District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

Initial Report ☒ Final Report

Name of Company : Chevron Environmental Management Co.	Contact Dan Snyder
Address 1400 Smith Road, Room 07063, Houston, TX 77002	Telephone No. (713) 372-1055
Facility Name State G SWD Well #1, Site A and Site B	Facility Type Salt Water Disposal

Surface Owner	Mineral Owner State	Lease No. B-10363-0

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I and J	9	14 South	33 East					Lea

Latitude 33° 07' 04" North **Longitude** 103° 36' 49" West

NATURE OF RELEASE

Type of Release Oil and Produced Water	Volume of Release 2 Bbls	Volume Recovered 0 Bbl
Source of Release Tank with holes	Date and Hour of Occurrence May 10, 2005	Date and Hour of Discovery May 10, 2005
Was Immediate Notice Given? ☐ Yes X No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes X No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Lease abandoned by Eclipse and Tamarack – Original State Land lease belongs to Gulf Oil – Notification by letter from State Land Office dated 5/10/2005. SEE ATTACHED CLOSURE REPORT BY CONESTOGA ROVERS & ASSOCIATES, INC. DESCRIBING CLEAN-UP ACTIONS TAKEN.

Describe Area Affected and Cleanup Action Taken.*

Road and caliche pads on locations. Testing and remediation completed on site.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: D Snyder	OIL CONSERVATION DIVISION	
Printed Name: Daniel Snyder	Approved by District Supervisor:	
Title: CEMC Project Manager	Approval Date:	Expiration Date:
E-mail Address: Daniel.Snyder@chevron.com	Conditions of Approval:	Attached ☐
Date: May 10, 2013 Phone: 713-449-6749 (m)		

* Attach Additional Sheets If Necessary

SITE CLOSURE REPORT
(RP No. 1791)

STATE G LEASE AND ADJACENT ABANDONED TANK BATTERY UNITS I & J, SECTION 9, TOWNSHIP 14 SOUTH, RANGE 33 EAST LEA COUNTY, NEW MEXICO

Prepared For:

Daniel Snyder
Chevron Environmental Management Company
1400 Smith St.
Room 07063
Houston, Texas 77002

Prepared by:
Conestoga-Rovers & Associates

2135 South Loop, 250 West
Midland, Texas
U.S.A. 79703

Office: (432) 686-0086
Fax: (432) 686-0186

web: http://www.CRAworld.com

MAY 2013
REF. NO. 042079 (6)

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1.0 INTRODUCTION

This Site Closure Report (the "Report") is intended to demonstrate the merits of closure for two closely associated produced petroleum fluids release sites: The State G Lease (Site A) and the Adjacent Abandoned Tank Battery (Site B). This Report describes soil assessment and remedial excavation activities performed in 2012. These activities were conducted by Conestoga-Rovers & Associates (CRA), on behalf of Chevron Environmental Management Company (CEMC). Soil borings were advanced at Site A to further define the vertical extent of chloride impacts to soils. Remedial excavation activities were performed at both sites to remove hydrocarbon impacted soils.

The State G Lease (Site A) is located along Highway 457, approximately 13.7 miles north of the intersection of Highway 457 with US Highway 82, in Lea County, New Mexico. Site A also is located in Unit I, Section 9, Township 14 South, Range 33 East, and at coordinates 33° 07' 04" north latitude and 103° 36' 49" west longitude (see Figure 1A). A standing "dry hole" marker on Site A locates the plugged and abandoned (P&A'd) State G #1 well. This marker identified the operator of the lease as Tamarack Petroleum Company, Inc. Another standing marker identifies the location of a second P&A'd well designated Eclipse Oil & Gas, Inc. State G SWD #1 - also on Site A. That salt water disposal (SWD) well was associated with a 500 barrel (bbl) storage tank, which had been dismantled and removed.

The Adjacent Abandoned Tank Battery (Site B) is located approximately 730 feet west of Site A, on the east-west trending oilfield lease road abutting both sites. (Note that this oilfield lease road deadends into Highway 457 approximately 0.1 mile east of Site A, and this road is the main access to both sites.) Site B is in Unit J, Section 9, Township 14 South, Range 33 East, and at coordinates 33° 07' 01" north latitude and 103° 36' 57" west longitude (see Figure 1B). Site B was an abandoned tank battery with three tanks of unknown capacity and two heater-treaters, all of which have been dismantled and removed. A Site Details Map is provided as Figure 2.

Sites A and B are located in relatively flat, sandy and dry topography with some gently-rolling hills. The general area is rural rangeland, but numerous oil and gas production facilities dot the landscape. Native range grasses and scattered mesquite hummocks are the predominate ground cover. No surface water is mapped within a one-mile radius of either Site A or Site B. And no water well or windmill is located within 1,000 feet of either site.

CRA identified Section 9, T14S, R33E —the section containing Sites A and B -- on OCD's "Pit Rule Web Mapping Portal". A single groundwater supply well was mapped in Section 9, at the virtual center of the section. This well was designated "L04391", and its

depth to groundwater (DTW) was listed as 110 feet[1]. It is notable that Unit J – the 40-acre lot containing Site B corners on the center of the section where the water well is located. Therefore, it is reasonable to deduce that the depth to groundwater at Site B and also at Site A is approximately 110 feet.

Site A is located on property owned by the State of New Mexico. The New Mexico State Land Office (SLO) is the agency charged with management of these State lands. Chevron currently is the operator on the subject property, having leasehold from the State of New Mexico titled "State Trust SWD-032 Business Lease". Chevron is reported to be the successor in interest to Gulf Oil Company on this lease. Historical records indicate the last active operator of the lease was Eclipse Oil and Gas, Inc. (Eclipse). Therefore, response to environmental impacts to the property arguably would be the responsibility of Eclipse. However, CRA understands Eclipse is now a defunct entity, through bankruptcy. Therefore, SLO would look to the current leaseholder, Chevron, to affect remediation of impacts to the property.

Site B is located on a private surface estate reported to be owned in fee by Mr. Norman Hahn.

[1] Previous reports submitted to OCD covering this project identified the depth to groundwater as being between 70 and 80 feet bgs. These depths were inferred from the New Mexico Office of the State Engineer and the Interstate Stream Commission document titled "New Mexico Water Resource Atlas", dated December 2002. Borings were advanced at Site A to a maximum depth of 85 feet bgs during these investigations; and no boring at Site A or Site B encountered Groundwater -- even at 85 feet.

2.0 REGULATORY FRAMEWORK

The New Mexico Oil Conservation Division (OCD) exercises regulatory jurisdiction over oil and gas production operations in New Mexico. OCD's jurisdiction extends to regulating assessment and remediation of spills and releases of produced fluids – *e.g.*, crude oil and brines. This project was conducted under the regulatory guidance of the OCD, which requires hydrocarbon-affected soils to be remediated such that the potential for future affects to groundwater or the environment are minimized. The OCD cleanup levels are determined on a site-by-site basis, and are based on ranking criteria outlined in the OCD publication titled "*Guidelines for Remediation of Spills, Leaks, and Releases*", dated August 13, 1993 (the "1993 Guidelines"). These ranking criteria guidelines are based on three site characteristics, consisting of 1) depth–to-groundwater (from base of affected soil), 2) well head protection radius distance (useable water sources), and 3) distance to surface water. The characteristics for a given site then define the Recommended Remediation Action Levels-Soils (RRALs) for specific contaminants of concern.

The table below illustrates the ranking criteria used by OCD. Entries in the tables reflect site-specific characteristics for the State G Lease sites:

RANKING CRITERIA AND SCORING

CHARACTERISTIC	*SELECTION*	*SCORE*
Depth to Groundwater [2]	>100 feet	0
Well head Protection Area	>1,000 feet	0
Distance to Surface Water	>1,000 feet	0

Total Score = 0

SOIL RECOMMENDED REMEDIATION ACTION LEVELS (RRALS)

CONTAMINANT OF CONCERN	*>19 SCORE*	*10-19 SCORE*	*0-9 SCORE*
Benzene (mg/kg)	10	10	10
Total BTEX (mg/kg)	50	50	50
Total TPH (mg/kg)	100	1,000	5,000

Based on the site characteristics and the 1993 Guidelines, Sites A and B have a ranking score of zero. Consequently, RRALs of 10 mg/kg for benzene, 50 mg/kg for total

[2] The depth to groundwater in a nearby water supply well was measured to be 110 feet bgs.

benzene, toluene, ethylbenzene, and total xylenes (BTEX), and 5,000 mg/kg for total petroleum hydrocarbons (TPH) were adopted as remediation targets at Sites A and B.

Note that the 1993 Guidelines specify no RRALs for chloride (Cl^-) concentrations.

3.0 HISTORY OF THE SITES

Chevron received a notification letter dated May 10, 2005 from SLO detailing a leaking storage tank at Site A. The SLO requested CEMC to conduct a Site inspection and apply appropriate corrective action measures. On May 23, 2005, CEMC submitted a New Mexico Oil Conservation Division form titled *Release Notification and Corrective Action Form C-141* to OCD's Hobbs District Office. The C-141 form reported an estimated two barrels of produced fluids released.

CRA and CEMC personnel conducted a Site visit on June 10, 2005 to evaluate surface impacts at Site A, noting surface staining at an above-ground storage tank (AST) onsite (see Figure 3A). During the Site visit, an abandoned tank battery with visible surface soil staining also was discovered west of Site A approximately 570 feet – at Site B (see Figure 3B). Operations at this adjacent abandoned tank battery were reported to be a component of the State G Lease at Site A. Although the Site B location was not addressed in the SLO correspondence referenced previously, CEMC voluntarily elected to evaluate surface impacts at the Site B location as part of the soil assessment activities planned for Site A.

3.1 AUGUST 24, 2005 SAMPLING EVENT

Soil assessment activities were performed on August 24, 2005. The following describes those soil assessment activities and summarizes findings:

Using air-rotary methods at Site A, White Drilling Company advanced three soil borings in the vicinity of the former tank battery where surface staining indicated a release (see Figure 3A). Soil boring SB-1 was advanced to 21 feet bgs; SB-2 was advanced to 26 feet bgs; and SB-3 was advanced to 31 feet bgs. A total of nine soil samples were collected at various depths from the three borings at Site A. The samples were screened by photoionization detector (PID) measurements of hydrocarbon vapor concentration.

In similar fashion and on even date, White Drilling Company also advanced two soil borings at Site B. The two borings were drilled where surface staining indicated a release of crude oil (see Figure 3B). Both borings SB-1 and SB-2 were advanced to 21-feet bgs. As at Site A, boring depths and locations were selected to maximize the opportunity to fully delineate the vertical and horizontal extent of hydrocarbon and chloride impacts. Seven soil samples, including a duplicate sample, were collected from varying depths within the two borings at Site B. The samples were screened by PID measurements of hydrocarbon vapor concentration. Also, a background sample of surface soil was collected in the vicinity of Site B.

The nine samples collected from Site A and the eight samples collected from Site B were submitted to Pace Analytical Services, Inc. laboratory (Pace), Saint Rose, Louisiana for analyses. These samples were analyzed for concentrations of the following [3]:

- Benzene, toluene, ethylbenzene and total xylenes (BTEX), by EPA Method 8021B.
- Total petroleum hydrocarbons (TPH), specified as DRO-diesel range organics (C10-C28) and GRO-gasoline range organics (C6-C10), by EPA Method 8015 Mod.
- Chlorides (Cl^-), by EPA Method 325.2.

Results from these laboratory analyses for Site A and Site B are presented in Tables I and II, respectively. Detections in bold print on the tables indicate concentrations above analytical quantification limits, and highlighted detections represent concentrations exceeding the OCD RRALs. OCD has not established recommended remediation action levels for chloride concentrations.

Results of the BTEX analyses are discussed in the following:

- No sample submitted to the laboratory from Site A or Site B exhibited concentration results for total BTEX or for any BTEX constituent exceeding RRALs. The following results were reported by the laboratory for Site A: SB-2 [1-2 ft. bgs] registered concentrations of toluene, total xylenes and total BTEX above analytical quantification limits (see Figures 5A and 6A). And the following results were reported for Site B: Both SB-1 [1-2 ft. bgs] and SB-2 [1-2 ft. bgs] registered concentrations of ethylbenzene, total xylenes and total BTEX above analytical quantification limits (see Figures 5B and 6B). No BTEX was detected at or below the 5-6 ft. bgs interval at either Site A or Site B – confirming the very limited BTEX contamination to be confined to the upper five feet of the soil profile at both locations.

TPH exceedances and chloride analyses are discussed in the following:

- Total TPH was detected above RRALs in three samples: One shallow sample SB-2 [1-2 ft. bgs]) at Site A; and two shallow samples (SB-1 [1-2ft. bgs] and SB-2 [1-2 ft. bgs]) at Site B. No total TPH RRALs exceedances were registered at or below the 5-6 ft. bgs interval at either Site A or Site B -- confirming TPH contamination to be confined to the upper five feet of the soil profile at both locations.
- Chloride concentrations were detected above analytical quantification limits in all nine samples collected from Site A. The chloride concentrations ranged from

[3] The background sample collected at Site B was analyzed only for chloride (Cl^-) concentration.

731 mg/kg in SB-3 [30-31 ft. bgs] to 7,470 mg/kg in SB-1 [1-2 ft. bgs]. Four of the seven boring samples, including the duplicate sample, collected from Site B exhibited concentrations above analytical quantification limits. Concentrations of chloride in the borings ranged from less than 250 mg/kg in SB-1 [20-21 ft. bgs] and SB-2 [20-21ft. bgs] to 1,310 mg/kg in SB-1 [5-6 ft. bgs]. The background sample concentration was reported by the laboratory to be less than 250 mg/kg.

In summary, the analytical results demonstrate regulated concentrations of hydrocarbons (TPH) were present only in the upper 5 feet of the profile at both Site A and Site B. However, elevated chloride concentrations were present at depth at Site A.

A report titled *Soil Assessment Report and Soil Remediation Workplan* was submitted to OCD and SLO in February 2006 detailing these assessment activities and results. That report proposed excavation activities at Sites A and B. OCD subsequently requested that separate C-141 forms be submitted for Sites A & B. The new C-141 forms were submitted in October 2007. OCD followed by issuing RP #1791 for the State G Lease. No separate "RP" number was ever provided by OCD for Site B.

3.2 JUNE 10, 2008 SAMPLING EVENT

In response to OCD evaluations and comment, a follow-up soil remediation workplan, dated July 3, 2007, was submitted to OCD and SLO. Activities proposed in the workplan included:

- Excavate and remove hydrocarbon-impacted soil exhibiting concentrations above the RRALs at Site A and Site B.

- As requested by OCD, advance an additional soil boring to 50 feet bgs at Site A to further evaluate the vertical extent of chloride impacts.

Following approval of the workplan by OCD, CRA mobilized to Site A on June 10, 2008 and installed the additional soil boring to a total depth of 50 feet bgs. It was advanced in immediate proximity to the SB-1 soil boring at Site A - which exhibited the highest chloride concentrations in previous, shallower investigations. Discrete soil samples were collected at 5-foot intervals for the first 40 feet bgs. Samples from 40 to 50 feet bgs were collected at continuous 2-foot intervals to more conclusively evaluate the vertical extent of chloride impacts at depth.

The 13 soil samples collected from the 50-feet deep boring were submitted to TestAmerica Laboratories, Houston, Texas, for determination of chloride concentrations,

by Method SW-846 9056. Chloride concentrations ranged downward in the profile from 3,550 mg/kg in the sample collected at the 5-foot depth to 1,250 mg/kg at the 50-foot depth - thus exhibiting a decreasing pattern with depth (see laboratory data report in Appendix C, which is incorrectly labeled as SB-4). As requested, these analytical results were reported to OCD via email – no report was generated incorporating findings from this 50-feet-deep boring at Site A. The following tabulates the chloride concentrations reported by the laboratory for the 13 collected soil samples:

50-FEET DEEP BORING – CHLORIDE DATA

SAMPLE DEPTH (FT. BGS)	*CHLORIDE CONCENTRATION (MG/KG)*
5	3,550
10	3,780
15	4,580
20	2,360
25	2,040
30	1,390
35	2,200
40	1,930
40 – 42	1,460
42 – 44	1,500
44 - 46	990
46 - 48	1,070
48 - 50	1,250

OCD responded with comments, requiring more borings at Site A to further delineate chloride impacts vertically. At Site A and Site B, OCD also stated clay or synthetic liners would be required on the floor of the hydrocarbon excavations prior to backfilling.

4.0 SITE CLOSURE ACTIVITIES IN 2012

On November 22, 2011, an updated report was submitted to OCD, titled *Updated Soil Assessment and Soil Remediation Workplan*. Additional soil borings were proposed at Site A to delineate the vertical extent of chloride impacts. Excavations at Sites A and B again were proposed to remove hydrocarbon-stained surface soils, with the addition of installing synthetic liners on the floor of the excavations prior to backfilling. The work plan was approved by OCD in December 2011.

Prior to commencement of field activities, a site-specific health and safety plan (HASP) was developed by CRA. During field activities, CRA and all subcontractors onsite conducted daily tailgate safety meetings, including discussions of hazards associated with the work tasks to be performed. CRA notified both OCD and the landowner, Norman Hahn, 48-hours prior to commencing field activities.

4.1 BORING INSTALLATION AND SOIL SAMPLING

Following approval of the work plan, four soil boring locations at Site A were marked (see Figure 3). The utilities locating service was notified, and all utilities present in the area of anticipated surface intrusion were identified and marked.

On February 24, 2012, a soil boring was advanced at each of the four marked locations at Site A (see Figure 3). Using air-rotary methods, White Drilling Company installed soil borings SB-4, SB-5, SB-6 and SB-7. Each of the four borings was within the former tank battery spill area. SB-4, SB-5, and SB-6 were advanced to 80 feet bgs, while soil boring SB-7 was advanced to 85 feet bgs. As with all previous borings at Sites A and B, groundwater was not encountered in any of these four deepest borings. By examining drill cuttings, CRA continuously recorded lithology data on a boring log for each location. Copies of the Well Record and Logs are in Appendix A [4], and copies of the Soil Boring Logs are located in Appendix B.

A total of 64 discrete soil samples were collected at 5-foot intervals in each of the four soil borings at Site A – 16 samples from each boring. Half of each sample was enclosed in a Zip-Loc® bag; and the other half was containerized in a labeled, laboratory-supplied sample jar. Each bagged sample was allowed sufficient time for any petroleum hydrocarbon contamination to evolve volatile organic compounds (VOCs). At that point a headspace vapor concentration reading was obtained for each

[4] The four (4) "Well Record & Log" report forms provided by White Drilling Company for SB-4, SB-5, SB-6 and SB-7 mistakenly designated the borings SB-2, SB-3, SB-4 and SB1a, respectively.

sample with a photo-ionization detector (PID). However, no PID reading exceeded zero for any of the 64 samples.

The jarred soil samples were placed immediately on ice in insulated coolers, chilling them to a temperature of approximately 4°C (40° F). The 64 samples were submitted to Xenco Laboratories, Inc. (Xenco), Odessa, Texas for analyses. Proper chain-of-custody documentation accompanied the samples. Xenco determined the chloride (Cl^-) concentration in each soil sample by EPA Method 300. Copies of the certified analytical reports, chain-of-custody documentation, and detailed case narratives describing holding times are attached in Appendix C.

After drilling and soil sampling activities were completed, the borings were permanently plugged with a bentonite/grout mixture to prevent subsurface impacts by surface runoff.

4.2 CHLORIDE (CL^-) ASSESSMENT AT SITE A

Results of chloride analyses for the 64 soil samples collected in the four soil borings at Site A are presented in Table I. The chloride concentration-by-depth trends for each of the soil borings are in Appendix D.

The following summarizes findings from these chloride contamination assessments:

- Chloride concentrations registered a marked decreasing trend with depth in SB-5, SB-6, and SB-7.
- Concentrations of chloride in SB-4 increased with depth in a narrow and low range, to a high of 414 mg/kg at the 70 to 75 feet interval. At the 75 to 80 feet interval, the concentration exhibits a decreasing trend. The overall pattern of chloride concentrations in SB-4 is very different from the pattern in the other three borings; and no readings in SB-4 approach the highest levels in the other three borings. The sum of chloride concentrations in SB-4 also was significantly less than in any of the other three borings. This suggests this boring was advanced at a point outside the major brine spill location. Therefore, possible threats to groundwater are minimal at this boring location.
- The deepest depth interval for which soil samples were analyzed was the 75 to 80 feet depth bgs. A soil sample was analyzed for the 75 to 80 feet interval in each of the four borings: SB-4, SB-5, SB-6 and SB-7. The average for the chloride concentrations in the four samples collected at the 75 to 80 feet depth was 231 mg/Kg. Considering that the depth to groundwater in this general area is 110 feet bgs – as indicated by the water supply well designated "L04391", which is

located in the same mapping unit (Unit "J") as Site B – a threat to groundwater from the brine spill at Site A is unlikely.

4.3 EXCAVATION OF HYDROCARBON-CONTAMINATED SOILS AT SITE A AND SITE B

As discussed previously, soil borings were installed at Site A and Site B on August 24, 2005. The analytical results from samples collected in these borings demonstrated that regulated concentrations of hydrocarbons (TPH) were present only in the upper 5 feet of the profile at both Site A and Site B; thus the vertical extent of the hydrocarbon-impacted soils was delineated to a depth of 5 feet or less.

