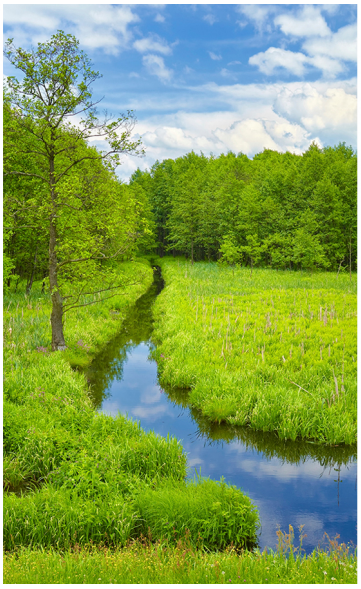
CONESTOGA-ROVERS & ASSOCIATES

www.CRAworld.com



Soil Assessment and Delineation Activities Report

Central Vacuum Unit 106 and Central Vaccum Unit 136
Lea County, New Mexico
API : 30-025-25796 and 30-025-25997
NMOCD: 1R-2642-0

Prepared for:
Chevron Environmental Management Company
1400 Smith Street, Room 07076
Houston, TX 77002

Conestoga-Rovers & Associates
6121 Indian School Road, NE Suite 200
Albuquerque, New Mexico 87110

!ʤƎʤžǔ 2014 • 074636 • Report No. 2

Partners in Sustainability

Table of Contents

Page

List of Figures
(Following Text)

List of Tables
(Following Text)

List of Appendices
(Following Text)

Section 1.0 Project Information and Background

Central Vacuum Unit No. 106 (CVU-106) and Central Vacuum Unit No. 136 (CVU-136) are both located in Unit E, Section 6, Township 18S, Range 35E of Lea County, approximately 15 miles southwest of Lovington, New Mexico, along Highway 238 (**Figure 1**).

Conestoga-Rovers and Associates (CRA) has combined the CVU-106 and CVU-136 release sites into a single area for investigation and delineation. Consolidation of these two units into a single Site delineation effort is based on:

- Their co-located nature (release sites are comingled),
- Similar nature of released material (produced water with reported chloride concentrations of 53,000 ppm),
- Identical New Mexico Oil Conservation Division (NMOCD) Recommended Remedial Action Levels (RRALs) for chloride of 250 ppm, and
- Near-contemporaneous release dates.

The first consultant to evaluate the Site was Cindy K. Crain, P.G. with Crain Environmental (Crain). Crain conducted field assessment activities at the CVU-106 and CVU-136 sites between August and November 2010. Crain's assessments included Site visits, soil sample collection, analytical laboratory analyses, and preliminary determinations of impacts to environmental media. In addition, remedial activities were conducted at the CVU-106 release site. CRA met with Ms. Crain on April 21, 2011 to review and transfer the file material for each Site and discuss Site histories. Additional information regarding the Crain Assessments is provided below. A Site visit was performed on October 22, 2013 by CRA. During the Site visit, boring locations were flagged for utility locating purposes. In addition, the Site was walked to observe Site features. During the Site visit, it appeared that a drilling pit was located to the north of the comingled release area (see Figure 2).

1.1 Central Vacuum Unit #106 (CVU-106) Injection Line Release

Chevron submitted a C-141 Release Notification and Corrective Action Form (C-141) to the NMOCD dated August 5, 2010. The NMOCD assigned a Remediation Permit number of 1RP-2642-0 to the CVU-106 release. A release of 300 barrels (bbls) of produced water from a corroded buried injection line occurred on August 2, 2010. None of the released fluid was reported to have been recovered. The C-141 reported that the released produced water had a concentration of 53,000 ppm and impacted an area of surface soils approximately 200 feet by 30 feet.

Crain collected three surface soil samples on August 12, 2010 to a depth of approximately six inches across the length of the apparent impacted area. These samples were laboratory-analyzed for chloride (Cl^-) concentrations. Chloride results ranged from 5,040 mg/Kg (ppm) to 27,600 ppm.

The apparent impacted area was subsequently excavated to a depth of approximately two feet. The dimensions of the irregularly-shaped excavation area were approximately 263 feet by 106 feet. An additional 17 soil samples were collected at a depth of approximately six inches across the floor of the excavation. They were taken from different locations than those sampled in August. Two background samples were also collected at a depth of six inches and at one foot below grade from a location southwest of the excavation area. Samples were collected on September 16, 2010 and analyzed for chlorides. Results ranged from <16 ppm to 27,200 ppm with only five samples having chloride concentrations below 250 ppm located at the northeast, northwest and southeast corners of the existing excavation.

Additional samples were also collected by hand in the floor of the excavation, ranging from six inches to eight feet in depth. Chloride concentrations in these samples ranged from 16 ppm to 13,600 ppm with the majority of the samples having concentrations above 250 ppm. Finally, soil boring BH-1 was advanced in the floor of the excavation to a depth of 30 feet below ground surface (bgs) at soil sample location SS-5, located just north of the CVU-106 well pad. Samples were collected on five-foot vertical intervals. Samples analyzed from this boring had chloride concentration of 250 ppm or greater with the exception of the sample collected at 30 feet bgs which had a reported chloride concentration of 96 ppm.

During excavation of the produced water-impacted soils, an undefined area was encountered exhibiting visible evidence of significant hydrocarbon contamination. The indicated depth and extent of this contamination suggested the release may have occurred, at least in part, within the area of an abandoned pit that had not been identified previously. No assessment of this pit was performed.

1.2 Central Vacuum Unit #136 (CVU-136) Injection Line Release

Chevron submitted a C-141 Form to NMOCD dated November 5, 2010, describing a release of 276.56 bbls of produced water. The release occurred on October 30, 2010 from a corroded buried injection line. Approximately 200 bbls of the release were reported to have been recovered. The C-141 reported the dimensions of stained soil to be approximately 200 feet by 200 feet. Additionally, it was noted that the CVU-136 injection line released fluid directly adjacent to, and comingled with, the CVU-106 release area. It should be noted that the release did not originate from the CVU-136 well, but from an injection line leak that occurred near the CVU-106 injection well.

Crain collected four surface soil samples to a depth of approximately six inches across the apparent stained soil area. These samples were submitted for laboratory analysis of chloride. Chloride results ranged from 11,000 ppm to 13,600 ppm.

The apparent stained soil area was described by Crain to be roughly 300 feet by 208 feet, and the release was described as having comingled with the CVU-106 chloride impacted area.

1.3 Historical Aerial Images

Historical aerial images of the Site were reviewed to provide information pertaining to the presence of two historic pits located near the Site. Provided in **Appendix A** are two aerial images for reference. The first figure is from 2004 and the second is from 2011. The 2011 aerial photograph shows the Site following both releases. The 2004 aerial indicates the presence of two former production pits in the vicinity of the site. These pits appear to be located in the northern and southern portions of the Site. The 2011 Aerial photograph also indicates the presence of the former production pits. However, in this photograph, the former production pits are less defined. The photograph also indicates the presence of excavation activities. Soil staining that may have been associated with the releases also appears to be visible.

1.4 Recommended Remediation Action Limits

Based on information available from the Petroleum Recovery Research Center Pit Rule Mapping Portal (PPRC Mapping Portal), the depth to groundwater at the Site is indicated to be between 60 and 103 feet bgs. During drilling activities (see below), indications of the capillary fringe were observed at a depth of 51.5 feet bgs. Although the nearest private domestic water and public/municipal water sources are greater than 200 feet and 1,000 feet respectively from the release site, this Site is located within 200 horizontal feet of a playa feature. Consequently, the preliminary total ranking score is 30 (see table below). Based on this, the site-specific RRAL to be applied by NMOCD for chlorides at the Site is 250 ppm.

New Mexico Oil Conservation Division Site Assessment	
Ranking Criteria	Score
Depth to Ground Water (50 feet - 99 feet)	10
Wellhead Protection Area (< 1000 feet from water source, < 200 feet from domestic source)	0
Distance to Surface Body Water (200 feet - 1000 feet)	20
Ranking Criteria Total Score	**30***
*Because the ranking criteria total score is 30, NMOCD established RRALs are 10 ppm for benzene, 50 ppm for benzene, toluene, ethylbenzene, and xylene (BTEX), 100 ppm for total petroleum hydrocarbons (TPH), and 250 ppm for chlorides[1].	

[1] NMOCD Draft Guidance for Release Reporting and Corrective Action, September 30, 2011

Section 2.0 Subsurface Assessment

On October 22, 2013, Ground Penetrating Radar Systems, Inc. of Albuquerque, New Mexico completed a ground-based geophysical subsurface clearance survey. The survey was performed using ground penetrating radar.

The geophysical survey was conducted as a secondary sweep for underground piping and utilities following the completion of the initial New Mexico One Call utility locate. CRA submitted a Chevron Dig Plan and Excavation Permit for approval to the Chevron Buckeye Field Management Team. Due to a delay in approval of the Chevron Dig Plan and Excavation Permit, field activities associated with the proposed shallow soil sampling program (hand auguring) were not performed. It was decided by Chevron Environmental Management Company (CEMC) and CRA that the shallow soil assessment would be addressed during the deep subsurface sampling and laboratory program.

2.1 Drilling and Sampling

Between November 20, 2013 and December 3, 2013, 15 soil borings were advanced at the Site by White Drilling Company of Clyde, Texas. The soil borings were pre-cleared with an air knife to a depth of five feet below ground surface (bgs) or until refusal. The remainder of each boring was advanced using an air rotary drill rig and split spoon soil sampling techniques. Fifteen soil borings were advanced in or around the CVU-106 and CVU-136 release sites and former excavations. Soil borings were advanced to total depths between 20 and 51.5 feet bgs based on field screening for hydrocarbons and chlorides.

Field screening for hydrocarbons was performed using the heated headspace method or a PetroFlag TPH kit. Chloride concentrations in soil were field screened by mixing soil samples with distilled water. The rinsate was then screened using Hach chloride test strips. Soil borings were advanced until field screening for TPH and chloride were below the RRAL of 100 ppm and 250 ppm respectively, or until just above what was believed to be the groundwater capillary fringe (see below). Soil borings were logged in accordance with the Unified Soil Classification System and recorded. Visual representation of the boring logs can be found in **Appendix B.** The location of the soil borings are presented on the Site Plan (**Figure 2**).

Soil samples were collected for laboratory analysis from each boring at ten foot intervals beginning at ten feet bgs. Several borings also had a sample collected at five feet bgs to assess shallow concentrations. Soil samples were packed into laboratory prepared jars and stored in a cooler with ice. The soil samples were sent to Xenco Laboratories (Xenco) in Odessa, Texas for analysis of BTEX by EPA Method 8021B; TPH gasoline range organics (GRO), TPH diesel range organics (DRO), and TPH oil range organics (ORO) by EPA Method 8015B Modified; and for chloride by EPA Method E300.0. Soil laboratory analytical results are summarized in **Table 1**. The soil laboratory analytical report is included as **Appendix C**. A Chloride Concentration in Soil Map is presented as **Figure 3**.

2.2 Soil Sampling Analytical Results

The soil type observed in soil samples collected during the drilling program consisted primarily of light tan to white, poorly graded, sandy silt. Intermittent caliche lenses of moderate to substantial cementation were present.

Moisture content observed in the soil samples ranged from dry to moist with the exception of the sample collected from 50 to 51.5 feet in boring B-4 where soil went from moist to damp at 51 feet bgs with a decrease in silt content and an increase of poorly graded fine grained sand. Due to the change in soil type and an increase in moisture content, it is believed that the start of the capillary fringe had been reached at 51 feet bgs. Since an NMOSE approved Well Plugging Plan of Operations was not in place, advancement of soil boring B-4 was stopped before groundwater was reached.

Soil samples collected from the borings for laboratory analysis were either below laboratory reporting limits or below RRALs for both BTEX and TPH. Soil samples collected from soil borings and analyzed for chloride indicate chloride concentrations above the RRAL of 250 ppm in all borings except for B-6, B-7, B-8, and B-11. Evaluation of the analytical data indicates that the deepest and highest concentrations of chlorides in the vadose zone are in the vicinity of borings B-2 and B-4. Vertical and horizontal delineation of chloride impacts to soil has not been reached to the north, south and west of the release area, but was achieved to the east. Further delineation efforts are suggested in order to gain a more concise understanding of the whole release footprint.

Section 3.0 Conclusions

Chloride concentrations in soil exceeding the NMOCD site-specific RRAL of 250 ppm were observed in the vicinity of the CVU-106 and CVU-136 injection line releases. Concentrations of chlorides in soil at the Site in exceedance of the RRAL range from 257 ppm to 10,200 ppm at depths ranging from five feet bgs to 51.5 feet bgs.

Section 4.0 Recommendations

Based on the chloride concentrations observed in the soil, additional assessment is recommended. The assessment should address the following:

- The vertical extent of chloride concentrations in the vadose zone;
- The horizontal extent of chloride concentrations in the vadose zone to the north, south, and west of the release area; and
- The potential for chloride concentrations in the groundwater;

To collect this data, CRA proposes to perform the following tasks:

- Perform geophysical surveys within and surrounding the former injection line release areas to assess the horizontal and vertical extent of chlorides in the vadose zone;

- Install two additional soil borings in and around the release areas to further assess the extent vertical and horizontal chloride concentrations in soil;
- Install up to five groundwater monitor wells in a phased approach. The purpose of the monitor well installation is to assess if an impact to groundwater occurred. Initially, a single monitoring well will be installed. In the event that an impact to groundwater is indicated from this well, an additional four monitoring wells will be installed. The additional wells will be used to assess the horizontal extent of dissolved chloride concentrations in groundwater.

4.1 Geophysical Surveys

The purpose of the geophysical surveys is to assess areas of elevated conductivity associated with chloride impacts. The geophysical survey will attempt to map the horizontal extent of chloride impacts in the vadose zone. Data from the geophysical surveys will also assist with creating a vertical profile of chloride concentrations in the vadose zone. Data collection techniques will consist of electromagnetic and electrical resistivity surveys. Proposed survey coverage is presented on **Figure 4**.

An electromagnetic (EM) survey utilizing an EM31 conductivity meter will be completed in order to assess the horizontal extent of chloride impacts in the shallow subsurface at the Site. Prior to conducting the EM survey, a grid consisting of parallel lines will be established over the proposed area of investigation indicated on **Figure 4**. Measurements of EM31 data will be collected along 50-foot spaced grid lines over the area of investigation, with station spacing of approximately four feet on all grid lines. The EM31 consists of transmitter and receiver coils located at opposite ends of a rigid boom. The coil separation for the EM31 is approximately 13 feet, which yields an approximate depth of penetration of 18 feet bgs in vertical dipole mode.

Measurements of terrain conductivity from the EM31 will be used to assess the horizontal and vertical extent of chlorides associated with the injection line releases and surrounding area. The data from the EM31 survey will be processed as a colored contour plot. The plot will then be superimposed on a Site plan to correlate elevated conductivity responses indicative of chlorides relative to the Site features.

Electrical resistivity survey (ERS) profiles will be completed on three selected survey lines, to assess the vertical extent of chloride-impacted areas at the Site. The focus of the ERS survey will consist of the former reserve pit and adjacent areas and use a portion of the grid established for the EM31 survey.

The proposed ERS will be conducted with a dual-function resistivity meter, which operates simultaneously as a transmitter and receiver.

The survey will use two multi-electrode cables yielding a total spread of 72 electrodes. The receiver will be programmed to automatically "switch" between measured quadripoles, yielding a pseudosection of apparent resistivity. The apparent resistivity data will then be imported into an inversion software program, and processed to yield a modeled profile of resistivity.

The configuration and spacing of the electrodes will be optimized to achieve an approximate depth of penetration of approximately 30 feet bgs, and the electrode spacing on all grid lines will be on the order of six feet.

4.2 Drilling Program

The drilling program will be performed to further assess the vertical and horizontal extent of chloride concentrations in soil and groundwater. Final locations of the investigational soil borings and monitor wells will be determined based on previously collected soil data and results of the proposed geophysical surveys. The drilling program is proposed to be performed in two phases.

The drilling program will consist of:

- Phase I: Advancing two soil borings around the perimeter of the previously assessed area to a depth of approximately 30 feet bgs, and install one groundwater monitor well to an approximate depth of 70 feet bgs to assess for the presence of chlorides in the groundwater.
- Phase II: If the first monitor well indicates the presence of chlorides above RRALs in the release area, an additional four groundwater monitor wells will be installed. These wells will be installed to an approximate depth of 70 feet bgs. They will be used to assess horizontal extent.

The soil borings will be advanced using hollow stem or air-rotary drilling methods. Discrete soil samples will be collected during the advancement of each soil boring. The samples will be collected by removing the drilling bit (depending on the method) and installing an 18 to 24-inch long steel split-spoon sampler.

Each boring will have soil samples collected first at five feet bgs, and then at 10 foot intervals to total depth, starting at 10 feet bgs. Soil sample intervals will be the same for monitor well borings, with the addition of a sample collected from the vadose zone immediately above the phreatic zone. All collected soil samples will be submitted for laboratory analysis of chlorides. Samples will also be field screened for chloride concentration using Hach Chloride Titration strips and for the presence of hydrocarbons using a photo-ionization detector (PID) and the heated headspace method.

Soil samples will be collected, placed in appropriate laboratory supplied containers, and preserved on ice in insulated coolers.

Soil samples will be submitted to Xenco Laboratories in Odessa, Texas for analysis. Soil samples will be analyzed for chlorides by Environmental Protection Agency (EPA) Method 300.0.

Soil borings not completed as monitor wells will be plugged and abandoned using hydrated bentonite chips. Locations of the proposed monitor wells and soil borings are indicated on **Figure 4**.

4.3 Proposed Monitor Well Program

4.3.1 Monitor Well Installation

CRA is proposing to install up to five, 2-inch diameter groundwater monitor wells to an approximate depth of 70-feet bgs. Prior to installing any monitor wells, appropriate monitor well permits will be filed with the New Mexico Office of the State Engineer (NMOSE). Discrete soil sampling of each boring will be completed as described above. The anticipated groundwater flow at the site is to the southeast, which appears to be regionally consistent. The wells will be located as follows:

- Proposed Phase I Well Installation: One well would be installed in close proximity to the location of soil borings B-2 and B-4 (see **Figure 4**).
- Proposed Phase II Well Installation: In the event that chloride concentrations are observed in the Phase I Well Installation Program, three monitor wells would be installed in the anticipated downgradient and side gradient groundwater flow direction (see **Figure 4**). An additional well will be installed in the anticipated upgradient groundwater flow direction (total of four monitor wells).

4.3.2 Monitor Well Construction

Monitor wells will be drilled and installed by a New Mexico-licensed water well driller in accordance with the monitor well construction guidance in the 1993 NMOCD document entitled *Guidelines for Remediation of Leaks, Spills and Releases*. Monitor wells will be constructed with two-inch diameter, flush-threaded, Schedule 40 polyvinyl chloride (PVC) casing. Each well will be constructed of 20 feet of 0.020-inch machine slotted PVC well screen. The well screen will extend approximately 15 feet below the soil/groundwater interface and approximately five feet above the soil/groundwater interface.

The well annulus will be backfilled with a sand filter pack to approximately two feet above the top of the screen interval. An approximately 2-foot thick bentonite seal will be placed on top of the sand. The remainder of the well annulus will be grouted to ground surface with a 95% Portland cement/5% bentonite powder grout. Each well will be completed with an above-ground lockable well vault. The well vaults will be placed within a minimum 2-foot by 2-foot by 4-inch thick concrete pad. A lock will be provided for each well vault and kept locked.

A State of New Mexico licensed surveyor will prepare a Site map and determine horizontal and vertical control for each monitor well. Monitor well information will be documented in well record forms and submitted to the NMOSE.

4.3.3 Monitor Well Development

Monitor wells will be developed by removal of sufficient volumes of water to clear the well casing and annulus of sediment. Wells will be developed until geochemical field parameters of pH, temperature and conductivity stabilize to within 10%. Following development, the monitor wells will be gauged with an oil/water interface probe to measure static water levels and thickness of light, non-aqueous, phase liquids (LNAPL) should any be present in the wells.

4.3.4 Monitor Well Sampling

CRA will perform an initial groundwater sampling event following the installation and development of the monitor wells. Prior to sampling the wells, groundwater levels and total well depths will be measured and reported to the nearest one-hundredth of a foot using an interface probe. The interface probe will be cleaned between wells.

Subsequent to well gauging, the monitor wells will be sampled using a submersible pump or disposable polyethylene bailers. Monitor wells will be sampled once three well volumes of water have been purged from the well or geochemical field parameters including pH, conductivity, and temperature reach stabilization. Geochemical field parameters will be recorded and laboratory-supplied sample containers will be filled. Representative groundwater samples will be collected, placed in appropriated laboratory supplied containers, and preserved on ice in insulated coolers. Groundwater samples will be submitted to Xenco for chloride by EPA Method 300.1.

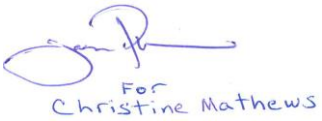
Section 5.0 Schedule

CRA is prepared to initiate the scope of work immediately, subsequent to CEMC approvals, the availability of resources, and stakeholder concurrence. A start date and anticipated schedule will be provided following NMOCD approval.

If you have any questions or comments with regards to this report or work plan, please do not hesitate to contact our Albuquerque office at (505) 884-0672. Your timely response to this correspondence is appreciated.

Respectfully Submitted,

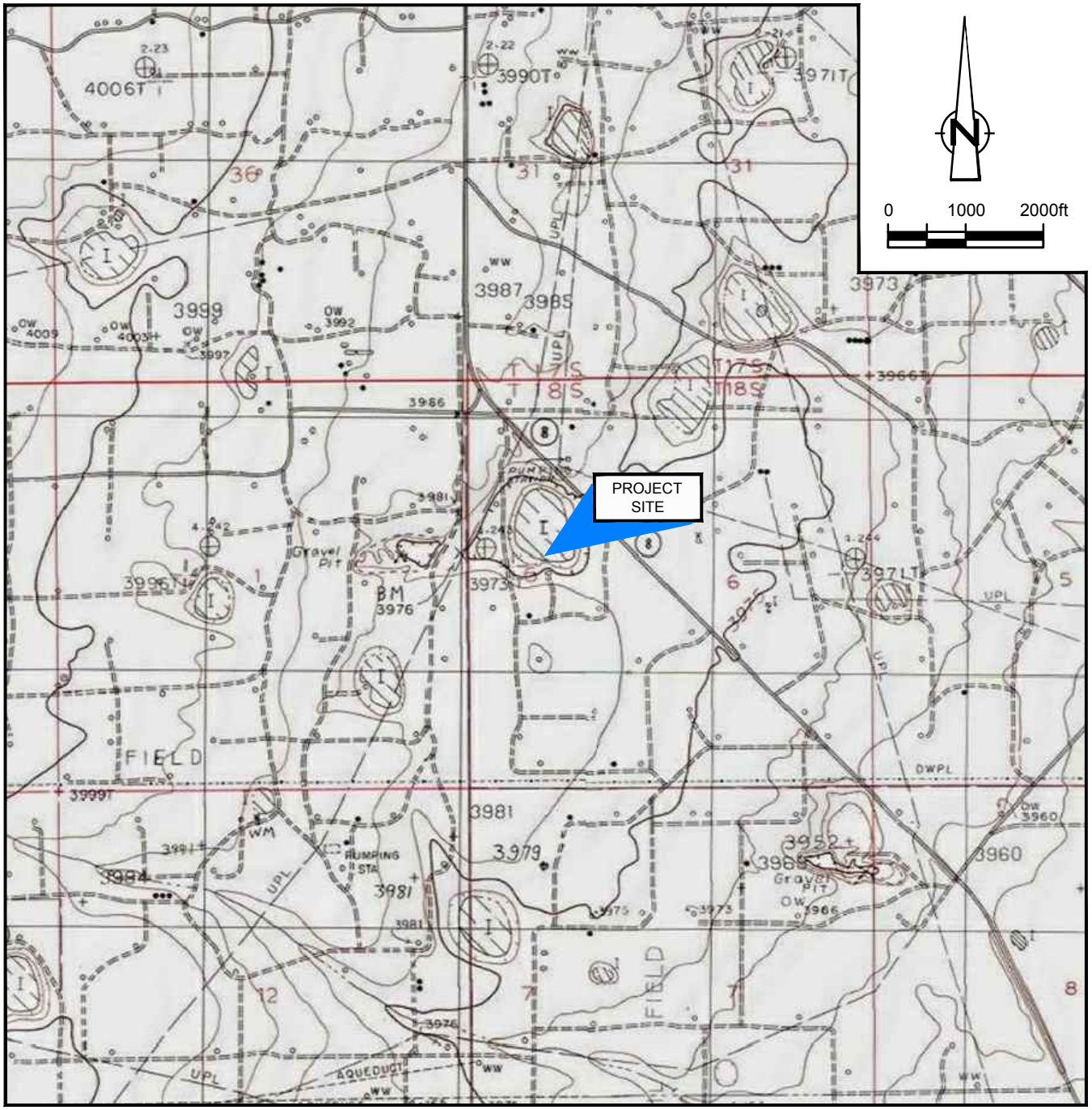
CONESTOGA ROVERS & ASSOCIATES



Christine Mathews
Project Scientist

Bernard Bockisch, PMP
Sr. Project Manager

Figures

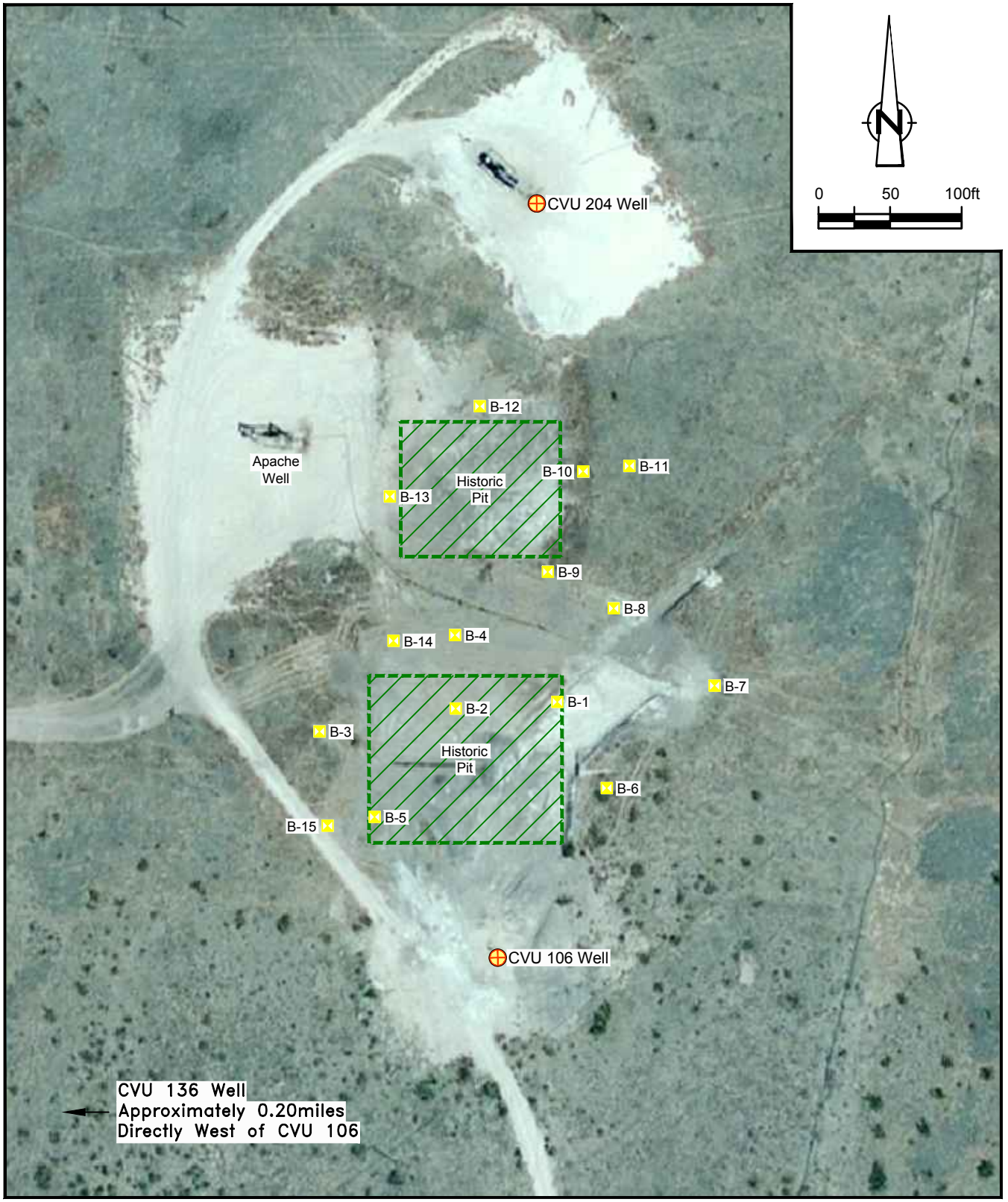


SOURCE: USGS 7.5 MINUTE QUAD
"BUCKEYE AND LOVINGTON SW, NEW MEXICO"

