	ND		1	5.0	0.30	ug/L	08/01/2013 1123
Vinyl chloride	ND		1	2.0	0.10	ug/L	08/01/2013 1123
Xylenes (total)	ND		1	5.0	1.7	ug/L	08/01/2013 1123

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		97	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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: OQ26307-002
Batch: 26307
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	125	70-130	08/01/2013 0945
Benzene	50	51		1	101	70-130	08/01/2013 0945
Bromodichloromethane	50	56		1	112	70-130	08/01/2013 0945
Bromoform	50	48		1	96	70-130	08/01/2013 0945
Bromomethane (Methyl bromide)	50	50		1	101	60-140	08/01/2013 0945
2-Butanone (MEK)	100	110		1	112	60-140	08/01/2013 0945
Carbon disulfide	50	48		1	96	60-140	08/01/2013 0945
Carbon tetrachloride	50	53		1	107	70-130	08/01/2013 0945
Chlorobenzene	50	51		1	103	70-130	08/01/2013 0945
Chloroethane	50	51		1	102	42-163	08/01/2013 0945
Chloroform	50	52		1	104	70-130	08/01/2013 0945
Chloromethane (Methyl chloride)	50	58		1	117	60-140	08/01/2013 0945
Cyclohexane	50	48		1	96	70-130	08/01/2013 0945
1,2-Dibromo-3-chloropropane (DBCP)	50	44		1	88	70-130	08/01/2013 0945
Dibromochloromethane	50	56		1	112	70-130	08/01/2013 0945
1,2-Dibromoethane (EDB)	50	54		1	107	70-130	08/01/2013 0945
1,4-Dichlorobenzene	50	51		1	102	70-130	08/01/2013 0945
1,3-Dichlorobenzene	50	51		1	103	70-130	08/01/2013 0945
1,2-Dichlorobenzene	50	51		1	102	70-130	08/01/2013 0945
Dichlorodifluoromethane	50	59		1	117	60-140	08/01/2013 0945
1,2-Dichloroethane	50	52		1	105	70-130	08/01/2013 0945
1,1-Dichloroethane	50	51		1	103	70-130	08/01/2013 0945
trans-1,2-Dichloroethene	50	52		1	104	70-130	08/01/2013 0945
cis-1,2-Dichloroethene	50	52		1	103	70-130	08/01/2013 0945
1,1-Dichloroethene	50	53		1	106	70-130	08/01/2013 0945
1,2-Dichloropropane	50	53		1	105	70-130	08/01/2013 0945
trans-1,3-Dichloropropene	50	54		1	108	70-130	08/01/2013 0945
cis-1,3-Dichloropropene	50	56		1	111	70-130	08/01/2013 0945
Ethylbenzene	50	52		1	105	70-130	08/01/2013 0945
2-Hexanone	100	110		1	108	60-140	08/01/2013 0945
Isopropylbenzene	50	51		1	102	70-130	08/01/2013 0945
Methyl acetate	50	52		1	105	70-130	08/01/2013 0945
Methyl tertiary butyl ether (MTBE)	50	50		1	101	70-130	08/01/2013 0945
4-Methyl-2-pentanone	100	110		1	112	60-140	08/01/2013 0945
Methylcyclohexane	50	49		1	99	70-130	08/01/2013 0945
Methylene chloride	50	51		1	101	70-130	08/01/2013 0945
Styrene	50	56		1	112	70-130	08/01/2013 0945
1,1,2,2-Tetrachloroethane	50	53		1	107	70-130	08/01/2013 0945
Tetrachloroethene	50	52		1	103	70-130	08/01/2013 0945
Toluene	50	53		1	105	70-130	08/01/2013 0945
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	51		1	101	70-130	08/01/2013 0945
1,2,4-Trichlorobenzene	50	38		1	75	70-130	08/01/2013 0945
1,1,2-Trichloroethane	50	52		1	104	70-130	08/01/2013 0945
1,1,1-Trichloroethane	50	51		1	103	70-130	08/01/2013 0945

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

Where applicable, all soil sample analysis are reported 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: OQ26307-002
Batch: 26307
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichlorofluoromethane	50	55		1	109	70-130	08/01/2013 0945
Vinyl chloride	50	54		1	109	70-130	08/01/2013 0945
Xylenes (total)	100	110		1	107	70-130	08/01/2013 0945