Excavation activities at Sites A and B commenced July 9 and continued through July 18, 2012. Site excavation activities were performed by Entact, LLC (Entact), Friendswood, Texas, supervised by CRA. All excavated hydrocarbon-contaminated soil was placed in roll-off boxes. The horizontal extents of the two excavation sites are depicted in Figure 4.

Confirmation samples of soils were collected from the sidewalls and floors throughout the excavation process. These samples were containerized in labeled, laboratory-supplied jars. The jarred soil samples were placed immediately on ice in insulated coolers, chilling them to a temperature of approximately 4°C (40° F). The seven samples each from Sites A and B were submitted to Xenco Laboratories, Inc., Odessa, Texas for analyses. Proper chain-of-custody documentation accompanied the samples. For each soil sample Xenco determined the TPH, specified as DRO-diesel range organics (C10-C28) and GRO-gasoline range organics (C6-C10), by EPA Method 8015B Mod. Results were reported on a dry-weight basis. These data are tabulated on Table III. Copies of the certified analytical reports, chain-of-custody documentation, and detailed case narratives describing holding times are attached in Appendix C.

Approximately 52 cubic yards of hydrocarbon-contaminated soil had been excavated from Site A when competent rock was encountered at 2.5 to 3 feet bgs. At this juncture, the TPH concentration at the north floor of Site A (6,980 mg/kg) was above the OCD RRALs of 5,000 mg/kg. Similarly, competent rock was encountered at 2.5 to 3 feet bgs following excavation of 20 cubic yards of hydrocarbon-contaminated soil from Site B. Also, oilfield piping limited horizontal excavation at Site B. On July 17, 2012, Mr. Geoffrey Leking with OCD was consulted concerning the limitations on further excavation encountered at Sites A and B. He advised that further excavation was not necessary at either site.

Following this determination by OCD, synthetic liners were installed on the floor of the excavation at Site A and Site B. Clean topsoil was obtained from a neighboring landowner and trucked to the sites. Atop the synthetic liners, the two pits were backfilled with clean topsoil in compacted lifts to grade. Approximately 65 cubic yards and 35 cubic yards were used to backfill Site A and Site B, respectively. Final grading of construction-related surface areas was performed to mitigate wind erosion and facilitate re-vegetation.

The roll-off boxes containing the excavated hydrocarbon-contaminated soils were trucked to Sundance Service (Sundance), Eunice, New Mexico as a non-DOT-regulated material. The contaminated soils were disposed as RCRA-exempt waste at Sundance – a Chevron-approved waste facility. The bills of lading for the trucking are attached as Appendix E.

5.0 SUMMARY OF FINDINGS

The following findings of these investigations support a decision on the part of the Oil Conservation Division to grant closure for Sites A and B at the State G Lease:

- The depth to groundwater in the general area of Sites A and B is 110 feet bgs – as indicated by the water supply well designated "L04391", which is located in the same mapping unit (Unit "J") as Site B. Site A is located in an adjacent mapping unit (Unit "I")
- Four soil borings, designated SB-4, SB-5, SB-6 and SB-7, were installed within the spill area at Site A. SB-4, SB-5, and SB-6 were advanced to 80 feet bgs, while soil boring SB-7 was advanced to 85 feet bgs. As with all previous borings at Sites A and B, groundwater was not encountered in any of these four borings. Chloride concentrations registered a marked decreasing trend with depth in SB-5, SB-6, and SB-7. Concentrations of chloride in SB-4 increased with depth in a narrow and low range, to a high of 414 mg/kg at the 70 to 75 feet interval. At the 75 to 80 feet interval the concentration exhibits a decreasing trend. The overall pattern of chloride concentrations in SB-4 is very different from the pattern in the other three borings; and no readings in SB-4 approach the highest levels in the other three borings. The sum of chloride concentrations in SB-4 also was significantly less than in any of the other three borings. This suggests this boring was advanced at a point outside the major brine spill location. Therefore, possible threats to groundwater are minimal at this boring location.
- A soil sample was analyzed at the 75 to 80 feet interval at Site A in each of the four borings SB-4, SB-5, SB-6 and SB-7. The average for the chloride concentrations in these samples was 231 mg/Kg [5]. The water table potentiometric surface in this general area is approximately 30 feet deeper (at 110 feet bgs) than the depth from which these samples were collected. This suggests that a threat to groundwater from the brine spill at Site A is vanishingly small. This conclusion is supported further by OCD's proposed 2011 remediation guidelines which would call for a chloride cleanup target of 250 mg/Kg in this circumstance.

- Soil borings were installed at Site A and Site B in 2005 to explore the horizontal and vertical extent of petroleum hydrocarbon impacts to soils. It was demonstrated in these investigations that regulated concentrations of petroleum hydrocarbons (TPH) were present only in the upper 5 feet of the profile at both Site A and Site B.

[5] It is reasonable to average these data points, because the boring locations form a closely-spaced quadrangle spanning the brine-impacted area. This roughly spaced quadrangle is approximately 42 feet by 67 feet (42′ X 67′) on its sides (see Figure 3). This close spacing among sampling points supports averaging analytical results at a specific depth.

- Commencing in July, 2012, hydrocarbon-contaminated soil was excavated from Site A until competent rock was encountered at 2.5 to 3 feet bgs. At this juncture, the TPH concentration at the north floor of Site A (6,980 mg/kg) was above the OCD RRALs of 5,000 mg/kg. Similarly, competent rock was encountered at 2.5 to 3 feet bgs during excavation of hydrocarbon-contaminated soil at Site B. Also, oilfield piping limited horizontal excavation at Site B. On July 17, 2012, Mr. Geoffrey Leking with OCD was consulted concerning the limitations on further excavation encountered at Sites A and B. He advised that further excavation was not necessary at either site. Thus, OCD concluded at that point in time that adequate removal of hydrocarbon-impacted soils at the two sites had been affected.
- Following this determination by OCD, synthetic liners were installed on the floor of the excavations at Site A and Site B. Clean topsoil was obtained from a neighboring landowner and trucked to the sites. The two pits were backfilled, atop the synthetic liners, with clean topsoil installed in compacted lifts to grade. This completed remediation of hydrocarbon-impacted soils at Site A and Site B, thus completing OCD-approved closure activities at Site A and Site B.

Based on these findings, CRA recommends closure of the State G Sites A and B.

All of Which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES

Hoy Bryson, DF, PG
Senior Environmental Scientist

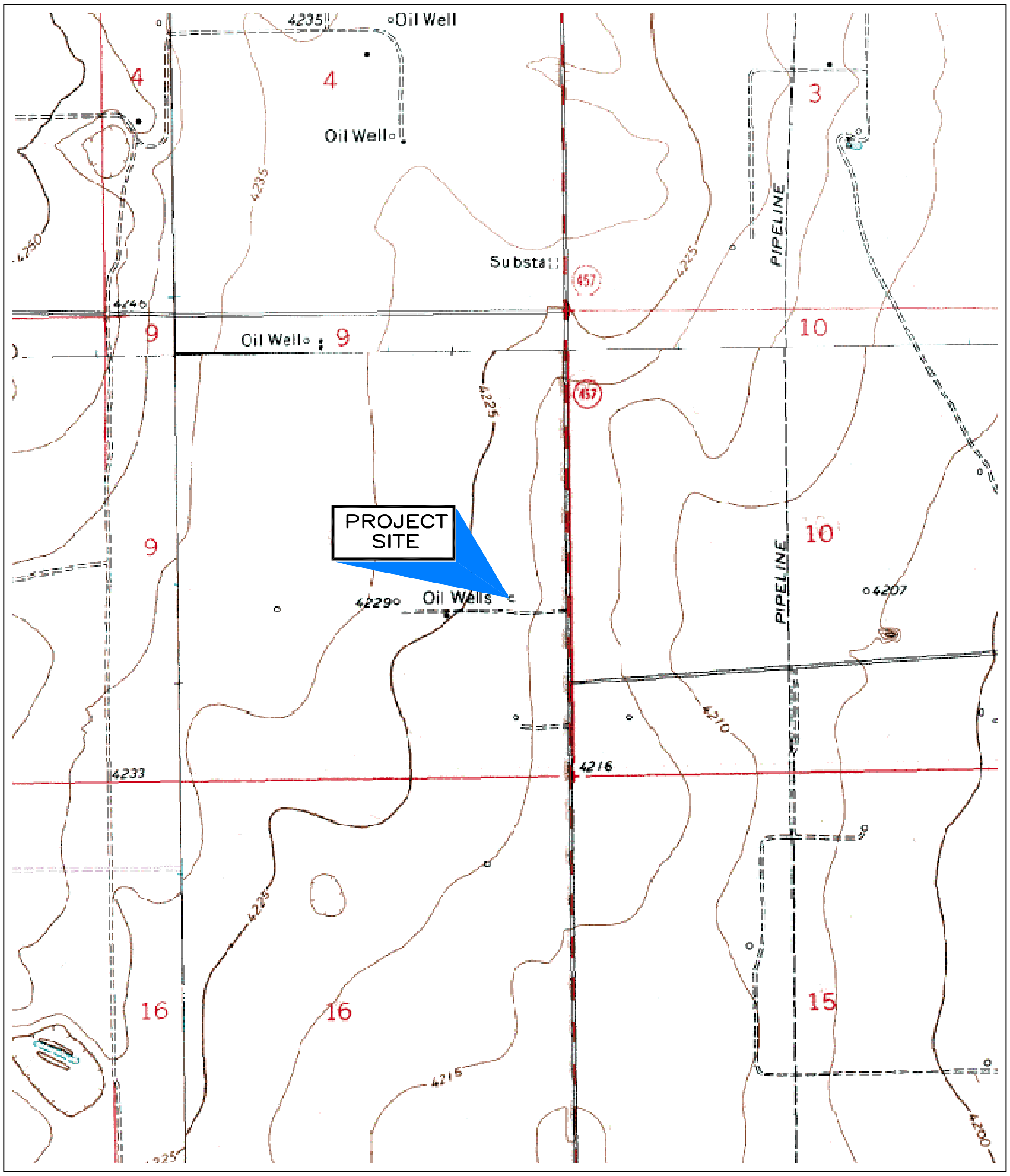
Thomas C. Larson
Midland Operations Manager

FIGURES

FORT RANCH QUADRANGLE
NEW MEXICO

LAT= 33° 07' 04" N
LONG= 103° 36' 49" W

PHOTOREVISED 1973



MAP SERIES 1:24000

0 1/2 1 2

(Miles)

0 2000 4000 6000 8000

(Feet)

CONTOUR INTERVAL 5 FEET

NORTH

042079 SLR 011206

CRA

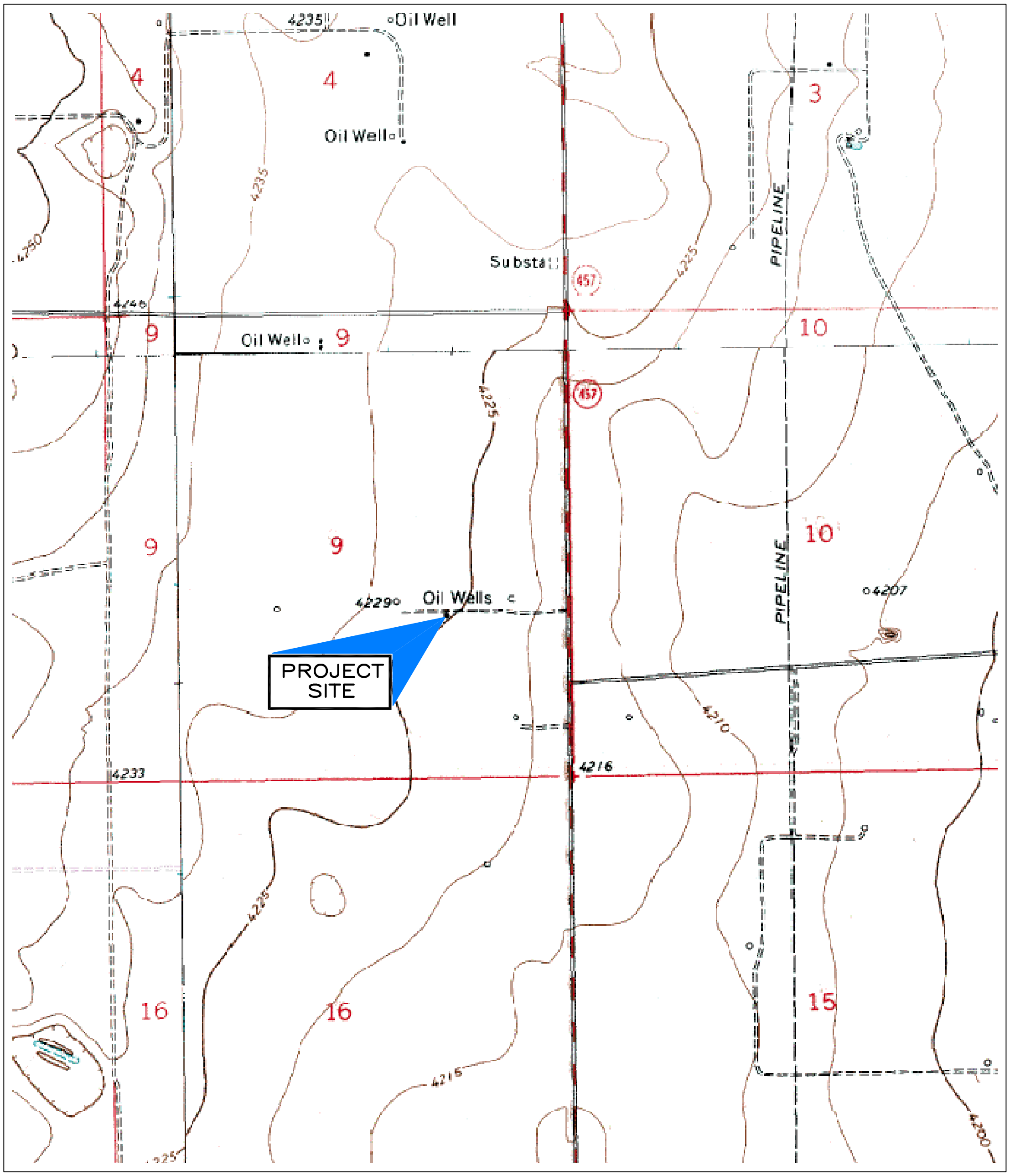
SITE A LOCATION MAP — STATE "G"
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY STATE G LEASE & ADJACENT ABANDONED TANK BATTERY LEA COUNTY, NEW MEXICO

JOB No. 042079
FIGURE 1A

FORT RANCH QUADRANGLE
NEW MEXICO

LAT= 33° 07' 01" N
LONG= 103° 36' 57" W

PHOTOREVISED 1973



MAP SERIES 1:24000

0 1/2 1 2
(Miles)

0 2000 4000 6000 8000
(Feet)

CONTOUR INTERVAL 5 FEET

NORTH

042079 SLR 011206

CRA

SITE B LOCATION MAP — ADJACENT ABANDONED TANK BATTERY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
STATE G LEASE & ADJACENT ABANDONED TANK BATTERY
LEA COUNTY, NEW MEXICO

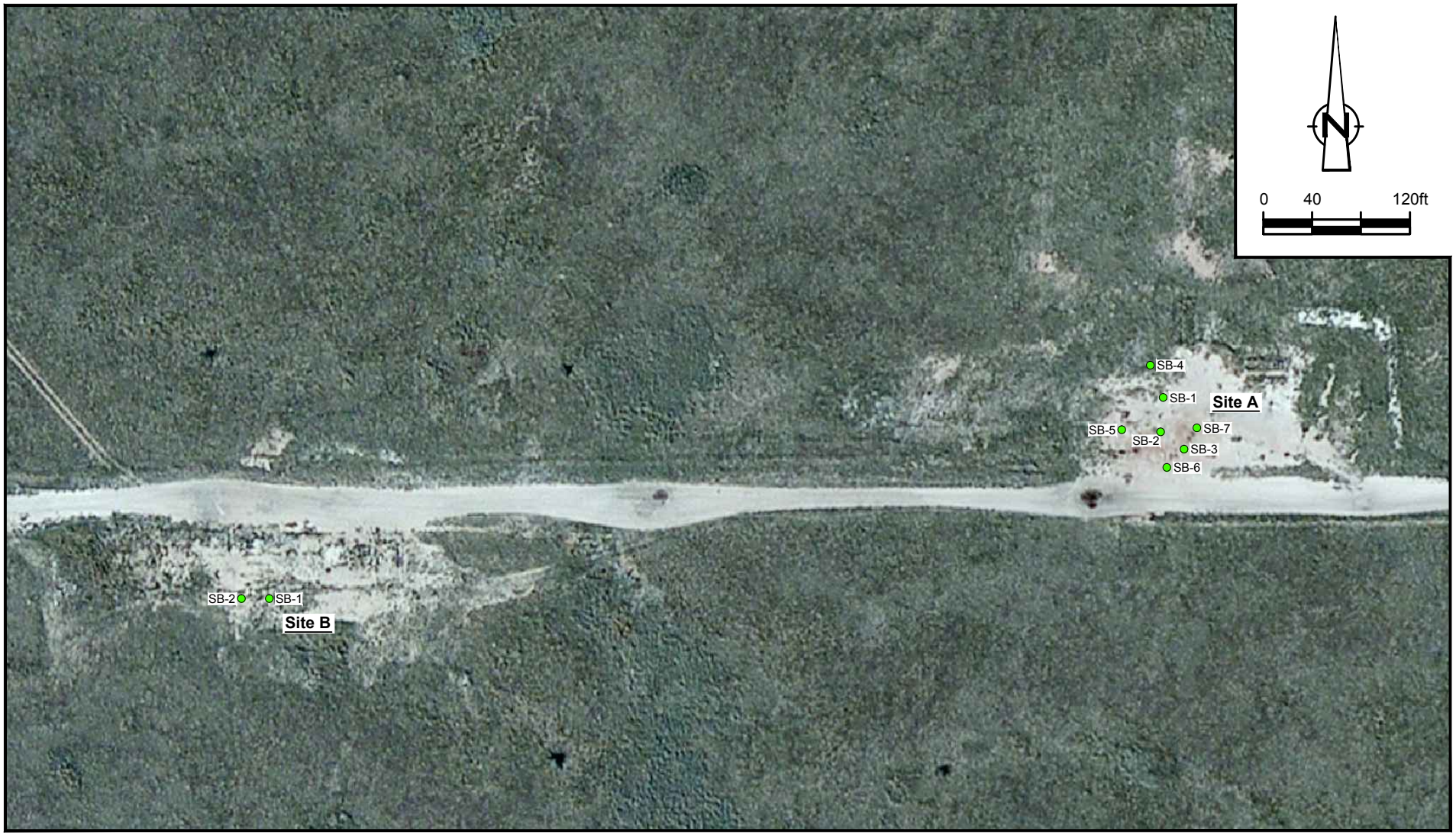
JOB No.
042079

FIGURE
1B

figure 2

SITE DETAILS MAP
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
STATE G LEASE & ADJACENT ABANDONED TANK BATTERY
Lea County, New Mexico

042079-00(006)GN-DL001 DEC 15/2012

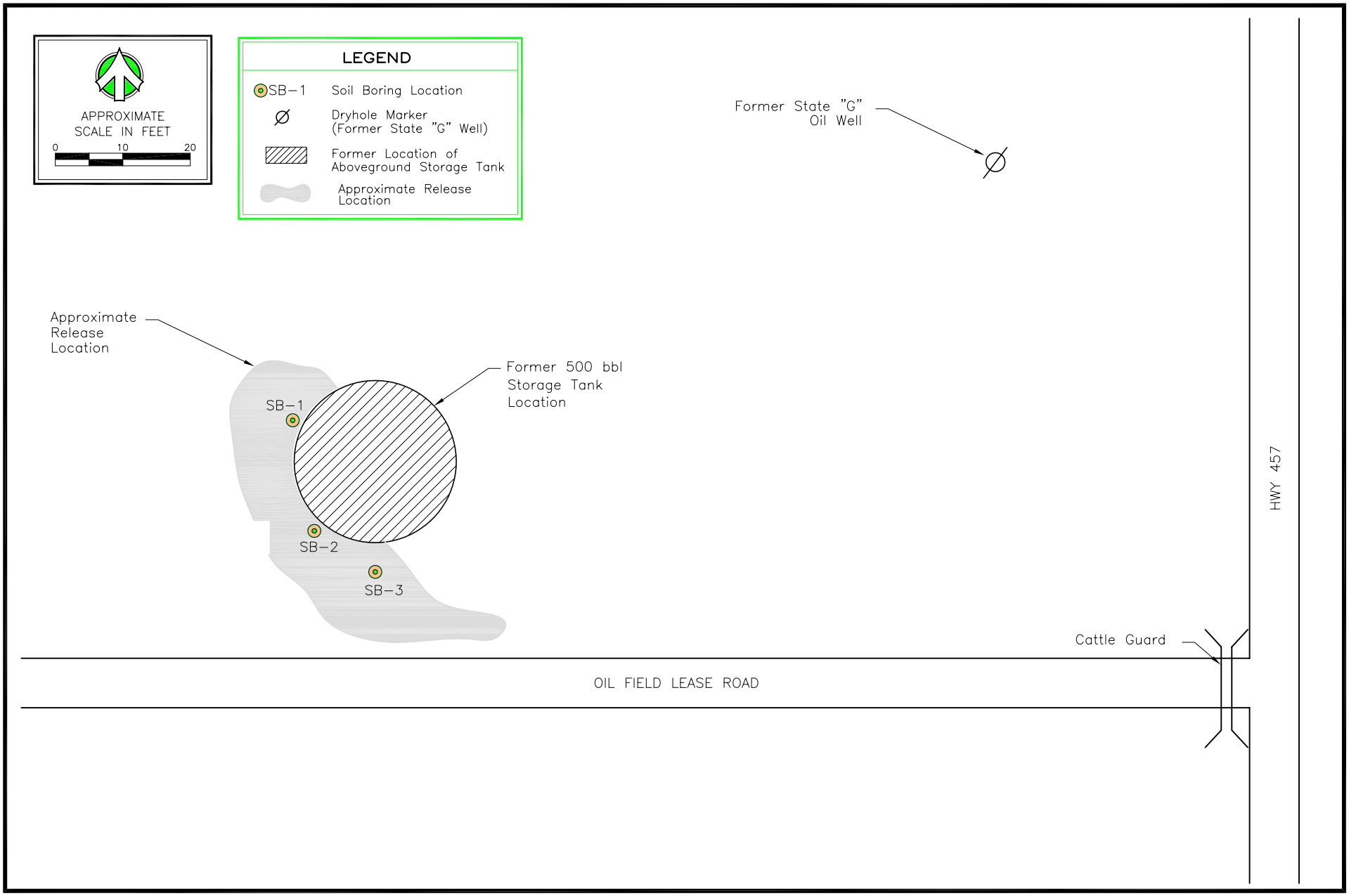


LEGEND
Soil Boring Location

figure 3

SOIL BORING LOCATIONS
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
STATE G LEASE & ADJACENT ABANDONED TANK BATTERY
Lea County, New Mexico