LAT/LONG: 32.7779° NORTH, 103.5021° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

Figure 1

SITE LOCATION MAP
CVU No.136 AND CVU No.106
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company



LEGEND

- Soil Boring Location
- CVU Well Location
- Historic Pit Limits

Figure 2

SITE PLAN
CVU No.136 AND CVU No.106
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

074636-00(000)GN-DL001 FEB 27/2014

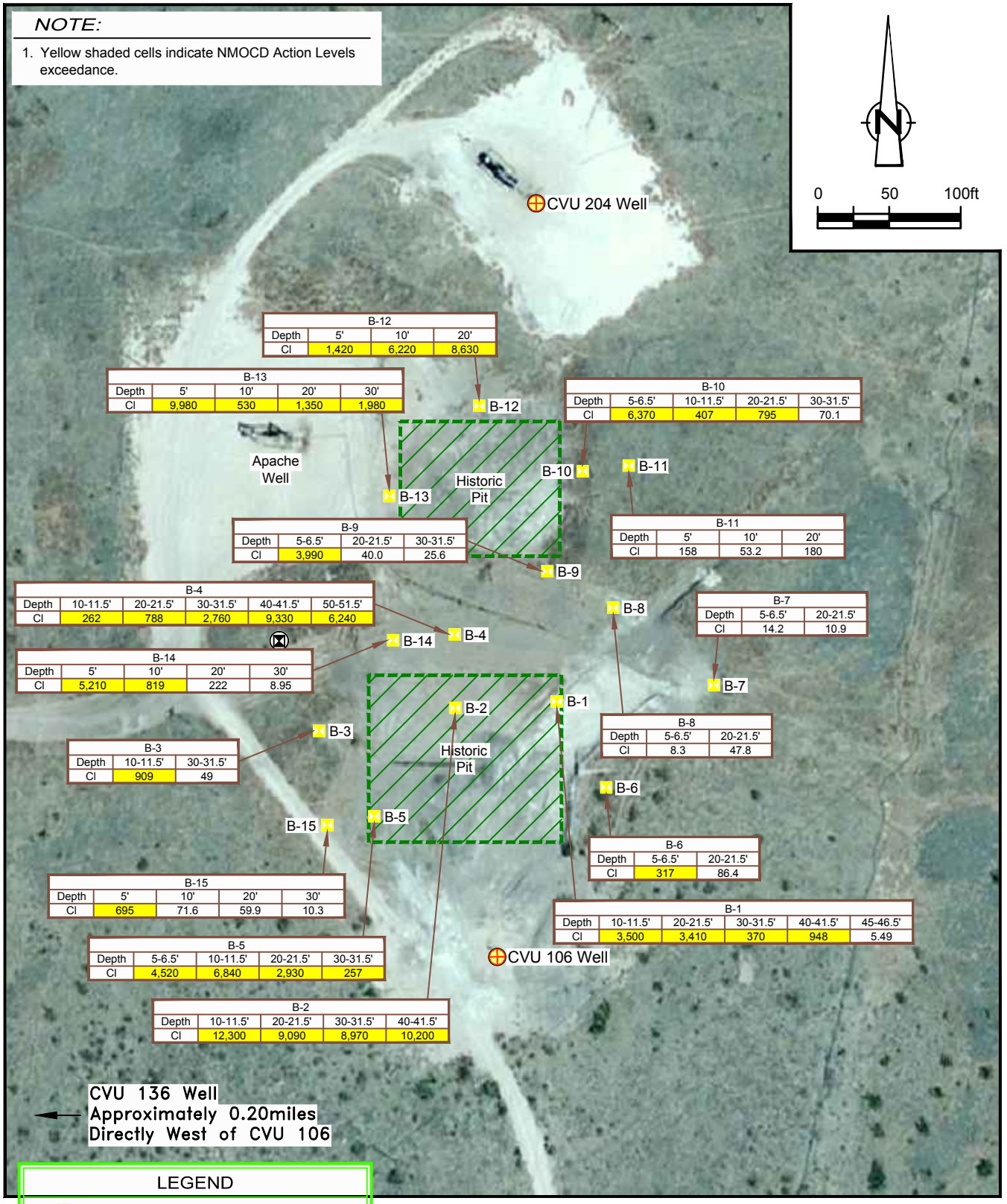


Figure 3

CHLORIDE CONCENTRATIONS IN SOIL MAP
CVU No.136 AND CVU No.106
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

074636-00(000)GN-DL001 MAR 19/2014

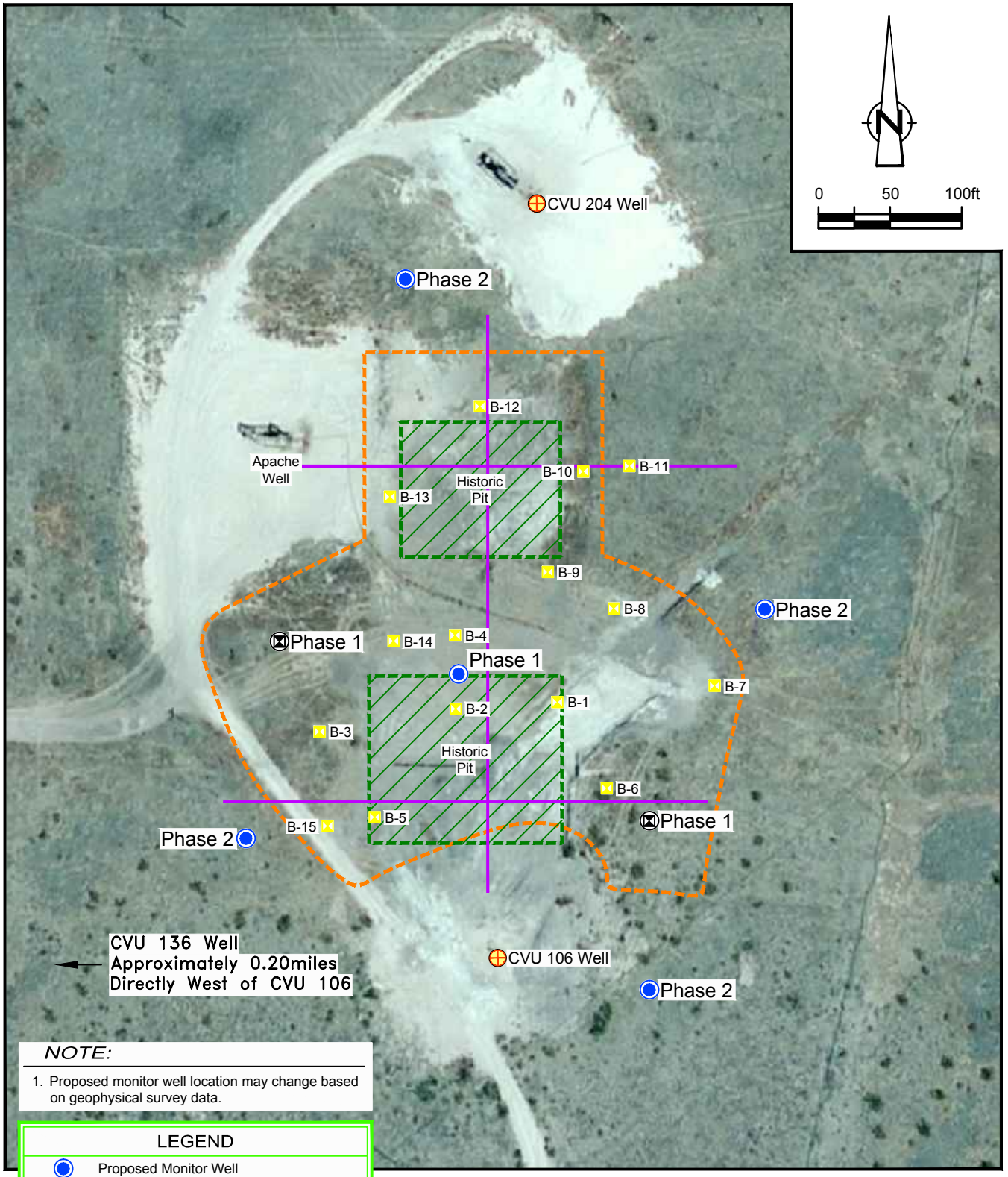


Figure 4

PROPOSED GEOPHYSICAL SURVEY AND MONITOR WELL LOCATIONS MAP
CVU No.136 AND CVU No.106
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

Tables

TABLE I
SOIL ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
Chevron CVU#106 and CVU#136
LEA COUNTY, NEW MEXICO

Boring Number	Sample ID	Depth (feet)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH (8015B Modified) GRO (mg/kg)	TPH (8015B Modified) DRO (mg/kg)	TPH (8015B Modified) ORO (mg/kg)	TPH (8015B Modified) Total TPH (mg/kg)	Chlorides (mg/kg)
NMOCD Recommended Remediation Action Levels (Total Ranking Score = 20)													
				10 mg/kg	**--- mg/kg**	**--- mg/kg**	**--- mg/kg**	**50 mg/kg**	**--- mg/kg**	**--- mg/kg**	**--- mg/kg**	**100 mg/kg**	**250 mg/kg**
B-1	S-074636-112013-CM-B-1(10-11.5)	10-11.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.4	262	23.2	**285**	**3,500**
	S-074636-112013-CM-B-1(20-21.5)	20-21.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.9	52.1	< 16.9	52.1	**3,410**
	S-074636-112013-CM-B-1(30-31.5)	30-31.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.2	37.7	< 16.2	37.7	**370**
	S-074636-112013-CM-B-1(40-41.5)	40-41.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.2	56.8	< 16.2	56.8	**948**
	S-074636-112013-CM-B-1(45-46.5)	45-46.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.9	< 15.9	< 15.9	< 15.9	5.49
B-2	S-074636-112013-CM-B-2(10-11.5)	10-11.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.7	< 16.7	< 16.7	< 16.7	**12,300**
	S-074636-112013-CM-B-2(20-21.5)	20-21.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.3	21.3	< 16.3	21.3	**9,090**
	S-074636-112013-CM-B-2(30-31.5)	30-31.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.3	46.4	< 16.3	46.4	**8,970**
	S-074636-112013-CM-B-2(40-41.5)	40-41.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.6	94.7	< 16.6	94.7	**10,200**
B-3	S-074636-112013-CM-B-3(10-11.5)	10-11.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.9	20	< 15.9	20	**909**
	S-074636-112013-CM-B-3(30-31.5)	30-31.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.8	< 16.8	< 16.8	< 16.8	49
B-4	S-074636-112013-CM-B-4(10-11.5)	10-11.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.4	< 16.4	< 16.4	< 16.4	**262**
	S-074636-112013-CM-B-4(20-21.5)	20-21.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.9	< 16.9	< 16.9	< 16.9	**788**
	S-074636-112013-CM-B-4(30-31.5)	30-31.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.4	39.9	< 16.4	39.9	**2,760**
	S-074636-112013-CM-B-4(40-41.5)	40-41.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.7	< 16.7	< 16.7	< 16.7	**9,330**
	S-074636-112013-CM-B-4(50-51.5)	50-51.5	11/20/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.0	25.6	< 16.0	25.6	**6,240**
B-5	S-074636-112113-CM-B-5(5-6.5)	5-6.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.9	< 15.9	< 15.9	< 15.9	**4,520**
	S-074636-112113-CM-B-5(10-11.5)	10-11.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.5	56.6	< 16.5	56.6	**6,840**
	S-074636-112113-CM-B-5(20-21.5)	20-21.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.6	49.5	< 16.6	49.5	**2,930**
	S-074636-112113-CM-B-5(30-31.5)	30-31.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.6	26.7	< 16.6	< 26.7	**257**
B-6	S-074636-112113-CM-B-6(5-6.5)	5-6.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.8	< 15.8	< 15.8	< 15.8	**317**
	S-074636-112113-CM-B-6(20-21.5)	20-21.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.7	52.4	< 15.7	52.4	86.4
B-7	S-074636-112113-CM-B-7(5-6.5)	5-6.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.2	< 17.2	< 17.2	< 17.2	14.2
	S-074636-112113-CM-B-7(20.21.5)	20-21.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.0	25	< 16.0	25	10.9
B-8	S-074636-112113-CM-B-8(5-6.5)	5-6.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.4	37.5	< 16.4	37.5	8.3
	S-074636-112113-CM-B-8(20-21.5)	20-21.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.5	< 16.5	< 16.5	< 16.5	47.8
B-9	S-074636-112113-CM-B-9(5-6.5)	5-6.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.9	< 17.9	< 17.9	< 17.9	**3,990.0**
	S-074636-112113-CM-B-9(20-21.5)	20-21.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.3	< 17.3	< 17.3	< 17.3	40.0
	S-074636-112113-CM-B-9(30-31.5)	30-31.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.3	< 16.3	< 16.3	< 16.3	25.6
B-10	S-074636-112113-CM-B-10(5-6.5)	5-6.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 19.3	< 19.3	< 19.3	< 19.3	**6,370**
	S-074636-112113-CM-B-10(10-11.5)	10-11.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.1	< 17.1	< 17.1	< 17.1	**407**
	S-074636-112113-CM-B-10(20-21.5)	20-21.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.4	62.8	< 16.4	62.8	**795**
	S-074636-112113-CM-B-10(30-31.5)	30-31.5	11/21/13	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.2	< 16.2	< 16.2	< 16.2	70.1
B-11	S-074636-120213-CK-B-11-5	5	12/2/13	NA	NA	NA	NA	NA	< 16.4	< 16.4	< 16.4	< 16.4	158
	S-074636-120213-CK-B-11-10	10	12/2/13	NA	NA	NA	NA	NA	< 16.0	< 16.0	< 16.0	< 16.0	53.2
	S-074636-120213-CK-B-11-20	20	12/2/13	NA	NA	NA	NA	NA	< 16.2	< 16.2	< 16.2	< 16.2	180
B-12	S-074636-120213-CK-B-12-5	5	12/2/13	NA	NA	NA	NA	NA	< 17.9	< 17.9	< 17.9	< 17.9	**1,420**
	S-074636-120213-CK-B-12-10	10	12/2/13	NA	NA	NA	NA	NA	< 18.4	< 18.4	< 18.4	< 18.4	**6,220**
	S-074636-120213-CK-B-12-20	20	12/2/13	NA	NA	NA	NA	NA	< 17.9	< 17.9	< 17.9	< 17.9	**8,630**

TABLE I
SOIL ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
Chevron CVU#106 and CVU#136
LEA COUNTY, NEW MEXICO

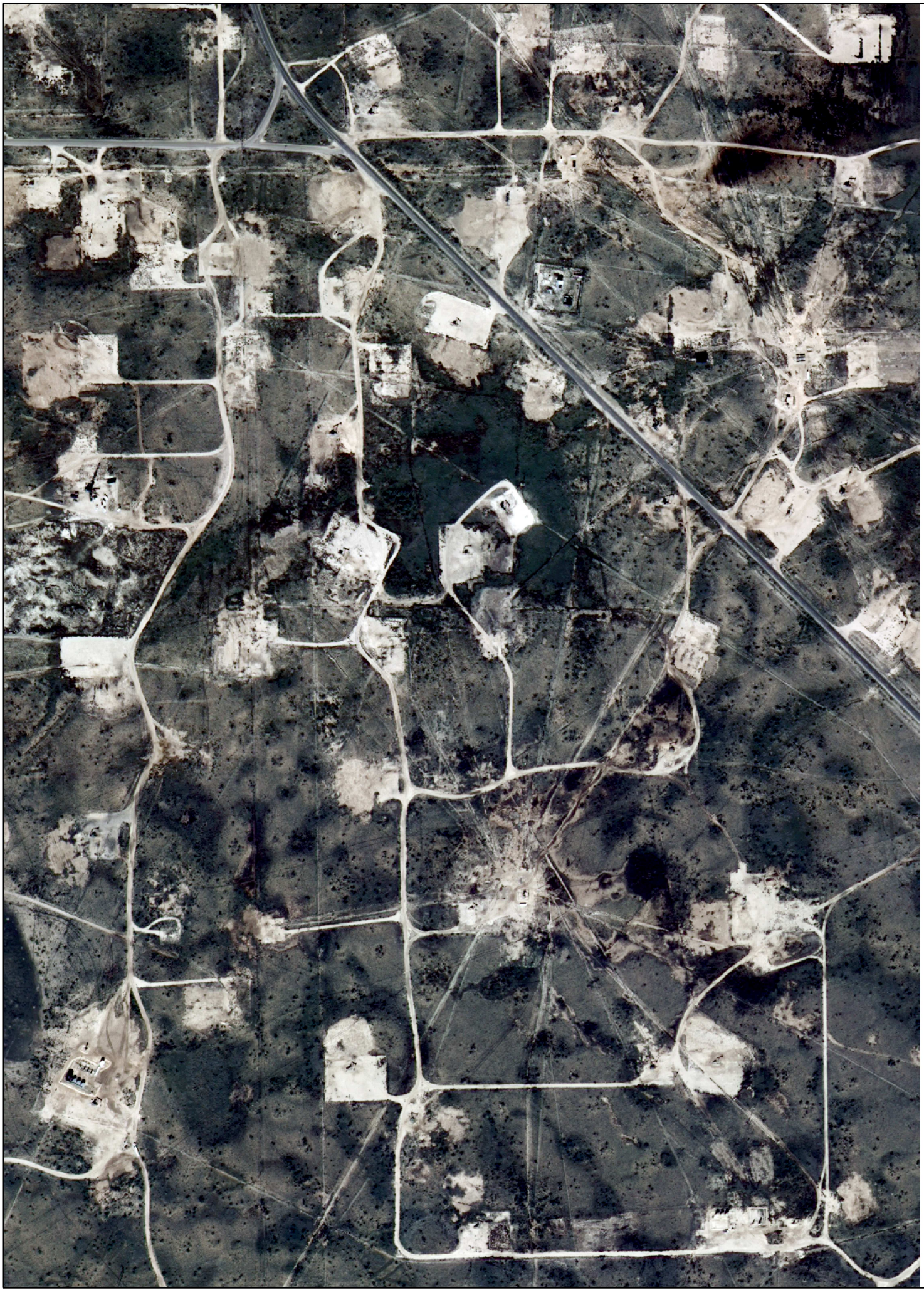
Boring Number	Sample ID	Depth (feet)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH (8015B Modified) GRO (mg/kg)	TPH (8015B Modified) DRO (mg/kg)	TPH (8015B Modified) ORO (mg/kg)	TPH (8015B Modified) Total TPH (mg/kg)	Chlorides (mg/kg)
NMOCD Recommended Remediation Action Levels (Total Ranking Score = 20)													
				10 mg/kg	**--- mg/kg**	**--- mg/kg**	**--- mg/kg**	**50 mg/kg**	**--- mg/kg**	**--- mg/kg**	**--- mg/kg**	**100 mg/kg**	**250 mg/kg**
B-13	S-074636-120313-CK-B-13-5	5	12/3/13	NA	NA	NA	NA	NA	< 20.0	< 20.0	< 20.0	< 20.0	**9,980**
	S-074636-120313-CK-B-13-10	10	12/3/13	NA	NA	NA	NA	NA	< 18.2	< 18.2	< 18.2	< 18.2	**530**
	S-074636-120313-CK-B-13-20	20	12/3/13	NA	NA	NA	NA	NA	< 17.0	< 17.0	< 17.0	< 17.0	**1,350**
	S-074636-120313-CK-B-13-30	30	12/3/13	NA	NA	NA	NA	NA	< 16.5	< 16.5	< 16.5	< 16.5	**1,980**
B-14	S-074636-120313-CK-B-14-5	5	12/3/13	NA	NA	NA	NA	NA	< 17.9	< 17.9	< 17.9	< 17.9	**5,210**
	S-074636-120313-CK-B-14-10	10	12/3/13	NA	NA	NA	NA	NA	< 16.2	< 16.2	< 16.2	< 16.2	**819**
	S-074636-120313-CK-B-14-20	20	12/3/13	NA	NA	NA	NA	NA	< 15.8	< 15.8	< 15.8	< 15.8	222
	S-074636-120313-CK-B-14-30	30	12/3/13	NA	NA	NA	NA	NA	< 16.0	< 16.0	< 16.0	< 16.0	8.95
B-15	S-074636-120313-CK-B-15-5	5	12/3/13	NA	NA	NA	NA	NA	< 16.0	< 16.0	< 16.0	< 16.0	**695**
	S-074636-120313-CK-B-15-10	10	12/3/13	NA	NA	NA	NA	NA	< 15.3	< 15.3	< 15.3	< 15.3	71.6
	S-074636-120313-CK-B-15-20	20	12/3/13	NA	NA	NA	NA	NA	< 16.2	< 16.2	< 16.2	< 16.2	59.9
	S-074636-120313-CK-B-15-30	30	12/3/13	NA	NA	NA	NA	NA	< 15.8	< 15.8	< 15.8	< 15.8	10.3

Notes:

1. BTEX analyses by EPA Method 8021B
2. TPH analyzed by EPA Method 8015B Mod.
3. Chlorides analyzed by EPA 300.0
4. NA - Not Analyzed
5. Bold concentrations above lab reporting limits.
6. Highlighted cells indicated concentrations above regulatory limits

Appendix A

Historical Aerial Images



Appendix B

Boring Logs

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3975 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.77812, -103.501846

SOIL BORING NO: B-1
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 20, 2013 at 1020
DATE/TIME HOLE COMPLETED: November 20, 2013 at 1100

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3975					SAND, Silty: Poorly-graded, tan to white, very fine grained, dry to moist , well cemented. At 11' bgs brown in color	SM		0
3970								-5
3965	X	B-1 (10-11.5)			SILT, Sandy: Poorly graded, light tan to white, very fine grained, slightly moist, trace fine grained subgrounded gravel, 1-2% clay light tan to white in color, slight plasticity in trace clay	SM	3500	-10
3960								-15
3955	X	B-1 (20-21.5)			SILT, Sandy: Poorly graded, light tan to	SM	3410	-20

