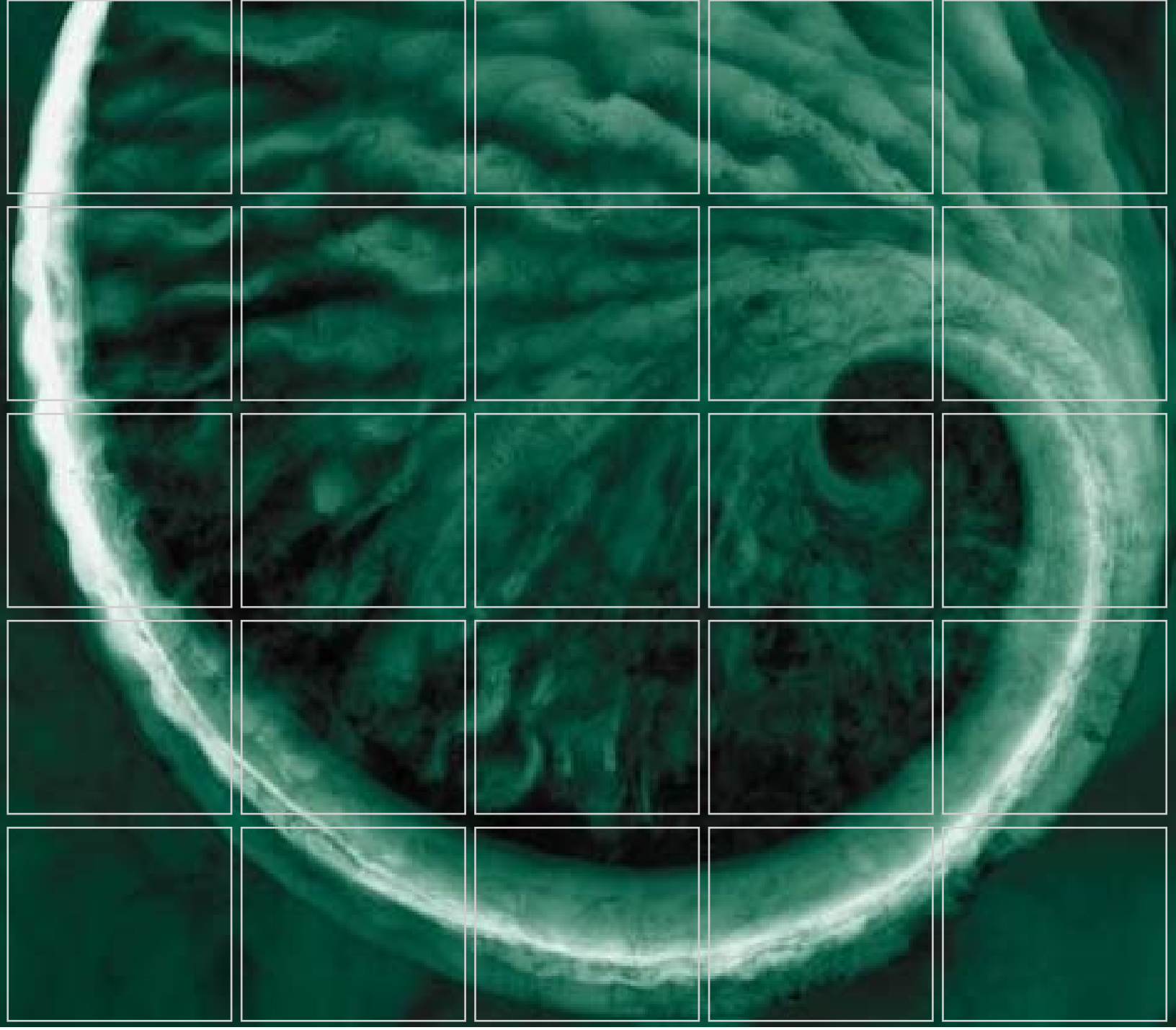

Joslyn Clark Controls, Inc.

Phase III Site Assessment
Joslyn Clark Controls Facility

2013 W. Meeting Street
Lancaster, South Carolina

February 23, 2012

Delivering sustainable solutions in a more competitive world

ERM

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Project No. 0145499

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EXECUTIVE SUMMARY

ERM NC, Inc. (ERM) conducted a Phase III Site Assessment at the Joslyn Clark Controls, Inc. (Joslyn Clark) facility located at 2013 W. Meeting Street in Lancaster, South Carolina. The purpose of the Phase III Site Assessment was to further assess soil and groundwater conditions at the property related to historical manufacturing operations. A Phase I Environmental Site Assessment (ESA) was conducted by ERM in January 2009 that identified potential environmental concerns related to former wastewater lagoons, a former metal plating operation, and a former degreasing operation that formerly took place near the northwest corner of the plant, which used trichloroethylene (TCE) as a solvent.

Soil and groundwater investigations were conducted in 2009 to assess areas of potential environmental concern identified in the Phase I ESA. Analyses of soil samples collected from 15 soil borings indicated that TCE was present in soil samples collected near the former metal plating area, the former wastewater lagoons, the former degreasing operation, and the former hazardous waste storage shed on the subject property. Tetrachloroethylene (PCE) was also detected in the vicinity of the former on-site hazardous waste storage shed.

Groundwater samples collected from seven permanent monitor wells (MW-1 through MW-7) detected TCE above the established South Carolina Maximum Contaminant Level (MCL) of 5.0 µg/L in four wells at concentrations ranging from 7.7 µg/L to 2,700 µg/L.

Based on these findings, a Phase III Site Assessment Plan (SAP) was prepared and submitted to the South Carolina Department of Health and Environmental Control (SCDHEC) in June 2011 per their request. The SAP was approved by the SCDHEC via letter on August 30, 2011.

The SAP was implemented in October 2011 with the installation of two additional soil borings along the former wastewater discharge line (GP-14 and GP-15) and one additional boring adjacent to the former wastewater lagoons (GP-16). Three additional shallow monitor wells (MW-8, MW-9 and MW-10) were installed to further evaluate the horizontal extent of the VOC plume, as well as to assess groundwater conditions near the former wastewater lagoons (MW-9). Two deep wells (MW-3D and MW-10D) were installed to evaluate the vertical extent of VOC impacted groundwater at the site.

Soil samples collected from GP-14 and GP-15 did not contain VOCs; however, each sample interval from GP-16 contained chlorinated compounds that exceeded EPA Screening Levels, including TCE, PCE, and cis-1,2-dichlorothene (DCE).

Soil samples also exhibited multiple target metal compounds. Metals that exceeded EPA Screening levels included arsenic, cobalt, iron, and manganese. Cobalt, iron, and manganese were not included in the analyte list during Phase II sampling activities; and may be present in these samples as naturally occurring. However, a comparison of these Phase III metal detections to concentrations occurring in other areas of the property cannot be made for the purpose of correlating naturally occurring levels.

Groundwater samples showed multiple chlorinated compounds, with TCE and PCE being the most prevalent. TCE was detected in each site well except MW-5, MW-10, and MW-10D. Reported concentrations ranged from 3.0 µg/L (MW-8) to 12,000 µg/L (MW-9).

PCE was also detected in groundwater above the MCL of 5.0 µg/L in monitor wells MW-3 (39 µg/L) and MW-7 (6.6 µg/L). No other detected compounds exceeded MCL in groundwater samples. TAL metals were detected in most samples submitted for analysis; however, reported concentrations were below the MCLs.

CONCLUSIONS AND RECOMMENDATIONS

Based on soil and groundwater analytical results, ERM concluded that:

- There are two source areas of TCE on the subject property. One is located inside the former manufacturing building (near the former plating operation), and the second is the former wastewater lagoons;

- The plume originating from the building has been delineated vertically and horizontally to end at the southern property boundary by well pair MW-10 and MW-10D; and

- The plume originating from the former lagoon area requires further delineation. These former lagoons were previously closed under SCDHEC supervision. Closure activities reportedly included excavation and disposal of sludge material and backfilling with clean material. Closure details or confirmatory sample information could not be located by the SCDHEC during a file review (during the Phase I ESA).

Further assessment of soil and groundwater conditions is warranted in the southwest portion of the property.

1.0 INTRODUCTION

Joslyn Clark Controls, Inc. (Joslyn Clark) requested ERM to conduct a Phase III Site Assessment at the Joslyn Clark facility located in Lancaster, South Carolina (the subject property) to further assess subsurface impacts from historic manufacturing operations.

This report presents a brief background of the Joslyn Clark facility and a description of the investigation activities completed. Results of the investigation, conclusions, and recommendations are also provided.

1.1 SITE DESCRIPTION AND BACKGROUND

The subject property is located at 2013 W. Meeting Street, Lancaster, Lancaster County, South Carolina. The general location of the property and the physiographic features of the surrounding area are illustrated on Figure 1.

The subject property consists of 23 acres of land and is developed with two buildings. The manufacturing building was constructed in 1964 and consists of approximately 180,000 square feet of floor space. The warehouse/storage building was constructed in 1967 and consists of approximately 14,400 square feet of floor space. The subject property has been used to manufacture electrical control equipment for fire safety purposes since its construction in 1964. Figure 2 illustrates the general property layout with improved features.

The principal raw materials for manufacturing included sheet metal, copper wire, pre-manufactured metal and plastic components, electrostatic paint, and oil-based paint. Joslyn Clark's primary production included the fabrication of metal cabinets, which were populated with various electrical, plastic, and metal components purchased from other off-site manufacturers. The Joslyn Clark facility has been a regulated source of air emissions, industrial wastewater discharge, and hazardous waste.

1.2 PREVIOUS INVESTIGATIONS

ERM conducted a Phase I Environmental Site Assessment (ESA) in January 2009 that identified potential environmental concerns related to former wastewater lagoons, a former metal plating operation, and a former degreasing operation located near the northwest corner of the plant, which used trichloroethylene (TCE) as a solvent.

Based on the Phase I ESA, a soil investigation was conducted in April 2009 to assess areas of potential environmental concern identified in the Phase I ESA. Analyses of soil samples collected from 15 soil borings indicated TCE was present in soil samples collected near the former metal plating area, the former wastewater lagoons, the former degreasing operation, and the former hazardous waste storage shed on the subject property. Tetrachloroethylene (PCE) was also detected in the vicinity of the former on-site hazardous waste storage shed.

Based on these findings, ERM conducted a groundwater investigation in September 2009 to evaluate shallow groundwater quality in the vicinity of the impacted soil, and to determine groundwater flow direction across the site. The groundwater investigation included the installation and sampling of seven permanent monitor wells (MW-1 through MW-7). Groundwater was encountered at depths between approximately 42 and 47 feet below ground surface (BGS) across the property. Based on the groundwater elevation data it appears that groundwater flows to the south-southeast, towards Cane Creek.

The laboratory analytical results indicated that TCE was present above the South Carolina Maximum Contaminant Level (MCL) of 5.0 µg/L in four wells at concentrations ranging from 7.7 µg/L to 2,700 µg/L. The highest concentration was detected in the sample collected from the well adjacent to the facility's former metal plating operation. The sample from the farthest downgradient well (MW-7) contained TCE at a concentration of 220 µg/L, which was also above the MCL. This well is located on site approximately 300 feet from the property line.

The purpose of this Phase III Site Assessment was to further evaluate subsurface conditions around the former wastewater discharge lines and lagoons, as well as to further define the extent of VOC impacted groundwater on the subject property.

2.0 PHASE III INVESTIGATION ACTIVITIES

2.1 SOIL ASSESSMENT

2.1.1 Soil Boring Installation

After receiving SCDHEC approval, soil assessment activities were conducted by ERM on October 10, 2011 with the advancement of three (3) soil borings. The locations of the soil borings, as shown on Figure 3, were completed in the following areas:

- GP-14 and GP-15: Adjacent to former wastewater discharge line; and
- GP-16: Adjacent to former wastewater lagoons.

Soil borings were installed with a Geoprobe® rig equipped with 2-inch outer diameter (O.D.) by 4-foot long stainless steel samplers and disposable acetate liners. Field sampling equipment was decontaminated prior to being brought on-site and between sampling locations with water and non-phosphate soap followed by a water rinse.

The total depth of borings GP-14 and GP-15 was 8 feet below ground surface (BGS). The total depth of boring GP-16 was 40 feet BGS. As part of the soil sampling activities, the soil samples were: (1) visually examined to characterize the subsurface geology; (2) evaluated for visible evidence of contamination; and (3) field screened with a photo-ionization detector (PID) for the presence of organic vapors. Prior to use, the PID was calibrated according the manufacturer's instructions using an isobutylene standard of known concentration. Soil boring information and screening data are presented on the soil boring logs included in Appendix A.

2.1.2 Soil Sampling

Soil samples were collected and analyzed for the following:

- Volatile organic compounds (VOCs) by EPA Method 8260B;
- 1,2-Dibromo-3-chloropropane (DBCP) and 1,2-Dibromoethane (EDB); using EPA Method 8011; and

- Target analytes list (TAL) metals (aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium & zinc) by EPA Method 6010C and 7471B (for mercury).

In addition, soil samples collected from GP-14 and GP-16 were analyzed for polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270D.

Each soil sample was placed in laboratory-provided containers specific to each analytical method and then labeled with the site name, analyses requested, sampler's initials, date of collection, and time of collection. This information was transferred to a chain-of-custody (COC) to ensure proper tracking and analysis of the sample. Soil samples were be placed on ice immediately after collection and maintained under proper COC control throughout the handling process to Shealy Environmental Services, Inc. (Shealy) of West Columbia, SC (SCDHEC No. 32010) for analytical testing. Soil sample analytical results are discussed in Section 4.3 and summarized in Table 1.

Soil cuttings were placed in a 55-gallon drum, properly labeled, and stored inside the vacant manufacturing building. The contents of the drum were sampled and analyzed for VOCs using the toxicity characteristic leaching procedure (TCLP) method and the soil cuttings were determined to be non-hazardous (see Appendix G). The drum was removed from the site by EVO Corporation of Winston-Salem, NC on January 5 and 6, 2012 for proper disposal. Disposal manifests are included in Appendix H. The boreholes were filled with cement to surface grade.

2.2.1 Monitor Well Installation

ERM mobilized to the site during the week of October 10, 2011 to install three shallow and two deep monitor wells in the following areas, as depicted on Figure 4:

- MW-3D: Installed as a deep well on the south side of the building, along the estimated plume centerline. This location is downgradient from the highest concentration detected (MW-3);

- MW-8: Installed as a shallow well on the southeast side of the manufacturing building to define the eastern portion of the plume in the saprolite aquifer;

- MW-9: Installed as a shallow well adjacent to the former wastewater lagoons; and

- MW-10 & MW-10D: Installed as a nest of shallow and deep wells at the southeast corner of the subject property, which is along the estimated centerline of the TCE plume. MW-10 and MW-10D serve as the most downgradient well pair, aiding in the vertical and horizontal delineation of VOC impacted groundwater.

Shallow wells MW-8, MW-9, and MW-10 were installed with a truck-mounted drill rig using 8.25-inch O.D. hollow stem augers. Monitor wells MW-8 and MW-9 were installed to approximately 55 feet BGS and MW-10 was installed to approximately 60 feet BGS. Each well was constructed with 15 feet of 0.010-inch slotted, 2-inch diameter PVC well screen and the appropriate length of casing, terminating approximately three feet above the ground surface. Number two filter sand was emplaced around the well screen beginning at the bottom of each borehole and terminating two feet above the screened interval. A two-foot thick hydrated bentonite seal was placed above the top of the sand interval. Neat cement grout was then applied using the tremie method from the top of the bentonite seal to approximately one foot BGS at each location.

Drilling and installation of the deep wells (MW-3D and MW-10D) took place in two stages. The first stage involved the advancement of the borehole with 10.25-inch O.D. hollow stem augers to approximately 75 feet BGS. A 6-inch PVC outer casing was set from the bottom of the borehole to the ground surface and then grouted in place. Approximately 24-hours were allowed to pass for the grout to cure. The boring was then advanced through the 6-inch casing into bedrock using a 4-inch air hammer. Each borehole was advanced to approximately 110 feet BGS. A 2-inch diameter PVC well was then installed to the bottom of each borehole. The wells were constructed with 10 feet of 0.010-inch slotted well screen and the appropriate length of casing, terminating approximately three feet above the ground surface. Number two filter sand was emplaced around the well screens, beginning at the bottom of the borehole and terminating two feet above the screened interval. A two foot thick hydrated bentonite seal was placed above the top of the sand interval. Neat cement grout was then applied using the tremie method from the top of the bentonite seal to approximately one foot BGS.

The top of well casings were finished with stick-up protective covers. Monitor well boring logs and well construction records are included in Appendix B. See Table 2 for well construction data. Soil cuttings

generated from monitor well installation were placed in 55-gallon drums stored inside the manufacturing building.

2.2.1 Groundwater Sampling

The newly installed monitor wells were developed on October 25, 2011, more than two weeks after their installation. The wells were developed using surging and bailing techniques and a submersible stainless steel pump with dedicated polyethylene tubing as a means of removing fines from the well and to aid in surging the well screen. Bailers were initially used to remove sediments from each well. Once visual observations indicated a reduction in sediments, the submersible pump was used in conjunction with a Horiba U-22 and flow cell to collect field measurements. Measurements for pH, specific conductance, temperature, and turbidity were periodically taken until at least three consecutive measurements showed stabilization of temperature, specific conductance, pH, and turbidity. Reusable equipment that was in contact with groundwater at each well location (stainless steel submersible pump (and cord) and water level indicator) was decontaminated according to the following procedure:

- Wash and brush equipment with a mild solution of phosphate free detergent;
- Rinse with tap water;
- Rinse thoroughly with analyte-free water;
- Rinse thoroughly with isopropanol; and
- Rinse thoroughly with organic/analyte-free water

Well development forms are provided in Appendix C. Groundwater generated from monitor well development was placed in properly labeled 55-gallon drums, properly labeled, and stored inside the manufacturing building. The contents of the drums of groundwater were sampled and analyzed for VOCs using the TCLP method and were determined to be non-hazardous (see Appendix G). The drums were removed from the site by EVO Corporation on January 5 and 6, 2012 for proper disposal. Disposal manifests are included in Appendix H.

Upon the completion of monitor well development activities, ERM allowed two weeks to pass before well sampling commenced. ERM returned to the site on November 10 - 11, 2011 and used a submersible

stainless steel pump with dedicated polyethylene tubing as a means of purging groundwater from each well at low, sustained rate. Measurements for pH, specific conductance, temperature, and turbidity were periodically taken until at least three consecutive measurements showed temperature and specific conductance within 10%, pH within 0.2 units, and turbidity below 10 Nephelometric Turbidity Units (NTU). Well purging forms are provided in Appendix C. Equipment decontamination procedures between each well were followed as described above.

Upon the completion of purging activities, a representative groundwater sample from each monitor well was collected directly from the polyethylene tubing and placed into laboratory-supplied sample containers for analysis by the following:

- VOCs by EPA Method 8260B;
- 1,2-Dibromo-3-chloropropane (DBCP) and 1,2-Dibromoethane (EDB); using EPA Method 8011; and
- TAL metals by EPA Methods 6020A and 7470A (for mercury).

In addition, monitor wells MW-3, MW-3D and MW-9 were also sampled for PAHs by EPA Method 8270D.

Groundwater samples collected for VOC analysis were transferred into laboratory-prepared 40 ml vials containing hydrochloric acid (HCL) as a preservative. Samples collected for TAL metals were transferred into laboratory-prepared 250 ml plastic bottles containing nitric acid (HNO_3) as a preservative. Samples collected for metals were not filtered prior to analysis. Each container was labeled with the site name, analyses requested, sampler's initials, date of collection, and time of collection. This information was transferred to a chain-of-custody (COC) to ensure proper tracking and analysis of the sample. Groundwater samples were placed on ice immediately after collection and maintained under proper COC control throughout the handling process. Groundwater sample analytical results are discussion in Section 4.4 and summarized in Table 3.

3.0 ENVIRONMENTAL SETTING

3.1 TOPOGRAPHY

The subject property is located at an elevation of approximately 540 feet above mean sea level (msl) and is situated on a topographic high point that slopes, southeast, south, and southwest from the area of the manufacturing plant building. A review of the USGS Lancaster, South Carolina topographic map indicates that there are two drainage features near the subject property. One feature is located approximately 500 feet southeast of the eastern property boundary and the second is located approximately 1,100 feet west of the western property boundary. Both drainage features discharge into Cane Creek, which is located approximately one mile south-southeast of the subject property.

3.2 SITE-SPECIFIC GEOLOGY

The Lancaster area, including the subject site, is located near the Western Piedmont Physiographic Province of South Carolina. According to the Geologic Map of South Carolina (1997) and *The Geology of the Carolinas, Horton and Zullo, 1991*, the Lancaster area is located within the Charlotte Belt and is specifically underlain by mica gneiss.

According to the US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/), the subject property is underlain by Georgeville silt and silty clay loam. Georgeville soils are well drained, have moderate infiltration rates, and do not meet the requirements for hydric soil.

Soils encountered during drilling activities consisted of light brown to orangish-brown, fine-grained, sandy silt from near the surface grade to approximately 110 feet BGS. Bedrock was not encountered during drilling activities.

3.3 SITE-SPECIFIC HYDROGEOLOGY

Groundwater is present between approximately 44 and 48 feet BGS across the subject property. As mentioned in Section 3.2, bedrock was not encountered during drilling activities; therefore groundwater monitor wells were installed into unconsolidated sediments. Based on observations made during well installation and water level measurements, the shallow aquifer appears to be unconfined.

Monitoring well locations and top of casing (TOC) elevations were surveyed by Site Design, Inc., a South Carolina licensed surveyor (No. C00122) with reference to the property boundary and improvements (see Appendix D for survey map). The depths to water below top of casings (BTOC) were measured to determine groundwater elevations at each well. These data were then used to determine groundwater flow direction and gradient. A groundwater flow direction map is presented as Figure 5 and the measured groundwater elevations are presented in Table 4. Based on the groundwater elevations, groundwater flow is to the south, towards Cane Creek with a hydraulic gradient of 0.009, as measured between MW-1 and MW-10.

4.0 FIELD SCREENING AND LABORATORY ANALYTICAL RESULTS

Soil and groundwater samples collected during the Phase III Site Assessment were submitted to Shealy Laboratories in West Columbia, South Carolina for laboratory analyses. The analytical results are presented in the sections below.

4.1 EVALUATION CRITERIA

The soil analytical results were compared to the U.S. Environmental Protection Agency (EPA) Screening Level - Regional Screening Levels for Chemical Contaminants at Superfund Sites, dated June 2011. Three EPA Screening Levels were compared for soil results, they included Protection of Groundwater (risk-based), Residential, and Industrial.

Groundwater analytical results were compared to the South Carolina MCLs.

4.2 SOIL FIELD SCREENING

Soil samples were field-screened with a PID to evaluate the qualitative presence of organic vapors. Soil samples exhibited PID readings ranging from 0.5 to 82 parts per million (ppm). The highest reading (82 ppm) was noted in soil boring GP-16 at the 10-12 foot BGS interval. PID readings are presented on soil boring logs included in Appendix A.

4.3 SOIL ANALYSES AND RESULTS

A summary of the analytical results is provided below and is presented in Table 1. The complete laboratory analytical report is included in Appendix E.

Soil samples collected from GP-14 and GP-15 did not contain VOCs; however, each sample interval from GP-16 contained chlorinated compounds that exceeded EPA Screening Levels. This includes trichloroethene (TCE), tetrachloroethene (PCE), and cis-1,2-dichlorothene (DCE).

PAHs were not detected in samples analyzed for this parameter, which included borings GP-14 and GP-16.

Multiple target metal compounds were detected in soil samples. Metals that exceeded EPA Screening levels included arsenic, cobalt, iron, and manganese. Background soil samples were not collected during this assessment; therefore concentrations of cobalt, iron, and manganese could not be compared to naturally occurring levels.

4.4 GROUNDWATER ANALYSES AND RESULTS

A summary of the groundwater analytical results is provided below and is also presented in Table 3. The complete laboratory report is included in Appendix F.

Multiple chlorinated compounds were detected in site wells, with TCE and PCE being the most prevalent. TCE was detected in each site well except MW-5, MW-10, and MW-10D (the most downgradient wells). Reported concentrations ranged from 3.0 µg/L (MW-8) to 12,000 µg/L (MW-9). Figure 6 presents TCE concentrations in relation to monitor wells and site features. Figures 7 through 9 provide geologic cross sections through the subject property to illustrate lithology, the measured water table, and TCE concentrations in site wells.

PCE was also detected above the MCL of 5.0 µg/L in monitor wells MW-3 (39 µg/L) and MW-7 (6.6 µg/L). No other detected compounds exceeded MCL in groundwater samples. TAL metals were detected in most samples submitted for analysis; however, reported concentrations were below MCLs.

PAHs were not detected in the three wells sampled for this parameter, which included MW-3, MW-3D and MW-9.

5.0 CONCLUSIONS

Based on soil and groundwater analytical results from several investigations, including the Phase III assessment, there may be two separate source areas of TCE on the property. One originates from the former manufacturing building, near the former plating operation, and the second may be at the former and previously remediated wastewater lagoons. The TCE plumes appear to join one another in the southwest portion of the property, and have been delineated vertically and horizontally by well pair MW-10 and MW-10D [if they join, then both are delineated as one].

Joslyn Clark Controls desires to expedite the remediation of the TCE-affected groundwater. Various in-situ source area remediation techniques are currently being considered. Joslyn Clark Controls proposes to further investigate soil quality while simultaneously conducting aquifer matrix treatability studies geared toward in-situ groundwater remediation. It is anticipated that a passive soil gas survey will be proposed to more accurately define the source area, followed by focused direct push soil sampling based on the soil gas results. Additional samples of the saturated aquifer matrix may also be collected to facilitate the treatability study. A work plan detailing these proposed investigation activities is currently in development.

The plume possibly originating from the former lagoon area will be further assessed at the southwest portion of the property, near to these previously remediated wastewater lagoons.

Tables

TABLE 1
SOIL ANALYTICAL RESULTS
JOSLYN CLARK FACILITY
LANCASTER, SOUTH CAROLINA

					Volatile Organic Compounds by EPA Method 8260B (mg/kg)						PAHs by EPA Method 8270D (mg/kg)
Sample ID	**Date**	**Potential Source Area**	**Total Depth of Boring (ft)**	**Sample Collection Depth (ft)**	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	1,1,2-Trichloroethane	Various Compounds
GP-14	10/10/2011	Wastewater Discharge Line	8	6-8	ND	ND	ND	ND	ND	ND	ND
GP-15	4/7/2009	Wastewater Discharge Line	8	6-8	ND	ND	ND	ND	ND	ND	NA
GP-16	4/7/2009	Wastewater Lagoon Area	40	10-12	ND	ND	ND	ND	**0.0038 J**	ND	ND
				26-28	**0.002 J**	ND	0.01	**0.025**	**0.290**	**0.0019 J**	ND
				26-28 (Dup-1)	ND	ND	ND	**0.82 J**	ND	ND	ND
				38-40	**0.0058 J**	0.0078	**0.037**	**0.120**	**2.0**	**0.0045 J**	ND
EPA Screening Level - Protection of Groundwater - Risk Based					0.000053	0.12	0.0021	0.000049	0.00072	0.000078	Varies
EPA Screening Level - Residential					0.29	240	160	0.55	2.8	1.1	Varies
EPA Screening Level - Industrial					1.5	1,100	2,000	2.6	14	5.3	Varies

Notes:
BOLD values indicate an exceedance of a published regulatory threshold
EPA Screening Level - Regional Screening Levels for Chemical Contaminants at Superfund Sites, June 2011
mg/kg = Milograms/kilogram, or ppm
ND = Not Detected; NA=Not analyzed; NE = Not Established; N/A = Not applicable
PAHs = Polycyclic Aromatic Hydrocarbons
J = Estimated concentration between minimum detection limit and minimum reporting limit
B = Compound detected in method blank
** Protection of Groundwater - Maxium Contaminant Limit

TABLE 1
SOIL ANALYTICAL RESULTS
JOSLYN CLARK FACILITY
LANCASTER, SOUTH CAROLINA

					Metals by EPA Method 6010C (mg/kg)																			EPA Method 7471B (mg/kg)
Sample ID	**Date**	**Potential Source Area**	**Total Depth of Boring (ft)**	**Sample Collection Depth (ft)**	Aluminum	Antimony	Arsenic	Barium	Beryllium	Calcium	Chromium (total)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Silver	Thallium	Vanadium	Zinc	Mercury
GP-14	10/10/2011	Wastewater Discharge Line	8	6-8	10,000	ND	ND	9.5	0.30	ND	1.7	**1.5 J**	3.2	**22,000**	4.3 B	440	39	3.2	420	ND	29 BJ	ND	ND	30	9.9	ND
GP-15	4/7/2009	Wastewater Discharge Line	8	6-8	17,000	ND	**0.84 J**	13	1.3	ND	2.7	**1.3 J**	9.6	**35,000**	8.1 B	310 J	53	2.2 J	240 J	ND	ND	0.15 J	ND	98	21	ND
GP-16	4/7/2009	Wastewater Lagoon Area	40	10-12	11,000	ND	**0.65 J**	14	0.31	ND	0.9	**1.2 J**	4.2	**33,000**	9.7 B	570	**140**	1.0 J	500	ND	ND	0.072 J	ND	46	19	ND
				26-28	34,000	2.5 BJ	ND	100	0.72 J	ND	ND	**16**	1.5 J	**25,000**	5.7 BJ	3,000	**820**	3.8 J	2,600 J	ND	ND	ND	ND	32	47	ND
				26-28 (Dup-1)	27,000	4.3 BJ	**2.6 J**	150	0.81 J	ND	ND	**55**	1.3 J	**28,000**	**15 B**	2,700 J	**1,800**	2.7 J	2,900 J	**4.2 J**	ND	ND	**7.6 J**	34	54	ND
				38-40	26,000	ND	**4.2 J**	230	1.5 J	720 BJ	ND	**20**	5.2	**31,000**	**15 B**	4,100	**2,500**	7.4 J	2,700 J	ND	ND	ND	ND	38	82	0.037 J
EPA Screening Level - Protection of Groundwater - Risk Based					55,000	0.66	0.0013	300	58	NE	NE	0.49	51	640	14**	NE	57	48	NE	0.95	100	1.6	0.026	180	680	0.033
EPA Screening Level - Residential					77,000	31	0.39	15,000	160	NE	280	23	3,100	55,000	400	NE	1,800	1,600	NE	390	NE	390	0.78	390	23,000	10
EPA Screening Level - Industrial					990,000	410	1.6	190,000	2,000	NE	1,400	300	41,000	72,000	800	NE	23,000	20,000	NE	5,100	NE	5,100	10	5,200	310,000	43

Notes:
BOLD values indicate an exceedance of a published regulatory threshold
EPA Screening Level - Regional Screening Levels for Chemical Contaminants at Superfund Sites, June 2011
mg/kg = Milograms/kilogram, or ppm
ND = Not Detected; NA=Not analyzed; NE = Not Established; N/A = Not applicable
J = Estimated concentration between minimum detection limit and minimum reporting limit
B = Compound detected in method blank
** Protection of Groundwater - Maxium Contaminant Limit

TABLE 2
MONITOR WELL CONSTRUCTION DATA
JOSLYN CLARK FACILITY
LANCASTER, SOUTH CAROLINA

Well ID	Installation Date	Drilling Method	Type Well	Well Depth (ft bls)	Land Surface Elevation (feet)	Measuring pt. Elevation-TOC (feet)	Screened Interval (ft bls)
MW-1	8/25/2009	HSA	II	55	545.17	547.41	40-55
MW-2	8/28/2009	HSA	II	55	542.75	542.54	40 - 55
MW-3	8/28/2009	HSA	II	55	542.76	542.52	40 - 55
MW-3D	10/19/2011	HSA / AR	III	110	540.50	543.15	100 - 110
MW-4	8/25/2009	HSA	II	55	538.95	541.51	40 - 55
MW-5	8/25/2009	HSA	II	55	538.14	540.63	40 - 55
MW-6	8/26/2009	HSA	II	55	539.97	542.41	40 - 55
MW-7	8/26/2009	HSA	II	55	539.48	541.92	40 - 55
MW-8	10/13/2011	HSA	II	55	536.99	539.50	40 - 55
MW-9	10/13/2011	HSA	II	55	538.09	540.69	40 - 55
MW-10	10/12/2011	HSA	II	60	530.93	533.20	45 - 60
MW-10D	10/13/2011	HSA / AR	III	110	530.65	533.05	100 - 110

Notes:
All measurements in feet; AR = Air Hammer; MP = Measuring Point; All wells constructed with 2-inch PVC
Groundwater depth measured from top of casing
Elevations are measured to USGS Monuments
HSA = Hollow stem auger drilling method; TOC = Top of Casing
Ft bls = Feet below measuring point (top of PVC casing)

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
JOSLYN CLARK FACILITY
LANCASTER, SOUTH CAROLINA

		Volatile Organic Compounds by EPA Method 8260B (µg/L)														PAHs by EPA Method 8270 (µg/L)	Target Analytes List of Metals by EPA Method 6010C (µg/L)																		EPA Method 7470A (µg/L)
Sample ID	Sample Date	Bromodichloromethane	Carbon disulfide	Carbon tetrachloride	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	trans 1,2-Dichloroethene	1,1-Dichloroethene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Various Compounds	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Silver	Selenium	Sodium	Vanadium	Zinc	Mercury
MW-1	11-10-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.44J**	ND	ND	ND	3.8	NA	260B	0.16J	ND	69	ND	ND	890	0.93J	1.1J	0.60J	320	0.30J	1,100	10	1.3J	2,200	ND	ND	2,100	ND	14	ND
MW-2	11-11-11	ND	ND	ND	0.36J	ND	ND	ND	ND	ND	**0.16J**	ND	ND	ND	**35**	NA	440B	ND	ND	26	ND	ND	4,800	1.8J	0.16J	1.5	530	0.46J	480	9.7	0.34J	1,600B	ND	ND	6,900	ND	8.3J	ND
MW-3	11-11-11	ND	ND	ND	ND	30	ND	ND	ND	**20**	**55**	ND	ND	**6.5J**	**3,200**	ND	680B	ND	ND	38	ND	ND	4,100	2.3J	0.23J	0.72J	820	0.26J	800	27	0.44J	1,600B	ND	ND	9,600	1.9J	5.7J	ND
MW-3D	11-11-11	ND	ND	ND	0.54J	ND	ND	ND	ND	1.6	**0.65J**	ND	ND	ND	**26**	ND	4,400B	0.29J	0.75J	92	0.38J	ND	11,000	6.9	2.3J	7.4	4,800	3.3	3,700	180	2.2J	2,600B	ND	ND	14,000	12	19	0.000054J
MW-4	11-10-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.73J**	ND	ND	ND	**5.5**	NA	230B	ND	ND	34	ND	ND	1,300	1.3J	ND	0.40J	180	0.26J	480	6.7	ND	1,600B	ND	ND	4,100	ND	5.2J	ND
MW-5	11-10-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	2,800B	ND	ND	270	0.83	0.064J	10,000	1.8J	1.2J	6.7	3,500	2.3	2,900	92	1.3J	3,000B	ND	ND	8,100	4.9J	42	ND
MW-6	11-11-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**7.5**	NA	1,100B	ND	ND	79	0.056J	ND	6,000	3.0J	0.94J	3.0	1,700	0.73J	2,300	49	1.1J	2,600B	ND	ND	4,300	3.9J	18	ND
MW-7	11-11-11	ND	ND	ND	1.8	1.1	ND	2.8	ND	ND	**11**	ND	ND	ND	**370**	NA	1,000B	ND	0.30J	93	ND	ND	3,500	1.8J	0.25J	0.79J	1,600	0.79J	1,400	43	0.44J	2,000B	0.15J	ND	7,700	2.7J	17	0.000055J
MW-8	11-10-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.57J**	ND	ND	ND	3.0	NA	1,300B	ND	0.29J	74	0.45J	ND	13,000	1.2J	1.4J	3.8	2,300	0.47J	5,100	120	1.1J	1,700B	ND	0.25BJ	15,000	12	9.1J	ND
MW-9	11-10-11	0.65J	1.3	0.36J	26	3.6	3.5	**250**	1.8	**320**	**970**	0.37J	0.82J	**14**	**12,000**	ND	330B	ND	ND	58	ND	ND	4,300	0.37J	2.3J	0.37J	390	0.21J	1,000	330	1.7J	2,200B	ND	ND	9,700	ND	8.5J	ND
MW-10	11-10-11	ND	ND	ND	ND	ND	ND	ND	ND	0.17J	ND	ND	ND	ND	ND	NA	1,700B	ND	0.28J	39	ND	ND	6,700	3.7J	1.2J	3.2	3,100	1.1	1,500	130	1.3J	1,300B	ND	0.65BJ	14,000	6.5	12	ND
MW-10D	11-10-11	ND	0.12J	ND	0.42J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	81B	ND	ND	20	ND	ND	16,000	0.92J	ND	0.20J	130	ND	2,800	9.8	ND	1,500B	ND	ND	14,000	4.5J	1.8J	ND
South Carolina MCL		80	NE	5.0	80	NE	5.0	70	100	7.0	5.0	1,000	200	5.0	5.0	Varies	NE	6.0	NE	2,000	4.0	5.0	NE	100	NE	1,300	NE	15	NE	NE	NE	NE	NE	50	NE	NE	NE	2.0

Notes:

BOLD values indicate an exceedence of EPA Screening Levels
ug/l = Micrograms/liter
B = Detected in Method blank
J = Less than pratical quantification level but equal to or greater than minimum detection limit
EPA = Environmental Protection Agency
MCL = Maximum Contaminant Level
ND = Not Detected; NA=Not analyzed; NE = Not Established; N/A = Not applicable

TABLE 4
GROUNDWATER ELEVATION DATA
JOSLYN CLARK FACILITY
LANCASTER, SOUTH CAROLINA

Well No.	Top of Casing Elevation (feet)		Well No.	Top of Casing Elevation (feet)		Well No.	Top of Casing Elevation (feet)		Well No.	Top of Casing Elevation (feet)	
MW-1	547.41		**MW-2**	542.54		**MW-3**	542.52		**MW-3D**	513.15	
Dates:	Water Depth (Ft. BGS)	Water Elevation (Ft. MSL)	Dates:	Water Depth (Ft. BGS)	Water Elevation (Ft. MSL)	Dates:	Water Depth (Ft. BGS)	Water Elevation (Ft. MSL)	Dates:	Water Depth (Ft. BGS)	Water Elevation (Ft. MSL)
9/30/09	44.54	502.87	9/30/09	42.47	500.07	9/30/09	44.43	498.09	11/10/11	47.91	465.24
11/10/11	46.86	500.55	11/10/11	44.02	498.52	11/10/11	45.67	496.85			

Well No.	Top of Casing Elevation (feet)		Well No.	Top of Casing Elevation (feet)		Well No.	Top of Casing Elevation (feet)		Well No.	Top of Casing Elevation (feet)	
MW-4	541.51		**MW-5**	540.63		**MW-6**	542.41		**MW-7**	541.92	
Dates:	Water Depth (Ft. BGS)	Water Elevation (Ft. MSL)	Dates:	Water Depth (Ft. BGS)	Water Elevation (Ft. MSL)	Dates:	Water Depth (Ft. BGS)	Water Elevation (Ft. MSL)	Dates:	Water Depth (Ft. BGS)	Water Elevation (Ft. MSL)
9/30/09	44.56	496.95	9/30/09	46.59	494.04	9/30/09	49.23	493.18	9/30/09	49.63	492.29
11/10/11	46.47	495.04	11/10/11	47.62	493.01	11/10/11	50.31	492.10	11/10/11	50.72	491.20

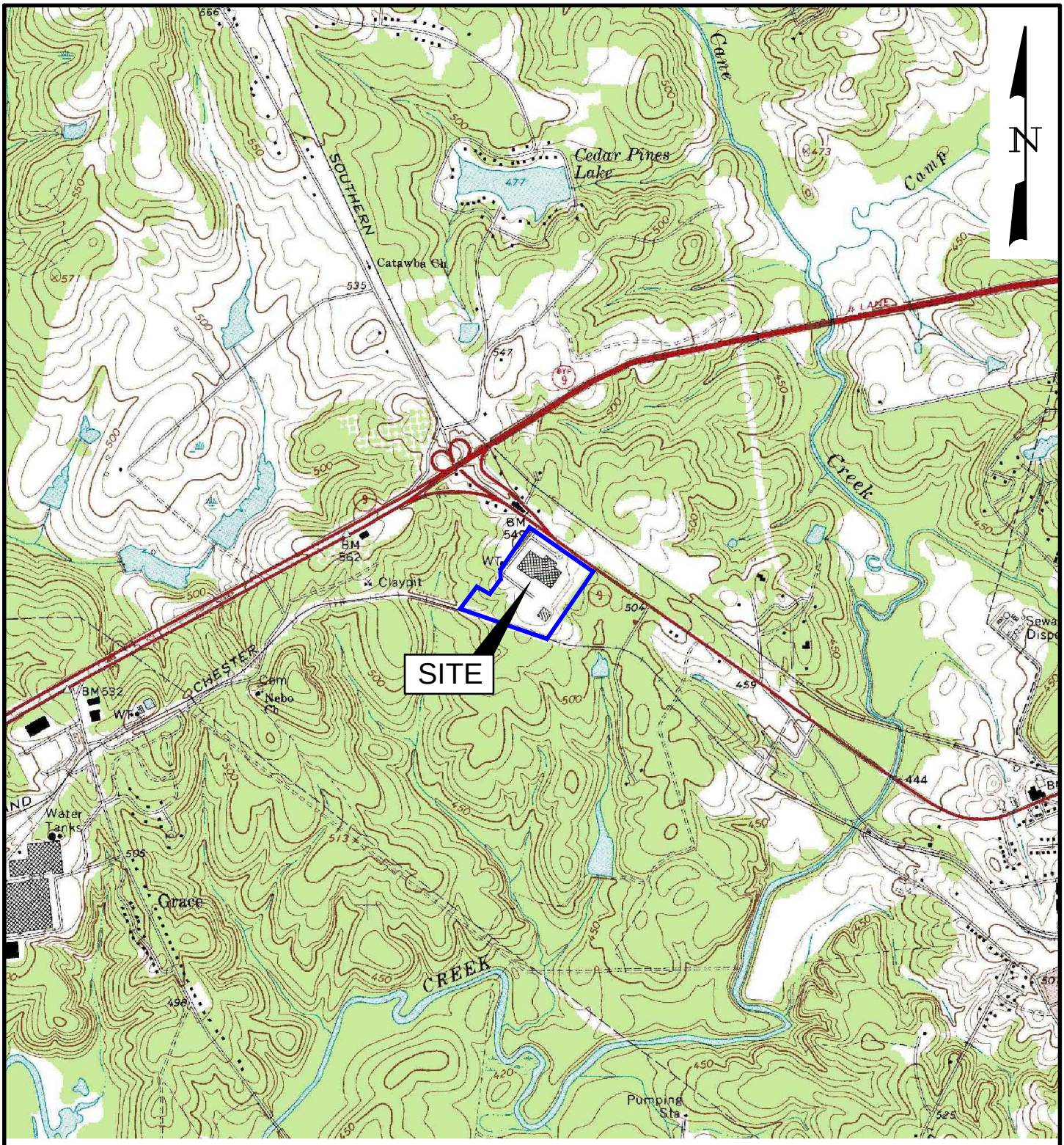
NM = Not Measured; Ft MSL = Feet above Mean Sea Level

TABLE 4
GROUNDWATER ELEVATION DATA
JOSLYN CLARK FACILITY
LANCASTER, SOUTH CAROLINA
PAGE 2 OF 2

Well No.	Top of Casing		Well No.	Top of Casing		Well No.	Top of Casing		Well No.	Top of Casing	
MW-8	Elevation (feet) 539.50		**MW-9**	Elevation (feet) 540.69		**MW-10**	Elevation (feet) 533.2		**MW-10D**	Elevation (feet) 533.05	
Dates:	Water Depth (Ft. BGS)	Water Elevation (Ft. MSL)	Dates:	Water Depth (Ft. BGS)	Water Elevation (Ft. MSL)	Dates:	Water Depth (Ft. BGS)	Water Elevation (Ft. MSL)	Dates:	Water Depth (Ft. BGS)	Water Elevation (Ft. MSL)
11/10/11	46.91	492.59	11/10/11	48.00	492.69	11/10/11	46.51	486.69	11/10/11	44.56	488.49

NM = Not Measured; Ft MSL = Feet above Mean Sea Level

Figures



SOURCE: U.S.G.S. 7.5 MINUTE QUADRANGLE LANCASTER, SOUTH CAROLINA, 1969.