042079-00(006)GN-DL001 DEC 15/2012



042079 SLR 011206

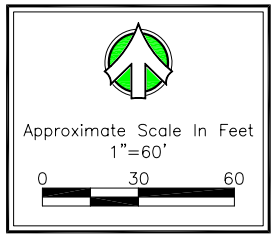
CRA

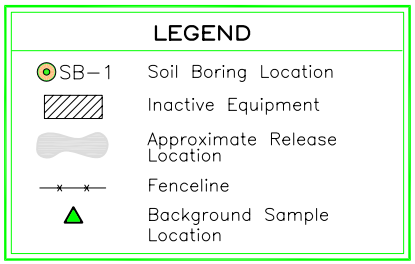
SITE DETAILS – SITE A

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
STATE G LEASE & ADJACENT ABANDONED TANK BATTERY LEA COUNTY, NEW MEXICO

JOB No.
042079

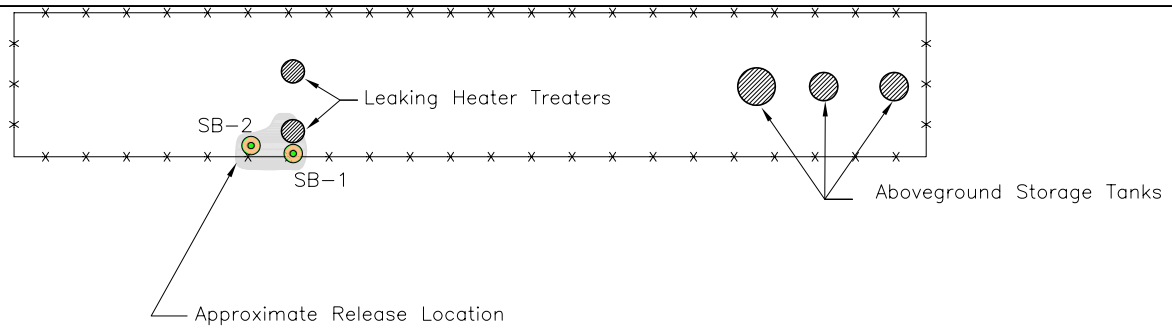
FIGURE
3A





Site A 570' east of Site B east fence.

OIL FIELD LEASE ROAD



042079 SLR 011206

SITE DETAILS – SITE B

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
STATE G LEASE & ADJACENT ABANDONED TANK BATTERY LEA COUNTY, NEW MEXICO

JOB No. 042079

FIGURE 3B

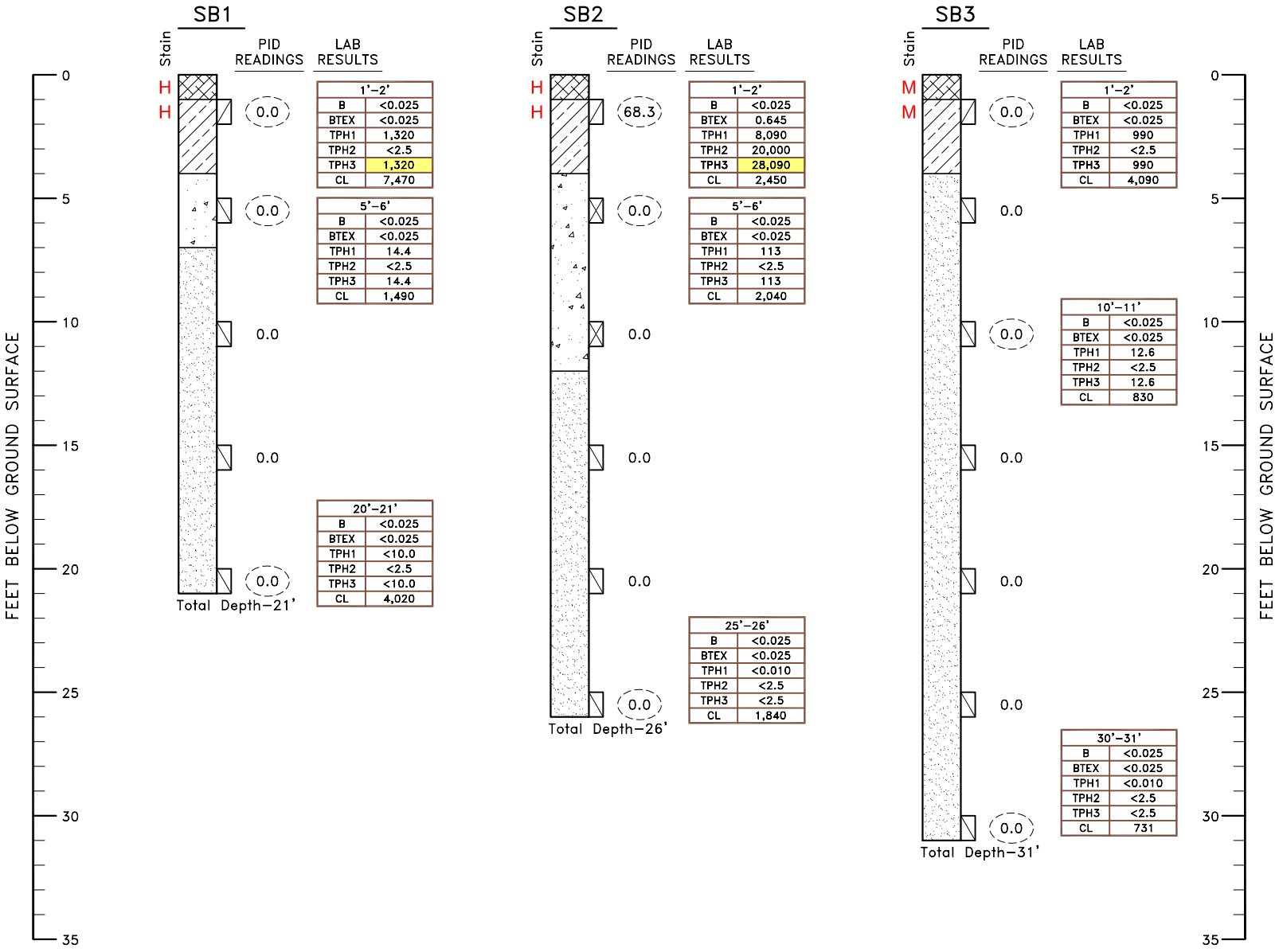
LEGEND

Excavation Limits

figure 4

EXCAVATION LOCATIONS
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
STATE G LEASE & ADJACENT ABANDONED TANK BATTERY
Lea County, New Mexico

042079-00(006)GN-DL001 DEC 15/2012

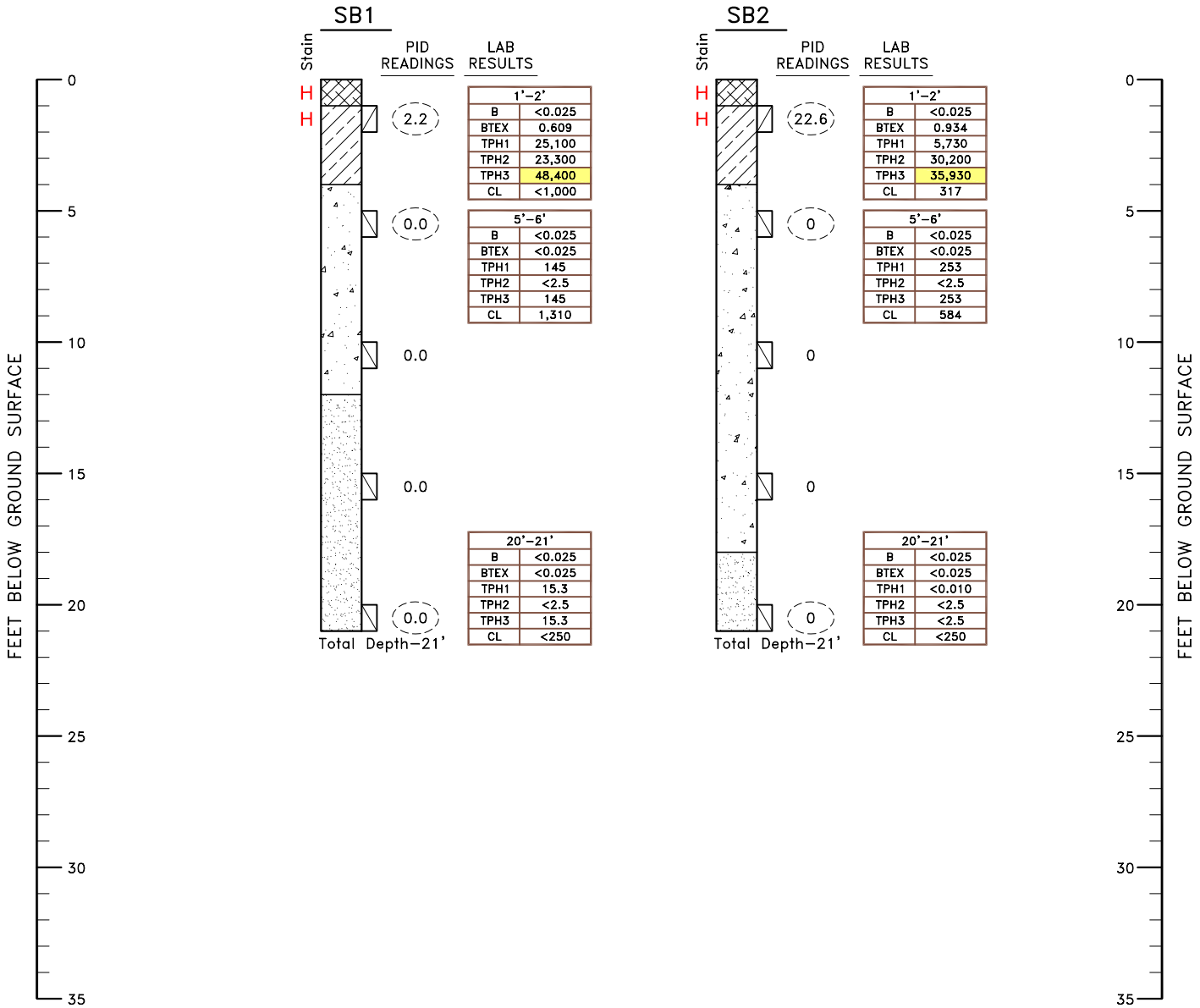


SITE A – LOGS AND DETAILS FOR SOIL BORINGS SB1, SB2, AND SB3

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
STATE G LEASE & ADJACENT ABANDONED TANK BATTERY LEA COUNTY, NEW MEXICO

JOB No. 042079

FIGURE 5A



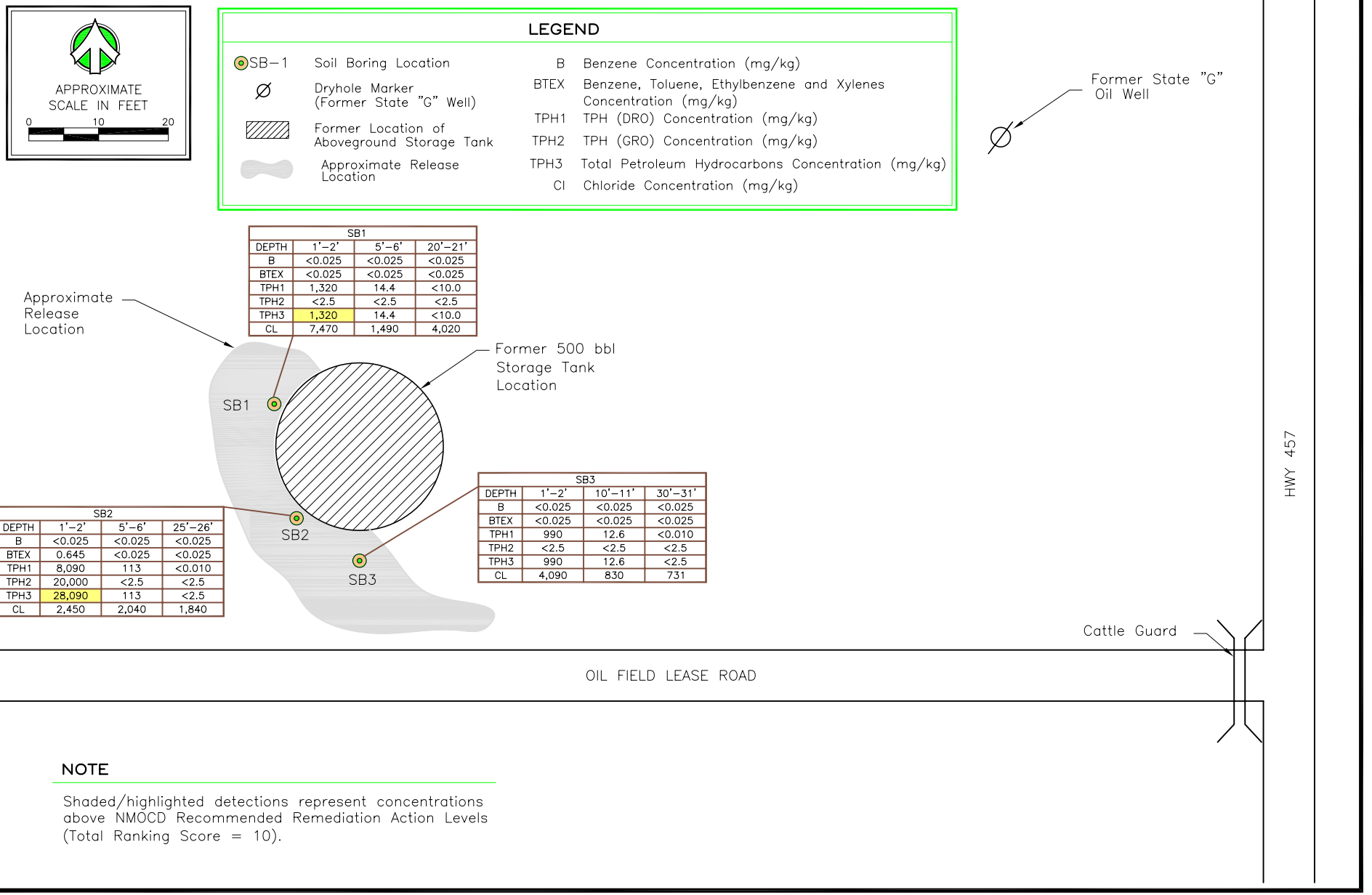
042079 SB Logs SLR 011606

SITE B – LOGS AND DETAILS FOR SOIL BORINGS SB1 & SB2

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
STATE G LEASE & ADJACENT ABANDONED TANK BATTERY LEA COUNTY, NEW MEXICO

JOB No. 042079

FIGURE 5B



NOTE

Shaded/highlighted detections represent concentrations above NMOCD Recommended Remediation Action Levels (Total Ranking Score = 10).

042079 SLR 011206

SITE A SOIL BORING ANALYTICAL RESULTS – AUGUST 2005

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
STATE G LEASE & ADJACENT ABANDONED TANK BATTERY LEA COUNTY, NEW MEXICO

JOB No. 042079

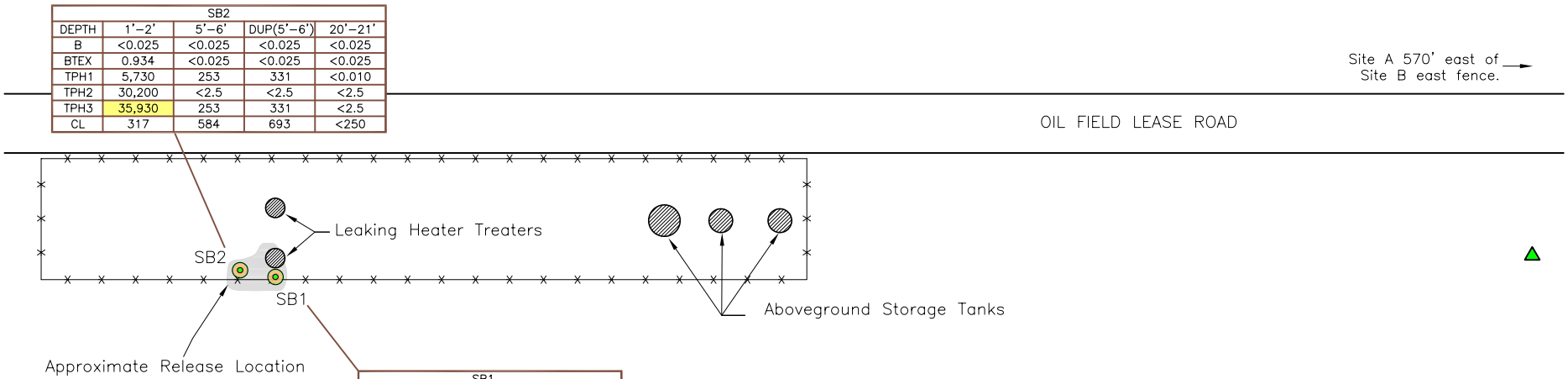
FIGURE 6A

Approximate Scale In Feet
1"=60'
0 30 60

LEGEND

SB−1	Soil Boring Location	B	Benzene Concentration (mg/kg)
Ø	Dryhole Marker (Former State "G" Well)	BTEX	Benzene, Toluene, Ethylbenzene and Xylenes Concentration (mg/kg)
	Former Location of Aboveground Storage Tank	TPH1	TPH (DRO) Concentration (mg/kg)
	Approximate Release Location	TPH2	TPH (GRO) Concentration (mg/kg)
		TPH3	Total Petroleum Hydrocarbons Concentration (mg/kg)
		Cl	Chloride Concentration (mg/kg)

SB2				
DEPTH	1'−2'	5'−6'	DUP(5'−6')	20'−21'
B	<0.025	<0.025	<0.025	<0.025
BTEX	0.934	<0.025	<0.025	<0.025
TPH1	5,730	253	331	<0.010
TPH2	30,200	<2.5	<2.5	<2.5
TPH3	35,930	253	331	<2.5
CL	317	584	693	<250



SB1			
DEPTH	1'−2'	5'−6'	20'−21'
B	<0.025	<0.025	<0.025
BTEX	0.609	<0.025	<0.025
TPH1	25,100	145	15.3
TPH2	23,300	<2.5	<2.5
TPH3	48,400	145	15.3
CL	<1,000	1,310	<250

NOTE

Shaded/highlighted detections represent concentrations above NMOCD Recommended Remediation Action Levels (Total Ranking Score = 10).