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3975 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.77812, -103.501846

SOIL BORING NO: B-1
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 20, 2013 at 1020
DATE/TIME HOLE COMPLETED: November 20, 2013 at 1100

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3950					white, very fine grained, slightly moist, trace fine grained subgrounded gravel, trace lenses of dense cementation and orange staining at 31'			-25
3945	X	B-1 (30-31.5)			SILT, Sandy: Poorly graded, light tan to white, very fine grained, slightly moist, trace fine grained subgrounded gravel, trace lenses of dense cementation and orange staining at 31'	SM	370	-30
3940								-35
3935	X	B-1 (40-41.5)			SILT, Sandy: Poorly graded, tan to white, very fine grained, damp, no cementation	SM	948	-40

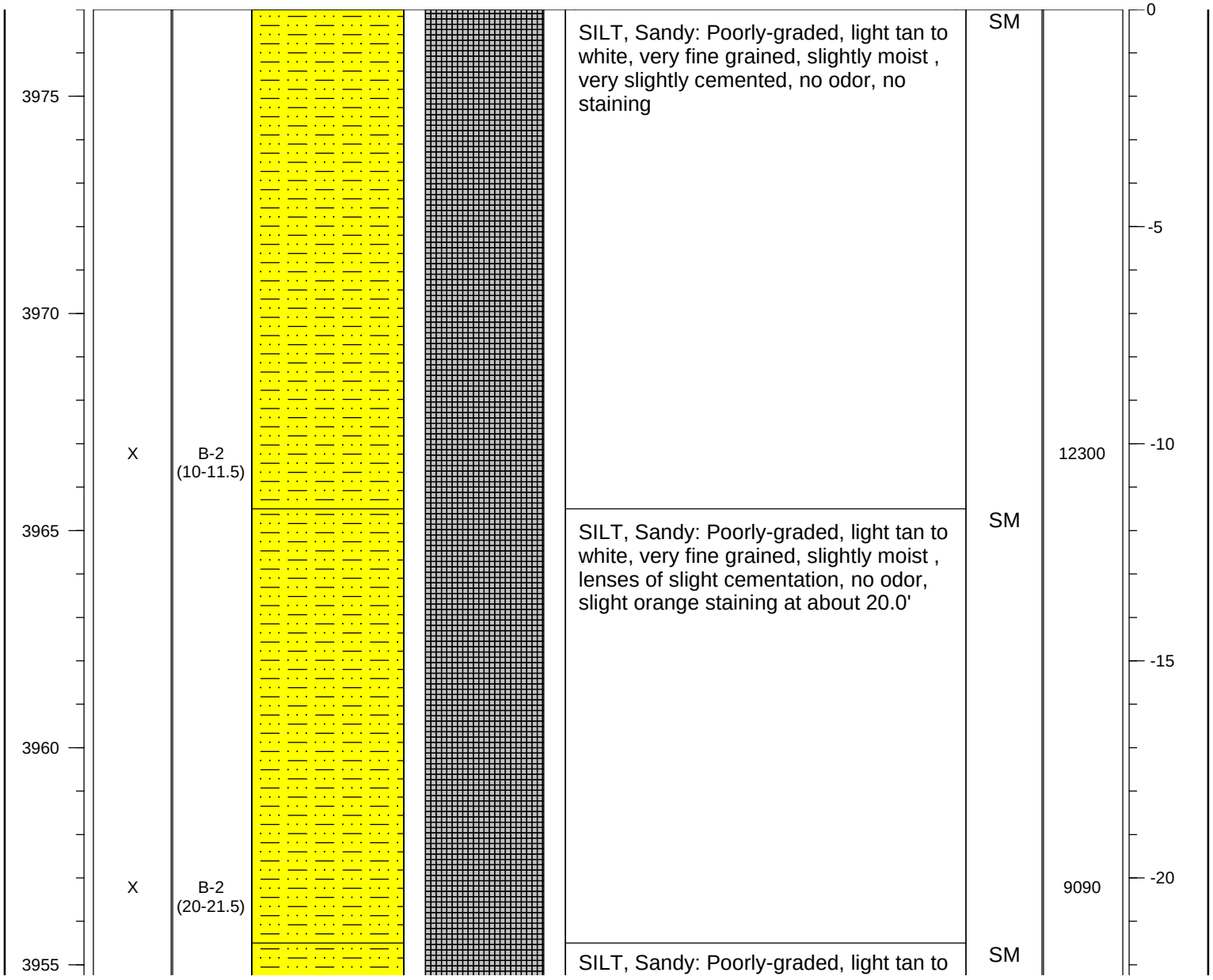
PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3975 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.77812, -103.501846

SOIL BORING NO: B-1
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 20, 2013 at 1020
DATE/TIME HOLE COMPLETED: November 20, 2013 at 1100

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3930	X	B-1 (45-47)					5.49	-45

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3977 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.777801, -103.502077

SOIL BORING NO: B-2
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 20, 2013 at 1245
DATE/TIME HOLE COMPLETED: November 20, 2013 at 1340



PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3977 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.777801, -103.502077

SOIL BORING NO: B-2
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 20, 2013 at 1245
DATE/TIME HOLE COMPLETED: November 20, 2013 at 1340

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	Chloride (mg/kg)	DEPTH (bgs) - ft
3950	X	B-2 (30-31.5)			white, very fine grained, slightly moist , no odor, no staining	SM	8970	-25 / -30
3945					SILT, Sandy: Poorly-graded, light tan to white, very fine grained, slightly moist , no odor, no staining			-35
3940	X	B-2 (40-41.5)					10200	-40

TD = 41.5' bgs

CONESTOGA-ROVERS & ASSOCIATES

BORING LOG AND WELL COMPLETION FORM

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3977 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.7777759, -103.502387

SOIL BORING NO: B-3
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 20, 2013 at 1415
DATE/TIME HOLE COMPLETED: November 20, 2013 at 145

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3975					SAND, Silty: Poorly-graded, tan to brown, slightly moist , some dense cementation lenses, trace fine grained gravel, poor recovery	SM		0
								-5
3970								
	X	B-3 (10-11.5)					909	-10
3965					SILT, Sandy: Light tan to white, very fine grained, moist, slight cementation/cohesiveness	SM		
								-15
3960								
	X	B-3 (20-21.5)					ND	-20
3955					SILT, Sandy: Light tan to white, very	SM		

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3977 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.7777759, -103.502387

SOIL BORING NO: B-3
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 20, 2013 at 1415
DATE/TIME HOLE COMPLETED: November 20, 2013 at 145

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3950	X	B-3 (30-31.5)			fine grained, slightly moist, slight to moderate cementation		49	-25 / -30

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3977 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.777942, -103.502077

SOIL BORING NO: B-4
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 20, 2013 at 1540
DATE/TIME HOLE COMPLETED: November 20, 2013 at 1625

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3975					SILT, Sandy: Poorly-graded, light tan to white, very fine grained, slightly moist , slightly to moderately cemented at approximately the bottom 0.5'	SM		0
								-5
3970								
	X	B-4 (10-11.5)					262	-10
3965					SILT, Sandy: Poorly-graded, light tan to white, very fine grained, slightly moist , slightly cemented at approximately the bottom 0.5', trace red gravel/broken	SM		
								-15
3960								
	X	B-4 (20-21.5)					788	-20
3955					SILT, Sandy: Poorly-graded, light tan to	SM		

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3977 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.777942, -103.502077

SOIL BORING NO: B-4
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 20, 2013 at 1540
DATE/TIME HOLE COMPLETED: November 20, 2013 at 1625

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3950					white, very fine grained, moist			-25
	X	B-4 (30-31.5)					2760	-30
3945					SILT, Sandy: Poorly-graded, light tan to white, very fine grained, moist	SM		-35
3940								
	X	B-4 (40-41.5)					9330	-40
3935					SILT, Sandy: Poorly-graded, light tan to white, very fine grained, damp at 51'. At 51' only trace silt, mostly finely grained sand	SM		

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3977 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.777942, -103.502077

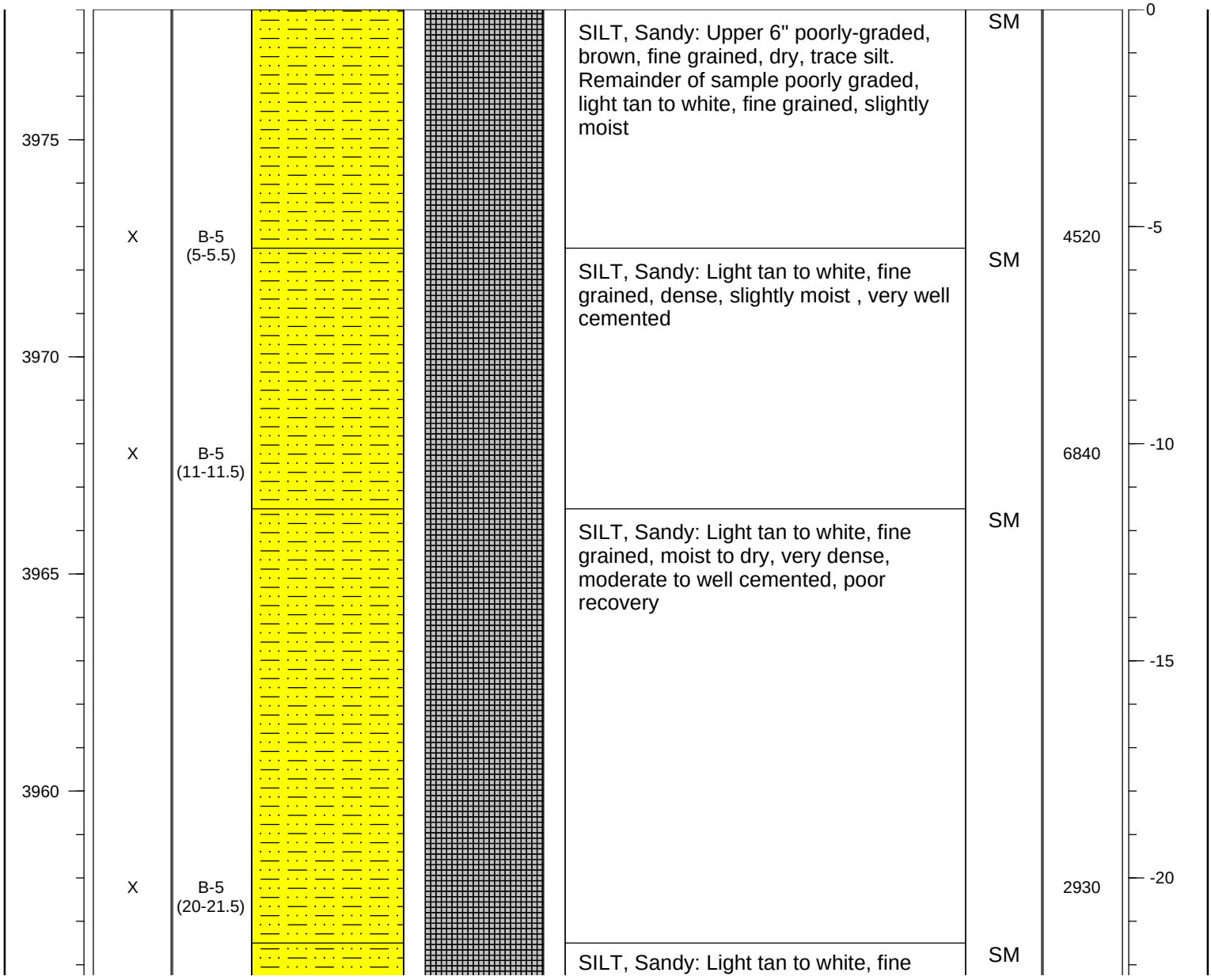
SOIL BORING NO: B-4
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 20, 2013 at 1540
DATE/TIME HOLE COMPLETED: November 20, 2013 at 1625

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3930	X	B-4 (50-51.5					6240	-45 / -50

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3978 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.7594, -103.502263

SOIL BORING NO: B-5
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 21, 2013 at 0855
DATE/TIME HOLE COMPLETED: November 21, 2013 at 0945

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	Chloride (mg/kg)	DEPTH (bgs) - ft
3975	X	B-5 (5-5.5)			SILT, Sandy: Upper 6" poorly-graded, brown, fine grained, dry, trace silt. Remainder of sample poorly graded, light tan to white, fine grained, slightly moist	SM	4520	-5
3970	X	B-5 (11-11.5)			SILT, Sandy: Light tan to white, fine grained, dense, slightly moist , very well cemented	SM	6840	-10
3965					SILT, Sandy: Light tan to white, fine grained, moist to dry, very dense, moderate to well cemented, poor recovery	SM		-15
3960	X	B-5 (20-21.5)			SILT, Sandy: Light tan to white, fine	SM	2930	-20



PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3978 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.7594, -103.502263

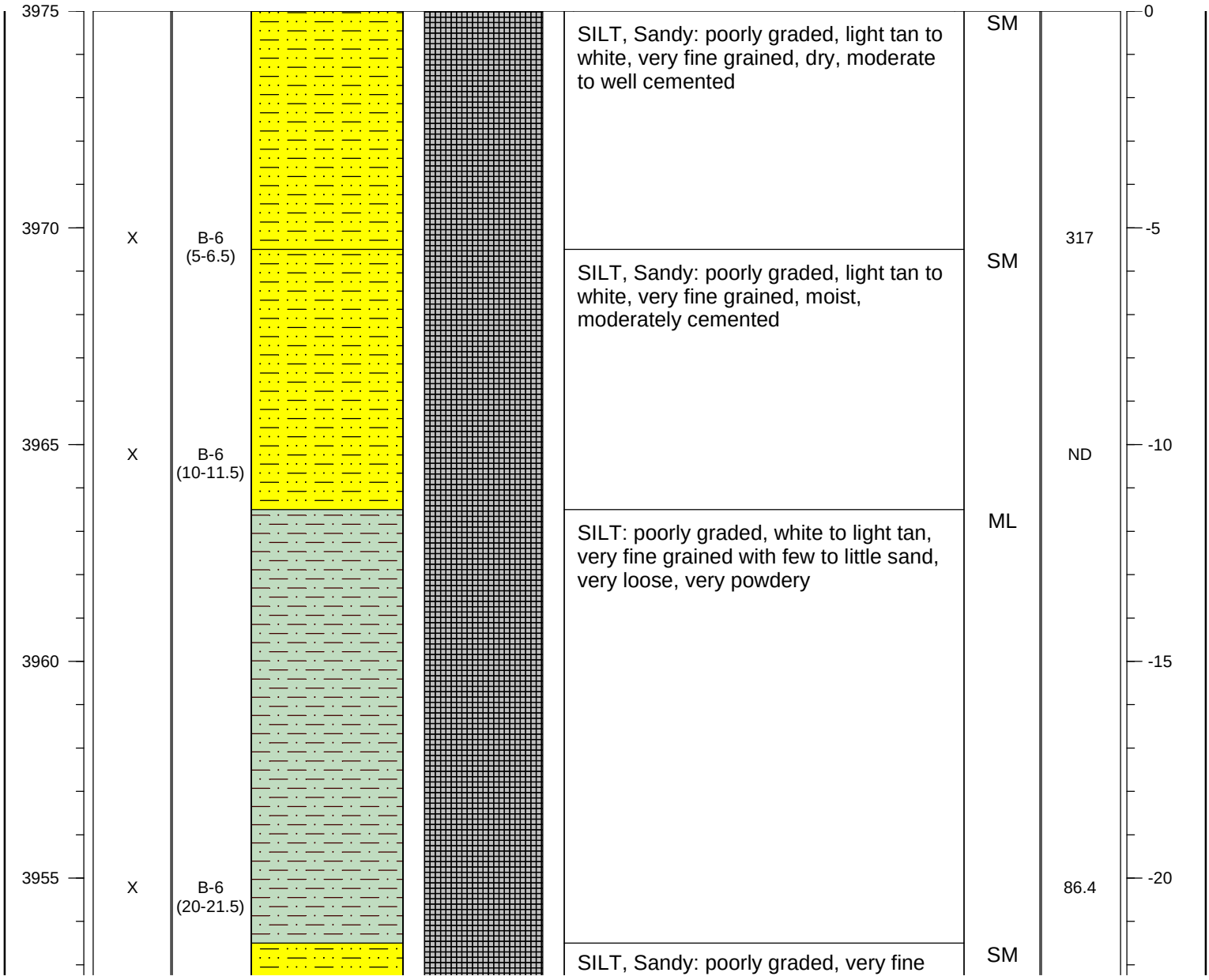
SOIL BORING NO: B-5
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 21, 2013 at 0855
DATE/TIME HOLE COMPLETED: November 21, 2013 at 0945

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	Chloride (mg/kg)	DEPTH (bgs) - ft
3955					grained, moist to dry, very dense, moderate to well cemented, poor recovery			-25
3950	X	B-5 (30-31.5)					257	-30
3945					SILT, Sandy: Light tan to white, fine grained, moist to dry, very dense, moderate to well cemented, poor recovery	SM		-35
3940	X	B-5 (40-41.5)						-40

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3975 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.777646, -103.501735

SOIL BORING NO: B-6
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 21, 2013 at 1015
DATE/TIME HOLE COMPLETED: November 21, 2013 at 1045

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	Chloride (mg/kg)	DEPTH (bgs) - ft
3975					SILT, Sandy: poorly graded, light tan to white, very fine grained, dry, moderate to well cemented	SM		0
3970	X	B-6 (5-6.5)			SILT, Sandy: poorly graded, light tan to white, very fine grained, moist, moderately cemented	SM	317	-5
3965	X	B-6 (10-11.5)			SILT: poorly graded, white to light tan, very fine grained with few to little sand, very loose, very powdery	ML	ND	-10
3960								-15
3955	X	B-6 (20-21.5)			SILT, Sandy: poorly graded, very fine	SM	86.4	-20



TD = 31.5' bgs

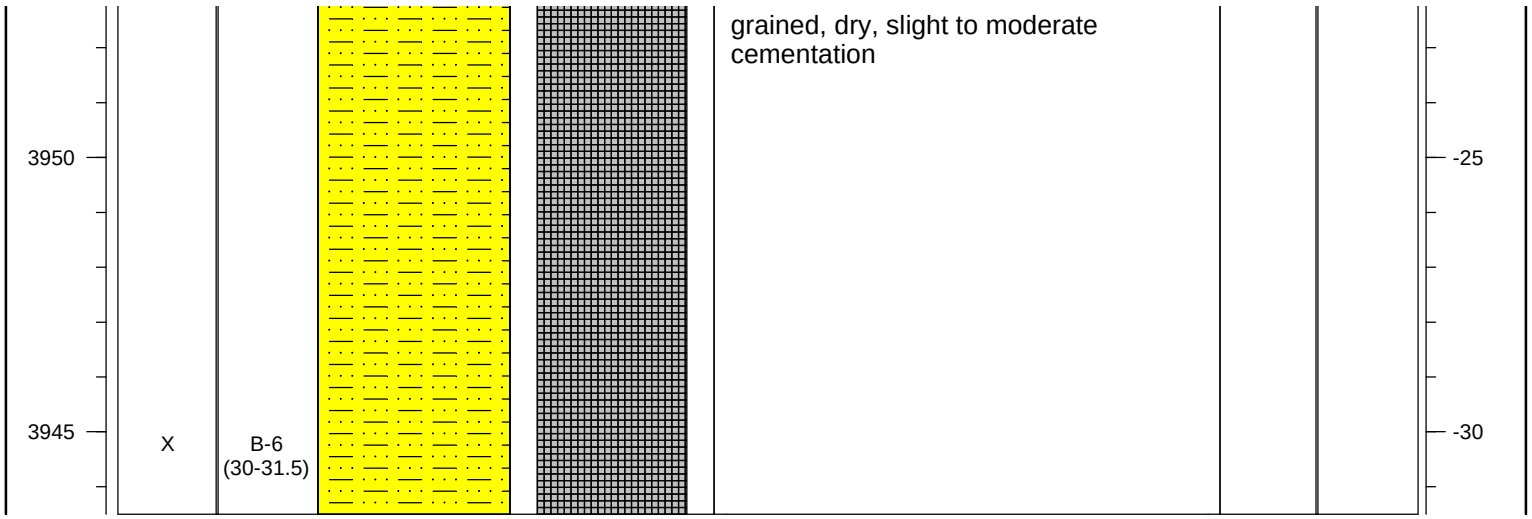
CONESTOGA-ROVERS & ASSOCIATES

BORING LOG AND WELL COMPLETION FORM

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3975 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.777646, -103.501735

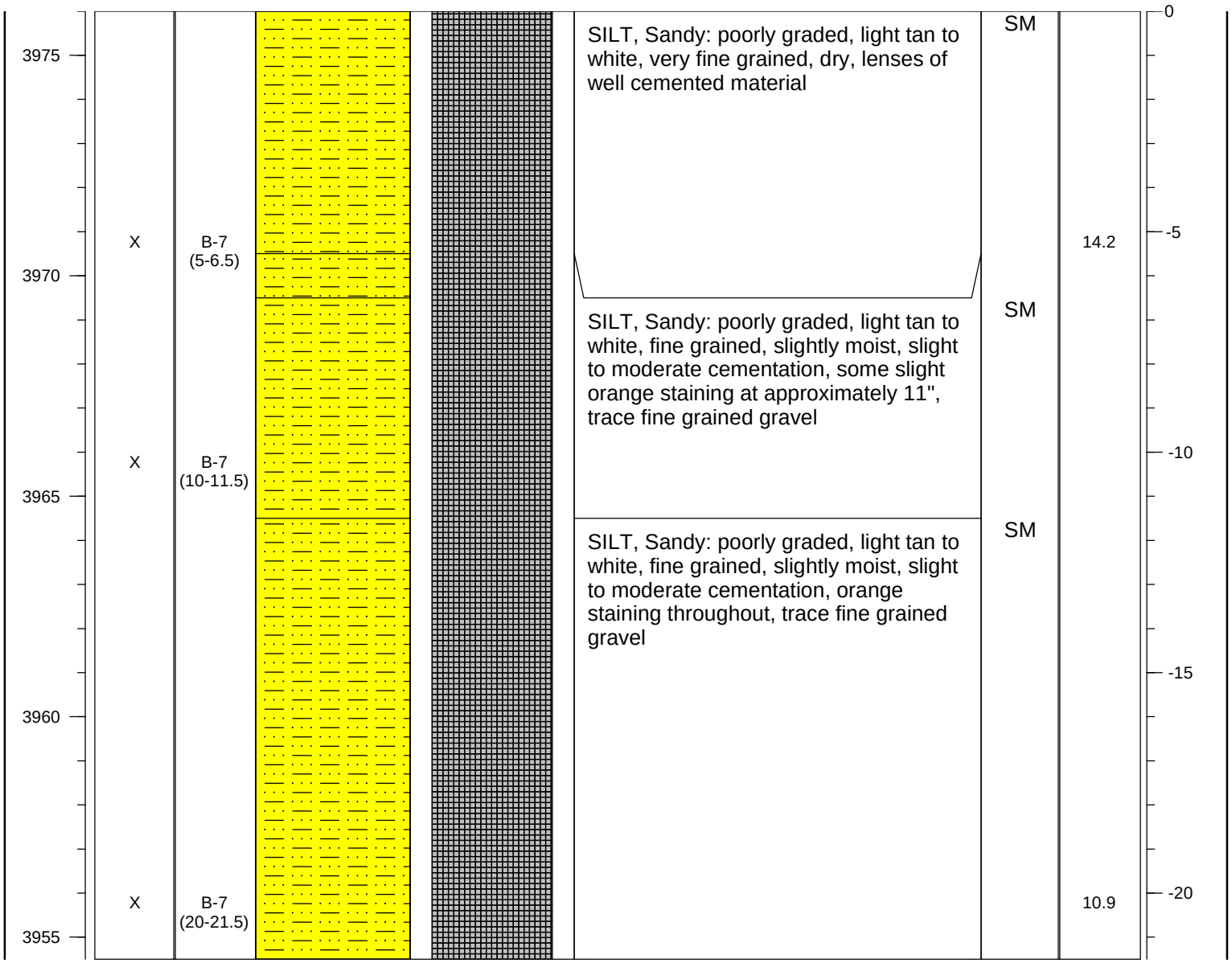
SOIL BORING NO: B-6
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 21, 2013 at 1015
DATE/TIME HOLE COMPLETED: November 21, 2013 at 1045

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	Chloride (mg/kg)	DEPTH (bgs) - ft
3950					grained, dry, slight to moderate cementation			-25
3945	X	B-6 (30-31.5)						-30



PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3976 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.77841, 103.501488

SOIL BORING NO: B-7
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 21, 2013 at 1120
DATE/TIME HOLE COMPLETED: November 21, 2013 at 1140



TD = 21.5' bgs

CONESTOGA-ROVERS & ASSOCIATES

BORING LOG AND WELL COMPLETION FORM

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3975 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.777991, -103-501716

SOIL BORING NO: B-8
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 21, 2013 at 1300
DATE/TIME HOLE COMPLETED: November 21, 2013 at 1330

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	Chloride (mg/kg)	DEPTH (bgs) - ft
3975					Sand: Poorly graded, brown, fine grained, dry, slightly cohesive/cemented, trace very fine grained gravel. 6'-6 1/2' sandy silt, tan, slightly cemented, small shells	SP		0
3970	X	B-8 (5-6.5)					8.3	-5
					SILT, Sandy: poorly graded, light tan to white, very fine grained, dry, slight to moderate cementation	SM		
3965	X	B-8 (10-11.5)						-10
					SILT, Sandy: poorly graded, light tan to white, very fine grained, moist, slight cementation, some orange staining	SM		
3960								-15
3955	X	B-8 (20-21.5)					47.8	-20