APPROXIMATE PROPERTY BOUNDARY

0 2000 4000

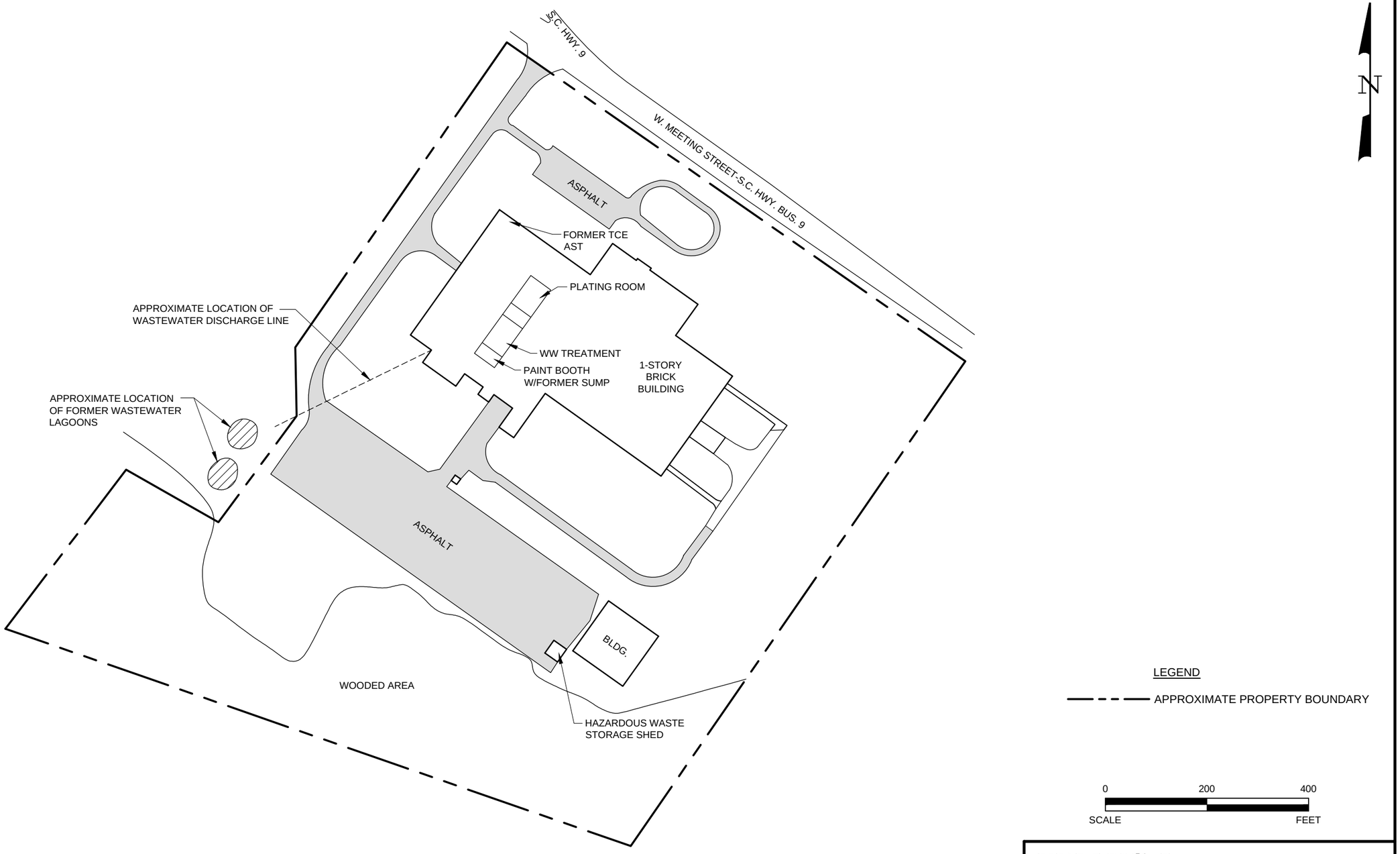
SCALE FEET

ERM NC, Inc.

DESIGN: MP	DRAWN: CAK	CHKD.:
DATE: 1/11/2012	SCALE: AS SHOWN	REV.:
W.O. NO.: 0145499a200 A12		

FIGURE 1
SITE LOCATION MAP
2013 W. Meeting Street
Lancaster, South Carolina

ERM



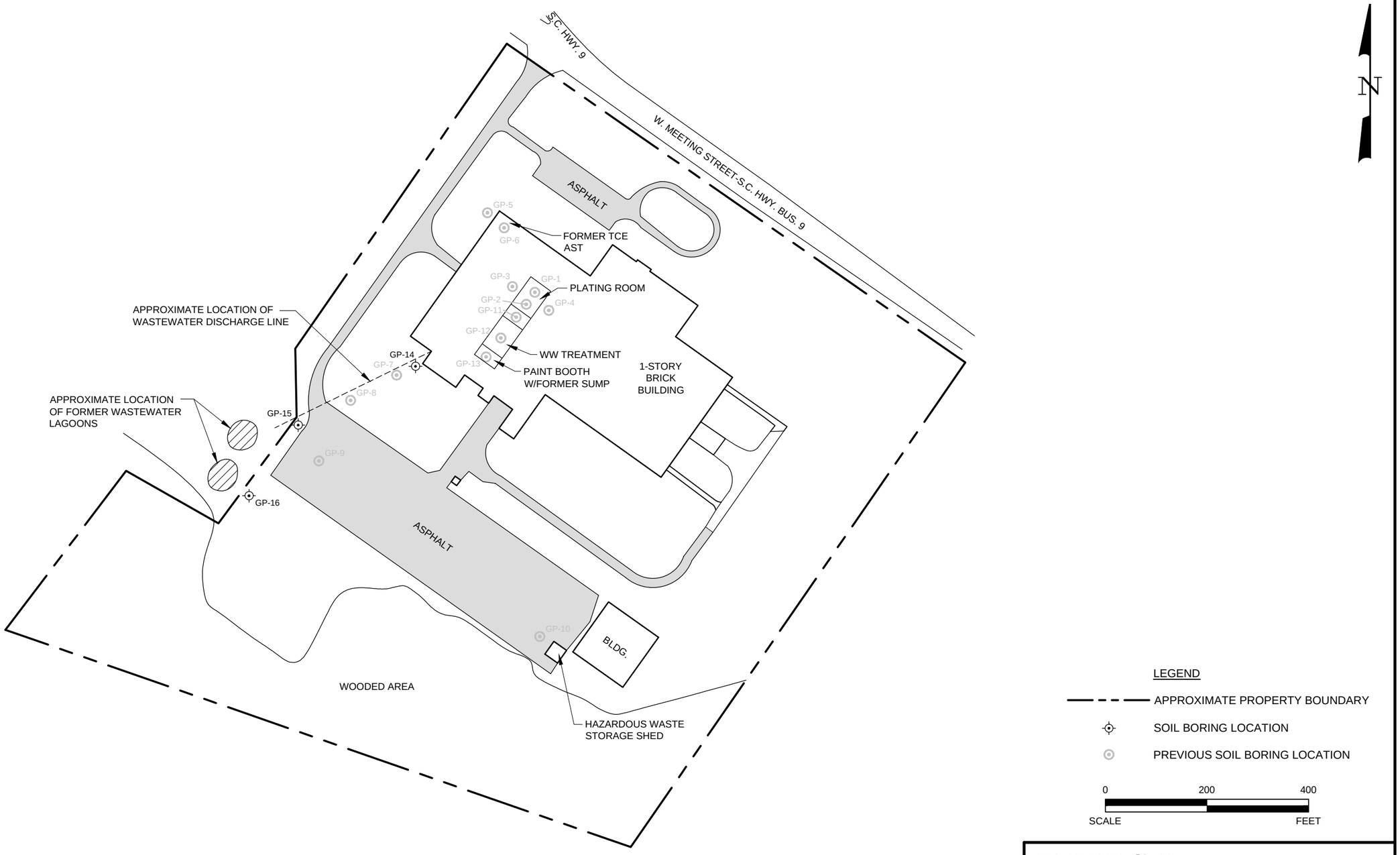
ERM NC, Inc.

FIGURE 2

SITE PLAN MAP
2013 W. Meeting Street
Lancaster, South Carolina

DESIGN: MP	DRAWN: CAK	CHKD.:
DATE: 1/12/2012	SCALE: AS SHOWN	REV.:
W.O.NO.: H:\DWG\A12\0145499b201.dwg		

ERM



LEGEND

APPROXIMATE PROPERTY BOUNDARY

SOIL BORING LOCATION

PREVIOUS SOIL BORING LOCATION

0 200 400

SCALE FEET

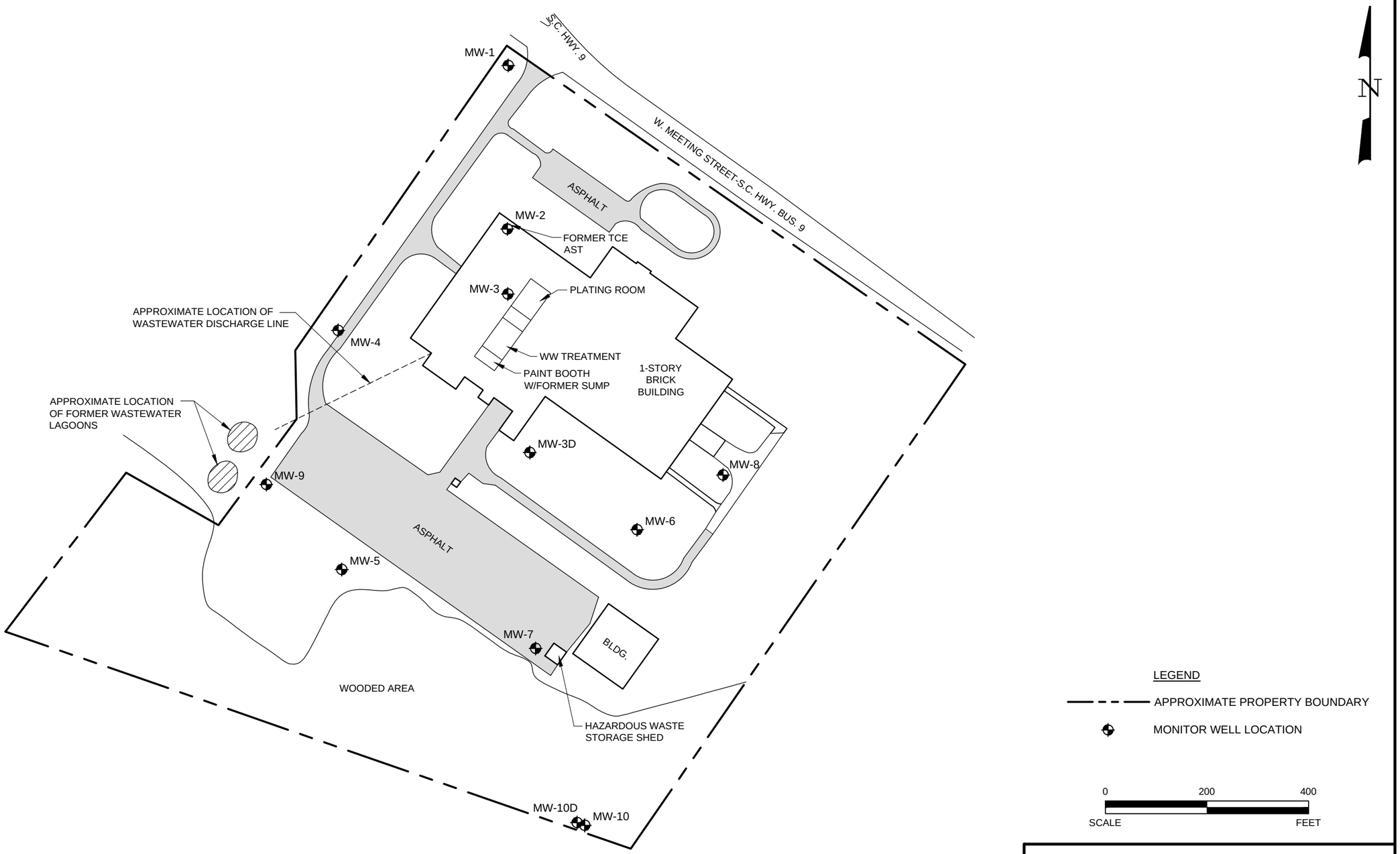
ERM NC, Inc.

FIGURE 3

SOIL BORING LOCATIONS MAP
2013 W. Meeting Street
Lancaster, South Carolina

DESIGN: MP	DRAWN: CAK	CHKD.:
DATE: 1/11/2012	SCALE: AS SHOWN	REV.:
W.O.NO.: H:\DWG\A12\0145499b201.dwg		

ERM

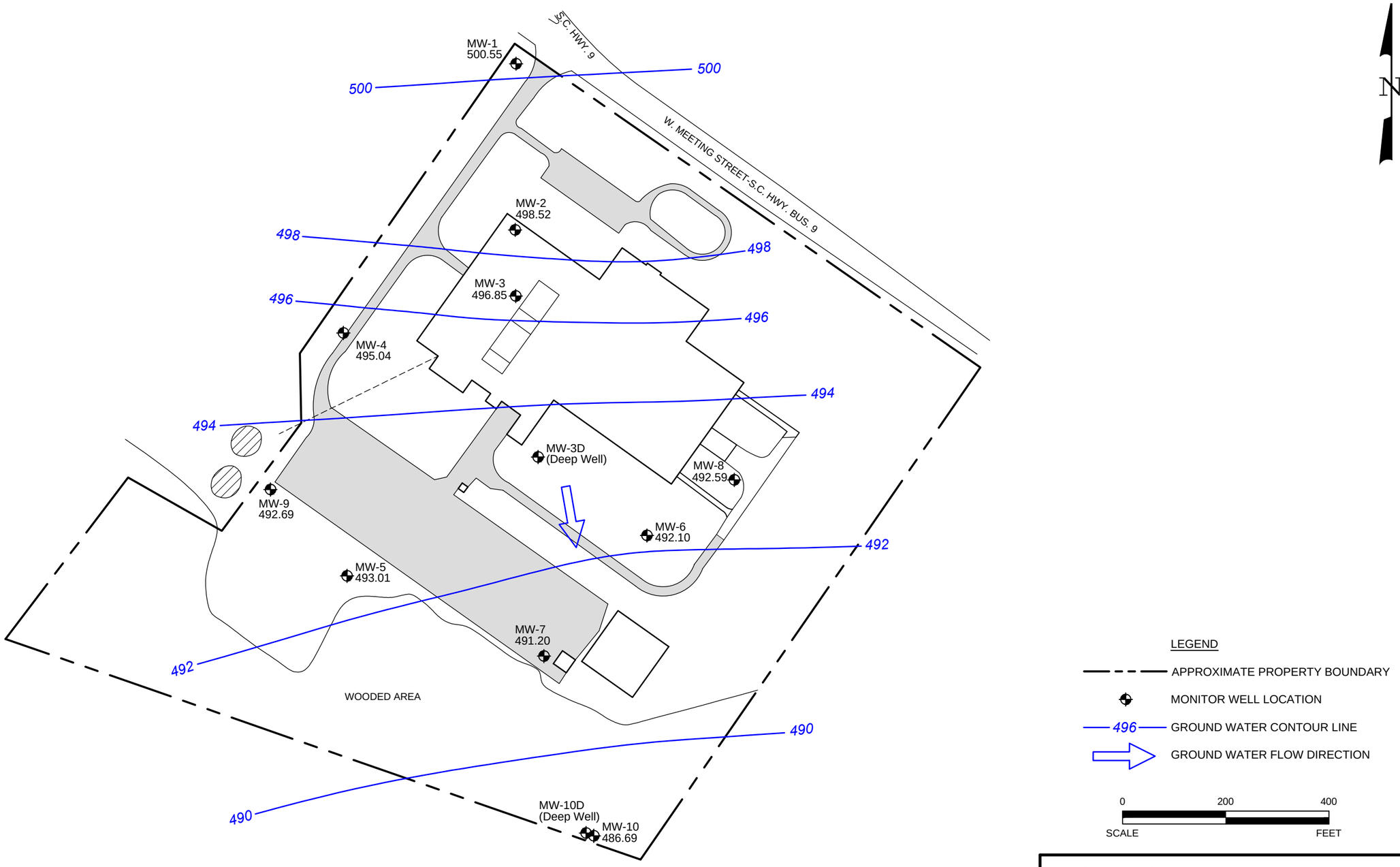


ERM NC, Inc.

FIGURE 4

MONITOR WELL LOCATIONS MAP
2013 W. Meeting Street
Lancaster, South Carolina

DESIGN: MP	DRAWN: CAK	CHKD.:
DATE: 1/11/2012	SCALE: AS SHOWN	REV.:
W.O.NO.: H:\DWG\A12\0145499b201.dwg		



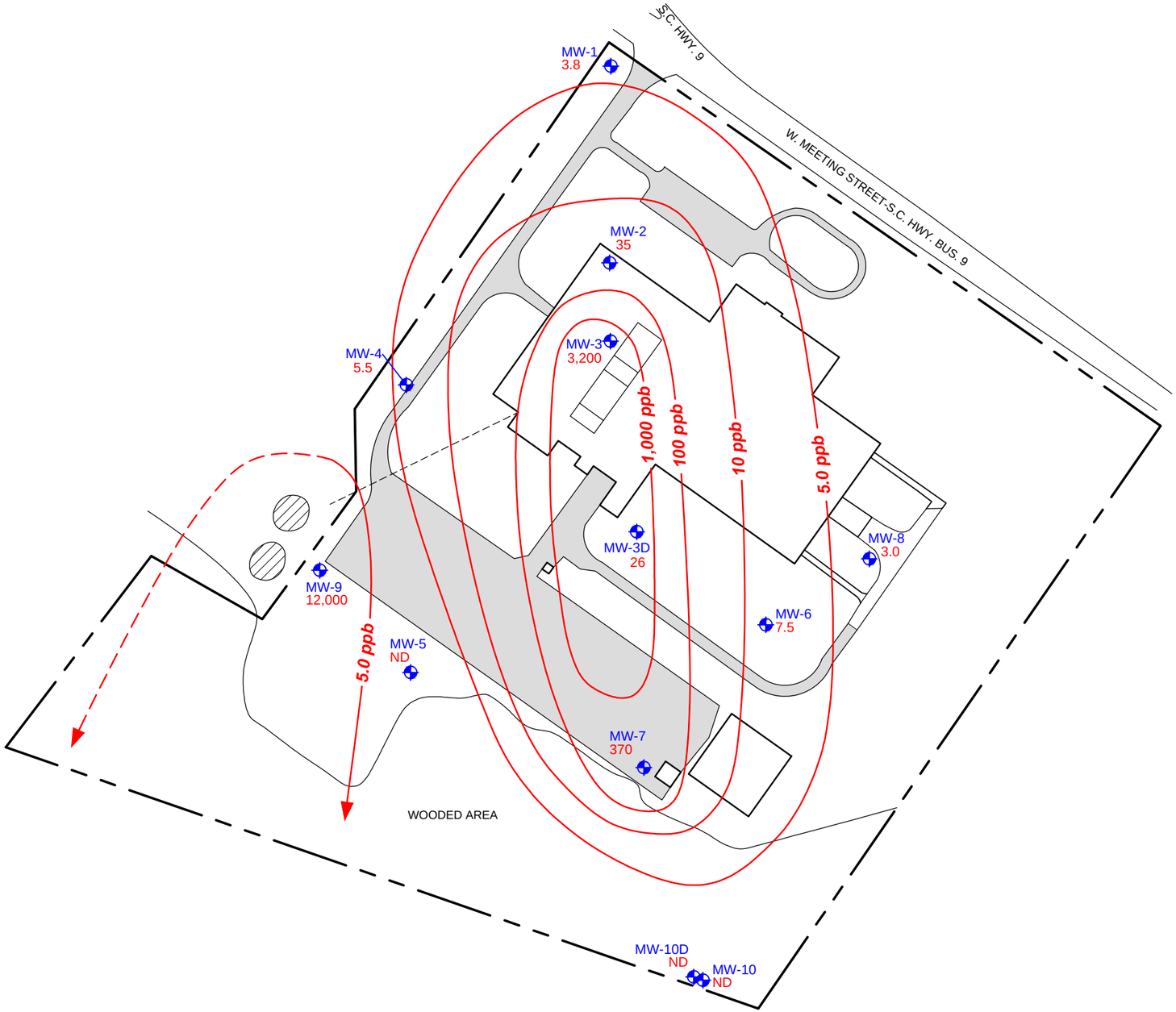
ERM NC, Inc.

FIGURE 5

SHALLOW GROUND WATER FLOW DIRECTION MAP
2013 W. Meeting Street
Lancaster, South Carolina

DESIGN: MP	DRAWN: CAK	CHKD.:
DATE: 1/19/2012	SCALE: AS SHOWN	REV.:

W.O.NO.: H:\DWG\A12\0145499b202.dwg



N

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- MW-6 7.5 — MONITOR WELL LOCATION WITH TCE CONCENTRATION
- ND — NOT DETECTED
- ESTIMATED EXTENT OF TCE PLUME

NOTES:

1. UNITS ARE IN PARTS PER BILLION (ppb).
2. SOUTH CAROLINA MCL = 5.0 ppb.

0 200 400
SCALE FEET

ERM NC, Inc.

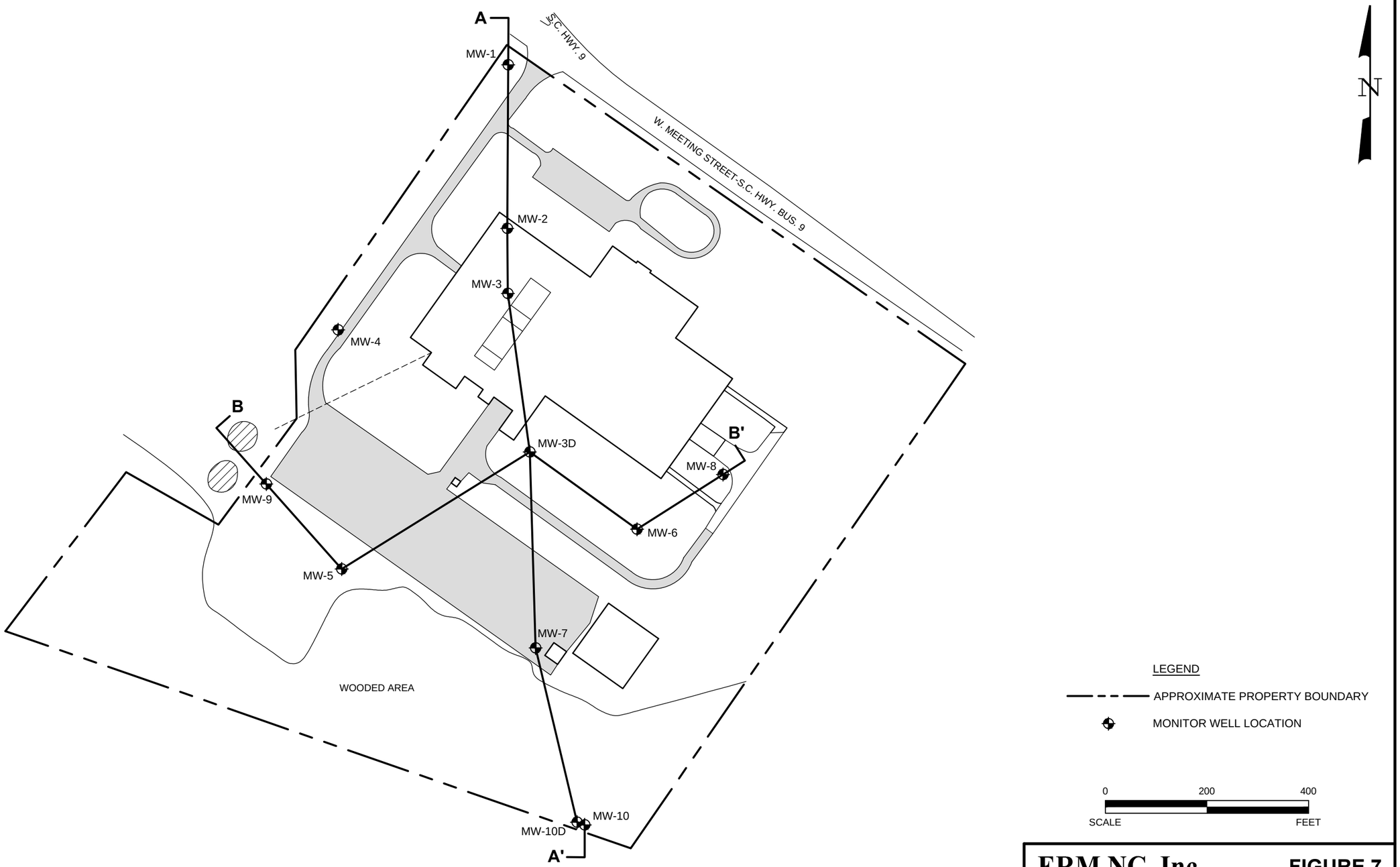
FIGURE 6

TRICHLOROETHYLENE (TCE)
ISOCONCENTRATION MAP
2013 W. Meeting Street
Lancaster, South Carolina

DESIGN: MP	DRAWN: CAK	CHKD.:
DATE: 1/19/2012	SCALE: AS SHOWN	REV.:

W.O.NO.: H:\DWG\A12\0145499b203.dwg

ERM



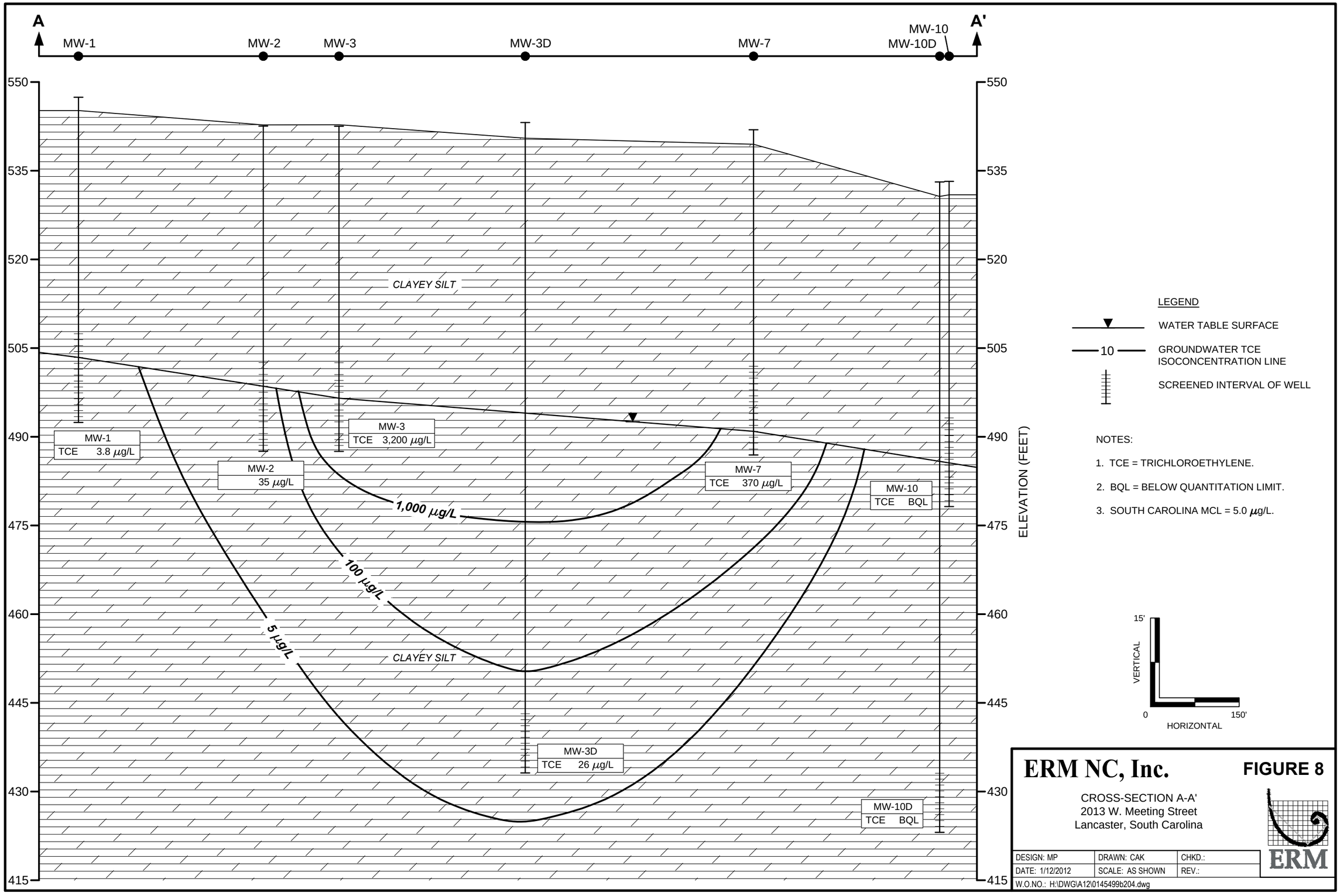
ERM NC, Inc.

FIGURE 7

CROSS-SECTION LOCATION MAP
2013 W. Meeting Street
Lancaster, South Carolina

DESIGN: MP	DRAWN: CAK	CHKD.:
DATE: 1/11/2012	SCALE: AS SHOWN	REV.:

W.O.NO.: H:\DWG\A12\0145499b204.dwg



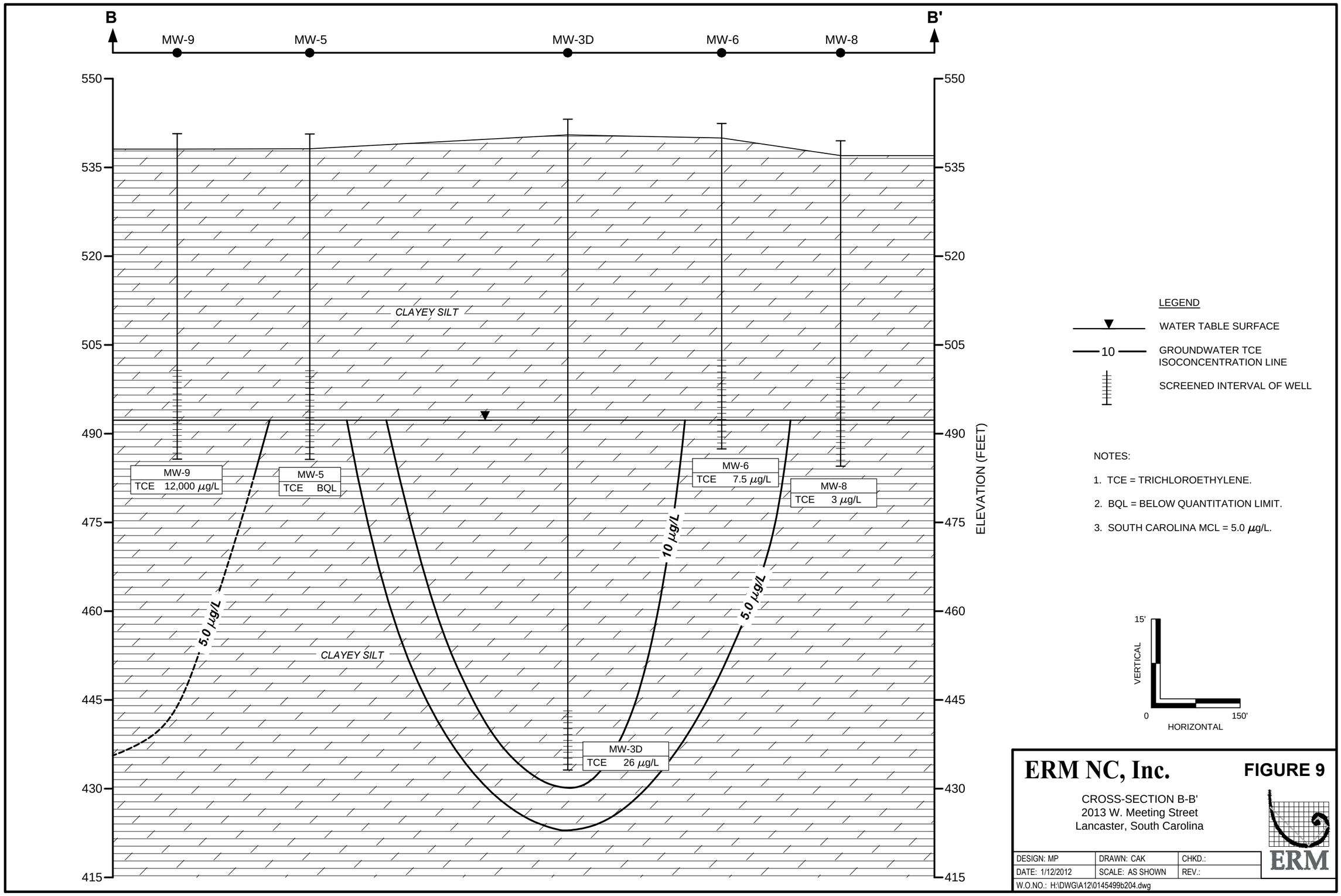
ERM NC, Inc.

FIGURE 8

CROSS-SECTION A-A'
2013 W. Meeting Street
Lancaster, South Carolina

DESIGN: MP	DRAWN: CAK	CHKD.:
DATE: 1/12/2012	SCALE: AS SHOWN	REV.:
W.O.NO.: H:\DWG\A12\0145499b204.dwg		

ERM



ERM NC, Inc.

FIGURE 9

CROSS-SECTION B-B'
2013 W. Meeting Street
Lancaster, South Carolina

DESIGN: MP	DRAWN: CAK	CHKD.:
DATE: 1/12/2012	SCALE: AS SHOWN	REV.:
W.O.NO.: H:\DWG\A12\0145499b204.dwg		

Appendix A
Soil Boring Logs

FIELD LOG OF BORING

ERM

BORING NUMBER GP-14

SHEET 1 OF 1

PROJECT NAME	PROJECT NUMBER	LOCATION	ELEVATION AND DATUM
Joslyn Clark Controls, Inc.	145564	Lancaster, SC	

DRILLING COMPANY	DRILLER	START DATE/TIME	COMPLETION DATE/TIME
Geologic Explorations	Jason Mantak	10/10/2011	10/10/2011
DRILLING EQUIPMENT	DRILLING METHOD	COMPLETION DEPTH	TOTAL NO. OF SAMPLES
Geoprobe 6620DT	Direct Push	10	1

SIZE AND TYPE OF BIT	HOLE DIAMETER	NO. OF SAMPLES	BULK	SS	DRIVE	PITCHER
	2.25 inches					

DRILLING FLUID	DRILLING ANGLE	WATER LEVEL	FIRST	AFTER _____ HOURS
None	0 degrees		NA	N/A

SAMPLE HAMMER	GEOLOGIST/DATE	CHECKED BY/DATE
TYPE DPT DRIVING WT. DROP	T. Fisher	

LITHOLOGY	DEPTH (feet)	SAMPLES	RECOVERY %	BLOW COUNT	DESCRIPTION	USCS SYMBOL	ESTIMATED PERCENT OF GR	SA	FI	PID READINGS	COMMENTS/ LAB SAMPLE IDENTIFICATIONS
				N/A	0 - 0.25 ft Grass, rootmat, & topsoil	NA	0	0	0		Hand auger to 4' bgs
	4		100		0.25 - 8 ft Reddish orange sandy SILT, dry	SM	0	40	60	0.5	
										0.5	
	8		100							0.6	6-8' Collected for lab
					Boring terminated at 10 feet					0.7	
	12										
	16										
	20										
	24										
	28										
	32										
	36										
	40										
	44										
	48										
	52										
	56										
	60										
	64										

FIELD LOG OF BORING

ERM

BORING NUMBER GP-15

SHEET 1 OF 1

PROJECT NAME	PROJECT NUMBER	LOCATION	ELEVATION AND DATUM
Joslyn Clark Controls, Inc.	145564	Lancaster, SC	

DRILLING COMPANY	DRILLER	START DATE/TIME	COMPLETION DATE/TIME
Geologic Explorations	Jason Mantak	10/10/2011	10/10/2011

DRILLING EQUIPMENT	DRILLING METHOD	COMPLETION DEPTH	TOTAL NO. OF SAMPLES
Geoprobe 6620DT	Direct Push	10	1

SIZE AND TYPE OF BIT	HOLE DIAMETER	NO. OF SAMPLES	BULK	SS	DRIVE	PITCHER
	2.25 inches					

DRILLING FLUID	DRILLING ANGLE	WATER LEVEL	FIRST	AFTER _____ HOURS
None	0 degrees		NA	N/A

SAMPLE HAMMER			GEOLOGIST/DATE	CHECKED BY/DATE
TYPE DPT	DRIVING WT.	DROP	T. Fisher	

LITHOLOGY	DEPTH (feet)	SAMPLES	RECOVERY %	BLOW COUNT	DESCRIPTION	USCS SYMBOL	ESTIMATED PERCENT OF GR	SA	FI	PID READINGS	COMMENTS/ LAB SAMPLE IDENTIFICATIONS
				N/A	0 - 0.25 ft Grass, rootmat, & topsoil	NA	0	0	0		Hand auger to 4' bgs
	4		100		0.25 - 8 ft Reddish orange sandy SILT, dry	SM	0	40	60	0.7	
										1.9	
	8		100							0.8	6-8' Collected for lab
					Boring terminated at 10 feet					1.2	
	12										
	16										
	20										
	24										
	28										
	32										
	36										
	40										
	44										
	48										
	52										
	56										
	60										
	64										

FIELD LOG OF BORING

ERM

BORING NUMBER **GP-16**

SHEET 1 OF 1

PROJECT NAME	PROJECT NUMBER	LOCATION	ELEVATION AND DATUM
Joslyn Clark Controls, Inc.	145564	Lancaster, SC	

DRILLING COMPANY	DRILLER	START DATE/TIME	COMPLETION DATE/TIME
Geologic Explorations	Jason Mantak	10/10/2011	10/10/2011

DRILLING EQUIPMENT	DRILLING METHOD	COMPLETION DEPTH	TOTAL NO. OF SAMPLES
Geoprobe 6620DT	Direct Push	40	3

SIZE AND TYPE OF BIT	HOLE DIAMETER	NO. OF SAMPLES	BULK	SS	DRIVE	PITCHER
	2.25 inches					

DRILLING FLUID	DRILLING ANGLE	WATER LEVEL	FIRST	AFTER _____ HOURS
None	0 degrees		NA	N/A

SAMPLE HAMMER TYPE DPT DRIVING WT. DROP	GEOLOGIST/DATE	CHECKED BY/DATE
	T. Fisher	

LITHOLOGY	DEPTH (feet)	SAMPLES	RECOVERY %	BLOW COUNT	DESCRIPTION	USCS SYMBOL	ESTIMATED PERCENT OF GR	SA	FI	PID READINGS	COMMENTS/ LAB SAMPLE IDENTIFICATIONS
				N/A	0 - 0.5 ft Topsoil/grass	NA	0	0	0		Hand auger to 4' bgs
	4		100		0.5 - 7 ft Reddish-orange SILT, dry	ML	0	20	80		
	8		100		7 - 20 ft Reddish-orange and tannish-orange SILT, dry	ML	0	20	80	5	
	12		100							82	10-12' Collected for lab
	16		100							1.7	
	20		100								
					20 - 32 ft Tannish-orange and tan with dark brown	ML	0	30	70	2.3	
	24		100		mottling SILT and fine-grained sand, dry.						
	28		100							3.9	26-28' Collected for lab
	32		100							3.9	
					32 - 40 ft Greyish-tan with some orange and brown	ML	0	30	70		
	36		100		mottling SILT and fine-grained sand, dry.						
										5.7	
	40		100		Boring terminated at 40 feet due to slightly moist soils						38-40' Collected for lab
	44										
	48										
	52										
	56										
	60										
	64										

PROJECT: Joslyn Clark

MW-3D

BORING LOCATION: Joslyn Clark, Lancaster SC

GROUND SURFACE ELEVATION AND DATUM: 543.15

DRILLING CONTRACTOR: Geologic Exploration

DATE STARTED: 10/10/11

DATE FINISHED: 10/19/11

DRILLING METHOD: Hollow-stem auger/Air Rotary

TOTAL DEPTH (ft.): 110

SCREEN INTERVAL (ft.): 100-110

DRILLING EQUIPMENT: Drillmax 2400 Combo Rig

DEPTH TO WATER: FIRST: N/A COMPL. 47.91

CASING: 2"/6" Sch.40PVC

SAMPLING METHOD: N/A

LOGGED BY: Chris Means

HAMMER WEIGHT: N/A

DROP: N/A

DRILLER: Nicholas Hayes

REG. NO. CO1983

DEPTH (feet)	SAMPLES Blows/ 6 Inches	OVM Reading	DESCRIPTION	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0		N/A	Organic Layer	Stick Up Well Monument
5			Reddish orange, dense CLAY, dry, no odor	
10			Light orange, silty CLAY, dry, no odor	Hand auger from ground surface to 5 feet bgs to clear for potential utilities.
15			Tan/orange, SILT, loose, dry, no odor	
20				8" diameter borehole
25			Tan, SILT, dry, no odor (Gravel layers at 18', 23-24', and 26-27')	
30				Neat cement grout
35				
40				
45				2" diameter Schedule 40 PVC casing
50				
55			Tan, fine sandy SILT, (Gravel layer at 51-52') cuttings saturated at 59', no odor, Outer Casing set at 74' bgs	
60				6" diameter, Schdule 40 PVC Outer Casing 0-75' bgs
65				
70				
75			Light brown, clayey SILT with a little fine SAND, moist, no odor	
80				
85				
90				
95				Bentonite Chip Seal
100			Light brown, clayey SILT with a few gravels and fine sand, wet, no odor	#2 filter pack sand
105				2" diameter, 0.010" slot, Schedule 40 PVC screen
110				2" diameter Schedule 40 PVC end cap

PROJECT: Joslyn Clark

MW-8

BORING LOCATION: Joslyn Clark, Lancaster SC

GROUND SURFACE ELEVATION AND DATUM: 539.50

DRILLING CONTRACTOR: Geologic Exploration

DATE STARTED: 10/13/11

DATE FINISHED: 10/13/11

DRILLING METHOD: Wing Bit/Air

TOTAL DEPTH (ft.): 55

SCREEN INTERVAL (ft.): 40-55

DRILLING EQUIPMENT: Drillmax 2400 Combo Rig

DEPTH TO WATER: FIRST: N/A COMPL. 46.91

CASING: 2" Sch.40PVC

SAMPLING METHOD: N/A

LOGGED BY: Chris Means

HAMMER WEIGHT: N/A

DROP: N/A

DRILLER: Nicholas Hayes

REG. NO. CO1983

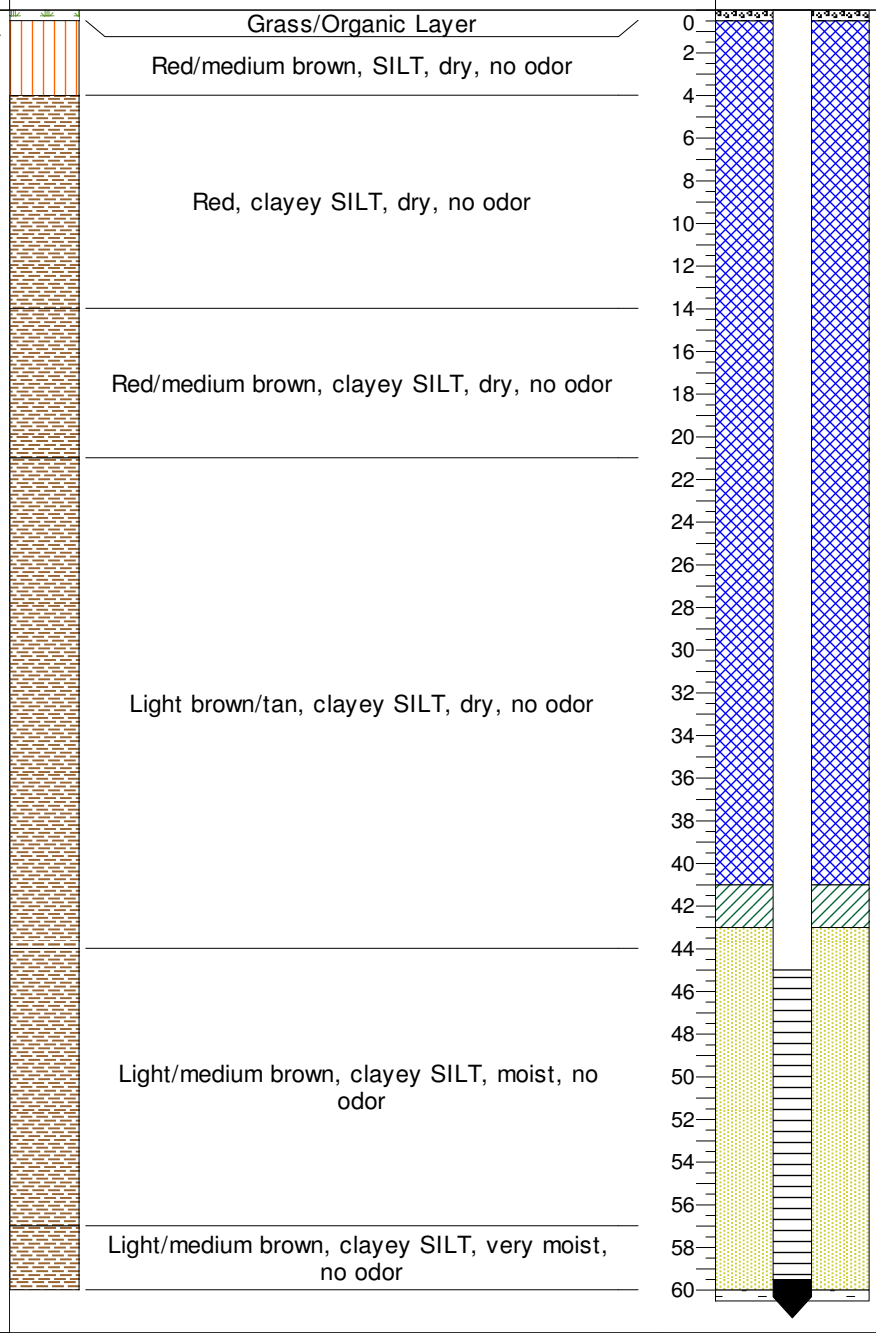
DEPTH (feet)	SAMPLES Blows/ 6 Inches	OVM Reading	DESCRIPTION	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0		N/A	Grass/Organic Layer	Sitck up well monument
2			Red, clayey SILT, moist (rain water), no odor	
4				
6				
8				6" diameter borehole
10				
12				
14			Red, clayey SILT, dry, no odor	
16				
18				
20				
22				Neat cement grout.
24				
26				
28				
30				
32				2" diameter Schedule 40 PVC Riser
34			Light/medium brown, clayey SILT, slightly moist, no odor	
36				Bentonite Chip Seal
38				
40				
42				
44				#2 filter pack sand
46				
48				
50			Light/medium brown, clayey SILT, moist, no odor	2" diameter, 0.010" slot, Schedule 40 PVC screen
52				
54				2" diameter Schedule 40 PVC end cap
56				Slough