042079 SLR 011206

CRA

SITE A SOIL BORING ANALYTICAL RESULTS — AUGUST 2005

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
STATE G LEASE & ADJACENT ABANDONED TANK BATTERY LEA COUNTY, NEW MEXICO

JOB No. 042079

FIGURE 6B

TABLES

TABLE I

SOIL ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
SITE A
NEW MEXICO STATE "G" TANK BATTERY
LEA COUNTY, NEW MEXICO

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) DRO (mg/kg)	TPH (8015B Modified) GRO (mg/kg)	TPH (8015B Modified) (GRO/DRO) (mg/kg)	Chlorides (mg/kg)
NMOCD Recommended Remediation Action Levels (Total Ranking Score = 0)											
			10 mg/kg	*--- mg/kg*	*--- mg/kg*	*--- mg/kg*	*50 mg/kg*	*--- mg/kg*	*--- mg/kg*	*5,000 mg/kg*	*--- mg/kg*
SB-1	(1-2)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	**1,320**	<2.5	**1,320**	**7,470**
	(5-6)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	**14.4**	<2.5	**14.4**	**1,490**
	(20-21)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<2.5	<10.0	**4,020**
SB-2	(1-2)	8/24/05	<0.025	**0.204**	<0.025	**0.441**	**0.645**	**8,090**	**20,000**	**28,090**	**2,450**
	(5-6)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	**113**	<2.5	**113**	**2,040**
	(25-26)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	<0.010	<2.5	<2.5	**1,840**
SB-3	(1-2)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	**990**	<2.5	**990**	**4,090**
	(10-11)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	**12.6**	<2.5	**12.6**	**830**
	(30-31)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	<0.010	<2.5	<2.5	**731**
SB-4	(0-5)	2/24/12	----	----	----	----	----	----	----	----	**18.9**
	(5-10)	2/24/12	----	----	----	----	----	----	----	----	**24.3**
	(10-15)	2/24/12	----	----	----	----	----	----	----	----	**70.6**
	(15-20)	2/24/12	----	----	----	----	----	----	----	----	**96.2**
	(20-25)	2/24/12	----	----	----	----	----	----	----	----	**158**
	(25-30)	2/24/12	----	----	----	----	----	----	----	----	**204**
	(30-35)	2/24/12	----	----	----	----	----	----	----	----	**314**
	(35-40)	2/24/12	----	----	----	----	----	----	----	----	**333**
	(40-45)	2/24/12	----	----	----	----	----	----	----	----	**357**
	(45-50)	2/24/12	----	----	----	----	----	----	----	----	**326**
	(50-55)	2/24/12	----	----	----	----	----	----	----	----	**370**
	(55-60)	2/24/12	----	----	----	----	----	----	----	----	**279**
	(60-65)	2/24/12	----	----	----	----	----	----	----	----	**291**
	(65-70)	2/24/12	----	----	----	----	----	----	----	----	**371**
SB-4	(70-75)	2/24/12	----	----	----	----	----	----	----	----	**414**
	(75-80)	2/24/12	----	----	----	----	----	----	----	----	**395**
SB-5	(0-5)	2/24/12	----	----	----	----	----	----	----	----	**365**
	(5-10)	2/24/12	----	----	----	----	----	----	----	----	**189**
	(10-15)	2/24/12	----	----	----	----	----	----	----	----	**437**
	(15-20)	2/24/12	----	----	----	----	----	----	----	----	**868**
	(20-25)	2/24/12	----	----	----	----	----	----	----	----	**990**
	(25-30)	2/24/12	----	----	----	----	----	----	----	----	**627**
	(30-35)	2/24/12	----	----	----	----	----	----	----	----	**414**
	(35-40)	2/24/12	----	----	----	----	----	----	----	----	**411**
	(40-45)	2/24/12	----	----	----	----	----	----	----	----	**373**
	(45-50)	2/24/12	----	----	----	----	----	----	----	----	**380**
	(50-55)	2/24/12	----	----	----	----	----	----	----	----	**641**
	(55-60)	2/24/12	----	----	----	----	----	----	----	----	**500**
	(60-65)	2/24/12	----	----	----	----	----	----	----	----	**463**
	(65-70)	2/24/12	----	----	----	----	----	----	----	----	**398**
	(70-75)	2/24/12	----	----	----	----	----	----	----	----	**428**
	(75-80)	2/24/12	----	----	----	----	----	----	----	----	**365**
SB-6	(0-5)	2/24/12	----	----	----	----	----	----	----	----	**1,110**
	(5-10)	2/24/12	----	----	----	----	----	----	----	----	**1,530**
	(10-15)	2/24/12	----	----	----	----	----	----	----	----	**1,170**
	(15-20)	2/24/12	----	----	----	----	----	----	----	----	**965**
	(20-25)	2/24/12	----	----	----	----	----	----	----	----	**1,040**
	(25-30)	2/24/12	----	----	----	----	----	----	----	----	**857**
	(30-35)	2/24/12	----	----	----	----	----	----	----	----	**886**
	(35-40)	2/24/12	----	----	----	----	----	----	----	----	**934**
	(40-45)	2/24/12	----	----	----	----	----	----	----	----	**716**
SB-6 (Cont.)	(45-50)	2/24/12	----	----	----	----	----	----	----	----	**297**
	(50-55)	2/24/12	----	----	----	----	----	----	----	----	**209**
	(55-60)	2/24/12	----	----	----	----	----	----	----	----	**10.2**

TABLE I

SOIL ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
SITE A
NEW MEXICO STATE "G" TANK BATTERY
LEA COUNTY, NEW MEXICO

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) DRO (mg/kg)	TPH (8015B Modified) GRO (mg/kg)	TPH (8015B Modified) (GRO/DRO) (mg/kg)	Chlorides (mg/kg)
NMOCD Recommended Remediation Action Levels (Total Ranking Score = 0)											
			10 mg/kg	*--- mg/kg*	*--- mg/kg*	*--- mg/kg*	*50 mg/kg*	*--- mg/kg*	*--- mg/kg*	*5,000 mg/kg*	*--- mg/kg*
	(60-65)	2/24/12	----	----	----	----	----	----	----	----	**97**
	(65-70)	2/24/12	----	----	----	----	----	----	----	----	**31**
	(70-75)	2/24/12	----	----	----	----	----	----	----	----	**18.2**
	(75-80)	2/24/12	----	----	----	----	----	----	----	----	**18.1**
SB-7	(0-5)	2/24/12	----	----	----	----	----	----	----	----	**432**
	(5-10)	2/24/12	----	----	----	----	----	----	----	----	**832**
	(10-15)	2/24/12	----	----	----	----	----	----	----	----	**1,650**
	(15-20)	2/24/12	----	----	----	----	----	----	----	----	**1,500**
	(20-25)	2/24/12	----	----	----	----	----	----	----	----	**1,460**
	(25-30)	2/24/12	----	----	----	----	----	----	----	----	**1,080**
	(30-35)	2/24/12	----	----	----	----	----	----	----	----	**980**
	(35-40)	2/24/12	----	----	----	----	----	----	----	----	**972**
	(40-45)	2/24/12	----	----	----	----	----	----	----	----	**1,000**
	(45-50)	2/24/12	----	----	----	----	----	----	----	----	**975**
	(50-55)	2/24/12	----	----	----	----	----	----	----	----	**1,310**
	(55-60)	2/24/12	----	----	----	----	----	----	----	----	**1,190**
	(60-65)	2/24/12	----	----	----	----	----	----	----	----	**1,040**
	(65-70)	2/24/12	----	----	----	----	----	----	----	----	**348**
	(70-75)	2/24/12	----	----	----	----	----	----	----	----	**164**
	(75-80)	2/24/12	----	----	----	----	----	----	----	----	**154**

Notes:

1. BTEX analyses by EPA Method 8021B
2. TPH analyzed by EPA Method 8015B Mod
3. Chlorides analyzed by EPA Method 325.2
4. Bold concentrations above lab reporting limits
5. Highlighted cells indicated concentrations above RRALs

TABLE II

SOIL ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMMENT COMPANY
SITE B
ADJACENT ABANDONED TANK BATTERY
LEA COUNTY, NEW MEXICO

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)*			*Chlorides (mg/kg)*
								DRO (mg/kg)	*GRO (mg/kg)*	*(GRO/DRO) (mg/kg)*	
NMOCD Recommended Remediation Action Levels (Total Ranking Score = 0)											
			10 mg/kg	**--- mg/kg**	**--- mg/kg**	**--- mg/kg**	**50 mg/kg**	**--- mg/kg**	**--- mg/kg**	**5000 mg/kg**	**--- mg/kg**
SB1	(1-2)	8/24/05	<0.025	<0.025	**0.193**	**0.416**	**0.609**	**25,100**	**23,300**	**48,400**	<1000
	(5-6)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	**145**	<2.5	**145**	**1,310**
	(20-21)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	**15.3**	<2.5	**15.3**	<250
SB2	(1-2)	8/24/05	<0.025	<0.025	**0.141**	**0.793**	**0.934**	**5,730**	**30,200**	**35,930**	**317**
	(5-6)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	**253**	<2.5	**253**	**584**
Duplicate	(5-6)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	**331**	<2.5	**331**	**693**
	(20-21)	8/24/05	<0.025	<0.025	<0.025	<0.025	<0.025	<0.010	<2.5	<2.5	<250
Background		8/24/05	NS	NS	NS	NS	NS	NS	NS	NS	<250

Notes:

1. BTEX analyses by EPA Method 8021B.
2. TPH analyzed by EPA Method 8015B Mod.
3. Chlorides analyzed by EPA Method 325.2
4. Bold concentrations above lab reporting limits.
5. Highlighted cells indicated concentrations above RRALs
6. NS - Not sampled

TABLE III

SOIL ANALYTICAL SUMMARY
CEMC EXCAVATION SITE A AND B
NEW MEXICO STATE G TANK BATTERY
LEA COUNTY, NEW MEXICO

Sample ID	*Date*	*Depth (feet)*	*Chlorides (mg/kg)*	*TPH (8015B Modified)*			*Percent Moisture (%)*
				DRO (mg/kg)	*GRO (mg/kg)*	*(GRO/DRO) (mg/kg)*	
Site A - NW Wall	7/10/2012	0-2.5	**1,210**	**941**	<17.0	**941**	**11.9**
Site A - NE Wall	7/10/2012	0-2.5	**377**	**925**	<16.3	**925**	**8.15**
Site A - SW Wall	7/11/2012	0-2.5	**685**	**1410**	<83.3	**1410**	**10.3**
Site A - SW Wall	7/13/2012	0-2.5	**2,820**	**548**	<15.9	**548**	**5.95**
Site A - SE Wall	7/11/2012	0-2.5	**1,190**	**272**	<18.5	**272**	**19.2**
Site A - N Floor	7/11/2012	0-2.5	**1,470**	**6980**	<97.5	**6980**	**23.2**
Site A - S Floor	7/11/2012	0-2.5	**794**	**598**	<17.4	**598**	**14**
Site B - NW Wall	7/11/2012	0-2.5	**78.1**	**809**	<16.7	**809**	**10.1**
Site B - NE Wall	7/11/2012	0-2.5	**53.2**	**1710**	<82.7	**1710**	**9.77**
Site B - NE Wall	7/13/2012	0-2.7	**40**	**1020**	<16.0	**1020**	**6.22**
Site B - SW Wall	7/11/2012	0-2.5	**293**	**2940**	**18.5**	**2958.5**	**7.83**
Site B - SW Wall	7/13/2012	0-2.6	**430**	**1060**	**19.5**	**1060**	**6.14**
Site B - SE Wall	7/11/2012	0-2.5	**106**	**820**	<17.1	**820**	**12.5**
Site B - Floor	7/11/2012	0-2.5	**111**	**580**	**25.4**	**605.4**	**12.3**

Notes:

1. TPH analyzed by EPA Method 8015B Mod.
2. Bold concentrations above lab reporting limits.
3. Highlighted cells indicate concentrations above RRALs.

APPENDICES

APPENDIX A

RECEIVED
MAY 19 2012
Midland

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

POD NUMBER (WELL NUMBER)	OSE FILE NUMBER(S)
SB-4	
WELL OWNER NAME(S)	PHONE (OPTIONAL)
Chevron Environmental Management Co.	
WELL OWNER MAILING ADDRESS	CITY / STATE / ZIP
1400 Smith St., HDU 140/1900-1A	Houston / TX / 77002

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	33	7	1.90	N
LONGITUDE	103	36	48.70	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS: State G

2. OPTIONAL

(2.5 ACRE)	(10 ACRE)	(40 ACRE)	(160 ACRE)	SECTION	TOWNSHIP	RANGE
¼	¼	¼	¼	9	14 ☐ NORTH ☑ SOUTH	33 ☑ EAST ☐ WEST

SUBDIVISION NAME	LOT NUMBER	BLOCK NUMBER	UNIT/TRACT
			I & J

HYDROGRAPHIC SURVEY	MAP NUMBER	TRACT NUMBER

3. DRILLING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1456	John W. White	White Drilling Company, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
02/24/12	02/24/12		80.0	Dry

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): Dry

DRILLING FLUID: ☑ AIR ☐ MUD ☐ ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)

4. WATER BEARING STRATA

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	YIELD (GPM)

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA	TOTAL ESTIMATED WELL YIELD (GPM)

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 1 OF 2

5. SEAL AND PUMP

TYPE OF PUMP: ☐ SUBMERSIBLE ☐ JET ☐ NO PUMP – WELL NOT EQUIPPED
☐ TURBINE ☐ CYLINDER ☐ OTHER – SPECIFY:

ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
	80.0	0.0	6.0	Bentonite Pellets	23 sacks	Hand Mix

6. GEOLOGIC LOG OF WELL

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?
0.0	16.0	16.0	Caliche.	☐ YES ☑ NO
16.0	78.0	62.0	Light brown sand.	☐ YES ☑ NO
78.0	80.0	2.0	Light brown sand w/gravel.	☐ YES ☑ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO

ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL

7. TEST & ADDITIONAL INFO

WELL TEST

METHOD: ☐ BAILER ☐ PUMP ☐ AIR LIFT ☐ OTHER – SPECIFY:

TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

ADDITIONAL STATEMENTS OR EXPLANATIONS:

8. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

SIGNATURE OF DRILLER

4/20/2012
DATE

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 2 OF 2

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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1. GENERAL AND WELL LOCATION

POD NUMBER (WELL NUMBER)	OSE FILE NUMBER(S)
SB-3	
WELL OWNER NAME(S)	**PHONE (OPTIONAL)**
Chevron Environmental Management Co.	
WELL OWNER MAILING ADDRESS	**CITY / STATE / ZIP**
1400 Smith St., HDU 140/1900-1A	Houston / TX / 77002

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	33	7	1.90	N
	LONGITUDE	103	36	48.70	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS: State G

2. OPTIONAL

(2.5 ACRE)	(10 ACRE)	(40 ACRE)	(160 ACRE)	SECTION	TOWNSHIP	RANGE
¼	¼	¼	¼	9	14 ☐ NORTH ☑ SOUTH	33 ☑ EAST ☐ WEST

SUBDIVISION NAME	LOT NUMBER	BLOCK NUMBER	UNIT/TRACT
			I & J

HYDROGRAPHIC SURVEY	MAP NUMBER	TRACT NUMBER

3. DRILLING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1456	John W. White	White Drilling Company, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
02/24/12	02/24/12		80.0	Dry

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): Dry

DRILLING FLUID: ☑ AIR ☐ MUD ☐ ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)

4. WATER BEARING STRATA

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	YIELD (GPM)

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA	TOTAL ESTIMATED WELL YIELD (GPM)

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 1 OF 2

5. SEAL AND PUMP

TYPE OF PUMP: ☐ SUBMERSIBLE ☐ JET ☐ NO PUMP – WELL NOT EQUIPPED
☐ TURBINE ☐ CYLINDER ☐ OTHER – SPECIFY:

ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
	80.0	0.0	6.0	Bentonite Pellets	23 sacks	Hand Mix

6. GEOLOGIC LOG OF WELL

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?
0.0	16.0	16.0	Caliche.	☐ YES ☑ NO
16.0	78.0	62.0	Light brown sand.	☐ YES ☑ NO
78.0	80.0	2.0	Light brown sand w/gravel.	☐ YES ☑ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO

ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL

7. TEST & ADDITIONAL INFO

WELL TEST — METHOD: ☐ BAILER ☐ PUMP ☐ AIR LIFT ☐ OTHER – SPECIFY:

TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

ADDITIONAL STATEMENTS OR EXPLANATIONS:

8. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

SIGNATURE OF DRILLER — DATE: 4/20/2012

FOR OSE INTERNAL USE — WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 2 OF 2

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

POD NUMBER (WELL NUMBER)	OSE FILE NUMBER(S)
SB-2	
WELL OWNER NAME(S)	**PHONE (OPTIONAL)**
Chevron Environmental Management Co.	
WELL OWNER MAILING ADDRESS	**CITY / STATE / ZIP**
1400 Smith St., HDU 140/1900-1A	Houston / TX / 77002

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	33	7	1.90	N
	LONGITUDE	103	36	48.70	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS

State G

2. OPTIONAL

(2.5 ACRE)	(10 ACRE)	(40 ACRE)	(160 ACRE)	SECTION	TOWNSHIP	RANGE
¼	¼	¼	¼	9	14 ☐ NORTH ☑ SOUTH	33 ☑ EAST ☐ WEST

SUBDIVISION NAME	LOT NUMBER	BLOCK NUMBER	UNIT/TRACT
			I & J

HYDROGRAPHIC SURVEY	MAP NUMBER	TRACT NUMBER

3. DRILLING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1456	John W. White	White Drilling Company, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
02/24/12	02/24/12		80.0	Dry

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): Dry

DRILLING FLUID: ☑ AIR ☐ MUD ☐ ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)

4. WATER BEARING STRATA

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	YIELD (GPM)

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA	TOTAL ESTIMATED WELL YIELD (GPM)

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 1 OF 2

5. SEAL AND PUMP

TYPE OF PUMP: ☐ SUBMERSIBLE ☐ JET ☐ NO PUMP – WELL NOT EQUIPPED ☐ TURBINE ☐ CYLINDER ☐ OTHER – SPECIFY:

ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
	80.0	0.0	6.0	Bentonite Pellets	23 sacks	Hand Mix

6. GEOLOGIC LOG OF WELL

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?
0.0	16.0	16.0	Caliche.	☐ YES ☑ NO
16.0	78.0	62.0	Light brown sand.	☐ YES ☑ NO
78.0	80.0	2.0	Light brown sand w/gravel.	☐ YES ☑ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO

ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL

7. TEST & ADDITIONAL INFO

WELL TEST

METHOD: ☐ BAILER ☐ PUMP ☐ AIR LIFT ☐ OTHER – SPECIFY:

TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

ADDITIONAL STATEMENTS OR EXPLANATIONS:

8. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

SIGNATURE OF DRILLER

4/20/2012

DATE

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 2 OF 2

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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1. GENERAL AND WELL LOCATION

POD NUMBER (WELL NUMBER)	OSE FILE NUMBER(S)
SB-1a	
WELL OWNER NAME(S)	**PHONE (OPTIONAL)**
Chevron Environmental Management Co.	
WELL OWNER MAILING ADDRESS	**CITY / STATE / ZIP**
1400 Smith St., HDU 140/1900-1A	Houston / TX / 77002

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	33	7	1.90	N
	LONGITUDE	103	36	48.70	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS

State G

2. OPTIONAL

(2.5 ACRE)	(10 ACRE)	(40 ACRE)	(160 ACRE)	SECTION	TOWNSHIP	RANGE
¼	¼	¼	¼	9	14 ☐ NORTH ☑ SOUTH	33 ☑ EAST ☐ WEST

SUBDIVISION NAME	LOT NUMBER	BLOCK NUMBER	UNIT/TRACT
			I & J

HYDROGRAPHIC SURVEY	MAP NUMBER	TRACT NUMBER

3. DRILLING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1456	John W. White	White Drilling Company, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
02/24/12	02/24/12		85.0	Dry

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): Dry

DRILLING FLUID: ☑ AIR ☐ MUD ☐ ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)

4. WATER BEARING STRATA

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	YIELD (GPM)

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA	TOTAL ESTIMATED WELL YIELD (GPM)

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 1 OF 2

5. SEAL AND PUMP

TYPE OF PUMP: ☐ SUBMERSIBLE ☐ JET ☐ NO PUMP – WELL NOT EQUIPPED ☐ TURBINE ☐ CYLINDER ☐ OTHER – SPECIFY:

ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
	85.0	0.0	6.0	Bentonite Pellets	25 sacks	Hand Mix

6. GEOLOGIC LOG OF WELL

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?
0.0	16.0	16.0	Caliche.	☐ YES ☑ NO
16.0	78.0	62.0	Light brown sand.	☐ YES ☑ NO
78.0	85.0	7.0	Light brown sand w/gravel.	☐ YES ☑ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO

ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL

7. TEST & ADDITIONAL INFO

WELL TEST: METHOD: ☐ BAILER ☐ PUMP ☐ AIR LIFT ☐ OTHER – SPECIFY:

TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

ADDITIONAL STATEMENTS OR EXPLANATIONS:

8. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE-DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

SIGNATURE OF DRILLER

4/20/2012
DATE

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 2 OF 2

APPENDIX B

SOIL BORING LOG

Project: 42079

Client: CEMC

No. SB-4

File No.: 42079
Date: 2/24/2012
Drilling Co.: White Drilling
Supervisor: Bo Atkins
Type Rig: Air Rotary
Logged by: Desiree Crenshaw

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 9:50 am Finish Time: 10:00 am
					18.9	0		5			Caliche
					24.3	0		10			
					70.6	0		15			
					96.2	0		20			Light brown sand
					158	0		25			
					204	0		30			
					314	0		35			
					333	0		40			

☒ Sampling Interval

Stratification is Inferred And May Not be Exact.
Soil Classification Based on Visual-Manual Procedure

Water First Noted

Analyzed Sample

SOIL BORING LOG

Project: 42079

Client: CEMC

No. SB-5

File No.: 42079
Date: 2/24/2012
Drilling Co.: White Drilling
Supervisor: Bo Atkins
Type Rig: Air Rotary
Logged by: Desiree Crenshaw

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 10:20 am Finish Time: 10:38 am
					365	0					Caliche
					189	0		5			
					437	0		10			
					868	0		15			Light brown sand
					990	0		20			
					627	0		25			
					414	0		30			
					411	0		35			
								40			

Sampling Interval

Stratification is Inferred And May Not be Exact.
Soil Classification Based on Visual-Manual Procedure

Water First Noted

Analyzed Sample

SOIL BORING LOG

Project: 42079

Client: cemc

No. SB-6

File No.: 42079
Date: 2/24/2012
Drilling Co.: White Drilling
Supervisor: Bo Atkins
Type Rig: Air Rotary
Logged by: Desiree Crenshaw