TD = 21.5' bgs

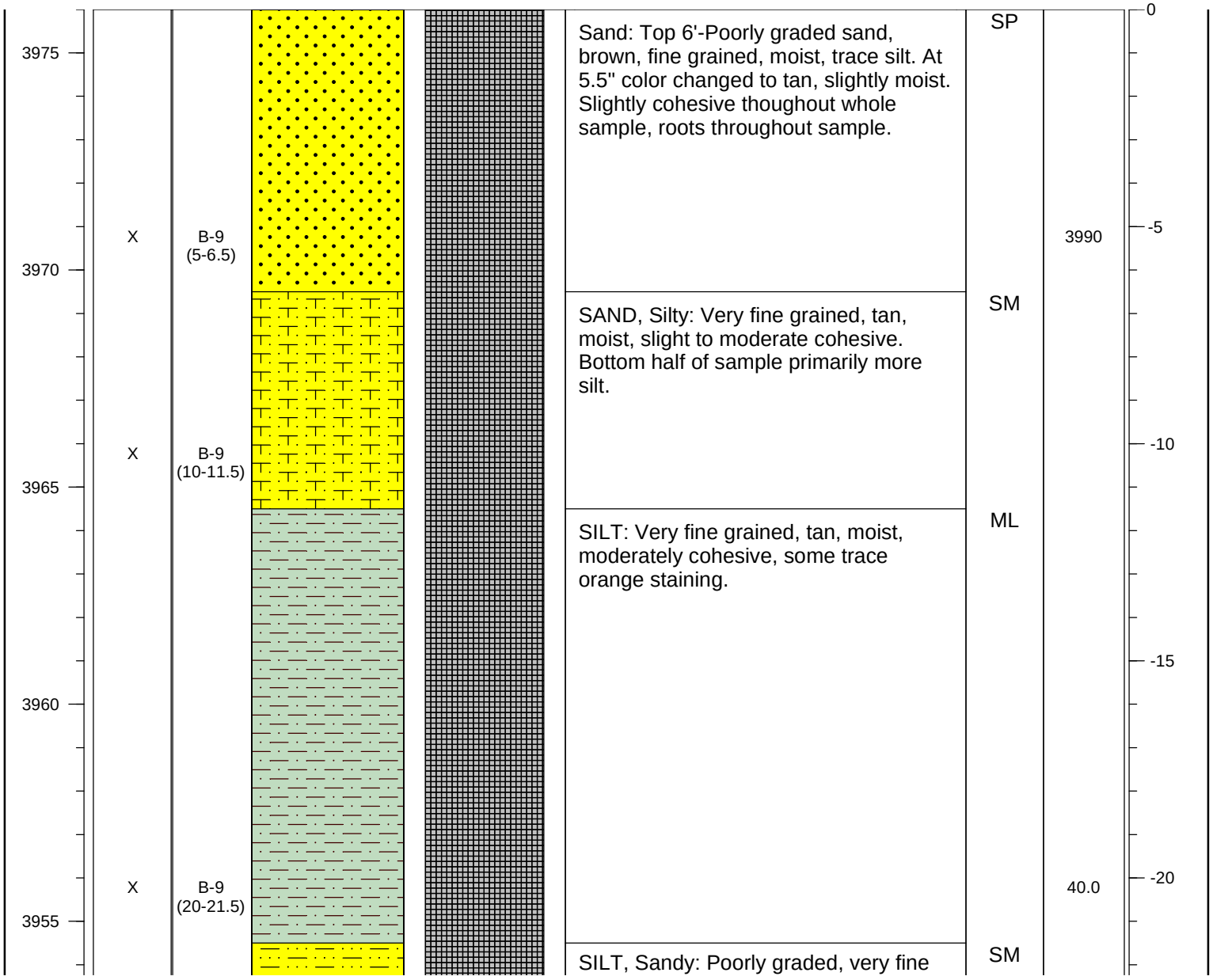
CONESTOGA-ROVERS & ASSOCIATES

BORING LOG AND WELL COMPLETION FORM

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3976 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.778062, -103501865

SOIL BORING NO: B-9
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 21, 2013 at 1350
DATE/TIME HOLE COMPLETED: November 21, 2013 at 1415

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3975					Sand: Top 6'-Poorly graded sand, brown, fine grained, moist, trace silt. At 5.5" color changed to tan, slightly moist. Slightly cohesive thoughout whole sample, roots throughout sample.	SP		0
3970	X	B-9 (5-6.5)			SAND, Silty: Very fine grained, tan, moist, slight to moderate cohesive. Bottom half of sample primarily more silt.	SM	3990	-5
3965	X	B-9 (10-11.5)			SILT: Very fine grained, tan, moist, moderately cohesive, some trace orange staining.	ML		-10
3960								-15
3955	X	B-9 (20-21.5)			SILT, Sandy: Poorly graded, very fine	SM	40.0	-20



TD = 31.5' bgs

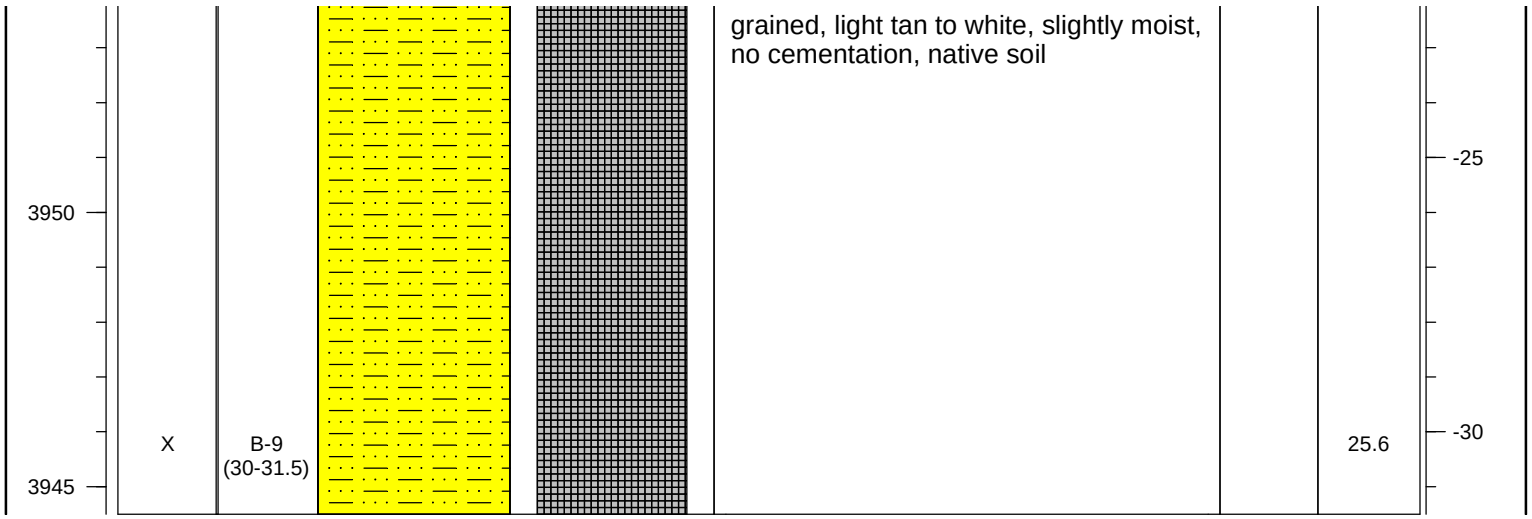
CONESTOGA-ROVERS & ASSOCIATES

BORING LOG AND WELL COMPLETION FORM

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3976 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.778062, -103501865

SOIL BORING NO: B-9
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 21, 2013 at 1350
DATE/TIME HOLE COMPLETED: November 21, 2013 at 1415

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
					grained, light tan to white, slightly moist, no cementation, native soil			
3950								-25
3945	X	B-9 (30-31.5)					25.6	-30



PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3976 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.778254, -103.501783

SOIL BORING NO: B-10
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 21, 2013 at 1515
DATE/TIME HOLE COMPLETED: November 21, 2013 at 1555

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	Chloride (mg/kg)	DEPTH (bgs) - ft
3975					SILT, Sandy: Top 6'-Tan, fine grained, moist, slightly cohesive. Remainder of sample-Tan to white, very fine grained, dry, dense to moderate cementation	SM		0
	X	B-10 (5-6.5)					6370	-5
3970					SAND, Silty: Light tan, very fine grained, slightly moist, slight cementation	SM		
	X	B-10 (10-11.5)					407	-10
3965					SAND, Silty: Light tan, very fine grained, slightly moist, slight cementation, trace orange staining	SM		
3960								-15
	X	B-10 (20-21.5)					795	-20
3955					SAND, Silty: Light tan, very fine	SM		

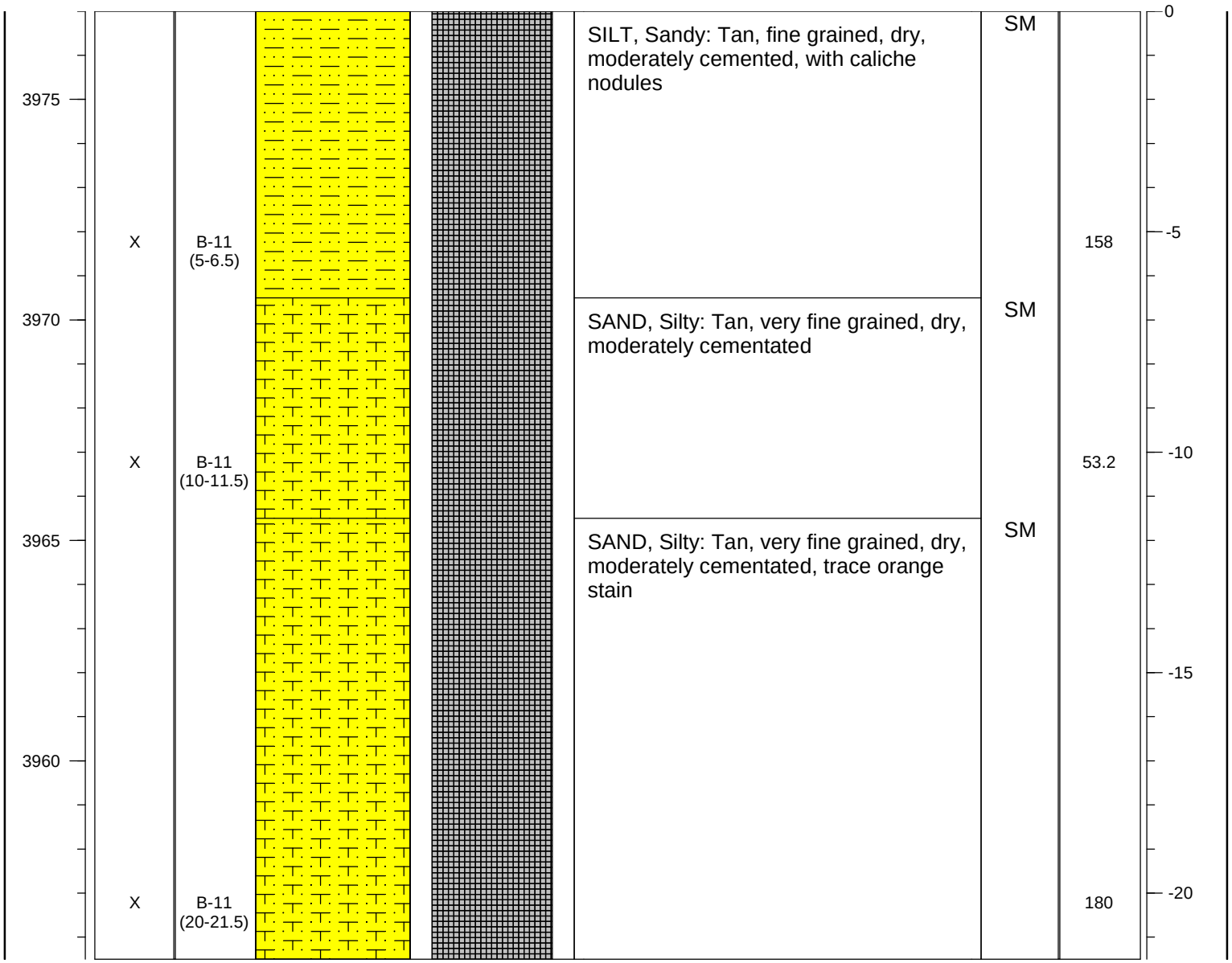
PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Christine Mathews
SURFACE ELEVATION (msl): 3976 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.778254, -103.501783

SOIL BORING NO: B-10
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: November 21, 2013 at 1515
DATE/TIME HOLE COMPLETED: November 21, 2013 at 1555

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	Chloride (mg/kg)	DEPTH (bgs) - ft
3950					grained, slightly moist, slight cementation			-25
3945	X	B-10 (30-31.5)					70.1	-30

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Cale Canack
SURFACE ELEVATION (msl): 3977 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.778264, -103.501678

SOIL BORING NO: B-11
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: December 2, 2013 at 1605
DATE/TIME HOLE COMPLETED: December 2, 2013 at 1630



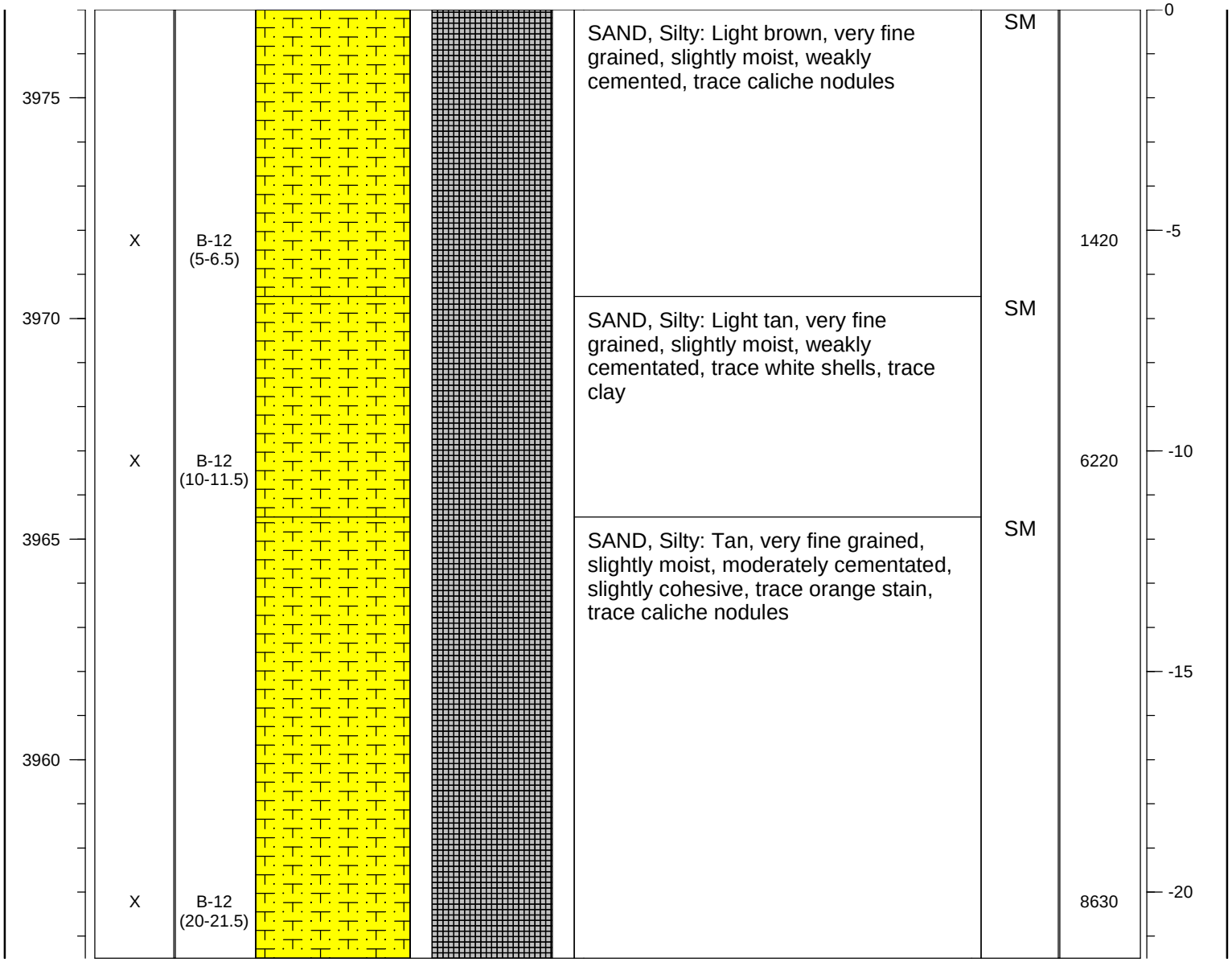
TD = 21.5' bgs

CONESTOGA-ROVERS & ASSOCIATES

BORING LOG AND WELL COMPLETION FORM

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Cale Canack
SURFACE ELEVATION (msl): 3977 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.78381, -103.502017

SOIL BORING NO: B-12
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: December 2, 2013 at 1605
DATE/TIME HOLE COMPLETED: December 2, 2013 at 1630



TD = 21.5' bgs

CONESTOGA-ROVERS & ASSOCIATES

BORING LOG AND WELL COMPLETION FORM

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Cale Canack
SURFACE ELEVATION (msl): 3976 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.778209, -103502223

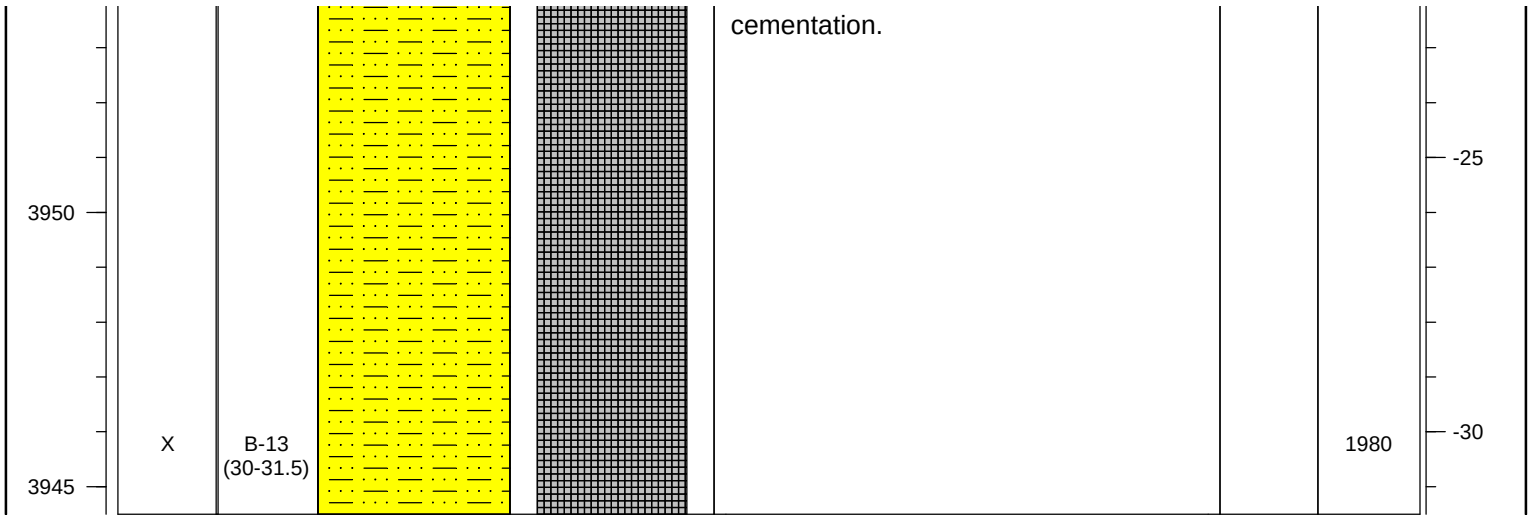
SOIL BORING NO: B-13
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: December 3, 2013 at 0900
DATE/TIME HOLE COMPLETED: December 3, 2013 at 0945

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3975					SILT, Sandy: Light tan, very fine grained, slightly moist, weakly cemented	SM		0
3970	X	B-13 (5-6.5)			SILT, Sandy: Light brown, very fine grained, slightly moist, weakly cementated, slightly cohesive, trace shells	SM	9980	-5
3965	X	B-13 (10-11.5)			SILT, Sandy: Light tan, very fine grained, slightly moist, weakly cementated, slightly cohesive	SM	530	-10
3960								-15
3955	X	B-13 (20-21.5)			SILT, Sandy: Tan, fine grained, dry, no-		1350	-20

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Cale Canack
SURFACE ELEVATION (msl): 3976 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.778209, -103502223

SOIL BORING NO: B-13
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: December 3, 2013 at 0900
DATE/TIME HOLE COMPLETED: December 3, 2013 at 0945

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3950					cementation.			-25
3945	X	B-13 (30-31.5)					1980	-30



PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Cale Canack
SURFACE ELEVATION (msl): 3976 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.777932, -103.502217

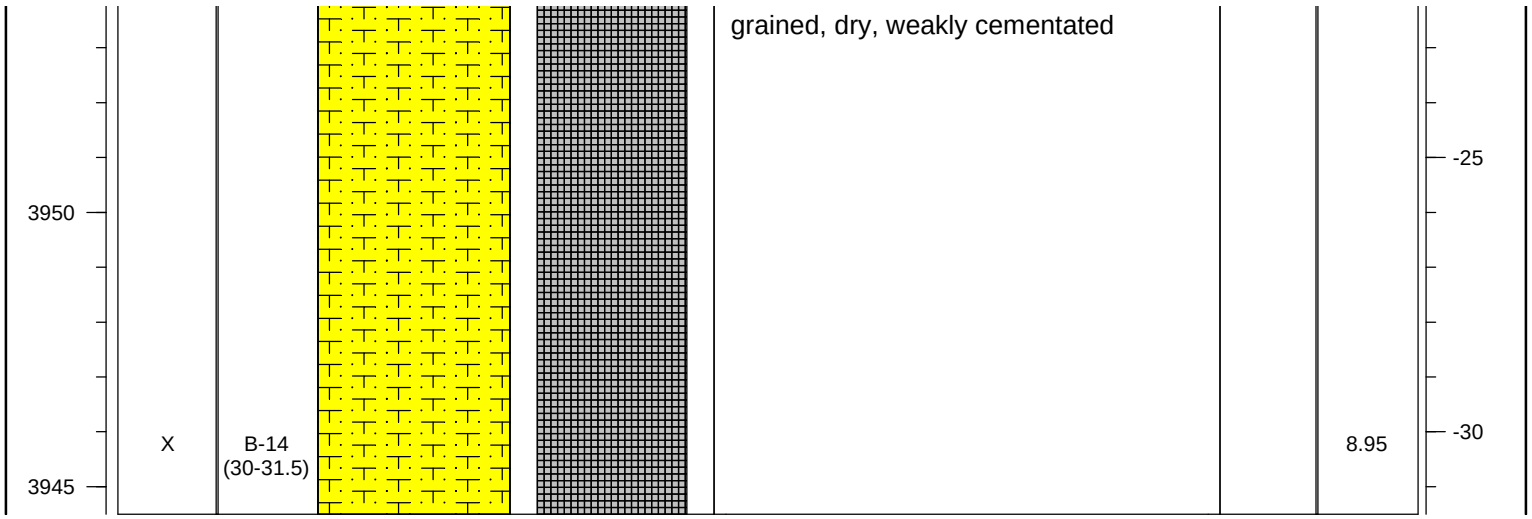
SOIL BORING NO: B-14
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: December 3, 2013 at 1015
DATE/TIME HOLE COMPLETED: December 3, 2013 at 1055

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	Chloride (mg/kg)	DEPTH (bgs) - ft
3975					SILT: Brown, very fine grained, slightly moist, weakly cemented, slightly cohesive	ML		0
	X	B-14 (5-6.5)					5210	-5
3970					SILT, Sandy: Tan, very fine grained, slightly moist, weakly cementated, slightly cohesive, trace orange stain	SM		
	X	B-14 (10-11.5)					819	-10
3965					SAND, Silty: Light tan, very fine grained, dry, moderately cementated, trace orange stain	SM		
3960								-15
	X	B-14 (20-21.5)					222	-20
3955					SAND, Silty: Light tan, very fine			

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Cale Canack
SURFACE ELEVATION (msl): 3976 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.777932, -103.502217

SOIL BORING NO: B-14
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: December 3, 2013 at 1015
DATE/TIME HOLE COMPLETED: December 3, 2013 at 1055

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	Chloride (mg/kg)	DEPTH (bgs) - ft
					grained, dry, weakly cementated			
3950								-25
3945	X	B-14 (30-31.5)					8.95	-30



PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Cale Canack
SURFACE ELEVATION (msl): 3978 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.777578, -103.502370