PROJECT: Joslyn Clark	**MW-9**
BORING LOCATION: Joslyn Clark, Lancaster SC	GROUND SURFACE ELEVATION AND DATUM: 540.69
DRILLING CONTRACTOR: Geologic Exploration	DATE STARTED: 10/13/11 / DATE FINISHED: 10/13/11
DRILLING METHOD: Hollow Stem Auger/ Wing Bit	TOTAL DEPTH (ft.): 55 / SCREEN INTERVAL (ft.): 40-55
DRILLING EQUIPMENT: Drillmax 2400 Combo Rig	DEPTH TO WATER: FIRST: N/A, COMPL. 48.00 / CASING: 2" Sch.40PVC
SAMPLING METHOD: N/A	LOGGED BY: Chris Means
HAMMER WEIGHT: N/A / DROP: N/A	DRILLER: Nicholas Hayes / REG. NO. CO1983

DEPTH (feet)	SAMPLES Blows/ 6 Inches	OVM Reading	DESCRIPTION	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0		N/A	Grass/Organic Layer	Sitck up well monument
2–10			Red, clayey SILT, dry, no odor	6" diameter borehole
12–22				Neat cement grout
24–36			Light brown, clayey SILT, dry, no odor	2" diameter Schedule 40 PVC Riser
38				Bentonite Chip Seal
40–46				#2 filter pack sand
48–52			Light brown, clayey SILT, moist/very moist, no odor	2" diameter, 0.010" slot, Schedule 40 PVC screen
54				2" diameter Schedule 40 PVC end cap
56				Slough

PROJECT: Joslyn Clark	**MW-10**
BORING LOCATION: Joslyn Clark, Lancaster SC	GROUND SURFACE ELEVATION AND DATUM: 533.20
DRILLING CONTRACTOR: Geologic Exploration	DATE STARTED: 10/12/11 / DATE FINISHED: 10/12/11
DRILLING METHOD: Hollow Stem Auger/ Air rotary	TOTAL DEPTH (ft.): 60 / SCREEN INTERVAL (ft.): 45-60
DRILLING EQUIPMENT: Drillmax 2400 Combo Rig	DEPTH TO WATER: FIRST: N/A, COMPL.: 44.65 / CASING: 2" Sch.40PVC
SAMPLING METHOD: N/A	LOGGED BY: Chris Means
HAMMER WEIGHT: N/A / DROP: N/A	DRILLER: Nicholas Hayes / REG. NO. CO1983

DEPTH (feet)	SAMPLES Blows/ 6 Inches	OVM Reading	DESCRIPTION	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0		N/A	Grass/Organic Layer	Sitck up well monument
2			Red/medium brown, SILT, dry, no odor	
4				
6				
8			Red, clayey SILT, dry, no odor	6" diameter borehole
10				
12				
14			Red/medium brown, clayey SILT, dry, no odor	
16				
18				
20				Neat cement grout
22				
24				
26				
28				
30				
32			Light brown/tan, clayey SILT, dry, no odor	2" diameter Schedule 40 PVC Riser
34				
36				
38				
40				
42				Bentonite Chip Seal
44				#2 filter pack sand
46				
48				
50			Light/medium brown, clayey SILT, moist, no odor	
52				2" diameter, 0.010" slot, Schedule 40 PVC screen
54				
56				
58			Light/medium brown, clayey SILT, very moist, no odor	2" diameter Schedule 40 PVC end cap
60				Slough



PROJECT: Joslyn Clark	**MW-10D**
BORING LOCATION: Joslyn Clark, Lancaster SC	GROUND SURFACE ELEVATION AND DATUM: 533.05
DRILLING CONTRACTOR: Geologic Exploration	DATE STARTED: 10/11/11 — DATE FINISHED: 10/13/11
DRILLING METHOD: Hollow-stem auger/Air Rotary	TOTAL DEPTH (ft.): 110 — SCREEN INTERVAL (ft.): 100-110
DRILLING EQUIPMENT: Drillmax 2400 Combo Rig	DEPTH TO WATER: FIRST: N/A, COMPL. 44.56 — CASING: 2"/6" Sch.40PVC
SAMPLING METHOD: N/A	LOGGED BY: Chris Means
HAMMER WEIGHT: N/A — DROP: N/A	DRILLER: Nicholas Hayes — REG. NO. CO1983

DEPTH (feet)	SAMPLES Blows/ 6 Inches	OVM Reading	DESCRIPTION	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0		N/A	Organic Layer	Stick Up Well Monument
5			Red/medium brown, SILT, dry, no odor, hard	
10			Red, clayey SILT, dry, no odor, hard	Hand auger from ground surface to 5 feet bgs to clear for potential utilities.
15				
20				8" diameter borehole
25			Light brown/ tan, clayey SILT, dry, no odor	
30				Neat cement grout
35				
40				
45			Light/medium brown, clayey SILT, moist/very moist, no odor, water table around 41-43 feet bgs.	2" diameter Schedule 40 PVC casing
50				
55				
60				6" diameter, Schdule 40 PVC Outer Casing 0-75' bgs
65			Light/medium brown, clayey SILT with a little sand, very moist/wet, no odor	
70				
75				
80			Light brown/tan, clayey SILT with some fine sand, moist, no odor	
85				
90				
95				Bentonite Chip Seal
100			Same as above but a harder layer	#2 filter pack sand
105			Light brown, clayey SILT with some fine sand, moist	2" diameter, 0.010" slot, Schedule 40 PVC screen
110				2" diameter Schedule 40 PVC end cap

Appendix B

Monitor Well Completion and Construction Records

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: JOSLYN CLARK CONTROLS (last) (first)
Address: 2013 WEST MEETING STREET
City: LANCASTER State: SC Zip: 29720
Telephone: Work: Home:

2. LOCATION OF WELL: SC **COUNTY:** LANCASTER
Name: JOSLYN CLARK CONTROLS
Street Address: 2013 WEST MEETING STREET
City: LANCASTER Zip: 29720
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
RED CLAY	5.0	5.0
TAN SANDY SILT	25.0	30.0
BROWN SILT	44.0	74.0
BROWN SILTY CLAY	36.0	110.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-3D BENTONITE SEAL FROM 94.0 TO 98.0 FT. 6 INCH PVC CASING GROUTED FROM 0.0 TO 74.0 FT

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☑ Other AUGER

7. PERMIT NUMBER:

8. USE:
☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 110.0 ft. Date Started: 10/10/11 Date Completed: 10/19/11

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2 INCH, 6 INCH
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 100.0 ft. depth
6.0 in. to 74.0 ft. depth
Height: Above ☑ Below ☐
Surface 2.5 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: SCH 40 PVC Diam.: 2 INCH
Slot/Gauge: .010 Length: 10.0 FEET
Set Between: 100.0 ft. and 110.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 50.0 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 98.0 ft. to 110.0 ft.
Effective size 1.43 Uniformity Coefficient 1.30

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 94.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: NICHOLAS HAYES **CERT. NO.:** 01983
Address: (Print) 176 COMMERCE BLVD
STATESVILLE, NC 28625
Level: A ☐ B ☐ C ☑ D ☐ (circle one)
Telephone No.: 704-872-7686 Fax No.: 704-872-0248

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/25/11
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: JOSLYN CLARK CONTROLS (last) (first)
Address: 2013 WEST MEETING STREET
City: LANCASTER State: SC Zip: 29720
Telephone: Work: Home:

2. LOCATION OF WELL: SC **COUNTY:** LANCASTER
Name: JOSLYN CLARK CONTROLS
Street Address: 2013 WEST MEETING STREET
City: LANCASTER Zip: 29720
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
RED CLAY	5.0	5.0
RED SILT	15.0	20.0
BROWN SILT	35.0	55.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-8 BENTONITE SEAL FROM 34.0 TO 38.0 FT.

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 10/13/11
55.0 ft. Date Completed: 10/13/11

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2 INCH
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 40.0 ft. depth
_____ in. to _____ ft. depth
Height: Above ☑ Below ☐
Surface 2.5 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: SCH 40 PVC Diam.: 2 INCH
Slot/Gauge: .010 Length: 15.0 FEET
Set Between: 40.0 ft. and 55.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 45.0 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 38.0 ft. to 55.0 ft.
Effective size 1.43 Uniformity Coefficient 1.30

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 34.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: NICHOLAS HAYES **CERT. NO.:** 01983
Address: (Print) 176 COMMERCE BLVD
STATESVILLE, NC 28625
Level: A ☐ B ☐ C ☑ D ☐ (circle one)
Telephone No.: 704-872-7686 Fax No.: 704-872-0248

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/25/11
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003)

COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: JOSLYN CLARK CONTROLS (last) (first)
Address: 2013 WEST MEETING STREET
City: LANCASTER State: SC Zip: 29720
Telephone: Work: Home:

2. LOCATION OF WELL: SC **COUNTY:** LANCASTER
Name: JOSLYN CLARK CONTROLS
Street Address: 2013 WEST MEETING STREET
City: LANCASTER Zip: 29720
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
RED CLAY	10.0	10.0
RED SILT	10.0	20.0
BROWN SILT	35.0	55.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-9 BENTONITE SEAL FROM 34.0 TO 38.0 FT.

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other AUGER

7. PERMIT NUMBER:

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 55.0 ft. Date Started: 10/13/11 Date Completed: 10/13/11

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2 INCH
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 40.0 ft. depth
_____ in. to _____ ft. depth
Height: Above ☑ Below ☐
Surface 2.5 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: SCH 40 PVC Diam.: 2 INCH
Slot/Gauge: .010 Length: 15.0 FEET
Set Between: 40.0 ft. and 55.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 45.0 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 38.0 ft. to 55.0 ft.
Effective size 1.43 Uniformity Coefficient 1.30

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 34.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: NICHOLAS HAYES **CERT. NO.:** 01983
Address: (Print) 176 COMMERCE BLVD
STATESVILLE, NC 28625
Level: A B C D (circle one) ☐ ☐ ☑ ☐
Telephone No.: 704-872-7686 Fax No.: 704-872-0248

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/25/11
Well Driller

If D Level Driller, provide supervising driller's name:

COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: JOSLYN CLARK CONTROLS (last) (first)
Address: 2013 WEST MEETING STREET
City: LANCASTER State: SC Zip: 29720
Telephone: Work: Home:

2. LOCATION OF WELL: SC **COUNTY:** LANCASTER
Name: JOSLYN CLARK CONTROLS
Street Address: 2013 WEST MEETING STREET
City: LANCASTER Zip: 29720
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
RED CLAY	10.0	10.0
RED SILT	10.0	20.0
BROWN SILT	40.0	60.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-10 BENTONITE SEAL FROM 40.0 TO 43.0 FT.

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other AUGER

7. PERMIT NUMBER:

8. USE:
☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 10/12/11
60.0 ft. Date Completed: 10/12/11

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2 INCH
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 45.0 ft. depth
_____ in. to _____ ft. depth
Height: Above ☑ Below ☐
Surface 2.5 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: SCH 40 PVC Diam.: 2 INCH
Slot/Gauge: .010 Length: 15.0 FEET
Set Between: 45.0 ft. and 60.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 45.0 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 43.0 ft. to 60.0 ft.
Effective size 1.43 Uniformity Coefficient 1.30

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 40.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: NICHOLAS HAYES **CERT. NO.:** 01983
Address: (Print) 176 COMMERCE BLVD
STATESVILLE, NC 28625
Level: A ☐ B ☐ C ☑ D ☐ (circle one)
Telephone No.: 704-872-7686 Fax No.: 704-872-0248

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/25/11
Well Driller

If D Level Driller, provide supervising driller's name:

COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: JOSLYN CLARK CONTROLS (last) (first)
Address: 2013 WEST MEETING STREET
City: LANCASTER State: SC Zip: 29720
Telephone: Work: Home:

2. LOCATION OF WELL: SC **COUNTY:** LANCASTER
Name: JOSLYN CLARK CONTROLS
Street Address: 2013 WEST MEETING STREET
City: LANCASTER Zip: 29720
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
RED CLAY	10.0	10.0
RED SILT	10.0	20.0
BROWN SILT	55.0	75.0
BROWN SILTY CLAY	35.0	110.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-10D BENTONITE SEAL FROM 94.0 TO 98.0 FT. 6 INCH PVC CASING GROUTED FROM 0.0 TO 75.0 FT

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☑ Other AUGER

7. PERMIT NUMBER:

8. USE:
☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 110.0 ft. Date Started: 10/11/11 Date Completed: 10/13/11

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2 INCH, 6 INCH
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 100.0 ft. depth
6.0 in. to 75.0 ft. depth
Height: Above ☑ Below ☐
Surface 2.5 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: SCH 40 PVC Diam.: 2 INCH
Slot/Gauge: .010 Length: 10.0 FEET
Set Between: 100.0 ft. and 110.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 50.0 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 98.0 ft. to 110.0 ft.
Effective size 1.43 Uniformity Coefficient 1.30

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 94.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: NICHOLAS HAYES **CERT. NO.:** 01983
Address: (Print) 176 COMMERCE BLVD
STATESVILLE, NC 28625
Level: A B C D (circle one) ☐ ☐ ☑ ☐
Telephone No.: 704-872-7686 Fax No.: 704-872-0248

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/25/11
Well Driller

If D Level Driller, provide supervising driller's name:

Appendix C
Well Development Forms

WATER MATRIX SAMPLING
FIELD DATA FORM

ERM

Sample Type: (Groundwater Well, G.W. DPT, Surface Water, other) MW
Sample Location: Joslyn Clark
STATION (Well or DPT) # MW
SAMPLE I.D.# MW-1
DATE: 11-10-11
OFFICIAL SAMPLE TIME: 1615
Weather Conditions Rain 54°F

PROJECT #:
PERSONNEL PRESENT DURING SAMPLING: CM

WELL INFORMATION:

1) WELL DEPTH (FROM TOP OF MEASURING POINT): 55 feet
2) DEPTH TO WATER PRIOR TO PURGING: 46.66 feet
3) LENGTH OF WATER COLUMN IN WELL: feet
4) VOLUME OF WATER STANDING IN WELL: gallons

mulitply #3 times 0.04 for 1" I.D. wells
mulitply #3 times 0.163 for 2" I.D. wells
mulitply #3 times 0.66 for 4" I.D. wells
mulitply #3 times 1.5 for 6" I.D. wells

5) NUMBER OF PURGE VOLUMES REQUIRED NA volumes
6) TOTAL MINIMUM VOLUME TO BE PURGED NA gallons
WELL MATERIAL: 2" PVC

Slow flow

Sample Depth (DPT only)
Screened Interval
Collection Method monsoon/poly tubing

STABILIZATION:

Time	Cumulative Volume (gal)	pH	Conductance (umhos/cm)	Temp (C)	Turbidity (NTUs)	REDOX (mV)	DO (mg/l)
1540 0	0	5.36	36	17.56	412.6	208	6.01
5		5.32	36	17.32	18.5	215	5.36
10		5.28	35	16.94	11.6	221	4.83
15		5.25	35	16.76	8.4	225	4.66
20		5.26	36	17.08	7.6	229	4.75
25		5.27	37	17.02	7.9	231	4.75
30		5.27	37	16.98	8.1	233	4.74

Field Parameters taken with: YSI 556

OBSERVATIONS:

Parameters Sampled:	Sample Containers; # of	Sample Volume	Preservation/Prep.
VOC			
1			

Stabilization Criteria
D.O. +/- 0.3 mg/l
Turb. +/- 10%
S.C. +/- 3%
ORP +/- 10 mV
pH +/- 0.1 unit

WATER MATRIX SAMPLING
FIELD DATA FORM

ERM

Sample Type: (Groundwater Well, G.W. DPT, Surface Water, other) MW
Sample Location: Joslyn Clark
STATION (Well or DPT) # MW
SAMPLE I.D.# MW-2
DATE: 11-11-11
OFFICIAL SAMPLE TIME: 1200
Weather Conditions Inside

PROJECT #:
PERSONNEL PRESENT DURING SAMPLING:
CM

WELL INFORMATION:

1) WELL DEPTH (FROM TOP OF MEASURING POINT): ____ feet
2) DEPTH TO WATER PRIOR TO PURGING: 44.02 feet
3) LENGTH OF WATER COLUMN IN WELL: ____ feet
4) VOLUME OF WATER STANDING IN WELL: ____ gallons

mulitply #3 times 0.04 for 1" I.D. wells
mulitply #3 times 0.163 for 2" I.D. wells
mulitply #3 times 0.66 for 4" I.D. wells
mulitply #3 times 1.5 for 6" I.D. wells

5) NUMBER OF PURGE VOLUMES REQUIRED N/A volumes
6) TOTAL MINIMUM VOLUME TO BE PURGED N/A gallons
WELL MATERIAL: 2"

Flow flow

Sample Depth (DPT only) ____
Screened Interval ____
Collection Method ____

STABILIZATION:

Time	Cumulative Volume (gal)	pH	Conductance (umhos/cm)	Temp (C)	Turbidity (NTUs)	REDOX (mV)	DO (mg/l)
1130 0	0	5.65	51	18.49	53.2	171	7.64
5	200ml/min	5.59	51	18.38	32.6	183	6.32
10		5.56	51	18.34	28.4	192	5.06
15		5.54	51	18.11	21.2	201	5.18
20		5.55	51	18.15	14.6	201	5.21
25		5.55	51	18.23	10.9	201	5.19
30		5.55	51	18.25	8.4	201	5.17

Field Parameters taken with: YSI 556

OBSERVATIONS:

Parameters Sampled:	Sample Containers; # of	Sample Volume	Preservation/Prep.
VOC	3	40ml	-
Metals	1	500ml	HCl

Stabilization Criteria
D.O. +/- 0.3 mg/l
Turb. +/- 10%
S.C. +/- 3%
ORP +/- 10 mV
pH +/- 0.1 unit

WATER MATRIX SAMPLING
FIELD DATA FORM

ERM

Sample Type: (Groundwater Well, G.W. DPT, Surface Water, other) MW
Sample Location: Joslyn Clark
STATION (Well or DPT) # well
SAMPLE I.D.# MW-3
DATE: 11-11-11
OFFICIAL SAMPLE TIME: 1445
Weather Conditions Inside

PROJECT #:
PERSONNEL PRESENT DURING SAMPLING:
CM

WELL INFORMATION:
1) WELL DEPTH (FROM TOP OF MEASURING POINT): 55 feet
2) DEPTH TO WATER PRIOR TO PURGING: feet
3) LENGTH OF WATER COLUMN IN WELL: feet
4) VOLUME OF WATER STANDING IN WELL: gallons
mulitply #3 times 0.04 for 1" I.D. wells
mulitply #3 times 0.163 for 2" I.D. wells
mulitply #3 times 0.66 for 4" I.D. wells
mulitply #3 times 1.5 for 6" I.D. wells
5) NUMBER OF PURGE VOLUMES REQUIRED NA volumes } low flow
6) TOTAL MINIMUM VOLUME TO BE PURGED NA gallons
WELL MATERIAL: 2" PVC

Sample Depth (DPT only)
Screened Interval
Collection Method monsoon/poly tubing

STABILIZATION:

Time	Cumulative Volume (gal)	pH	Conductance (umhos/cm)	Temp (C)	Turbidity (NTUs)	REDOX (mV)	DO (mg/l)
1345 0	0	6.29	80	19.14	32.6	146	5.04
5		6.11	81	19.84	22.3	157	3.60
10		6.10	82	19.99	13.9	161	3.51
15		6.09	82	20.40	6.6	166	3.40
20		6.08	82	19.40	9.2	172	5.16
25		6.07	82	19.23	8.4	172	3.72
30		6.07	82	19.06	7.3	173	3.14

Field Parameters taken with: YSI 556

OBSERVATIONS:

Parameters Sampled:	Sample Containers; # of	Sample Volume	Preservation/Prep.
VOC	3	40ml	HCl
Metals	1	500ml	HNO3
PAHs	2	1L	—

Stabilization Criteria
D.O. +/- 0.3 mg/l
Turb. +/- 10%
S.C. +/- 3%
ORP +/- 10 mV
pH +/- 0.1 unit

WATER MATRIX SAMPLING
FIELD DATA FORM

ERM

Sample Type: (Groundwater Well, G.W. DPT, Surface Water, other) MW
Sample Location: Tosky Clark
STATION (Well or DPT) #
SAMPLE I.D.# MW-3D
DATE: 11-11-11
OFFICIAL SAMPLE TIME: 1305
Weather Conditions Sunny 60°F

PROJECT #:
PERSONNEL PRESENT DURING SAMPLING:
Cm

WELL INFORMATION:
1) WELL DEPTH (FROM TOP OF MEASURING POINT): 110 feet
2) DEPTH TO WATER PRIOR TO PURGING: 47.91 feet
3) LENGTH OF WATER COLUMN IN WELL: feet
4) VOLUME OF WATER STANDING IN WELL: gallons
mulitply #3 times 0.04 for 1" I.D. wells
mulitply #3 times 0.163 for 2" I.D. wells
mulitply #3 times 0.66 for 4" I.D. wells
mulitply #3 times 1.5 for 6" I.D. wells
5) NUMBER OF PURGE VOLUMES REQUIRED NA volumes } low flow
6) TOTAL MINIMUM VOLUME TO BE PURGED NA gallons
WELL MATERIAL: 2" PVC w/ 6" casing

Sample Depth (DPT only)
Screened Interval 100-110
Collection Method monsoon/poly tubing

STABILIZATION:

Time	Cumulative Volume (gal)	pH	Conductance (umhos/cm)	Temp (C)	Turbidity (NTUs)	REDOX (mV)	DO (mg/l)
1230 0	0	6.88	127	18.26	999+	161	5.23
5		6.89	125	18.07	999+	156	5.06
10		6.93	127	18.36	999+	145	4.85
15		6.95	129	18.88	783	139	4.62
20		6.96	128	18.71	758	129	4.81
25		6.94	127	18.64	752	127	4.81
30		6.93	126	18.68	750	127	4.80

Field Parameters taken with: YSI 556

OBSERVATIONS: Hard to Depart Sample

Parameters Sampled:	Sample Containers; # of	Sample Volume	Preservation/Prep.
VOC	3	40ml	—
Metals	1	500ml	HNO3
PAHs	2	1L	—

Stabilization Criteria
D.O. +/- 0.3 mg/l
Turb. +/- 10%
S.C. +/- 3%
ORP +/- 10 mV
pH +/- 0.1 unit

WATER MATRIX SAMPLING
FIELD DATA FORM

ERM

Sample Type: (Groundwater Well, G.W. DPT, Surface Water, other) MW

Sample Location: Joslyn Clark

STATION (Well or DPT) # MW

SAMPLE I.D.# MW-4

DATE: 11-10-11

OFFICIAL SAMPLE TIME: 1510

Weather Conditions Rain 59°F

PROJECT #: _____

PERSONNEL PRESENT DURING SAMPLING:

Cm

WELL INFORMATION:

1) WELL DEPTH (FROM TOP OF MEASURING POINT): 55 feet
2) DEPTH TO WATER PRIOR TO PURGING: _____ feet
3) LENGTH OF WATER COLUMN IN WELL: _____ feet
4) VOLUME OF WATER STANDING IN WELL: _____ gallons

mulitply #3 times 0.04 for 1" I.D. wells
mulitply #3 times 0.163 for 2" I.D. wells
mulitply #3 times 0.66 for 4" I.D. wells
mulitply #3 times 1.5 for 6" I.D. wells

5) NUMBER OF PURGE VOLUMES REQUIRED NA volumes } low flow
6) TOTAL MINIMUM VOLUME TO BE PURGED NA gallons }

WELL MATERIAL: 2" PVC

Sample Depth (DPT only) _____

Screened Interval 40-55

Collection Method monsoon/poly tubing

STABILIZATION:

Time	Cumulative Volume (gal)	pH	Conductance (umhos/cm)	Temp (C)	Turbidity (NTUs)	REDOX (mV)	DO (mg/l)
1440 0	0	5.58	37	18.18	52.6	184	5.26
5	200ml/min	5.57	36	18.19	32.9	195	4.71
10	|	5.56	36	18.31	25.2	195	4.64
15	|	5.54	35	18.72	16.1	198	4.64
20	|	5.54	35	18.77	11.3	198	4.41
25	|	5.54	35	18.90	8.6	199	4.43
30	V	5.54	35	18.95	7.9	200	4.45

Field Parameters taken with: YSI 556

OBSERVATIONS: _____

Parameters Sampled:	Sample Containers; # of	Sample Volume	Preservation/Prep.
VOC	@ 3	40ml	
Metals	1	500ml	HNO3

Stabilization Criteria
D.O. +/- 0.3 mg/l
Turb. +/- 10%
S.C. +/- 3%
ORP +/- 10 mV
pH +/- 0.1 unit

WATER MATRIX SAMPLING
FIELD DATA FORM

ERM

Sample Type: (Groundwater Well, G.W. DPT, Surface Water, other) MW
Sample Location: Joslyn Clor
STATION (Well or DPT) # MW
SAMPLE I.D.# MW-5
DATE: 11-10-11
OFFICIAL SAMPLE TIME: 1335
Weather Conditions Rain

PROJECT #:
PERSONNEL PRESENT DURING SAMPLING:
CM

WELL INFORMATION:
1) WELL DEPTH (FROM TOP OF MEASURING POINT): 55 feet
2) DEPTH TO WATER PRIOR TO PURGING: 50 feet
3) LENGTH OF WATER COLUMN IN WELL: feet
4) VOLUME OF WATER STANDING IN WELL: gallons
mulitply #3 times 0.04 for 1" I.D. wells
mulitply #3 times 0.163 for 2" I.D. wells
mulitply #3 times 0.66 for 4" I.D. wells
mulitply #3 times 1.5 for 6" I.D. wells
5) NUMBER OF PURGE VOLUMES REQUIRED N/A volumes Slow flow
6) TOTAL MINIMUM VOLUME TO BE PURGED N/A gallons
WELL MATERIAL: 2" PVC

Sample Depth (DPT only)
Screened Interval 40-55'
Collection Method Monsoon

STABILIZATION:

Time	Cumulative Volume (gal)	pH	Conductance (umhos/cm)	Temp (C)	Turbidity (NTUs)	REDOX (mV)	DO (mg/l)
300 0	0	5.66	130	17.80	999+	197	6.24
5		5.66	130	17.98	999+	198	6.13
10		5.65	130	18.25	999+	202	5.94
15		5.65	132	18.64	999+	207	5.50
20		5.65	133	18.83	802	208	5.44
25		5.65	133	19.21	783	208	5.40
30		5.65	133	19.25	776	208	5.38

Field Parameters taken with:

OBSERVATIONS:

Parameters Sampled:	Sample Containers; # of	Sample Volume	Preservation/Prep.
VOC	3	40ml	
Metals	1	500ml	HNO3

Stabilization Criteria
D.O. +/- 0.3 mg/l
Turb. +/- 10%
S.C. +/- 3%
ORP +/- 10 mV
pH +/- 0.1 unit

WATER MATRIX SAMPLING
FIELD DATA FORM

ERM

Sample Type: (Groundwater Well, G.W. DPT, Surface Water, other) MW
Sample Location: Josh
STATION (Well or DPT) # MW
SAMPLE I.D.# MW-6
DATE: 11-11-11
OFFICIAL SAMPLE TIME: 0910
Weather Conditions Sunny 37°F

PROJECT #:
PERSONNEL PRESENT DURING SAMPLING:
CM

WELL INFORMATION:
1) WELL DEPTH (FROM TOP OF MEASURING POINT): 55 feet
2) DEPTH TO WATER PRIOR TO PURGING: ____ feet
3) LENGTH OF WATER COLUMN IN WELL: ____ feet
4) VOLUME OF WATER STANDING IN WELL: ____ gallons
   mulitply #3 times 0.04 for 1" I.D. wells
   mulitply #3 times 0.163 for 2" I.D. wells
   mulitply #3 times 0.66 for 4" I.D. wells
   mulitply #3 times 1.5 for 6" I.D. wells
5) NUMBER OF PURGE VOLUMES REQUIRED N/A volumes } low flow
6) TOTAL MINIMUM VOLUME TO BE PURGED N/A gallons }
WELL MATERIAL: 2" PVC

Sample Depth (DPT only) ____
Screened Interval 40-55
Collection Method monsoon/poly tubing

STABILIZATION:

Time	Cumulative Volume (gal)	pH	Conductance (umhos/cm)	Temp (C)	Turbidity (NTUs)	REDOX (mV)	DO (mg/l)
1835 0	0	5.63	76	15.28	32.6	179	0.99
5	200 ml/min	5.61	75	14.64	23.6	183	0.87
10	↓	5.60	73	13.46	18.9	183	0.73
15	↓	5.59	70	12.93	11.6	183	0.67
20	↓	5.59	69	11.56	9.4	183	0.73
25	↓	5.59	68	11.16	8.6	183	0.74
30	↓	5.60	68	10.21	9.3	183	0.75
35	↓	5.59	67	10.02	9.0	183	0.76

Field Parameters taken with: YSI

OBSERVATIONS:

Parameters Sampled:	Sample Containers; # of	Sample Volume	Preservation/Prep.
VOC	3	40ml	—
Metals	1	500ml	HNO_3

Stabilization Criteria
D.O. +/- 0.3 mg/l
Turb. +/- 10%
S.C. +/- 3%
ORP +/- 10 mV
pH +/- 0.1 unit

WATER MATRIX SAMPLING FIELD DATA FORM

ERM

Sample Type: (Groundwater Well, G.W. DPT, Surface Water, other) MW
Sample Location: [illegible]
STATION (Well or DPT) # MW
SAMPLE I.D.# MW-7
DATE: 11-11-11
OFFICIAL SAMPLE TIME: 1030
Weather Conditions Sunny ~45° F

PROJECT #:
PERSONNEL PRESENT DURING SAMPLING:
CM

WELL INFORMATION:
1) WELL DEPTH (FROM TOP OF MEASURING POINT): 55 feet
2) DEPTH TO WATER PRIOR TO PURGING: feet
3) LENGTH OF WATER COLUMN IN WELL: feet
4) VOLUME OF WATER STANDING IN WELL: gallons
mulitply #3 times 0.04 for 1" I.D. wells
mulitply #3 times 0.163 for 2" I.D. wells
mulitply #3 times 0.66 for 4" I.D. wells
mulitply #3 times 1.5 for 6" I.D. wells
5) NUMBER OF PURGE VOLUMES REQUIRED NA volumes } low flow
6) TOTAL MINIMUM VOLUME TO BE PURGED NA gallons
WELL MATERIAL: 2" PVC

Sample Depth (DPT only) —
Screened Interval 40-55
Collection Method Monsoon/poly tubing

STABILIZATION:

Time	Cumulative Volume (gal)	pH	Conductance (umhos/cm)	Temp (C)	Turbidity (NTUs)	REDOX (mV)	DO (mg/l)
0	0	5.89	64	16.84	47.9	174	4.69
5	200ml/min	5.85	63	16.66	28.6	181	4.71
10		5.86	63	16.76	15.2	182	4.61
15		5.86	64	16.98	11.6	184	4.68
20		5.86	65	17.36	9.4	185	4.73
25		5.86	64	16.94	10.5	184	4.72
30		5.86	64	16.87	9.3	184	4.70

Field Parameters taken with: YSI 556

OBSERVATIONS:

Parameters Sampled:	Sample Containers; # of	Sample Volume	Preservation/Prep.
VOC	3	40ml	—
Metals	1	500ml	HNO3

Stabilization Criteria
D.O. +/- 0.3 mg/l
Turb. +/- 10%
S.C. +/- 3%
ORP +/- 10 mV
pH +/- 0.1 unit

WATER MATRIX SAMPLING
FIELD DATA FORM

ERM

Sample Type: (Groundwater Well, G.W. DPT, Surface Water, other) MW
Sample Location: Joslyn Clark
STATION (Well or DPT) # MW
SAMPLE I.D.# MW-8
DATE: 10-10-11
OFFICIAL SAMPLE TIME: 1715
Weather Conditions Cloudy

PROJECT #:
PERSONNEL PRESENT DURING SAMPLING:
Cm

WELL INFORMATION:
1) WELL DEPTH (FROM TOP OF MEASURING POINT): 55 feet
2) DEPTH TO WATER PRIOR TO PURGING: feet
3) LENGTH OF WATER COLUMN IN WELL: feet
4) VOLUME OF WATER STANDING IN WELL: gallons
mulitply #3 times 0.04 for 1" I.D. wells
mulitply #3 times 0.163 for 2" I.D. wells
mulitply #3 times 0.66 for 4" I.D. wells
mulitply #3 times 1.5 for 6" I.D. wells
5) NUMBER OF PURGE VOLUMES REQUIRED NA volumes
6) TOTAL MINIMUM VOLUME TO BE PURGED NA gallons
WELL MATERIAL: 2" PVC

Sample Depth (DPT only)
Screened Interval
Collection Method

STABILIZATION:

Time	Cumulative Volume (gal)	pH	Conductance (umhos/cm)	Temp (C)	Turbidity (NTUs)	REDOX (mV)	DO (mg/l)
1540 0	0	6.12	178	18.36	652	191	5.92
5	200ml/min	6.12	178	18.31	643.2	192	4.95
10		6.12	178	18.28	308	192	4.82
15		6.12	177	17.69	191	194	5.05
20		6.13	176	18.10	78.6	194	5.00
25		6.13	177	18.06	55.2	195	4.98
30		6.13	177	18.02	36.5	195	4.97

Field Parameters taken with: YSI 556

OBSERVATIONS:

Parameters Sampled:	Sample Containers; # of	Sample Volume	Preservation/Prep.
VOC	3	40ml	
Metals	1	500ml	HNO3

Stabilization Criteria
D.O. +/- 0.3 mg/l
Turb. +/- 10%
S.C. +/- 3%
ORP +/- 10 mV
pH +/- 0.1 unit

WATER MATRIX SAMPLING
FIELD DATA FORM

ERM

Other Sample times

Sample Type: (Groundwater Well, G.W. DPT, Surface Water, other) MW
Sample Location: ~~MW-9~~ Joslyn Clark
STATION (Well or DPT) #
SAMPLE I.D.# MW-9
DATE: 11-10-11
OFFICIAL SAMPLE TIME: 1345
Weather Conditions Rain

PROJECT #:
PERSONNEL PRESENT DURING SAMPLING:
Cm

WELL INFORMATION:

1) WELL DEPTH (FROM TOP OF MEASURING POINT): 55 feet
2) DEPTH TO WATER PRIOR TO PURGING: 48.00 feet
3) LENGTH OF WATER COLUMN IN WELL: feet
4) VOLUME OF WATER STANDING IN WELL: gallons

mulitply #3 times 0.04 for 1" I.D. wells
mulitply #3 times 0.163 for 2" I.D. wells
mulitply #3 times 0.66 for 4" I.D. wells
mulitply #3 times 1.5 for 6" I.D. wells

5) NUMBER OF PURGE VOLUMES REQUIRED NA volumes 3 low flow
6) TOTAL MINIMUM VOLUME TO BE PURGED gallons
WELL MATERIAL: 2" PVC

Sample Depth (DPT only)
Screened Interval 40-55
Collection Method

STABILIZATION:

Time	Cumulative Volume (gal)	pH	Conductance (umhos/cm)	Temp (C)	Turbidity (NTUs)	REDOX (mV)	DO (mg/l)
1315 0	0	5.89	76	18.20	361	186	5.95
5	200ml/min	5.88	77	18.13	264	182	5.64
10	|	5.88	78	18.21	132	190	5.52
15	|	5.89	80	19.04	56.2	189	5.75
20	|	5.89	82	19.93	29.6	185	5.44
25	|	5.89	82	20.06	13.9	185	5.36
30	↓	5.89	82	20.12	9.8	185	5.34

Field Parameters taken with: YST 556

OBSERVATIONS:

Parameters Sampled:	Sample Containers; # of	Sample Volume	Preservation/Prep.
VOC	3	40ml	—
Metals	1	500ml	HNO_3
PAH	2	1L	—

Stabilization Criteria
D.O. +/- 0.3 mg/l
Turb. +/- 10%
S.C. +/- 3%
ORP +/- 10 mV
pH +/- 0.1 unit

WATER MATRIX SAMPLING FIELD DATA FORM

ERM

Sample Type: (Groundwater Well, G.W. DPT, Surface Water, other) MW
Sample Location: Joslyn Clay
STATION (Well or DPT) # well
SAMPLE I.D.# MW-10
DATE: 11-10-11
OFFICIAL SAMPLE TIME: 1220
Weather Conditions Rain 60°F

PROJECT #:
PERSONNEL PRESENT DURING SAMPLING:
Cm

WELL INFORMATION:

1) WELL DEPTH (FROM TOP OF MEASURING POINT): 60 feet
2) DEPTH TO WATER PRIOR TO PURGING: [illegible] feet
3) LENGTH OF WATER COLUMN IN WELL: feet
4) VOLUME OF WATER STANDING IN WELL: gallons

mulitply #3 times 0.04 for 1" I.D. wells
mulitply #3 times 0.163 for 2" I.D. wells
mulitply #3 times 0.66 for 4" I.D. wells
mulitply #3 times 1.5 for 6" I.D. wells

5) NUMBER OF PURGE VOLUMES REQUIRED NA volumes } low flow
6) TOTAL MINIMUM VOLUME TO BE PURGED NA gallons }
WELL MATERIAL: 2" PVC

Sample Depth (DPT only)
Screened Interval
Collection Method

STABILIZATION:

Time	Cumulative Volume (gal)	pH	Conductance (umhos/cm)	Temp (C)	Turbidity (NTUs)	REDOX (mV)	DO (mg/l)
1145 6	0	6.09	103	16.53	700	157	6.61
5		6.08	104	16.56	320	160	6.58
10		6.07	104	16.57	253	162	6.55
15		6.07	104	16.65	236	164	6.32
20		6.08	105	16.68	190	166	6.42
25		6.08	105	16.77	192	166	6.44
30		6.08	105	16.81	183	166	6.45

Field Parameters taken with: YSI 556 & turbidity meter

OBSERVATIONS: Purged @ 200 ml/min Had to decant Sample

Parameters Sampled:	Sample Containers; # of	Sample Volume	Preservation/Prep.
VOC	3	40ml	
Metals	1	500ml	HNO3

Stabilization Criteria
D.O. +/- 0.3 mg/l
Turb. +/- 10%
S.C. +/- 3%
ORP +/- 10 mV
pH +/- 0.1 unit

WATER MATRIX SAMPLING
FIELD DATA FORM

ERM

Sample Type: (Groundwater Well, G.W. DPT, Surface Water, other) MW
Sample Location: Joslyn Clark
STATION (Well or DPT) # MW-10D
SAMPLE I.D.# MW-10D
DATE: 11-10-11
OFFICIAL SAMPLE TIME: 1120
Weather Conditions Rain 60°F

PROJECT #:
PERSONNEL PRESENT DURING SAMPLING:
CM

WELL INFORMATION:
1) WELL DEPTH (FROM TOP OF MEASURING POINT): 110 feet
2) DEPTH TO WATER PRIOR TO PURGING: 44.56 feet
3) LENGTH OF WATER COLUMN IN WELL: feet
4) VOLUME OF WATER STANDING IN WELL: gallons
mulitply #3 times 0.04 for 1" I.D. wells
mulitply #3 times 0.163 for 2" I.D. wells
mulitply #3 times 0.66 for 4" I.D. wells
mulitply #3 times 1.5 for 6" I.D. wells
5) NUMBER OF PURGE VOLUMES REQUIRED NA volumes } low flow
6) TOTAL MINIMUM VOLUME TO BE PURGED gallons }
WELL MATERIAL: 2" PVC w/ 6" Casing

Sample Depth (DPT only)
Screened Interval
Collection Method monsoon pump & tubing

STABILIZATION: DTW

Time	~~Cumulative Volume~~ (gal)	pH	µ S/cm Conductance (umhos/cm)	Temp (C)	Turbidity (NTUs)	REDOX (mV)	DO (mg/l)
1050 0	47.53 0	6.70	166	16.62	7.5	112	6.75
5	47.41	6.42	167	16.76	7.3	115	6.72
10	46.92	6.72	166	16.64	7.6	119	6.31
15	46.81	6.73	168	16.55	8.4	122	6.07
20	46.78	6.77	169	16.56	8.7	124	6.24
25	46.75	6.78	169	16.69	8.3	124	6.26
30	46.73	6.78	170	16.71	7.6	125	6.27

Field Parameters taken with: YSI 556

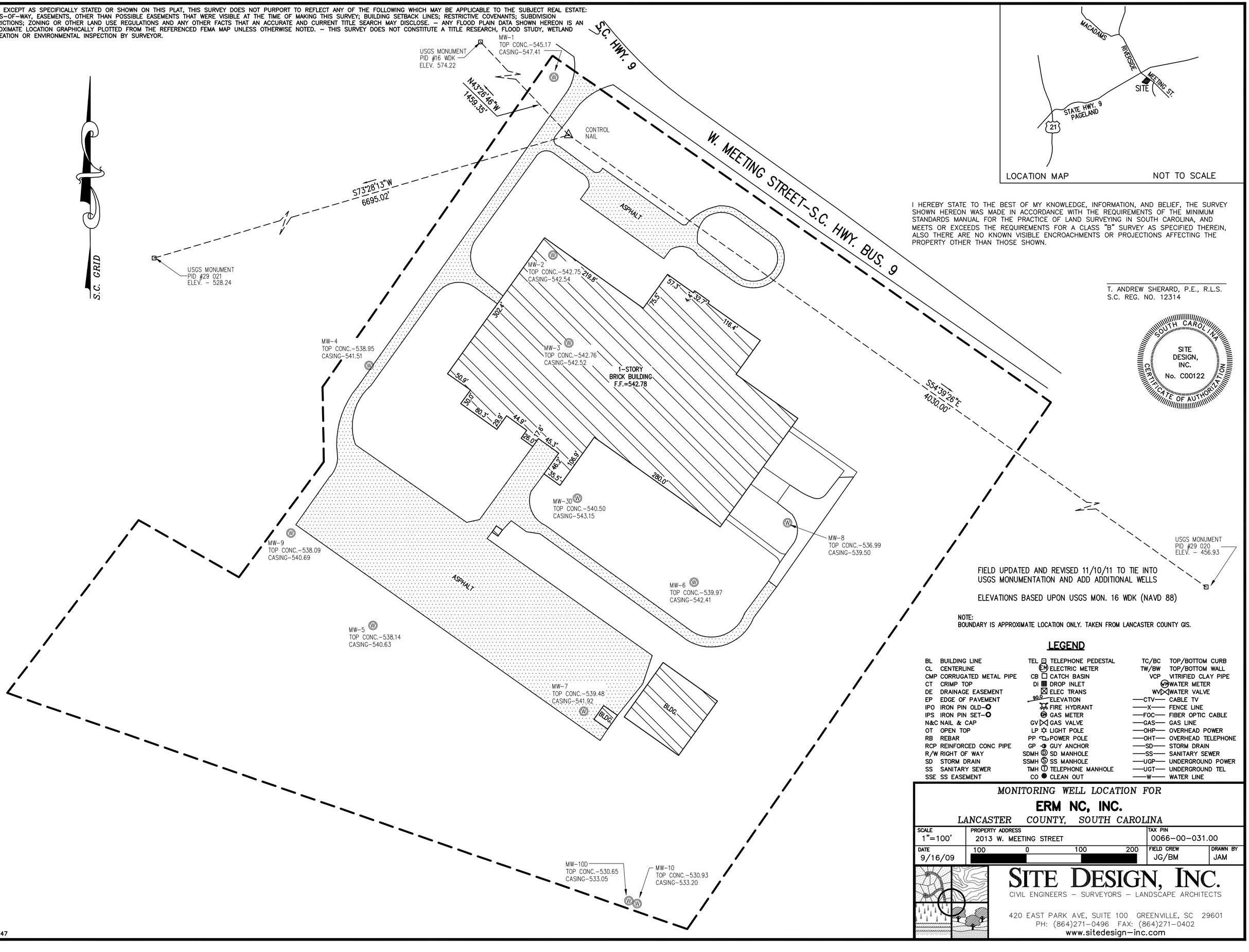
OBSERVATIONS: 200 ml/min low flow

Parameters Sampled:	Sample Containers; # of	Sample Volume	Preservation/Prep.
TCL VOCs			HCl
~~TOTAL~~ Metals			HNO3

Stabilization Criteria
D.O. +/- 0.3 mg/l
Turb. +/- 10%
S.C. +/- 3%
ORP +/- 10 mV
pH +/- 0.1 unit

Appendix D
Site Survey

NOTE: EXCEPT AS SPECIFICALLY STATED OR SHOWN ON THIS PLAT, THIS SURVEY DOES NOT PURPORT TO REFLECT ANY OF THE FOLLOWING WHICH MAY BE APPLICABLE TO THE SUBJECT REAL ESTATE: RIGHTS-OF-WAY, EASEMENTS, OTHER THAN POSSIBLE EASEMENTS THAT WERE VISIBLE AT THE TIME OF MAKING THIS SURVEY; BUILDING SETBACK LINES; RESTRICTIVE COVENANTS; SUBDIVISION RESTRICTIONS; ZONING OR OTHER LAND USE REGULATIONS AND ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. – ANY FLOOD PLAIN DATA SHOWN HEREON IS AN APPROXIMATE LOCATION GRAPHICALLY PLOTTED FROM THE REFERENCED FEMA MAP UNLESS OTHERWISE NOTED. – THIS SURVEY DOES NOT CONSTITUTE A TITLE RESEARCH, FLOOD STUDY, WETLAND DELINEATION OR ENVIRONMENTAL INSPECTION BY SURVEYOR.