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		99	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: OQ26307-003
Batch: 26307
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	110		1	107	15	70-130	20	08/01/2013 1010
Benzene	50	50		1	100	1.2	70-130	20	08/01/2013 1010
Bromodichloromethane	50	54		1	109	2.7	70-130	20	08/01/2013 1010
Bromoform	50	47		1	94	2.8	70-130	20	08/01/2013 1010
Bromomethane (Methyl bromide)	50	47		1	94	6.7	60-140	20	08/01/2013 1010
2-Butanone (MEK)	100	100		1	100	11	60-140	20	08/01/2013 1010
Carbon disulfide	50	46		1	93	3.3	60-140	20	08/01/2013 1010
Carbon tetrachloride	50	52		1	104	2.3	70-130	20	08/01/2013 1010
Chlorobenzene	50	50		1	100	2.3	70-130	20	08/01/2013 1010
Chloroethane	50	50		1	100	2.6	42-163	20	08/01/2013 1010
Chloroform	50	51		1	102	1.9	70-130	20	08/01/2013 1010
Chloromethane (Methyl chloride)	50	55		1	111	5.2	60-140	20	08/01/2013 1010
Cyclohexane	50	47		1	94	2.0	70-130	20	08/01/2013 1010
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	93	5.0	70-130	20	08/01/2013 1010
Dibromochloromethane	50	56		1	112	0.49	70-130	20	08/01/2013 1010
1,2-Dibromoethane (EDB)	50	54		1	107	0.073	70-130	20	08/01/2013 1010
1,4-Dichlorobenzene	50	49		1	98	3.5	70-130	20	08/01/2013 1010
1,3-Dichlorobenzene	50	50		1	100	2.8	70-130	20	08/01/2013 1010
1,2-Dichlorobenzene	50	49		1	99	3.1	70-130	20	08/01/2013 1010
Dichlorodifluoromethane	50	56		1	112	4.3	60-140	20	08/01/2013 1010
1,2-Dichloroethane	50	51		1	101	3.2	70-130	20	08/01/2013 1010
1,1-Dichloroethane	50	50		1	100	3.1	70-130	20	08/01/2013 1010
trans-1,2-Dichloroethene	50	50		1	101	2.7	70-130	20	08/01/2013 1010
cis-1,2-Dichloroethene	50	51		1	101	1.7	70-130	20	08/01/2013 1010
1,1-Dichloroethene	50	49		1	99	6.8	70-130	20	08/01/2013 1010
1,2-Dichloropropane	50	51		1	102	3.4	70-130	20	08/01/2013 1010
trans-1,3-Dichloropropene	50	55		1	109	1.3	70-130	20	08/01/2013 1010
cis-1,3-Dichloropropene	50	54		1	107	3.9	70-130	20	08/01/2013 1010
Ethylbenzene	50	50		1	100	4.7	70-130	20	08/01/2013 1010
2-Hexanone	100	110		1	106	2.3	60-140	20	08/01/2013 1010
Isopropylbenzene	50	50		1	101	1.6	70-130	20	08/01/2013 1010
Methyl acetate	50	49		1	98	6.5	70-130	20	08/01/2013 1010
Methyl tertiary butyl ether (MTBE)	50	51		1	102	1.2	70-130	20	08/01/2013 1010
4-Methyl-2-pentanone	100	100		1	105	6.5	60-140	20	08/01/2013 1010
Methylcyclohexane	50	48		1	95	3.8	70-130	20	08/01/2013 1010
Methylene chloride	50	50		1	100	1.5	70-130	20	08/01/2013 1010
Styrene	50	53		1	105	5.7	70-130	20	08/01/2013 1010
1,1,2,2-Tetrachloroethane	50	54		1	109	1.6	70-130	20	08/01/2013 1010
Tetrachloroethene	50	51		1	102	1.4	70-130	20	08/01/2013 1010
Toluene	50	50		1	100	4.8	70-130	20	08/01/2013 1010
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	49		1	97	3.9	70-130	20	08/01/2013 1010
1,2,4-Trichlorobenzene	50	44		1	89	16	70-130	20	08/01/2013 1010
1,1,2-Trichloroethane	50	52		1	105	0.89	70-130	20	08/01/2013 1010
1,1,1-Trichloroethane	50	52		1	103	0.85	70-130	20	08/01/2013 1010

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 - LCSD

Sample ID: OQ26307-003
Batch: 26307
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichlorofluoromethane	50	53		1	107	2.1	70-130	20	08/01/2013 1010
Vinyl chloride	50	51		1	103	5.7	70-130	20	08/01/2013 1010
Xylenes (total)	100	100		1	101	5.5	70-130	20	08/01/2013 1010

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		97	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