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 10:40 am Finish Time: 11:04 am
					716	0					
								45			
					297	0					
								50			
					209	0					
								55			
					10.2	0					Light Brown Sand
								60			
					97	0					
								65			
					31	0					
								70			
					18.2	0					
								75			
					18.1	0					Light Brown Sand with gravel
								80			Total Depth = 80 feet

☒ Sampling Interval

Stratification is Inferred And May Not be Exact.
Soil Classification Based on Visual-Manual Procedure

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: 42079

Client: CEMC

No. SB-7

File No.: 42079
Date: 2/24/2012
Drilling Co.: White Drilling
Supervisor: Bo Atkins
Type Rig: Air Rotary
Logged by: Desiree Crenshaw

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 9:10 am Finish Time: 9:41 am
					432	0					Caliche
					832	0		5			
					1,650	0		10			
					1,500	0		15			Light brown sand
					1,460	0		20			
					1,080	0		25			
					980	0		30			
					972	0		35			
								40			

Sampling Interval

Stratification is Inferred And May Not be Exact.
Soil Classification Based on Visual-Manual Procedure

Water First Noted

Analyzed Sample

APPENDIX C

ANALYTICAL REPORT

JOB NUMBER: 355329
Project ID: STATE G LEASE NM 042079

Prepared For:

Conestoga-Rovers and Associates
2135 S. Loop 250 West
Midland, TX 79707

Attention: Todd Wells

Date: 06/26/2008

_____ _____

Signature Date

Name: Sachin G. Kudchadkar

Title: Project Manager III

E-Mail: sachin.kudchadkar@testamericainc.com

TestAmerica Laboratories, Inc
6310 Rothway Drive
Houston, TX 77040

PHONE: 713-690-4444

S A M P L E I N F O R M A T I O N
Date: 06/26/2008

Job Number.: 355329
Customer...: Conestoga-Rovers and Associates
Attn.......: Todd Wells

Project Number.....: 99007835
Customer Project ID....: STATE G LEASE NM 042079
Project Description....: Analytical

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
355329-1	SB-4 5'	Soil	06/02/2008	14:45	06/10/2008	09:35
355329-2	SB-4 10'	Soil	06/02/2008	14:50	06/10/2008	09:35
355329-3	SB-4 15'	Soil	06/02/2008	14:55	06/10/2008	09:35
355329-4	SB-4 20'	Soil	06/02/2008	15:00	06/10/2008	09:35
355329-5	SB-4 25'	Soil	06/02/2008	15:05	06/10/2008	09:35
355329-6	SB-4 30'	Soil	06/02/2008	15:10	06/10/2008	09:35
355329-7	SB-4 35'	Soil	06/02/2008	15:15	06/10/2008	09:35
355329-8	SB-4 40'	Soil	06/02/2008	15:20	06/10/2008	09:35
355329-9	SB-4 40-42'	Soil	06/02/2008	14:25	06/10/2008	09:35
355329-10	SB-4 42-44'	Soil	06/02/2008	14:30	06/10/2008	09:35
355329-11	SB-4 44-46'	Soil	06/02/2008	14:35	06/10/2008	09:35
355329-12	SB-4 46-48'	Soil	06/02/2008	15:40	06/10/2008	09:35
355329-13	SB-4 48-50'	Soil	06/02/2008	15:45	06/10/2008	09:35

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates | PROJECT: STATE G LEASE NM 04 | ATTN: Todd Wells

Customer Sample ID: SB-4 5'
Date Sampled.....: 06/02/2008
Time Sampled.....: 14:45
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-1
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	3550				40	10	mg/Kg	400631		06/23/08 1533	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates | PROJECT: STATE G LEASE NM 04 | ATTN: Todd Wells

Customer Sample ID: SB-4 10'
Date Sampled.....: 06/02/2008
Time Sampled.....: 14:50
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-2
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	3780				40	10	mg/Kg	400631		06/23/08 1620	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates | PROJECT: STATE G LEASE NM 04 | ATTN: Todd Wells

Customer Sample ID: SB-4 15'
Date Sampled.....: 06/02/2008
Time Sampled.....: 14:55
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-3
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	4580				40	10	mg/Kg	400631		06/23/08 1636	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates | PROJECT: STATE G LEASE NM 04 | ATTN: Todd Wells

Customer Sample ID: SB-4 20'
Date Sampled.....: 06/02/2008
Time Sampled.....: 15:00
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-4
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	2360				40	10	mg/Kg	400631		06/23/08 1651	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates | PROJECT: STATE G LEASE NM 04 | ATTN: Todd Wells

Customer Sample ID: SB-4 25'
Date Sampled.....: 06/02/2008
Time Sampled.....: 15:05
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-5
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	2040				40	10	mg/Kg	400631		06/23/08 1707	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates | PROJECT: STATE G LEASE NM 04 | ATTN: Todd Wells

Customer Sample ID: SB-4 30'
Date Sampled.....: 06/02/2008
Time Sampled.....: 15:10
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-6
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	1390				40	10	mg/Kg	400631		06/23/08 1723	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates | PROJECT: STATE G LEASE NM 04 | ATTN: Todd Wells

Customer Sample ID: SB-4 35'
Date Sampled.....: 06/02/2008
Time Sampled.....: 15:15
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-7
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	2200				40	10	mg/Kg	400631		06/23/08 1809	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates | PROJECT: STATE G LEASE NM 04 | ATTN: Todd Wells

Customer Sample ID: SB-4 40'
Date Sampled.....: 06/02/2008
Time Sampled.....: 15:20
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-8
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	1930				40	10	mg/Kg	400631		06/23/08 1825	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: STATE G LEASE NM 04

ATTN: Todd Wells

Customer Sample ID: SB-4 40-42'
Date Sampled.....: 06/02/2008
Time Sampled.....: 14:25
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-9
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	1460				40	10	mg/Kg	400631		06/23/08 1841	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: STATE G LEASE NM 04

ATTN: Todd Wells

Customer Sample ID: SB-4 42-44'
Date Sampled.....: 06/02/2008
Time Sampled.....: 14:30
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-10
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	1500				40	10	mg/Kg	400631		06/23/08 1856	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: STATE G LEASE NM 04

ATTN: Todd Wells

Customer Sample ID: SB-4 44-46'
Date Sampled.....: 06/02/2008
Time Sampled.....: 14:35
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-11
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	990				40	10	mg/Kg	400714		06/24/08 1923	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates | PROJECT: STATE G LEASE NM 04 | ATTN: Todd Wells

Customer Sample ID: SB-4 46-48'
Date Sampled.....: 06/02/2008
Time Sampled.....: 15:40
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-12
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	1070				40	10	mg/Kg	400714		06/24/08 2010	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 355329

Date:06/26/2008

CUSTOMER: Conestoga-Rovers and Associates | PROJECT: STATE G LEASE NM 04 | ATTN: Todd Wells

Customer Sample ID: SB-4 48-50'
Date Sampled.....: 06/02/2008
Time Sampled.....: 15:45
Sample Matrix.....: Soil

Laboratory Sample ID: 355329-13
Date Received.....: 06/10/2008
Time Received.....: 09:35

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 9056	Chloride, Soil	1250				40	10	mg/Kg	400714		06/24/08 2026	sur

* In Description = Dry Wgt.

Q U A L I T Y C O N T R O L R E S U L T S

Job Number.: 355329 Report Date.: 06/26/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: STATE G LEASE NM 042079 ATTN: Todd Wells

Test Method.....: SW-846 9056 Analyst...: sur
Method Description.: Ion Chromatography Analysis Units.....: mg/L Test Code.: BRO
Parameter.....: Bromide (Br) Batch(s)...: 400631 400714

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	Date	Time
ICV		WCS50001	19.624		20.00		98.1		90.0-110.		06/23/2008	1430
ICB			0								06/23/2008	1446
MB	400631--21		0								06/23/2008	1502
LCS	400631--21	WCS50001	19.799		20.00		99.0		90.0-110.		06/23/2008	1517
DU	355329-1		0.1361			0.1322	0.0039		0.6000		06/23/2008	1549
MS	355329-1	WCS49722	9.9655		10.000000	0.1322	98.3		90-110		06/23/2008	1604
CCV		WCS50001	19.760		20.00		98.8		90.0-110.		06/23/2008	1738
CCB			0								06/23/2008	1754
DU	355497-4		0.3235			0.3493	0.0258		0.6000		06/23/2008	1943
MS	355497-4	WCS49722	10.218		10.000000	0.3493	98.7		90-110		06/23/2008	1959
CCV		WCS50001	19.903		20.00		99.5		90.0-110.		06/23/2008	2030
CCB			0								06/23/2008	2046
MB	400631--21		0								06/23/2008	2102
LCS	400631--21	WCS50001	19.820		20.00		99.1		90.0-110.		06/23/2008	2117
DU	355529-1		0			0	0		1		06/23/2008	2251
MS	355529-1	WCS49722	9.6678		10.000000	0	96.7		90-110		06/23/2008	2307
CCV		WCS50001	19.841		20.00		99.2		90.0-110.		06/23/2008	2354
CCB			0								06/24/2008	0009
CCV		WCS50001	19.613		20.00		98.1		90.0-110.		06/24/2008	0302
CCB			0								06/24/2008	0317
CCV		WCS50001	19.870		20.00		99.3		90.0-110.		06/24/2008	0609
CCB			0								06/24/2008	0625
BK			0								06/24/2008	0712
BK			0								06/24/2008	0743
BK			0								06/24/2008	0815
BK			0								06/24/2008	0846
CCV		WCS50001	19.710		20.00		98.5		90.0-110.		06/24/2008	0902
CCB			0								06/24/2008	0917
ICV		WCS50001	20.015		20.00		100.1		90.0-110.		06/24/2008	1820
ICB			0								06/24/2008	1836
MB	400714--21		0								06/24/2008	1852
LCS	400714--21	WCS50001	19.666		20.00		98.3		90.0-110.		06/24/2008	1907
DU	355329-11		0.0558			0	0.0558		0.6000		06/24/2008	1939
MS	355329-11	WCS49722	9.8441		10.000000	0	98.4		90-110		06/24/2008	1954
CCV		WCS50001	19.660		20.00		98.3		90.0-110.		06/24/2008	2128
CCB			0								06/24/2008	2144
DU	355908-1		0			0	0		1		06/24/2008	2349
MS	355908-1	WCS49722	9.4824		10.000000	0	94.8		90-110		06/25/2008	0005
CCV		WCS50001	19.798		20.00		99.0		90.0-110.		06/25/2008	0020
CCB			0								06/25/2008	0036
CCV		WCS50001	19.629		20.00		98.1		90.0-110.		06/25/2008	0344
CCB			0								06/25/2008	0400
DU	356027-2		0			0	0		1		06/25/2008	0415
MS	356027-2	WCS49722	9.3677	0	10.000000	0	93.7		90-110		06/25/2008	0431
CCV		WCS50001	19.592		20.00		98.0		90.0-110.		06/25/2008	0502
CCB			0								06/25/2008	0518

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 355329 Report Date.: 06/26/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: STATE G LEASE NM 042079 ATTN: Todd Wells

Test Method.....: SW-846 9056 Analyst...: sur
Method Description.: Ion Chromatography Analysis Units.....: mg/L Test Code.: CHL
Parameter.....: Chloride Batch(s)...: 400631 400714

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	Date	Time
ICV		WCS50001	19.455		20.00		97.3		90.0-110.		06/23/2008	1430
ICB			0								06/23/2008	1446
MB	400631--21		0								06/23/2008	1502
LCS	400631--21	WCS50001	19.705		20.00		98.5		90.0-110.		06/23/2008	1517
DU	355329-1		35.203			35.530	0.9		20		06/23/2008	1549
MS	355329-1	WCS49722	42.068		10.000000	35.530	65.4		90-110	A	06/23/2008	1604
CCV		WCS50001	19.691		20.00		98.5		90.0-110.		06/23/2008	1738
CCB			0								06/23/2008	1754
DU	355497-4		34.929			35.244	0.9		20		06/23/2008	1943
MS	355497-4	WCS49722	42.330		10.000000	35.244	70.9		90-110	A	06/23/2008	1959
CCV		WCS50001	19.746		20.00		98.7		90.0-110.		06/23/2008	2030
CCB			0								06/23/2008	2046
MB	400631--21		0								06/23/2008	2102
LCS	400631--21	WCS50001	19.662		20.00		98.3		90.0-110.		06/23/2008	2117
DU	355529-1		7.3962			7.3392	0.8		20		06/23/2008	2251
MS	355529-1	WCS49722	16.909		10.000000	7.3392	95.7		90-110		06/23/2008	2307
CCV		WCS50001	19.746		20.00		98.7		90.0-110.		06/23/2008	2354
CCB			0.1964								06/24/2008	0009
CCV		WCS50001	19.458		20.00		97.3		90.0-110.		06/24/2008	0302
CCB			0								06/24/2008	0317
CCV		WCS50001	19.787		20.00		98.9		90.0-110.		06/24/2008	0609
CCB			0								06/24/2008	0625
BK			0								06/24/2008	0712
BK			0								06/24/2008	0743
BK			0								06/24/2008	0815
BK			19.597								06/24/2008	0846
CCV		WCS50001	19.512		20.00		97.6		90.0-110.		06/24/2008	0902
CCB			0.2003								06/24/2008	0917
ICV		WCS50001	19.486		20.00		97.4		90.0-110.		06/24/2008	1820
ICB			0.2099								06/24/2008	1836
MB	400714--21		0								06/24/2008	1852
LCS	400714--21	WCS50001	19.528		20.00		97.6		90.0-110.		06/24/2008	1907
DU	355329-11		9.7094			9.8612	1.6		20		06/24/2008	1939
MS	355329-11	WCS49722	19.719		10.000000	9.8612	98.6		90-110		06/24/2008	1954
CCV		WCS50001	19.583		20.00		97.9		90.0-110.		06/24/2008	2128
CCB			0.1922								06/24/2008	2144
DU	355908-1		7.4526			7.2819	2.3		20		06/24/2008	2349
MS	355908-1	WCS49722	16.820		10.000000	7.2819	95.4		90-110		06/25/2008	0005
CCV		WCS50001	19.526		20.00		97.6		90.0-110.		06/25/2008	0020
CCB			0								06/25/2008	0036
CCV		WCS50001	19.463		20.00		97.3		90.0-110.		06/25/2008	0344
CCB			0.2195								06/25/2008	0400
DU	356027-2		0.9914			1.4367	0.4453		0.5000		06/25/2008	0415
MS	356027-2	WCS49722	9.3208	0.9914	10.000000	1.4367	78.8		90-110	A	06/25/2008	0431
CCV		WCS50001	19.516		20.00		97.6		90.0-110.		06/25/2008	0502
CCB			0								06/25/2008	0518

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 355329 Report Date.: 06/26/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: STATE G LEASE NM 042079 ATTN: Todd Wells

Test Method.....: SW-846 9056 Analyst...: sur
Method Description.: Ion Chromatography Analysis Units.....: mg/L Test Code.: FL
Parameter.....: Fluoride (F) Batch(s)...: 400631 400714

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	Date	Time
ICV		WCS50001	8.9651		10.00		89.7		90.0-110.	G	06/23/2008	1430
ICB			0								06/23/2008	1446
MB	400631--21		0								06/23/2008	1502
LCS	400631--21	WCS50001	9.2773		10.00		92.8		90.0-110.		06/23/2008	1517
DU	355329-1		0.1075			0.1088	0.0013		0.3000		06/23/2008	1549
MS	355329-1	WCS49722	1.4814		2.000000	0.1088	68.6		90-110	A	06/23/2008	1604
CCV		WCS50001	9.4913		10.00		94.9		90.0-110.		06/23/2008	1738
CCB			0								06/23/2008	1754
DU	355497-4		0			0	0		0		06/23/2008	1943
MS	355497-4	WCS49722	1.4175		2.000000	0	70.9		90-110	A	06/23/2008	1959
CCV		WCS50001	9.6360		10.00		96.4		90.0-110.		06/23/2008	2030
CCB			0								06/23/2008	2046
MB	400631--21		0								06/23/2008	2102
LCS	400631--21	WCS50001	9.5985		10.00		96.0		90.0-110.		06/23/2008	2117
DU	355529-1		0.2054			0.1737	0.0317		0.3000		06/23/2008	2251
MS	355529-1	WCS49722	1.6284		2.000000	0.1737	72.7		90-110	A	06/23/2008	2307
CCV		WCS50001	9.8331		10.00		98.3		90.0-110.		06/23/2008	2354
CCB			0								06/24/2008	0009
CCV		WCS50001	9.7506		10.00		97.5		90.0-110.		06/24/2008	0302
CCB			0								06/24/2008	0317
CCV		WCS50001	9.8086		10.00		98.1		90.0-110.		06/24/2008	0609
CCB			0								06/24/2008	0625
BK			0								06/24/2008	0712
BK			0								06/24/2008	0743
BK			0								06/24/2008	0815
BK			0								06/24/2008	0846
CCV		WCS50001	9.4848		10.00		94.8		90.0-110.		06/24/2008	0902
CCB			0								06/24/2008	0917
ICV		WCS50001	8.9843		10.00		89.8		90.0-110.	G	06/24/2008	1820
ICB			0								06/24/2008	1836
MB	400714--21		0								06/24/2008	1852
LCS	400714--21	WCS50001	9.2992		10.00		93.0		90.0-110.		06/24/2008	1907
DU	355329-11		0			0	0		0		06/24/2008	1939
CCV		WCS50001	9.8669		10.00		98.7		90.0-110.		06/24/2008	2128
CCB			0								06/24/2008	2144
DU	355908-1		0.2173			0.2088	0.0085		0.3000		06/24/2008	2349
MS	355908-1	WCS49722	1.6806		2.000000	0.2088	73.6		90-110	A	06/25/2008	0005
CCV		WCS50001	9.7836		10.00		97.8		90.0-110.		06/25/2008	0020
CCB			0								06/25/2008	0036
CCV		WCS50001	9.6000		10.00		96.0		90.0-110.		06/25/2008	0344
CCB			0								06/25/2008	0400
DU	356027-2		0			0	0		0		06/25/2008	0415
MS	356027-2	WCS49722	1.7012	0	2.000000	0	85.1		90-110	A	06/25/2008	0431
CCV		WCS50001	9.6252		10.00		96.3		90.0-110.		06/25/2008	0502
CCB			0								06/25/2008	0518

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

Q U A L I T Y C O N T R O L R E S U L T S

Job Number.: 355329 Report Date.: 06/26/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: STATE G LEASE NM 042079 ATTN: Todd Wells

Test Method.....: SW-846 9056 Analyst...: sur
Method Description.: Ion Chromatography Analysis Units.....: mg/L Test Code.: NO3
Parameter.....: Nitrogen, Nitrate as N (NO3-N) Batch(s)...: 400631 400714

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	Date	Time
ICV		WCS50001	10.254		10.0		102.5		90.0-110.		06/23/2008	1430
ICB			0								06/23/2008	1446
MB	400631--21		0								06/23/2008	1502
LCS	400631--21	WCS50001	10.404		10.0		104.0		90.0-110.		06/23/2008	1517
DU	355329-1		0			0	0		0		06/23/2008	1549
MS	355329-1	WCS49722	1.9243		2.000000	0	96.2		90-110		06/23/2008	1604
CCV		WCS50001	10.374		10.0		103.7		90.0-110.		06/23/2008	1738
CCB			0								06/23/2008	1754
DU	355497-4		0			0	0		0		06/23/2008	1943
MS	355497-4	WCS49722	1.9491		2.000000	0	97.5		90-110		06/23/2008	1959
CCV		WCS50001	10.430		10.0		104.3		90.0-110.		06/23/2008	2030
CCB			0								06/23/2008	2046
MB	400631--21		0								06/23/2008	2102
LCS	400631--21	WCS50001	10.427		10.0		104.3		90.0-110.		06/23/2008	2117
DU	355529-1		0			0.0998	0.0998		0.2500		06/23/2008	2251
MS	355529-1	WCS49722	1.9565		2.000000	0.0998	92.8		90-110		06/23/2008	2307
CCV		WCS50001	10.431		10.0		104.3		90.0-110.		06/23/2008	2354
CCB			0								06/24/2008	0009
CCV		WCS50001	10.288		10.0		102.9		90.0-110.		06/24/2008	0302
CCB			0								06/24/2008	0317
CCV		WCS50001	10.409		10.0		104.1		90.0-110.		06/24/2008	0609
CCB			0								06/24/2008	0625
BK			0								06/24/2008	0712
BK			0								06/24/2008	0743
BK			0								06/24/2008	0815
BK			0								06/24/2008	0846
CCV		WCS50001	10.427		10.0		104.3		90.0-110.		06/24/2008	0902
CCB			0								06/24/2008	0917
ICV		WCS50001	10.318		10.0		103.2		90.0-110.		06/24/2008	1820
ICB			0								06/24/2008	1836
MB	400714--21		0								06/24/2008	1852
LCS	400714--21	WCS50001	10.393		10.0		103.9		90.0-110.		06/24/2008	1907
DU	355329-11		0.0999			0	0.0999		0.2500		06/24/2008	1939
MS	355329-11	WCS49722	1.9777		2.000000	0	98.9		90-110		06/24/2008	1954
CCV		WCS50001	10.364		10.0		103.6		90.0-110.		06/24/2008	2128
CCB			0								06/24/2008	2144
DU	355908-1		0.1329			0.1456	0.0127		0.2500		06/24/2008	2349
MS	355908-1	WCS49722	1.9572		2.000000	0.1456	90.6		90-110		06/25/2008	0005
CCV		WCS50001	10.381		10.0		103.8		90.0-110.		06/25/2008	0020
CCB			0								06/25/2008	0036
CCV		WCS50001	10.336		10.0		103.4		90.0-110.		06/25/2008	0344
CCB			0								06/25/2008	0400
DU	356027-2		0.1553			0.1785	0.0232		0.2500		06/25/2008	0415
MS	356027-2	WCS49722	1.9608	0.1553	2.000000	0.1785	89.1		90-110	A	06/25/2008	0431
CCV		WCS50001	10.322		10.0		103.2		90.0-110.		06/25/2008	0502
CCB			0								06/25/2008	0518