LOCATION MAP NOT TO SCALE

I HEREBY STATE TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "B" SURVEY AS SPECIFIED THEREIN, ALSO THERE ARE NO KNOWN VISIBLE ENCROACHMENTS OR PROJECTIONS AFFECTING THE PROPERTY OTHER THAN THOSE SHOWN.

T. ANDREW SHERARD, P.E., R.L.S.
S.C. REG. NO. 12314

SOUTH CAROLINA
SITE DESIGN, INC.
No. C00122
CERTIFICATE OF AUTHORIZATION

FIELD UPDATED AND REVISED 11/10/11 TO TIE INTO USGS MONUMENTATION AND ADD ADDITIONAL WELLS

ELEVATIONS BASED UPON USGS MON. 16 WDK (NAVD 88)

NOTE:
BOUNDARY IS APPROXIMATE LOCATION ONLY. TAKEN FROM LANCASTER COUNTY GIS.

LEGEND

BL	BUILDING LINE	TEL	TELEPHONE PEDESTAL	TC/BC	TOP/BOTTOM CURB
CL	CENTERLINE	EM	ELECTRIC METER	TW/BW	TOP/BOTTOM WALL
CMP	CORRUGATED METAL PIPE	CB	CATCH BASIN	VCP	VITRIFIED CLAY PIPE
CT	CRIMP TOP	DI	DROP INLET	WM	WATER METER
DE	DRAINAGE EASEMENT		ELEC TRANS	WV	WATER VALVE
EP	EDGE OF PAVEMENT	90.0	ELEVATION	CTV	CABLE TV
IPO	IRON PIN OLD-O		FIRE HYDRANT	X	FENCE LINE
IPS	IRON PIN SET-O	GM	GAS METER	FOC	FIBER OPTIC CABLE
N&C	NAIL & CAP	GV	GAS VALVE	GAS	GAS LINE
OT	OPEN TOP	LP	LIGHT POLE	OHP	OVERHEAD POWER
RB	REBAR	PP	POWER POLE	OHT	OVERHEAD TELEPHONE
RCP	REINFORCED CONC PIPE	GP	GUY ANCHOR	SD	STORM DRAIN
R/W	RIGHT OF WAY	SDMH	SD MANHOLE	SS	SANITARY SEWER
SD	STORM DRAIN	SSMH	SS MANHOLE	UGP	UNDERGROUND POWER
SS	SANITARY SEWER	TMH	TELEPHONE MANHOLE	UGT	UNDERGROUND TEL
SSE	SS EASEMENT	CO	CLEAN OUT	W	WATER LINE

MONITORING WELL LOCATION FOR

ERM NC, INC.

LANCASTER COUNTY, SOUTH CAROLINA

SCALE	PROPERTY ADDRESS	TAX PIN	
1"=100'	2013 W. MEETING STREET	0066-00-031.00	
DATE	100 0 100 200	FIELD CREW	DRAWN BY
9/16/09		JG/BM	JAM

SITE DESIGN, INC.
CIVIL ENGINEERS – SURVEYORS – LANDSCAPE ARCHITECTS
420 EAST PARK AVE, SUITE 100 GREENVILLE, SC 29601
PH: (864)271-0496 FAX: (864)271-0402
www.sitedesign-inc.com

S090247

Appendix E

Soil Sampling Laboratory Report

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

ERM-Southeast, Inc
8000 Corporate Center Drive
Suite 200
Charlotte, NC 28226
Attention: Michael Pressley

Project Name: **Joslyn Clark**

Project Number: **0145499**

Lot Number: **MJ11034**

Date Completed: **10/19/2011**

Kelly M. Maberry
Project Manager

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

MJ11034

Case Narrative
ERM-Southeast, Inc
Lot Number: MJ11034

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.

Shealy is not NELAC certified for Phosphorus by 365.1 but is certified in SC and NC.

Shealy is not NELAC certified for VPH, but is certified for VPH in NC.

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

GC/MS Volatiles
The MS associated with sample -006 had MTBE and methylene chloride recovered outside of the acceptance limits. The LCS/LCSD were recovered within the required acceptance limits; therefore, this demonstrates a matrix effect and data quality is not impacted.

Inorganic Metals
The method blank associated with batch 69547 had antimony, calcium, lead and sodium detected at a concentration that was above the MDL but below ½ the PQL. All samples associated with this method blank have detections for these metals at least ten times greater than the detection in the blank or are "J" flagged. These samples have been flagged with a "B".

Sample Summary
ERM-Southeast, Inc
Lot Number: MJ11034

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	GP-14 6-8'	Solid	10/10/2011 1020	10/11/2011
002	GP-15 6-8'	Solid	10/10/2011 1045	10/11/2011
003	GP-16 10-12'	Solid	10/10/2011 1105	10/11/2011
004	GP-16 26-28'	Solid	10/10/2011 1120	10/11/2011
005	GP-16 38-40'	Solid	10/10/2011 1140	10/11/2011
006	Dup-1	Solid	10/10/2011	10/11/2011

(6 samples)

Executive Summary
ERM-Southeast, Inc
Lot Number: MJ11034

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	GP-14 6-8'	Solid	Aluminum	6010C	10000		mg/kg	10
001	GP-14 6-8'	Solid	Barium	6010C	9.5		mg/kg	10
001	GP-14 6-8'	Solid	Beryllium	6010C	0.30		mg/kg	10
001	GP-14 6-8'	Solid	Chromium	6010C	1.7		mg/kg	10
001	GP-14 6-8'	Solid	Cobalt	6010C	1.5	J	mg/kg	10
001	GP-14 6-8'	Solid	Copper	6010C	3.2		mg/kg	10
001	GP-14 6-8'	Solid	Iron	6010C	22000		mg/kg	10
001	GP-14 6-8'	Solid	Lead	6010C	4.3	B	mg/kg	10
001	GP-14 6-8'	Solid	Magnesium	6010C	440		mg/kg	10
001	GP-14 6-8'	Solid	Manganese	6010C	39		mg/kg	10
001	GP-14 6-8'	Solid	Nickel	6010C	3.2		mg/kg	10
001	GP-14 6-8'	Solid	Potassium	6010C	420		mg/kg	10
001	GP-14 6-8'	Solid	Sodium	6010C	29	BJ	mg/kg	10
001	GP-14 6-8'	Solid	Vanadium	6010C	30		mg/kg	10
001	GP-14 6-8'	Solid	Zinc	6010C	9.9		mg/kg	10
002	GP-15 6-8'	Solid	Aluminum	6010C	17000		mg/kg	14
002	GP-15 6-8'	Solid	Arsenic	6010C	0.84	J	mg/kg	14
002	GP-15 6-8'	Solid	Barium	6010C	13		mg/kg	14
002	GP-15 6-8'	Solid	Beryllium	6010C	1.3		mg/kg	14
002	GP-15 6-8'	Solid	Chromium	6010C	2.7		mg/kg	14
002	GP-15 6-8'	Solid	Cobalt	6010C	1.3	J	mg/kg	14
002	GP-15 6-8'	Solid	Copper	6010C	9.6		mg/kg	14
002	GP-15 6-8'	Solid	Iron	6010C	35000		mg/kg	14
002	GP-15 6-8'	Solid	Lead	6010C	8.1	B	mg/kg	14
002	GP-15 6-8'	Solid	Magnesium	6010C	310	J	mg/kg	14
002	GP-15 6-8'	Solid	Manganese	6010C	53		mg/kg	14
002	GP-15 6-8'	Solid	Nickel	6010C	2.2	J	mg/kg	14
002	GP-15 6-8'	Solid	Potassium	6010C	240	J	mg/kg	14
002	GP-15 6-8'	Solid	Silver	6010C	0.15	J	mg/kg	14
002	GP-15 6-8'	Solid	Vanadium	6010C	98		mg/kg	14
002	GP-15 6-8'	Solid	Zinc	6010C	21		mg/kg	14
003	GP-16 10-12'	Solid	Trichloroethene	8260B	3.8	J	ug/kg	17
003	GP-16 10-12'	Solid	Aluminum	6010C	11000		mg/kg	19
003	GP-16 10-12'	Solid	Arsenic	6010C	0.65	J	mg/kg	19
003	GP-16 10-12'	Solid	Barium	6010C	14		mg/kg	19
003	GP-16 10-12'	Solid	Beryllium	6010C	0.31		mg/kg	19
003	GP-16 10-12'	Solid	Chromium	6010C	0.90		mg/kg	19
003	GP-16 10-12'	Solid	Cobalt	6010C	1.2	J	mg/kg	19
003	GP-16 10-12'	Solid	Copper	6010C	4.2		mg/kg	19
003	GP-16 10-12'	Solid	Iron	6010C	33000		mg/kg	19
003	GP-16 10-12'	Solid	Lead	6010C	9.7	B	mg/kg	19
003	GP-16 10-12'	Solid	Magnesium	6010C	570		mg/kg	19
003	GP-16 10-12'	Solid	Manganese	6010C	140		mg/kg	19
003	GP-16 10-12'	Solid	Nickel	6010C	1.0	J	mg/kg	19
003	GP-16 10-12'	Solid	Potassium	6010C	500		mg/kg	19

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	GP-16 10-12'	Solid	Silver	6010C	0.072	J	mg/kg	19
003	GP-16 10-12'	Solid	Vanadium	6010C	46		mg/kg	19
003	GP-16 10-12'	Solid	Zinc	6010C	19		mg/kg	19
004	GP-16 26-28'	Solid	Chloroform	8260B	2.0	J	ug/kg	21
004	GP-16 26-28'	Solid	cis-1,2-Dichloroethene	8260B	10		ug/kg	21
004	GP-16 26-28'	Solid	Tetrachloroethene	8260B	25		ug/kg	21
004	GP-16 26-28'	Solid	1,1,2-Trichloroethane	8260B	1.9	J	ug/kg	21
004	GP-16 26-28'	Solid	Trichloroethene	8260B	290		ug/kg	22
004	GP-16 26-28'	Solid	Aluminum	6010C	34000		mg/kg	24
004	GP-16 26-28'	Solid	Antimony	6010C	2.5	BJ	mg/kg	24
004	GP-16 26-28'	Solid	Barium	6010C	100		mg/kg	24
004	GP-16 26-28'	Solid	Beryllium	6010C	0.72	J	mg/kg	24
004	GP-16 26-28'	Solid	Cobalt	6010C	16		mg/kg	24
004	GP-16 26-28'	Solid	Copper	6010C	1.5	J	mg/kg	24
004	GP-16 26-28'	Solid	Iron	6010C	25000		mg/kg	24
004	GP-16 26-28'	Solid	Lead	6010C	5.7	BJ	mg/kg	24
004	GP-16 26-28'	Solid	Magnesium	6010C	3000		mg/kg	24
004	GP-16 26-28'	Solid	Manganese	6010C	820		mg/kg	24
004	GP-16 26-28'	Solid	Nickel	6010C	3.8	J	mg/kg	24
004	GP-16 26-28'	Solid	Potassium	6010C	2600	J	mg/kg	24
004	GP-16 26-28'	Solid	Vanadium	6010C	32		mg/kg	24
004	GP-16 26-28'	Solid	Zinc	6010C	47		mg/kg	24
005	GP-16 38-40'	Solid	Chloroform	8260B	5.8	J	ug/kg	26
005	GP-16 38-40'	Solid	1,1-Dichloroethene	8260B	7.8		ug/kg	26
005	GP-16 38-40'	Solid	cis-1,2-Dichloroethene	8260B	37		ug/kg	26
005	GP-16 38-40'	Solid	Tetrachloroethene	8260B	120		ug/kg	26
005	GP-16 38-40'	Solid	1,1,2-Trichloroethane	8260B	4.5	J	ug/kg	27
005	GP-16 38-40'	Solid	Trichloroethene	8260B	2000		ug/kg	27
005	GP-16 38-40'	Solid	Aluminum	6010C	26000		mg/kg	29
005	GP-16 38-40'	Solid	Arsenic	6010C	4.2	J	mg/kg	29
005	GP-16 38-40'	Solid	Barium	6010C	230		mg/kg	29
005	GP-16 38-40'	Solid	Beryllium	6010C	1.5	J	mg/kg	29
005	GP-16 38-40'	Solid	Calcium	6010C	720	BJ	mg/kg	29
005	GP-16 38-40'	Solid	Cobalt	6010C	20		mg/kg	29
005	GP-16 38-40'	Solid	Copper	6010C	5.2		mg/kg	29
005	GP-16 38-40'	Solid	Iron	6010C	31000		mg/kg	29
005	GP-16 38-40'	Solid	Lead	6010C	15	B	mg/kg	29
005	GP-16 38-40'	Solid	Magnesium	6010C	4100		mg/kg	29
005	GP-16 38-40'	Solid	Manganese	6010C	2500		mg/kg	29
005	GP-16 38-40'	Solid	Nickel	6010C	7.4	J	mg/kg	29
005	GP-16 38-40'	Solid	Potassium	6010C	2700	J	mg/kg	29
005	GP-16 38-40'	Solid	Vanadium	6010C	38		mg/kg	29
005	GP-16 38-40'	Solid	Zinc	6010C	82		mg/kg	29
005	GP-16 38-40'	Solid	Mercury	7471B	0.037	J	mg/kg	30
006	Dup-1	Solid	Tetrachloroethene	8260B	0.82	J	ug/kg	31
006	Dup-1	Solid	Aluminum	6010C	27000		mg/kg	34
006	Dup-1	Solid	Antimony	6010C	4.3	BJ	mg/kg	34
006	Dup-1	Solid	Arsenic	6010C	2.6	J	mg/kg	34

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
006	Dup-1	Solid	Barium	6010C	150		mg/kg	34
006	Dup-1	Solid	Beryllium	6010C	0.81	J	mg/kg	34
006	Dup-1	Solid	Cobalt	6010C	55		mg/kg	34
006	Dup-1	Solid	Copper	6010C	1.3	J	mg/kg	34
006	Dup-1	Solid	Iron	6010C	28000		mg/kg	34
006	Dup-1	Solid	Lead	6010C	15	B	mg/kg	34
006	Dup-1	Solid	Magnesium	6010C	2700	J	mg/kg	34
006	Dup-1	Solid	Manganese	6010C	1800		mg/kg	34
006	Dup-1	Solid	Nickel	6010C	2.7	J	mg/kg	34
006	Dup-1	Solid	Potassium	6010C	2900	J	mg/kg	34
006	Dup-1	Solid	Selenium	6010C	4.2	J	mg/kg	34
006	Dup-1	Solid	Thallium	6010C	7.6	J	mg/kg	34
006	Dup-1	Solid	Vanadium	6010C	34		mg/kg	34
006	Dup-1	Solid	Zinc	6010C	54		mg/kg	34

(107 detections)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-001
Description: GP-14 6-8'
Matrix: Solid
Date Sampled: 10/10/2011 1020
% Solids: 66.5 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	10/12/2011 1817	SAS		69536	5.68

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		26	8.9	ug/kg	1
Benzene	71-43-2	8260B	ND		6.6	1.5	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.6	2.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.6	0.93	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.6	2.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		13	3.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.6	1.7	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.6	2.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.6	2.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.6	1.7	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.6	1.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.6	1.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.6	0.89	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.6	2.0	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.6	2.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.6	1.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.6	2.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.6	2.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.6	2.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.6	2.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.6	0.97	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.6	1.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.6	2.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.6	1.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.6	2.0	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.6	1.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.6	0.90	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.6	1.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.6	2.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	1.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.6	0.30	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.6	1.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.6	0.53	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	2.0	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.6	0.54	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.6	3.4	ug/kg	1
Styrene	100-42-5	8260B	ND		6.6	1.5	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.6	0.62	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.6	0.66	ug/kg	1
Toluene	108-88-3	8260B	ND		6.6	2.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.6	0.83	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.6	2.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.6	1.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.6	1.0	ug/kg	1

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

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-001
Description: GP-14 6-8'
Matrix: Solid
Date Sampled: 10/10/2011 1020
% Solids: 66.5 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	10/12/2011 1817	SAS		69536	5.68

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.6	2.5	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.6	2.0	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.6	1.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.6	3.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142
Bromofluorobenzene		116	47-138
Toluene-d8		100	68-124

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

Semivolatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Description: GP-14 6-8'
Date Sampled: 10/10/2011 1020
Date Received: 10/11/2011

Laboratory ID: MJ11034-001
Matrix: Solid
% Solids: 66.5 10/12/2011 2132

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	10/17/2011 2133	WD	10/12/2011 1824	69554

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		490	15	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		490	19	ug/kg	1
Anthracene	120-12-7	8270D	ND		490	22	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		490	16	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		490	36	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		490	33	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		490	33	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		490	40	ug/kg	1
Chrysene	218-01-9	8270D	ND		490	15	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		490	32	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		490	15	ug/kg	1
Fluorene	86-73-7	8270D	ND		490	19	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		490	44	ug/kg	1
Naphthalene	91-20-3	8270D	ND		490	21	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		490	20	ug/kg	1
Pyrene	129-00-0	8270D	ND		490	21	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		67	33-102
Nitrobenzene-d5		69	22-109
Terphenyl-d14		74	41-120

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

ICP-AES

Client: ERM-Southeast, Inc
Description: GP-14 6-8'
Date Sampled: 10/10/2011 1020
Date Received: 10/11/2011

Laboratory ID: MJ11034-001
Matrix: Solid
% Solids: 66.5 10/12/2011 2132

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	10/12/2011 2351	KJC	10/12/2011 1929	69547
2	3050B	6010C	1	10/13/2011 2209	KJC	10/12/2011 1929	69547

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6010C	10000		14	1.8	mg/kg	1
Antimony	7440-36-0	6010C	ND		0.70	0.25	mg/kg	2
Arsenic	7440-38-2	6010C	ND		0.70	0.26	mg/kg	1
Barium	7440-39-3	6010C	9.5		1.8	0.13	mg/kg	1
Beryllium	7440-41-7	6010C	0.30		0.28	0.039	mg/kg	1
Cadmium	7440-43-9	6010C	ND		0.14	0.015	mg/kg	1
Calcium	7440-70-2	6010C	ND		350	25	mg/kg	1
Chromium	7440-47-3	6010C	1.7		0.35	0.071	mg/kg	1
Cobalt	7440-48-4	6010C	1.5	J	1.8	0.13	mg/kg	1
Copper	7440-50-8	6010C	3.2		0.35	0.068	mg/kg	1
Iron	7439-89-6	6010C	22000		7.0	2.3	mg/kg	1
Lead	7439-92-1	6010C	4.3	B	0.70	0.13	mg/kg	1
Magnesium	7439-95-4	6010C	440		350	26	mg/kg	1
Manganese	7439-96-5	6010C	39		1.1	0.081	mg/kg	1
Nickel	7440-02-0	6010C	3.2		2.8	0.21	mg/kg	1
Potassium	7440-09-7	6010C	420		350	15	mg/kg	1
Selenium	7782-49-2	6010C	ND		0.70	0.24	mg/kg	1
Silver	7440-22-4	6010C	ND		0.35	0.059	mg/kg	1
Sodium	7440-23-5	6010C	29	BJ	350	24	mg/kg	1
Thallium	7440-28-0	6010C	ND		3.5	0.36	mg/kg	1
Vanadium	7440-62-2	6010C	30		3.5	0.21	mg/kg	1
Zinc	7440-66-6	6010C	9.9		3.5	0.48	mg/kg	1

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

CVAA

Client: ERM-Southeast, Inc
Description: GP-14 6-8'
Date Sampled: 10/10/2011 1020
Date Received: 10/11/2011

Laboratory ID: MJ11034-001
Matrix: Solid
% Solids: 66.5 10/12/2011 2132

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	10/13/2011 1243	BNW	10/13/2011 1103	69574

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.11	0.0077	mg/kg	1

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

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-002
Description: GP-15 6-8'
Matrix: Solid
Date Sampled: 10/10/2011 1045
% Solids: 69.7 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	10/12/2011 1840	SAS		69536	5.34

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		27	9.0	ug/kg	1
Benzene	71-43-2	8260B	ND		6.7	1.5	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.7	2.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.7	0.94	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.7	2.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		13	3.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.7	1.7	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.7	2.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.7	2.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.7	1.7	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.7	1.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.7	1.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.7	0.91	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.7	2.0	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.7	2.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.7	1.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.7	2.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.7	2.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.7	2.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.7	2.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.7	0.98	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.7	1.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.7	2.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.7	1.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.7	2.0	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.7	1.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.7	0.91	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.7	1.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.7	2.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	1.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.7	0.31	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.7	1.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.7	0.54	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	2.0	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.7	0.55	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.7	3.5	ug/kg	1
Styrene	100-42-5	8260B	ND		6.7	1.5	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.7	0.63	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.7	0.67	ug/kg	1
Toluene	108-88-3	8260B	ND		6.7	2.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.7	0.85	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.7	2.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.7	1.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.7	1.1	ug/kg	1

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

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-002
Description: GP-15 6-8'
Matrix: Solid
Date Sampled: 10/10/2011 1045
% Solids: 69.7 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	10/12/2011 1840	SAS		69536	5.34

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.7	2.6	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.7	2.0	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.7	1.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.7	3.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		95	68-124

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

ICP-AES

Client: ERM-Southeast, Inc
Description: GP-15 6-8'
Date Sampled: 10/10/2011 1045
Date Received: 10/11/2011

Laboratory ID: MJ11034-002
Matrix: Solid
% Solids: 69.7 10/12/2011 2132

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	10/12/2011 2357	KJC	10/12/2011 1929	69547
2	3050B	6010C	2	10/13/2011 2215	KJC	10/12/2011 1929	69547
3	3050B	6010C	2	10/14/2011 2038	KJC	10/12/2011 1929	69547

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6010C	17000		14	1.8	mg/kg	1
Antimony	7440-36-0	6010C	ND		1.4	0.51	mg/kg	2
Arsenic	7440-38-2	6010C	0.84	J	1.4	0.53	mg/kg	2
Barium	7440-39-3	6010C	13		1.9	0.13	mg/kg	1
Beryllium	7440-41-7	6010C	1.3		0.29	0.040	mg/kg	1
Cadmium	7440-43-9	6010C	ND		0.29	0.030	mg/kg	2
Calcium	7440-70-2	6010C	ND		360	25	mg/kg	1
Chromium	7440-47-3	6010C	2.7		0.71	0.14	mg/kg	2
Cobalt	7440-48-4	6010C	1.3	J	1.9	0.13	mg/kg	1
Copper	7440-50-8	6010C	9.6		0.71	0.14	mg/kg	2
Iron	7439-89-6	6010C	35000		14	4.7	mg/kg	2
Lead	7439-92-1	6010C	8.1	B	1.4	0.26	mg/kg	3
Magnesium	7439-95-4	6010C	310	J	360	26	mg/kg	1
Manganese	7439-96-5	6010C	53		2.1	0.16	mg/kg	2
Nickel	7440-02-0	6010C	2.2	J	2.9	0.21	mg/kg	1
Potassium	7440-09-7	6010C	240	J	360	16	mg/kg	1
Selenium	7782-49-2	6010C	ND		1.4	0.50	mg/kg	2
Silver	7440-22-4	6010C	0.15	J	0.71	0.12	mg/kg	2
Sodium	7440-23-5	6010C	ND		360	24	mg/kg	1
Thallium	7440-28-0	6010C	ND		7.1	0.73	mg/kg	2
Vanadium	7440-62-2	6010C	98		3.6	0.21	mg/kg	1
Zinc	7440-66-6	6010C	21		7.1	0.97	mg/kg	3

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

CVAA

Client: ERM-Southeast, Inc
Description: GP-15 6-8'
Date Sampled: 10/10/2011 1045
Date Received: 10/11/2011

Laboratory ID: MJ11034-002
Matrix: Solid
% Solids: 69.7 10/12/2011 2132

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	10/13/2011 1245	BNW	10/13/2011 1103	69574

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.11	0.0078	mg/kg	1

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

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-003
Description: GP-16 10-12'
Matrix: Solid
Date Sampled: 10/10/2011 1105
% Solids: 66.8 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	10/12/2011 1905	SAS		69536	5.42

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		28	9.2	ug/kg	1
Benzene	71-43-2	8260B	ND		6.9	1.5	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.9	2.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.9	0.97	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.9	2.5	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		14	3.3	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.9	1.8	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.9	2.5	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.9	2.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.9	1.8	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.9	1.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.9	1.4	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.9	0.93	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.9	2.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.9	2.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.9	1.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.9	2.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.9	2.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.9	2.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.9	2.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.9	1.0	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.9	1.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.9	2.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.9	1.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.9	2.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.9	1.3	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.9	0.94	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.9	1.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.9	2.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		14	1.8	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.9	0.32	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.9	1.4	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.9	0.55	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		14	2.1	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.9	0.57	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.9	3.6	ug/kg	1
Styrene	100-42-5	8260B	ND		6.9	1.5	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.9	0.65	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.9	0.69	ug/kg	1
Toluene	108-88-3	8260B	ND		6.9	2.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.9	0.87	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.9	2.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.9	1.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.9	1.1	ug/kg	1

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

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-003
Description: GP-16 10-12'
Matrix: Solid
Date Sampled: 10/10/2011 1105
% Solids: 66.8 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	10/12/2011 1905	SAS		69536	5.42

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	3.8	J	6.9	2.6	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.9	2.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.9	1.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.9	4.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		108	47-138
Toluene-d8		94	68-124

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

Semivolatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-003
Description: GP-16 10-12'
Matrix: Solid
Date Sampled: 10/10/2011 1105
% Solids: 66.8 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	10/17/2011 2152	WD	10/12/2011 1824	69554

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		490	15	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		490	19	ug/kg	1
Anthracene	120-12-7	8270D	ND		490	22	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		490	16	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		490	36	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		490	33	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		490	33	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		490	40	ug/kg	1
Chrysene	218-01-9	8270D	ND		490	15	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		490	33	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		490	15	ug/kg	1
Fluorene	86-73-7	8270D	ND		490	19	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		490	44	ug/kg	1
Naphthalene	91-20-3	8270D	ND		490	21	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		490	20	ug/kg	1
Pyrene	129-00-0	8270D	ND		490	21	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		59	33-102
Nitrobenzene-d5		60	22-109
Terphenyl-d14		69	41-120

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

ICP-AES

Client: ERM-Southeast, Inc
Description: GP-16 10-12'
Date Sampled: 10/10/2011 1105
Date Received: 10/11/2011

Laboratory ID: MJ11034-003
Matrix: Solid
% Solids: 66.8 10/12/2011 2132

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	10/13/2011 0003	KJC	10/12/2011 1929	69547
2	3050B	6010C	1	10/13/2011 2221	KJC	10/12/2011 1929	69547

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6010C	11000		14	1.8	mg/kg	1
Antimony	7440-36-0	6010C	ND		0.70	0.25	mg/kg	2
Arsenic	7440-38-2	6010C	0.65	J	0.70	0.26	mg/kg	1
Barium	7440-39-3	6010C	14		1.8	0.13	mg/kg	1
Beryllium	7440-41-7	6010C	0.31		0.28	0.039	mg/kg	1
Cadmium	7440-43-9	6010C	ND		0.14	0.015	mg/kg	1
Calcium	7440-70-2	6010C	ND		350	25	mg/kg	1
Chromium	7440-47-3	6010C	0.90		0.35	0.071	mg/kg	1
Cobalt	7440-48-4	6010C	1.2	J	1.8	0.13	mg/kg	1
Copper	7440-50-8	6010C	4.2		0.35	0.068	mg/kg	1
Iron	7439-89-6	6010C	33000		7.0	2.3	mg/kg	1
Lead	7439-92-1	6010C	9.7	B	0.70	0.13	mg/kg	1
Magnesium	7439-95-4	6010C	570		350	26	mg/kg	1
Manganese	7439-96-5	6010C	140		1.0	0.081	mg/kg	1
Nickel	7440-02-0	6010C	1.0	J	2.8	0.21	mg/kg	1
Potassium	7440-09-7	6010C	500		350	15	mg/kg	1
Selenium	7782-49-2	6010C	ND		0.70	0.24	mg/kg	1
Silver	7440-22-4	6010C	0.072	J	0.35	0.059	mg/kg	1
Sodium	7440-23-5	6010C	ND		350	24	mg/kg	1
Thallium	7440-28-0	6010C	ND		3.5	0.36	mg/kg	1
Vanadium	7440-62-2	6010C	46		3.5	0.21	mg/kg	1
Zinc	7440-66-6	6010C	19		3.5	0.47	mg/kg	1

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

CVAA

Client: ERM-Southeast, Inc
Description: GP-16 10-12'
Date Sampled: 10/10/2011 1105
Date Received: 10/11/2011

Laboratory ID: MJ11034-003
Matrix: Solid
% Solids: 66.8 10/12/2011 2132

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	10/13/2011 1248	BNW	10/13/2011 1103	69574

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.12	0.0086	mg/kg	1

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

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-004
Description: GP-16 26-28'
Matrix: Solid
Date Sampled: 10/10/2011 1120
% Solids: 76.9 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	10/12/2011 1928	SAS		69536	5.73

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		23	7.6	ug/kg	1
Benzene	71-43-2	8260B	ND		5.7	1.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.7	1.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.7	0.79	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.7	2.0	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		11	2.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.7	1.5	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.7	2.0	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.7	1.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.7	1.5	ug/kg	1
Chloroform	67-66-3	8260B	2.0	J	5.7	0.94	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.7	1.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.7	0.77	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.7	1.7	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.7	1.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.7	0.96	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.7	1.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.7	1.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.7	1.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.7	1.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.7	0.83	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.7	1.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.7	1.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	10		5.7	0.86	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.7	1.7	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.7	1.0	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.7	0.77	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.7	0.93	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.7	1.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	1.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.7	0.26	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.7	1.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.7	0.45	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	1.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.7	0.47	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.7	3.0	ug/kg	1
Styrene	100-42-5	8260B	ND		5.7	1.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.7	0.53	ug/kg	1
Tetrachloroethene	127-18-4	8260B	25		5.7	0.57	ug/kg	1
Toluene	108-88-3	8260B	ND		5.7	1.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.7	0.72	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.7	1.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.7	0.96	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	1.9	J	5.7	0.90	ug/kg	1

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

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-004
Description: GP-16 26-28'
Matrix: Solid
Date Sampled: 10/10/2011 1120
% Solids: 76.9 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	10/12/2011 1928	SAS		69536	5.73

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	290		5.7	2.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.7	1.7	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.7	0.98	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.7	3.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	53-142
Bromofluorobenzene		120	47-138
Toluene-d8		106	68-124

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

Semivolatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-004
Description: GP-16 26-28'
Matrix: Solid
Date Sampled: 10/10/2011 1120
% Solids: 76.9 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	10/17/2011 2327	WD	10/12/2011 1824	69554

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		420	13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		420	17	ug/kg	1
Anthracene	120-12-7	8270D	ND		420	19	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		420	14	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		420	31	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		420	28	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		420	29	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		420	35	ug/kg	1
Chrysene	218-01-9	8270D	ND		420	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		420	28	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		420	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		420	16	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		420	38	ug/kg	1
Naphthalene	91-20-3	8270D	ND		420	18	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		420	17	ug/kg	1
Pyrene	129-00-0	8270D	ND		420	18	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	33-102
Nitrobenzene-d5		65	22-109
Terphenyl-d14		72	41-120

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

ICP-AES

Client: ERM-Southeast, Inc
Description: GP-16 26-28'
Date Sampled: 10/10/2011 1120
Date Received: 10/11/2011

Laboratory ID: MJ11034-004
Matrix: Solid
% Solids: 76.9 10/12/2011 2132

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	10	10/13/2011 2227	KJC	10/12/2011 1929	69547
2	3050B	6010C	10	10/14/2011 2044	KJC	10/12/2011 1929	69547

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6010C	34000		120	15	mg/kg	1
Antimony	7440-36-0	6010C	2.5	BJ	6.0	2.1	mg/kg	1
Arsenic	7440-38-2	6010C	ND		6.0	2.3	mg/kg	1
Barium	7440-39-3	6010C	100		16	1.1	mg/kg	1
Beryllium	7440-41-7	6010C	0.72	J	2.4	0.34	mg/kg	1
Cadmium	7440-43-9	6010C	ND		1.2	0.13	mg/kg	1
Calcium	7440-70-2	6010C	ND		3000	210	mg/kg	1
Chromium	7440-47-3	6010C	ND		3.0	0.61	mg/kg	1
Cobalt	7440-48-4	6010C	16		16	1.1	mg/kg	1
Copper	7440-50-8	6010C	1.5	J	3.0	0.58	mg/kg	1
Iron	7439-89-6	6010C	25000		60	20	mg/kg	1
Lead	7439-92-1	6010C	5.7	BJ	6.0	1.1	mg/kg	2
Magnesium	7439-95-4	6010C	3000		3000	220	mg/kg	1
Manganese	7439-96-5	6010C	820		9.0	0.69	mg/kg	1
Nickel	7440-02-0	6010C	3.8	J	24	1.8	mg/kg	1
Potassium	7440-09-7	6010C	2600	J	3000	130	mg/kg	1
Selenium	7782-49-2	6010C	ND		6.0	2.1	mg/kg	1
Silver	7440-22-4	6010C	ND		3.0	0.50	mg/kg	1
Sodium	7440-23-5	6010C	ND		3000	210	mg/kg	1
Thallium	7440-28-0	6010C	ND		30	3.1	mg/kg	1
Vanadium	7440-62-2	6010C	32		30	1.8	mg/kg	1
Zinc	7440-66-6	6010C	47		30	4.1	mg/kg	2

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

CVAA

Client: ERM-Southeast, Inc
Description: GP-16 26-28'
Date Sampled: 10/10/2011 1120
Date Received: 10/11/2011

Laboratory ID: MJ11034-004
Matrix: Solid
% Solids: 76.9 10/12/2011 2132

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	10/13/2011 1250	BNW	10/13/2011 1103	69574

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.11	0.0075	mg/kg	1

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-005
Description: GP-16 38-40'
Matrix: Solid
Date Sampled: 10/10/2011 1140
% Solids: 70.1 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	10/12/2011 2018	SAS		69536	6.04
2	5035	8260B	50	10/19/2011 1329	SAS		69878	5.81

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		24	7.9	ug/kg	1
Benzene	71-43-2	8260B	ND		5.9	1.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.9	2.0	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.9	0.83	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.9	2.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		12	2.8	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.9	1.5	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.9	2.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.9	2.0	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.9	1.5	ug/kg	1
Chloroform	67-66-3	8260B	5.8	J	5.9	0.98	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.9	1.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.9	0.80	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.9	1.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.9	2.0	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.9	1.0	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.9	2.0	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.9	2.0	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.9	2.0	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.9	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.9	0.86	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.9	1.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	7.8		5.9	2.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	37		5.9	0.90	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.9	1.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.9	1.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.9	0.80	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.9	0.97	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.9	2.0	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	1.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.9	0.27	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.9	1.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.9	0.47	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	1.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.9	0.48	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.9	3.1	ug/kg	1
Styrene	100-42-5	8260B	ND		5.9	1.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.9	0.56	ug/kg	1
Tetrachloroethene	127-18-4	8260B	120		5.9	0.59	ug/kg	1
Toluene	108-88-3	8260B	ND		5.9	2.0	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.9	0.74	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.9	2.0	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.9	1.0	ug/kg	1

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

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-005
Description: GP-16 38-40'
Matrix: Solid
Date Sampled: 10/10/2011 1140
% Solids: 70.1 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	10/12/2011 2018	SAS		69536	6.04
2	5035	8260B	50	10/19/2011 1329	SAS		69878	5.81

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloroethane	79-00-5	8260B	4.5	J	5.9	0.93	ug/kg	1
Trichloroethene	79-01-6	8260B	2000		310	120	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		5.9	1.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.9	1.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.9	3.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	53-142		116	53-142
Bromofluorobenzene		110	47-138		109	47-138
Toluene-d8		95	68-124		114	68-124

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

Semivolatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-005
Description: GP-16 38-40'
Matrix: Solid
Date Sampled: 10/10/2011 1140
% Solids: 70.1 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	10/18/2011 0023	WD	10/12/2011 1824	69554

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		460	14	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		460	18	ug/kg	1
Anthracene	120-12-7	8270D	ND		460	20	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		460	15	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		460	34	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		460	31	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		460	31	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		460	38	ug/kg	1
Chrysene	218-01-9	8270D	ND		460	14	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		460	31	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		460	15	ug/kg	1
Fluorene	86-73-7	8270D	ND		460	18	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		460	42	ug/kg	1
Naphthalene	91-20-3	8270D	ND		460	19	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		460	19	ug/kg	1
Pyrene	129-00-0	8270D	ND		460	20	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		68	33-102
Nitrobenzene-d5		77	22-109
Terphenyl-d14		78	41-120

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

ICP-AES

Client: ERM-Southeast, Inc
Description: GP-16 38-40'
Date Sampled: 10/10/2011 1140
Date Received: 10/11/2011

Laboratory ID: MJ11034-005
Matrix: Solid
% Solids: 70.1 10/12/2011 2132

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	10	10/13/2011 2233	KJC	10/12/2011 1929	69547
2	3050B	6010C	10	10/14/2011 2050	KJC	10/12/2011 1929	69547

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6010C	26000		130	17	mg/kg	1
Antimony	7440-36-0	6010C	ND		6.6	2.3	mg/kg	1
Arsenic	7440-38-2	6010C	4.2	J	6.6	2.5	mg/kg	1
Barium	7440-39-3	6010C	230		17	1.2	mg/kg	1
Beryllium	7440-41-7	6010C	1.5	J	2.6	0.37	mg/kg	1
Cadmium	7440-43-9	6010C	ND		1.3	0.14	mg/kg	1
Calcium	7440-70-2	6010C	720	BJ	3300	230	mg/kg	1
Chromium	7440-47-3	6010C	ND		3.3	0.66	mg/kg	1
Cobalt	7440-48-4	6010C	20		17	1.2	mg/kg	1
Copper	7440-50-8	6010C	5.2		3.3	0.63	mg/kg	1
Iron	7439-89-6	6010C	31000		66	22	mg/kg	1
Lead	7439-92-1	6010C	15	B	6.6	1.2	mg/kg	2
Magnesium	7439-95-4	6010C	4100		3300	240	mg/kg	1
Manganese	7439-96-5	6010C	2500		9.8	0.76	mg/kg	1
Nickel	7440-02-0	6010C	7.4	J	26	2.0	mg/kg	1
Potassium	7440-09-7	6010C	2700	J	3300	140	mg/kg	1
Selenium	7782-49-2	6010C	ND		6.6	2.3	mg/kg	1
Silver	7440-22-4	6010C	ND		3.3	0.55	mg/kg	1
Sodium	7440-23-5	6010C	ND		3300	220	mg/kg	1
Thallium	7440-28-0	6010C	ND		33	3.3	mg/kg	1
Vanadium	7440-62-2	6010C	38		33	2.0	mg/kg	1
Zinc	7440-66-6	6010C	82		33	4.4	mg/kg	2

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

CVAA

Client: ERM-Southeast, Inc
Description: GP-16 38-40'
Date Sampled: 10/10/2011 1140
Date Received: 10/11/2011

Laboratory ID: MJ11034-005
Matrix: Solid
% Solids: 70.1 10/12/2011 2132

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	10/13/2011 1253	BNW	10/13/2011 1103	69574

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	0.037	J	0.11	0.0078	mg/kg	1

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

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-006
Description: Dup-1
Matrix: Solid
Date Sampled: 10/10/2011
% Solids: 74.5 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	10/12/2011 2040	SAS		69536	5.57
2	5035	8260B	1	10/13/2011 1805	SAS		69626	5.06

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		24	8.1	ug/kg	1
Benzene	71-43-2	8260B	ND		6.0	1.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.0	2.0	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.0	0.84	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.0	2.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		12	2.9	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.0	1.6	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.0	2.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.0	2.0	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.0	1.6	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.0	1.0	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.0	1.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.0	0.81	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.0	1.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.0	2.0	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.0	1.0	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.0	2.0	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.0	2.0	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.0	2.0	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.0	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.0	0.88	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.0	1.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.0	2.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.0	0.92	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.0	1.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.0	1.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.0	0.82	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.0	0.99	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.0	2.0	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	1.6	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.0	0.28	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.0	1.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.0	0.48	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	1.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.0	0.49	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.0	3.1	ug/kg	1
Styrene	100-42-5	8260B	ND		6.0	1.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.0	0.57	ug/kg	1
Tetrachloroethene	127-18-4	8260B	0.82	J	6.0	0.60	ug/kg	1
Toluene	108-88-3	8260B	ND		6.0	2.0	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.0	0.76	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.0	2.0	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.0	1.0	ug/kg	1

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

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-006
Description: Dup-1
Matrix: Solid
Date Sampled: 10/10/2011
% Solids: 74.5 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	10/12/2011 2040	SAS		69536	5.57
2	5035	8260B	1	10/13/2011 1805	SAS		69626	5.06

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.0	0.95	ug/kg	1
Trichloroethene	79-01-6	8260B	ND		6.6	2.5	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		6.0	1.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.0	1.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.0	3.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
1,2-Dichloroethane-d4		102	53-142		100	53-142
Bromofluorobenzene		113	47-138		95	47-138
Toluene-d8		97	68-124		92	68-124

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

Semivolatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-006
Description: Dup-1
Matrix: Solid
Date Sampled: 10/10/2011
% Solids: 74.5 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	10/18/2011 0042	WD	10/12/2011 1824	69554

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		430	13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		430	17	ug/kg	1
Anthracene	120-12-7	8270D	ND		430	19	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		430	14	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		430	32	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		430	29	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		430	29	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		430	36	ug/kg	1
Chrysene	218-01-9	8270D	ND		430	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		430	29	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		430	14	ug/kg	1
Fluorene	86-73-7	8270D	ND		430	17	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		430	39	ug/kg	1
Naphthalene	91-20-3	8270D	ND		430	18	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		430	18	ug/kg	1
Pyrene	129-00-0	8270D	ND		430	19	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		49	33-102
Nitrobenzene-d5		56	22-109
Terphenyl-d14		69	41-120

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

ICP-AES

Client: ERM-Southeast, Inc
Laboratory ID: MJ11034-006
Description: Dup-1
Matrix: Solid
Date Sampled: 10/10/2011
% Solids: 74.5 10/12/2011 2132
Date Received: 10/11/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	10	10/13/2011 2253	KJC	10/12/2011 1929	69547
2	3050B	6010C	10	10/14/2011 2056	KJC	10/12/2011 1929	69547

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6010C	27000		130	17	mg/kg	1
Antimony	7440-36-0	6010C	4.3	BJ	6.6	2.4	mg/kg	1
Arsenic	7440-38-2	6010C	2.6	J	6.6	2.5	mg/kg	1
Barium	7440-39-3	6010C	150		17	1.2	mg/kg	1
Beryllium	7440-41-7	6010C	0.81	J	2.7	0.37	mg/kg	1
Cadmium	7440-43-9	6010C	ND		1.3	0.14	mg/kg	1
Calcium	7440-70-2	6010C	ND		3300	240	mg/kg	1
Chromium	7440-47-3	6010C	ND		3.3	0.67	mg/kg	1
Cobalt	7440-48-4	6010C	55		17	1.2	mg/kg	1
Copper	7440-50-8	6010C	1.3	J	3.3	0.64	mg/kg	1
Iron	7439-89-6	6010C	28000		66	22	mg/kg	1
Lead	7439-92-1	6010C	15	B	6.6	1.2	mg/kg	2
Magnesium	7439-95-4	6010C	2700	J	3300	250	mg/kg	1
Manganese	7439-96-5	6010C	1800		10	0.77	mg/kg	1
Nickel	7440-02-0	6010C	2.7	J	27	2.0	mg/kg	1
Potassium	7440-09-7	6010C	2900	J	3300	150	mg/kg	1
Selenium	7782-49-2	6010C	4.2	J	6.6	2.3	mg/kg	1
Silver	7440-22-4	6010C	ND		3.3	0.56	mg/kg	1
Sodium	7440-23-5	6010C	ND		3300	230	mg/kg	1
Thallium	7440-28-0	6010C	7.6	J	33	3.4	mg/kg	1
Vanadium	7440-62-2	6010C	34		33	2.0	mg/kg	1
Zinc	7440-66-6	6010C	54		33	4.5	mg/kg	1

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

CVAA

Client: ERM-Southeast, Inc
Description: Dup-1
Date Sampled: 10/10/2011
Date Received: 10/11/2011

Laboratory ID: MJ11034-006
Matrix: Solid
% Solids: 74.5 10/12/2011 2132

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	10/13/2011 1259	BNW	10/13/2011 1103	69574

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7471B	ND		0.11	0.0079	mg/kg	1