TAL Metals - MB

Sample ID: OQ25445-001
Batch: 25445
Analytical Method: 6010C

Matrix: Solid
Prep Method: 3050B
Prep Date: 07/19/2013 1207

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	ND		1	0.50	0.18	mg/kg	07/22/2013 1456
Arsenic	ND		1	0.50	0.19	mg/kg	07/22/2013 1456
Beryllium	ND		1	0.20	0.028	mg/kg	07/22/2013 2358
Cadmium	ND		1	0.10	0.011	mg/kg	07/22/2013 2358
Chromium	**0.068**	**J**	**1**	**0.25**	**0.051**	**mg/kg**	**07/22/2013 1456**
Copper	ND		1	0.25	0.048	mg/kg	07/22/2013 1456
Lead	**0.17**	**J**	**1**	**0.50**	**0.093**	**mg/kg**	**07/22/2013 1456**
Nickel	ND		1	2.0	0.15	mg/kg	07/22/2013 1456
Selenium	ND		1	0.50	0.17	mg/kg	07/23/2013 2340
Silver	ND		1	0.25	0.042	mg/kg	07/22/2013 1456
Thallium	ND		1	2.5	0.25	mg/kg	07/22/2013 1456
Zinc	ND		1	2.5	0.34	mg/kg	07/22/2013 1456

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

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

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

TAL Metals - LCS

Sample ID: OQ25445-002
Batch: 25445
Analytical Method: 6010C

Matrix: Solid
Prep Method: 3050B
Prep Date: 07/19/2013 1207

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	50	47		1	94	80-120	07/22/2013 1500
Arsenic	250	210		1	86	80-120	07/22/2013 1500
Beryllium	100	92		1	92	80-120	07/23/2013 0002
Cadmium	50	43		1	87	80-120	07/23/2013 0002
Chromium	250	250		1	101	80-120	07/22/2013 1500
Copper	100	92		1	92	80-120	07/22/2013 1500
Lead	250	220		1	87	80-120	07/22/2013 1500
Nickel	100	94		1	94	80-120	07/22/2013 1500
Selenium	50	42		1	84	80-120	07/23/2013 2344
Silver	250	230		1	92	80-120	07/22/2013 1500
Thallium	40	35		1	87	80-120	07/22/2013 1500
Zinc	100	93		1	93	80-120	07/22/2013 1500

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

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

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

TAL Metals - LCSD

Sample ID: OQ25445-003
Batch: 25445
Analytical Method: 6010C

Matrix: Solid
Prep Method: 3050B
Prep Date: 07/19/2013 1207

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Antimony	50	50		1	100	5.7	80-120	20	07/22/2013 1504
Arsenic	250	220		1	89	3.8	80-120	20	07/22/2013 1504
Beryllium	100	96		1	96	3.6	80-120	20	07/23/2013 0006
Cadmium	50	45		1	89	2.8	80-120	20	07/23/2013 0006
Chromium	250	260		1	106	4.0	80-120	20	07/22/2013 1504
Copper	100	98		1	98	6.8	80-120	20	07/22/2013 1504
Lead	250	210		1	86	1.7	80-120	20	07/22/2013 1504
Nickel	100	97		1	97	3.5	80-120	20	07/22/2013 1504
Selenium	50	42		1	83	0.43	80-120	20	07/23/2013 2348
Silver	250	240		1	96	4.1	80-120	20	07/22/2013 1504
Thallium	40	36		1	91	5.1	80-120	20	07/22/2013 1504
Zinc	100	96		1	96	3.1	80-120	20	07/22/2013 1504

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

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

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

Priority Pollutant Metals - MB

Sample ID: OQ25447-001
Batch: 25447
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 07/19/2013 1226

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Antimony	ND		1	0.010	0.0028	mg/L	07/19/2013 1944
Arsenic	ND		1	0.010	0.0040	mg/L	07/19/2013 1944
Beryllium	ND		1	0.0040	0.0012	mg/L	07/19/2013 1944
Cadmium	ND		1	0.0020	0.00060	mg/L	07/19/2013 1944
Chromium	ND		1	0.0050	0.0021	mg/L	07/19/2013 1944
Copper	**0.0024**	**J**	**1**	**0.0050**	**0.0015**	**mg/L**	**07/19/2013 1944**
Lead	**0.0035**	**J**	**1**	**0.010**	**0.0019**	**mg/L**	**07/19/2013 1944**
Nickel	ND		1	0.040	0.010	mg/L	07/19/2013 1944
Selenium	ND		1	0.010	0.0026	mg/L	07/19/2013 1944
Silver	**0.0040**	**J**	**1**	**0.0050**	**0.00040**	**mg/L**	**07/19/2013 1944**
Thallium	**0.016**	**J**	**1**	**0.050**	**0.0045**	**mg/L**	**07/19/2013 1944**
Zinc	ND		1	0.020	0.0045	mg/L	07/19/2013 1944