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 355329 Report Date.: 06/26/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: STATE G LEASE NM 042079 ATTN: Todd Wells

Test Method.....: SW-846 9056 Analyst...: sur
Method Description.: Ion Chromatography Analysis Units.....: mg/L Test Code.: NO2
Parameter.....: Nitrogen, Nitrite as N (NO2-N) Batch(s)...: 400631 400714

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	Date	Time
ICV		WCS50001	9.6569		10.0		96.6		90.0-110.		06/23/2008	1430
ICB			0								06/23/2008	1446
MB	400631--21		0								06/23/2008	1502
LCS	400631--21	WCS50001	9.7997		10.0		98.0		90.0-110.		06/23/2008	1517
DU	355329-1		0			0	0		0		06/23/2008	1549
MS	355329-1	WCS49722	2.0621		2.000000	0	103.1		90-110		06/23/2008	1604
CCV		WCS50001	9.7605		10.0		97.6		90.0-110.		06/23/2008	1738
CCB			0								06/23/2008	1754
DU	355497-4		0			0	0		0		06/23/2008	1943
MS	355497-4	WCS49722	2.0512		2.000000	0	102.6		90-110		06/23/2008	1959
CCV		WCS50001	9.7956		10.0		98.0		90.0-110.		06/23/2008	2030
CCB			0								06/23/2008	2046
MB	400631--21		0								06/23/2008	2102
LCS	400631--21	WCS50001	9.7710		10.0		97.7		90.0-110.		06/23/2008	2117
DU	355529-1		0			0	0		0		06/23/2008	2251
MS	355529-1	WCS49722	1.7881		2.000000	0	89.4		90-110	A	06/23/2008	2307
CCV		WCS50001	9.7951		10.0		98.0		90.0-110.		06/23/2008	2354
CCB			0								06/24/2008	0009
CCV		WCS50001	9.6510		10.0		96.5		90.0-110.		06/24/2008	0302
CCB			0.0757								06/24/2008	0317
CCV		WCS50001	9.7552		10.0		97.6		90.0-110.		06/24/2008	0609
CCB			0								06/24/2008	0625
BK			0								06/24/2008	0712
BK			0								06/24/2008	0743
BK			0								06/24/2008	0815
BK			0								06/24/2008	0846
CCV		WCS50001	9.6575		10.0		96.6		90.0-110.		06/24/2008	0902
CCB			0								06/24/2008	0917
ICV		WCS50001	9.7204		10.0		97.2		90.0-110.		06/24/2008	1820
ICB			0								06/24/2008	1836
MB	400714--21		0								06/24/2008	1852
LCS	400714--21	WCS50001	9.6858		10.0		96.9		90.0-110.		06/24/2008	1907
DU	355329-11		0			0	0		0		06/24/2008	1939
MS	355329-11	WCS49722	1.8418		2.000000	0	92.1		90-110		06/24/2008	1954
CCV		WCS50001	9.7469		10.0		97.5		90.0-110.		06/24/2008	2128
CCB			0								06/24/2008	2144
DU	355908-1		0			0	0		0		06/24/2008	2349
MS	355908-1	WCS49722	1.7763		2.000000	0	88.8		90-110	A	06/25/2008	0005
CCV		WCS50001	9.6992		10.0		97.0		90.0-110.		06/25/2008	0020
CCB			0								06/25/2008	0036
CCV		WCS50001	9.6595		10.0		96.6		90.0-110.		06/25/2008	0344
CCB			0								06/25/2008	0400
DU	356027-2		0			0	0		0		06/25/2008	0415
MS	356027-2	WCS49722	1.6938	0	2.000000	0	84.7		90-110	A	06/25/2008	0431
CCV		WCS50001	9.6543		10.0		96.5		90.0-110.		06/25/2008	0502
CCB			0								06/25/2008	0518

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 355329 Report Date.: 06/26/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: STATE G LEASE NM 042079 ATTN: Todd Wells

Test Method.....: SW-846 9056 Analyst...: sur
Method Description.: Ion Chromatography Analysis Units.....: mg/L Test Code.: SO4
Parameter.....: Sulfate (SO4) Batch(s)...: 400631 400714

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	Date	Time
ICV		WCS50001	19.243		20.00		96.2		90.0-110.		06/23/2008	1430
ICB			0								06/23/2008	1446
MB	400631--21		0								06/23/2008	1502
LCS	400631--21	WCS50001	19.225		20.00		96.1		90.0-110.		06/23/2008	1517
DU	355329-1		0.8904			0.9813	0.0909		0.5000		06/23/2008	1549
MS	355329-1	WCS49722	10.029		10.000000	0.9813	90.5		90-110		06/23/2008	1604
CCV		WCS50001	19.438		20.00		97.2		90.0-110.		06/23/2008	1738
CCB			0								06/23/2008	1754
DU	355497-4		0.2225			0.1875	0.0350		0.5000		06/23/2008	1943
MS	355497-4	WCS49722	9.7019		10.000000	0.1875	95.1		90-110		06/23/2008	1959
CCV		WCS50001	19.549		20.00		97.7		90.0-110.		06/23/2008	2030
CCB			0								06/23/2008	2046
MB	400631--21		0								06/23/2008	2102
LCS	400631--21	WCS50001	19.695		20.00		98.5		90.0-110.		06/23/2008	2117
DU	355529-1		1.7846			1.7966	0.0120		0.5000		06/23/2008	2251
MS	355529-1	WCS49722	11.234		10.000000	1.7966	94.4		90-110		06/23/2008	2307
CCV		WCS50001	19.367		20.00		96.8		90.0-110.		06/23/2008	2354
CCB			0								06/24/2008	0009
CCV		WCS50001	19.345		20.00		96.7		90.0-110.		06/24/2008	0302
CCB			0								06/24/2008	0317
CCV		WCS50001	19.559		20.00		97.8		90.0-110.		06/24/2008	0609
CCB			0								06/24/2008	0625
BK			0.1292								06/24/2008	0712
BK			0.2787								06/24/2008	0743
BK			0								06/24/2008	0815
BK			0								06/24/2008	0846
CCV		WCS50001	19.529		20.00		97.6		90.0-110.		06/24/2008	0902
CCB			0								06/24/2008	0917
ICV		WCS50001	18.954		20.00		94.8		90.0-110.		06/24/2008	1820
ICB			0								06/24/2008	1836
MB	400714--21		0								06/24/2008	1852
LCS	400714--21	WCS50001	19.667		20.00		98.3		90.0-110.		06/24/2008	1907
DU	355329-11		0.3445			0.2612	0.0833		0.5000		06/24/2008	1939
MS	355329-11	WCS49722	9.7946		10.000000	0.2612	95.3		90-110		06/24/2008	1954
CCV		WCS50001	19.514		20.00		97.6		90.0-110.		06/24/2008	2128
CCB			0.0340								06/24/2008	2144
DU	355908-1		29.938			30.087	0.5		20		06/24/2008	2349
MS	355908-1	WCS49722	38.074		10.000000	30.087	79.9		90-110	A	06/25/2008	0005
CCV		WCS50001	19.549		20.00		97.7		90.0-110.		06/25/2008	0020
CCB			0								06/25/2008	0036
CCV		WCS50001	19.384		20.00		96.9		90.0-110.		06/25/2008	0344
CCB			0								06/25/2008	0400
MS	356027-2	WCS49722	9.2607	0.7095	10.000000	0.0761	91.8		90-110		06/25/2008	0431
CCV		WCS50001	19.526		20.00		97.6		90.0-110.		06/25/2008	0502
CCB			0								06/25/2008	0518

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 06/26/2008

REPORT COMMENTS

1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
2) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
3) According to 40CFR Part 136.3, pH, Chlorine Residual, and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field,(e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.
4) For all USACE projects, the QC limits are based on "mean +/- 2 sigma", which are the warning limits.

General Information:

- Cresylic Acid is the combination of o,m and p-Cresol. The combination is reportesd as the final result.
- m-Cresol (3-Methylphenol) and p-Cresol (4-methylphenol) co-elute. The result of the two is reported as either m&p-cresol or as 4-methylphenol (p-cresol).
- m-Xylene and p-Xylene co-elute. The result of the two is reported as m,p-Xylene.
- N-Nitrosodiphenylamine decomposes in the gas chromatograph inlet forming dipheylamine and, consequently, may be detected as diphenylamine.
- Methylene Chloride and Acetone are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.
- Trimethysilyl(Diazomethane) is used to esterify acid herbicides in Method SW-846 8151A.
- For Inorganic analyses, duplicate QC limits are determined as follows: If the sample result is less than or equal to 5 times the reporting limit, the RPD limit is equal to the reporting limit. If the sample result is greater than 5 times the reporting limit, the RPD limit is the method defined RPD.
- For TRRP reports, the header on the column RL is equivalent to a MQL/PQL.
- Results for LCS and MS/MSD recoveries listed in the report are reported as ug/L on-column values which are not corrected for variables such as sample volumes or weights extracted, final volume of extracts and dilutions. To correct QC on-column recoveries to reflect actual spiking volumes for soils, mutltiply the values reported for Diesel Range Organics and Semivolatiles by 33.3 and Gasoline Range Organics by 20. The 8260 and 1006 results will not require correction. The only corection required for water analysis is for method 1006 where the reported concentraiton must be multiplied by 0.1.
- Due to limitiation of the reporting software, results for the Method blank in the Semivolatile fraction are reported as "0". Which indicates there was no compound detected at the reporting limit for the compound reveiwed.
- The dilution factor listed on the report represents only the analytical dilutions necessary for the target compounds to be within the calibration range of the instrument. It does not include any preparation factors, dry weight or any other adjustment.

Explanation of Qualifiers:

U - This qualifier indicates that the analyte was analyzed but not detected.
J - (Organics only) This qualifier indicates that the analyte is an estimated value between the RL and the MDL.
B - (Inorganics only) This Qualifier indicates that the analyte is an estimated value between the RL and the MDL.
N - (Organics only) This flag indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic charachterization of a TIC, such as "chlorinated hydrocarbon", the "N" flag is not used.

Explanation of General QC Outliers:

A - Matrix interference present in sample.
a - MS/MSD analyses yielded comparable poor recoveries, indicating a possible matrix interference. Method performance is demonstrated by acceptable LCS recoveries.
b - Target analyte was found in the method blank.
M - QC sample analysis yielded recoveries outside QC acceptance criteria. This sample was reanalyzed.
L - LCS analysis yielded high recoveries, indicating a potential high bias. No target analytes were

observed above the RL in the associated samples.
G - Marginal outlier within 1% of acceptance criteria.
r - RPD value is outside method acceptance criteria.
C - Poor RPD values observed due to the non-homogenous nature of the sample.
O - Sample required dilution due to matrix interference.
D - Sample reported from a dilution.
d - Spike and/or surrogate diluted.
E - The reported concentration exceeds the instrument calibration.
F - The analyte is outside QC limits and was not detected in any associated samples in the analytical batch.
H - Continuing Calibration Verification (CCV) standard is not associated with the samples reported.
q - See the subcontract final report for qualifier explanation.
W - The MS/MSD recoveries are outside QC acceptance criteria because the amount spiked is much less than the amount found in the sample.
K - High recovery will not affect the quality of reported results.
Z - See case narrative.

Explanation of Organic QC Outliers:

e - Method blank analysis yielded phthalate concentrations above the RL. Phthlates are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.
S - Sample reanalyzed/reextracted due to poor surrogate recovery. Reanalysis confirmed original analysis indicating a possible matrix interference.
T - Sample analysis yielded poor surrogate recovery.
R - The RPD between the two GC columns is greater than 40% and no anomalies are present. The higher result is reported as per EPA Method 8000B.
I - The RPD between the two GC columns is greater than 40% and anomalies are present. The lower of the two results has been reported.
X - Gaseous compound. In-house QC limits are advisory.
Y - Ketone compounds have poor purge efficiency. In-house QC limits are advisory.
f - Surrogate not associated with reported analytes.

Explanation of Inorganic QC Outliers:

Q - Method blank analysis yielded target analytes above the RL. Associated sample results are greater than 10 times the concentrations observed in the method blank.
V - The RPD control limit for sample results less than 5 times the RL is +/- the RL value. Sample and duplicate results are within method acceptance criteria.
e - Serial dilution failed due to matrix interference.
g - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficent for the MSA is greater than or equal to 0.995.
s - BOD/cBOD seed value is not within method acceptance criteria. Due to the nature of the test method, the sample cannot be reanalyzed.
l - BOD/cBOD LCS value is not within method acceptance criteria. Due to the nature of the test method, sample cannot be reanalyzed.
N - Spiked sample recovery is not within control limits.
n - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficient for the MSA is less than 0.995.
* - Duplicate analysis is not within control limits.

Abbreviations:

Batch - Designation given to identify a specific extraction, digestion, preparation, or analysis set.
CCV - Continuing Calibration Verification
CRA - Low level standard check - GFAA, Mercury
CRI - Low level standard check - ICP
Dil Fac - Dilution Factor - Secondary dilution analysis

DLFac - Detection Limit Factor
DU - Duplicate
EB - Extraction Blank (TCLP, SPLP, etc.)
ICAL - Initial Calibration
ICB - Initial Calibration Blank
ICV - Initial Calibration Verification
ISA - Interference Check Sample A - ICP
ISB - Interference Check Sample B - ICP
LCD - Laboratory Control Duplicate
LCS - Laboratory Control Sample
MB - Method Blank
MD - Method Duplicate
MDL - Method Detection Limit
MQL - Method Quantitation Limit (TRRP)
MS - Matrix Spike
MSD - Matrix Spike Duplicate
ND - Not Detected
PB - Preparation Blank
PREPF - Preparation Factor
RL - Reporting Limit
RPD - Relative Percent Difference
RRF - Relative Response Factor
RT - Retention Time
SQL - Sample Quantitation Limit (TRRP)
TIC - Tentatively Identified Compound

Method References:

(1) EPA 600/4-79-020 Methods for the Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-94-111 Methods for the Determination of MEtals in Environmental Samples, Supplement I, May 1994.
(3) EPA SW846 Test Methods for Evaluating Solid Waste, Third Edition, September 1986; Update I July 1992; Update II, September 1994, Update IIA August 1993; Update IIB, January 1995; Update III, December 1996, Update IVA January 1998, Update IVB November 2000.
(4) Standard Methods for the Examination of Water and Wastewater, 16th Edition (1985), 17th Edition (1989), 18th Edition (1992), 19th Edition (1995), 20th Edition (1998).
(5) HACH Water Analysis Handbook 3rd Edition (1997).
(6) Federal Register, July 1, 1990 (40 CFR Part 136 Appendix A).
(7) Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, 2nd Edition, January 1997.

(9) Diagnosis and Improvement of Saline and Alkali Soils, Agriculture Handbook No. 60, United States Department of Agriculture, 1954.

L A B O R A T O R Y C H R O N I C L E

Job Number: 355329 Date: 06/26/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: STATE G LEASE NM 04 ATTN: Todd Wells

Lab ID: 355329-1 Client ID: SB-4 5' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400631		06/23/2008 1533	10

Lab ID: 355329-2 Client ID: SB-4 10' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400631		06/23/2008 1620	10

Lab ID: 355329-3 Client ID: SB-4 15' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400631		06/23/2008 1636	10

Lab ID: 355329-4 Client ID: SB-4 20' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400631		06/23/2008 1651	10

Lab ID: 355329-5 Client ID: SB-4 25' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400631		06/23/2008 1707	10

Lab ID: 355329-6 Client ID: SB-4 30' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400631		06/23/2008 1723	10

Lab ID: 355329-7 Client ID: SB-4 35' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400631		06/23/2008 1809	10

Lab ID: 355329-8 Client ID: SB-4 40' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400631		06/23/2008 1825	10

Lab ID: 355329-9 Client ID: SB-4 40-42' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400631		06/23/2008 1841	10

Lab ID: 355329-10 Client ID: SB-4 42-44' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400631		06/23/2008 1856	10

Lab ID: 355329-11 Client ID: SB-4 44-46' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400714		06/24/2008 1923	10

Lab ID: 355329-12 Client ID: SB-4 46-48' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400714		06/24/2008 2010	10

Lab ID: 355329-13 Client ID: SB-4 48-50' Date Recvd: 06/10/2008 Sample Date: 06/02/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 9056	Ion Chromatography Analysis	1	400714		06/24/2008 2026	10

Analytical Report 437672

for

Conestoga Rovers & Associates

Project Manager: Desiree Crenshaw

State G

042079

08-MAR-12

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-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)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
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)

08-MAR-12

Project Manager: **Desiree Crenshaw**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No: **437672**
State G
Project Address: New Mexico

Desiree Crenshaw:

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 437672. 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. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. 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. 437672 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,

Brent Barron II
Odessa Laboratory Manager

Sample Cross Reference 437672

Conestoga Rovers & Associates, Midland, TX

State G

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-4 0-5'	S	02-24-12 09:52	0 - 5 ft	437672-001
SB-4 5-10'	S	02-24-12 09:53	5 - 10 ft	437672-002
SB-4 10-15'	S	02-24-12 09:55	10 - 15 ft	437672-003
SB-4 15-20'	S	02-24-12 09:56	15 - 20 ft	437672-004
SB-4 20-25'	S	02-24-12 09:57	20 - 25 ft	437672-005
SB-4 25-30'	S	02-24-12 09:58	25 - 30 ft	437672-006
SB-4 30-35'	S	02-24-12 10:00	30 - 35 ft	437672-007
SB-4 35-40'	S	02-24-12 10:01	35 - 40 ft	437672-008
SB-4 40-45'	S	02-24-12 10:02	40 - 45 ft	437672-009
SB-4 45-50'	S	02-24-12 10:03	45 - 50 ft	437672-010
SB-4 50-55'	S	02-24-12 10:05	50 - 55 ft	437672-011
SB-4 55-60'	S	02-24-12 10:06	55 - 60 ft	437672-012
SB-4 60-65'	S	02-24-12 10:07	60 - 65 ft	437672-013
SB-4 65-70'	S	02-24-12 10:08	65 - 70 ft	437672-014
SB-4 70-75'	S	02-24-12 10:09	70 - 75 ft	437672-015
SB-4 75-80'	S	02-24-12 10:10	75 - 80 ft	437672-016
SB-5 0-5'	S	02-24-12 10:15	0 - 5 ft	437672-017
SB-5 5-10'	S	02-24-12 10:17	5 - 10 ft	437672-018
SB-5 10-15'	S	02-24-12 10:19	10 - 15 ft	437672-019
SB-5 15-20'	S	02-24-12 10:22	15 - 20 ft	437672-020
SB-5 20-25'	S	02-24-12 10:23	20 - 25 ft	437672-021
SB-5 25-30'	S	02-24-12 10:24	25 - 30 ft	437672-022
SB-5 30-35'	S	02-24-12 10:25	30 - 35 ft	437672-023
SB-5 35-40'	S	02-24-12 10:27	35 - 40 ft	437672-024
SB-5 40-45'	S	02-24-12 10:29	40 - 45 ft	437672-025
SB-5 45-50'	S	02-24-12 10:30	45 - 50 ft	437672-026
SB-5 50-55'	S	02-24-12 10:31	50 - 55 ft	437672-027
SB-5 55-60'	S	02-24-12 10:33	55 - 60 ft	437672-028
SB-5 60-65'	S	02-24-12 10:34	60 - 65 ft	437672-029
SB-5 65-70'	S	02-24-12 10:35	65 - 70 ft	437672-030
SB-5 70-75'	S	02-24-12 10:36	70 - 75 ft	437672-031
SB-5 75-80'	S	02-24-12 10:38	75 - 80 ft	437672-032
SB-6 0-5'	S	02-24-12 10:46	0 - 5 ft	437672-033
SB-6 5-10'	S	02-24-12 10:47	5 - 10 ft	437672-034
SB-6 10-15'	S	02-24-12 10:48	10 - 15 ft	437672-035
SB-6 15-20'	S	02-24-12 10:49	15 - 20 ft	437672-036
SB-6 20-25'	S	02-24-12 10:51	20 - 25 ft	437672-037
SB-6 25-30'	S	02-24-12 10:52	25 - 30 ft	437672-038
SB-6 30-35'	S	02-24-12 10:53	30 - 35 ft	437672-039
SB-6 35-40'	S	02-24-12 10:54	35 - 40 ft	437672-040
SB-6 40-45'	S	02-24-12 10:55	40 - 45 ft	437672-041
SB-6 45-50'	S	02-24-12 10:57	45 - 50 ft	437672-042
SB-6 50-55'	S	02-24-12 10:58	50 - 55 ft	437672-043