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

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69536-001
Batch: 69536
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	10/12/2011 1209
Benzene	ND		1	5.0	1.1	ug/kg	10/12/2011 1209
Bromodichloromethane	ND		1	5.0	1.7	ug/kg	10/12/2011 1209
Bromoform	ND		1	5.0	0.70	ug/kg	10/12/2011 1209
Bromomethane (Methyl bromide)	ND		1	5.0	1.8	ug/kg	10/12/2011 1209
2-Butanone (MEK)	ND		1	10	2.4	ug/kg	10/12/2011 1209
Carbon disulfide	ND		1	5.0	1.3	ug/kg	10/12/2011 1209
Carbon tetrachloride	ND		1	5.0	1.8	ug/kg	10/12/2011 1209
Chlorobenzene	ND		1	5.0	1.7	ug/kg	10/12/2011 1209
Chloroethane	ND		1	5.0	1.3	ug/kg	10/12/2011 1209
Chloroform	ND		1	5.0	0.83	ug/kg	10/12/2011 1209
Chloromethane (Methyl chloride)	ND		1	5.0	1.0	ug/kg	10/12/2011 1209
Cyclohexane	ND		1	5.0	0.67	ug/kg	10/12/2011 1209
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	1.5	ug/kg	10/12/2011 1209
Dibromochloromethane	ND		1	5.0	1.7	ug/kg	10/12/2011 1209
1,2-Dibromoethane (EDB)	ND		1	5.0	0.85	ug/kg	10/12/2011 1209
1,4-Dichlorobenzene	ND		1	5.0	1.7	ug/kg	10/12/2011 1209
1,3-Dichlorobenzene	ND		1	5.0	1.7	ug/kg	10/12/2011 1209
1,2-Dichlorobenzene	ND		1	5.0	1.7	ug/kg	10/12/2011 1209
Dichlorodifluoromethane	ND		1	5.0	1.6	ug/kg	10/12/2011 1209
1,2-Dichloroethane	ND		1	5.0	1.0	ug/kg	10/12/2011 1209
1,1-Dichloroethane	ND		1	5.0	0.73	ug/kg	10/12/2011 1209
trans-1,2-Dichloroethene	ND		1	5.0	1.5	ug/kg	10/12/2011 1209
cis-1,2-Dichloroethene	ND		1	5.0	0.76	ug/kg	10/12/2011 1209
1,1-Dichloroethene	ND		1	5.0	1.7	ug/kg	10/12/2011 1209
1,2-Dichloropropane	ND		1	5.0	0.91	ug/kg	10/12/2011 1209
trans-1,3-Dichloropropene	ND		1	5.0	0.82	ug/kg	10/12/2011 1209
cis-1,3-Dichloropropene	ND		1	5.0	0.68	ug/kg	10/12/2011 1209
Ethylbenzene	ND		1	5.0	1.7	ug/kg	10/12/2011 1209
2-Hexanone	ND		1	10	1.3	ug/kg	10/12/2011 1209
Isopropylbenzene	ND		1	5.0	0.23	ug/kg	10/12/2011 1209
Methyl acetate	ND		1	5.0	0.98	ug/kg	10/12/2011 1209
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/kg	10/12/2011 1209
4-Methyl-2-pentanone	ND		1	10	1.5	ug/kg	10/12/2011 1209
Methylcyclohexane	ND		1	5.0	0.41	ug/kg	10/12/2011 1209
Methylene chloride	ND		1	5.0	2.6	ug/kg	10/12/2011 1209
Styrene	ND		1	5.0	1.1	ug/kg	10/12/2011 1209
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.47	ug/kg	10/12/2011 1209
Tetrachloroethene	ND		1	5.0	0.50	ug/kg	10/12/2011 1209
Toluene	ND		1	5.0	1.7	ug/kg	10/12/2011 1209
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.63	ug/kg	10/12/2011 1209
1,2,4-Trichlorobenzene	ND		1	5.0	1.7	ug/kg	10/12/2011 1209
1,1,2-Trichloroethane	ND		1	5.0	0.79	ug/kg	10/12/2011 1209
1,1,1-Trichloroethane	ND		1	5.0	0.85	ug/kg	10/12/2011 1209

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

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

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69536-001
Batch: 69536
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	1.9	ug/kg	10/12/2011 1209
Trichlorofluoromethane	ND		1	5.0	1.5	ug/kg	10/12/2011 1209
Vinyl chloride	ND		1	5.0	0.86	ug/kg	10/12/2011 1209
Xylenes (total)	ND		1	5.0	2.9	ug/kg	10/12/2011 1209

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		111	47-138
1,2-Dichloroethane-d4		97	53-142
Toluene-d8		100	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: MQ69536-002
Batch: 69536
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	69		1	69	42-149	10/12/2011 1039
Benzene	50	40		1	80	69-123	10/12/2011 1039
Bromodichloromethane	50	45		1	91	69-121	10/12/2011 1039
Bromoform	50	45		1	90	61-119	10/12/2011 1039
Bromomethane (Methyl bromide)	50	60		1	120	35-144	10/12/2011 1039
2-Butanone (MEK)	100	67		1	67	57-148	10/12/2011 1039
Carbon disulfide	50	44		1	88	58-122	10/12/2011 1039
Carbon tetrachloride	50	48		1	97	58-136	10/12/2011 1039
Chlorobenzene	50	43		1	86	59-129	10/12/2011 1039
Chloroethane	50	53		1	107	42-163	10/12/2011 1039
Chloroform	50	41		1	82	71-125	10/12/2011 1039
Chloromethane (Methyl chloride)	50	51		1	103	34-134	10/12/2011 1039
Cyclohexane	50	38		1	76	53-139	10/12/2011 1039
1,2-Dibromo-3-chloropropane (DBCP)	50	34		1	67	55-125	10/12/2011 1039
Dibromochloromethane	50	50		1	100	66-119	10/12/2011 1039
1,2-Dibromoethane (EDB)	50	43		1	85	74-124	10/12/2011 1039
1,4-Dichlorobenzene	50	42		1	84	52-133	10/12/2011 1039
1,3-Dichlorobenzene	50	42		1	85	51-134	10/12/2011 1039
1,2-Dichlorobenzene	50	41		1	81	57-131	10/12/2011 1039
Dichlorodifluoromethane	50	46		1	93	10-157	10/12/2011 1039
1,2-Dichloroethane	50	38		1	76	67-129	10/12/2011 1039
1,1-Dichloroethane	50	39		1	79	71-127	10/12/2011 1039
trans-1,2-Dichloroethene	50	42		1	83	68-131	10/12/2011 1039
cis-1,2-Dichloroethene	50	41		1	82	70-122	10/12/2011 1039
1,1-Dichloroethene	50	41		1	82	69-138	10/12/2011 1039
1,2-Dichloropropane	50	40		1	81	72-124	10/12/2011 1039
trans-1,3-Dichloropropene	50	47		1	95	70-124	10/12/2011 1039
cis-1,3-Dichloropropene	50	46		1	92	70-126	10/12/2011 1039
Ethylbenzene	50	42		1	84	59-128	10/12/2011 1039
2-Hexanone	100	73		1	73	54-137	10/12/2011 1039
Isopropylbenzene	50	44		1	88	50-136	10/12/2011 1039
Methyl acetate	50	37		1	73	59-137	10/12/2011 1039
Methyl tertiary butyl ether (MTBE)	50	41		1	82	72-122	10/12/2011 1039
4-Methyl-2-pentanone	100	68		1	68	60-134	10/12/2011 1039
Methylcyclohexane	50	37		1	74	41-144	10/12/2011 1039
Methylene chloride	50	42		1	84	77-129	10/12/2011 1039
Styrene	50	47		1	94	54-136	10/12/2011 1039
1,1,2,2-Tetrachloroethane	50	41		1	82	69-132	10/12/2011 1039
Tetrachloroethene	50	44		1	89	45-150	10/12/2011 1039
Toluene	50	41		1	81	61-129	10/12/2011 1039
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	37		1	74	49-136	10/12/2011 1039
1,2,4-Trichlorobenzene	50	31		1	61	34-145	10/12/2011 1039
1,1,2-Trichloroethane	50	41		1	82	55-128	10/12/2011 1039
1,1,1-Trichloroethane	50	47		1	95	63-128	10/12/2011 1039

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: MQ69536-002
Batch: 69536
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	45		1	90	62-126	10/12/2011 1039
Trichlorofluoromethane	50	47		1	95	45-138	10/12/2011 1039
Vinyl chloride	50	50		1	100	42-132	10/12/2011 1039
Xylenes (total)	100	88		1	88	58-128	10/12/2011 1039

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		111	47-138
1,2-Dichloroethane-d4		94	53-142
Toluene-d8		99	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 - LCSD

Sample ID: MQ69536-003
Batch: 69536
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	68		1	68	0.91	42-149	20	10/12/2011 1101
Benzene	50	41		1	83	4.2	69-123	20	10/12/2011 1101
Bromodichloromethane	50	48		1	96	5.3	69-121	20	10/12/2011 1101
Bromoform	50	46		1	92	1.6	61-119	20	10/12/2011 1101
Bromomethane (Methyl bromide)	50	70		1	139	15	35-144	20	10/12/2011 1101
2-Butanone (MEK)	100	68		1	68	1.4	57-148	20	10/12/2011 1101
Carbon disulfide	50	44		1	88	0.57	58-122	20	10/12/2011 1101
Carbon tetrachloride	50	49		1	97	0.15	58-136	20	10/12/2011 1101
Chlorobenzene	50	45		1	90	4.1	59-129	20	10/12/2011 1101
Chloroethane	50	52		1	104	2.2	42-163	20	10/12/2011 1101
Chloroform	50	42		1	83	1.5	71-125	20	10/12/2011 1101
Chloromethane (Methyl chloride)	50	50		1	100	2.4	34-134	20	10/12/2011 1101
Cyclohexane	50	39		1	77	1.4	53-139	20	10/12/2011 1101
1,2-Dibromo-3-chloropropane (DBCP)	50	35		1	70	3.8	55-125	20	10/12/2011 1101
Dibromochloromethane	50	52		1	105	5.2	66-119	20	10/12/2011 1101
1,2-Dibromoethane (EDB)	50	44		1	88	3.0	74-124	20	10/12/2011 1101
1,4-Dichlorobenzene	50	43		1	87	3.0	52-133	20	10/12/2011 1101
1,3-Dichlorobenzene	50	44		1	87	3.0	51-134	20	10/12/2011 1101
1,2-Dichlorobenzene	50	43		1	86	6.0	57-131	20	10/12/2011 1101
Dichlorodifluoromethane	50	47		1	93	0.29	10-157	20	10/12/2011 1101
1,2-Dichloroethane	50	39		1	78	3.1	67-129	20	10/12/2011 1101
1,1-Dichloroethane	50	40		1	80	0.99	71-127	20	10/12/2011 1101
trans-1,2-Dichloroethene	50	43		1	85	2.4	68-131	20	10/12/2011 1101
cis-1,2-Dichloroethene	50	41		1	83	0.31	70-122	20	10/12/2011 1101
1,1-Dichloroethene	50	42		1	84	1.6	69-138	20	10/12/2011 1101
1,2-Dichloropropane	50	42		1	85	4.9	72-124	20	10/12/2011 1101
trans-1,3-Dichloropropene	50	50		1	101	6.2	70-124	20	10/12/2011 1101
cis-1,3-Dichloropropene	50	48		1	96	4.8	70-126	20	10/12/2011 1101
Ethylbenzene	50	45		1	90	6.3	59-128	20	10/12/2011 1101
2-Hexanone	100	76		1	76	3.9	54-137	20	10/12/2011 1101
Isopropylbenzene	50	46		1	92	4.1	50-136	20	10/12/2011 1101
Methyl acetate	50	37		1	74	1.3	59-137	20	10/12/2011 1101
Methyl tertiary butyl ether (MTBE)	50	41		1	83	1.1	72-122	20	10/12/2011 1101
4-Methyl-2-pentanone	100	70		1	70	3.4	60-134	20	10/12/2011 1101
Methylcyclohexane	50	37		1	74	1.0	41-144	20	10/12/2011 1101
Methylene chloride	50	42		1	85	1.7	77-129	20	10/12/2011 1101
Styrene	50	49		1	98	4.9	54-136	20	10/12/2011 1101
1,1,2,2-Tetrachloroethane	50	42		1	84	3.2	69-132	20	10/12/2011 1101
Tetrachloroethene	50	46		1	92	3.0	45-150	20	10/12/2011 1101
Toluene	50	43		1	85	4.8	61-129	20	10/12/2011 1101
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	36		1	72	2.9	49-136	20	10/12/2011 1101
1,2,4-Trichlorobenzene	50	32		1	65	5.1	34-145	20	10/12/2011 1101
1,1,2-Trichloroethane	50	44		1	88	6.9	55-128	20	10/12/2011 1101
1,1,1-Trichloroethane	50	48		1	95	0.70	63-128	20	10/12/2011 1101

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: MQ69536-003
Batch: 69536
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
Trichloroethene	50	46		1	93	3.0	62-126	20	10/12/2011 1101
Trichlorofluoromethane	50	46		1	93	1.7	45-138	20	10/12/2011 1101
Vinyl chloride	50	49		1	99	1.5	42-132	20	10/12/2011 1101
Xylenes (total)	100	91		1	91	3.9	58-128	20	10/12/2011 1101

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		111	47-138
1,2-Dichloroethane-d4		94	53-142
Toluene-d8		101	68-124

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

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

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

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: MJ11034-005DU
Batch: 69536
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Acetone	ND	ND		1	0.00	20	10/12/2011 2103
Benzene	ND	ND		1	0.00	20	10/12/2011 2103
Bromodichloromethane	ND	ND		1	0.00	20	10/12/2011 2103
Bromoform	ND	ND		1	0.00	20	10/12/2011 2103
Bromomethane (Methyl bromide)	ND	ND		1	0.00	20	10/12/2011 2103
2-Butanone (MEK)	ND	ND		1	0.00	20	10/12/2011 2103
Carbon disulfide	ND	ND		1	0.00	20	10/12/2011 2103
Carbon tetrachloride	ND	ND		1	0.00	20	10/12/2011 2103
Chlorobenzene	ND	ND		1	0.00	20	10/12/2011 2103
Chloroethane	ND	ND		1	0.00	20	10/12/2011 2103
Chloroform	5.8	6.2		1	6.1	20	10/12/2011 2103
Chloromethane (Methyl chloride)	ND	ND		1	0.00	20	10/12/2011 2103
Cyclohexane	ND	ND		1	0.00	20	10/12/2011 2103
1,2-Dibromo-3-chloropropane (DBCP)	ND	ND		1	0.00	20	10/12/2011 2103
Dibromochloromethane	ND	ND		1	0.00	20	10/12/2011 2103
1,2-Dibromoethane (EDB)	ND	ND		1	0.00	20	10/12/2011 2103
1,4-Dichlorobenzene	ND	ND		1	0.00	20	10/12/2011 2103
1,3-Dichlorobenzene	ND	ND		1	0.00	20	10/12/2011 2103
1,2-Dichlorobenzene	ND	ND		1	0.00	20	10/12/2011 2103
Dichlorodifluoromethane	ND	ND		1	0.00	20	10/12/2011 2103
1,2-Dichloroethane	ND	ND		1	0.00	20	10/12/2011 2103
1,1-Dichloroethane	ND	ND		1	0.00	20	10/12/2011 2103
trans-1,2-Dichloroethene	ND	ND		1	0.00	20	10/12/2011 2103
cis-1,2-Dichloroethene	37	38		1	3.6	20	10/12/2011 2103
1,1-Dichloroethene	7.8	7.4		1	5.6	20	10/12/2011 2103
1,2-Dichloropropane	ND	ND		1	0.00	20	10/12/2011 2103
trans-1,3-Dichloropropene	ND	ND		1	0.00	20	10/12/2011 2103
cis-1,3-Dichloropropene	ND	ND		1	0.00	20	10/12/2011 2103
Ethylbenzene	ND	ND		1	0.00	20	10/12/2011 2103
2-Hexanone	ND	ND		1	0.00	20	10/12/2011 2103
Isopropylbenzene	ND	ND		1	0.00	20	10/12/2011 2103
Methyl acetate	ND	ND		1	0.00	20	10/12/2011 2103
Methyl tertiary butyl ether (MTBE)	ND	ND		1	0.00	20	10/12/2011 2103
4-Methyl-2-pentanone	ND	ND		1	0.00	20	10/12/2011 2103
Methylcyclohexane	ND	ND		1	0.00	20	10/12/2011 2103
Methylene chloride	ND	ND		1	0.00	20	10/12/2011 2103
Styrene	ND	ND		1	0.00	20	10/12/2011 2103
1,1,2,2-Tetrachloroethane	ND	ND		1	0.00	20	10/12/2011 2103
Tetrachloroethene	120	130		1	8.9	20	10/12/2011 2103
Toluene	ND	ND		1	0.00	20	10/12/2011 2103
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND		1	0.00	20	10/12/2011 2103
1,2,4-Trichlorobenzene	ND	ND		1	0.00	20	10/12/2011 2103
1,1,2-Trichloroethane	4.5	4.8	J	1	4.6	20	10/12/2011 2103
1,1,1-Trichloroethane	ND	ND		1	0.00	20	10/12/2011 2103

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

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

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

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: MJ11034-005DU
Batch: 69536
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Trichloroethene	2000	1100		1	7.2	20	10/12/2011 2103
Trichlorofluoromethane	ND	ND		1	0.00	20	10/12/2011 2103
Vinyl chloride	ND	ND		1	0.00	20	10/12/2011 2103
Xylenes (total)	ND	ND		1	0.00	20	10/12/2011 2103

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		110	47-138
1,2-Dichloroethane-d4		103	53-142
Toluene-d8		100	68-124

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

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

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

Volatile Organic Compounds by GC/MS - MS

Sample ID: MJ11034-006MS
Batch: 69536
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	ND	120	69		1	58	42-149	10/12/2011 2126
Benzene	ND	60	45		1	75	69-123	10/12/2011 2126
Bromodichloromethane	ND	60	51		1	86	69-121	10/12/2011 2126
Bromoform	ND	60	49		1	82	61-119	10/12/2011 2126
Bromomethane (Methyl bromide)	ND	60	63		1	104	35-144	10/12/2011 2126
2-Butanone (MEK)	ND	120	70		1	58	57-148	10/12/2011 2126
Carbon disulfide	ND	60	48		1	81	58-122	10/12/2011 2126
Carbon tetrachloride	ND	60	60		1	101	58-136	10/12/2011 2126
Chlorobenzene	ND	60	51		1	85	59-129	10/12/2011 2126
Chloroethane	ND	60	56		1	94	50-132	10/12/2011 2126
Chloroform	ND	60	44		1	74	71-125	10/12/2011 2126
Chloromethane (Methyl chloride)	ND	60	53		1	88	34-134	10/12/2011 2126
Cyclohexane	ND	60	39		1	66	53-139	10/12/2011 2126
1,2-Dibromo-3-chloropropane (DBCP)	ND	60	43		1	72	55-125	10/12/2011 2126
Dibromochloromethane	ND	60	56		1	93	66-119	10/12/2011 2126
1,2-Dibromoethane (EDB)	ND	60	47		1	78	74-124	10/12/2011 2126
1,4-Dichlorobenzene	ND	60	49		1	82	52-133	10/12/2011 2126
1,3-Dichlorobenzene	ND	60	51		1	86	51-134	10/12/2011 2126
1,2-Dichlorobenzene	ND	60	49		1	82	57-131	10/12/2011 2126
Dichlorodifluoromethane	ND	60	54		1	90	10-157	10/12/2011 2126
1,2-Dichloroethane	ND	60	41		1	68	67-129	10/12/2011 2126
1,1-Dichloroethane	ND	60	43		1	71	71-127	10/12/2011 2126
trans-1,2-Dichloroethene	ND	60	45		1	75	68-131	10/12/2011 2126
cis-1,2-Dichloroethene	ND	60	43		1	73	70-122	10/12/2011 2126
1,1-Dichloroethene	ND	60	46		1	77	69-138	10/12/2011 2126
1,2-Dichloropropane	ND	60	45		1	74	72-124	10/12/2011 2126
trans-1,3-Dichloropropene	ND	60	51		1	86	70-124	10/12/2011 2126
cis-1,3-Dichloropropene	ND	60	49		1	81	70-126	10/12/2011 2126
Ethylbenzene	ND	60	55		1	92	59-128	10/12/2011 2126
2-Hexanone	ND	120	87		1	72	54-137	10/12/2011 2126
Isopropylbenzene	ND	60	62		1	103	50-136	10/12/2011 2126
Methyl acetate	ND	60	41		1	69	59-137	10/12/2011 2126
Methyl tertiary butyl ether (MTBE)	ND	60	41	N	1	68	72-122	10/12/2011 2126
4-Methyl-2-pentanone	ND	120	80		1	67	60-134	10/12/2011 2126
Methylcyclohexane	ND	60	59		1	99	41-144	10/12/2011 2126
Methylene chloride	ND	60	40	N	1	67	77-129	10/12/2011 2126
Styrene	ND	60	54		1	91	54-136	10/12/2011 2126
1,1,2,2-Tetrachloroethane	ND	60	46		1	77	69-132	10/12/2011 2126
Tetrachloroethene	0.82	60	62		1	102	70-130	10/12/2011 2126
Toluene	ND	60	47		1	79	61-129	10/12/2011 2126
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	60	44		1	74	49-136	10/12/2011 2126
1,2,4-Trichlorobenzene	ND	60	43		1	72	34-145	10/12/2011 2126
1,1,2-Trichloroethane	ND	60	47		1	79	55-128	10/12/2011 2126
1,1,1-Trichloroethane	ND	60	56		1	94	63-128	10/12/2011 2126

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

Where applicable, all soil sample analysis are reported 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: MJ11034-006MS
Batch: 69536
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	60	74		1	104	62-126	10/12/2011 2126
Trichlorofluoromethane	ND	60	57		1	96	45-138	10/12/2011 2126
Vinyl chloride	ND	60	54		1	90	42-132	10/12/2011 2126
Xylenes (total)	ND	120	110		1	92	58-128	10/12/2011 2126

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		119	47-138
1,2-Dichloroethane-d4		104	53-142
Toluene-d8		103	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: MQ69626-001
Batch: 69626
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	1.9	ug/kg	10/13/2011 1656

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	47-138
1,2-Dichloroethane-d4		106	53-142
Toluene-d8		100	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: MQ69626-002
Batch: 69626
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	46		1	92	62-126	10/13/2011 1523

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	47-138
1,2-Dichloroethane-d4		103	53-142
Toluene-d8		103	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 - LCSD

Sample ID: MQ69626-003
Batch: 69626
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
Trichloroethene	50	48		1	97	5.2	62-126	20	10/13/2011 1546

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		104	47-138
1,2-Dichloroethane-d4		106	53-142
Toluene-d8		105	68-124

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

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

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

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: MJ11034-006DU
Batch: 69626
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Trichloroethene	ND	ND		1	0.00	20	10/13/2011 2154

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	47-138
1,2-Dichloroethane-d4		116	53-142
Toluene-d8		99	68-124

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

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

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

Volatile Organic Compounds by GC/MS - MS

Sample ID: MJ11034-006MS
Batch: 69626
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	50	39		1	79	62-126	10/13/2011 2217

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	47-138
1,2-Dichloroethane-d4		109	53-142
Toluene-d8		97	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: MQ69878-001
Batch: 69878
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		50	250	95	ug/kg	10/19/2011 1220

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		118	47-138
1,2-Dichloroethane-d4		132	53-142
Toluene-d8		122	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: MQ69878-002
Batch: 69878
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	2500	2700		50	109	62-126	10/18/2011 1134

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		118	47-138
1,2-Dichloroethane-d4		130	53-142
Toluene-d8		124	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 - LCSD

Sample ID: MQ69878-003
Batch: 69878
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
Trichloroethene	2500	2500		50	100	8.8	62-126	20	10/19/2011 1243

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		113	47-138
1,2-Dichloroethane-d4		121	53-142
Toluene-d8		117	68-124

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

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

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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: MQ69554-001
Batch: 69554
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 10/12/2011 1824

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acenaphthene	ND		1	330	10	ug/kg	10/17/2011 2055
Acenaphthylene	ND		1	330	13	ug/kg	10/17/2011 2055
Anthracene	ND		1	330	15	ug/kg	10/17/2011 2055
Benzo(a)anthracene	ND		1	330	11	ug/kg	10/17/2011 2055
Benzo(a)pyrene	ND		1	330	24	ug/kg	10/17/2011 2055
Benzo(b)fluoranthene	ND		1	330	22	ug/kg	10/17/2011 2055
Benzo(g,h,i)perylene	ND		1	330	23	ug/kg	10/17/2011 2055
Benzo(k)fluoranthene	ND		1	330	27	ug/kg	10/17/2011 2055
Chrysene	ND		1	330	10	ug/kg	10/17/2011 2055
Dibenzo(a,h)anthracene	ND		1	330	22	ug/kg	10/17/2011 2055
Fluoranthene	ND		1	330	10	ug/kg	10/17/2011 2055
Fluorene	ND		1	330	13	ug/kg	10/17/2011 2055
Indeno(1,2,3-c,d)pyrene	ND		1	330	30	ug/kg	10/17/2011 2055
Naphthalene	ND		1	330	14	ug/kg	10/17/2011 2055
Phenanthrene	ND		1	330	13	ug/kg	10/17/2011 2055
Pyrene	ND		1	330	14	ug/kg	10/17/2011 2055

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		77	33-102
Nitrobenzene-d5		81	22-109
Terphenyl-d14		88	41-120

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

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

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: MQ69554-002
Batch: 69554
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 10/12/2011 1824

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	3300	2700		1	81	46-114	10/17/2011 2114
Acenaphthylene	3300	2600		1	79	44-122	10/17/2011 2114
Anthracene	3300	2700		1	80	50-119	10/17/2011 2114
Benzo(a)anthracene	3300	3200		1	95	47-121	10/17/2011 2114
Benzo(a)pyrene	3300	3200		1	96	55-134	10/17/2011 2114
Benzo(b)fluoranthene	3300	3100		1	92	28-139	10/17/2011 2114
Benzo(g,h,i)perylene	3300	2900		1	86	36-125	10/17/2011 2114
Benzo(k)fluoranthene	3300	2800		1	83	47-130	10/17/2011 2114
Chrysene	3300	2800		1	83	45-126	10/17/2011 2114
Dibenzo(a,h)anthracene	3300	2900		1	86	45-122	10/17/2011 2114
Fluoranthene	3300	2700		1	82	50-123	10/17/2011 2114
Fluorene	3300	2700		1	82	48-117	10/17/2011 2114
Indeno(1,2,3-c,d)pyrene	3300	2700		1	81	45-123	10/17/2011 2114
Naphthalene	3300	2400		1	71	36-110	10/17/2011 2114
Phenanthrene	3300	2800		1	83	49-117	10/17/2011 2114
Pyrene	3300	3200		1	95	47-119	10/17/2011 2114

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		80	33-102
Nitrobenzene-d5		83	22-109
Terphenyl-d14		86	41-120

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

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

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: MJ11034-004MS
Batch: 69554
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 10/12/2011 1824

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	4300	3300		1	77	30-130	10/17/2011 2345
Acenaphthylene	ND	4300	3200		1	75	30-130	10/17/2011 2345
Anthracene	ND	4300	3200		1	75	30-130	10/17/2011 2345
Benzo(a)anthracene	ND	4300	3400		1	80	30-130	10/17/2011 2345
Benzo(a)pyrene	ND	4300	3800		1	89	30-130	10/17/2011 2345
Benzo(b)fluoranthene	ND	4300	3700		1	87	30-130	10/17/2011 2345
Benzo(g,h,i)perylene	ND	4300	3400		1	79	30-130	10/17/2011 2345
Benzo(k)fluoranthene	ND	4300	3300		1	78	30-130	10/17/2011 2345
Chrysene	ND	4300	3400		1	80	30-130	10/17/2011 2345
Dibenzo(a,h)anthracene	ND	4300	3500		1	81	30-130	10/17/2011 2345
Fluoranthene	ND	4300	3300		1	78	30-130	10/17/2011 2345
Fluorene	ND	4300	3400		1	79	30-130	10/17/2011 2345
Indeno(1,2,3-c,d)pyrene	ND	4300	3300		1	78	30-130	10/17/2011 2345
Naphthalene	ND	4300	2800		1	66	30-130	10/17/2011 2345
Phenanthrene	ND	4300	3300		1	78	30-130	10/17/2011 2345
Pyrene	ND	4300	3600		1	85	30-130	10/17/2011 2345

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		72	33-102
Nitrobenzene-d5		74	22-109
Terphenyl-d14		75	41-120

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

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

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: MJ11034-004MD
Batch: 69554
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 10/12/2011 1824

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	4200	2800		1	68	15	30-130	40	10/18/2011 0004
Acenaphthylene	ND	4200	2700		1	65	18	30-130	40	10/18/2011 0004
Anthracene	ND	4200	2900		1	70	8.2	30-130	40	10/18/2011 0004
Benzo(a)anthracene	ND	4200	3300		1	79	3.1	30-130	40	10/18/2011 0004
Benzo(a)pyrene	ND	4200	3500		1	85	6.9	30-130	40	10/18/2011 0004
Benzo(b)fluoranthene	ND	4200	3000		1	73	20	30-130	40	10/18/2011 0004
Benzo(g,h,i)perylene	ND	4200	3100		1	75	6.5	30-130	40	10/18/2011 0004
Benzo(k)fluoranthene	ND	4200	3500		1	84	5.2	30-130	40	10/18/2011 0004
Chrysene	ND	4200	3300		1	78	5.1	30-130	40	10/18/2011 0004
Dibenzo(a,h)anthracene	ND	4200	3200		1	76	9.3	30-130	40	10/18/2011 0004
Fluoranthene	ND	4200	3100		1	74	7.1	30-130	40	10/18/2011 0004
Fluorene	ND	4200	2900		1	70	14	30-130	40	10/18/2011 0004
Indeno(1,2,3-c,d)pyrene	ND	4200	3100		1	74	7.1	30-130	40	10/18/2011 0004
Naphthalene	ND	4200	2200		1	53	24	30-130	40	10/18/2011 0004
Phenanthrene	ND	4200	3100		1	73	8.6	30-130	40	10/18/2011 0004
Pyrene	ND	4200	3500		1	84	3.0	30-130	40	10/18/2011 0004

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		58	33-102
Nitrobenzene-d5		62	22-109
Terphenyl-d14		73	41-120

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

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

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

ICP-AES - MB

Sample ID: MQ69547-001
Batch: 69547
Analytical Method: 6010C

Matrix: Solid
Prep Method: 3050B
Prep Date: 10/12/2011 1929

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Aluminum	ND		1	10	1.3	mg/kg	10/13/2011 2139
Antimony	0.19	J	1	0.50	0.18	mg/kg	10/13/2011 2139
Arsenic	ND		1	0.50	0.19	mg/kg	10/12/2011 2321
Barium	ND		1	1.3	0.091	mg/kg	10/12/2011 2321
Beryllium	ND		1	0.20	0.028	mg/kg	10/12/2011 2321
Cadmium	ND		1	0.10	0.011	mg/kg	10/12/2011 2321
Calcium	30	J	1	250	18	mg/kg	10/12/2011 2321
Chromium	ND		1	0.25	0.051	mg/kg	10/12/2011 2321
Cobalt	ND		1	1.3	0.092	mg/kg	10/12/2011 2321
Copper	ND		1	0.25	0.048	mg/kg	10/12/2011 2321
Iron	ND		1	5.0	1.6	mg/kg	10/12/2011 2321
Lead	0.16	J	1	0.50	0.093	mg/kg	10/12/2011 2321
Magnesium	ND		1	250	18	mg/kg	10/12/2011 2321
Manganese	ND		1	0.75	0.058	mg/kg	10/12/2011 2321
Nickel	ND		1	2.0	0.15	mg/kg	10/12/2011 2321
Potassium	ND		1	250	11	mg/kg	10/12/2011 2321
Selenium	ND		1	0.50	0.17	mg/kg	10/12/2011 2321
Silver	ND		1	0.25	0.042	mg/kg	10/12/2011 2321
Sodium	25	J	1	250	17	mg/kg	10/12/2011 2321
Thallium	ND		1	2.5	0.25	mg/kg	10/12/2011 2321
Vanadium	ND		1	2.5	0.15	mg/kg	10/12/2011 2321
Zinc	ND		1	2.5	0.34	mg/kg	10/12/2011 2321

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

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

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

ICP-AES - LCS

Sample ID: MQ69547-002
Batch: 69547
Analytical Method: 6010C

Matrix: Solid
Prep Method: 3050B
Prep Date: 10/12/2011 1929

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Aluminum	1000	960		1	96	80-120	10/13/2011 2145
Antimony	50	49		1	97	80-120	10/13/2011 2145
Arsenic	250	250		1	99	80-120	10/12/2011 2327
Barium	500	470		1	95	80-120	10/12/2011 2327
Beryllium	100	100		1	100	80-120	10/12/2011 2327
Cadmium	50	51		1	102	80-120	10/12/2011 2327
Calcium	2000	2000		1	98	80-120	10/12/2011 2327
Chromium	250	240		1	96	80-120	10/12/2011 2327
Cobalt	100	98		1	98	80-120	10/12/2011 2327
Copper	100	97		1	97	80-120	10/12/2011 2327
Iron	1000	980		1	98	80-120	10/12/2011 2327
Lead	250	230		1	94	80-120	10/12/2011 2327
Magnesium	2000	1900		1	96	80-120	10/12/2011 2327
Manganese	100	98		1	98	80-120	10/12/2011 2327
Nickel	100	97		1	97	80-120	10/12/2011 2327
Potassium	2000	1900		1	93	80-120	10/12/2011 2327
Selenium	50	48		1	97	80-120	10/12/2011 2327
Silver	250	240		1	94	80-120	10/12/2011 2327
Sodium	2000	1900		1	93	80-120	10/12/2011 2327
Thallium	40	40		1	100	80-120	10/12/2011 2327
Vanadium	100	97		1	97	80-120	10/12/2011 2327
Zinc	100	99		1	99	80-120	10/12/2011 2327

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

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

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

ICP-AES - LCSD

Sample ID: MQ69547-003
Batch: 69547
Analytical Method: 6010C

Matrix: Solid
Prep Method: 3050B
Prep Date: 10/12/2011 1929

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Aluminum	1000	900		1	90	7.0	80-120	20	10/13/2011 2151
Antimony	50	46		1	91	6.3	80-120	20	10/13/2011 2151
Arsenic	250	230		1	93	6.2	80-120	20	10/12/2011 2333
Barium	500	440		1	88	7.2	80-120	20	10/12/2011 2333
Beryllium	100	94		1	94	6.8	80-120	20	10/12/2011 2333
Cadmium	50	48		1	96	6.5	80-120	20	10/12/2011 2333
Calcium	2000	1800		1	91	7.0	80-120	20	10/12/2011 2333
Chromium	250	220		1	90	7.1	80-120	20	10/12/2011 2333
Cobalt	100	92		1	92	6.6	80-120	20	10/12/2011 2333
Copper	100	90		1	90	7.7	80-120	20	10/12/2011 2333
Iron	1000	910		1	91	7.0	80-120	20	10/12/2011 2333
Lead	250	220		1	88	6.8	80-120	20	10/12/2011 2333
Magnesium	2000	1800		1	90	7.0	80-120	20	10/12/2011 2333
Manganese	100	91		1	91	7.0	80-120	20	10/12/2011 2333
Nickel	100	90		1	90	6.7	80-120	20	10/12/2011 2333
Potassium	2000	1800		1	88	6.1	80-120	20	10/12/2011 2333
Selenium	50	46		1	91	5.7	80-120	20	10/12/2011 2333
Silver	250	220		1	88	7.1	80-120	20	10/12/2011 2333
Sodium	2000	1700		1	87	7.0	80-120	20	10/12/2011 2333
Thallium	40	37		1	93	6.4	80-120	20	10/12/2011 2333
Vanadium	100	90		1	90	7.1	80-120	20	10/12/2011 2333
Zinc	100	93		1	93	6.3	80-120	20	10/12/2011 2333

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

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

CVAA - MB

Sample ID: MQ69574-001
Batch: 69574
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 10/13/2011 1103

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	ND		1	0.083	0.0059	mg/kg	10/13/2011 1233

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

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

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

CVAA - LCS

Sample ID: MQ69574-002
Batch: 69574
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 10/13/2011 1103

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.83	0.81		1	97	85-115	10/13/2011 1235

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

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

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

CVAA - LCSD

Sample ID: MQ69574-003
Batch: 69574
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 10/13/2011 1103

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.83	0.82		1	98	1.0	85-115	20	10/13/2011 1237

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

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

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

CVAA - MS

Sample ID: MJ11034-006MS
Batch: 69574
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 10/13/2011 1103

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	ND	1.1	1.1		1	101	85-115	10/13/2011 1301

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

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

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

CVAA - MSD

Sample ID: MJ11034-006MD
Batch: 69574
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 10/13/2011 1103

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	ND	1.1	1.1		1	104	3.6	85-115	20	10/13/2011 1304

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

Where applicable, all soil sample analysis are reported 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.
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 13947

Client: ERM NC, INC.	Report to Contact: Michael Pressley	Sampler (Printed Name): [illegible]	Quote No: 12585
Address: 8000 CORPORATE CENTER #200	Telephone No. / Fax No. / Email: michael.pressley@erm.com	Waybill No.	Page 1 of 1
City: CHARLOTTE State: NC Zip Code: 28226	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCl 6. Na Thio. 7. NaOH 8 MeOH 9 DI water		
Project Name: JOSLYN CLARK			
Project Number: 0145499	P.O Number:		

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: VOCs by 8260	TAL METALS	PAHs	Number of Containers	Bottle (See Instructions on back)	Preservative	Lot No.	Remarks / Cooler ID
									4	1	1				MJ11034	
									A	L	M					
									1&9	1	1					
GP-14 6-8'	10-10-11	10:20	G				X		X	X	X					
GP-15 6-8'		10:45	G				X		X	X						
GP-16 10-12'		11:05	G				X		X	X	X					
GP-16 26-28'		11:20	G				X		X	X	X					
GP-16 38-40'		11:40	G				X		X	X	X					
DUP-1		—	G				X		X	X	X					

Turn Around Time Required (Prior lab approval required for expedited TAT): X Standard ☐ Rush (Please Specify) Std 7 Day TAT

Sample Disposal: ☐ Return to Client X Disposal by Lab

QC Requirements (Specify):

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

	Date	Time		Date	Time
1. Relinquished by Sampler: Michael Pressley	10-11-11	11:20	1. Received by: [illegible]	10-11-11	11:20
2. Relinquished by: [illegible]	10-11-11	16:00	2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory Received by: [illegible]	10-11-11	1600

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

LAB USE ONLY — Received on Ice (Check) X ☐ Yes ☐ No ☐ Ice Pack — Receipt Temp. 1.2 °C — Temp. Blank ☐ Y X N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 9

Replaces Date: 05/06/11
Effective Date: 10/11/11

Sample Receipt Checklist (SRC)

Client: Zeus Cooler Inspected by/date: [illegible] 10/14/11 Lot #: MJ1134

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 1 / 2 °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/BNA/pest/PCB/herb (<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/BNA/pest/PCB/herb.

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: _____ Date of response: _____

Comments: _____

Appendix F

Groundwater Sampling Laboratory Report

Report of Analysis

ERM-Southeast, Inc
8000 Corporate Center Drive
Suite 200
Charlotte, NC 28226
Attention: Michael Pressley

Project Name: Joslyn Clark

Lot Number: MK14023
Date Completed: 11/29/2011
Date Revised: 01/03/2012

Kelly M. Maberry
Project Manager

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

MK14023

Case Narrative
ERM-Southeast, Inc
Lot Number: MK14023

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.

GC/MS Volatiles

The method blank associated with sample -013 had 2-hexanone detected at a concentration that was above the MDL but below ½ the PQL. All samples associated with this method blank that have detections for this compound have been flagged with a "B".

The LCS/LCSD associated with batch 71892 had 1,1,2-trichloro-1,2,2-trifluoroethane and trichlorofluoromethane recovered above the acceptance limits. This demonstrates a high bias on analytical results. There were no detections for these compounds in the samples associated with this batch; therefore, data quality is not impacted.

Inorganic Metals

Metals were not analyzed on the trip blank.

The method blank associated with samples -001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011 and -012 had aluminum and potassium detected at a concentration that was above the MDL but below ½ the PQL. All samples associated with this method blank that have detections for these metals have been flagged with a "B".

The method blank associated with samples -009 and -011had selenium detected at a concentration that was above the MDL but below ½ the PQL. All samples associated with this method blank that have detections for this metal have been flagged with a "B".

Revision 01/03/12

Report was revised at the client's request to include EDB and DBCP in the volatiles list of compounds.