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

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

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

Priority Pollutant Metals - LCS

Sample ID: OQ25447-002
Batch: 25447
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 07/19/2013 1226

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	0.40	0.40		1	99	80-120	07/19/2013 1948
Arsenic	0.40	0.44		1	110	80-120	07/19/2013 1948
Beryllium	2.0	2.0		1	102	80-120	07/19/2013 1948
Cadmium	0.40	0.39		1	97	80-120	07/19/2013 1948
Chromium	2.0	2.0		1	102	80-120	07/19/2013 1948
Copper	2.0	1.9		1	97	80-120	07/19/2013 1948
Lead	0.40	0.39		1	97	80-120	07/19/2013 1948
Nickel	2.0	1.9		1	97	80-120	07/19/2013 1948
Selenium	0.40	0.45		1	112	80-120	07/19/2013 1948
Silver	0.40	0.41		1	102	80-120	07/19/2013 1948
Thallium	0.80	0.81		1	102	80-120	07/19/2013 1948
Zinc	2.0	2.0		1	102	80-120	07/19/2013 1948

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

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

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

Priority Pollutant Metals - LCSD

Sample ID: OQ25447-003
Batch: 25447
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 07/19/2013 1226

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Antimony	0.40	0.40		1	99	0.36	80-120	20	07/19/2013 1952
Arsenic	0.40	0.43		1	108	1.3	80-120	20	07/19/2013 1952
Beryllium	2.0	2.1		1	104	1.9	80-120	20	07/19/2013 1952
Cadmium	0.40	0.39		1	97	0.014	80-120	20	07/19/2013 1952
Chromium	2.0	2.1		1	104	2.2	80-120	20	07/19/2013 1952
Copper	2.0	2.0		1	99	2.3	80-120	20	07/19/2013 1952
Lead	0.40	0.39		1	98	1.5	80-120	20	07/19/2013 1952
Nickel	2.0	1.9		1	97	0.24	80-120	20	07/19/2013 1952
Selenium	0.40	0.45		1	113	0.80	80-120	20	07/19/2013 1952
Silver	0.40	0.41		1	103	0.62	80-120	20	07/19/2013 1952
Thallium	0.80	0.81		1	101	0.78	80-120	20	07/19/2013 1952
Zinc	2.0	2.0		1	101	0.23	80-120	20	07/19/2013 1952

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

Priority Pollutant Metals - MS

Sample ID: OG19007-001MS
Batch: 25447
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 07/19/2013 1226

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	ND	0.40	0.40		1	99	75-125	07/19/2013 1959
Arsenic	0.0047	0.40	0.43		1	106	75-125	07/19/2013 1959
Beryllium	ND	2.0	2.0		1	99	75-125	07/19/2013 1959
Cadmium	ND	0.40	0.40		1	101	75-125	07/19/2013 1959
Chromium	ND	2.0	2.0		1	99	75-125	07/19/2013 1959
Copper	0.0042	2.0	2.0		1	102	75-125	07/19/2013 1959
Lead	0.010	0.40	0.41		1	100	75-125	07/19/2013 1959
Nickel	0.017	2.0	2.0		1	98	75-125	07/19/2013 1959
Selenium	ND	0.40	0.45		1	111	75-125	07/19/2013 1959
Silver	0.0052	0.40	0.41		1	101	75-125	07/19/2013 1959
Thallium	0.021	0.80	0.91		1	111	75-125	07/19/2013 1959
Zinc	0.048	2.0	2.0		1	97	75-125	07/19/2013 1959