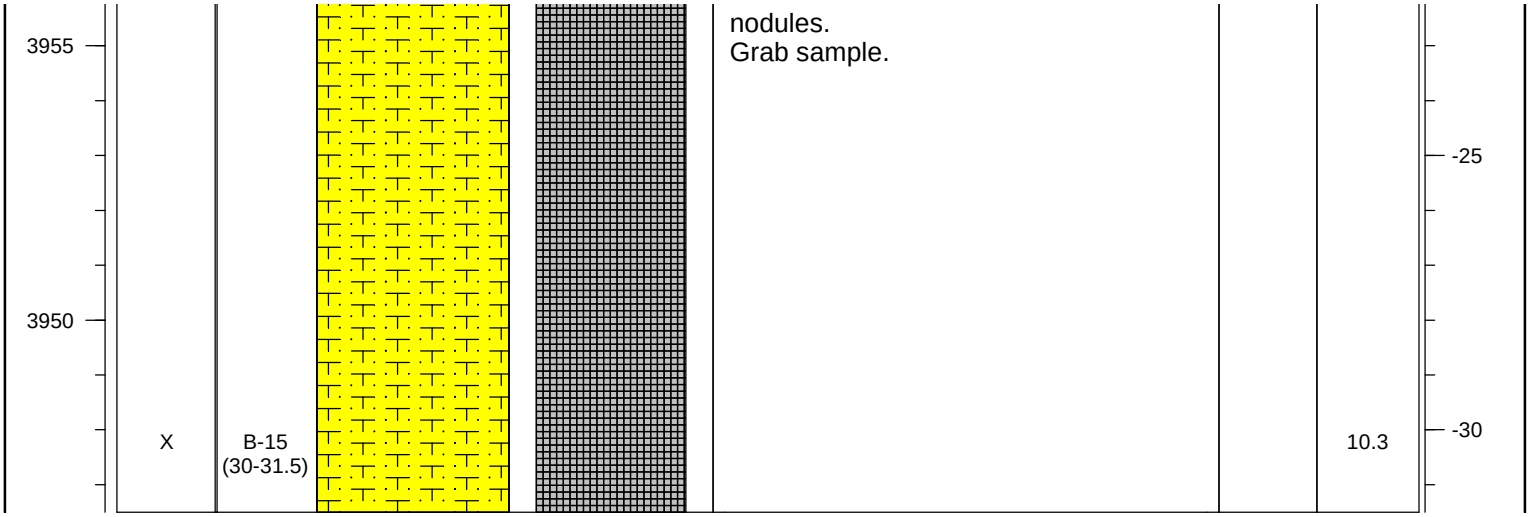
SOIL BORING NO: B-15
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: December 3, 2013 at 1105
DATE/TIME HOLE COMPLETED: December 3, 2013 at 1145

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3975	X	B-15 (5-6.5)			SAND, Silty: White to light tan, dry, well cemented. Grab sample.	SM	695	-5
3970	X	B-15 (10-11.5)			SAND, Silty: White to light tan, dry, well cemented. Grab sample.	SM	71.6	-10
3965					SAND, Silty: White to light tan, dry, well cemented. Grab sample.	SM		-15
3960	X	B-15 (20-21.5)			SAND, Silty: Tan, trace caliche		59.9	-20

PROJECT NAME: CVU 106 and CVU 136
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: Cale Canack
SURFACE ELEVATION (msl): 3978 feet
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES: 32.777578, -103.502370

SOIL BORING NO: B-15
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 4"
DRILLED BY: White Drilling
DATE/TIME HOLE STARTED: December 3, 2013 at 1105
DATE/TIME HOLE COMPLETED: December 3, 2013 at 1145

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS Symbol	Chloride mg/kg	DEPTH (bgs) - ft
3955					nodules.			
					Grab sample.			-25
3950								
	X	B-15 (30-31.5)					10.3	-30



Appendix C

Soil Laboratory Analytical Reports

Analytical Report 474756

for

Conestoga-Rovers & Associates

Project Manager: Chris Knight

Soil Assessment & Delineation

074636-02

20-JAN-14

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-13-15-TX), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

20-JAN-14

Project Manager: **Chris Knight**
Conestoga-Rovers & Associates
13091 Pond Springs Road
Suite A100

Austin, TX 78729

Reference: XENCO Report No(s): **474756**
Soil Assessment & Delineation
Project Address: New Mexico

Chris Knight:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 474756. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 474756 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-074636-112013-CM-B-1(10-11.5)	S	11-20-13 10:35		474756-001
S-074636-112013-CM-B-1 (20-21.5)	S	11-20-13 10:40		474756-002
S-074636-112013-CM-B-1(30-31.5)	S	11-20-13 10:45		474756-003
S-074636-112013-CM-B-1 (40-41.5)	S	11-20-13 10:50		474756-004
S-074363-112013-CM-B1 (45-46.5)	S	11-20-13 10:55		474756-005
S-074636-112013-CM-B-2 (10-11.5)	S	11-20-13 12:55		474756-006
S-074636-112013-CM-B-2 (20-21.5)	S	11-20-13 13:05		474756-007
S-074636-112013-CM-B-2 (30-31.5)	S	11-20-13 13:10		474756-008
S-074636-112013-CM-B-2 (40-41.5)	S	11-20-13 13:35		474756-009
S-074636-112013-CM-B-3 (10-11.5)	S	11-20-13 14:25		474756-010
S-074636-112013-CM-B-3 (30-31.5)	S	11-20-13 14:30		474756-011
S-074636-112013-CM-B-4 (10-11.5)	S	11-20-13 15:50		474756-012
S-074636-112013-CM-B-4 (20-21.5)	S	11-20-13 15:55		474756-013
S-074636-112013-CM-B-4 (30-31.5)	S	11-20-13 16:05		474756-014
S-074636-112013-CM-B-4 (40-41.5)	S	11-20-13 16:10		474756-015
S-074636-112013-CM-B-4 (50-51.5)	S	11-20-13 16:20		474756-016
S-074636-112013-CM-DUP	S	11-20-13 16:25		474756-017
S-074636-112113-CM-B-5 (5-6.5)	S	11-21-13 09:05		474756-018
S-074636-112113-CM-B-5 (10-11.5)	S	11-21-13 09:10		474756-019
S-074636-112113-CM-B-5 (20-21.5)	S	11-21-13 09:15		474756-020
S-074636-112113-CM-B-5 (30-31.5)	S	11-21-13 09:20		474756-021
S-074636-112113-CM-B-6 (5-6.5)	S	11-21-13 10:25		474756-022
S-074636-112113-CM-B-6 (20-21.5)	S	11-21-13 10:35		474756-023
S-074636-112113-CM-B-7 (5-6.5)	S	11-21-13 11:25		474756-024
S-074636-112113-CM-B-7 (20-21.5)	S	11-21-13 11:35		474756-025
S-074636-112113-CM-B-8 (5-6.5)	S	11-21-13 13:10		474756-026
S-074636-112113-CM-B-8 (20-21.5)	S	11-21-13 13:20		474756-027
S-074636-112113-CM-B-9 (5-6.5)	S	11-21-13 14:00		474756-028
S-074636-112113-CM-B-9 (20-21.5)	S	11-21-13 14:10		474756-029
S-074636-112113-CM-B-9 (30-31.5)	S	11-21-13 14:40		474756-030
S-074636-112113-CM-B-10 (5-6.5)	S	11-21-13 15:25		474756-031
S-074636-112113-CM-B-10 (10-11.5)	S	11-21-13 15:30		474756-032
S-074636-112113-CM-B-10 (20-21.5)	S	11-21-13 15:35		474756-033
S-074636-112113-CM-B-10 (30-31.5)	S	11-21-13 15:55		474756-034

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-928636 Inorganic Anions by EPA 300/300.1
E300

Batch 928636, Chloride recovered above QC limits in the Matrix Spike.
Samples affected are: 474756-004, -007, -001, -006, -008, -010, -005, -009, -014, -016, -002, -013, -017, -018, -003, -011, -012, -015.
The Laboratory Control Sample for Chloride is within laboratory Control Limits

Batch: LBA-928638 Inorganic Anions by EPA 300/300.1
E300

Batch 928638, Chloride recovered above QC limits in the Matrix Spike.
Samples affected are: 474756-019, -031, -033, -023, -028, -032, -027, -030, -020, -025, -034, -021, -022, -024, -026, -029.
The Laboratory Control Sample for Chloride is within laboratory Control Limits

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-1(10-11.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-001	Date Collected:	11.20.13 10.35		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	8.66
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3500**	109	mg/kg	11.26.13 13.24		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	8.66
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.4	mg/kg	11.29.13 18.31	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**262**	16.4	mg/kg	11.29.13 18.31		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	**23.2**	16.4	mg/kg	11.29.13 18.31		1
Total TPH	PHC635	**285**	16.4	mg/kg	11.29.13 18.31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	11.29.13 18.31	
o-Terphenyl	84-15-1	82	%	70-135	11.29.13 18.31	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-1(10-11.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-001	Date Collected:	11.20.13 10.35		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	8.66
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00109	mg/kg	11.25.13 18.47	U	1
Toluene	108-88-3	ND	0.00219	mg/kg	11.25.13 18.47	U	1
Ethylbenzene	100-41-4	ND	0.00109	mg/kg	11.25.13 18.47	U	1
m,p-Xylenes	179601-23-1	ND	0.00219	mg/kg	11.25.13 18.47	U	1
o-Xylene	95-47-6	ND	0.00109	mg/kg	11.25.13 18.47	U	1
Total Xylenes	1330-20-7	ND	0.00109	mg/kg	11.25.13 18.47	U	1
Total BTEX		ND	0.00109	mg/kg	11.25.13 18.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	80-120	11.25.13 18.47	
4-Bromofluorobenzene	460-00-4	100	%	80-120	11.25.13 18.47	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-1 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-002	Date Collected:	11.20.13 10.40		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	11.22
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3410**	113	mg/kg	11.26.13 13.46		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	11.22
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.9	mg/kg	11.29.13 19.56	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**52.1**	16.9	mg/kg	11.29.13 19.56		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.9	mg/kg	11.29.13 19.56	U	1
Total TPH	PHC635	**52.1**	16.9	mg/kg	11.29.13 19.56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	11.29.13 19.56	
o-Terphenyl	84-15-1	81	%	70-135	11.29.13 19.56	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-1 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-002	Date Collected:	11.20.13 10.40		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	11.22
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00112	mg/kg	11.25.13 19.03	U	1
Toluene	108-88-3	ND	0.00223	mg/kg	11.25.13 19.03	U	1
Ethylbenzene	100-41-4	ND	0.00112	mg/kg	11.25.13 19.03	U	1
m,p-Xylenes	179601-23-1	ND	0.00223	mg/kg	11.25.13 19.03	U	1
o-Xylene	95-47-6	ND	0.00112	mg/kg	11.25.13 19.03	U	1
Total Xylenes	1330-20-7	ND	0.00112	mg/kg	11.25.13 19.03	U	1
Total BTEX		ND	0.00112	mg/kg	11.25.13 19.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	80-120	11.25.13 19.03	
1,4-Difluorobenzene	540-36-3	89	%	80-120	11.25.13 19.03	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-1(30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-003	Date Collected:	11.20.13 10.45		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	7.65
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**370**	21.7	mg/kg	11.26.13 14.09		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	7.65
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.2	mg/kg	11.29.13 20.23	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**37.7**	16.2	mg/kg	11.29.13 20.23		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.2	mg/kg	11.29.13 20.23	U	1
Total TPH	PHC635	**37.7**	16.2	mg/kg	11.29.13 20.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	11.29.13 20.23	
o-Terphenyl	84-15-1	83	%	70-135	11.29.13 20.23	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-1(30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-003	Date Collected:	11.20.13 10.45		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	7.65
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00108	mg/kg	11.25.13 19.19	U	1
Toluene	108-88-3	ND	0.00216	mg/kg	11.25.13 19.19	U	1
Ethylbenzene	100-41-4	ND	0.00108	mg/kg	11.25.13 19.19	U	1
m,p-Xylenes	179601-23-1	ND	0.00216	mg/kg	11.25.13 19.19	U	1
o-Xylene	95-47-6	ND	0.00108	mg/kg	11.25.13 19.19	U	1
Total Xylenes	1330-20-7	ND	0.00108	mg/kg	11.25.13 19.19	U	1
Total BTEX		ND	0.00108	mg/kg	11.25.13 19.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	86	%	80-120	11.25.13 19.19	
4-Bromofluorobenzene	460-00-4	98	%	80-120	11.25.13 19.19	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-1 (40-41.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-004	Date Collected:	11.20.13 10.50		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	7.36
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**948**	21.6	mg/kg	11.26.13 14.32		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	7.36
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.2	mg/kg	11.29.13 20.50	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**56.8**	16.2	mg/kg	11.29.13 20.50		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.2	mg/kg	11.29.13 20.50	U	1
Total TPH	PHC635	**56.8**	16.2	mg/kg	11.29.13 20.50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	11.29.13 20.50	
o-Terphenyl	84-15-1	84	%	70-135	11.29.13 20.50	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-1 (40-41.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-004	Date Collected:	11.20.13 10.50		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	7.36
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00108	mg/kg	11.25.13 19.35	U	1
Toluene	108-88-3	ND	0.00215	mg/kg	11.25.13 19.35	U	1
Ethylbenzene	100-41-4	ND	0.00108	mg/kg	11.25.13 19.35	U	1
m,p-Xylenes	179601-23-1	ND	0.00215	mg/kg	11.25.13 19.35	U	1
o-Xylene	95-47-6	ND	0.00108	mg/kg	11.25.13 19.35	U	1
Total Xylenes	1330-20-7	ND	0.00108	mg/kg	11.25.13 19.35	U	1
Total BTEX		ND	0.00108	mg/kg	11.25.13 19.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	86	%	80-120	11.25.13 19.35	
4-Bromofluorobenzene	460-00-4	99	%	80-120	11.25.13 19.35	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074363-112013-CM-B1 (45-46.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-005	Date Collected:	11.20.13 10.55		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.11
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5.49**	2.13	mg/kg	11.26.13 15.40		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	6.11
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	15.9	mg/kg	11.29.13 21.17	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	15.9	mg/kg	11.29.13 21.17	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.9	mg/kg	11.29.13 21.17	U	1
Total TPH	PHC635	ND	15.9	mg/kg	11.29.13 21.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	11.29.13 21.17	
o-Terphenyl	84-15-1	81	%	70-135	11.29.13 21.17	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074363-112013-CM-B1 (45-46.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-005	Date Collected:	11.20.13 10.55		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	6.11
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00107	mg/kg	11.25.13 19.51	U	1
Toluene	108-88-3	ND	0.00213	mg/kg	11.25.13 19.51	U	1
Ethylbenzene	100-41-4	ND	0.00107	mg/kg	11.25.13 19.51	U	1
m,p-Xylenes	179601-23-1	ND	0.00213	mg/kg	11.25.13 19.51	U	1
o-Xylene	95-47-6	ND	0.00107	mg/kg	11.25.13 19.51	U	1
Total Xylenes	1330-20-7	ND	0.00107	mg/kg	11.25.13 19.51	U	1
Total BTEX		ND	0.00107	mg/kg	11.25.13 19.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	80-120	11.25.13 19.51	
4-Bromofluorobenzene	460-00-4	95	%	80-120	11.25.13 19.51	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-2 (10-11.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-006	Date Collected:	11.20.13 12.55		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	10.53
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12300**	224	mg/kg	11.26.13 16.02		100

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	10.53
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.7	mg/kg	11.29.13 22.38	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.7	mg/kg	11.29.13 22.38	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.7	mg/kg	11.29.13 22.38	U	1
Total TPH	PHC635	ND	16.7	mg/kg	11.29.13 22.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	11.29.13 22.38	
o-Terphenyl	84-15-1	80	%	70-135	11.29.13 22.38	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-2 (10-11.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-006	Date Collected:	11.20.13 12.55		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	10.53
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00112	mg/kg	11.25.13 20.07	U	1
Toluene	108-88-3	ND	0.00224	mg/kg	11.25.13 20.07	U	1
Ethylbenzene	100-41-4	ND	0.00112	mg/kg	11.25.13 20.07	U	1
m,p-Xylenes	179601-23-1	ND	0.00224	mg/kg	11.25.13 20.07	U	1
o-Xylene	95-47-6	ND	0.00112	mg/kg	11.25.13 20.07	U	1
Total Xylenes	1330-20-7	ND	0.00112	mg/kg	11.25.13 20.07	U	1
Total BTEX		ND	0.00112	mg/kg	11.25.13 20.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	80-120	11.25.13 20.07	
1,4-Difluorobenzene	540-36-3	89	%	80-120	11.25.13 20.07	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-2 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-007	Date Collected:	11.20.13 13.05		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	8.14
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9090**	218	mg/kg	11.26.13 16.25		100

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	8.14
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.3	mg/kg	11.29.13 23.04	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**21.3**	16.3	mg/kg	11.29.13 23.04		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.3	mg/kg	11.29.13 23.04	U	1
Total TPH	PHC635	**21.3**	16.3	mg/kg	11.29.13 23.04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	11.29.13 23.04	
o-Terphenyl	84-15-1	81	%	70-135	11.29.13 23.04	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-2 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-007	Date Collected:	11.20.13 13.05		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	8.14
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00108	mg/kg	11.25.13 20.23	U	1
Toluene	108-88-3	ND	0.00216	mg/kg	11.25.13 20.23	U	1
Ethylbenzene	100-41-4	ND	0.00108	mg/kg	11.25.13 20.23	U	1
m,p-Xylenes	179601-23-1	ND	0.00216	mg/kg	11.25.13 20.23	U	1
o-Xylene	95-47-6	ND	0.00108	mg/kg	11.25.13 20.23	U	1
Total Xylenes	1330-20-7	ND	0.00108	mg/kg	11.25.13 20.23	U	1
Total BTEX		ND	0.00108	mg/kg	11.25.13 20.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	80-120	11.25.13 20.23	
1,4-Difluorobenzene	540-36-3	88	%	80-120	11.25.13 20.23	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-2 (30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-008	Date Collected:	11.20.13 13.10		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	8.05
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8970**	218	mg/kg	11.26.13 16.48		100

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	8.05
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.3	mg/kg	11.29.13 23.30	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**46.4**	16.3	mg/kg	11.29.13 23.30		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.3	mg/kg	11.29.13 23.30	U	1
Total TPH	PHC635	**46.4**	16.3	mg/kg	11.29.13 23.30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	11.29.13 23.30	
o-Terphenyl	84-15-1	83	%	70-135	11.29.13 23.30	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-2 (30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-008	Date Collected:	11.20.13 13.10		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	8.05
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00108	mg/kg	11.25.13 20.39	U	1
Toluene	108-88-3	ND	0.00217	mg/kg	11.25.13 20.39	U	1
Ethylbenzene	100-41-4	ND	0.00108	mg/kg	11.25.13 20.39	U	1
m,p-Xylenes	179601-23-1	ND	0.00217	mg/kg	11.25.13 20.39	U	1
o-Xylene	95-47-6	ND	0.00108	mg/kg	11.25.13 20.39	U	1
Total Xylenes	1330-20-7	ND	0.00108	mg/kg	11.25.13 20.39	U	1
Total BTEX		ND	0.00108	mg/kg	11.25.13 20.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	85	%	80-120	11.25.13 20.39	
4-Bromofluorobenzene	460-00-4	95	%	80-120	11.25.13 20.39	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-2 (40-41.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-009	Date Collected:	11.20.13 13.35		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	9.6
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10200**	221	mg/kg	11.26.13 17.10		100

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	9.6
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.6	mg/kg	11.29.13 23.56	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**94.7**	16.6	mg/kg	11.29.13 23.56		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.6	mg/kg	11.29.13 23.56	U	1
Total TPH	PHC635	**94.7**	16.6	mg/kg	11.29.13 23.56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	11.29.13 23.56	
o-Terphenyl	84-15-1	85	%	70-135	11.29.13 23.56	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-2 (40-41.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-009	Date Collected:	11.20.13 13.35		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	9.6
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00110	mg/kg	11.25.13 20.55	U	1
Toluene	108-88-3	ND	0.00221	mg/kg	11.25.13 20.55	U	1
Ethylbenzene	100-41-4	ND	0.00110	mg/kg	11.25.13 20.55	U	1
m,p-Xylenes	179601-23-1	ND	0.00221	mg/kg	11.25.13 20.55	U	1
o-Xylene	95-47-6	ND	0.00110	mg/kg	11.25.13 20.55	U	1
Total Xylenes	1330-20-7	ND	0.00110	mg/kg	11.25.13 20.55	U	1
Total BTEX		ND	0.00110	mg/kg	11.25.13 20.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	80-120	11.25.13 20.55	
1,4-Difluorobenzene	540-36-3	86	%	80-120	11.25.13 20.55	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-3 (10-11.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-010	Date Collected:	11.20.13 14.25		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.03
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**909**	21.3	mg/kg	11.26.13 17.56		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	6.03
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	15.9	mg/kg	11.30.13 00.23	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**20.0**	15.9	mg/kg	11.30.13 00.23		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.9	mg/kg	11.30.13 00.23	U	1
Total TPH	PHC635	**20.0**	15.9	mg/kg	11.30.13 00.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	11.30.13 00.23	
o-Terphenyl	84-15-1	82	%	70-135	11.30.13 00.23	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-3 (10-11.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-010	Date Collected:	11.20.13 14.25		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	6.03
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00106	mg/kg	11.25.13 21.11	U	1
Toluene	108-88-3	ND	0.00212	mg/kg	11.25.13 21.11	U	1
Ethylbenzene	100-41-4	ND	0.00106	mg/kg	11.25.13 21.11	U	1
m,p-Xylenes	179601-23-1	ND	0.00212	mg/kg	11.25.13 21.11	U	1
o-Xylene	95-47-6	ND	0.00106	mg/kg	11.25.13 21.11	U	1
Total Xylenes	1330-20-7	ND	0.00106	mg/kg	11.25.13 21.11	U	1
Total BTEX		ND	0.00106	mg/kg	11.25.13 21.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	91	%	80-120	11.25.13 21.11	
4-Bromofluorobenzene	460-00-4	102	%	80-120	11.25.13 21.11	

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id: **S-074636-112013-CM-B-3 (30-31.5)** Matrix: Soil Date Received:11.23.13 14.00

Lab Sample Id: 474756-011 Date Collected: 11.20.13 14.30

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Tech: AMB % Moisture: 10.73

Analyst: AMB Date Prep: 11.26.13 10.30 Basis: Dry Weight

Seq Number: 928636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.0**	11.2	mg/kg	11.26.13 18.18		5

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Tech: ARM % Moisture: 10.73

Analyst: ARM Date Prep: 11.27.13 10.00 Basis: Dry Weight

Seq Number: 928930

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.8	mg/kg	11.30.13 00.49	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.8	mg/kg	11.30.13 00.49	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.8	mg/kg	11.30.13 00.49	U	1
Total TPH	PHC635	ND	16.8	mg/kg	11.30.13 00.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	11.30.13 00.49	
o-Terphenyl	84-15-1	81	%	70-135	11.30.13 00.49	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-3 (30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-011	Date Collected:	11.20.13 14.30		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	10.73
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00111	mg/kg	11.25.13 22.00	U	1
Toluene	108-88-3	ND	0.00223	mg/kg	11.25.13 22.00	U	1
Ethylbenzene	100-41-4	ND	0.00111	mg/kg	11.25.13 22.00	U	1
m,p-Xylenes	179601-23-1	ND	0.00223	mg/kg	11.25.13 22.00	U	1
o-Xylene	95-47-6	ND	0.00111	mg/kg	11.25.13 22.00	U	1
Total Xylenes	1330-20-7	ND	0.00111	mg/kg	11.25.13 22.00	U	1
Total BTEX		ND	0.00111	mg/kg	11.25.13 22.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	80-120	11.25.13 22.00	
1,4-Difluorobenzene	540-36-3	86	%	80-120	11.25.13 22.00	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-4 (10-11.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-012	Date Collected:	11.20.13 15.50		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	8.51
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**262**	21.9	mg/kg	11.26.13 18.41		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	8.51
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.4	mg/kg	11.30.13 01.15	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.4	mg/kg	11.30.13 01.15	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.4	mg/kg	11.30.13 01.15	U	1
Total TPH	PHC635	ND	16.4	mg/kg	11.30.13 01.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	11.30.13 01.15	
o-Terphenyl	84-15-1	87	%	70-135	11.30.13 01.15	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-4 (10-11.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-012	Date Collected:	11.20.13 15.50		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	8.51
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00109	mg/kg	11.25.13 22.15	U	1
Toluene	108-88-3	ND	0.00217	mg/kg	11.25.13 22.15	U	1
Ethylbenzene	100-41-4	ND	0.00109	mg/kg	11.25.13 22.15	U	1
m,p-Xylenes	179601-23-1	ND	0.00217	mg/kg	11.25.13 22.15	U	1
o-Xylene	95-47-6	ND	0.00109	mg/kg	11.25.13 22.15	U	1
Total Xylenes	1330-20-7	ND	0.00109	mg/kg	11.25.13 22.15	U	1
Total BTEX		ND	0.00109	mg/kg	11.25.13 22.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	80-120	11.25.13 22.15	
1,4-Difluorobenzene	540-36-3	90	%	80-120	11.25.13 22.15	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-4 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-013	Date Collected:	11.20.13 15.55		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	11.3
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**788**	45.1	mg/kg	11.26.13 19.03		20