Sample Summary

ERM-Southeast, Inc

Lot Number: MK14023

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	MW-1	Aqueous	11/10/2011 1615	11/14/2011
002	MW-2	Aqueous	11/11/2011 1200	11/14/2011
003	MW-3	Aqueous	11/11/2011 1445	11/14/2011
004	MW-3D	Aqueous	11/11/2011 1305	11/14/2011
005	MW-4	Aqueous	11/10/2011 1510	11/14/2011
006	MW-5	Aqueous	11/10/2011 1335	11/14/2011
007	MW-6	Aqueous	11/11/2011 0910	11/14/2011
008	MW-7	Aqueous	11/11/2011 1030	11/14/2011
009	MW-8	Aqueous	11/10/2011 1715	11/14/2011
010	MW-9	Aqueous	11/10/2011 1345	11/14/2011
011	MW-10	Aqueous	11/10/2011 1220	11/14/2011
012	MW-10D	Aqueous	11/10/2011 1120	11/14/2011
013	Trip Blank	Aqueous	11/10/2011	11/14/2011

(13 samples)

Executive Summary
ERM-Southeast, Inc
Lot Number: MK14023

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	MW-1	Aqueous	Tetrachloroethene	8260B	0.44	J	ug/L	9
001	MW-1	Aqueous	Trichloroethene	8260B	3.8		ug/L	10
001	MW-1	Aqueous	Aluminum	6020A	260	B	ug/L	11
001	MW-1	Aqueous	Antimony	6020A	0.16	J	ug/L	11
001	MW-1	Aqueous	Barium	6020A	69		ug/L	11
001	MW-1	Aqueous	Calcium	6020A	890		ug/L	11
001	MW-1	Aqueous	Chromium	6020A	0.93	J	ug/L	11
001	MW-1	Aqueous	Cobalt	6020A	1.1	J	ug/L	11
001	MW-1	Aqueous	Copper	6020A	0.60	J	ug/L	11
001	MW-1	Aqueous	Iron	6020A	320		ug/L	11
001	MW-1	Aqueous	Lead	6020A	0.30	J	ug/L	11
001	MW-1	Aqueous	Magnesium	6020A	1100		ug/L	11
001	MW-1	Aqueous	Manganese	6020A	10		ug/L	11
001	MW-1	Aqueous	Nickel	6020A	1.3	J	ug/L	11
001	MW-1	Aqueous	Potassium	6020A	2200	B	ug/L	11
001	MW-1	Aqueous	Sodium	6020A	2100		ug/L	11
001	MW-1	Aqueous	Zinc	6020A	14		ug/L	11
002	MW-2	Aqueous	Chloroform	8260B	0.36	J	ug/L	13
002	MW-2	Aqueous	Tetrachloroethene	8260B	0.16	J	ug/L	13
002	MW-2	Aqueous	Trichloroethene	8260B	35		ug/L	14
002	MW-2	Aqueous	Aluminum	6020A	440	B	ug/L	15
002	MW-2	Aqueous	Barium	6020A	26		ug/L	15
002	MW-2	Aqueous	Calcium	6020A	4800		ug/L	15
002	MW-2	Aqueous	Chromium	6020A	1.8	J	ug/L	15
002	MW-2	Aqueous	Cobalt	6020A	0.16	J	ug/L	15
002	MW-2	Aqueous	Copper	6020A	1.5		ug/L	15
002	MW-2	Aqueous	Iron	6020A	530		ug/L	15
002	MW-2	Aqueous	Lead	6020A	0.46	J	ug/L	15
002	MW-2	Aqueous	Magnesium	6020A	480		ug/L	15
002	MW-2	Aqueous	Manganese	6020A	9.7		ug/L	15
002	MW-2	Aqueous	Nickel	6020A	0.34	J	ug/L	15
002	MW-2	Aqueous	Potassium	6020A	1600	B	ug/L	15
002	MW-2	Aqueous	Sodium	6020A	6900		ug/L	15
002	MW-2	Aqueous	Zinc	6020A	8.3	J	ug/L	15
003	MW-3	Aqueous	1,1-Dichloroethane	8260B	30		ug/L	17
003	MW-3	Aqueous	1,1-Dichloroethene	8260B	20		ug/L	17
003	MW-3	Aqueous	Tetrachloroethene	8260B	55		ug/L	17
003	MW-3	Aqueous	1,1,2-Trichloroethane	8260B	6.5	J	ug/L	17
003	MW-3	Aqueous	Trichloroethene	8260B	3200		ug/L	18
003	MW-3	Aqueous	Aluminum	6020A	680	B	ug/L	20
003	MW-3	Aqueous	Barium	6020A	38		ug/L	20
003	MW-3	Aqueous	Calcium	6020A	4100		ug/L	20
003	MW-3	Aqueous	Chromium	6020A	2.3	J	ug/L	20
003	MW-3	Aqueous	Cobalt	6020A	0.23	J	ug/L	20
003	MW-3	Aqueous	Copper	6020A	0.72	J	ug/L	20

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	MW-3	Aqueous	Iron	6020A	820		ug/L	20
003	MW-3	Aqueous	Lead	6020A	0.26	J	ug/L	20
003	MW-3	Aqueous	Magnesium	6020A	800		ug/L	20
003	MW-3	Aqueous	Manganese	6020A	27		ug/L	20
003	MW-3	Aqueous	Nickel	6020A	0.44	J	ug/L	20
003	MW-3	Aqueous	Potassium	6020A	1600	B	ug/L	20
003	MW-3	Aqueous	Sodium	6020A	9600		ug/L	20
003	MW-3	Aqueous	Vanadium	6020A	1.9	J	ug/L	20
003	MW-3	Aqueous	Zinc	6020A	5.7	J	ug/L	20
004	MW-3D	Aqueous	Chloroform	8260B	0.54	J	ug/L	22
004	MW-3D	Aqueous	1,1-Dichloroethene	8260B	1.6		ug/L	22
004	MW-3D	Aqueous	Tetrachloroethene	8260B	0.65	J	ug/L	22
004	MW-3D	Aqueous	Trichloroethene	8260B	26		ug/L	23
004	MW-3D	Aqueous	Aluminum	6020A	4400	B	ug/L	25
004	MW-3D	Aqueous	Antimony	6020A	0.29	J	ug/L	25
004	MW-3D	Aqueous	Arsenic	6020A	0.75	J	ug/L	25
004	MW-3D	Aqueous	Barium	6020A	92		ug/L	25
004	MW-3D	Aqueous	Beryllium	6020A	0.38	J	ug/L	25
004	MW-3D	Aqueous	Calcium	6020A	11000		ug/L	25
004	MW-3D	Aqueous	Chromium	6020A	6.9		ug/L	25
004	MW-3D	Aqueous	Cobalt	6020A	2.3	J	ug/L	25
004	MW-3D	Aqueous	Copper	6020A	7.4		ug/L	25
004	MW-3D	Aqueous	Iron	6020A	4800		ug/L	25
004	MW-3D	Aqueous	Lead	6020A	3.3		ug/L	25
004	MW-3D	Aqueous	Magnesium	6020A	3700		ug/L	25
004	MW-3D	Aqueous	Manganese	6020A	180		ug/L	25
004	MW-3D	Aqueous	Nickel	6020A	2.2	J	ug/L	25
004	MW-3D	Aqueous	Potassium	6020A	2600	B	ug/L	25
004	MW-3D	Aqueous	Sodium	6020A	14000		ug/L	25
004	MW-3D	Aqueous	Vanadium	6020A	12		ug/L	25
004	MW-3D	Aqueous	Zinc	6020A	19		ug/L	25
004	MW-3D	Aqueous	Mercury	7470A	0.000054	J	mg/L	26
005	MW-4	Aqueous	Tetrachloroethene	8260B	0.73	J	ug/L	27
005	MW-4	Aqueous	Trichloroethene	8260B	5.5		ug/L	28
005	MW-4	Aqueous	Aluminum	6020A	230	B	ug/L	29
005	MW-4	Aqueous	Barium	6020A	34		ug/L	29
005	MW-4	Aqueous	Calcium	6020A	1300		ug/L	29
005	MW-4	Aqueous	Chromium	6020A	1.3	J	ug/L	29
005	MW-4	Aqueous	Copper	6020A	0.40	J	ug/L	29
005	MW-4	Aqueous	Iron	6020A	180		ug/L	29
005	MW-4	Aqueous	Lead	6020A	0.26	J	ug/L	29
005	MW-4	Aqueous	Magnesium	6020A	480		ug/L	29
005	MW-4	Aqueous	Manganese	6020A	6.7		ug/L	29
005	MW-4	Aqueous	Potassium	6020A	1600	B	ug/L	29
005	MW-4	Aqueous	Sodium	6020A	4100		ug/L	29
005	MW-4	Aqueous	Zinc	6020A	5.2	J	ug/L	29
006	MW-5	Aqueous	Aluminum	6020A	2800	B	ug/L	33
006	MW-5	Aqueous	Barium	6020A	270		ug/L	33

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
006	MW-5	Aqueous	Beryllium	6020A	0.83		ug/L	33
006	MW-5	Aqueous	Cadmium	6020A	0.064	J	ug/L	33
006	MW-5	Aqueous	Calcium	6020A	10000		ug/L	33
006	MW-5	Aqueous	Chromium	6020A	1.8	J	ug/L	33
006	MW-5	Aqueous	Cobalt	6020A	1.2	J	ug/L	33
006	MW-5	Aqueous	Copper	6020A	6.7		ug/L	33
006	MW-5	Aqueous	Iron	6020A	3500		ug/L	33
006	MW-5	Aqueous	Lead	6020A	2.3		ug/L	33
006	MW-5	Aqueous	Magnesium	6020A	2900		ug/L	33
006	MW-5	Aqueous	Manganese	6020A	92		ug/L	33
006	MW-5	Aqueous	Nickel	6020A	1.3	J	ug/L	33
006	MW-5	Aqueous	Potassium	6020A	3000	B	ug/L	33
006	MW-5	Aqueous	Sodium	6020A	8100		ug/L	33
006	MW-5	Aqueous	Vanadium	6020A	4.9	J	ug/L	33
006	MW-5	Aqueous	Zinc	6020A	42		ug/L	33
007	MW-6	Aqueous	Trichloroethene	8260B	7.5		ug/L	36
007	MW-6	Aqueous	Aluminum	6020A	1100	B	ug/L	37
007	MW-6	Aqueous	Barium	6020A	79		ug/L	37
007	MW-6	Aqueous	Beryllium	6020A	0.056	J	ug/L	37
007	MW-6	Aqueous	Calcium	6020A	6000		ug/L	37
007	MW-6	Aqueous	Chromium	6020A	3.0	J	ug/L	37
007	MW-6	Aqueous	Cobalt	6020A	0.94	J	ug/L	37
007	MW-6	Aqueous	Copper	6020A	3.0		ug/L	37
007	MW-6	Aqueous	Iron	6020A	1700		ug/L	37
007	MW-6	Aqueous	Lead	6020A	0.73	J	ug/L	37
007	MW-6	Aqueous	Magnesium	6020A	2300		ug/L	37
007	MW-6	Aqueous	Manganese	6020A	49		ug/L	37
007	MW-6	Aqueous	Nickel	6020A	1.1	J	ug/L	37
007	MW-6	Aqueous	Potassium	6020A	2600	B	ug/L	37
007	MW-6	Aqueous	Sodium	6020A	4300		ug/L	37
007	MW-6	Aqueous	Vanadium	6020A	3.9	J	ug/L	37
007	MW-6	Aqueous	Zinc	6020A	18		ug/L	37
008	MW-7	Aqueous	Chloroform	8260B	1.8		ug/L	39
008	MW-7	Aqueous	1,1-Dichloroethane	8260B	1.1		ug/L	39
008	MW-7	Aqueous	cis-1,2-Dichloroethene	8260B	2.8		ug/L	39
008	MW-7	Aqueous	Tetrachloroethene	8260B	11		ug/L	39
008	MW-7	Aqueous	Trichloroethene	8260B	370		ug/L	40
008	MW-7	Aqueous	Aluminum	6020A	1000	B	ug/L	41
008	MW-7	Aqueous	Arsenic	6020A	0.30	J	ug/L	41
008	MW-7	Aqueous	Barium	6020A	93		ug/L	41
008	MW-7	Aqueous	Calcium	6020A	3500		ug/L	41
008	MW-7	Aqueous	Chromium	6020A	1.8	J	ug/L	41
008	MW-7	Aqueous	Cobalt	6020A	0.25	J	ug/L	41
008	MW-7	Aqueous	Copper	6020A	0.79	J	ug/L	41
008	MW-7	Aqueous	Iron	6020A	1600		ug/L	41
008	MW-7	Aqueous	Lead	6020A	0.79	J	ug/L	41
008	MW-7	Aqueous	Magnesium	6020A	1400		ug/L	41
008	MW-7	Aqueous	Manganese	6020A	43		ug/L	41

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
008	MW-7	Aqueous	Nickel	6020A	0.44	J	ug/L	41
008	MW-7	Aqueous	Potassium	6020A	2000	B	ug/L	41
008	MW-7	Aqueous	Silver	6020A	0.015	J	ug/L	41
008	MW-7	Aqueous	Sodium	6020A	7700		ug/L	41
008	MW-7	Aqueous	Vanadium	6020A	2.7	J	ug/L	41
008	MW-7	Aqueous	Zinc	6020A	17		ug/L	41
008	MW-7	Aqueous	Mercury	7470A	0.000055	J	mg/L	42
009	MW-8	Aqueous	Tetrachloroethene	8260B	0.57	J	ug/L	43
009	MW-8	Aqueous	Trichloroethene	8260B	3.0		ug/L	44
009	MW-8	Aqueous	Aluminum	6020A	1300	B	ug/L	45
009	MW-8	Aqueous	Arsenic	6020A	0.29	J	ug/L	45
009	MW-8	Aqueous	Barium	6020A	74		ug/L	45
009	MW-8	Aqueous	Beryllium	6020A	0.045	J	ug/L	45
009	MW-8	Aqueous	Calcium	6020A	13000		ug/L	45
009	MW-8	Aqueous	Chromium	6020A	1.2	J	ug/L	45
009	MW-8	Aqueous	Cobalt	6020A	1.4	J	ug/L	45
009	MW-8	Aqueous	Copper	6020A	3.8		ug/L	45
009	MW-8	Aqueous	Iron	6020A	2300		ug/L	45
009	MW-8	Aqueous	Lead	6020A	0.47	J	ug/L	45
009	MW-8	Aqueous	Magnesium	6020A	5100		ug/L	45
009	MW-8	Aqueous	Manganese	6020A	120		ug/L	45
009	MW-8	Aqueous	Nickel	6020A	1.1	J	ug/L	45
009	MW-8	Aqueous	Potassium	6020A	1700	B	ug/L	45
009	MW-8	Aqueous	Selenium	6020A	0.25	BJ	ug/L	45
009	MW-8	Aqueous	Sodium	6020A	15000		ug/L	45
009	MW-8	Aqueous	Vanadium	6020A	12		ug/L	45
009	MW-8	Aqueous	Zinc	6020A	9.1	J	ug/L	45
010	MW-9	Aqueous	Bromodichloromethane	8260B	0.65	J	ug/L	47
010	MW-9	Aqueous	Carbon disulfide	8260B	1.3		ug/L	47
010	MW-9	Aqueous	Carbon tetrachloride	8260B	0.36	J	ug/L	47
010	MW-9	Aqueous	Chloroform	8260B	26		ug/L	47
010	MW-9	Aqueous	1,2-Dichloroethane	8260B	3.5		ug/L	47
010	MW-9	Aqueous	1,1-Dichloroethane	8260B	3.6		ug/L	47
010	MW-9	Aqueous	trans-1,2-Dichloroethene	8260B	1.8		ug/L	47
010	MW-9	Aqueous	cis-1,2-Dichloroethene	8260B	250		ug/L	47
010	MW-9	Aqueous	1,1-Dichloroethene	8260B	320		ug/L	47
010	MW-9	Aqueous	Tetrachloroethene	8260B	970		ug/L	47
010	MW-9	Aqueous	Toluene	8260B	0.37	J	ug/L	47
010	MW-9	Aqueous	1,1,2-Trichloroethane	8260B	14		ug/L	47
010	MW-9	Aqueous	1,1,1-Trichloroethane	8260B	0.82	J	ug/L	48
010	MW-9	Aqueous	Trichloroethene	8260B	12000		ug/L	48
010	MW-9	Aqueous	Aluminum	6020A	330	B	ug/L	50
010	MW-9	Aqueous	Barium	6020A	58		ug/L	50
010	MW-9	Aqueous	Calcium	6020A	4300		ug/L	50
010	MW-9	Aqueous	Chromium	6020A	0.37	J	ug/L	50
010	MW-9	Aqueous	Cobalt	6020A	2.3	J	ug/L	50
010	MW-9	Aqueous	Copper	6020A	0.37	J	ug/L	50
010	MW-9	Aqueous	Iron	6020A	390		ug/L	50

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
010	MW-9	Aqueous	Lead	6020A	0.21	J	ug/L	50
010	MW-9	Aqueous	Magnesium	6020A	1000		ug/L	50
010	MW-9	Aqueous	Manganese	6020A	330		ug/L	50
010	MW-9	Aqueous	Nickel	6020A	1.7	J	ug/L	50
010	MW-9	Aqueous	Potassium	6020A	2000	B	ug/L	50
010	MW-9	Aqueous	Sodium	6020A	9700		ug/L	50
010	MW-9	Aqueous	Zinc	6020A	8.5	J	ug/L	50
011	MW-10	Aqueous	1,1-Dichloroethene	8260B	0.17	J	ug/L	52
011	MW-10	Aqueous	Aluminum	6020A	1700	B	ug/L	54
011	MW-10	Aqueous	Arsenic	6020A	0.28	J	ug/L	54
011	MW-10	Aqueous	Barium	6020A	39		ug/L	54
011	MW-10	Aqueous	Calcium	6020A	6700		ug/L	54
011	MW-10	Aqueous	Chromium	6020A	3.7	J	ug/L	54
011	MW-10	Aqueous	Cobalt	6020A	1.2	J	ug/L	54
011	MW-10	Aqueous	Copper	6020A	3.2		ug/L	54
011	MW-10	Aqueous	Iron	6020A	3100		ug/L	54
011	MW-10	Aqueous	Lead	6020A	1.1		ug/L	54
011	MW-10	Aqueous	Magnesium	6020A	1500		ug/L	54
011	MW-10	Aqueous	Manganese	6020A	130		ug/L	54
011	MW-10	Aqueous	Nickel	6020A	1.3	J	ug/L	54
011	MW-10	Aqueous	Potassium	6020A	1300	B	ug/L	54
011	MW-10	Aqueous	Selenium	6020A	0.65	BJ	ug/L	54
011	MW-10	Aqueous	Sodium	6020A	14000		ug/L	54
011	MW-10	Aqueous	Vanadium	6020A	6.5		ug/L	54
011	MW-10	Aqueous	Zinc	6020A	12		ug/L	54
012	MW-10D	Aqueous	Carbon disulfide	8260B	0.12	J	ug/L	56
012	MW-10D	Aqueous	Chloroform	8260B	0.42	J	ug/L	56
012	MW-10D	Aqueous	Aluminum	6020A	81	B	ug/L	58
012	MW-10D	Aqueous	Barium	6020A	20		ug/L	58
012	MW-10D	Aqueous	Calcium	6020A	16000		ug/L	58
012	MW-10D	Aqueous	Chromium	6020A	0.92	J	ug/L	58
012	MW-10D	Aqueous	Copper	6020A	0.20	J	ug/L	58
012	MW-10D	Aqueous	Iron	6020A	130		ug/L	58
012	MW-10D	Aqueous	Magnesium	6020A	2800		ug/L	58
012	MW-10D	Aqueous	Manganese	6020A	9.8		ug/L	58
012	MW-10D	Aqueous	Potassium	6020A	1500	B	ug/L	58
012	MW-10D	Aqueous	Sodium	6020A	14000		ug/L	58
012	MW-10D	Aqueous	Vanadium	6020A	4.5	J	ug/L	58
012	MW-10D	Aqueous	Zinc	6020A	1.8	J	ug/L	58
013	Trip Blank	Aqueous	2-Hexanone	8260B	0.34	J	ug/L	60

(229 detections)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-001
Description: MW-1
Matrix: Aqueous
Date Sampled: 11/10/2011 1615
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/16/2011 2330	JJG		74929

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		1.0	0.13	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	0.33	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	0.66	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	0.097	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	0.14	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	0.33	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	0.47	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	0.33	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	0.35	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	0.30	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	0.33	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	0.33	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	0.13	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	0.21	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	0.12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	0.16	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	0.19	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	0.11	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	0.092	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.27	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	0.030	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.30	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.31	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	0.33	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	0.12	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	0.16	ug/L	1
Tetrachloroethene	127-18-4	8260B	0.44	J	1.0	0.13	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	0.51	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	0.21	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	0.074	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-001
Description: MW-1
Matrix: Aqueous
Date Sampled: 11/10/2011 1615
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/16/2011 2330	JJG		74929

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	3.8		1.0	0.18	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	0.054	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		97	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
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

ICP-MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-001
Description: MW-1
Matrix: Aqueous
Date Sampled: 11/10/2011 1615
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	11/17/2011 0319	KJC	11/16/2011 2020	71887
2	3005A	6020A	1	11/17/2011 2104	KJC	11/16/2011 2020	71887

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6020A	260	B	40	1.8	ug/L	2
Antimony	7440-36-0	6020A	0.16	J	1.0	0.097	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Barium	7440-39-3	6020A	69		5.0	0.045	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.028	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.059	ug/L	1
Calcium	7440-70-2	6020A	890		200	13	ug/L	1
Chromium	7440-47-3	6020A	0.93	J	5.0	0.35	ug/L	1
Cobalt	7440-48-4	6020A	1.1	J	5.0	0.029	ug/L	1
Copper	7440-50-8	6020A	0.60	J	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	320		20	5.7	ug/L	1
Lead	7439-92-1	6020A	0.30	J	1.0	0.047	ug/L	1
Magnesium	7439-95-4	6020A	1100		50	0.94	ug/L	1
Manganese	7439-96-5	6020A	10		5.0	0.20	ug/L	1
Nickel	7440-02-0	6020A	1.3	J	5.0	0.28	ug/L	1
Potassium	7440-09-7	6020A	2200	B	200	6.0	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.25	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.011	ug/L	2
Sodium	7440-23-5	6020A	2100		200	4.0	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.076	ug/L	1
Vanadium	7440-62-2	6020A	ND		5.0	1.5	ug/L	1
Zinc	7440-66-6	6020A	14		10	1.5	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"
* = Reportable result (only when report all runs)

CVAA

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-001
Description: MW-1
Matrix: Aqueous
Date Sampled: 11/10/2011 1615
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/17/2011 1322	BNW	11/17/2011 1005	71904

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	ND		0.00010	0.000053	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-002
Description: MW-2
Matrix: Aqueous
Date Sampled: 11/11/2011 1200
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/16/2011 2352	JJG		74929

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		1.0	0.13	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	0.33	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	0.66	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	0.097	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	0.14	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	0.33	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	0.47	ug/L	1
Chloroform	67-66-3	8260B	0.36	J	1.0	0.33	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	0.35	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	0.30	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	0.33	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	0.33	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	0.13	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	0.21	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	0.12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	0.16	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	0.19	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	0.11	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	0.092	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.27	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	0.030	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.30	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.31	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	0.33	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	0.12	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	0.16	ug/L	1
Tetrachloroethene	127-18-4	8260B	0.16	J	1.0	0.13	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	0.51	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	0.21	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	0.074	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-002
Description: MW-2
Matrix: Aqueous
Date Sampled: 11/11/2011 1200
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/16/2011 2352	JJG		74929

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	35		1.0	0.18	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	0.054	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130
Bromofluorobenzene		99	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"
* = Reportable result (only when report all runs)

ICP-MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-002
Description: MW-2
Matrix: Aqueous
Date Sampled: 11/11/2011 1200
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	11/17/2011 0327	KJC	11/16/2011 2020	71887
2	3005A	6020A	1	11/17/2011 2112	KJC	11/16/2011 2020	71887

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6020A	440	B	40	1.8	ug/L	2
Antimony	7440-36-0	6020A	ND		1.0	0.097	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Barium	7440-39-3	6020A	26		5.0	0.045	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.028	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.059	ug/L	1
Calcium	7440-70-2	6020A	4800		200	13	ug/L	1
Chromium	7440-47-3	6020A	1.8	J	5.0	0.35	ug/L	1
Cobalt	7440-48-4	6020A	0.16	J	5.0	0.029	ug/L	1
Copper	7440-50-8	6020A	1.5		1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	530		20	5.7	ug/L	1
Lead	7439-92-1	6020A	0.46	J	1.0	0.047	ug/L	1
Magnesium	7439-95-4	6020A	480		50	0.94	ug/L	1
Manganese	7439-96-5	6020A	9.7		5.0	0.20	ug/L	1
Nickel	7440-02-0	6020A	0.34	J	5.0	0.28	ug/L	1
Potassium	7440-09-7	6020A	1600	B	200	6.0	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.25	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.011	ug/L	2
Sodium	7440-23-5	6020A	6900		200	4.0	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.076	ug/L	1
Vanadium	7440-62-2	6020A	ND		5.0	1.5	ug/L	1
Zinc	7440-66-6	6020A	8.3	J	10	1.5	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"
* = Reportable result (only when report all runs)

CVAA

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-002
Description: MW-2
Matrix: Aqueous
Date Sampled: 11/11/2011 1200
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/17/2011 1332	BNW	11/17/2011 1005	71904

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	ND		0.00010	0.000053	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-003
Description: MW-3
Matrix: Aqueous
Date Sampled: 11/11/2011 1445
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	11/17/2011 0228	JJG		74929

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		400	130	ug/L	1
Benzene	71-43-2	8260B	ND		20	2.6	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		20	6.6	ug/L	1
Bromoform	75-25-2	8260B	ND		20	13	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		40	16	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		200	41	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		20	1.9	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		20	2.7	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		20	6.6	ug/L	1
Chloroethane	75-00-3	8260B	ND		40	9.4	ug/L	1
Chloroform	67-66-3	8260B	ND		20	6.6	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		20	7.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		20	6.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		20	12	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		20	6.6	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		20	6.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		20	6.6	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		20	6.6	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		20	6.6	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		40	4.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		20	2.9	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	30		20	2.6	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		20	4.1	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		20	2.4	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	20		20	3.2	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		20	3.8	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		20	2.1	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		20	1.8	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		20	6.6	ug/L	1
2-Hexanone	591-78-6	8260B	ND		200	5.5	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		20	0.60	ug/L	1
Methyl acetate	79-20-9	8260B	ND		20	6.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		20	8.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		200	6.2	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		100	19	ug/L	1
Methylene chloride	75-09-2	8260B	ND		20	6.6	ug/L	1
Styrene	100-42-5	8260B	ND		20	2.4	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		20	3.3	ug/L	1
Tetrachloroethene	127-18-4	8260B	55		20	2.6	ug/L	1
Toluene	108-88-3	8260B	ND		20	6.6	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		20	6.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		20	10	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	6.5	J	20	4.2	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		20	1.5	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-003
Description: MW-3
Matrix: Aqueous
Date Sampled: 11/11/2011 1445
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	11/17/2011 0228	JJG		74929

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	3200		20	3.6	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		20	6.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		20	1.1	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		20	6.6	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		99	70-130

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

Semivolatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-003
Description: MW-3
Matrix: Aqueous
Date Sampled: 11/11/2011 1445
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	11/22/2011 1948	JCG	11/16/2011 1436	71833

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.2	1.3	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.2	1.3	ug/L	1
Anthracene	120-12-7	8270D	ND		5.2	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.2	0.63	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.2	0.52	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.2	0.63	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.2	0.83	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.2	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.2	0.73	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.2	1.4	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.2	1.5	ug/L	1
Fluorene	86-73-7	8270D	ND		5.2	1.5	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.2	2.4	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.2	1.4	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.2	1.3	ug/L	1
Pyrene	129-00-0	8270D	ND		5.2	3.2	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		93	37-129
Nitrobenzene-d5		85	38-127
Terphenyl-d14		84	10-148

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

ICP-MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-003
Description: MW-3
Matrix: Aqueous
Date Sampled: 11/11/2011 1445
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	11/17/2011 0335	KJC	11/16/2011 2020	71887
2	3005A	6020A	1	11/17/2011 2120	KJC	11/16/2011 2020	71887

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6020A	680	B	40	1.8	ug/L	2
Antimony	7440-36-0	6020A	ND		1.0	0.097	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Barium	7440-39-3	6020A	38		5.0	0.045	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.028	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.059	ug/L	1
Calcium	7440-70-2	6020A	4100		200	13	ug/L	1
Chromium	7440-47-3	6020A	2.3	J	5.0	0.35	ug/L	1
Cobalt	7440-48-4	6020A	0.23	J	5.0	0.029	ug/L	1
Copper	7440-50-8	6020A	0.72	J	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	820		20	5.7	ug/L	1
Lead	7439-92-1	6020A	0.26	J	1.0	0.047	ug/L	1
Magnesium	7439-95-4	6020A	800		50	0.94	ug/L	1
Manganese	7439-96-5	6020A	27		5.0	0.20	ug/L	1
Nickel	7440-02-0	6020A	0.44	J	5.0	0.28	ug/L	1
Potassium	7440-09-7	6020A	1600	B	200	6.0	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.25	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.011	ug/L	2
Sodium	7440-23-5	6020A	9600		200	4.0	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.076	ug/L	1
Vanadium	7440-62-2	6020A	1.9	J	5.0	1.5	ug/L	1
Zinc	7440-66-6	6020A	5.7	J	10	1.5	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"
* = Reportable result (only when report all runs)

CVAA

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-003
Description: MW-3
Matrix: Aqueous
Date Sampled: 11/11/2011 1445
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/17/2011 1337	BNW	11/17/2011 1005	71904

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	ND		0.00010	0.000053	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-004
Description: MW-3D
Matrix: Aqueous
Date Sampled: 11/11/2011 1305
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	11/25/2011 1440	JJG		74931

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		1.0	0.13	ug/L	2
Bromodichloromethane	75-27-4	8260B	ND		1.0	0.33	ug/L	2
Bromoform	75-25-2	8260B	ND		1.0	0.66	ug/L	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	0.80	ug/L	2
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	2
Carbon disulfide	75-15-0	8260B	ND		1.0	0.097	ug/L	2
Carbon tetrachloride	56-23-5	8260B	ND		1.0	0.14	ug/L	2
Chlorobenzene	108-90-7	8260B	ND		1.0	0.33	ug/L	2
Chloroethane	75-00-3	8260B	ND		2.0	0.47	ug/L	2
Chloroform	67-66-3	8260B	0.54	J	1.0	0.33	ug/L	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	0.35	ug/L	2
Cyclohexane	110-82-7	8260B	ND		1.0	0.30	ug/L	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	0.60	ug/L	2
Dibromochloromethane	124-48-1	8260B	ND		1.0	0.33	ug/L	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	0.30	ug/L	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	0.33	ug/L	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	0.33	ug/L	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	0.33	ug/L	2
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	0.20	ug/L	2
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	2
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	0.13	ug/L	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	0.21	ug/L	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	0.12	ug/L	2
1,1-Dichloroethene	75-35-4	8260B	1.6		1.0	0.16	ug/L	2
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	0.19	ug/L	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	0.11	ug/L	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	0.092	ug/L	2
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	2
2-Hexanone	591-78-6	8260B	ND		10	0.27	ug/L	2
Isopropylbenzene	98-82-8	8260B	ND		1.0	0.030	ug/L	2
Methyl acetate	79-20-9	8260B	ND		1.0	0.30	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.31	ug/L	2
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	2
Methylene chloride	75-09-2	8260B	ND		1.0	0.33	ug/L	2
Styrene	100-42-5	8260B	ND		1.0	0.12	ug/L	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	0.16	ug/L	2
Tetrachloroethene	127-18-4	8260B	0.65	J	1.0	0.13	ug/L	2
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.30	ug/L	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	0.51	ug/L	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	0.21	ug/L	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	0.074	ug/L	2

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

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-004
Description: MW-3D
Matrix: Aqueous
Date Sampled: 11/11/2011 1305
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	11/25/2011 1440	JJG		74931

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	26		1.0	0.18	ug/L	2
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	0.30	ug/L	2
Vinyl chloride	75-01-4	8260B	ND		1.0	0.054	ug/L	2
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		101	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"
* = Reportable result (only when report all runs)

Semivolatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-004
Description: MW-3D
Matrix: Aqueous
Date Sampled: 11/11/2011 1305
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	11/22/2011 2007	JCG	11/16/2011 1436	71833

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.3	1.3	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.3	1.3	ug/L	1
Anthracene	120-12-7	8270D	ND		5.3	1.2	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.3	0.63	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.3	0.53	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.3	0.63	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.3	0.84	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.3	1.1	ug/L	1
Chrysene	218-01-9	8270D	ND		5.3	0.74	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.3	1.4	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.3	1.5	ug/L	1
Fluorene	86-73-7	8270D	ND		5.3	1.5	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.3	2.4	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.3	1.4	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.3	1.3	ug/L	1
Pyrene	129-00-0	8270D	ND		5.3	3.3	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		89	37-129
Nitrobenzene-d5		81	38-127
Terphenyl-d14		50	10-148

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

ICP-MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-004
Description: MW-3D
Matrix: Aqueous
Date Sampled: 11/11/2011 1305
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	11/17/2011 0342	KJC	11/16/2011 2020	71887
2	3005A	6020A	1	11/17/2011 2128	KJC	11/16/2011 2020	71887
3	3005A	6020A	2	11/18/2011 0036	KJC	11/16/2011 2020	71887

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6020A	4400	B	40	1.8	ug/L	2
Antimony	7440-36-0	6020A	0.29	J	1.0	0.097	ug/L	1
Arsenic	7440-38-2	6020A	0.75	J	2.0	0.52	ug/L	3
Barium	7440-39-3	6020A	92		5.0	0.045	ug/L	1
Beryllium	7440-41-7	6020A	0.38	J	0.40	0.028	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.059	ug/L	1
Calcium	7440-70-2	6020A	11000		200	13	ug/L	1
Chromium	7440-47-3	6020A	6.9		5.0	0.35	ug/L	1
Cobalt	7440-48-4	6020A	2.3	J	5.0	0.029	ug/L	1
Copper	7440-50-8	6020A	7.4		1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	4800		20	5.7	ug/L	1
Lead	7439-92-1	6020A	3.3		1.0	0.047	ug/L	1
Magnesium	7439-95-4	6020A	3700		50	0.94	ug/L	1
Manganese	7439-96-5	6020A	180		5.0	0.20	ug/L	1
Nickel	7440-02-0	6020A	2.2	J	5.0	0.28	ug/L	1
Potassium	7440-09-7	6020A	2600	B	200	6.0	ug/L	1
Selenium	7782-49-2	6020A	ND		2.0	0.51	ug/L	3
Silver	7440-22-4	6020A	ND		1.0	0.011	ug/L	2
Sodium	7440-23-5	6020A	14000		200	4.0	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.076	ug/L	1
Vanadium	7440-62-2	6020A	12		5.0	1.5	ug/L	1
Zinc	7440-66-6	6020A	19		10	1.5	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"
* = Reportable result (only when report all runs)

CVAA

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-004
Description: MW-3D
Matrix: Aqueous
Date Sampled: 11/11/2011 1305
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/17/2011 1339	BNW	11/17/2011 1005	71904

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	0.000054	J	0.00010	0.000053	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-005
Description: MW-4
Matrix: Aqueous
Date Sampled: 11/10/2011 1510
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/17/2011 0014	JJG		74929

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		1.0	0.13	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	0.33	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	0.66	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	0.097	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	0.14	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	0.33	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	0.47	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	0.33	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	0.35	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	0.30	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	0.33	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	0.33	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	0.13	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	0.21	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	0.12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	0.16	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	0.19	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	0.11	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	0.092	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.27	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	0.030	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.30	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.31	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	0.33	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	0.12	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	0.16	ug/L	1
Tetrachloroethene	127-18-4	8260B	0.73	J	1.0	0.13	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	0.51	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	0.21	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	0.074	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-005
Description: MW-4
Matrix: Aqueous
Date Sampled: 11/10/2011 1510
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/17/2011 0014	JJG		74929

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	5.5		1.0	0.18	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	0.054	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		99	70-130

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

ICP-MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-005
Description: MW-4
Matrix: Aqueous
Date Sampled: 11/10/2011 1510
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	11/17/2011 0350	KJC	11/16/2011 2020	71887
2	3005A	6020A	1	11/17/2011 2136	KJC	11/16/2011 2020	71887

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6020A	230	B	40	1.8	ug/L	2
Antimony	7440-36-0	6020A	ND		1.0	0.097	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Barium	7440-39-3	6020A	34		5.0	0.045	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.028	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.059	ug/L	1
Calcium	7440-70-2	6020A	1300		200	13	ug/L	1
Chromium	7440-47-3	6020A	1.3	J	5.0	0.35	ug/L	1
Cobalt	7440-48-4	6020A	ND		5.0	0.029	ug/L	1
Copper	7440-50-8	6020A	0.40	J	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	180		20	5.7	ug/L	1
Lead	7439-92-1	6020A	0.26	J	1.0	0.047	ug/L	1
Magnesium	7439-95-4	6020A	480		50	0.94	ug/L	1
Manganese	7439-96-5	6020A	6.7		5.0	0.20	ug/L	1
Nickel	7440-02-0	6020A	ND		5.0	0.28	ug/L	1
Potassium	7440-09-7	6020A	1600	B	200	6.0	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.25	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.011	ug/L	2
Sodium	7440-23-5	6020A	4100		200	4.0	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.076	ug/L	1
Vanadium	7440-62-2	6020A	ND		5.0	1.5	ug/L	1
Zinc	7440-66-6	6020A	5.2	J	10	1.5	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"
* = Reportable result (only when report all runs)

CVAA

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-005
Description: MW-4
Matrix: Aqueous
Date Sampled: 11/10/2011 1510
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/17/2011 1347	BNW	11/17/2011 1005	71904

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	ND		0.00010	0.000053	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-006
Description: MW-5
Matrix: Aqueous
Date Sampled: 11/10/2011 1335
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/17/2011 0059	JJG		74929

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		1.0	0.13	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	0.33	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	0.66	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	0.097	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	0.14	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	0.33	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	0.47	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	0.33	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	0.35	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	0.30	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	0.33	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	0.33	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	0.13	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	0.21	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	0.12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	0.16	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	0.19	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	0.11	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	0.092	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.27	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	0.030	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.30	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.31	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	0.33	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	0.12	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	0.16	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	0.13	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	0.51	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	0.21	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	0.074	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-006
Description: MW-5
Matrix: Aqueous
Date Sampled: 11/10/2011 1335
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/17/2011 0059	JJG		74929

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	0.18	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	0.054	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		99	70-130

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

ICP-MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-006
Description: MW-5
Matrix: Aqueous
Date Sampled: 11/10/2011 1335
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	11/17/2011 0358	KJC	11/16/2011 2020	71887
2	3005A	6020A	1	11/17/2011 2144	KJC	11/16/2011 2020	71887
3	3005A	6020A	2	11/18/2011 0044	KJC	11/16/2011 2020	71887

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6020A	2800	B	40	1.8	ug/L	2
Antimony	7440-36-0	6020A	ND		1.0	0.097	ug/L	1
Arsenic	7440-38-2	6020A	ND		2.0	0.52	ug/L	3
Barium	7440-39-3	6020A	270		5.0	0.045	ug/L	1
Beryllium	7440-41-7	6020A	0.83		0.40	0.028	ug/L	1
Cadmium	7440-43-9	6020A	0.064	J	0.10	0.059	ug/L	1
Calcium	7440-70-2	6020A	10000		200	13	ug/L	1
Chromium	7440-47-3	6020A	1.8	J	5.0	0.35	ug/L	1
Cobalt	7440-48-4	6020A	1.2	J	5.0	0.029	ug/L	1
Copper	7440-50-8	6020A	6.7		1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	3500		20	5.7	ug/L	1
Lead	7439-92-1	6020A	2.3		1.0	0.047	ug/L	1
Magnesium	7439-95-4	6020A	2900		50	0.94	ug/L	1
Manganese	7439-96-5	6020A	92		5.0	0.20	ug/L	1
Nickel	7440-02-0	6020A	1.3	J	5.0	0.28	ug/L	1
Potassium	7440-09-7	6020A	3000	B	200	6.0	ug/L	1
Selenium	7782-49-2	6020A	ND		2.0	0.51	ug/L	3
Silver	7440-22-4	6020A	ND		1.0	0.011	ug/L	2
Sodium	7440-23-5	6020A	8100		200	4.0	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.076	ug/L	1
Vanadium	7440-62-2	6020A	4.9	J	5.0	1.5	ug/L	1
Zinc	7440-66-6	6020A	42		10	1.5	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"
* = Reportable result (only when report all runs)

CVAA

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-006
Description: MW-5
Matrix: Aqueous
Date Sampled: 11/10/2011 1335
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/17/2011 1349	BNW	11/17/2011 1005	71904

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	ND		0.00010	0.000053	mg/L	1

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

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-007
Description: MW-6
Matrix: Aqueous
Date Sampled: 11/11/2011 0910
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/17/2011 0121	JJG		74929

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		1.0	0.13	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	0.33	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	0.66	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	0.097	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	0.14	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	0.33	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	0.47	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	0.33	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	0.35	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	0.30	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	0.33	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	0.33	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	0.13	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	0.21	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	0.12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	0.16	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	0.19	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	0.11	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	0.092	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.27	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	0.030	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.30	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.31	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	0.33	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	0.12	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	0.16	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	0.13	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	0.51	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	0.21	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	0.074	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-007
Description: MW-6
Matrix: Aqueous
Date Sampled: 11/11/2011 0910
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/17/2011 0121	JJG		74929

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	7.5		1.0	0.18	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	0.054	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		99	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"
* = Reportable result (only when report all runs)

ICP-MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-007
Description: MW-6
Matrix: Aqueous
Date Sampled: 11/11/2011 0910
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	11/17/2011 0406	KJC	11/16/2011 2020	71887
2	3005A	6020A	1	11/17/2011 2151	KJC	11/16/2011 2020	71887

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6020A	1100	B	40	1.8	ug/L	2
Antimony	7440-36-0	6020A	ND		1.0	0.097	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Barium	7440-39-3	6020A	79		5.0	0.045	ug/L	1
Beryllium	7440-41-7	6020A	0.056	J	0.40	0.028	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.059	ug/L	1
Calcium	7440-70-2	6020A	6000		200	13	ug/L	1
Chromium	7440-47-3	6020A	3.0	J	5.0	0.35	ug/L	1
Cobalt	7440-48-4	6020A	0.94	J	5.0	0.029	ug/L	1
Copper	7440-50-8	6020A	3.0		1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	1700		20	5.7	ug/L	1
Lead	7439-92-1	6020A	0.73	J	1.0	0.047	ug/L	1
Magnesium	7439-95-4	6020A	2300		50	0.94	ug/L	1
Manganese	7439-96-5	6020A	49		5.0	0.20	ug/L	1
Nickel	7440-02-0	6020A	1.1	J	5.0	0.28	ug/L	1
Potassium	7440-09-7	6020A	2600	B	200	6.0	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.25	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.011	ug/L	2
Sodium	7440-23-5	6020A	4300		200	4.0	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.076	ug/L	1
Vanadium	7440-62-2	6020A	3.9	J	5.0	1.5	ug/L	1
Zinc	7440-66-6	6020A	18		10	1.5	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"
* = Reportable result (only when report all runs)

CVAA

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-007
Description: MW-6
Matrix: Aqueous
Date Sampled: 11/11/2011 0910
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/17/2011 1352	BNW	11/17/2011 1005	71904

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	ND		0.00010	0.000053	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-008
Description: MW-7
Matrix: Aqueous
Date Sampled: 11/11/2011 1030
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/17/2011 0144	JJG		74929

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		1.0	0.13	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	0.33	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	0.66	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	0.097	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	0.14	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	0.33	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	0.47	ug/L	1
Chloroform	67-66-3	8260B	1.8		1.0	0.33	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	0.35	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	0.30	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	0.33	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	0.33	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	1.1		1.0	0.13	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	0.21	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	2.8		1.0	0.12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	0.16	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	0.19	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	0.11	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	0.092	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.27	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	0.030	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.30	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.31	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	0.33	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	0.12	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	0.16	ug/L	1
Tetrachloroethene	127-18-4	8260B	11		1.0	0.13	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	0.51	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	0.21	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	0.074	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-008
Description: MW-7
Matrix: Aqueous
Date Sampled: 11/11/2011 1030
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/17/2011 0144	JJG		74929

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	370		1.0	0.18	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	0.054	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		99	70-130

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

ICP-MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-008
Description: MW-7
Matrix: Aqueous
Date Sampled: 11/11/2011 1030
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	11/17/2011 0429	KJC	11/16/2011 2020	71887
2	3005A	6020A	1	11/17/2011 2215	KJC	11/16/2011 2020	71887

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6020A	1000	B	40	1.8	ug/L	2
Antimony	7440-36-0	6020A	ND		1.0	0.097	ug/L	1
Arsenic	7440-38-2	6020A	0.30	J	1.0	0.26	ug/L	1
Barium	7440-39-3	6020A	93		5.0	0.045	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.028	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.059	ug/L	1
Calcium	7440-70-2	6020A	3500		200	13	ug/L	1
Chromium	7440-47-3	6020A	1.8	J	5.0	0.35	ug/L	1
Cobalt	7440-48-4	6020A	0.25	J	5.0	0.029	ug/L	1
Copper	7440-50-8	6020A	0.79	J	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	1600		20	5.7	ug/L	1
Lead	7439-92-1	6020A	0.79	J	1.0	0.047	ug/L	1
Magnesium	7439-95-4	6020A	1400		50	0.94	ug/L	1
Manganese	7439-96-5	6020A	43		5.0	0.20	ug/L	1
Nickel	7440-02-0	6020A	0.44	J	5.0	0.28	ug/L	1
Potassium	7440-09-7	6020A	2000	B	200	6.0	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.25	ug/L	1
Silver	7440-22-4	6020A	0.015	J	1.0	0.011	ug/L	2
Sodium	7440-23-5	6020A	7700		200	4.0	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.076	ug/L	1
Vanadium	7440-62-2	6020A	2.7	J	5.0	1.5	ug/L	1
Zinc	7440-66-6	6020A	17		10	1.5	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"
* = Reportable result (only when report all runs)

CVAA

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-008
Description: MW-7
Matrix: Aqueous
Date Sampled: 11/11/2011 1030
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/17/2011 1354	BNW	11/17/2011 1005	71904

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	0.000055	J	0.00010	0.000053	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-009
Description: MW-8
Matrix: Aqueous
Date Sampled: 11/10/2011 1715
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/19/2011 0230	JJG		74932

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		1.0	0.13	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	0.33	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	0.66	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	0.097	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	0.14	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	0.33	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	0.47	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	0.33	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	0.35	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	0.30	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	0.33	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	0.33	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	0.13	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	0.21	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	0.12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	0.16	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	0.19	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	0.11	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	0.092	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.27	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	0.030	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.30	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.31	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	0.33	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	0.12	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	0.16	ug/L	1
Tetrachloroethene	127-18-4	8260B	0.57	J	1.0	0.13	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	0.51	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	0.21	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	0.074	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-009
Description: MW-8
Matrix: Aqueous
Date Sampled: 11/10/2011 1715
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/19/2011 0230	JJG		74932

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	3.0		1.0	0.18	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	0.054	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

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

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

ICP-MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-009
Description: MW-8
Matrix: Aqueous
Date Sampled: 11/10/2011 1715
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	11/17/2011 0437	KJC	11/16/2011 2020	71887
2	3005A	6020A	1	11/17/2011 2223	KJC	11/16/2011 2020	71887

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6020A	1300	B	40	1.8	ug/L	2
Antimony	7440-36-0	6020A	ND		1.0	0.097	ug/L	1
Arsenic	7440-38-2	6020A	0.29	J	1.0	0.26	ug/L	1
Barium	7440-39-3	6020A	74		5.0	0.045	ug/L	1
Beryllium	7440-41-7	6020A	0.045	J	0.40	0.028	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.059	ug/L	1
Calcium	7440-70-2	6020A	13000		200	13	ug/L	1
Chromium	7440-47-3	6020A	1.2	J	5.0	0.35	ug/L	1
Cobalt	7440-48-4	6020A	1.4	J	5.0	0.029	ug/L	1
Copper	7440-50-8	6020A	3.8		1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	2300		20	5.7	ug/L	1
Lead	7439-92-1	6020A	0.47	J	1.0	0.047	ug/L	1
Magnesium	7439-95-4	6020A	5100		50	0.94	ug/L	1
Manganese	7439-96-5	6020A	120		5.0	0.20	ug/L	1
Nickel	7440-02-0	6020A	1.1	J	5.0	0.28	ug/L	1
Potassium	7440-09-7	6020A	1700	B	200	6.0	ug/L	1
Selenium	7782-49-2	6020A	0.25	BJ	1.0	0.25	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.011	ug/L	2
Sodium	7440-23-5	6020A	15000		200	4.0	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.076	ug/L	1
Vanadium	7440-62-2	6020A	12		5.0	1.5	ug/L	1
Zinc	7440-66-6	6020A	9.1	J	10	1.5	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"
* = Reportable result (only when report all runs)

CVAA

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-009
Description: MW-8
Matrix: Aqueous
Date Sampled: 11/10/2011 1715
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/17/2011 1357	BNW	11/17/2011 1005	71904

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	ND		0.00010	0.000053	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-010
Description: MW-9
Matrix: Aqueous
Date Sampled: 11/10/2011 1345
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/19/2011 0253	JJG		74932
2	5030B	8260B	100	11/21/2011 1955	BM		74933