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

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

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

Priority Pollutant Metals - MSD

Sample ID: OG19007-001MD
Batch: 25447
Analytical Method: 6010C

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 07/19/2013 1226

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Antimony	ND	0.40	0.39		1	98	0.52	75-125	20	07/19/2013 2003
Arsenic	0.0047	0.40	0.43		1	105	0.36	75-125	20	07/19/2013 2003
Beryllium	ND	2.0	1.9		1	97	1.6	75-125	20	07/19/2013 2003
Cadmium	ND	0.40	0.41		1	102	1.3	75-125	20	07/19/2013 2003
Chromium	ND	2.0	2.0		1	99	0.41	75-125	20	07/19/2013 2003
Copper	0.0042	2.0	2.0		1	100	1.8	75-125	20	07/19/2013 2003
Lead	0.010	0.40	0.42		1	104	3.1	75-125	20	07/19/2013 2003
Nickel	0.017	2.0	2.0		1	99	1.3	75-125	20	07/19/2013 2003
Selenium	ND	0.40	0.44		1	111	0.78	75-125	20	07/19/2013 2003
Silver	0.0052	0.40	0.43		1	105	3.7	75-125	20	07/19/2013 2003
Thallium	0.021	0.80	0.91		1	111	0.42	75-125	20	07/19/2013 2003
Zinc	0.048	2.0	2.0		1	97	0.077	75-125	20	07/19/2013 2003

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

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

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

TAL Metals - MB

Sample ID: OQ25522-001
Batch: 25522
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 07/22/2013 951

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	ND		1	0.083	0.0059	mg/kg	07/22/2013 1114

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

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

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

TAL Metals - LCS

Sample ID: OQ25522-002
Batch: 25522
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 07/22/2013 951

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.83	0.78		1	94	85-115	07/22/2013 1116

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

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

TAL Metals - LCSD

Sample ID: OQ25522-003
Batch: 25522
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 07/22/2013 951

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.83	0.80		1	96	2.1	85-115	20	07/22/2013 1118

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

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

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

Priority Pollutant Metals - MB

Sample ID: OQ25524-001
Batch: 25524
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 07/22/2013 1132

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	ND		1	0.00010	0.000015	mg/L	07/22/2013 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

Priority Pollutant Metals - LCS

Sample ID: OQ25524-002
Batch: 25524
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 07/22/2013 1132

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.0020	0.0021		1	103	85-115	07/22/2013 1528

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

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

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

Priority Pollutant Metals - LCSD

Sample ID: OQ25524-003
Batch: 25524
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 07/22/2013 1132

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.0020	0.0021		1	105	1.9	85-115	20	07/22/2013 1531

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

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

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY **Chain of Custody Record** Number 27816

Client: Terracon	Report to Contact: Michael Jordan	Sampler (Printed Name): Stephen Kerlin	Quote No.
Address: 2401 Brentwood Rd, Ste 107	Telephone No. / Fax No. / Email: 919-873-2211 / 919-873-9555	Waybill No.	Page 1 of 1
City: Raleigh; State: NC; Zip Code: 27604	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCl 6. Na Thio. 7. NaOH MeOH		Number of Containers
Project Name: Surtronics, Inc			Bottle (See Instructions on back)
			Preservative
Project Number: 70137337	P.O Number:		Lot No. OG19007

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: Metals	Hexavalent Cr	VOCs	CN	Remarks / Cooler ID
MW-1	7/18/13	13:20	G	X					X	X	X	X	
MW-2		14:20											
MW-3		15:00											
MW-4		15:35											
MW-5		16:55											
MW-6		18:25											
MW-7		15:40											
TRIP		N/A									X		
S-1		16:00					X		X	X	X		

Turn Around Time Required (Prior lab approval required for expedited TAT): ☑ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☑ Disposal by Lab

QC Requirements (Specify):

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

	Date	Time		Date	Time
1. Relinquished by / Sampler	7/18/13	19:15	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by FEDEX	7-19-13	1030	4. Laboratory Received by	7-19-13	1030

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY: Received on Ice (Check) ☑ Yes ☐ No ☐ Ice Pack; Receipt Temp. 1.6 °C; Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 11

Page 1 of 1
Replaces Date: 01/28/13
Effective Date: 04/18/13

Sample Receipt Checklist (SRC)

Client: Terracon Cooler Inspected by/date: JHL 7/19/13 Lot #: OC9/9007

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Airborne Exp ☐ Other

Yes ☑	No ☐		1. Were custody seals present on the cooler?
Yes ☑	No ☐		2. If custody seals were present, were they intact and unbroken?

Cooler ID/temperature upon receipt 649/1.0 °C ___ / ___ °C ___ / ___ °C ___ / ___ °C
Method: ☑ Temperature Blank ☑ Against Bottles
Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: ___ (For coolers received via commercial courier, PMs are to be notified immediately.
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 ☑	NA ☐	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☐	No ☑		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess 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?

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,HNO_3,HCl,NaOH) with the SR # (number) ___.

Sample(s) ___ were received with bubbles >6 mm in diameter.

Sample(s) ___ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/phenol

Sample labels verified by: [signature] Date: 7/19/13

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐
SESI employee: ___ Date of response: ___
Comments: ___