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	11.3
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.9	mg/kg	11.30.13 01.41	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.9	mg/kg	11.30.13 01.41	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.9	mg/kg	11.30.13 01.41	U	1
Total TPH	PHC635	ND	16.9	mg/kg	11.30.13 01.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	11.30.13 01.41	
o-Terphenyl	84-15-1	89	%	70-135	11.30.13 01.41	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-4 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-013	Date Collected:	11.20.13 15.55		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	11.3
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00112	mg/kg	11.25.13 22.31	U	1
Toluene	108-88-3	ND	0.00225	mg/kg	11.25.13 22.31	U	1
Ethylbenzene	100-41-4	ND	0.00112	mg/kg	11.25.13 22.31	U	1
m,p-Xylenes	179601-23-1	ND	0.00225	mg/kg	11.25.13 22.31	U	1
o-Xylene	95-47-6	ND	0.00112	mg/kg	11.25.13 22.31	U	1
Total Xylenes	1330-20-7	ND	0.00112	mg/kg	11.25.13 22.31	U	1
Total BTEX		ND	0.00112	mg/kg	11.25.13 22.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	80-120	11.25.13 22.31	
4-Bromofluorobenzene	460-00-4	104	%	80-120	11.25.13 22.31	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-4 (30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-014	Date Collected:	11.20.13 16.05		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	9.15
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2760**	110	mg/kg	11.26.13 20.11		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	9.15
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.4	mg/kg	11.30.13 02.59	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**39.9**	16.4	mg/kg	11.30.13 02.59		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.4	mg/kg	11.30.13 02.59	U	1
Total TPH	PHC635	**39.9**	16.4	mg/kg	11.30.13 02.59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	11.30.13 02.59	
o-Terphenyl	84-15-1	85	%	70-135	11.30.13 02.59	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-4 (30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-014	Date Collected:	11.20.13 16.05		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	9.15
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00109	mg/kg	11.25.13 22.47	U	1
Toluene	108-88-3	ND	0.00218	mg/kg	11.25.13 22.47	U	1
Ethylbenzene	100-41-4	ND	0.00109	mg/kg	11.25.13 22.47	U	1
m,p-Xylenes	179601-23-1	ND	0.00218	mg/kg	11.25.13 22.47	U	1
o-Xylene	95-47-6	ND	0.00109	mg/kg	11.25.13 22.47	U	1
Total Xylenes	1330-20-7	ND	0.00109	mg/kg	11.25.13 22.47	U	1
Total BTEX		ND	0.00109	mg/kg	11.25.13 22.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	80-120	11.25.13 22.47	
1,4-Difluorobenzene	540-36-3	87	%	80-120	11.25.13 22.47	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-4 (40-41.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-015	Date Collected:	11.20.13 16.10		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	10.38
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9330**	223	mg/kg	11.26.13 20.34		100

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	10.38
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.7	mg/kg	11.30.13 03.25	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.7	mg/kg	11.30.13 03.25	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.7	mg/kg	11.30.13 03.25	U	1
Total TPH	PHC635	ND	16.7	mg/kg	11.30.13 03.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	11.30.13 03.25	
o-Terphenyl	84-15-1	80	%	70-135	11.30.13 03.25	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-4 (40-41.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-015	Date Collected:	11.20.13 16.10		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	10.38
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00112	mg/kg	11.25.13 23.03	U	1
Toluene	108-88-3	ND	0.00223	mg/kg	11.25.13 23.03	U	1
Ethylbenzene	100-41-4	ND	0.00112	mg/kg	11.25.13 23.03	U	1
m,p-Xylenes	179601-23-1	ND	0.00223	mg/kg	11.25.13 23.03	U	1
o-Xylene	95-47-6	ND	0.00112	mg/kg	11.25.13 23.03	U	1
Total Xylenes	1330-20-7	ND	0.00112	mg/kg	11.25.13 23.03	U	1
Total BTEX		ND	0.00112	mg/kg	11.25.13 23.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	80-120	11.25.13 23.03	
1,4-Difluorobenzene	540-36-3	89	%	80-120	11.25.13 23.03	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-4 (50-51.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-016	Date Collected:	11.20.13 16.20		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.24
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6240**	213	mg/kg	11.26.13 20.57		100

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	6.24
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.0	mg/kg	11.30.13 03.51	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**25.6**	16.0	mg/kg	11.30.13 03.51		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.0	mg/kg	11.30.13 03.51	U	1
Total TPH	PHC635	**25.6**	16.0	mg/kg	11.30.13 03.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	11.30.13 03.51	
o-Terphenyl	84-15-1	80	%	70-135	11.30.13 03.51	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-B-4 (50-51.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-016	Date Collected:	11.20.13 16.20		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	6.24
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00106	mg/kg	11.25.13 23.19	U	1
Toluene	108-88-3	ND	0.00213	mg/kg	11.25.13 23.19	U	1
Ethylbenzene	100-41-4	ND	0.00106	mg/kg	11.25.13 23.19	U	1
m,p-Xylenes	179601-23-1	ND	0.00213	mg/kg	11.25.13 23.19	U	1
o-Xylene	95-47-6	ND	0.00106	mg/kg	11.25.13 23.19	U	1
Total Xylenes	1330-20-7	ND	0.00106	mg/kg	11.25.13 23.19	U	1
Total BTEX		ND	0.00106	mg/kg	11.25.13 23.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	80-120	11.25.13 23.19	
4-Bromofluorobenzene	460-00-4	96	%	80-120	11.25.13 23.19	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-DUP**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-017	Date Collected:	11.20.13 16.25		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.54
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6470**	107	mg/kg	11.26.13 21.19		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	6.54
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.0	mg/kg	11.30.13 04.17	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.0	mg/kg	11.30.13 04.17	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.0	mg/kg	11.30.13 04.17	U	1
Total TPH	PHC635	ND	16.0	mg/kg	11.30.13 04.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	11.30.13 04.17	
o-Terphenyl	84-15-1	85	%	70-135	11.30.13 04.17	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112013-CM-DUP**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-017	Date Collected:	11.20.13 16.25		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	6.54
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00107	mg/kg	11.25.13 23.34	U	1
Toluene	108-88-3	ND	0.00214	mg/kg	11.25.13 23.34	U	1
Ethylbenzene	100-41-4	ND	0.00107	mg/kg	11.25.13 23.34	U	1
m,p-Xylenes	179601-23-1	ND	0.00214	mg/kg	11.25.13 23.34	U	1
o-Xylene	95-47-6	ND	0.00107	mg/kg	11.25.13 23.34	U	1
Total Xylenes	1330-20-7	ND	0.00107	mg/kg	11.25.13 23.34	U	1
Total BTEX		ND	0.00107	mg/kg	11.25.13 23.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	80-120	11.25.13 23.34	
1,4-Difluorobenzene	540-36-3	89	%	80-120	11.25.13 23.34	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-5 (5-6.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-018	Date Collected:	11.21.13 09.05		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	5.93
Analyst:	AMB	Date Prep:	11.26.13 10.30	Basis:	Dry Weight
Seq Number:	928636				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4520**	106	mg/kg	11.26.13 21.42		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	5.93
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	15.9	mg/kg	11.30.13 04.42	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	15.9	mg/kg	11.30.13 04.42	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.9	mg/kg	11.30.13 04.42	U	1
Total TPH	PHC635	ND	15.9	mg/kg	11.30.13 04.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	11.30.13 04.42	
o-Terphenyl	84-15-1	79	%	70-135	11.30.13 04.42	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-5 (5-6.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-018	Date Collected:	11.21.13 09.05		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	5.93
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00106	mg/kg	11.25.13 23.50	U	1
Toluene	108-88-3	ND	0.00212	mg/kg	11.25.13 23.50	U	1
Ethylbenzene	100-41-4	ND	0.00106	mg/kg	11.25.13 23.50	U	1
m,p-Xylenes	179601-23-1	ND	0.00212	mg/kg	11.25.13 23.50	U	1
o-Xylene	95-47-6	ND	0.00106	mg/kg	11.25.13 23.50	U	1
Total Xylenes	1330-20-7	ND	0.00106	mg/kg	11.25.13 23.50	U	1
Total BTEX		ND	0.00106	mg/kg	11.25.13 23.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	80-120	11.25.13 23.50	
4-Bromofluorobenzene	460-00-4	99	%	80-120	11.25.13 23.50	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-5 (10-11.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-019	Date Collected:	11.21.13 09.10		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	9.33
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6840**	110	mg/kg	11.26.13 23.58		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	9.33
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.5	mg/kg	11.30.13 05.08	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**56.6**	16.5	mg/kg	11.30.13 05.08		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.5	mg/kg	11.30.13 05.08	U	1
Total TPH	PHC635	**56.6**	16.5	mg/kg	11.30.13 05.08		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	11.30.13 05.08	
o-Terphenyl	84-15-1	87	%	70-135	11.30.13 05.08	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-5 (10-11.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-019	Date Collected:	11.21.13 09.10		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	9.33
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00110	mg/kg	11.26.13 00.06	U	1
Toluene	108-88-3	ND	0.00220	mg/kg	11.26.13 00.06	U	1
Ethylbenzene	100-41-4	ND	0.00110	mg/kg	11.26.13 00.06	U	1
m,p-Xylenes	179601-23-1	ND	0.00220	mg/kg	11.26.13 00.06	U	1
o-Xylene	95-47-6	ND	0.00110	mg/kg	11.26.13 00.06	U	1
Total Xylenes	1330-20-7	ND	0.00110	mg/kg	11.26.13 00.06	U	1
Total BTEX		ND	0.00110	mg/kg	11.26.13 00.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	80-120	11.26.13 00.06	
4-Bromofluorobenzene	460-00-4	99	%	80-120	11.26.13 00.06	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-5 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-020	Date Collected:	11.21.13 09.15		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	9.96
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2930**	44.4	mg/kg	11.27.13 00.43		20

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	9.96
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928930				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.6	mg/kg	11.30.13 05.34	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**49.5**	16.6	mg/kg	11.30.13 05.34		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.6	mg/kg	11.30.13 05.34	U	1
Total TPH	PHC635	**49.5**	16.6	mg/kg	11.30.13 05.34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	11.30.13 05.34	
o-Terphenyl	84-15-1	84	%	70-135	11.30.13 05.34	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-5 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-020	Date Collected:	11.21.13 09.15		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	9.96
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928659				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00111	mg/kg	11.26.13 00.22	U	1
Toluene	108-88-3	ND	0.00221	mg/kg	11.26.13 00.22	U	1
Ethylbenzene	100-41-4	ND	0.00111	mg/kg	11.26.13 00.22	U	1
m,p-Xylenes	179601-23-1	ND	0.00221	mg/kg	11.26.13 00.22	U	1
o-Xylene	95-47-6	ND	0.00111	mg/kg	11.26.13 00.22	U	1
Total Xylenes	1330-20-7	ND	0.00111	mg/kg	11.26.13 00.22	U	1
Total BTEX		ND	0.00111	mg/kg	11.26.13 00.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	80-120	11.26.13 00.22	
1,4-Difluorobenzene	540-36-3	91	%	80-120	11.26.13 00.22	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-5 (30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-021	Date Collected:	11.21.13 09.20		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	10.13
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**257**	11.1	mg/kg	11.27.13 01.06		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	10.13
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.6	mg/kg	11.30.13 08.08	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**26.7**	16.6	mg/kg	11.30.13 08.08		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.6	mg/kg	11.30.13 08.08	U	1
Total TPH	PHC635	**26.7**	16.6	mg/kg	11.30.13 08.08		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	11.30.13 08.08	
o-Terphenyl	84-15-1	75	%	70-135	11.30.13 08.08	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-5 (30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-021	Date Collected:	11.21.13 09.20		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	10.13
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00111	mg/kg	11.26.13 02.28	U	1
Toluene	108-88-3	ND	0.00222	mg/kg	11.26.13 02.28	U	1
Ethylbenzene	100-41-4	ND	0.00111	mg/kg	11.26.13 02.28	U	1
m,p-Xylenes	179601-23-1	ND	0.00222	mg/kg	11.26.13 02.28	U	1
o-Xylene	95-47-6	ND	0.00111	mg/kg	11.26.13 02.28	U	1
Total Xylenes	1330-20-7	ND	0.00111	mg/kg	11.26.13 02.28	U	1
Total BTEX		ND	0.00111	mg/kg	11.26.13 02.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	80-120	11.26.13 02.28	
4-Bromofluorobenzene	460-00-4	98	%	80-120	11.26.13 02.28	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-6 (5-6.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-022	Date Collected:	11.21.13 10.25		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	5.69
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**317**	10.6	mg/kg	11.27.13 01.29		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	5.69
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	15.8	mg/kg	11.30.13 09.28	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	15.8	mg/kg	11.30.13 09.28	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.8	mg/kg	11.30.13 09.28	U	1
Total TPH	PHC635	ND	15.8	mg/kg	11.30.13 09.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-135	11.30.13 09.28	
o-Terphenyl	84-15-1	76	%	70-135	11.30.13 09.28	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-6 (5-6.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-022	Date Collected:	11.21.13 10.25		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	5.69
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00106	mg/kg	11.26.13 02.44	U	1
Toluene	108-88-3	ND	0.00212	mg/kg	11.26.13 02.44	U	1
Ethylbenzene	100-41-4	ND	0.00106	mg/kg	11.26.13 02.44	U	1
m,p-Xylenes	179601-23-1	ND	0.00212	mg/kg	11.26.13 02.44	U	1
o-Xylene	95-47-6	ND	0.00106	mg/kg	11.26.13 02.44	U	1
Total Xylenes	1330-20-7	ND	0.00106	mg/kg	11.26.13 02.44	U	1
Total BTEX		ND	0.00106	mg/kg	11.26.13 02.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	92	%	80-120	11.26.13 02.44	
4-Bromofluorobenzene	460-00-4	102	%	80-120	11.26.13 02.44	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-6 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-023	Date Collected:	11.21.13 10.35		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	4.95
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**86.4**	10.5	mg/kg	11.27.13 01.51		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	4.95
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	15.7	mg/kg	11.30.13 09.56	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**52.4**	15.7	mg/kg	11.30.13 09.56		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.7	mg/kg	11.30.13 09.56	U	1
Total TPH	PHC635	**52.4**	15.7	mg/kg	11.30.13 09.56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-135	11.30.13 09.56	
o-Terphenyl	84-15-1	75	%	70-135	11.30.13 09.56	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-6 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-023	Date Collected:	11.21.13 10.35		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	4.95
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00105	mg/kg	11.26.13 03.00	U	1
Toluene	108-88-3	ND	0.00210	mg/kg	11.26.13 03.00	U	1
Ethylbenzene	100-41-4	ND	0.00105	mg/kg	11.26.13 03.00	U	1
m,p-Xylenes	179601-23-1	ND	0.00210	mg/kg	11.26.13 03.00	U	1
o-Xylene	95-47-6	ND	0.00105	mg/kg	11.26.13 03.00	U	1
Total Xylenes	1330-20-7	ND	0.00105	mg/kg	11.26.13 03.00	U	1
Total BTEX		ND	0.00105	mg/kg	11.26.13 03.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	85	%	80-120	11.26.13 03.00	
4-Bromofluorobenzene	460-00-4	96	%	80-120	11.26.13 03.00	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-7 (5-6.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-024	Date Collected:	11.21.13 11.25		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	12.65
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.2**	2.29	mg/kg	11.27.13 02.14		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	12.65
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	17.2	mg/kg	11.30.13 10.26	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	17.2	mg/kg	11.30.13 10.26	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	17.2	mg/kg	11.30.13 10.26	U	1
Total TPH	PHC635	ND	17.2	mg/kg	11.30.13 10.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	11.30.13 10.26	
o-Terphenyl	84-15-1	79	%	70-135	11.30.13 10.26	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-7 (5-6.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-024	Date Collected:	11.21.13 11.25		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	12.65
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00114	mg/kg	11.26.13 03.16	U	1
Toluene	108-88-3	ND	0.00229	mg/kg	11.26.13 03.16	U	1
Ethylbenzene	100-41-4	ND	0.00114	mg/kg	11.26.13 03.16	U	1
m,p-Xylenes	179601-23-1	ND	0.00229	mg/kg	11.26.13 03.16	U	1
o-Xylene	95-47-6	ND	0.00114	mg/kg	11.26.13 03.16	U	1
Total Xylenes	1330-20-7	ND	0.00114	mg/kg	11.26.13 03.16	U	1
Total BTEX		ND	0.00114	mg/kg	11.26.13 03.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	89	%	80-120	11.26.13 03.16	
4-Bromofluorobenzene	460-00-4	97	%	80-120	11.26.13 03.16	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-7 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-025	Date Collected:	11.21.13 11.35		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.58
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.9**	2.14	mg/kg	11.27.13 03.22		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	6.58
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.0	mg/kg	12.02.13 17.35	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**25.0**	16.0	mg/kg	12.02.13 17.35		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.0	mg/kg	12.02.13 17.35	U	1
Total TPH	PHC635	**25.0**	16.0	mg/kg	12.02.13 17.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	12.02.13 17.35	
o-Terphenyl	84-15-1	96	%	70-135	12.02.13 17.35	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-7 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-025	Date Collected:	11.21.13 11.35		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	6.58
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00107	mg/kg	11.26.13 03.32	U	1
Toluene	108-88-3	ND	0.00213	mg/kg	11.26.13 03.32	U	1
Ethylbenzene	100-41-4	ND	0.00107	mg/kg	11.26.13 03.32	U	1
m,p-Xylenes	179601-23-1	ND	0.00213	mg/kg	11.26.13 03.32	U	1
o-Xylene	95-47-6	ND	0.00107	mg/kg	11.26.13 03.32	U	1
Total Xylenes	1330-20-7	ND	0.00107	mg/kg	11.26.13 03.32	U	1
Total BTEX		ND	0.00107	mg/kg	11.26.13 03.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	80-120	11.26.13 03.32	
1,4-Difluorobenzene	540-36-3	90	%	80-120	11.26.13 03.32	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-8 (5-6.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-026	Date Collected:	11.21.13 13.10		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	8.86
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.30**	2.19	mg/kg	11.27.13 03.45		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	8.86
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.4	mg/kg	12.02.13 18.03	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**37.5**	16.4	mg/kg	12.02.13 18.03		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.4	mg/kg	12.02.13 18.03	U	1
Total TPH	PHC635	**37.5**	16.4	mg/kg	12.02.13 18.03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	12.02.13 18.03	
o-Terphenyl	84-15-1	98	%	70-135	12.02.13 18.03	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-8 (5-6.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-026	Date Collected:	11.21.13 13.10		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	8.86
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00109	mg/kg	11.26.13 03.47	U	1
Toluene	108-88-3	ND	0.00219	mg/kg	11.26.13 03.47	U	1
Ethylbenzene	100-41-4	ND	0.00109	mg/kg	11.26.13 03.47	U	1
m,p-Xylenes	179601-23-1	ND	0.00219	mg/kg	11.26.13 03.47	U	1
o-Xylene	95-47-6	ND	0.00109	mg/kg	11.26.13 03.47	U	1
Total Xylenes	1330-20-7	ND	0.00109	mg/kg	11.26.13 03.47	U	1
Total BTEX		ND	0.00109	mg/kg	11.26.13 03.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	80-120	11.26.13 03.47	
1,4-Difluorobenzene	540-36-3	92	%	80-120	11.26.13 03.47	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-8 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-027	Date Collected:	11.21.13 13.20		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	9.08
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**47.8**	2.20	mg/kg	11.27.13 04.07		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	9.08
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.5	mg/kg	12.02.13 18.32	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.5	mg/kg	12.02.13 18.32	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.5	mg/kg	12.02.13 18.32	U	1
Total TPH	PHC635	ND	16.5	mg/kg	12.02.13 18.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	12.02.13 18.32	
o-Terphenyl	84-15-1	93	%	70-135	12.02.13 18.32	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-8 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-027	Date Collected:	11.21.13 13.20		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	9.08
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00109	mg/kg	11.26.13 04.03	U	1
Toluene	108-88-3	ND	0.00219	mg/kg	11.26.13 04.03	U	1
Ethylbenzene	100-41-4	ND	0.00109	mg/kg	11.26.13 04.03	U	1
m,p-Xylenes	179601-23-1	ND	0.00219	mg/kg	11.26.13 04.03	U	1
o-Xylene	95-47-6	ND	0.00109	mg/kg	11.26.13 04.03	U	1
Total Xylenes	1330-20-7	ND	0.00109	mg/kg	11.26.13 04.03	U	1
Total BTEX		ND	0.00109	mg/kg	11.26.13 04.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	80-120	11.26.13 04.03	
1,4-Difluorobenzene	540-36-3	89	%	80-120	11.26.13 04.03	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-9 (5-6.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-028	Date Collected:	11.21.13 14.00		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	16.13
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3990**	119	mg/kg	11.27.13 04.30		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	16.13
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	17.9	mg/kg	12.02.13 19.01	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	17.9	mg/kg	12.02.13 19.01	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	17.9	mg/kg	12.02.13 19.01	U	1
Total TPH	PHC635	ND	17.9	mg/kg	12.02.13 19.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	12.02.13 19.01	
o-Terphenyl	84-15-1	96	%	70-135	12.02.13 19.01	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-9 (5-6.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-028	Date Collected:	11.21.13 14.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	16.13
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00118	mg/kg	11.26.13 04.19	U	1
Toluene	108-88-3	ND	0.00237	mg/kg	11.26.13 04.19	U	1
Ethylbenzene	100-41-4	ND	0.00118	mg/kg	11.26.13 04.19	U	1
m,p-Xylenes	179601-23-1	ND	0.00237	mg/kg	11.26.13 04.19	U	1
o-Xylene	95-47-6	ND	0.00118	mg/kg	11.26.13 04.19	U	1
Total Xylenes	1330-20-7	ND	0.00118	mg/kg	11.26.13 04.19	U	1
Total BTEX		ND	0.00118	mg/kg	11.26.13 04.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	80-120	11.26.13 04.19	
1,4-Difluorobenzene	540-36-3	89	%	80-120	11.26.13 04.19	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-9 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-029	Date Collected:	11.21.13 14.10		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	13.34
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**40.0**	11.5	mg/kg	11.27.13 04.52		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	13.34
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	17.3	mg/kg	12.02.13 19.29	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	17.3	mg/kg	12.02.13 19.29	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	17.3	mg/kg	12.02.13 19.29	U	1
Total TPH	PHC635	ND	17.3	mg/kg	12.02.13 19.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	12.02.13 19.29	
o-Terphenyl	84-15-1	90	%	70-135	12.02.13 19.29	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-9 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-029	Date Collected:	11.21.13 14.10		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	13.34
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00115	mg/kg	11.26.13 04.35	U	1
Toluene	108-88-3	ND	0.00230	mg/kg	11.26.13 04.35	U	1
Ethylbenzene	100-41-4	ND	0.00115	mg/kg	11.26.13 04.35	U	1
m,p-Xylenes	179601-23-1	ND	0.00230	mg/kg	11.26.13 04.35	U	1
o-Xylene	95-47-6	ND	0.00115	mg/kg	11.26.13 04.35	U	1
Total Xylenes	1330-20-7	ND	0.00115	mg/kg	11.26.13 04.35	U	1
Total BTEX		ND	0.00115	mg/kg	11.26.13 04.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	80-120	11.26.13 04.35	
1,4-Difluorobenzene	540-36-3	88	%	80-120	11.26.13 04.35	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-9 (30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-030	Date Collected:	11.21.13 14.40		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	8.24
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**25.6**	2.18	mg/kg	11.27.13 06.00		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	8.24
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.3	mg/kg	12.02.13 19.57	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.3	mg/kg	12.02.13 19.57	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.3	mg/kg	12.02.13 19.57	U	1
Total TPH	PHC635	ND	16.3	mg/kg	12.02.13 19.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	12.02.13 19.57	
o-Terphenyl	84-15-1	83	%	70-135	12.02.13 19.57	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-9 (30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-030	Date Collected:	11.21.13 14.40		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	8.24
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00108	mg/kg	11.26.13 04.50	U	1
Toluene	108-88-3	ND	0.00216	mg/kg	11.26.13 04.50	U	1
Ethylbenzene	100-41-4	ND	0.00108	mg/kg	11.26.13 04.50	U	1
m,p-Xylenes	179601-23-1	ND	0.00216	mg/kg	11.26.13 04.50	U	1
o-Xylene	95-47-6	ND	0.00108	mg/kg	11.26.13 04.50	U	1
Total Xylenes	1330-20-7	ND	0.00108	mg/kg	11.26.13 04.50	U	1
Total BTEX		ND	0.00108	mg/kg	11.26.13 04.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	80-120	11.26.13 04.50	
1,4-Difluorobenzene	540-36-3	89	%	80-120	11.26.13 04.50	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-10 (5-6.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-031	Date Collected:	11.21.13 15.25		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	22.68
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6370**	129	mg/kg	11.27.13 06.46		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	22.68
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	19.3	mg/kg	12.02.13 20.25	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	19.3	mg/kg	12.02.13 20.25	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	19.3	mg/kg	12.02.13 20.25	U	1
Total TPH	PHC635	ND	19.3	mg/kg	12.02.13 20.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	12.02.13 20.25	
o-Terphenyl	84-15-1	87	%	70-135	12.02.13 20.25	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-10 (5-6.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-031	Date Collected:	11.21.13 15.25		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	22.68
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00129	mg/kg	11.26.13 05.38	U	1
Toluene	108-88-3	ND	0.00257	mg/kg	11.26.13 05.38	U	1
Ethylbenzene	100-41-4	ND	0.00129	mg/kg	11.26.13 05.38	U	1
m,p-Xylenes	179601-23-1	ND	0.00257	mg/kg	11.26.13 05.38	U	1
o-Xylene	95-47-6	ND	0.00129	mg/kg	11.26.13 05.38	U	1
Total Xylenes	1330-20-7	ND	0.00129	mg/kg	11.26.13 05.38	U	1
Total BTEX		ND	0.00129	mg/kg	11.26.13 05.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	80-120	11.26.13 05.38	
1,4-Difluorobenzene	540-36-3	88	%	80-120	11.26.13 05.38	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-10 (10-11.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-032	Date Collected:	11.21.13 15.30		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	12.59
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**407**	22.9	mg/kg	11.27.13 07.08		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	12.59
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	17.1	mg/kg	12.02.13 20.52	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	17.1	mg/kg	12.02.13 20.52	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	17.1	mg/kg	12.02.13 20.52	U	1
Total TPH	PHC635	ND	17.1	mg/kg	12.02.13 20.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	12.02.13 20.52	
o-Terphenyl	84-15-1	80	%	70-135	12.02.13 20.52	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-10 (10-11.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-032	Date Collected:	11.21.13 15.30		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	12.59
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00114	mg/kg	11.26.13 05.54	U	1
Toluene	108-88-3	ND	0.00228	mg/kg	11.26.13 05.54	U	1
Ethylbenzene	100-41-4	ND	0.00114	mg/kg	11.26.13 05.54	U	1
m,p-Xylenes	179601-23-1	ND	0.00228	mg/kg	11.26.13 05.54	U	1
o-Xylene	95-47-6	ND	0.00114	mg/kg	11.26.13 05.54	U	1
Total Xylenes	1330-20-7	ND	0.00114	mg/kg	11.26.13 05.54	U	1
Total BTEX		ND	0.00114	mg/kg	11.26.13 05.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	89	%	80-120	11.26.13 05.54	
4-Bromofluorobenzene	460-00-4	98	%	80-120	11.26.13 05.54	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-10 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-033	Date Collected:	11.21.13 15.35		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	8.95
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**795**	22.0	mg/kg	11.27.13 07.31		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	8.95
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.4	mg/kg	12.02.13 21.20	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**62.8**	16.4	mg/kg	12.02.13 21.20		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.4	mg/kg	12.02.13 21.20	U	1
Total TPH	PHC635	**62.8**	16.4	mg/kg	12.02.13 21.20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	12.02.13 21.20	
o-Terphenyl	84-15-1	94	%	70-135	12.02.13 21.20	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-10 (20-21.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-033	Date Collected:	11.21.13 15.35		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	8.95
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00110	mg/kg	11.26.13 06.09	U	1
Toluene	108-88-3	ND	0.00220	mg/kg	11.26.13 06.09	U	1
Ethylbenzene	100-41-4	ND	0.00110	mg/kg	11.26.13 06.09	U	1
m,p-Xylenes	179601-23-1	ND	0.00220	mg/kg	11.26.13 06.09	U	1
o-Xylene	95-47-6	ND	0.00110	mg/kg	11.26.13 06.09	U	1
Total Xylenes	1330-20-7	ND	0.00110	mg/kg	11.26.13 06.09	U	1
Total BTEX		ND	0.00110	mg/kg	11.26.13 06.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	80-120	11.26.13 06.09	
4-Bromofluorobenzene	460-00-4	105	%	80-120	11.26.13 06.09	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-10 (30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-034	Date Collected:	11.21.13 15.55		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	7.27
Analyst:	AMB	Date Prep:	11.26.13 18.00	Basis:	Dry Weight
Seq Number:	928638				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**70.1**	10.8	mg/kg	11.27.13 07.54		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	7.27
Analyst:	ARM	Date Prep:	11.27.13 10.00	Basis:	Dry Weight
Seq Number:	928933				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.2	mg/kg	12.02.13 21.47	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.2	mg/kg	12.02.13 21.47	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.2	mg/kg	12.02.13 21.47	U	1
Total TPH	PHC635	ND	16.2	mg/kg	12.02.13 21.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	12.02.13 21.47	
o-Terphenyl	84-15-1	74	%	70-135	12.02.13 21.47	