Conestoga Rovers & Associates, Midland, TX

State G

SB-6 55-60'	S	02-24-12 10:59	55 - 60 ft	437672-044
SB-6 60-65'	S	02-24-12 11:00	60 - 65 ft	437672-045
SB-6 65-70'	S	02-24-12 11:01	65 - 70 ft	437672-046
SB-6 70-75'	S	02-24-12 11:02	70 - 75 ft	437672-047
SB-6 75-80'	S	02-24-12 11:04	75 - 80 ft	437672-048
SB-7 0-5'	S	02-24-12 09:17	0 - 5 ft	437672-049
SB-7 5-10'	S	02-24-12 09:18	5 - 10 ft	437672-050
SB-7 10-15'	S	02-24-12 09:22	10 - 15 ft	437672-051
SB-7 15-20'	S	02-24-12 09:26	15 - 20 ft	437672-052
SB-7 20-25'	S	02-24-12 09:27	20 - 25 ft	437672-053
SB-7 25-30'	S	02-24-12 09:29	25 - 30 ft	437672-054
SB-7 30-35'	S	02-24-12 09:30	30 - 35 ft	437672-055
SB-7 35-40'	S	02-24-12 09:31	35 - 40 ft	437672-056
SB-7 40-45'	S	02-24-12 09:32	40 - 45 ft	437672-057
SB-7 45-50'	S	02-24-12 09:33	45 - 50 ft	437672-058
SB-7 50-55'	S	02-24-12 09:33	50 - 55 ft	437672-059
SB-7 55-60'	S	02-24-12 09:34	55 - 60 ft	437672-060
SB-7 60-65'	S	02-24-12 09:19	60 - 65 ft	437672-061
SB-7 65-70'	S	02-24-12 09:20	65 - 70 ft	437672-062
SB-7 70-75'	S	02-24-12 09:21	70 - 75 ft	437672-063
SB-7 75-80'	S	02-24-12 09:22	75 - 80 ft	437672-064

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates

Project Name: State G

Project ID:	*042079*	*Report Date:*	*08-MAR-12*
Work Order Number:	*437672*	*Date Received:*	*02/27/2012*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 437672

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Mon Feb-27-12 10:59 am
Report Date: 08-MAR-12
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	437672-001		437672-002		437672-003		437672-004		437672-005		437672-006	
	Field Id:	SB-4 0-5'		SB-4 5-10'		SB-4 10-15'		SB-4 15-20'		SB-4 20-25'		SB-4 25-30'	
	Depth:	0-5 ft		5-10 ft		10-15 ft		15-20 ft		20-25 ft		25-30 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-24-12 09:52		Feb-24-12 09:53		Feb-24-12 09:55		Feb-24-12 09:56		Feb-24-12 09:57		Feb-24-12 09:58	
Anions by E300	***Extracted:***												
	Analyzed:	Mar-05-12 10:01		Mar-05-12 10:01		Mar-05-12 10:01		Mar-05-12 10:01		Mar-05-12 10:01		Mar-05-12 10:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		18.9	4.67	24.3	4.63	70.6	4.59	96.2	4.48	158	4.49	204	4.46
Percent Moisture	***Extracted:***												
	Analyzed:	Feb-27-12 14:55		Feb-27-12 14:55		Feb-27-12 14:55		Feb-27-12 14:55		Feb-27-12 14:55		Feb-27-12 14:55	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		10.1	1.00	9.33	1.00	8.56	1.00	6.27	1.00	6.50	1.00	5.74	1.00

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 437672

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Mon Feb-27-12 10:59 am
Report Date: 08-MAR-12
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	437672-007		437672-008		437672-009		437672-010		437672-011		437672-012	
	Field Id:	SB-4 30-35'		SB-4 35-40'		SB-4 40-45'		SB-4 45-50'		SB-4 50-55'		SB-4 55-60'	
	Depth:	30-35 ft		35-40 ft		40-45 ft		45-50 ft		50-55 ft		55-60 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-24-12 10:00		Feb-24-12 10:01		Feb-24-12 10:02		Feb-24-12 10:03		Feb-24-12 10:05		Feb-24-12 10:06	
Anions by E300	***Extracted:***												
	Analyzed:	Mar-05-12 10:01		Mar-05-12 10:01		Mar-05-12 10:01		Mar-05-12 10:01		Mar-05-12 10:01		Mar-05-12 10:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		314	8.98	333	8.88	357	8.86	326	8.82	370	8.99	279	4.46
Percent Moisture	***Extracted:***												
	Analyzed:	Feb-27-12 14:55		Feb-27-12 14:55		Feb-27-12 14:55		Feb-27-12 14:55		Feb-27-12 14:55		Feb-27-12 15:05	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.43	1.00	5.45	1.00	5.18	1.00	4.77	1.00	6.60	1.00	5.91	1.00

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 437672

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Mon Feb-27-12 10:59 am
Report Date: 08-MAR-12
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	437672-013		437672-014		437672-015		437672-016		437672-017		437672-018	
	Field Id:	SB-4 60-65'		SB-4 65-70'		SB-4 70-75'		SB-4 75-80'		SB-5 0-5'		SB-5 5-10'	
	Depth:	60-65 ft		65-70 ft		70-75 ft		75-80 ft		0-5 ft		5-10 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-24-12 10:07		Feb-24-12 10:08		Feb-24-12 10:09		Feb-24-12 10:10		Feb-24-12 10:15		Feb-24-12 10:17	
Anions by E300	***Extracted:***												
	Analyzed:	Mar-05-12 10:01		Mar-05-12 10:01		Mar-05-12 10:01		Mar-05-12 10:01		Mar-06-12 09:36		Mar-06-12 09:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		291	4.46	371	8.87	414	8.83	395	8.74	365	9.00	189	9.16
Percent Moisture	***Extracted:***												
	Analyzed:	Feb-27-12 15:05		Feb-27-12 15:05		Feb-27-12 15:05		Feb-27-12 15:05		Feb-27-12 15:11		Feb-27-12 15:11	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		5.77	1.00	5.32	1.00	4.86	1.00	3.91	1.00	6.71	1.00	8.33	1.00

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 437672

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Mon Feb-27-12 10:59 am
Report Date: 08-MAR-12
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	437672-019		437672-020		437672-021		437672-022		437672-023		437672-024	
	Field Id:	SB-5 10-15'		SB-5 15-20'		SB-5 20-25'		SB-5 25-30'		SB-5 30-35'		SB-5 35-40'	
	Depth:	10-15 ft		15-20 ft		20-25 ft		25-30 ft		30-35 ft		35-40 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-24-12 10:19		Feb-24-12 10:22		Feb-24-12 10:23		Feb-24-12 10:24		Feb-24-12 10:25		Feb-24-12 10:27	
Anions by E300	***Extracted:***												
	Analyzed:	Mar-06-12 09:36		Mar-06-12 09:36		Mar-06-12 09:36		Mar-06-12 09:36		Mar-06-12 09:36		Mar-06-12 09:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		437	9.25	868	18.1	990	18.0	627	8.89	414	8.91	411	8.91
Percent Moisture	***Extracted:***												
	Analyzed:	Feb-27-12 15:11		Feb-27-12 15:11		Feb-27-12 15:11		Feb-27-12 15:11		Feb-27-12 15:11		Feb-27-12 15:11	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.20	1.00	7.07	1.00	6.42	1.00	5.52	1.00	5.77	1.00	5.68	1.00

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 437672

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Mon Feb-27-12 10:59 am
Report Date: 08-MAR-12
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	437672-025		437672-026		437672-027		437672-028		437672-029		437672-030	
	Field Id:	SB-5 40-45'		SB-5 45-50'		SB-5 50-55'		SB-5 55-60'		SB-5 60-65'		SB-5 65-70'	
	Depth:	40-45 ft		45-50 ft		50-55 ft		55-60 ft		60-65 ft		65-70 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-24-12 10:29		Feb-24-12 10:30		Feb-24-12 10:31		Feb-24-12 10:33		Feb-24-12 10:34		Feb-24-12 10:35	
Anions by E300	***Extracted:***												
	Analyzed:	Mar-06-12 09:36		Mar-06-12 09:36		Mar-06-12 09:36		Mar-06-12 09:36		Mar-06-12 09:36		Mar-06-12 09:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		373	4.42	380	4.43	641	9.01	500	8.88	463	8.90	398	8.84
Percent Moisture	***Extracted:***												
	Analyzed:	Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:05	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.97	1.00	5.21	1.00	6.74	1.00	5.45	1.00	5.67	1.00	5.01	1.00

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 437672

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Mon Feb-27-12 10:59 am
Report Date: 08-MAR-12
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	437672-031		437672-032		437672-033		437672-034		437672-035		437672-036	
	Field Id:	SB-5 70-75'		SB-5 75-80'		SB-6 0-5'		SB-6 5-10'		SB-6 10-15'		SB-6 15-20'	
	Depth:	70-75 ft		75-80 ft		0-5 ft		5-10 ft		10-15 ft		15-20 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-24-12 10:36		Feb-24-12 10:38		Feb-24-12 10:46		Feb-24-12 10:47		Feb-24-12 10:48		Feb-24-12 10:49	
Anions by E300	***Extracted:***												
	Analyzed:	Mar-06-12 09:36		Mar-06-12 09:36		Mar-07-12 15:50		Mar-07-12 15:50		Mar-07-12 15:50		Mar-07-12 15:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		428	8.82	365	8.73	1110	17.6	1530	18.1	1170	18.1	965	8.93
Percent Moisture	***Extracted:***												
	Analyzed:	Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:05	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.77	1.00	3.77	1.00	4.77	1.00	7.20	1.00	7.00	1.00	5.97	1.00

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 437672

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Mon Feb-27-12 10:59 am
Report Date: 08-MAR-12
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	437672-037		437672-038		437672-039		437672-040		437672-041		437672-042	
	Field Id:	SB-6 20-25'		SB-6 25-30'		SB-6 30-35'		SB-6 35-40'		SB-6 40-45'		SB-6 45-50'	
	Depth:	20-25 ft		25-30 ft		30-35 ft		35-40 ft		40-45 ft		45-50 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-24-12 10:51		Feb-24-12 10:52		Feb-24-12 10:53		Feb-24-12 10:54		Feb-24-12 10:55		Feb-24-12 10:57	
Anions by E300	***Extracted:***												
	Analyzed:	Mar-07-12 15:50		Mar-07-12 15:50		Mar-07-12 15:50		Mar-07-12 15:50		Mar-07-12 15:50		Mar-08-12 00:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1040	18.0	857	8.81	886	8.82	934	8.90	716	8.83	297	4.37
Percent Moisture	***Extracted:***												
	Analyzed:	Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:05	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.46	1.00	4.64	1.00	4.76	1.00	5.65	1.00	4.83	1.00	3.91	1.00

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 437672

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Mon Feb-27-12 10:59 am
Report Date: 08-MAR-12
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	437672-043		437672-044		437672-045		437672-046		437672-047		437672-048	
	Field Id:	SB-6 50-55'		SB-6 55-60'		SB-6 60-65'		SB-6 65-70'		SB-6 70-75'		SB-6 75-80'	
	Depth:	50-55 ft		55-60 ft		60-65 ft		65-70 ft		70-75 ft		75-80 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-24-12 10:58		Feb-24-12 10:59		Feb-24-12 11:00		Feb-24-12 11:01		Feb-24-12 11:02		Feb-24-12 11:04	
Anions by E300	***Extracted:***												
	Analyzed:	Mar-08-12 00:15		Mar-08-12 00:15		Mar-08-12 00:15		Mar-08-12 00:15		Mar-08-12 00:15		Mar-08-12 00:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		209	4.47	10.2	4.44	97.0	4.45	31.0	4.41	18.2	4.42	18.1	4.37
Percent Moisture	***Extracted:***												
	Analyzed:	Feb-28-12 11:05		Feb-28-12 11:05		Feb-28-12 11:30		Feb-28-12 11:30		Feb-28-12 11:30		Feb-28-12 11:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.07	1.00	5.49	1.00	5.63	1.00	4.77	1.00	4.99	1.00	3.86	1.00

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 437672

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Mon Feb-27-12 10:59 am
Report Date: 08-MAR-12
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	437672-049		437672-050		437672-051		437672-052		437672-053		437672-054	
	Field Id:	SB-7 0-5'		SB-7 5-10'		SB-7 10-15'		SB-7 15-20'		SB-7 20-25'		SB-7 25-30'	
	Depth:	0-5 ft		5-10 ft		10-15 ft		15-20 ft		20-25 ft		25-30 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-24-12 09:17		Feb-24-12 09:18		Feb-24-12 09:22		Feb-24-12 09:26		Feb-24-12 09:27		Feb-24-12 09:29	
Anions by E300	***Extracted:***												
	Analyzed:	Mar-08-12 00:15		Mar-08-12 00:15		Mar-08-12 00:15		Mar-08-12 00:15		Mar-08-12 00:15		Mar-08-12 00:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		432	8.80	832	8.84	1650	18.2	1500	17.9	1460	17.9	1080	17.7
Percent Moisture	***Extracted:***												
	Analyzed:	Feb-28-12 12:30		Feb-28-12 12:30		Feb-28-12 12:30		Feb-28-12 12:30		Feb-28-12 12:30		Feb-28-12 12:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.53	1.00	4.95	1.00	7.60	1.00	5.99	1.00	6.08	1.00	4.93	1.00

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 437672

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Mon Feb-27-12 10:59 am
Report Date: 08-MAR-12
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	437672-055		437672-056		437672-057		437672-058		437672-059		437672-060	
	Field Id:	SB-7 30-35'		SB-7 35-40'		SB-7 40-45'		SB-7 45-50'		SB-7 50-55'		SB-7 55-60'	
	Depth:	30-35 ft		35-40 ft		40-45 ft		45-50 ft		50-55 ft		55-60 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-24-12 09:30		Feb-24-12 09:31		Feb-24-12 09:32		Feb-24-12 09:33		Feb-24-12 09:33		Feb-24-12 09:34	
Anions by E300	***Extracted:***												
	Analyzed:	Mar-08-12 00:15		Mar-08-12 00:15		Mar-08-12 00:15		Mar-08-12 00:15		Mar-08-12 00:15		Mar-08-12 00:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		980	8.83	972	8.86	1000	17.7	975	8.82	1310	17.9	1190	17.9
Percent Moisture	***Extracted:***												
	Analyzed:	Feb-28-12 12:30		Feb-28-12 12:30		Feb-28-12 12:30		Feb-28-12 12:30		Feb-28-12 12:30		Feb-28-12 12:42	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.83	1.00	5.17	1.00	5.12	1.00	4.71	1.00	6.08	1.00	6.30	1.00

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 437672

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Mon Feb-27-12 10:59 am
Report Date: 08-MAR-12
Project Manager: Brent Barron II

Analysis Requested											
	Lab Id:	437672-061		437672-062		437672-063		437672-064			
	Field Id:	SB-7 60-65'		SB-7 65-70'		SB-7 70-75'		SB-7 75-80'			
	Depth:	60-65 ft		65-70 ft		70-75 ft		75-80 ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	Feb-24-12 09:19		Feb-24-12 09:20		Feb-24-12 09:21		Feb-24-12 09:22			
Anions by E300	***Extracted:***										
	Analyzed:	Mar-05-12 10:01		Mar-05-12 10:01		Mar-05-12 10:01		Mar-05-12 10:01			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		1040 D	17.9	348	4.43	164	4.39	154	4.35		
Percent Moisture	***Extracted:***										
	Analyzed:	Feb-28-12 12:42		Feb-28-12 12:42		Feb-28-12 12:42		Feb-28-12 12:42			
	Units/RL:	%	RL	%	RL	%	RL	%	RL		
Percent Moisture		6.09	1.00	5.16	1.00	4.27	1.00	3.54	1.00		

Brent Barron II
Odessa Laboratory Manager

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 quantiation 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

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

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4143 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
6017 Financial Drive, Norcross, GA 30071	(770) 449-8800	(770) 449-5477
3725 E. Atlanta Ave, Phoenix, AZ 85040	(602) 437-0330	

Blank Spike Recovery

Project Name: State G

Work Order #: 437672 **Project ID:** 042079

Lab Batch #: 882942 **Sample:** 882942-1-BKS **Matrix:** Solid
Date Analyzed: 03/06/2012 **Date Prepared:** 03/06/2012 **Analyst:** BRB
Reporting Units: mg/kg **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Anions by E300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	<0.840	20.0	18.6	93	75-125	

Lab Batch #: 882943 **Sample:** 882943-1-BKS **Matrix:** Solid
Date Analyzed: 03/05/2012 **Date Prepared:** 03/05/2012 **Analyst:** BRB
Reporting Units: mg/kg **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Anions by E300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	<0.840	20.0	18.7	94	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: State G

Work Order #: 437672 **Project ID:** 042079

Analyst: BRB **Date Prepared:** 03/07/2012 **Date Analyzed:** 03/07/2012

Lab Batch ID: 883085 **Sample:** 883085-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.840	20.0	19.8	99	20.0	19.8	99	0	75-125	20	

Analyst: BRB **Date Prepared:** 03/08/2012 **Date Analyzed:** 03/08/2012

Lab Batch ID: 883089 **Sample:** 883089-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.840	20.0	19.7	99	20.0	19.6	98	1	75-125	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: State G

Work Order #: 437672

Lab Batch #: 882942 **Project ID:** 042079

Date Analyzed: 03/06/2012 **Date Prepared:** 03/06/2012 **Analyst:** BRB

QC- Sample ID: 437672-023 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	414	212	649	111	75-125	

Lab Batch #: 882942

Date Analyzed: 03/06/2012 **Date Prepared:** 03/06/2012 **Analyst:** BRB

QC- Sample ID: 438142-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	12.5	121	136	102	75-125	

Lab Batch #: 882943

Date Analyzed: 03/05/2012 **Date Prepared:** 03/05/2012 **Analyst:** BRB

QC- Sample ID: 437672-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	18.9	111	134	104	75-125	

Lab Batch #: 882943

Date Analyzed: 03/05/2012 **Date Prepared:** 03/05/2012 **Analyst:** BRB

QC- Sample ID: 437672-011 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	370	214	616	115	75-125	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS Recoveries

Project Name: State G

Work Order #: 437672

Lab Batch #: 883085 **Project ID:** 042079

Date Analyzed: 03/07/2012 **Date Prepared:** 03/07/2012 **Analyst:** BRB

QC- Sample ID: 438034-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	9.88	102	111	99	75-125	

Lab Batch #: 883089

Date Analyzed: 03/08/2012 **Date Prepared:** 03/08/2012 **Analyst:** BRB

QC- Sample ID: 437672-042 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	297	104	426	124	75-125	

Lab Batch #: 883089

Date Analyzed: 03/08/2012 **Date Prepared:** 03/08/2012 **Analyst:** BRB

QC- Sample ID: 437672-052 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1500	425	2000	118	75-125	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: State G

Work Order #: 437672

Lab Batch #: 882942 **Project ID:** 042079
Date Analyzed: 03/06/2012 09:36 **Date Prepared:** 03/06/2012 **Analyst:** BRB
QC- Sample ID: 438142-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	12.5	12.2	2	20	

Lab Batch #: 882943
Date Analyzed: 03/05/2012 10:01 **Date Prepared:** 03/05/2012 **Analyst:** BRB
QC- Sample ID: 437672-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	18.9	23.2	20	20	

Lab Batch #: 883085
Date Analyzed: 03/07/2012 15:50 **Date Prepared:** 03/07/2012 **Analyst:** BRB
QC- Sample ID: 438034-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	9.88	9.22	7	20	

Lab Batch #: 883085
Date Analyzed: 03/07/2012 15:50 **Date Prepared:** 03/07/2012 **Analyst:** BRB
QC- Sample ID: 438034-011 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	310	293	6	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: State G

Work Order #: 437672

Lab Batch #: 883089 **Project ID:** 042079
Date Analyzed: 03/08/2012 00:15 **Date Prepared:** 03/08/2012 **Analyst:** BRB
QC- Sample ID: 437672-042 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	297	297	0	20	

Lab Batch #: 882343
Date Analyzed: 02/27/2012 13:00 **Date Prepared:** 02/27/2012 **Analyst:** BRB
QC- Sample ID: 437671-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	8.99	8.74	3	20	

Lab Batch #: 882344
Date Analyzed: 02/27/2012 15:11 **Date Prepared:** 02/27/2012 **Analyst:** BRB
QC- Sample ID: 437672-017 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	6.71	6.95	4	20	

Lab Batch #: 882450
Date Analyzed: 02/28/2012 11:05 **Date Prepared:** 02/28/2012 **Analyst:** BRB
QC- Sample ID: 437672-025 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	4.97	5.23	5	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: State G

Work Order #: 437672

Lab Batch #: 882452 **Project ID:** 042079

Date Analyzed: 02/28/2012 11:30 **Date Prepared:** 02/28/2012 **Analyst:** BRB

QC- Sample ID: 437672-045 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.63	5.43	4	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Desiree Crenshaw
Company Name: CRA
Company Address: 2135 S Loop 250 W
City/State/Zip: Midland, TX 79703
Telephone No: 432-686-0086 Fax No: 432-686-0186
Sampler Signature:

Project Name: Dr State G
Project #: 042079
Project Loc: New Mexico
PO #:
Report Format: ☒ Standard ☐ TRRP ☐ NPDES
e-mail: drenshaw@craworld.com

(lab use only)
ORDER #: 437672

LAB # (lab use only)	FIELD CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M TPH: TX 1005 TX 1006	TOTAL: Cations (Ca, Mg, Na, K) Anions (Cl, SO4, Alkalinity) SAR / ESP / CEC Metals: As Ag Ba Cd Cr Pb Hg Se Volatiles Semivolatiles BTEX 8021B/5030 or BTEX 8260 RCI N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	SB-4	0'-5'	0	5	2-24-12	952											S			
02	SB-4	5'-10'	5	10		953														
03	SB-4	10'-15'	10	15		955														
04	SB-4	15'-20'	15	20		956														
05	SB-4	20'-25'	20	25		957														
06	SB-4	25'-30'	25	30		958														
07	SB-4	30'-35'	30	35		1000														
08	SB-4	35'-40'	35	40		1001														
09	SB-4	40'-45'	40	45		1002														
10	SB-4	45'-50'	45	50		1003														