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		1.0	0.13	ug/L	1
Bromodichloromethane	75-27-4	8260B	0.65	J	1.0	0.33	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	0.66	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	1.3		1.0	0.097	ug/L	1
Carbon tetrachloride	56-23-5	8260B	0.36	J	1.0	0.14	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	0.33	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	0.47	ug/L	1
Chloroform	67-66-3	8260B	26		1.0	0.33	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	0.35	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	0.30	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	0.33	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	0.33	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	3.5		1.0	0.15	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	3.6		1.0	0.13	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	1.8		1.0	0.21	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	250		1.0	0.12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	320		1.0	0.16	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	0.19	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	0.11	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	0.092	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.27	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	0.030	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.30	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.31	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	0.33	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	0.12	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	0.16	ug/L	1
Tetrachloroethene	127-18-4	8260B	970		100	13	ug/L	2
Toluene	108-88-3	8260B	0.37	J	1.0	0.33	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	0.51	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	14		1.0	0.21	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-010
Description: MW-9
Matrix: Aqueous
Date Sampled: 11/10/2011 1345
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/19/2011 0253	JJG		74932
2	5030B	8260B	100	11/21/2011 1955	BM		74933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,1-Trichloroethane	71-55-6	8260B	0.82	J	1.0	0.074	ug/L	1
Trichloroethene	79-01-6	8260B	12000		100	18	ug/L	2
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	0.054	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130		102	70-130
Bromofluorobenzene		100	70-130		99	70-130
Toluene-d8		100	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"
* = Reportable result (only when report all runs)

Semivolatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-010
Description: MW-9
Matrix: Aqueous
Date Sampled: 11/10/2011 1345
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	11/22/2011 2026	JCG	11/16/2011 1436	71833

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		6.0	1.4	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		6.0	1.4	ug/L	1
Anthracene	120-12-7	8270D	ND		6.0	1.3	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		6.0	0.71	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		6.0	0.60	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		6.0	0.71	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		6.0	0.95	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		6.0	1.2	ug/L	1
Chrysene	218-01-9	8270D	ND		6.0	0.83	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		6.0	1.5	ug/L	1
Fluoranthene	206-44-0	8270D	ND		6.0	1.7	ug/L	1
Fluorene	86-73-7	8270D	ND		6.0	1.7	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		6.0	2.7	ug/L	1
Naphthalene	91-20-3	8270D	ND		6.0	1.5	ug/L	1
Phenanthrene	85-01-8	8270D	ND		6.0	1.4	ug/L	1
Pyrene	129-00-0	8270D	ND		6.0	3.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		88	37-129
Nitrobenzene-d5		80	38-127
Terphenyl-d14		83	10-148

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

ICP-MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-010
Description: MW-9
Matrix: Aqueous
Date Sampled: 11/10/2011 1345
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	11/17/2011 0445	KJC	11/16/2011 2020	71887
2	3005A	6020A	1	11/17/2011 2231	KJC	11/16/2011 2020	71887

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6020A	330	B	40	1.8	ug/L	2
Antimony	7440-36-0	6020A	ND		1.0	0.097	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Barium	7440-39-3	6020A	58		5.0	0.045	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.028	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.059	ug/L	1
Calcium	7440-70-2	6020A	4300		200	13	ug/L	1
Chromium	7440-47-3	6020A	0.37	J	5.0	0.35	ug/L	1
Cobalt	7440-48-4	6020A	2.3	J	5.0	0.029	ug/L	1
Copper	7440-50-8	6020A	0.37	J	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	390		20	5.7	ug/L	1
Lead	7439-92-1	6020A	0.21	J	1.0	0.047	ug/L	1
Magnesium	7439-95-4	6020A	1000		50	0.94	ug/L	1
Manganese	7439-96-5	6020A	330		5.0	0.20	ug/L	1
Nickel	7440-02-0	6020A	1.7	J	5.0	0.28	ug/L	1
Potassium	7440-09-7	6020A	2000	B	200	6.0	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.25	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.011	ug/L	2
Sodium	7440-23-5	6020A	9700		200	4.0	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.076	ug/L	1
Vanadium	7440-62-2	6020A	ND		5.0	1.5	ug/L	1
Zinc	7440-66-6	6020A	8.5	J	10	1.5	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"
* = Reportable result (only when report all runs)

CVAA

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-010
Description: MW-9
Matrix: Aqueous
Date Sampled: 11/10/2011 1345
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/17/2011 1359	BNW	11/17/2011 1005	71904

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	ND		0.00010	0.000053	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-011
Description: MW-10
Matrix: Aqueous
Date Sampled: 11/10/2011 1220
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/19/2011 0316	JJG		74932
2	5030B	8260B	1	11/21/2011 1325	BM		74933

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		1.0	0.13	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	0.33	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	0.66	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	0.097	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	0.14	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	0.33	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	0.47	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	0.33	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	0.35	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	0.30	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	0.33	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	0.33	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	0.13	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	0.21	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	0.12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	0.17	J	1.0	0.16	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	0.19	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	0.11	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	0.092	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.27	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	0.030	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.30	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.31	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	0.33	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	0.12	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	0.16	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	0.13	ug/L	2
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	0.51	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	0.21	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-011
Description: MW-10
Matrix: Aqueous
Date Sampled: 11/10/2011 1220
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/19/2011 0316	JJG		74932
2	5030B	8260B	1	11/21/2011 1325	BM		74933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	0.074	ug/L	1
Trichloroethene	79-01-6	8260B	ND		1.0	0.18	ug/L	2
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	0.054	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130		101	70-130
Bromofluorobenzene		99	70-130		99	70-130
Toluene-d8		97	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"
* = Reportable result (only when report all runs)

ICP-MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-011
Description: MW-10
Matrix: Aqueous
Date Sampled: 11/10/2011 1220
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	11/17/2011 0453	KJC	11/16/2011 2020	71887
2	3005A	6020A	1	11/17/2011 2239	KJC	11/16/2011 2020	71887

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6020A	1700	B	40	1.8	ug/L	2
Antimony	7440-36-0	6020A	ND		1.0	0.097	ug/L	1
Arsenic	7440-38-2	6020A	0.28	J	1.0	0.26	ug/L	1
Barium	7440-39-3	6020A	39		5.0	0.045	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.028	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.059	ug/L	1
Calcium	7440-70-2	6020A	6700		200	13	ug/L	1
Chromium	7440-47-3	6020A	3.7	J	5.0	0.35	ug/L	1
Cobalt	7440-48-4	6020A	1.2	J	5.0	0.029	ug/L	1
Copper	7440-50-8	6020A	3.2		1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	3100		20	5.7	ug/L	1
Lead	7439-92-1	6020A	1.1		1.0	0.047	ug/L	1
Magnesium	7439-95-4	6020A	1500		50	0.94	ug/L	1
Manganese	7439-96-5	6020A	130		5.0	0.20	ug/L	1
Nickel	7440-02-0	6020A	1.3	J	5.0	0.28	ug/L	1
Potassium	7440-09-7	6020A	1300	B	200	6.0	ug/L	1
Selenium	7782-49-2	6020A	0.65	BJ	1.0	0.25	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.011	ug/L	2
Sodium	7440-23-5	6020A	14000		200	4.0	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.076	ug/L	1
Vanadium	7440-62-2	6020A	6.5		5.0	1.5	ug/L	1
Zinc	7440-66-6	6020A	12		10	1.5	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"
* = Reportable result (only when report all runs)

CVAA

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-011
Description: MW-10
Matrix: Aqueous
Date Sampled: 11/10/2011 1220
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/17/2011 1401	BNW	11/17/2011 1005	71904

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	ND		0.00010	0.000053	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-012
Description: MW-10D
Matrix: Aqueous
Date Sampled: 11/10/2011 1120
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/19/2011 0339	JJG		74932
2	5030B	8260B	1	11/21/2011 1348	BM		74933

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		1.0	0.13	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	0.33	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	0.66	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	0.12	J	1.0	0.097	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	0.14	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	0.33	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	0.47	ug/L	1
Chloroform	67-66-3	8260B	0.42	J	1.0	0.33	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	0.35	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	0.30	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	0.33	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	0.33	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	0.13	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	0.21	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	0.12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	0.16	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	0.19	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	0.11	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	0.092	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	0.27	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	0.030	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.30	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.31	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	0.33	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	0.12	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	0.16	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	0.13	ug/L	2
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	0.51	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	0.21	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-012
Description: MW-10D
Matrix: Aqueous
Date Sampled: 11/10/2011 1120
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/19/2011 0339	JJG		74932
2	5030B	8260B	1	11/21/2011 1348	BM		74933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	0.074	ug/L	1
Trichloroethene	79-01-6	8260B	ND		1.0	0.18	ug/L	2
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	0.054	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130		104	70-130
Bromofluorobenzene		98	70-130		99	70-130
Toluene-d8		98	70-130		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"
* = Reportable result (only when report all runs)

ICP-MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-012
Description: MW-10D
Matrix: Aqueous
Date Sampled: 11/10/2011 1120
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020A	1	11/17/2011 0501	KJC	11/16/2011 2020	71887
2	3005A	6020A	1	11/17/2011 2246	KJC	11/16/2011 2020	71887

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aluminum	7429-90-5	6020A	81	B	40	1.8	ug/L	2
Antimony	7440-36-0	6020A	ND		1.0	0.097	ug/L	1
Arsenic	7440-38-2	6020A	ND		1.0	0.26	ug/L	1
Barium	7440-39-3	6020A	20		5.0	0.045	ug/L	1
Beryllium	7440-41-7	6020A	ND		0.40	0.028	ug/L	1
Cadmium	7440-43-9	6020A	ND		0.10	0.059	ug/L	1
Calcium	7440-70-2	6020A	16000		200	13	ug/L	1
Chromium	7440-47-3	6020A	0.92	J	5.0	0.35	ug/L	1
Cobalt	7440-48-4	6020A	ND		5.0	0.029	ug/L	1
Copper	7440-50-8	6020A	0.20	J	1.0	0.15	ug/L	1
Iron	7439-89-6	6020A	130		20	5.7	ug/L	1
Lead	7439-92-1	6020A	ND		1.0	0.047	ug/L	1
Magnesium	7439-95-4	6020A	2800		50	0.94	ug/L	1
Manganese	7439-96-5	6020A	9.8		5.0	0.20	ug/L	1
Nickel	7440-02-0	6020A	ND		5.0	0.28	ug/L	1
Potassium	7440-09-7	6020A	1500	B	200	6.0	ug/L	1
Selenium	7782-49-2	6020A	ND		1.0	0.25	ug/L	1
Silver	7440-22-4	6020A	ND		1.0	0.011	ug/L	2
Sodium	7440-23-5	6020A	14000		200	4.0	ug/L	1
Thallium	7440-28-0	6020A	ND		0.50	0.076	ug/L	1
Vanadium	7440-62-2	6020A	4.5	J	5.0	1.5	ug/L	1
Zinc	7440-66-6	6020A	1.8	J	10	1.5	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"
* = Reportable result (only when report all runs)

CVAA

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-012
Description: MW-10D
Matrix: Aqueous
Date Sampled: 11/10/2011 1120
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/17/2011 1416	BNW	11/17/2011 1005	71905

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Mercury	7439-97-6	7470A	ND		0.000080	0.000042	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-013
Description: Trip Blank
Matrix: Aqueous
Date Sampled: 11/10/2011
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/16/2011 2245	JJG		74929

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		1.0	0.13	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	0.33	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	0.66	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.0	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	0.097	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	0.14	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	0.33	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	0.47	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	0.33	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	0.35	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	0.30	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	0.30	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	0.33	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	0.33	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	0.33	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	0.13	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	0.21	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	0.12	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	0.16	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	0.19	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	0.11	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	0.092	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
2-Hexanone	591-78-6	8260B	0.34	J	10	0.27	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	0.030	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	0.30	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.31	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	0.33	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	0.12	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	0.16	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	0.13	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	0.51	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	0.21	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	0.074	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"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: ERM-Southeast, Inc
Laboratory ID: MK14023-013
Description: Trip Blank
Matrix: Aqueous
Date Sampled: 11/10/2011
Date Received: 11/14/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/16/2011 2245	JJG		74929

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	0.18	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	0.054	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		101	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"
* = Reportable result (only when report all runs)

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ74929-001
Batch: 74929
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	11/16/2011 2124
Benzene	ND		1	1.0	0.13	ug/L	11/16/2011 2124
Bromodichloromethane	ND		1	1.0	0.33	ug/L	11/16/2011 2124
Bromoform	ND		1	1.0	0.66	ug/L	11/16/2011 2124
Bromomethane (Methyl bromide)	ND		1	2.0	0.80	ug/L	11/16/2011 2124
2-Butanone (MEK)	ND		1	10	2.0	ug/L	11/16/2011 2124
Carbon disulfide	ND		1	1.0	0.097	ug/L	11/16/2011 2124
Carbon tetrachloride	ND		1	1.0	0.14	ug/L	11/16/2011 2124
Chlorobenzene	ND		1	1.0	0.33	ug/L	11/16/2011 2124
Chloroethane	ND		1	2.0	0.47	ug/L	11/16/2011 2124
Chloroform	ND		1	1.0	0.33	ug/L	11/16/2011 2124
Chloromethane (Methyl chloride)	ND		1	1.0	0.35	ug/L	11/16/2011 2124
Cyclohexane	ND		1	1.0	0.30	ug/L	11/16/2011 2124
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	0.60	ug/L	11/16/2011 2124
Dibromochloromethane	ND		1	1.0	0.33	ug/L	11/16/2011 2124
1,2-Dibromoethane (EDB)	ND		1	1.0	0.30	ug/L	11/16/2011 2124
1,2-Dichlorobenzene	ND		1	1.0	0.33	ug/L	11/16/2011 2124
1,3-Dichlorobenzene	ND		1	1.0	0.33	ug/L	11/16/2011 2124
1,4-Dichlorobenzene	ND		1	1.0	0.33	ug/L	11/16/2011 2124
Dichlorodifluoromethane	ND		1	2.0	0.20	ug/L	11/16/2011 2124
1,1-Dichloroethane	ND		1	1.0	0.13	ug/L	11/16/2011 2124
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	11/16/2011 2124
1,1-Dichloroethene	ND		1	1.0	0.16	ug/L	11/16/2011 2124
cis-1,2-Dichloroethene	ND		1	1.0	0.12	ug/L	11/16/2011 2124
trans-1,2-Dichloroethene	ND		1	1.0	0.21	ug/L	11/16/2011 2124
1,2-Dichloropropane	ND		1	1.0	0.19	ug/L	11/16/2011 2124
cis-1,3-Dichloropropene	ND		1	1.0	0.092	ug/L	11/16/2011 2124
trans-1,3-Dichloropropene	ND		1	1.0	0.11	ug/L	11/16/2011 2124
Ethylbenzene	ND		1	1.0	0.33	ug/L	11/16/2011 2124
2-Hexanone	2.7	J	1	10	0.27	ug/L	11/16/2011 2124
Isopropylbenzene	ND		1	1.0	0.030	ug/L	11/16/2011 2124
Methyl acetate	ND		1	1.0	0.30	ug/L	11/16/2011 2124
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	11/16/2011 2124
4-Methyl-2-pentanone	0.85	J	1	10	0.31	ug/L	11/16/2011 2124
Methylcyclohexane	ND		1	5.0	0.95	ug/L	11/16/2011 2124
Methylene chloride	ND		1	1.0	0.33	ug/L	11/16/2011 2124
Styrene	ND		1	1.0	0.12	ug/L	11/16/2011 2124
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.16	ug/L	11/16/2011 2124
Tetrachloroethene	ND		1	1.0	0.13	ug/L	11/16/2011 2124
Toluene	ND		1	1.0	0.33	ug/L	11/16/2011 2124
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	0.30	ug/L	11/16/2011 2124
1,2,4-Trichlorobenzene	0.68	J	1	1.0	0.51	ug/L	11/16/2011 2124
1,1,1-Trichloroethane	ND		1	1.0	0.074	ug/L	11/16/2011 2124
1,1,2-Trichloroethane	ND		1	1.0	0.21	ug/L	11/16/2011 2124

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

Where applicable, all soil sample analysis are reported 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: NQ74929-001
Batch: 74929
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	1.0	0.18	ug/L	11/16/2011 2124
Trichlorofluoromethane	ND		1	1.0	0.30	ug/L	11/16/2011 2124
Vinyl chloride	ND		1	1.0	0.054	ug/L	11/16/2011 2124
Xylenes (total)	ND		1	1.0	0.33	ug/L	11/16/2011 2124

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		101	70-130

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

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

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

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ74929-002
Batch: 74929
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	111	70-130	11/16/2011 1955
Benzene	50	53		1	107	70-130	11/16/2011 1955
Bromodichloromethane	50	56		1	112	70-130	11/16/2011 1955
Bromoform	50	49		1	97	70-130	11/16/2011 1955
Bromomethane (Methyl bromide)	50	56		1	111	60-140	11/16/2011 1955
2-Butanone (MEK)	100	110		1	114	60-140	11/16/2011 1955
Carbon disulfide	50	53		1	105	60-140	11/16/2011 1955
Carbon tetrachloride	50	60		1	119	70-130	11/16/2011 1955
Chlorobenzene	50	53		1	106	70-130	11/16/2011 1955
Chloroethane	50	46		1	92	42-163	11/16/2011 1955
Chloroform	50	55		1	110	70-130	11/16/2011 1955
Chloromethane (Methyl chloride)	50	47		1	94	70-130	11/16/2011 1955
Cyclohexane	50	57		1	114	70-130	11/16/2011 1955
1,2-Dibromo-3-chloropropane (DBCP)	50	49		1	99	70-130	11/16/2011 1955
Dibromochloromethane	50	57		1	114	70-130	11/16/2011 1955
1,2-Dibromoethane (EDB)	50	54		1	107	70-130	11/16/2011 1955
1,2-Dichlorobenzene	50	51		1	101	70-130	11/16/2011 1955
1,3-Dichlorobenzene	50	52		1	104	70-130	11/16/2011 1955
1,4-Dichlorobenzene	50	51		1	102	70-130	11/16/2011 1955
Dichlorodifluoromethane	50	64		1	127	60-140	11/16/2011 1955
1,1-Dichloroethane	50	54		1	108	70-130	11/16/2011 1955
1,2-Dichloroethane	50	55		1	110	70-130	11/16/2011 1955
1,1-Dichloroethene	50	55		1	111	70-130	11/16/2011 1955
cis-1,2-Dichloroethene	50	54		1	108	70-130	11/16/2011 1955
trans-1,2-Dichloroethene	50	55		1	110	70-130	11/16/2011 1955
1,2-Dichloropropane	50	53		1	106	70-130	11/16/2011 1955
cis-1,3-Dichloropropene	50	53		1	105	70-130	11/16/2011 1955
trans-1,3-Dichloropropene	50	50		1	101	70-130	11/16/2011 1955
Ethylbenzene	50	54		1	108	70-130	11/16/2011 1955
2-Hexanone	100	110		1	111	60-140	11/16/2011 1955
Isopropylbenzene	50	55		1	111	70-130	11/16/2011 1955
Methyl acetate	50	52		1	104	15-128	11/16/2011 1955
Methyl tertiary butyl ether (MTBE)	50	53		1	107	70-130	11/16/2011 1955
4-Methyl-2-pentanone	100	110		1	112	60-140	11/16/2011 1955
Methylcyclohexane	50	54		1	109	70-130	11/16/2011 1955
Methylene chloride	50	52		1	105	70-130	11/16/2011 1955
Styrene	50	56		1	112	70-130	11/16/2011 1955
1,1,2,2-Tetrachloroethane	50	51		1	101	60-140	11/16/2011 1955
Tetrachloroethene	50	53		1	106	70-130	11/16/2011 1955
Toluene	50	53		1	105	70-130	11/16/2011 1955
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	68	N	1	136	70-130	11/16/2011 1955
1,2,4-Trichlorobenzene	50	47		1	94	70-130	11/16/2011 1955
1,1,1-Trichloroethane	50	56		1	113	70-130	11/16/2011 1955
1,1,2-Trichloroethane	50	51		1	102	70-130	11/16/2011 1955

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: NQ74929-002
Batch: 74929
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	54		1	109	70-130	11/16/2011 1955
Trichlorofluoromethane	50	63		1	125	70-130	11/16/2011 1955
Vinyl chloride	50	50		1	101	70-130	11/16/2011 1955
Xylenes (total)	100	110		1	108	70-130	11/16/2011 1955

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		103	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: NQ74929-003
Batch: 74929
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	111	0.19	70-130	20	11/16/2011 2017
Benzene	50	53		1	107	0.038	70-130	20	11/16/2011 2017
Bromodichloromethane	50	56		1	112	0.0018	70-130	20	11/16/2011 2017
Bromoform	50	49		1	98	0.96	70-130	20	11/16/2011 2017
Bromomethane (Methyl bromide)	50	57		1	114	2.5	60-140	20	11/16/2011 2017
2-Butanone (MEK)	100	110		1	110	3.5	60-140	20	11/16/2011 2017
Carbon disulfide	50	52		1	103	1.9	60-140	20	11/16/2011 2017
Carbon tetrachloride	50	60		1	121	1.2	70-130	20	11/16/2011 2017
Chlorobenzene	50	52		1	105	0.53	70-130	20	11/16/2011 2017
Chloroethane	50	46		1	91	1.3	42-163	20	11/16/2011 2017
Chloroform	50	54		1	108	1.8	70-130	20	11/16/2011 2017
Chloromethane (Methyl chloride)	50	54		1	108	14	70-130	20	11/16/2011 2017
Cyclohexane	50	56		1	111	2.2	70-130	20	11/16/2011 2017
1,2-Dibromo-3-chloropropane (DBCP)	50	52		1	103	4.3	70-130	20	11/16/2011 2017
Dibromochloromethane	50	56		1	112	1.8	70-130	20	11/16/2011 2017
1,2-Dibromoethane (EDB)	50	54		1	107	0.28	70-130	20	11/16/2011 2017
1,2-Dichlorobenzene	50	50		1	101	0.22	70-130	20	11/16/2011 2017
1,3-Dichlorobenzene	50	52		1	104	0.025	70-130	20	11/16/2011 2017
1,4-Dichlorobenzene	50	51		1	101	0.73	70-130	20	11/16/2011 2017
Dichlorodifluoromethane	50	62		1	124	2.8	60-140	20	11/16/2011 2017
1,1-Dichloroethane	50	53		1	106	1.5	70-130	20	11/16/2011 2017
1,2-Dichloroethane	50	54		1	109	1.2	70-130	20	11/16/2011 2017
1,1-Dichloroethene	50	54		1	109	1.6	70-130	20	11/16/2011 2017
cis-1,2-Dichloroethene	50	54		1	107	0.47	70-130	20	11/16/2011 2017
trans-1,2-Dichloroethene	50	53		1	106	2.9	70-130	20	11/16/2011 2017
1,2-Dichloropropane	50	53		1	106	0.47	70-130	20	11/16/2011 2017
cis-1,3-Dichloropropene	50	53		1	106	0.45	70-130	20	11/16/2011 2017
trans-1,3-Dichloropropene	50	50		1	100	0.39	70-130	20	11/16/2011 2017
Ethylbenzene	50	55		1	110	1.4	70-130	20	11/16/2011 2017
2-Hexanone	100	110		1	112	0.71	60-140	20	11/16/2011 2017
Isopropylbenzene	50	55		1	110	0.43	70-130	20	11/16/2011 2017
Methyl acetate	50	50		1	100	4.4	15-128	20	11/16/2011 2017
Methyl tertiary butyl ether (MTBE)	50	53		1	106	0.62	70-130	20	11/16/2011 2017
4-Methyl-2-pentanone	100	110		1	112	0.0062	60-140	20	11/16/2011 2017
Methylcyclohexane	50	54		1	108	0.85	70-130	20	11/16/2011 2017
Methylene chloride	50	51		1	102	2.8	70-130	20	11/16/2011 2017
Styrene	50	56		1	112	0.61	70-130	20	11/16/2011 2017
1,1,2,2-Tetrachloroethane	50	51		1	101	0.0079	60-140	20	11/16/2011 2017
Tetrachloroethene	50	53		1	105	0.35	70-130	20	11/16/2011 2017
Toluene	50	52		1	105	0.18	70-130	20	11/16/2011 2017
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	67	N	1	134	1.0	70-130	20	11/16/2011 2017
1,2,4-Trichlorobenzene	50	47		1	95	0.66	70-130	20	11/16/2011 2017
1,1,1-Trichloroethane	50	57		1	113	0.75	70-130	20	11/16/2011 2017
1,1,2-Trichloroethane	50	51		1	102	0.73	70-130	20	11/16/2011 2017

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: NQ74929-003
Batch: 74929
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	55		1	109	0.67	70-130	20	11/16/2011 2017
Trichlorofluoromethane	50	67	N	1	134	7.2	70-130	20	11/16/2011 2017
Vinyl chloride	50	52		1	103	2.7	70-130	20	11/16/2011 2017
Xylenes (total)	100	110		1	107	0.45	70-130	20	11/16/2011 2017

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		102	70-130

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

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

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ74931-001
Batch: 74931
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	11/25/2011 1241
Benzene	ND		1	1.0	0.13	ug/L	11/25/2011 1241
Bromodichloromethane	ND		1	1.0	0.33	ug/L	11/25/2011 1241
Bromoform	ND		1	1.0	0.66	ug/L	11/25/2011 1241
Bromomethane (Methyl bromide)	ND		1	2.0	0.80	ug/L	11/25/2011 1241
2-Butanone (MEK)	ND		1	10	2.0	ug/L	11/25/2011 1241
Carbon disulfide	ND		1	1.0	0.097	ug/L	11/25/2011 1241
Carbon tetrachloride	ND		1	1.0	0.14	ug/L	11/25/2011 1241
Chlorobenzene	ND		1	1.0	0.33	ug/L	11/25/2011 1241
Chloroethane	ND		1	2.0	0.47	ug/L	11/25/2011 1241
Chloroform	ND		1	1.0	0.33	ug/L	11/25/2011 1241
Chloromethane (Methyl chloride)	ND		1	1.0	0.35	ug/L	11/25/2011 1241
Cyclohexane	ND		1	1.0	0.30	ug/L	11/25/2011 1241
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	0.60	ug/L	11/25/2011 1241
Dibromochloromethane	ND		1	1.0	0.33	ug/L	11/25/2011 1241
1,2-Dibromoethane (EDB)	ND		1	1.0	0.30	ug/L	11/25/2011 1241
1,2-Dichlorobenzene	ND		1	1.0	0.33	ug/L	11/25/2011 1241
1,3-Dichlorobenzene	ND		1	1.0	0.33	ug/L	11/25/2011 1241
1,4-Dichlorobenzene	ND		1	1.0	0.33	ug/L	11/25/2011 1241
Dichlorodifluoromethane	ND		1	2.0	0.20	ug/L	11/25/2011 1241
1,1-Dichloroethane	ND		1	1.0	0.13	ug/L	11/25/2011 1241
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	11/25/2011 1241
1,1-Dichloroethene	ND		1	1.0	0.16	ug/L	11/25/2011 1241
cis-1,2-Dichloroethene	ND		1	1.0	0.12	ug/L	11/25/2011 1241
trans-1,2-Dichloroethene	ND		1	1.0	0.21	ug/L	11/25/2011 1241
1,2-Dichloropropane	ND		1	1.0	0.19	ug/L	11/25/2011 1241
cis-1,3-Dichloropropene	ND		1	1.0	0.092	ug/L	11/25/2011 1241
trans-1,3-Dichloropropene	ND		1	1.0	0.11	ug/L	11/25/2011 1241
Ethylbenzene	ND		1	1.0	0.33	ug/L	11/25/2011 1241
2-Hexanone	ND		1	10	0.27	ug/L	11/25/2011 1241
Isopropylbenzene	ND		1	1.0	0.030	ug/L	11/25/2011 1241
Methyl acetate	ND		1	1.0	0.30	ug/L	11/25/2011 1241
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	11/25/2011 1241
4-Methyl-2-pentanone	ND		1	10	0.31	ug/L	11/25/2011 1241
Methylcyclohexane	ND		1	5.0	0.95	ug/L	11/25/2011 1241
Methylene chloride	ND		1	1.0	0.33	ug/L	11/25/2011 1241
Styrene	ND		1	1.0	0.12	ug/L	11/25/2011 1241
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.16	ug/L	11/25/2011 1241
Tetrachloroethene	ND		1	1.0	0.13	ug/L	11/25/2011 1241
Toluene	ND		1	1.0	0.33	ug/L	11/25/2011 1241
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	0.30	ug/L	11/25/2011 1241
1,2,4-Trichlorobenzene	ND		1	1.0	0.51	ug/L	11/25/2011 1241
1,1,1-Trichloroethane	ND		1	1.0	0.074	ug/L	11/25/2011 1241
1,1,2-Trichloroethane	ND		1	1.0	0.21	ug/L	11/25/2011 1241

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

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ74931-001
Batch: 74931
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	1.0	0.18	ug/L	11/25/2011 1241
Trichlorofluoromethane	ND		1	1.0	0.30	ug/L	11/25/2011 1241
Vinyl chloride	ND		1	1.0	0.054	ug/L	11/25/2011 1241
Xylenes (total)	ND		1	1.0	0.33	ug/L	11/25/2011 1241

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	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: NQ74931-002
Batch: 74931
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	99		1	99	70-130	11/25/2011 1112
Benzene	50	51		1	101	70-130	11/25/2011 1112
Bromodichloromethane	50	55		1	111	70-130	11/25/2011 1112
Bromoform	50	48		1	96	70-130	11/25/2011 1112
Bromomethane (Methyl bromide)	50	47		1	94	60-140	11/25/2011 1112
2-Butanone (MEK)	100	110		1	107	60-140	11/25/2011 1112
Carbon disulfide	50	57		1	113	60-140	11/25/2011 1112
Carbon tetrachloride	50	58		1	115	70-130	11/25/2011 1112
Chlorobenzene	50	49		1	97	70-130	11/25/2011 1112
Chloroethane	50	49		1	99	42-163	11/25/2011 1112
Chloroform	50	54		1	108	70-130	11/25/2011 1112
Chloromethane (Methyl chloride)	50	52		1	103	70-130	11/25/2011 1112
Cyclohexane	50	49		1	98	70-130	11/25/2011 1112
1,2-Dibromo-3-chloropropane (DBCP)	50	43		1	86	70-130	11/25/2011 1112
Dibromochloromethane	50	48		1	97	70-130	11/25/2011 1112
1,2-Dibromoethane (EDB)	50	50		1	100	70-130	11/25/2011 1112
1,2-Dichlorobenzene	50	49		1	97	70-130	11/25/2011 1112
1,3-Dichlorobenzene	50	49		1	98	70-130	11/25/2011 1112
1,4-Dichlorobenzene	50	47		1	94	70-130	11/25/2011 1112
Dichlorodifluoromethane	50	53		1	107	60-140	11/25/2011 1112
1,1-Dichloroethane	50	52		1	104	70-130	11/25/2011 1112
1,2-Dichloroethane	50	50		1	100	70-130	11/25/2011 1112
1,1-Dichloroethene	50	54		1	108	70-130	11/25/2011 1112
cis-1,2-Dichloroethene	50	54		1	108	70-130	11/25/2011 1112
trans-1,2-Dichloroethene	50	54		1	108	70-130	11/25/2011 1112
1,2-Dichloropropane	50	51		1	103	70-130	11/25/2011 1112
cis-1,3-Dichloropropene	50	58		1	116	70-130	11/25/2011 1112
trans-1,3-Dichloropropene	50	47		1	95	70-130	11/25/2011 1112
Ethylbenzene	50	50		1	101	70-130	11/25/2011 1112
2-Hexanone	100	100		1	101	60-140	11/25/2011 1112
Isopropylbenzene	50	50		1	100	70-130	11/25/2011 1112
Methyl acetate	50	48		1	95	15-128	11/25/2011 1112
Methyl tertiary butyl ether (MTBE)	50	54		1	108	70-130	11/25/2011 1112
4-Methyl-2-pentanone	100	110		1	107	60-140	11/25/2011 1112
Methylcyclohexane	50	53		1	105	70-130	11/25/2011 1112
Methylene chloride	50	55		1	110	70-130	11/25/2011 1112
Styrene	50	53		1	105	70-130	11/25/2011 1112
1,1,2,2-Tetrachloroethane	50	47		1	95	60-140	11/25/2011 1112
Tetrachloroethene	50	50		1	100	70-130	11/25/2011 1112
Toluene	50	52		1	103	70-130	11/25/2011 1112
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	64		1	127	70-130	11/25/2011 1112
1,2,4-Trichlorobenzene	50	51		1	102	70-130	11/25/2011 1112
1,1,1-Trichloroethane	50	55		1	110	70-130	11/25/2011 1112
1,1,2-Trichloroethane	50	47		1	94	70-130	11/25/2011 1112

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: NQ74931-002
Batch: 74931
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	54		1	107	70-130	11/25/2011 1112
Trichlorofluoromethane	50	52		1	105	70-130	11/25/2011 1112
Vinyl chloride	50	53		1	106	70-130	11/25/2011 1112
Xylenes (total)	100	100		1	102	70-130	11/25/2011 1112

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		106	70-130

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

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

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

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ74931-003
Batch: 74931
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	94		1	94	5.8	70-130	20	11/25/2011 1133
Benzene	50	50		1	100	0.80	70-130	20	11/25/2011 1133
Bromodichloromethane	50	55		1	110	0.79	70-130	20	11/25/2011 1133
Bromoform	50	46		1	93	3.2	70-130	20	11/25/2011 1133
Bromomethane (Methyl bromide)	50	53		1	105	11	60-140	20	11/25/2011 1133
2-Butanone (MEK)	100	100		1	101	5.8	60-140	20	11/25/2011 1133
Carbon disulfide	50	56		1	111	1.8	60-140	20	11/25/2011 1133
Carbon tetrachloride	50	57		1	114	1.3	70-130	20	11/25/2011 1133
Chlorobenzene	50	48		1	96	1.3	70-130	20	11/25/2011 1133
Chloroethane	50	48		1	97	2.5	42-163	20	11/25/2011 1133
Chloroform	50	54		1	107	0.14	70-130	20	11/25/2011 1133
Chloromethane (Methyl chloride)	50	49		1	98	5.0	70-130	20	11/25/2011 1133
Cyclohexane	50	48		1	95	2.5	70-130	20	11/25/2011 1133
1,2-Dibromo-3-chloropropane (DBCP)	50	41		1	82	4.1	70-130	20	11/25/2011 1133
Dibromochloromethane	50	47		1	94	2.3	70-130	20	11/25/2011 1133
1,2-Dibromoethane (EDB)	50	50		1	99	1.4	70-130	20	11/25/2011 1133
1,2-Dichlorobenzene	50	48		1	96	1.6	70-130	20	11/25/2011 1133
1,3-Dichlorobenzene	50	48		1	97	1.0	70-130	20	11/25/2011 1133
1,4-Dichlorobenzene	50	47		1	94	0.025	70-130	20	11/25/2011 1133
Dichlorodifluoromethane	50	51		1	103	3.6	60-140	20	11/25/2011 1133
1,1-Dichloroethane	50	51		1	103	1.3	70-130	20	11/25/2011 1133
1,2-Dichloroethane	50	49		1	98	2.1	70-130	20	11/25/2011 1133
1,1-Dichloroethene	50	54		1	108	0.38	70-130	20	11/25/2011 1133
cis-1,2-Dichloroethene	50	54		1	107	0.81	70-130	20	11/25/2011 1133
trans-1,2-Dichloroethene	50	54		1	108	0.20	70-130	20	11/25/2011 1133
1,2-Dichloropropane	50	51		1	102	0.95	70-130	20	11/25/2011 1133
cis-1,3-Dichloropropene	50	57		1	114	1.4	70-130	20	11/25/2011 1133
trans-1,3-Dichloropropene	50	46		1	93	1.8	70-130	20	11/25/2011 1133
Ethylbenzene	50	50		1	100	1.3	70-130	20	11/25/2011 1133
2-Hexanone	100	94		1	94	6.5	60-140	20	11/25/2011 1133
Isopropylbenzene	50	50		1	100	0.63	70-130	20	11/25/2011 1133
Methyl acetate	50	45		1	90	5.7	15-128	20	11/25/2011 1133
Methyl tertiary butyl ether (MTBE)	50	53		1	105	2.5	70-130	20	11/25/2011 1133
4-Methyl-2-pentanone	100	100		1	101	6.1	60-140	20	11/25/2011 1133
Methylcyclohexane	50	52		1	104	0.97	70-130	20	11/25/2011 1133
Methylene chloride	50	55		1	109	1.0	70-130	20	11/25/2011 1133
Styrene	50	52		1	104	1.0	70-130	20	11/25/2011 1133
1,1,2,2-Tetrachloroethane	50	47		1	94	1.4	60-140	20	11/25/2011 1133
Tetrachloroethene	50	49		1	99	1.4	70-130	20	11/25/2011 1133
Toluene	50	51		1	102	1.4	70-130	20	11/25/2011 1133
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	63		1	125	1.6	70-130	20	11/25/2011 1133
1,2,4-Trichlorobenzene	50	51		1	101	0.099	70-130	20	11/25/2011 1133
1,1,1-Trichloroethane	50	55		1	109	0.74	70-130	20	11/25/2011 1133
1,1,2-Trichloroethane	50	46		1	93	1.3	70-130	20	11/25/2011 1133

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: NQ74931-003
Batch: 74931
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	53		1	105	1.6	70-130	20	11/25/2011 1133
Trichlorofluoromethane	50	52		1	104	0.52	70-130	20	11/25/2011 1133
Vinyl chloride	50	51		1	102	3.5	70-130	20	11/25/2011 1133
Xylenes (total)	100	100		1	101	1.2	70-130	20	11/25/2011 1133

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		103	70-130

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

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

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ74932-001
Batch: 74932
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	11/18/2011 2132
Benzene	ND		1	1.0	0.13	ug/L	11/18/2011 2132
Bromodichloromethane	ND		1	1.0	0.33	ug/L	11/18/2011 2132
Bromoform	ND		1	1.0	0.66	ug/L	11/18/2011 2132
Bromomethane (Methyl bromide)	ND		1	2.0	0.80	ug/L	11/18/2011 2132
2-Butanone (MEK)	ND		1	10	2.0	ug/L	11/18/2011 2132
Carbon disulfide	ND		1	1.0	0.097	ug/L	11/18/2011 2132
Carbon tetrachloride	ND		1	1.0	0.14	ug/L	11/18/2011 2132
Chlorobenzene	ND		1	1.0	0.33	ug/L	11/18/2011 2132
Chloroethane	ND		1	2.0	0.47	ug/L	11/18/2011 2132
Chloroform	ND		1	1.0	0.33	ug/L	11/18/2011 2132
Chloromethane (Methyl chloride)	ND		1	1.0	0.35	ug/L	11/18/2011 2132
Cyclohexane	ND		1	1.0	0.30	ug/L	11/18/2011 2132
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	0.60	ug/L	11/18/2011 2132
Dibromochloromethane	ND		1	1.0	0.33	ug/L	11/18/2011 2132
1,2-Dibromoethane (EDB)	ND		1	1.0	0.30	ug/L	11/18/2011 2132
1,2-Dichlorobenzene	ND		1	1.0	0.33	ug/L	11/18/2011 2132
1,3-Dichlorobenzene	ND		1	1.0	0.33	ug/L	11/18/2011 2132
1,4-Dichlorobenzene	ND		1	1.0	0.33	ug/L	11/18/2011 2132
Dichlorodifluoromethane	ND		1	2.0	0.20	ug/L	11/18/2011 2132
1,1-Dichloroethane	ND		1	1.0	0.13	ug/L	11/18/2011 2132
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	11/18/2011 2132
1,1-Dichloroethene	ND		1	1.0	0.16	ug/L	11/18/2011 2132
cis-1,2-Dichloroethene	ND		1	1.0	0.12	ug/L	11/18/2011 2132
trans-1,2-Dichloroethene	ND		1	1.0	0.21	ug/L	11/18/2011 2132
1,2-Dichloropropane	ND		1	1.0	0.19	ug/L	11/18/2011 2132
cis-1,3-Dichloropropene	ND		1	1.0	0.092	ug/L	11/18/2011 2132
trans-1,3-Dichloropropene	ND		1	1.0	0.11	ug/L	11/18/2011 2132
Ethylbenzene	ND		1	1.0	0.33	ug/L	11/18/2011 2132
2-Hexanone	ND		1	10	0.27	ug/L	11/18/2011 2132
Isopropylbenzene	ND		1	1.0	0.030	ug/L	11/18/2011 2132
Methyl acetate	ND		1	1.0	0.30	ug/L	11/18/2011 2132
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	11/18/2011 2132
4-Methyl-2-pentanone	ND		1	10	0.31	ug/L	11/18/2011 2132
Methylcyclohexane	ND		1	5.0	0.95	ug/L	11/18/2011 2132
Methylene chloride	ND		1	1.0	0.33	ug/L	11/18/2011 2132
Styrene	ND		1	1.0	0.12	ug/L	11/18/2011 2132
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.16	ug/L	11/18/2011 2132
Tetrachloroethene	ND		1	1.0	0.13	ug/L	11/18/2011 2132
Toluene	ND		1	1.0	0.33	ug/L	11/18/2011 2132
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	0.30	ug/L	11/18/2011 2132
1,2,4-Trichlorobenzene	ND		1	1.0	0.51	ug/L	11/18/2011 2132
1,1,1-Trichloroethane	ND		1	1.0	0.074	ug/L	11/18/2011 2132
1,1,2-Trichloroethane	ND		1	1.0	0.21	ug/L	11/18/2011 2132

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

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ74932-001
Batch: 74932
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	1.0	0.18	ug/L	11/18/2011 2132
Trichlorofluoromethane	ND		1	1.0	0.30	ug/L	11/18/2011 2132
Vinyl chloride	ND		1	1.0	0.054	ug/L	11/18/2011 2132
Xylenes (total)	ND		1	1.0	0.33	ug/L	11/18/2011 2132

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		89	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 - LCS

Sample ID: NQ74932-002
Batch: 74932
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	111	70-130	11/18/2011 2000
Benzene	50	52		1	104	70-130	11/18/2011 2000
Bromodichloromethane	50	48		1	96	70-130	11/18/2011 2000
Bromoform	50	45		1	90	70-130	11/18/2011 2000
Bromomethane (Methyl bromide)	50	52		1	103	60-140	11/18/2011 2000
2-Butanone (MEK)	100	110		1	112	60-140	11/18/2011 2000
Carbon disulfide	50	54		1	108	60-140	11/18/2011 2000
Carbon tetrachloride	50	47		1	93	70-130	11/18/2011 2000
Chlorobenzene	50	50		1	99	70-130	11/18/2011 2000
Chloroethane	50	52		1	104	42-163	11/18/2011 2000
Chloroform	50	48		1	97	70-130	11/18/2011 2000
Chloromethane (Methyl chloride)	50	45		1	90	70-130	11/18/2011 2000
Cyclohexane	50	45		1	90	70-130	11/18/2011 2000
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	96	70-130	11/18/2011 2000
Dibromochloromethane	50	50		1	101	70-130	11/18/2011 2000
1,2-Dibromoethane (EDB)	50	51		1	102	70-130	11/18/2011 2000
1,2-Dichlorobenzene	50	49		1	98	70-130	11/18/2011 2000
1,3-Dichlorobenzene	50	49		1	99	70-130	11/18/2011 2000
1,4-Dichlorobenzene	50	50		1	100	70-130	11/18/2011 2000
Dichlorodifluoromethane	50	36		1	73	60-140	11/18/2011 2000
1,1-Dichloroethane	50	49		1	98	70-130	11/18/2011 2000
1,2-Dichloroethane	50	44		1	89	70-130	11/18/2011 2000
1,1-Dichloroethene	50	51		1	101	70-130	11/18/2011 2000
cis-1,2-Dichloroethene	50	52		1	104	70-130	11/18/2011 2000
trans-1,2-Dichloroethene	50	50		1	101	70-130	11/18/2011 2000
1,2-Dichloropropane	50	51		1	101	70-130	11/18/2011 2000
cis-1,3-Dichloropropene	50	52		1	104	70-130	11/18/2011 2000
trans-1,3-Dichloropropene	50	50		1	101	70-130	11/18/2011 2000
Ethylbenzene	50	52		1	104	70-130	11/18/2011 2000
2-Hexanone	100	100		1	102	60-140	11/18/2011 2000
Isopropylbenzene	50	54		1	107	70-130	11/18/2011 2000
Methyl acetate	50	51		1	103	15-128	11/18/2011 2000
Methyl tertiary butyl ether (MTBE)	50	51		1	103	70-130	11/18/2011 2000
4-Methyl-2-pentanone	100	100		1	103	60-140	11/18/2011 2000
Methylcyclohexane	50	54		1	107	70-130	11/18/2011 2000
Methylene chloride	50	49		1	99	70-130	11/18/2011 2000
Styrene	50	54		1	108	70-130	11/18/2011 2000
1,1,2,2-Tetrachloroethane	50	52		1	104	60-140	11/18/2011 2000
Tetrachloroethene	50	49		1	97	70-130	11/18/2011 2000
Toluene	50	50		1	100	70-130	11/18/2011 2000
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	59		1	117	70-130	11/18/2011 2000
1,2,4-Trichlorobenzene	50	54		1	107	70-130	11/18/2011 2000
1,1,1-Trichloroethane	50	46		1	92	70-130	11/18/2011 2000
1,1,2-Trichloroethane	50	50		1	99	70-130	11/18/2011 2000

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: NQ74932-002
Batch: 74932
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	48		1	96	70-130	11/18/2011 2000
Trichlorofluoromethane	50	44		1	87	70-130	11/18/2011 2000
Vinyl chloride	50	41		1	83	70-130	11/18/2011 2000
Xylenes (total)	100	110		1	105	70-130	11/18/2011 2000

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		100	70-130

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

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

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

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ74933-001
Batch: 74933
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Tetrachloroethene	ND		1	1.0	0.13	ug/L	11/21/2011 1043
Trichloroethene	ND		1	1.0	0.18	ug/L	11/21/2011 1043