Certificate of Analytical Results 474756

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**S-074636-112113-CM-B-10 (30-31.5)**	Matrix:	Soil	Date Received:	11.23.13 14.00
Lab Sample Id:	474756-034	Date Collected:	11.21.13 15.55		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ARM			% Moisture:	7.27
Analyst:	ARM	Date Prep:	11.25.13 16.00	Basis:	Dry Weight
Seq Number:	928662				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00108	mg/kg	11.26.13 06.25	U	1
Toluene	108-88-3	ND	0.00215	mg/kg	11.26.13 06.25	U	1
Ethylbenzene	100-41-4	ND	0.00108	mg/kg	11.26.13 06.25	U	1
m,p-Xylenes	179601-23-1	ND	0.00215	mg/kg	11.26.13 06.25	U	1
o-Xylene	95-47-6	ND	0.00108	mg/kg	11.26.13 06.25	U	1
Total Xylenes	1330-20-7	ND	0.00108	mg/kg	11.26.13 06.25	U	1
Total BTEX		ND	0.00108	mg/kg	11.26.13 06.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	80-120	11.26.13 06.25	
1,4-Difluorobenzene	540-36-3	89	%	80-120	11.26.13 06.25	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Conestoga-Rovers & Associates

Soil Assessment & Delineation

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 928636 Matrix: Solid Date Prep: 11.26.13
MB Sample Id: 647584-1-BLK LCS Sample Id: 647584-1-BKS LCSD Sample Id: 647584-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<2.00	50.0	49.0	98	49.3	99	80-120	1	20	mg/kg	11.26.13 11:08	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 928638 Matrix: Solid Date Prep: 11.26.13
MB Sample Id: 647586-1-BLK LCS Sample Id: 647586-1-BKS LCSD Sample Id: 647586-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<2.00	50.0	49.7	99	49.4	99	80-120	1	20	mg/kg	11.26.13 23:13	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 928636 Matrix: Soil Date Prep: 11.26.13
Parent Sample Id: 474756-009 MS Sample Id: 474756-009 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	10200	5530	18100	143	80-120	mg/kg	11.26.13 17:33	X

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 928636 Matrix: Soil Date Prep: 11.26.13
Parent Sample Id: 474787-001 MS Sample Id: 474787-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	160	271	449	107	80-120	mg/kg	11.26.13 12:38	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 928638 Matrix: Soil Date Prep: 11.26.13
Parent Sample Id: 474756-019 MS Sample Id: 474756-019 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	6840	2760	10900	147	80-120	mg/kg	11.27.13 00:21	X

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 928638 Matrix: Soil Date Prep: 11.26.13
Parent Sample Id: 474756-030 MS Sample Id: 474756-030 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	25.6	54.5	80.9	101	80-120	mg/kg	11.27.13 06:23	

Conestoga-Rovers & Associates

Soil Assessment & Delineation

Analytical Method: **Percent Moisture**
Seq Number: 928426 Matrix: Solid
MB Sample Id: 928426-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	11.25.13 14:00	

Analytical Method: **Percent Moisture**
Seq Number: 928436 Matrix: Solid
MB Sample Id: 928436-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	11.25.13 15:20	

Analytical Method: **Percent Moisture**
Seq Number: 928461 Matrix: Solid
MB Sample Id: 928461-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	11.25.13 16:20	

Analytical Method: **Percent Moisture**
Seq Number: 928426 Matrix: Soil
Parent Sample Id: 474756-002 MD Sample Id: 474756-002 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	11.2	11.3	1	20	%	11.25.13 14:00	

Analytical Method: **Percent Moisture**
Seq Number: 928436 Matrix: Soil
Parent Sample Id: 474756-021 MD Sample Id: 474756-021 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	10.1	7.91	24	20	%	11.25.13 15:20	F

Analytical Method: **Percent Moisture**
Seq Number: 928461 Matrix: Soil
Parent Sample Id: 474772-001 MD Sample Id: 474772-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	5.95	4.34	31	20	%	11.25.13 16:20	F

Conestoga-Rovers & Associates

Soil Assessment & Delineation

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 928930 — Matrix: Solid — Date Prep: 11.27.13
MB Sample Id: 647709-1-BLK — LCS Sample Id: 647709-1-BKS — LCSD Sample Id: 647709-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	905	91	862	86	70-135	5	35	mg/kg	11.29.13 17:01	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	841	84	904	90	70-135	7	35	mg/kg	11.29.13 17:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		102		100		70-135	%	11.29.13 17:01
o-Terphenyl	90		106		105		70-135	%	11.29.13 17:01

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 928933 — Matrix: Solid — Date Prep: 11.27.13
MB Sample Id: 647711-1-BLK — LCS Sample Id: 647711-1-BKS — LCSD Sample Id: 647711-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	898	90	825	83	70-135	8	35	mg/kg	11.30.13 06:51	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	834	83	833	83	70-135	0	35	mg/kg	11.30.13 06:51	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		105		103		70-135	%	11.30.13 06:51
o-Terphenyl	88		107		104		70-135	%	11.30.13 06:51

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 928930 — Matrix: Soil — Date Prep: 11.27.13
Parent Sample Id: 474756-001 — MS Sample Id: 474756-001 S — MSD Sample Id: 474756-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<16.4	1090	958	88	973	89	70-135	2	35	mg/kg	11.29.13 19:00	
C12-C28 Diesel Range Hydrocarbons	262	1090	1070	74	1090	76	70-135	2	35	mg/kg	11.29.13 19:00	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		97		70-135	%	11.29.13 19:00
o-Terphenyl	101		99		70-135	%	11.29.13 19:00

Conestoga-Rovers & Associates

Soil Assessment & Delineation

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 928933 — Matrix: Soil — Date Prep: 11.27.13
Parent Sample Id: 474756-021 — MS Sample Id: 474756-021 S — MSD Sample Id: 474756-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<16.7	1110	976	88	979	88	70-135	0	35	mg/kg	11.30.13 08:34	
C12-C28 Diesel Range Hydrocarbons	26.7	1110	922	81	924	81	70-135	0	35	mg/kg	11.30.13 08:34	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		95		70-135	%	11.30.13 08:34
o-Terphenyl	99		100		70-135	%	11.30.13 08:34

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 928659 — Matrix: Solid — Date Prep: 11.25.13
MB Sample Id: 647542-1-BLK — LCS Sample Id: 647542-1-BKS — LCSD Sample Id: 647542-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0863	86	0.0875	88	70-130	1	35	mg/kg	11.25.13 16:33	
Toluene	<0.00200	0.100	0.0882	88	0.0895	90	70-130	1	35	mg/kg	11.25.13 16:33	
Ethylbenzene	<0.00100	0.100	0.0954	95	0.0967	97	71-129	1	35	mg/kg	11.25.13 16:33	
m,p-Xylenes	<0.00200	0.200	0.193	97	0.196	98	70-135	2	35	mg/kg	11.25.13 16:33	
o-Xylene	<0.00100	0.100	0.0981	98	0.0994	99	71-133	1	35	mg/kg	11.25.13 16:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		94		94		80-120	%	11.25.13 16:33
4-Bromofluorobenzene	96		110		110		80-120	%	11.25.13 16:33

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 928662 — Matrix: Solid — Date Prep: 11.25.13
MB Sample Id: 647596-1-BLK — LCS Sample Id: 647596-1-BKS — LCSD Sample Id: 647596-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0848	85	0.0854	85	70-130	1	35	mg/kg	11.26.13 00:54	
Toluene	<0.00200	0.100	0.0856	86	0.0865	87	70-130	1	35	mg/kg	11.26.13 00:54	
Ethylbenzene	<0.00100	0.100	0.0910	91	0.0918	92	71-129	1	35	mg/kg	11.26.13 00:54	
m,p-Xylenes	<0.00200	0.200	0.185	93	0.187	94	70-135	1	35	mg/kg	11.26.13 00:54	
o-Xylene	<0.00100	0.100	0.0938	94	0.0950	95	71-133	1	35	mg/kg	11.26.13 00:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		92		93		80-120	%	11.26.13 00:54
4-Bromofluorobenzene	100		107		108		80-120	%	11.26.13 00:54

Conestoga-Rovers & Associates

Soil Assessment & Delineation

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 928659 Matrix: Soil Date Prep: 11.25.13

Parent Sample Id: 474756-001 MS Sample Id: 474756-001 S MSD Sample Id: 474756-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00109	0.109	0.0987	91	0.0869	80	70-130	13	35	mg/kg	11.25.13 17:05	
Toluene	<0.00219	0.109	0.0981	90	0.0860	79	70-130	13	35	mg/kg	11.25.13 17:05	
Ethylbenzene	<0.00109	0.109	0.101	93	0.0876	80	71-129	14	35	mg/kg	11.25.13 17:05	
m,p-Xylenes	<0.00219	0.219	0.204	93	0.177	81	70-135	14	35	mg/kg	11.25.13 17:05	
o-Xylene	<0.00109	0.109	0.103	94	0.0889	82	71-133	15	35	mg/kg	11.25.13 17:05	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		98		80-120	%	11.25.13 17:05
4-Bromofluorobenzene	110		110		80-120	%	11.25.13 17:05

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 928662 Matrix: Soil Date Prep: 11.25.13

Parent Sample Id: 474756-021 MS Sample Id: 474756-021 S MSD Sample Id: 474756-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00110	0.110	0.0870	79	0.0871	78	70-130	0	35	mg/kg	11.26.13 01:25	
Toluene	<0.00221	0.110	0.0874	79	0.0877	79	70-130	0	35	mg/kg	11.26.13 01:25	
Ethylbenzene	<0.00110	0.110	0.0908	83	0.0901	81	71-129	1	35	mg/kg	11.26.13 01:25	
m,p-Xylenes	<0.00221	0.221	0.183	83	0.181	82	70-135	1	35	mg/kg	11.26.13 01:25	
o-Xylene	<0.00110	0.110	0.0919	84	0.0917	83	71-133	0	35	mg/kg	11.26.13 01:25	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		97		80-120	%	11.26.13 01:25
4-Bromofluorobenzene	110		109		80-120	%	11.26.13 01:25

CHAIN OF CUSTODY RECORD

XENCO LABORATORIES

LAB W.O#: 474754

Field billable Hrs :

Company:	CRA	Phone:	512.506.8806
Address:	13091 Pond Springs Road, Ste. A-100	Fax:	512.506.8823
City:	Austin	St: TX	Zip: 79729
PM/Attn:	Chris Knight		
Project ID/ Location:	Soil Assessment & Delineation; 074636/02	PO#:	
Invoice To:	Chris Knight	Quote #:	

TAT Work Days = D Need results by: Standard Time:

Std (5-7D) Same Day 1D 2D 3D 4D 5D 7D 10D 14D Other_____

Circle One Event: Daily Weekly Monthly Quartely Semi-Annual Annual N/A

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Depth	Total # of containers	Example Volatiles by 8260	BTEX	TPH	Chloride	Percent Moisture	Hold Sample (CALL___) Run PAH on Highest TPH___ Only if
	MW-1	6/16/04	11:35	GW	X	6"	2	# Cont	Lab Only:				
1	S-074636-112013-CM-B-1(10-11.5)	11/20/13	10:35	S			1		X	X	X	X	
2	S-074636-112013-CM-B-1(20-21.5)	11/20/13	10:40	S			1		X	X	X	X	
3	S-074636-112013-CM-B-1(30-31.5)	11/20/13	10:45	S			1		X	X	X	X	
4	S-074636-112013-CM-B-1(40-41.5)	11/20/13	10:50	S			1		X	X	X	X	
5	S-074636-112013-CM-B1(45-46.5)	11/20/13	10:55	S			1		X	X	X	X	
6	S-074636-112013-CM-B-2(10-11.5)	11/20/13	12:55	S			1		X	X	X	X	
7	S-074636-112013-CM-B-2(20-21.5)	11/20/13	1305	S			1		X	X	X	X	
8	S-074636-112013-CM-B-2(30-31.5)	11/20/13	1310	S			1		X	X	X	X	
9	S-074636-112013-CM-B-2(40-41.5)	11/20/13	1335	S			1		X	X	X	X	
10	S-074636-112013-CM-B-3(10-11.5)	11/20/13	1425	S			1		X	X	X	X	

* Container Type Codes

VA Vial Amber, VC Vial Clear, VP Vial Pre-preserved, GA Glass Amber, GC Glass Clear, PA Plastic Amber, PC Plastic Clear, ES Encore Sampler, TS TerraCore Sampler, AC Air Canister, TB Tedlar Bag, ZB Zip Lock Bag, PC Plastic Clear, Other_____

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz , 1Gal

** Preservative Type Codes

A. None, B. HNO_3, C. H_2SO_4, D. NaOH, E. HCL, F. MeOH, G. $Na_2S_2O_3$, H. $NaHSO_4$, I. Ice, J. MCAA, K. ZnAc&NaOH, L. Asbc Acid&NaOH, O._____

^ Matrix Type Codes

GW Ground Water, S Soil/Sediment/Solid, WW Waste Water, DW Drinking Water, SW Surface Water, OW Ocean/Sea Water, PL Product-Liquid, PS Product-Solid, SL Sludge, W Wipe, A Air, O Oil, T Tissue, U Urine, B Blood

REMARKS

Reg. Program / Clean-up Std: CTLs TRRP DW NPDES LPST DryCln Other:

STATE for Certs & Regs: FL TX GA NC SC NJ PA OK LA AL NM Other:

QA/QC Level & Certification: 1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:

EDDs: ADaPT SEDD ERPIMS XLS Other:

COC & Labels: Match Incomplete Absent Unclear

Coolers Temp °C: 1 3.4 2 2 3

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1		CRA	11/22/13	1230		M/S	11-22-13	1246
2						Xenco	11-23-13	14:00
3								
4								

Lab Use Only	YES	NO	N/A
Non-Conformances found?		X	
Samples intact upon arrival?	X		
Received on Wet Ice?	X		
Labeled with proper preservatives?	X		
Received within holding time?	X		
Custody seals intact?			X
VOCs rec'd w/o headspace?	X		
Proper containers used?	X		
pH verified-acceptable, excl VOCs?	X		
Received on time to meet HTs?	X		

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330

FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

C.O.C. Serial #

Revision Date: Nov 12, 2009

CHAIN OF CUSTODY RECORD

XENCO LABORATORIES

Page 2 of 4

LAB W.O#: 474756

Field billable Hrs :

Company:	CRA	Phone:	512.506.8806
Address:	13091 Pond Springs Road, Ste. A-100	Fax:	512.506.8823
City:	Austin	St: TX	Zip: 79729
PM/Attn:	Chris Knight		
Project ID/ Location:	Soil Assessment & Delineation; 074636/02	PO#:	
Invoice To:	Chris Knight	Quote #:	

TAT Work Days = D Need results by: Standard Time:

Std (5-7D) Same Day 1D 2D 3D 4D 5D 7D 10D 14D Other

Circle One Event: Daily Weekly Monthly Quarterly Semi-Annual Annual N/A

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Depth	Total # of containers	Cont Type * VC	Pres Type** E..I	Example Volatiles by 8260	BTEX	TPH	Chloride	Percent Moisture	Hold Sample (CALL) on Highest TPH	Run PAH Only if
	MW-1	6/16/04	11:35	GW	X	6"	2	# Cont	Lab Only:							
1	S-074636-112013-CM-B-3 (30-31.5)	11/20/13	1430	S			1				X	X	X	X		
2	S-074636-112013-CM-B-4 (10-11.5)	11/20/13	1550	S			1				X	X	X	X		
3	S-074636-112013-CM-B-4 (20-21.5)	11/20/13	1555	S			1				X	X	X	X		
4	S-074636-112013-CM-B-4 (30-31.5)	11/20/13	1605	S			1				X	X	X	X		
5	S-074636-112013-CM-B-4 (40-41.5)	11/20/13	1610	S			1				X	X	X	X		
6	S-074636-112013-CM-B-4 (50-51.5)	11/20/13	1620	S			1				X	X	X	X		
7	~~S-074636-112013-CM-B-4 CM~~															
8	S-074636-112013-CM--DUP	11/20/13	1625	S			1				X	X	X	X		
9	S-074636-112113-CM-B-5 (5-6.5)	11/21/13	0905	S			1				X	X	X	X		
10	S-074636-112113-CM-B-5 (10-11.5)	10/21/13	0910	S			1				X	X	X	X		

* Container Type Codes

VA	Vial Amber	ES	Encore Sampler
VC	Vial Clear	TS	TerraCore Sampler
VP	Vial Pre-preserved	AC	Air Canister
GA	Glass Amber	TB	Tedlar Bag
GC	Glass Clear	ZB	Zip Lock Bag
PA	Plastic Amber	PC	Plastic Clear
PC	Plastic Clear		

Other

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz , 1Gal

** Preservative Type Codes

A. None	E. HCL	I. Ice
B. HNO_3	F. MeOH	J. MCAA
C. H_2SO_4	G. $Na_2S_2O_3$	K. ZnAc&NaOH
D. NaOH	H. $NaHSO_4$	L Asbc Acid&NaOH

O.

^ Matrix Type Codes

GW	Ground Water	S	Soil/Sediment/Solid
WW	Waste Water	W	Wipe
DW	Drinking Water	A	Air
SW	Surface Water	O	Oil
OW	Ocean/Sea Water	T	Tissue
PL	Product-Liquid	U	Urine
PS	Product-Solid	B	Blood
SL	Sludge		

REMARKS

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	1.3 4.2 2.3

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1		CRA	11/22/13	1230	Steve Butler	M/S	11-22-13	1246
2					Julian M	Xenco	11-23-13	14:00
3								
4								

Lab Use Only	YES	NO	N/A
Non-Conformances found?		X	
Samples intact upon arrival?	X		
Received on Wet Ice?	X		
Labeled with proper preservatives?	X		
Received within holding time?	X		
Custody seals intact?			X
VOCs rec'd w/o headspace?	X		
Proper containers used?	X		
pH verified-acceptable, excl VOCs?	X		
Received on time to meet HTs?	X		

C.O.C. Serial #

 Revision Date: Nov 12, 2009

CHAIN OF CUSTODY RECORD

XENCO LABORATORIES

Page 3 of 4

LAB W.O#: 474754

Field billable Hrs :

Company:	CRA	Phone:	512.506.8806
Address:	13091 Pond Springs Road, Ste. A-100	Fax:	512.506.8823
City:	Austin	St: TX	Zip: 79729
PM/Attn:	Chris Knight		
Project ID/ Location:	Soil Assessment & Delineation; 074636/02	PO#:	
Invoice To:	Chris Knight	Quote #:	

TAT Work Days = D Need results by: Standard Time:

Std (5-7D) Same Day 1D 2D 3D 4D 5D 7D 10D 14D Other

Circle One Event: Daily Weekly Monthly Quarterly Semi-Annual Annual N/A

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Depth	Total # of containers	Cont Type * VC	Pres Type** E.I	Example Volatiles by 8260	BTEX	TPH	Chloride	Percent Moisture	Hold Sample (CALL)	Run PAH Only if on Highest TPH
	MW-1	6/16/04	11:35	GW	X	6"	2	# Cont	Lab Only:							
1	S-074636-11213-CM-B-5 (20-21.5)	11/21/13	0915	S			1				X	X	X	X		
2	S-074636-11213-CM-B-5 (30-31.5)	11/21/13	0920	S			1				X	X	X	X		
3	~~S-074636-11213-CM-B-5 (40-41.5)~~	11/21/13	0940	S			1				X	X	X	X		
4	S-074636-11213-CM-B-6 (5-6.5)	11/21/13	1025	S			1				X	X	X	X		
5	S-074636-11213-CM-B-6 (20-21.5)	11/21/13	1035	S			1				X	X	X	X		
6	S-074636-11213-CM-B-7 (5-6.5)	11/21/13	1125	S			1				X	X	X	X		
7	S-074636-11213-CM-B-7 (20-21.5)	11/21/13	1135	S			1				X	X	X	X		
8	S-074636-11213-CM-B-8 (5-6.5)	11/21/13	1310	S			1				X	X	X	X		
9	S-074636-11213-CM-B-8 (20-21.5)	11/21/13	1320	S			1				X	X	X	X		
0	S-074636-11213-CM-B-9 (5-6.5)	11/21/13	1400	S			1				X	X	X	X		

* Container Type Codes

VA	Vial Amber	ES	Encore Sampler
VC	Vial Clear	TS	TerraCore Sampler
VP	Vial Pre-preserved	AC	Air Canister
GA	Glass Amber	TB	Tedlar Bag
GC	Glass Clear	ZB	Zip Lock Bag
PA	Plastic Amber	PC	Plastic Clear
PC	Plastic Clear		

Other

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz , 1Gal

** Preservative Type Codes

A. None	E. HCL	I. Ice
B. HNO_3	F. MeOH	J. MCAA
C. H_2SO_4	G. $Na_2S_2O_3$	K. ZnAc&NaOH
D. NaOH	H. $NaHSO_4$	L. Asbc Acid&NaOH

O.