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	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: NQ74933-002
Batch: 74933
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Tetrachloroethene	50	47		1	94	70-130	11/21/2011 0911
Trichloroethene	50	45		1	90	70-130	11/21/2011 0911

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

P = The RPD between two GC columns exceeds 40%

J = Estimated result < PQL and ≥ MDL

N - Recovery is out of criteria

+ - RPD is out of criteria

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

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

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: MK14023-011DU
Batch: 74933
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Tetrachloroethene	ND	ND		1	0.00	20	11/21/2011 1629
Trichloroethene	ND	ND		1	0.00	20	11/21/2011 1629

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		93	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

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: MQ71833-001
Batch: 71833
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 11/16/2011 1436

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acenaphthene	ND		1	5.0	1.2	ug/L	11/22/2011 1909
Acenaphthylene	ND		1	5.0	1.2	ug/L	11/22/2011 1909
Anthracene	ND		1	5.0	1.1	ug/L	11/22/2011 1909
Benzo(a)anthracene	ND		1	5.0	0.60	ug/L	11/22/2011 1909
Benzo(a)pyrene	ND		1	5.0	0.50	ug/L	11/22/2011 1909
Benzo(b)fluoranthene	ND		1	5.0	0.60	ug/L	11/22/2011 1909
Benzo(g,h,i)perylene	ND		1	5.0	0.80	ug/L	11/22/2011 1909
Benzo(k)fluoranthene	ND		1	5.0	1.0	ug/L	11/22/2011 1909
Chrysene	ND		1	5.0	0.70	ug/L	11/22/2011 1909
Dibenzo(a,h)anthracene	ND		1	5.0	1.3	ug/L	11/22/2011 1909
Fluoranthene	ND		1	5.0	1.4	ug/L	11/22/2011 1909
Fluorene	ND		1	5.0	1.4	ug/L	11/22/2011 1909
Indeno(1,2,3-c,d)pyrene	ND		1	5.0	2.3	ug/L	11/22/2011 1909
Naphthalene	ND		1	5.0	1.3	ug/L	11/22/2011 1909
Phenanthrene	ND		1	5.0	1.2	ug/L	11/22/2011 1909
Pyrene	ND		1	5.0	3.1	ug/L	11/22/2011 1909

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		100	37-129
Nitrobenzene-d5		91	38-127
Terphenyl-d14		93	10-148

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

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

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

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: MQ71833-002
Batch: 71833
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 11/16/2011 1436

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	100	95		1	95	30-130	11/22/2011 1928
Acenaphthylene	100	94		1	94	30-130	11/22/2011 1928
Anthracene	100	99		1	99	30-130	11/22/2011 1928
Benzo(a)anthracene	100	98		1	98	30-130	11/22/2011 1928
Benzo(a)pyrene	100	110		1	105	30-130	11/22/2011 1928
Benzo(b)fluoranthene	100	110		1	105	30-130	11/22/2011 1928
Benzo(g,h,i)perylene	100	97		1	97	30-130	11/22/2011 1928
Benzo(k)fluoranthene	100	90		1	90	30-130	11/22/2011 1928
Chrysene	100	92		1	92	30-130	11/22/2011 1928
Dibenzo(a,h)anthracene	100	99		1	99	30-130	11/22/2011 1928
Fluoranthene	100	100		1	104	30-130	11/22/2011 1928
Fluorene	100	95		1	95	30-130	11/22/2011 1928
Indeno(1,2,3-c,d)pyrene	100	97		1	97	30-130	11/22/2011 1928
Naphthalene	100	110		1	113	30-130	11/22/2011 1928
Phenanthrene	100	100		1	101	30-130	11/22/2011 1928
Pyrene	100	97		1	97	30-130	11/22/2011 1928

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		97	37-129
Nitrobenzene-d5		95	38-127
Terphenyl-d14		91	10-148

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

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

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

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: MK14023-010MS
Batch: 71833
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 11/16/2011 1436

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	240	210		1	88	30-130	11/22/2011 2045
Acenaphthylene	ND	240	210		1	86	30-130	11/22/2011 2045
Anthracene	ND	240	210		1	89	30-130	11/22/2011 2045
Benzo(a)anthracene	ND	240	210		1	89	30-130	11/22/2011 2045
Benzo(a)pyrene	ND	240	230		1	95	30-130	11/22/2011 2045
Benzo(b)fluoranthene	ND	240	220		1	93	30-130	11/22/2011 2045
Benzo(g,h,i)perylene	ND	240	210		1	88	30-130	11/22/2011 2045
Benzo(k)fluoranthene	ND	240	200		1	85	30-130	11/22/2011 2045
Chrysene	ND	240	200		1	86	30-130	11/22/2011 2045
Dibenzo(a,h)anthracene	ND	240	210		1	90	30-130	11/22/2011 2045
Fluoranthene	ND	240	230		1	95	30-130	11/22/2011 2045
Fluorene	ND	240	210		1	87	30-130	11/22/2011 2045
Indeno(1,2,3-c,d)pyrene	ND	240	210		1	88	30-130	11/22/2011 2045
Naphthalene	ND	240	230		1	98	30-130	11/22/2011 2045
Phenanthrene	ND	240	220		1	92	30-130	11/22/2011 2045
Pyrene	ND	240	210		1	89	30-130	11/22/2011 2045

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		88	37-129
Nitrobenzene-d5		80	38-127
Terphenyl-d14		83	10-148

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

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

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

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: MK14023-010MD
Batch: 71833
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 11/16/2011 1436

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	240	200		1	85	2.9	30-130	20	11/22/2011 2104
Acenaphthylene	ND	240	200		1	84	2.5	30-130	20	11/22/2011 2104
Anthracene	ND	240	200		1	84	5.8	30-130	20	11/22/2011 2104
Benzo(a)anthracene	ND	240	210		1	87	1.6	30-130	20	11/22/2011 2104
Benzo(a)pyrene	ND	240	220		1	94	1.2	30-130	20	11/22/2011 2104
Benzo(b)fluoranthene	ND	240	220		1	91	1.5	30-130	20	11/22/2011 2104
Benzo(g,h,i)perylene	ND	240	210		1	86	1.6	30-130	20	11/22/2011 2104
Benzo(k)fluoranthene	ND	240	200		1	84	0.82	30-130	20	11/22/2011 2104
Chrysene	ND	240	200		1	84	2.0	30-130	20	11/22/2011 2104
Dibenzo(a,h)anthracene	ND	240	210		1	87	2.9	30-130	20	11/22/2011 2104
Fluoranthene	ND	240	210		1	90	4.9	30-130	20	11/22/2011 2104
Fluorene	ND	240	200		1	85	2.2	30-130	20	11/22/2011 2104
Indeno(1,2,3-c,d)pyrene	ND	240	210		1	86	2.2	30-130	20	11/22/2011 2104
Naphthalene	ND	240	230		1	95	3.2	30-130	20	11/22/2011 2104
Phenanthrene	ND	240	210		1	86	6.5	30-130	20	11/22/2011 2104
Pyrene	ND	240	210		1	88	1.1	30-130	20	11/22/2011 2104

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		87	37-129
Nitrobenzene-d5		82	38-127
Terphenyl-d14		82	10-148

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N - Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ - RPD is out of criteria

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

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

ICP-MS - MB

Sample ID: MQ71887-001
Batch: 71887
Analytical Method: 6020A

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 11/16/2011 2020

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Aluminum	6.6	J	1	40	1.8	ug/L	11/17/2011 2041
Antimony	ND		1	1.0	0.097	ug/L	11/17/2011 0255
Arsenic	ND		1	1.0	0.26	ug/L	11/17/2011 0255
Barium	ND		1	5.0	0.045	ug/L	11/17/2011 0255
Beryllium	ND		1	0.40	0.028	ug/L	11/17/2011 0255
Cadmium	ND		1	0.10	0.059	ug/L	11/17/2011 0255
Calcium	ND		1	200	13	ug/L	11/17/2011 0255
Chromium	ND		1	5.0	0.35	ug/L	11/17/2011 0255
Cobalt	ND		1	5.0	0.029	ug/L	11/17/2011 0255
Copper	ND		1	1.0	0.15	ug/L	11/17/2011 0255
Iron	ND		1	20	5.7	ug/L	11/17/2011 0255
Lead	ND		1	1.0	0.047	ug/L	11/17/2011 0255
Magnesium	ND		1	50	0.94	ug/L	11/17/2011 0255
Manganese	ND		1	5.0	0.20	ug/L	11/17/2011 0255
Nickel	ND		1	5.0	0.28	ug/L	11/17/2011 0255
Potassium	11	J	1	200	6.0	ug/L	11/17/2011 0255
Selenium	0.36	J	1	1.0	0.25	ug/L	11/17/2011 0255
Silver	ND		1	1.0	0.011	ug/L	11/17/2011 2041
Sodium	ND		1	200	4.0	ug/L	11/17/2011 0255
Thallium	ND		1	0.50	0.076	ug/L	11/17/2011 0255
Vanadium	ND		1	5.0	1.5	ug/L	11/17/2011 0255
Zinc	ND		1	10	1.5	ug/L	11/17/2011 0255

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

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

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

ICP-MS - LCS

Sample ID: MQ71887-002
Batch: 71887
Analytical Method: 6020A

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 11/16/2011 2020

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Aluminum	100	100		1	101	80-120	11/17/2011 2049
Antimony	100	96		1	96	80-120	11/17/2011 0303
Arsenic	100	110		1	109	80-120	11/17/2011 0303
Barium	100	96		1	96	80-120	11/17/2011 0303
Beryllium	100	110		1	107	80-120	11/17/2011 0303
Cadmium	100	110		1	106	80-120	11/17/2011 0303
Calcium	1000	1000		1	103	80-120	11/17/2011 0303
Chromium	100	99		1	99	80-120	11/17/2011 0303
Cobalt	100	99		1	99	80-120	11/17/2011 0303
Copper	100	100		1	101	80-120	11/17/2011 0303
Iron	1000	1100		1	107	80-120	11/17/2011 0303
Lead	100	97		1	97	80-120	11/17/2011 0303
Magnesium	1000	1100		1	108	80-120	11/17/2011 0303
Manganese	100	98		1	98	80-120	11/17/2011 0303
Nickel	100	100		1	101	80-120	11/17/2011 0303
Potassium	1000	1100		1	109	80-120	11/17/2011 0303
Selenium	100	120		1	119	80-120	11/17/2011 0303
Silver	100	95		1	95	80-120	11/17/2011 2049
Sodium	1000	1100		1	109	80-120	11/17/2011 0303
Thallium	100	96		1	96	80-120	11/17/2011 0303
Vanadium	100	95		1	95	80-120	11/17/2011 0303
Zinc	100	120		1	116	80-120	11/17/2011 0303

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

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

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

ICP-MS - LCSD

Sample ID: MQ71887-003
Batch: 71887
Analytical Method: 6020A

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 11/16/2011 2020

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Aluminum	100	100		1	101	0.49	80-120	20	11/17/2011 2057
Antimony	100	98		1	98	1.9	80-120	20	11/17/2011 0311
Arsenic	100	110		1	107	1.6	80-120	20	11/17/2011 0311
Barium	100	97		1	97	1.6	80-120	20	11/17/2011 0311
Beryllium	100	100		1	104	2.9	80-120	20	11/17/2011 0311
Cadmium	100	110		1	105	0.86	80-120	20	11/17/2011 0311
Calcium	1000	980		1	98	4.7	80-120	20	11/17/2011 0311
Chromium	100	94		1	94	5.9	80-120	20	11/17/2011 0311
Cobalt	100	97		1	97	2.0	80-120	20	11/17/2011 0311
Copper	100	97		1	97	3.8	80-120	20	11/17/2011 0311
Iron	1000	1000		1	103	4.2	80-120	20	11/17/2011 0311
Lead	100	97		1	97	0.057	80-120	20	11/17/2011 0311
Magnesium	1000	1000		1	103	4.6	80-120	20	11/17/2011 0311
Manganese	100	95		1	95	3.5	80-120	20	11/17/2011 0311
Nickel	100	99		1	99	2.4	80-120	20	11/17/2011 0311
Potassium	1000	1000		1	103	5.7	80-120	20	11/17/2011 0311
Selenium	100	110		1	114	3.9	80-120	20	11/17/2011 0311
Silver	100	94		1	94	0.54	80-120	20	11/17/2011 2057
Sodium	1000	1000		1	100	7.8	80-120	20	11/17/2011 0311
Thallium	100	96		1	96	0.34	80-120	20	11/17/2011 0311
Vanadium	100	92		1	92	2.7	80-120	20	11/17/2011 0311
Zinc	100	110		1	115	1.2	80-120	20	11/17/2011 0311

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

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

CVAA - MB

Sample ID: MQ71904-001
Batch: 71904
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 11/17/2011 1005

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	ND		1	0.00010	0.000053	mg/L	11/17/2011 1247

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

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

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

CVAA - LCS

Sample ID: MQ71904-002
Batch: 71904
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 11/17/2011 1005

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.0020	0.0021		1	103	85-115	11/17/2011 1250

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

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

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

CVAA - LCSD

Sample ID: MQ71904-003
Batch: 71904
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 11/17/2011 1005

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.0020	0.0021		1	103	0.48	85-115	20	11/17/2011 1252

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

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

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

CVAA - MS

Sample ID: MK14023-001MS
Batch: 71904
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 11/17/2011 1005

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	ND	0.0020	0.0019		1	96	85-115	11/17/2011 1325

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

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

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

CVAA - MSD

Sample ID: MK14023-001MD
Batch: 71904
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 11/17/2011 1005

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	ND	0.0020	0.0021		1	106	9.9	85-115	20	11/17/2011 1327

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

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

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

CVAA - MS

Sample ID: MK14023-002MS
Batch: 71904
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 11/17/2011 1005

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	ND	0.0020	0.0021		1	107	85-115	11/17/2011 1335

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

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

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

CVAA - MB

Sample ID: MQ71905-001
Batch: 71905
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 11/17/2011 1005

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	ND		1	0.00010	0.000053	mg/L	11/17/2011 1404

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

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

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

CVAA - LCS

Sample ID: MQ71905-002
Batch: 71905
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 11/17/2011 1005

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.0020	0.0021		1	107	85-115	11/17/2011 1406

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

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

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

CVAA - LCSD

Sample ID: MQ71905-003
Batch: 71905
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 7470A
Prep Date: 11/17/2011 1005

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.0020	0.0021		1	103	2.9	85-115	20	11/17/2011 1409

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

Where applicable, all soil sample analysis are reported 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.
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 06935

Client: ERM NC Inc	Report to Contact: Michael Pressley	Sampler (Printed Name): Chris Means	Quote No.: 12585
Address: 8000 Corporate Center Dr #200	Telephone No. / Fax No. / Email: (704)541-8345/michael.pressley@erm.com	Waybill No.	Page: 1 of 2
City: Charlotte / State: NC / Zip Code: 28226	Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		
Project Name: Joslyn Clark			

Project Number	P.O Number		G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: TCL VOC	TAL Metals	PAHs	Number of Containers: 2	1									Bottle (See Instructions on back): A	F	I									Preservative	Lot No.: MK14023
Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time																																Remarks / Cooler ID
MW-1	11-10-11	1615	6	X					X	X																								
MW-2	11-11-11	1200	6	X					X	X																								
MW-3	11-11-11	1445	6	X					X	X	X																							
MW-3D	11-11-11	1305	6	X					X	X	X																							
MW-4	11-10-11	1510	6	X					X	X																								
MW-5	11-10-11	1335	6	X					X	X																								
MW-6	11-11-11	0910	6	X					X	X																								
MW-7	11-11-11	1030	6	X					X	X																								
MW-8	11-10-11	1715	6	X					X	X																								
MW-9	11-10-11	1345	6	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	11.10.11	1800	1. Received by	11.11.11	1800
2. Relinquished by	11.14.11	0730	2. Received by	11.14.11	0730
3. Relinquished by	11.14.11	1120	3. Received by		
4. Relinquished by			4. Laboratory Received by	11-14-11	1120

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. 1.0 °C — Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

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

SHEALY Chain of Custody Record

Number 110406

Client: ERM NC Inc	Report to Contact: Michael Pressley	Telephone No. / Fax No. / E-mail: (704)541-9345/michael.pressley@erm.com	Quote No.: 12585
Address: 8000 Corporate Center Dr #200	Sampler's Signature:	Waybill No.:	Page 2 of 2
City: Charlotte / State: NC / Zip Code: 28226	Printed Name: Chris Means		
Project Name: Joslyn Clark			

Analysis (Attach list if more space is needed.)

Project No.	P.O. No.			Matrix			No. of Containers by Preservative Type								Lot No. MK14023
Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab / C-Composite	Aqueous	Solid	Non-Aqueous	Unpres.	H2SO4	HNO3	HCl	NaOH	5035 Kit	TCL VOC	TAL Metals	Remarks / Cooler I.D.
MW-10	11-10-11	1220	G	X			X		X				X	X	
MW-10D	11-10-11	1120	G	X			X		X				X	X	
Trip Blank	—	—	G	X			X						X	X	

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

Sample Disposal: ☑ Return to Client ☐ Disposal by Lab

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

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

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	11.11.11	1900	1. Received by: Secure Area / Shealy Officer	11.11.11	1800
2. Relinquished by: Secure Area / Shealy Officer	11.14.11	0730	2. Received by	11.14.11	0730
3. Relinquished by	11.14.11	1120	3. Laboratory received by	11-14-11	1120

Comments

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack

Receipt Temp. 1.0 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-012 Effective Date: 09-04-02

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 9

Replaces Date: 05/06/11
Effective Date: 10/11/11

Sample Receipt Checklist (SRC)

Client: CRM Cooler Inspected by/date: GL / 11/14/11 Lot #: MK1423

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 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/BNA/pest/PCB/herb (<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/BNA/pest/PCB/herb.

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: ___ Date of response: ___

Comments: ___

Appendix G

Investigation Derived Waste Sampling Laboratory Report

Report of Analysis

ERM-Southeast, Inc
8000 Corporate Center Drive
Suite 200
Charlotte, NC 28226
Attention: Michael Pressley

Project Name: Joslyn Clark

Lot Number: MJ17010
Date Completed: 10/27/2011

Kelly M. Maberry
Project Manager

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

MJ17010

Case Narrative
ERM-Southeast, Inc
Lot Number: MJ17010

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.

Shealy is not NELAC certified for Phosphorus by 365.1 but is certified in SC and NC.

Shealy is not NELAC certified for VPH, but is certified for VPH in NC.

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

TCLP Volatiles
The temperature in the extraction room was marginally out of range during the tumbling of these samples at 20.2 °C (acceptance range is 21-25°C).

The method blank associated with batch 70236 had chloroform detected at a concentration that was above the MDL but below ½ the PQL. All samples associated with this method blank that have detections for chloroform have been flagged with a "B".

Sample Summary
ERM-Southeast, Inc
Lot Number: MJ17010

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	DS-MW-3D	Solid	10/14/2011 1035	10/17/2011
002	DS-MW-8	Solid	10/14/2011 1040	10/17/2011
003	DS-MW-9	Solid	10/14/2011 1045	10/17/2011
004	DS-MW-10	Solid	10/14/2011 1050	10/17/2011
005	DS-MW-10D	Solid	10/14/2011 1055	10/17/2011
006	DS-Decon H2O	Aqueous	10/14/2011 1110	10/17/2011

(6 samples)

Executive Summary

ERM-Southeast, Inc

Lot Number: MJ17010

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	DS-MW-3D	Solid	Chloroform	8260B	0.0040	BJ	mg/L	5
002	DS-MW-8	Solid	Chloroform	8260B	0.0050	BJ	mg/L	6
003	DS-MW-9	Solid	Chloroform	8260B	0.0040	BJ	mg/L	7
004	DS-MW-10	Solid	Chloroform	8260B	0.0050	BJ	mg/L	8
005	DS-MW-10D	Solid	Chloroform	8260B	0.0040	BJ	mg/L	9

(5 detections)

TCLP Volatiles

Client: ERM-Southeast, Inc
Laboratory ID: MJ17010-001
Description: DS-MW-3D
Matrix: Solid
Date Sampled: 10/14/2011 1035
% Solids: 87.5 10/17/2011 2149
Date Received: 10/17/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/5030B	8260B	10	10/19/2011 1225	BM		69986	10/17/2011 2130
2	1311/5030B	8260B	10	10/26/2011 1452	LBS		70535	10/25/2011 1809

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.050	0.0020	mg/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		0.10	0.018	mg/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.050	0.0040	mg/L	1
Chlorobenzene	108-90-7	8260B	ND		0.050	0.0020	mg/L	1
Chloroform	67-66-3	8260B	0.0040	BJ	0.050	0.0030	mg/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.050	0.0030	mg/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.050	0.0050	mg/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.050	0.0040	mg/L	1
Trichloroethene	79-01-6	8260B	ND		0.050	0.0030	mg/L	2
Vinyl chloride	75-01-4	8260B	ND		0.010	0.0010	mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130		128	70-130
Bromofluorobenzene		97	70-130		122	70-130
Toluene-d8		101	70-130		125	70-130

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

TCLP Volatiles

Client: ERM-Southeast, Inc
Laboratory ID: MJ17010-002
Description: DS-MW-8
Matrix: Solid
Date Sampled: 10/14/2011 1040
% Solids: 78.7 10/17/2011 2149
Date Received: 10/17/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/5030B	8260B	10	10/19/2011 1248	BM		69986	10/17/2011 2130
2	1311/5030B	8260B	10	10/26/2011 1515	LBS		70535	10/25/2011 1809

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.050	0.0020	mg/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		0.10	0.018	mg/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.050	0.0040	mg/L	1
Chlorobenzene	108-90-7	8260B	ND		0.050	0.0020	mg/L	1
Chloroform	67-66-3	8260B	0.0050	BJ	0.050	0.0030	mg/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.050	0.0030	mg/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.050	0.0050	mg/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.050	0.0040	mg/L	1
Trichloroethene	79-01-6	8260B	ND		0.050	0.0030	mg/L	2
Vinyl chloride	75-01-4	8260B	ND		0.010	0.0010	mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130		124	70-130
Bromofluorobenzene		96	70-130		120	70-130
Toluene-d8		97	70-130		124	70-130

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

TCLP Volatiles

Client: ERM-Southeast, Inc
Laboratory ID: MJ17010-003
Description: DS-MW-9
Matrix: Solid
Date Sampled: 10/14/2011 1045
% Solids: 80.7 10/17/2011 2149
Date Received: 10/17/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/5030B	8260B	10	10/19/2011 1311	BM		69986	10/17/2011 2130
2	1311/5030B	8260B	10	10/26/2011 1538	LBS		70535	10/25/2011 1809

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.050	0.0020	mg/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		0.10	0.018	mg/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.050	0.0040	mg/L	1
Chlorobenzene	108-90-7	8260B	ND		0.050	0.0020	mg/L	1
Chloroform	67-66-3	8260B	0.0040	BJ	0.050	0.0030	mg/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.050	0.0030	mg/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.050	0.0050	mg/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.050	0.0040	mg/L	1
Trichloroethene	79-01-6	8260B	ND		0.050	0.0030	mg/L	2
Vinyl chloride	75-01-4	8260B	ND		0.010	0.0010	mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130		125	70-130
Bromofluorobenzene		95	70-130		118	70-130
Toluene-d8		98	70-130		124	70-130

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

TCLP Volatiles

Client: ERM-Southeast, Inc
Laboratory ID: MJ17010-004
Description: DS-MW-10
Matrix: Solid
Date Sampled: 10/14/2011 1050
% Solids: 82.6 10/17/2011 2149
Date Received: 10/17/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
2	1311/5030B	8260B	10	10/22/2011 0027	JJG		70236	10/18/2011 2237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.050	0.0020	mg/L	2
2-Butanone (MEK)	78-93-3	8260B	ND		0.10	0.018	mg/L	2
Carbon tetrachloride	56-23-5	8260B	ND		0.050	0.0040	mg/L	2
Chlorobenzene	108-90-7	8260B	ND		0.050	0.0020	mg/L	2
Chloroform	67-66-3	8260B	0.0050	BJ	0.050	0.0030	mg/L	2
1,2-Dichloroethane	107-06-2	8260B	ND		0.050	0.0030	mg/L	2
1,1-Dichloroethene	75-35-4	8260B	ND		0.050	0.0050	mg/L	2
Tetrachloroethene	127-18-4	8260B	ND		0.050	0.0040	mg/L	2
Trichloroethene	79-01-6	8260B	ND		0.050	0.0030	mg/L	2
Vinyl chloride	75-01-4	8260B	ND		0.010	0.0010	mg/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		101	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"
* = Reportable result (only when report all runs)

TCLP Volatiles

Client: ERM-Southeast, Inc
Laboratory ID: MJ17010-005
Description: DS-MW-10D
Matrix: Solid
Date Sampled: 10/14/2011 1055
% Solids: 80.5 10/17/2011 2149
Date Received: 10/17/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
2	1311/5030B	8260B	10	10/22/2011 0048	JJG		70236	10/18/2011 2237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.050	0.0020	mg/L	2
2-Butanone (MEK)	78-93-3	8260B	ND		0.10	0.018	mg/L	2
Carbon tetrachloride	56-23-5	8260B	ND		0.050	0.0040	mg/L	2
Chlorobenzene	108-90-7	8260B	ND		0.050	0.0020	mg/L	2
Chloroform	67-66-3	8260B	0.0040	BJ	0.050	0.0030	mg/L	2
1,2-Dichloroethane	107-06-2	8260B	ND		0.050	0.0030	mg/L	2
1,1-Dichloroethene	75-35-4	8260B	ND		0.050	0.0050	mg/L	2
Tetrachloroethene	127-18-4	8260B	ND		0.050	0.0040	mg/L	2
Trichloroethene	79-01-6	8260B	ND		0.050	0.0030	mg/L	2
Vinyl chloride	75-01-4	8260B	ND		0.010	0.0010	mg/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		96	70-130

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

TCLP Volatiles

Client: ERM-Southeast, Inc
Laboratory ID: MJ17010-006
Description: DS-Decon H2O
Matrix: Aqueous
Date Sampled: 10/14/2011 1110
Date Received: 10/17/2011

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/5030B	8260B	10	10/19/2011 1124	BM		69983	10/19/2011 0000

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.050	0.0020	mg/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		0.10	0.018	mg/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.050	0.0040	mg/L	1
Chlorobenzene	108-90-7	8260B	ND		0.050	0.0020	mg/L	1
Chloroform	67-66-3	8260B	ND		0.050	0.0030	mg/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.050	0.0030	mg/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.050	0.0050	mg/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.050	0.0040	mg/L	1
Trichloroethene	79-01-6	8260B	ND		0.050	0.0030	mg/L	1
Vinyl chloride	75-01-4	8260B	ND		0.010	0.0010	mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		94	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"
* = Reportable result (only when report all runs)

QC Summary

TCLP Volatiles - MB

Sample ID: MQ69983-001
Batch: 69983
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 1311/5030B

Leachate Date: 10/19/2011 0000

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		10	0.050	0.0020	mg/L	10/19/2011 0836
2-Butanone (MEK)	ND		10	0.10	0.018	mg/L	10/19/2011 0836
Carbon tetrachloride	ND		10	0.050	0.0040	mg/L	10/19/2011 0836
Chlorobenzene	ND		10	0.050	0.0020	mg/L	10/19/2011 0836
Chloroform	ND		10	0.050	0.0030	mg/L	10/19/2011 0836
1,2-Dichloroethane	ND		10	0.050	0.0030	mg/L	10/19/2011 0836
1,1-Dichloroethene	ND		10	0.050	0.0050	mg/L	10/19/2011 0836
Tetrachloroethene	ND		10	0.050	0.0040	mg/L	10/19/2011 0836
Trichloroethene	ND		10	0.050	0.0030	mg/L	10/19/2011 0836
Vinyl chloride	ND		10	0.010	0.0010	mg/L	10/19/2011 0836

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		95	70-130

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

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

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

TCLP Volatiles - LCS

Sample ID: MQ69983-002
Batch: 69983
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 1311/5030B

Leachate Date: 10/19/2011 0000

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	0.50	0.46		10	92	72-127	10/19/2011 0733
2-Butanone (MEK)	1.0	1.1		10	106	60-140	10/19/2011 0733
Carbon tetrachloride	0.50	0.48		10	96	37-166	10/19/2011 0733
Chlorobenzene	0.50	0.47		10	93	78-129	10/19/2011 0733
Chloroform	0.50	0.43		10	86	63-123	10/19/2011 0733
1,2-Dichloroethane	0.50	0.46		10	92	59-143	10/19/2011 0733
1,1-Dichloroethene	0.50	0.47		10	94	50-132	10/19/2011 0733
Tetrachloroethene	0.50	0.48		10	95	70-130	10/19/2011 0733
Trichloroethene	0.50	0.47		10	93	73-124	10/19/2011 0733
Vinyl chloride	0.50	0.52		10	104	29-159	10/19/2011 0733

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		97	70-130

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

TCLP Volatiles - MS

Sample ID: MJ17010-006MS
Batch: 69983
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 1311/5030B
Leachate Date: 10/19/2011 0000

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	0.50	0.45		10	90	70-127	10/19/2011 1145
2-Butanone (MEK)	ND	1.0	1.0		10	101	60-140	10/19/2011 1145
Carbon tetrachloride	ND	0.50	0.50		10	101	37-166	10/19/2011 1145
Chlorobenzene	ND	0.50	0.47		10	94	78-129	10/19/2011 1145
Chloroform	ND	0.50	0.43		10	86	63-123	10/19/2011 1145
1,2-Dichloroethane	ND	0.50	0.46		10	93	59-143	10/19/2011 1145
1,1-Dichloroethene	ND	0.50	0.48		10	96	50-132	10/19/2011 1145
Tetrachloroethene	ND	0.50	0.49		10	97	70-130	10/19/2011 1145
Trichloroethene	ND	0.50	0.48		10	95	73-124	10/19/2011 1145
Vinyl chloride	ND	0.50	0.54		10	108	29-159	10/19/2011 1145

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		94	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

TCLP Volatiles - MB

Sample ID: MQ69986-001
Batch: 69986
Analytical Method: 8260B

Matrix: Solid
Prep Method: 1311/5030B

Leachate Date: 10/17/2011 2130

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		10	0.050	0.0020	mg/L	10/19/2011 1202
2-Butanone (MEK)	ND		10	0.10	0.018	mg/L	10/19/2011 1202
Carbon tetrachloride	0.021	J	10	0.050	0.0040	mg/L	10/19/2011 1202
Chlorobenzene	ND		10	0.050	0.0020	mg/L	10/19/2011 1202
Chloroform	0.0050	J	10	0.050	0.0030	mg/L	10/19/2011 1202
1,2-Dichloroethane	ND		10	0.050	0.0030	mg/L	10/19/2011 1202
1,1-Dichloroethene	ND		10	0.050	0.0050	mg/L	10/19/2011 1202
Tetrachloroethene	ND		10	0.050	0.0040	mg/L	10/19/2011 1202
Vinyl chloride	ND		10	0.010	0.0010	mg/L	10/19/2011 1202

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		94	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

TCLP Volatiles - LCS

Sample ID: MQ69986-002
Batch: 69986
Analytical Method: 8260B

Matrix: Solid
Prep Method: 1311/5030B

Leachate Date: 10/17/2011 2130

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	0.50	0.47		10	94	72-127	10/19/2011 1139
2-Butanone (MEK)	1.0	0.65		10	65	60-140	10/19/2011 1139
Carbon tetrachloride	0.50	0.56		10	113	37-166	10/19/2011 1139
Chlorobenzene	0.50	0.49		10	97	78-129	10/19/2011 1139
Chloroform	0.50	0.45		10	90	63-123	10/19/2011 1139
1,2-Dichloroethane	0.50	0.44		10	87	59-143	10/19/2011 1139
1,1-Dichloroethene	0.50	0.51		10	102	50-132	10/19/2011 1139
Tetrachloroethene	0.50	0.49		10	98	70-130	10/19/2011 1139
Vinyl chloride	0.50	0.55		10	111	29-159	10/19/2011 1139

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		101	70-130

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

TCLP Volatiles - MS

Sample ID: MJ17010-003MS
Batch: 69986
Analytical Method: 8260B

Matrix: Solid
Prep Method: 1311/5030B
Leachate Date: 10/17/2011 2130

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	0.50	0.48		10	95	70-127	10/19/2011 1334
2-Butanone (MEK)	ND	1.0	0.61		10	61	60-140	10/19/2011 1334
Carbon tetrachloride	ND	0.50	0.56		10	113	37-166	10/19/2011 1334
Chlorobenzene	ND	0.50	0.48		10	97	78-129	10/19/2011 1334
Chloroform	0.0040	0.50	0.46		10	91	63-123	10/19/2011 1334
1,2-Dichloroethane	ND	0.50	0.45		10	89	59-143	10/19/2011 1334
1,1-Dichloroethene	ND	0.50	0.51		10	102	50-132	10/19/2011 1334
Tetrachloroethene	ND	0.50	0.49		10	97	70-130	10/19/2011 1334
Vinyl chloride	ND	0.50	0.54		10	107	29-159	10/19/2011 1334

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

TCLP Volatiles - MB

Sample ID: MQ70236-001
Batch: 70236
Analytical Method: 8260B

Matrix: Solid
Prep Method: 1311/5030B

Leachate Date: 10/18/2011 2237

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		10	0.050	0.0020	mg/L	10/22/2011 0006
2-Butanone (MEK)	ND		10	0.10	0.018	mg/L	10/22/2011 0006
Carbon tetrachloride	ND		10	0.050	0.0040	mg/L	10/22/2011 0006
Chlorobenzene	ND		10	0.050	0.0020	mg/L	10/22/2011 0006
Chloroform	0.0040	J	10	0.050	0.0030	mg/L	10/22/2011 0006
1,2-Dichloroethane	ND		10	0.050	0.0030	mg/L	10/22/2011 0006
1,1-Dichloroethene	ND		10	0.050	0.0050	mg/L	10/22/2011 0006
Tetrachloroethene	ND		10	0.050	0.0040	mg/L	10/22/2011 0006
Trichloroethene	ND		10	0.050	0.0030	mg/L	10/22/2011 0006
Vinyl chloride	ND		10	0.010	0.0010	mg/L	10/22/2011 0006

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		100	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

TCLP Volatiles - LCS

Sample ID: MQ70236-002
Batch: 70236
Analytical Method: 8260B

Matrix: Solid
Prep Method: 1311/5030B

Leachate Date: 10/18/2011 2237

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	0.50	0.48		10	95	72-127	10/21/2011 2345
2-Butanone (MEK)	1.0	0.90		10	90	60-140	10/21/2011 2345
Carbon tetrachloride	0.50	0.44		10	89	37-166	10/21/2011 2345
Chlorobenzene	0.50	0.45		10	91	78-129	10/21/2011 2345
Chloroform	0.50	0.42		10	84	63-123	10/21/2011 2345
1,2-Dichloroethane	0.50	0.47		10	93	59-143	10/21/2011 2345
1,1-Dichloroethene	0.50	0.49		10	98	50-132	10/21/2011 2345
Tetrachloroethene	0.50	0.44		10	88	70-130	10/21/2011 2345
Trichloroethene	0.50	0.46		10	92	73-124	10/21/2011 2345
Vinyl chloride	0.50	0.51		10	102	29-159	10/21/2011 2345

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		103	70-130

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

TCLP Volatiles - MS

Sample ID: MJ17010-004MS
Batch: 70236
Analytical Method: 8260B

Matrix: Solid
Prep Method: 1311/5030B
Leachate Date: 10/18/2011 2237

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	0.50	0.46		10	92	70-127	10/22/2011 0109
2-Butanone (MEK)	ND	1.0	0.99		10	99	60-140	10/22/2011 0109
Carbon tetrachloride	ND	0.50	0.44		10	88	37-166	10/22/2011 0109
Chlorobenzene	ND	0.50	0.45		10	89	78-129	10/22/2011 0109
Chloroform	0.0050	0.50	0.42		10	83	63-123	10/22/2011 0109
1,2-Dichloroethane	ND	0.50	0.47		10	94	59-143	10/22/2011 0109
1,1-Dichloroethene	ND	0.50	0.49		10	98	50-132	10/22/2011 0109
Tetrachloroethene	ND	0.50	0.43		10	87	70-130	10/22/2011 0109
Trichloroethene	ND	0.50	0.45		10	90	73-124	10/22/2011 0109
Vinyl chloride	ND	0.50	0.54		10	107	29-159	10/22/2011 0109

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

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

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

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

TCLP Volatiles - MB

Sample ID: MQ70535-001
Batch: 70535
Analytical Method: 8260B

Matrix: Solid
Prep Method: 1311/5030B
Leachate Date: 10/25/2011 1809

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		10	0.050	0.0030	mg/L	10/26/2011 1429

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		122	70-130
1,2-Dichloroethane-d4		125	70-130
Toluene-d8		126	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

TCLP Volatiles - LCS

Sample ID: MQ70535-002
Batch: 70535
Analytical Method: 8260B

Matrix: Solid
Prep Method: 1311/5030B

Leachate Date: 10/25/2011 1809

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	0.50	0.44		10	88	73-124	10/26/2011 2321

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		100	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

TCLP Volatiles - MS

Sample ID: MJ17010-003MS
Batch: 70535
Analytical Method: 8260B

Matrix: Solid
Prep Method: 1311/5030B
Leachate Date: 10/25/2011 1809

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	0.50	0.45		10	89	73-124	10/27/2011 0003

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		103	70-130

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

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

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

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111

SHEALY **Chain of Custody Record**

Number 110410

Client: ERM NC Inc	Report to Contact: Michael Pressley	Telephone No. / Fax No. / E-mail: (704)541-8345/michael.pressley@erm.com	Quote No.: 12585
Address: 8000 Corporate Center Dr #200	Sampler's Signature: X	Waybill No.:	Page 1 of 1
City: Charlotte / State: NC / Zip Code: 28226	Printed Name: Chris Means	Analysis (Attach list if more space is needed.)	
Project Name: Joslyn Clark			
Project No.:	P.O. No.:		Lot No.: MJ17010

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No. of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	SAPA Vial	TCLP VOC	Remarks / Cooler I.D.
DS-MW-3D	10-14-11	1035	C		X		1						X	
DS-MW-8	10-14-11	1040	C		X		1						X	
DS-MW-9	10-14-11	1045	C		X		1						X	
DS-MW-10	10-14-11	1050	C		X		1						X	
DS-MW-10D	10-14-11	1055	C		X		1						X	
DS-Decon H2O	10-14-11	1110	C	X			3						X	

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

Sample Disposal: ☐ Return to Client ☑ Disposal by Lab

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

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

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished by	10-14-11	1800	1. Received by: Secure Area/Study Office	10.14.11	1800
2. Relinquished by	10.17.11	0700	2. Relinquished by:	10.17.11	0700
3. Relinquished by	10.17.11	1020	3. Laboratory received by:	10/17/11	1020

Comments:

LAB USE ONLY
Received on ice (Circle) Yes / No ice Pack

Receipt Temp. 1.3 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-012 Effective Date: 08-04-02

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 9

Replaces Date: 05/06/11
Effective Date: 10/11/11

Sample Receipt Checklist (SRC)

Client: GRM Cooler Inspected by/date: EC 10/19/11 Lot #: MJ1701o

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 1 - 3 °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/BNA/pest/PCB/herb (<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/BNA/pest/PCB/herb.

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: _____ Date of response: _____

Comments: _____

Appendix H

Investigation Derived Waste Certificates of Disposal

ENVIRONMENTAL AND INDUSTRIAL RESOURCES

1703 Vargrave Street
Winston-Salem, NC 27107
ph 336-725-5844
fax 336-725-6244

CERTIFICATE OF DISPOSAL

Evo Corporation does hereby certify that 7 drums of non-hazardous contaminated water received on 01/05/2012 from:

Generator: Joslyn Clark Controls, LLC

Originating at: 2013 W. Meeting Street
Lancaster, SC

EC Waste ID #: 121132

has been disposed of by Evo Corporation in a manner approved by the North Carolina Department of Environment and Natural Resources.

Signature

Thomas W. Hammett
CEO
Evo Corporation

EVO CORPORATION

1703 Vargrave Street, Winston-Salem, NC 27107
www.evocorp.net

NON-HAZARDOUS MATERIALS MANIFEST

Load # Manifest No. 73423

GENERATOR INFORMATION

Generator: Joslyn Clark Controls, LLC Phone: 704-541-8345
Site Address: 2013 W. Meeting Street
City/State: Lancaster, SC Contact: Michael Pressley

MATERIAL DESCRIPTION / QUANTITY / WEIGHT

Gross Weight (lbs): Material: Water
Empty Weight (lbs): Contaminant: Non-Haz VOC's
Net Weight (lbs):

Quantity 7 Tons Drums Pails Sacs Yards Other:

TRANSPORTER INFORMATION

Transporter: Evo Corporation Phone: 336-725-5844
Truck #: 401 Contact: Tony Disher

As the transporter, I certify that the materials described above being shipped under this non-hazardous materials manifest are properly classified, packaged, labeled, secured and are in proper condition for transport in commerce under the applicable regulations governing transportation, and I hereby receive this material for delivery to the facility designate.

Driver Signature: Date: 1/5/12

FACILITY INFORMATION

Evo Project #: 121132

EVO CORPORATION
1703 Vargrave Street
Winston-Salem, NC 27107

Phone: (336) 725-5844
Contact: Tony Disher

I certify that the carrier has delivered the materials described above to this facility, and I hereby accept this material for treatment and/or disposal in a manner that has been authorized by the State of North Carolina.

Facility Signature: Date: 01-05-2012

White/Facility Canary/Invoice Goldenrod/Generator Pink/Carrier

ENVIRONMENTAL AND INDUSTRIAL RESOURCES

1703 Vargrave Street
Winston-Salem, NC 27107
ph 336-725-5844
fax 336-725-6244

CERTIFICATE OF DISPOSAL

Evo Corporation does hereby certify that 44 drums of non-hazardous contaminated material received on 01/05/2012 and 01/06/2012 from:

Generator: Joslyn Clark Controls, LLC

Originating at: 2013 W. Meeting Street
Lancaster, SC

EC Waste ID #: 121132

has been disposed of by Evo Corporation in a manner approved by the North Carolina Department of Environment and Natural Resources.

Signature

Thomas W. Hammett
CEO
Evo Corporation

EVO CORPORATION

1703 Vargrave Street, Winston-Salem, NC 27107
www.evocorp.net

NON-HAZARDOUS MATERIALS MANIFEST

Load # Manifest No. 73443

GENERATOR INFORMATION

Generator: Joslyn Clark Controls, LLC Phone: 704-541-8345
Site Address: 2013 W. Meeting Street
City/State: Lancaster, SC Contact: Michael Presaley

MATERIAL DESCRIPTION / QUANTITY / WEIGHT

Gross Weight (lbs): Material: Soil
Empty Weight (lbs): Contaminant: Non-Haz VOC's
Net Weight (lbs):

Quantity 38 Tons (Drums) Pails Sacs Yards Other:

TRANSPORTER INFORMATION

Transporter: Evo Corporation Phone: 336-725-5844
Truck #: Contact: Tony Disher

As the transporter, I certify that the materials described above being shipped under this non-hazardous materials manifest are properly classified, packaged, labeled, secured and are in proper condition for transport in commerce under the applicable regulations governing transportation, and I hereby receive this material for delivery to the facility designate.

Driver Signature: Jim Myers Date: 01-06-2012

FACILITY INFORMATION

Evo Project #: 121132

EVO CORPORATION
1703 Vargrave Street
Winston-Salem, NC 27107

Phone: (336) 725-5844

Contact: Tony Disher

I certify that the carrier has delivered the materials described above to this facility, and I hereby accept this material for treatment and/or disposal in a manner that has been authorized by the State of North Carolina.

Facility Signature: Lauren Pelock Date: 1/6/12

White/Facility Canary/Invoice Goldenrod/Generator Pink/Carrier

EVO CORPORATION

1703 Vargrave Street, Winston-Salem, NC 27107
www.evocorp.net
NON-HAZARDOUS MATERIALS MANIFEST

Load # Manifest No. 73422

GENERATOR INFORMATION

Generator: Joslyn Clark Controls, LLC Phone: 704-541-8345
Site Address: 2013 W. Meeting Street
City/State: Lancaster, SC Contact: Michael Pressley

MATERIAL DESCRIPTION / QUANTITY / WEIGHT

Gross Weight (lbs): Material: Soil
Empty Weight (lbs): Contaminant: Non-Haz VOC's
Net Weight (lbs):

Quantity 6 Tons (Drums) Pails Sacs Yards Other:

TRANSPORTER INFORMATION

Transporter: Evo Corporation Phone: 336-725-5844
Truck #: 401 Contact: Tony Disher

As the transporter, I certify that the materials described above being shipped under this non-hazardous materials manifest are properly classified, packaged, labeled, secured and are in proper condition for transport in commerce under the applicable regulations governing transportation, and I hereby receive this material for delivery to the facility designate.

Driver Signature: Date: 1/5/12

FACILITY INFORMATION

Evo Project #: 121132

EVO CORPORATION
1703 Vargrave Street
Winston-Salem, NC 27107

Phone: (336) 725-5844

Contact: Tony Disher

I certify that the carrier has delivered the materials described above to this facility, and I hereby accept this material for treatment and/or disposal in a manner that has been authorized by the State of North Carolina.

Facility Signature: Date: 01-05-2012

White/Facility Canary/Invoice Goldenrod/Generator Pink/Carrier