^ Matrix Type Codes

GW	Ground Water	S	Soil/Sediment/Solid
WW	Waste Water	W	Wipe
DW	Drinking Water	A	Air
SW	Surface Water	O	Oil
OW	Ocean/Sea Water	T	Tissue
PL	Product-Liquid	U	Urine
PS	Product-Solid	B	Blood
SL	Sludge		

REMARKS

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	13.4 2 2 3

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1		CRA	11/22/13	1230	Shar Butler	T/S	11-22-13	1246
2					JJ Lard	Xenco	11-23-13	14:00
3								
4								

Lab Use Only	YES	NO	N/A
Non-Conformances found?		X	
Samples intact upon arrival?	X		
Received on Wet Ice?	X		
Labeled with proper preservatives?	X		
Received within holding time?	X		
Custody seals intact?			X
VOCs rec'd w/o headspace?	X		
Proper containers used?	X		
pH verified-acceptable, excl VOCs?	X		
Received on time to meet HTs?	X		

C.O.C. Serial #

 Revision Date: Nov 12, 2009

CHAIN OF CUSTODY RECORD

XENCO LABORATORIES

LAB W.O#: 474756

Field billable Hrs :

Company:	CRA	Phone:	512.506.8806
Address:	13091 Pond Springs Road, Ste. A-100	Fax:	512.506.8823
City:	Austin	St: TX	Zip: 79729
PM/Attn:	Chris Knight		
Project ID/ Location:	Soil Assessment & Delineation; 074636/02	PO#:	
Invoice To:	Chris Knight	Quote #:	

TAT Work Days = D Need results by: Standard Time:

Std (5-7D) Same Day 1D 2D 3D 4D 5D 7D 10D 14D Other

Circle One Event: Daily Weekly Monthly Quarterly Semi-Annual Annual N/A

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Depth	Total # of containers	Cont Type * VC	Pres Type** E.I	Example Volatiles by 8260	BTEX	TPH	Chloride	Percent Moisture						Hold Sample (CALL) on Highest TPH	Run PAH Only if
	MW-1	6/16/04	11:35	GW	X	6"	2	# Cont	Lab Only:												
1	S-074636-112/13-CRA-B-9 (20-21.5)	11/21/13	1410	S			1				X	X	X	X							
2	S-074636-112/13-CRA-B-9 (30-31.5)	11/21/13	1440	S			1				X	X	X	X							
3	S-074636-112/13-CRA-B-10 (5-6.5)	11/21/13	1525	S			1				X	X	X	X							
4	S-074636-112/13-CRA-B-10 (10-11.5)	11/21/13	1530	S			1				X	X	X	X							
5	S-074636-112/13-CRA-B-10 (20-21.5)	11/21/13	1535	S			1				X	X	X	X							
6	S-074636-112/13-CRA-B-10 (30-31.5)	11/21/13	1555	S			1				X	X	X	X							
7																					
8																					
9																					
10																					

* Container Type Codes

VA	Vial Amber	ES	Encore Sampler
VC	Vial Clear	TS	TerraCore Sampler
VP	Vial Pre-preserved	AC	Air Canister
GA	Glass Amber	TB	Tedlar Bag
GC	Glass Clear	ZB	Zip Lock Bag
PA	Plastic Amber	PC	Plastic Clear
PC	Plastic Clear		

Other _____

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz , 1Gal

** Preservative Type Codes

A. None	E. HCL	I. Ice
B. HNO_3	F. MeOH	J. MCAA
C. H_2SO_4	G. $Na_2S_2O_3$	K. ZnAc&NaOH
D. NaOH	H. $NaHSO_4$	L Asbc Acid&NaOH

O. _____

^ Matrix Type Codes

GW	Ground Water	S	Soil/Sediment/Solid
WW	Waste Water	W	Wipe
DW	Drinking Water	A	Air
SW	Surface Water	O	Oil
OW	Ocean/Sea Water	T	Tissue
PL	Product-Liquid	U	Urine
PS	Product-Solid	B	Blood
SL	Sludge		

REMARKS

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	13.4 2 3

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1	[signature]	CRA	11/22/13	1230	Steve Sutton	M/S	11-22-13	1246
2					Julian M	Xenco	11-23-13	14:00
3								
4								

Lab Use Only	YES	NO	N/A
Non-Conformances found?		X	
Samples intact upon arrival?	X		
Received on Wet Ice?	X		
Labeled with proper preservatives?	X		
Received within holding time?	X		
Custody seals intact?			X
VOCs rec'd w/o headspace?	X		
Proper containers used?	X		
pH verified-acceptable, excl VOCs?	X		
Received on time to meet HTs?	X		

C.O.C. Serial #

 Revision Date: Nov 12, 2009

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga-Rovers & Associates

Date/ Time Received: 11/23/2013 02:00:00 PM

Work Order #: 474756

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**No**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**N/A**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**N/A**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Candace James Date: 11/25/2013
Candace James

Checklist reviewed by: Kelsey Brooks Date: 11/25/2013
Kelsey Brooks

Analytical Report 475232

for

Conestoga-Rovers & Associates

Project Manager: Chris Knight

Soil Assessment & Delineation

074636-02

10-DEC-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-13-15-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

10-DEC-13

Project Manager: **Chris Knight**
Conestoga-Rovers & Associates
13091 Pond Springs Road
Suite A100

Austin, TX 78729

Reference: XENCO Report No(s): **475232**
Soil Assessment & Delineation
Project Address: New Mexico

Chris Knight:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 475232. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 475232 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS-074636-120213-CK-B11-5	S	12-02-13 14:50		475232-001
SS-074636-120213-CK-B11-10	S	12-02-13 14:55		475232-002
SS-074636-120213-CK-B11-20	S	12-02-13 15:00		475232-003
SS-074636-120213-CK-B12-5	S	12-02-13 16:15		475232-004
SS-074636-120213-CK-B12-10	S	12-02-13 16:20		475232-005
SS-074636-120213-CK-B12-20	S	12-02-13 16:25		475232-006
SS-074636-120313-CK-B13-5	S	12-03-13 09:10		475232-007
SS-074636-120313-CK-B13-10	S	12-03-13 09:15		475232-008
SS-074636-120313-CK-B13-20	S	12-03-13 09:20		475232-009
SS-074636-120313-CK-B13-30	S	12-03-13 09:40		475232-010
SS-074636-120313-CK-B14-5	S	12-03-13 10:25		475232-011
SS-074636-120313-CK-B14-10	S	12-03-13 10:30		475232-012
SS-074636-120313-CK-B14-20	S	12-03-13 10:35		475232-013
SS-074636-120313-CK-B14-30	S	12-03-13 10:50		475232-014
SS-074636-120313-CK-B15-5	S	12-03-13 11:15		475232-015
SS-074636-120313-CK-B15-10	S	12-03-13 11:20		475232-016
SS-074636-120313-CK-B15-20	S	12-03-13 11:30		475232-017
SS-074636-120313-CK-B15-30	S	12-03-13 11:40		475232-018

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120213-CK-B11-5**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-001	Date Collected:	12.02.13 14.50		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	8.66
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**158**	10.9	mg/kg	12.05.13 14.07		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	8.66
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.4	mg/kg	12.05.13 06.49	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.4	mg/kg	12.05.13 06.49	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.4	mg/kg	12.05.13 06.49	U	1
Total TPH	PHC635	ND	16.4	mg/kg	12.05.13 06.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	12.05.13 06.49	
o-Terphenyl	84-15-1	110	%	70-135	12.05.13 06.49	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120213-CK-B11-10**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-002	Date Collected:	12.02.13 14.55		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.26
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**53.2**	4.27	mg/kg	12.05.13 14.52		2

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	6.26
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.0	mg/kg	12.05.13 07.56	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.0	mg/kg	12.05.13 07.56	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.0	mg/kg	12.05.13 07.56	U	1
Total TPH	PHC635	ND	16.0	mg/kg	12.05.13 07.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	12.05.13 07.56	
o-Terphenyl	84-15-1	92	%	70-135	12.05.13 07.56	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120213-CK-B11-20**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-003	Date Collected:	12.02.13 15.00		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	7.25
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**180**	10.8	mg/kg	12.05.13 15.15		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	7.25
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.2	mg/kg	12.05.13 08.19	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.2	mg/kg	12.05.13 08.19	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.2	mg/kg	12.05.13 08.19	U	1
Total TPH	PHC635	ND	16.2	mg/kg	12.05.13 08.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	12.05.13 08.19	
o-Terphenyl	84-15-1	95	%	70-135	12.05.13 08.19	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120213-CK-B12-5**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-004	Date Collected:	12.02.13 16.15		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	16.3
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1420**	47.8	mg/kg	12.05.13 15.38		20

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	16.3
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	17.9	mg/kg	12.05.13 08.41	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	17.9	mg/kg	12.05.13 08.41	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	17.9	mg/kg	12.05.13 08.41	U	1
Total TPH	PHC635	ND	17.9	mg/kg	12.05.13 08.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	12.05.13 08.41	
o-Terphenyl	84-15-1	104	%	70-135	12.05.13 08.41	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120213-CK-B12-10**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-005	Date Collected:	12.02.13 16.20		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	18.7
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6220**	246	mg/kg	12.05.13 16.00		100

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	18.7
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	18.4	mg/kg	12.05.13 09.04	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	18.4	mg/kg	12.05.13 09.04	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	18.4	mg/kg	12.05.13 09.04	U	1
Total TPH	PHC635	ND	18.4	mg/kg	12.05.13 09.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	12.05.13 09.04	
o-Terphenyl	84-15-1	105	%	70-135	12.05.13 09.04	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120213-CK-B12-20**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-006	Date Collected:	12.02.13 16.25		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	16.2
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8630**	239	mg/kg	12.05.13 16.23		100

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	16.2
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	17.9	mg/kg	12.05.13 09.27	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	17.9	mg/kg	12.05.13 09.27	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	17.9	mg/kg	12.05.13 09.27	U	1
Total TPH	PHC635	ND	17.9	mg/kg	12.05.13 09.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	12.05.13 09.27	
o-Terphenyl	84-15-1	98	%	70-135	12.05.13 09.27	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120313-CK-B13-5**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-007	Date Collected:	12.03.13 09.10		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	25.2
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9980**	267	mg/kg	12.05.13 17.31		100

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	25.2
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	20.0	mg/kg	12.05.13 09.50	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	20.0	mg/kg	12.05.13 09.50	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	20.0	mg/kg	12.05.13 09.50	U	1
Total TPH	PHC635	ND	20.0	mg/kg	12.05.13 09.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	12.05.13 09.50	
o-Terphenyl	84-15-1	104	%	70-135	12.05.13 09.50	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120313-CK-B13-10**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-008	Date Collected:	12.03.13 09.15		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	18
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**530**	24.4	mg/kg	12.05.13 17.54		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	18
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	18.2	mg/kg	12.05.13 10.13	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	18.2	mg/kg	12.05.13 10.13	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	18.2	mg/kg	12.05.13 10.13	U	1
Total TPH	PHC635	ND	18.2	mg/kg	12.05.13 10.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	12.05.13 10.13	
o-Terphenyl	84-15-1	104	%	70-135	12.05.13 10.13	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120313-CK-B13-20**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-009	Date Collected:	12.03.13 09.20		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	12
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1350**	45.5	mg/kg	12.05.13 18.16		20

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	12
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	17.0	mg/kg	12.05.13 13.21	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	17.0	mg/kg	12.05.13 13.21	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	17.0	mg/kg	12.05.13 13.21	U	1
Total TPH	PHC635	ND	17.0	mg/kg	12.05.13 13.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	12.05.13 13.21	
o-Terphenyl	84-15-1	104	%	70-135	12.05.13 13.21	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120313-CK-B13-30**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-010	Date Collected:	12.03.13 09.40		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	9.33
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1980**	44.1	mg/kg	12.05.13 18.39		20

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	9.33
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.5	mg/kg	12.05.13 13.45	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.5	mg/kg	12.05.13 13.45	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.5	mg/kg	12.05.13 13.45	U	1
Total TPH	PHC635	ND	16.5	mg/kg	12.05.13 13.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	12.05.13 13.45	
o-Terphenyl	84-15-1	100	%	70-135	12.05.13 13.45	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120313-CK-B14-5**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-011	Date Collected:	12.03.13 10.25		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	16.7
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5210**	120	mg/kg	12.05.13 19.02		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	16.7
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	17.9	mg/kg	12.05.13 14.08	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	17.9	mg/kg	12.05.13 14.08	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	17.9	mg/kg	12.05.13 14.08	U	1
Total TPH	PHC635	ND	17.9	mg/kg	12.05.13 14.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	12.05.13 14.08	
o-Terphenyl	84-15-1	107	%	70-135	12.05.13 14.08	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120313-CK-B14-10**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-012	Date Collected:	12.03.13 10.30		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	7.71
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**819**	21.7	mg/kg	12.05.13 19.47		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	7.71
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.2	mg/kg	12.05.13 14.31	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.2	mg/kg	12.05.13 14.31	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.2	mg/kg	12.05.13 14.31	U	1
Total TPH	PHC635	ND	16.2	mg/kg	12.05.13 14.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	12.05.13 14.31	
o-Terphenyl	84-15-1	99	%	70-135	12.05.13 14.31	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120313-CK-B14-20**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-013	Date Collected:	12.03.13 10.35		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	4.93
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**222**	10.5	mg/kg	12.05.13 20.09		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	4.93
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	15.8	mg/kg	12.05.13 14.54	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	15.8	mg/kg	12.05.13 14.54	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.8	mg/kg	12.05.13 14.54	U	1
Total TPH	PHC635	ND	15.8	mg/kg	12.05.13 14.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	12.05.13 14.54	
o-Terphenyl	84-15-1	100	%	70-135	12.05.13 14.54	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120313-CK-B14-30**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-014	Date Collected:	12.03.13 10.50		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.57
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.95**	2.14	mg/kg	12.05.13 20.32		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	6.57
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.0	mg/kg	12.05.13 15.17	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.0	mg/kg	12.05.13 15.17	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.0	mg/kg	12.05.13 15.17	U	1
Total TPH	PHC635	ND	16.0	mg/kg	12.05.13 15.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.05.13 15.17	
o-Terphenyl	84-15-1	106	%	70-135	12.05.13 15.17	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120313-CK-B15-5**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-015	Date Collected:	12.03.13 11.15		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.15
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**695**	21.3	mg/kg	12.05.13 20.55		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	6.15
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.0	mg/kg	12.05.13 15.40	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.0	mg/kg	12.05.13 15.40	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.0	mg/kg	12.05.13 15.40	U	1
Total TPH	PHC635	ND	16.0	mg/kg	12.05.13 15.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	12.05.13 15.40	
o-Terphenyl	84-15-1	100	%	70-135	12.05.13 15.40	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120313-CK-B15-10**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-016	Date Collected:	12.03.13 11.20		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	2.62
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**71.6**	2.05	mg/kg	12.05.13 22.03		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	2.62
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	15.3	mg/kg	12.05.13 16.03	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	15.3	mg/kg	12.05.13 16.03	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.3	mg/kg	12.05.13 16.03	U	1
Total TPH	PHC635	ND	15.3	mg/kg	12.05.13 16.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	12.05.13 16.03	
o-Terphenyl	84-15-1	98	%	70-135	12.05.13 16.03	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120313-CK-B15-20**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-017	Date Collected:	12.03.13 11.30		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	7.74
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**59.9**	2.17	mg/kg	12.05.13 22.25		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	7.74
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.2	mg/kg	12.05.13 16.26	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.2	mg/kg	12.05.13 16.26	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.2	mg/kg	12.05.13 16.26	U	1
Total TPH	PHC635	ND	16.2	mg/kg	12.05.13 16.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	12.05.13 16.26	
o-Terphenyl	84-15-1	100	%	70-135	12.05.13 16.26	

Certificate of Analytical Results 475232

Conestoga-Rovers & Associates, Austin, TX

Soil Assessment & Delineation

Sample Id:	**SS-074636-120313-CK-B15-30**	Matrix:	Soil	Date Received:	12.03.13 16.20
Lab Sample Id:	475232-018	Date Collected:	12.03.13 11.40		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	AMB			% Moisture:	5.22
Analyst:	AMB	Date Prep:	12.05.13 09.30	Basis:	Dry Weight
Seq Number:	929338				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.3**	2.11	mg/kg	12.05.13 22.48		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	5.22
Analyst:	ARM	Date Prep:	12.04.13 15.00	Basis:	Dry Weight
Seq Number:	929186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	15.8	mg/kg	12.05.13 16.50	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	15.8	mg/kg	12.05.13 16.50	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.8	mg/kg	12.05.13 16.50	U	1
Total TPH	PHC635	ND	15.8	mg/kg	12.05.13 16.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	12.05.13 16.50	
o-Terphenyl	84-15-1	101	%	70-135	12.05.13 16.50	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Conestoga-Rovers & Associates

Soil Assessment & Delineation

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 929338 Matrix: Solid Date Prep: 12.05.13
MB Sample Id: 647910-1-BLK LCS Sample Id: 647910-1-BKS LCSD Sample Id: 647910-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<2.00	50.0	46.7	93	46.0	92	80-120	2	20	mg/kg	12.05.13 13:22	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 929338 Matrix: Soil Date Prep: 12.05.13
Parent Sample Id: 475232-001 MS Sample Id: 475232-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	158	274	429	99	80-120	mg/kg	12.05.13 14:30	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 929338 Matrix: Soil Date Prep: 12.05.13
Parent Sample Id: 475232-011 MS Sample Id: 475232-011 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	5210	3000	8390	106	80-120	mg/kg	12.05.13 19:24	

Analytical Method: **Percent Moisture**
Seq Number: 929070 Matrix: Solid
MB Sample Id: 929070-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	12.04.13 14:05	

Analytical Method: **Percent Moisture**
Seq Number: 929070 Matrix: Sludge
Parent Sample Id: 475228-001 MD Sample Id: 475228-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	40.5	37.9	7	20	%	12.04.13 14:05	

QC Summary 475232

Conestoga-Rovers & Associates

Soil Assessment & Delineation

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P

Seq Number: 929186 Matrix: Solid Date Prep: 12.04.13

MB Sample Id: 647960-1-BLK LCS Sample Id: 647960-1-BKS LCSD Sample Id: 647960-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	938	94	949	95	70-135	1	35	mg/kg	12.05.13 05:41	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	932	93	975	98	70-135	5	35	mg/kg	12.05.13 05:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	112		125		123		70-135	%	12.05.13 05:41
o-Terphenyl	112		118		123		70-135	%	12.05.13 05:41

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P

Seq Number: 929186 Matrix: Soil Date Prep: 12.04.13

Parent Sample Id: 475232-001 MS Sample Id: 475232-001 S MSD Sample Id: 475232-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<16.4	1090	1020	94	1060	97	70-135	4	35	mg/kg	12.05.13 07:11	
C12-C28 Diesel Range Hydrocarbons	<16.4	1090	1060	97	1010	93	70-135	5	35	mg/kg	12.05.13 07:11	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	110		98		70-135	%	12.05.13 07:11
o-Terphenyl	109		110		70-135	%	12.05.13 07:11

CHAIN OF CUSTODY RECORD

XENCO LABORATORIES

Page 1 of 2

LAB W.O#: 475232

Field billable Hrs :

Company:	CRA	Phone:	512.506.8806
Address:	13091 Pond Springs Road, Ste. A-100	Fax:	512.506.8823
City:	Austin	St: TX	Zip: 79729
PM/Attn:	Chris Knight		
Project ID/ Location:	Soil Assessment & Delineation; 074636/02	PO#:	
Invoice To:	Chris Knight	Quote #:	

TAT Work Days = D Need results by: STANDARD Time:

Std (5-7D) Same Day 1D 2D 3D 4D 5D 7D 10D 14D Other

Circle One Event: Daily Weekly Monthly Quartely Semi-Annual Annual N/A

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Depth	Total # of containers	Cont Type * VC	Pres Type** E. I	Example Volatiles by 8260	BTEX	TPH	Chloride	Percent Moisture						Hold Sample (CALL__) Run PAH on Highest TPH__ Only if
	MW-1	6/16/04	11:35	GW	X	6"	2	# Cont	Lab Only:											
1	SS-074636-120213-CK-B11-5	12/2/13	1450	S			1				X	X	X	X						
2	SS-074636-120213-CK-B11-10	12/2/13	1455	S			1				X	X	X	X						
3	SS-074636-120213-CK-B11-20	12/2/13	1500	S			1				X	X	X	X						
4	SS-074636-120213-CK-B12-5	12/2/13	1615	S			1				X	X	X	X						
5	SS-074636-120213-CK-B12-10	12/2/13	1620	S			1				X	X	X	X						
6	SS-074636-120213-CK-B12-20	12/2/13	1625	S			1				X	X	X	X						
7	SS-074636-120313-CK-B13-5	12/3/13	0910	S			1				X	X	X	X						
8	SS-074636-120313-CK-B13-10	12/3/13	0915	S			1				X	X	X	X						
9	SS-074636-120313-CK-B13-20	12/3/13	0920	S			1				X	X	X	X						
10	SS-074636-120313-CK-B13-30	12/3/13	0940	S			1				X	X	X	X						

* Container Type Codes

VA	Vial Amber	ES	Encore Sampler
VC	Vial Clear	TS	TerraCore Sampler
VP	Vial Pre-preserved	AC	Air Canister
GA	Glass Amber	TB	Tedlar Bag
GC	Glass Clear	ZB	Zip Lock Bag
PA	Plastic Amber	PC	Plastic Clear
PC	Plastic Clear		

Other

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz , 1Gal

** Preservative Type Codes

A. None	E. HCL	I. Ice
B. HNO_3	F. MeOH	J. MCAA
C. H_2SO_4	G. $Na_2S_2O_3$	K. ZnAc&NaOH
D. NaOH	H. $NaHSO_4$	L Asbc Acid&NaOH

O.

^ Matrix Type Codes

GW	Ground Water	S	Soil/Sediment/Solid
WW	Waste Water	W	Wipe
DW	Drinking Water	A	Air
SW	Surface Water	O	Oil
OW	Ocean/Sea Water	T	Tissue
PL	Product-Liquid	U	Urine
PS	Product-Solid	B	Blood
SL	Sludge		

REMARKS

EMAIL RESULTS TO BBOCKISCH@CRA WORLD.COM, CKANACK@CRA WORLD.COM CMATHEWS@CRA WORLD.COM

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL (NM) Other:	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	1 2 3 10.4

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1		CRA	12/3/13	1620		MS	12-3-13	16:30
2						Xenco	12-4-13	14:00
3								
4								

Lab Use Only	YES	NO	N/A
Non-Conformances found?		X	
Samples intact upon arrival?	X		
Received on Wet Ice?	X		
Labeled with proper preservatives?	X		
Received within holding time?	X		
Custody seals intact?			X
VOCs rec'd w/o headspace?	X		
Proper containers used?	X		
pH verified-acceptable, excl VOCs?	X		
Received on time to meet HTs?	X		

C.O.C. Serial #

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330

FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

 Revision Date: Nov 12, 2009

CHAIN OF CUSTODY RECORD

XENCO LABORATORIES

Page 1 of 2

LAB W.O#: 475232

Field billable Hrs :

Company:	CRA	Phone:	512.506.8806
Address:	13091 Pond Springs Road, Ste. A-100	Fax:	512.506.8823
City:	Austin	St: TX	Zip: 79729
PM/Attn:	Chris Knight		
Project ID/ Location:	Soil Assessment & Delineation; 074636/02	PO#:	
Invoice To:	Chris Knight	Quote #:	

TAT Work Days = D Need results by: STANDARD Time:

Std (5-7D) Same Day 1D 2D 3D 4D 5D 7D 10D 14D Other

Circle One Event: Daily Weekly Monthly Quartely Semi-Annual Annual N/A

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Depth	Total # of containers	Cont Type * VC	Pres Type** E.I	Example Volatiles by 8260	BTEX	TPH	Chloride	Percent Moisture	Hold Sample (CALL) Run PAH on Highest TPH Only if
	MW-1	6/16/04	11:35	GW	X	6"	2	# Cont	Lab Only:						
1	SS-074636-120313-CK-B14-5	12/3/13	1025	S			1				X	X	X	X	
2	SS-074636-120313-CK-B14-10	12/3/13	1030	S			1				X	X	X	X	
3	SS-074636-120313-CK-B14-20	12/3/13	1035	S			1				X	X	X	X	
4	SS-074636-120313-CK-B14-30	12/3/13	1050	S			1				X	X	X	X	
5	SS-074636-120313-CK-B15-5	12/3/13	1115	S			1				X	X	X	X	
6	SS-074636-120313-CK-B15-10	12/3/13	1120	S			1				X	X	X	X	
7	SS-074636-120313-CK-B15-20	12/3/13	1130	S			1				X	X	X	X	
8	SS-074636-120313-CK-B15-30	12/3/13	1140	S			1				X	X	X	X	
9															
10															

* Container Type Codes

VA	Vial Amber	ES	Encore Sampler
VC	Vial Clear	TS	TerraCore Sampler
VP	Vial Pre-preserved	AC	Air Canister
GA	Glass Amber	TB	Tedlar Bag
GC	Glass Clear	ZB	Zip Lock Bag
PA	Plastic Amber	PC	Plastic Clear
PC	Plastic Clear		

Other

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz , 1Gal

** Preservative Type Codes

A. None	E. HCL	I. Ice
B. HNO_3	F. MeOH	J. MCAA
C. H_2SO_4	G. $Na_2S_2O_3$	K. ZnAc&NaOH
D. NaOH	H. $NaHSO_4$	L. Asbc Acid&NaOH
O.		

^ Matrix Type Codes

GW	Ground Water	S	Soil/Sediment/Solid
WW	Waste Water	W	Wipe
DW	Drinking Water	A	Air
SW	Surface Water	O	Oil
OW	Ocean/Sea Water	T	Tissue
PL	Product-Liquid	U	Urine
PS	Product-Solid	B	Blood
SL	Sludge		

REMARKS

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	1 2 3 10.4

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1		CRA	12/3/13	1620	Perla R.	MS	12-3-13	16:20
2								
3								
4								

Lab Use Only	YES	NO	N/A
Non-Conformances found?		X	
Samples intact upon arrival?	X		
Received on Wet Ice?	X		
Labeled with proper preservatives?	X		
Received within holding time?	X		
Custody seals intact?			X
VOCs rec'd w/o headspace?	X		
Proper containers used?	X		
pH verified-acceptable, excl VOCs?	X		
Received on time to meet HTs?	X		

C.O.C. Serial #

 Revision Date: Nov 12, 2009

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga-Rovers & Associates

Date/ Time Received: 12/03/2013 04:20:00 PM

Work Order #: 475232

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	10.4
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**No**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**N/A**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**N/A**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Candace James Date: 12/04/2013
Candace James

Checklist reviewed by: Kelsey Brooks Date: 12/04/2013
Kelsey Brooks