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	2-27-12	1059			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Elam	2 27 12	1059

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 3.0 °C

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Desiree' Crenshaw
Company Name: CRA
Company Address: 2135 S Loop 250 W
City/State/Zip: Midland, TX 79703
Telephone No: 432-686-0086
Fax No: 432-686-0186
Sampler Signature: [signature]
e-mail: dcrenshaw@craworld.com

Project Name: State G
Project #: 042079
Project Loc: New Mexico
PO #:
Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 437672

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other)	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
11	SB-4 50'-55'	50	55	2-24-12	1005		1									S													
12	SB-4 55'-60'	55	60		1006																								
13	SB-4 60'-65'	60	65		1007																								
14	SB-4 65'-70'	65	70		1008																								
15	SB-4 70'-75'	70	75		1009																								
16	SB-4 75'-80'	75	80		1010																								
17	SB-5 0'-5'	0	5		1015																								
18	SB-5 5'-10'	5	10		1017																								
19	SB-5 10'-15'	10	15		1019																								
20	SB-5 15'-20'	15	20		1022																								

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	2-27-12	1059			
			Received by ELOT: Andrea Elam	2-27-12	10:59

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered Y N
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 3.0 °C

Xenco Laboratories

The.Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Desiree Crenshaw
Company Name: CRA
Company Address: 2135 S Loop 250 W
City/State/Zip: Midland, TX 79703
Telephone No: 432-686-0086
Fax No: 432-686-0186
Sampler Signature: [signature]
e-mail: dcrenshaw@craworld.com

Project Name: 8K State G
Project #: 042079
Project Loc: New Mexico
PO #:
Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 437672

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge, GW = Groundwater S=Soil/Solid, NP=Non-Potable Specify Other)	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
21	SB-S 20'-25'	20	25	2-24-12	1023		1	✓								S				✓									✓
22	SB-S 25'-30'	25	30		1024																								
23	SB-S 30'-35'	30	35		1025																								
24	SB-S 35'-40'	35	40		1027																								
25	SB-S 40'-45'	40	45		1029																								
26	SB-S 45'-50'	45	50		1030																								
27	SB-S 50'-55'	50	55		1031																								
28	SB-S 55'-60'	55	60		1033																								
29	SB-S 60'-65'	60	65		1034																								
30	SB-S 65'-70'	65	70		1035																								

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	2-27-12	1059			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Elam	2-27-12	10:59

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 3.0 °C

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Desiree Crenshaw
Company Name: CRA
Company Address: 2135 S Loop 250 W
City/State/Zip: Midland, TX 79703
Telephone No: 432-686-0086 Fax No: 432-686-0186
Sampler Signature: [signature]
e-mail: dcrenshaw@crawor1d.com

Project Name: State H
Project #: 042079
Project Loc: New Mexico
PO #:
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 437672

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW=Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 8015M	TPH: 418.1	TPH: TX 1005	TPH: TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
31	SB-5	70'-75'	70	75	2-24-12	1036		1								S																	
32	SB-5	75'-80'	75	80		1038		1																									
33	SB-6	0'-5'	0	5		1046																											
34	SB-6	5'-10'	5	10		1047																											
35	SB-6	10'-15'	10	15		1048																											
36	SB-6	15'-~~20'~~	15	20		1049																											
37	SB-6	20'-25'	20	25		1051																											
38	SB-6	25'-30'	25	30		1052																											
39	SB-10	30-35'	30	35		1053																											
40	SB-6	35'-40'	35	40	↓	1054		↓								↓																	

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	2-27-12	1059			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Elam	2-27-12	1057

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?		
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 3.0 °C

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Desiree Crenshaw
Company Name: CRA
Company Address: 2135 S Loop 250 W
City/State/Zip: Midland, TX 79703
Telephone No: 432-686-0086 Fax No: 432-686-0186
Sampler Signature: DC e-mail: dcrenshaw@craworld.com

Project Name: State G
Project #: 042079
Project Loc: New Mexico
PO #:
Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 437672

LAB # (lab use only)	FIELD CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW=Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 8015B	TPH: 8015M 418.1	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
41	SB-6	40'-45'	40	45	2-24-12	1055		1	X								S															
42	SB-6	45'-50'	45	50		1057																										
43	SB-6	50'-55'	50	55		1058																										
44	SB-6	55'-60'	55	60		1059																										
45	SB-6	60'-65'	60	65		1100																										
46	SB-6	65'-70'	65	70		1101																										
47	SB-6	70'-75'	70	75		1102																										
48	SB-6	75-80'	75	80		1104																										
49	SB-7	0-5'	0	5		917																										
50	SB-7	5'-10'	5	10		918																										

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
DC	2-27-12	10:59			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Elam	Date 2-27-12	Time 10:59

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 3.0 °C

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Desiree Crenshaw
Company Name: CRA
Company Address: 2135 S Loop 250 W
City/State/Zip: Midland, TX 79703
Telephone No: 432-686-0086
Fax No: 432-686-0186
Sampler Signature: [signature]
e-mail: dcrenshaw@craworld.com

Project Name: State 5
Project #: 042079
Project Loc: New Mexico
PO #:
Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 437672

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other)	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, ~~SO4, Alkalinity~~)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
51	SB-7 10'-15'	10	15	2-24-12	922		1	1								S				↓									↓
52	SB-7 15'-20'	15	20	↓	926		↓	↓								↓				↓									↓
53	SB-7 20'-25'	20	25	↓	927		↓	↓								↓				↓									↓
54	SB-7 25'-30'	25	30	↓	929		↓	↓								↓				↓									↓
55	SB-7 30'-35'	30	35	↓	930		↓	↓								↓				↓									↓
56	SB-7 35'-40'	35	40	↓	931		↓	↓								↓				↓									↓
57	SB-7 40'-45'	40	45	↓	932		↓	↓								↓				↓									↓
58	SB-7 45'-50'	45	50	↓	933		↓	↓								↓				↓									↓
59	SB-7 50'-55'	50	55	↓	933		↓	↓								↓				↓									↓
60	SB-7 55'-60'	55	60	↓	934		↓	↓								↓				↓									↓

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	2-27-12	1059			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Elam	2-27-12	1059

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 3.0 °C

Xenco Laboratories

The Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Desiree Crenshaw

Company Name: CRA

Company Address: 2135 S Loop 250 W

City/State/Zip: Midland, TX 79703

Telephone No: 432-686-0086

Fax No:

Sampler Signature: [signature]

e-mail:

Project Name: State G

Project #: 042079

Project Loc: New Mexico

PO #:

Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 437672

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	SB-7 60'-65'	60	65	2-27-12	919		↓	↓								S				↓											↓
02	SB-7 65'-70'	65	70	↓	920											↓															
03	SB-7 70'-75'	70	75	↓	921											↓															
04	SB-7 75'-80'	75	80	↓	922											↓															

Analyze For: TCLP: TOTAL:

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	2-27-12	1059			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Elam	2-27-12	10:59

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 3.0 °C

XENCO Laboratories	XENCO Laboratories Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia Phoenix, San Antonio, Tampa	Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: CRA

Date/Time: 2.27.12 10:59

Lab ID # : 437672

Initials: AE

Sample Receipt Checklist

1. Samples on ice?	Blue	(Water)	No	
2. Shipping container in good condition?	(Yes)	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	(N/A)	
4. Chain of Custody present?	(Yes)	No		
5. Sample instructions complete on chain of custody?	(Yes)	No		
6. Any missing / extra samples?	Yes	(No)		
7. Chain of custody signed when relinquished / received?	(Yes)	No		
8. Chain of custody agrees with sample label(s)?	(Yes)	No		
9. Container labels legible and intact?	(Yes)	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No		
11. Samples in proper container / bottle?	(Yes)	No		
12. Samples properly preserved?	(Yes)	No	N/A	
13. Sample container intact?	(Yes)	No		
14. Sufficient sample amount for indicated test(s)?	(Yes)	No		
15. All samples received within sufficient hold time?	(Yes)	No		
16. Subcontract of sample(s)?	Yes	No	(N/A)	
17. VOC sample have zero head space?	Yes	No	(N/A)	

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	3.0 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

Contact: _____ **Contacted by:** _____ **Date/Time:** _____

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 445445

for

Conestoga Rovers & Associates

Project Manager: Desiree Crenshaw

State G

042079-2012-02

16-JUL-12

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-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)

16-JUL-12

Project Manager: **Desiree Crenshaw**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No: **445445**
State G
Project Address: New Mexico

Desiree Crenshaw:

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 445445. 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. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. 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. 445445 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,

Nicholas Straccione
Project Manager

Sample Cross Reference 445445

Conestoga Rovers & Associates, Midland, TX

State G

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Site A NW Wall	S	07-10-12 17:00	0 - 2.5 ft	445445-001
Site A NE Wall	S	07-10-12 17:00	0 - 2.5 ft	445445-002
Site A SW Wall	S	07-11-12 10:00	0 - 2.5 ft	445445-003
Site A SE Wall	S	07-11-12 10:05	0 - 2.5 ft	445445-004
Site A N Floor	S	07-11-12 10:10	0 - 2.5 ft	445445-005
Site A S Floor	S	07-11-12 10:15	0 - 2.5 ft	445445-006
Site B NW Wall	S	07-11-12 10:20	0 - 2.5 ft	445445-007
Site B NE Wall	S	07-11-12 10:25	0 - 2.5 ft	445445-008
Site B SW Wall	S	07-11-12 10:30	0 - 2.5 ft	445445-009
Site B SE Wall	S	07-11-12 10:35	0 - 2.5 ft	445445-010
Site B Floor	S	07-11-12 10:40	0 - 2.5 ft	445445-011

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates

Project Name: State G

Project ID:	*042079-2012-02*	*Report Date:*	*16-JUL-12*
Work Order Number:	*445445*	*Date Received:*	*07/11/2012*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-892030 TPH By SW8015 Mod
SW8015MOD_NM

Batch 892030, 1-Chlorooctane, o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 624446-1-BKS.

SW8015MOD_NM

Batch 892030, C12-C28 DRO recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 445445-010, -004, -005, -001, -002, -007, -008, -006, -003, -009, -011.
The Laboratory Control Sample for C12-C28 DRO is within laboratory Control Limits

Certificate of Analysis Summary 445445

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079-2012-02
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Wed Jul-11-12 03:05 pm
Report Date: 16-JUL-12
Project Manager: Nicholas Straccione

Analysis Requested													
	Lab Id:	445445-001		445445-002		445445-003		445445-004		445445-005		445445-006	
	Field Id:	Site A NW Wall		Site A NE Wall		Site A SW Wall		Site A SE Wall		Site A N Floor		Site A S Floor	
	Depth:	0-2.5 ft		0-2.5 ft		0-2.5 ft		0-2.5 ft		0-2.5 ft		0-2.5 ft	
	Matrix:	SOLID		SOLID		SOLID		SOLID		SOLID		SOLID	
	Sampled:	Jul-10-12 17:00		Jul-10-12 17:00		Jul-11-12 10:00		Jul-11-12 10:05		Jul-11-12 10:10		Jul-11-12 10:15	
Inorganic Anions by EPA 300/300.1 SUB: E871002	***Extracted:***	Jul-13-12 02:53		Jul-13-12 03:09		Jul-13-12 03:25		Jul-13-12 03:41		Jul-13-12 03:57		Jul-13-12 04:46	
	Analyzed:	Jul-13-12 02:53		Jul-13-12 03:09		Jul-13-12 03:25		Jul-13-12 03:41		Jul-13-12 03:57		Jul-13-12 04:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1210	11.3	377	10.9	685	11.1	1190	12.4	1470	13.0	794	11.6
Percent Moisture	***Extracted:***												
	Analyzed:	Jul-11-12 16:30		Jul-11-12 16:30		Jul-11-12 16:30		Jul-11-12 16:30		Jul-11-12 16:30		Jul-11-12 16:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		11.9	1.00	8.15	1.00	10.3	1.00	19.2	1.00	23.3	1.00	14.0	1.00
TPH By SW8015 Mod	***Extracted:***	Jul-11-12 16:00		Jul-11-12 16:00		Jul-11-12 16:00		Jul-11-12 16:00		Jul-11-12 16:00		Jul-11-12 16:00	
	Analyzed:	Jul-12-12 01:29		Jul-12-12 01:58		Jul-12-12 02:27		Jul-12-12 02:55		Jul-12-12 03:25		Jul-12-12 03:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 GRO		ND	17.0	ND	16.3	ND	83.3	ND	18.5	ND	97.5	ND	17.4
C12-C28 DRO		941	17.0	925	16.3	1410	83.3	272	18.5	6980	97.5	598	17.4

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 445445

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079-2012-02
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Wed Jul-11-12 03:05 pm
Report Date: 16-JUL-12
Project Manager: Nicholas Straccione

Analysis Requested											
	Lab Id:	445445-007		445445-008		445445-009		445445-010		445445-011	
	Field Id:	Site B NW Wall		Site B NE Wall		Site B SW Wall		Site B SE Wall		Site B Floor	
	Depth:	0-2.5 ft		0-2.5 ft		0-2.5 ft		0-2.5 ft		0-2.5 ft	
	Matrix:	SOLID		SOLID		SOLID		SOLID		SOLID	
	Sampled:	Jul-11-12 10:20		Jul-11-12 10:25		Jul-11-12 10:30		Jul-11-12 10:35		Jul-11-12 10:40	
Inorganic Anions by EPA 300/300.1 SUB: E871002	***Extracted:***	Jul-13-12 05:02		Jul-13-12 05:18		Jul-13-12 05:34		Jul-13-12 05:50		Jul-13-12 06:06	
	Analyzed:	Jul-13-12 05:02		Jul-13-12 05:18		Jul-13-12 05:34		Jul-13-12 05:50		Jul-13-12 06:06	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		78.1	1.11	53.2	1.11	293	1.08	106	1.14	111	1.14
Percent Moisture	***Extracted:***										
	Analyzed:	Jul-11-12 16:30		Jul-11-12 16:30		Jul-11-12 16:30		Jul-11-12 16:30		Jul-11-12 16:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		10.1	1.00	9.77	1.00	7.83	1.00	12.5	1.00	12.3	1.00
TPH By SW8015 Mod	***Extracted:***	Jul-11-12 16:00		Jul-11-12 16:00		Jul-11-12 16:00		Jul-11-12 16:00		Jul-11-12 16:00	
	Analyzed:	Jul-12-12 04:27		Jul-12-12 04:56		Jul-12-12 05:25		Jul-12-12 05:53		Jul-12-12 07:26	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 GRO		ND	16.7	ND	82.7	18.5	16.2	ND	17.1	25.4	17.0
C12-C28 DRO		809	16.7	1710	82.7	2940	16.2	820	17.1	580	17.0

Nicholas Straccione
Project Manager

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 quantiation 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

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

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4143 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
6017 Financial Drive, Norcross, GA 30071	(770) 449-8800	(770) 449-5477
3725 E. Atlanta Ave, Phoenix, AZ 85040	(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: State G

Work Orders : 445445,

Project ID: 042079-2012-02

Lab Batch #: 892030 **Sample:** 445445-001 / SMP **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 01:29

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.1	99.8	82	70-135	
o-Terphenyl	45.3	49.9	91	70-135	

Lab Batch #: 892030 **Sample:** 445445-002 / SMP **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 01:58

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.1	100	86	70-135	
o-Terphenyl	46.6	50.0	93	70-135	

Lab Batch #: 892030 **Sample:** 445445-003 / SMP **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 02:27

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.9	99.6	88	70-135	
o-Terphenyl	47.7	49.8	96	70-135	

Lab Batch #: 892030 **Sample:** 445445-004 / SMP **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 02:55

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.3	99.7	90	70-135	
o-Terphenyl	49.2	49.9	99	70-135	

Lab Batch #: 892030 **Sample:** 445445-005 / SMP **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 03:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.6	99.8	94	70-135	
o-Terphenyl	65.2	49.9	131	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: State G

Work Orders : 445445,

Project ID: 042079-2012-02

Lab Batch #: 892030 **Sample:** 445445-006 / SMP **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 03:57

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.1	99.8	85	70-135	
o-Terphenyl	45.8	49.9	92	70-135	

Lab Batch #: 892030 **Sample:** 445445-007 / SMP **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 04:27

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.1	100	91	70-135	
o-Terphenyl	50.0	50.1	100	70-135	

Lab Batch #: 892030 **Sample:** 445445-008 / SMP **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 04:56

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.0	99.5	92	70-135	
o-Terphenyl	50.0	49.8	100	70-135	

Lab Batch #: 892030 **Sample:** 445445-009 / SMP **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 05:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.7	99.8	88	70-135	
o-Terphenyl	47.5	49.9	95	70-135	

Lab Batch #: 892030 **Sample:** 445445-010 / SMP **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 05:53

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.6	99.7	91	70-135	
o-Terphenyl	48.8	49.9	98	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: State G

Work Orders : 445445,

Project ID: 042079-2012-02

Lab Batch #: 892030 **Sample:** 445445-011 / SMP **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 07:26

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.2	99.5	89	70-135	
o-Terphenyl	47.9	49.8	96	70-135	

Lab Batch #: 892030 **Sample:** 624446-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 01:01

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.9	100	89	70-135	
o-Terphenyl	49.8	50.0	100	70-135	

Lab Batch #: 892030 **Sample:** 624446-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 00:03

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	155	100	155	70-135	**
o-Terphenyl	93.5	50.0	187	70-135	**

Lab Batch #: 892030 **Sample:** 624446-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 00:32

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.9	100	98	70-135	
o-Terphenyl	49.9	50.0	100	70-135	

Lab Batch #: 892030 **Sample:** 445445-002 S / MS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 07:56

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	51.3	50.0	103	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: State G

Work Orders : 445445,

Project ID: 042079-2012-02

Lab Batch #: 892030 **Sample:** 445445-002 SD / MSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/12/12 08:26

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	51.2	50.0	102	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: State G

Work Order #: 445445 **Project ID:** 042079-2012-02

Analyst: TTE **Date Prepared:** 07/13/2012 **Date Analyzed:** 07/13/2012

Lab Batch ID: 892136 **Sample:** 624506-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<1.00	100	102	102	100	96.8	97	5	80-120	20	

Analyst: KEB **Date Prepared:** 07/11/2012 **Date Analyzed:** 07/12/2012

Lab Batch ID: 892030 **Sample:** 624446-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 GRO	<15.0	1000	706	71	1000	709	71	0	70-135	35	
C12-C28 DRO	<15.0	1000	839	84	1000	849	85	1	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: State G

Work Order #: 445445

Lab Batch #: 892136 **Project ID:** 042079-2012-02

Date Analyzed: 07/13/2012 **Date Prepared:** 07/13/2012 **Analyst:** TTE

QC- Sample ID: 445441-001 S **Batch #:** 1 **Matrix:** Solid

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	15.8	100	117	101	80-120	

Lab Batch #: 892136

Date Analyzed: 07/13/2012 **Date Prepared:** 07/13/2012 **Analyst:** TTE

QC- Sample ID: 445445-011 S **Batch #:** 1 **Matrix:** Solid

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	111	114	204	82	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: State G

Work Order # : 445445 **Project ID:** 042079-2012-02

Lab Batch ID: 892030 **QC- Sample ID:** 445445-002 S **Batch #:** 1 **Matrix:** Solid

Date Analyzed: 07/12/2012 **Date Prepared:** 07/11/2012 **Analyst:** KEB

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
C6-C12 GRO	<16.3	1090	779	71	1090	784	72	1	70-135	35	
C12-C28 DRO	925	1090	1640	66	1090	1630	65	1	70-135	35	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: State G

Work Order #: 445445

Lab Batch #: 892038 **Project ID:** 042079-2012-02

Date Analyzed: 07/11/2012 16:30 **Date Prepared:** 07/11/2012 **Analyst:** WRU

QC- Sample ID: 445445-001 D **Batch #:** 1 **Matrix:** Solid

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	11.9	10.8	10	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Desiree' Crensha
Company Name: CRA
Company Address: 2135 S Loop 250 W
City/State/Zip: Midland, TX 79703
Telephone No: 432 230 4310
Fax No:
Sampler Signature: [signature]
e-mail: dcrenshaw@craworld.com

Project Name: State G
Project #: 042079-2012-02
Project Loc: New Mexico
PO #:
Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 445445

Preservation & # of Containers | Matrix | Analyze For: TCLP: / TOTAL:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: 418.1 8015M 8015B (DRO/GRO)	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.				RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	Site A NW Wall	0	2.5	7-10-12	1700																											
	Site A NE wall			7-10-12	1700																											
	Site A SW wall			7-11-12	1000																											
	Site A SE wall				1005																											
	Site A N Floor				1010																											
	Site A S Floor				1015																											
	Site B NW wall				1020																											
	Site B NE wall				1025																											
	Site B SW wall				1030																											
	Site B SE wall				1035																											

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	7-11-12	1505			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: [signature]	7-11-12	15:05

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) on lid (Y) N
Custody seals on container(s) Y (N)
Custody seals on cooler(s) Y (N)
Sample Hand Delivered (Y) N
by Sampler/Client Rep. ? (Y) N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: As Read 4.5 Corrected 3.0 °C
402 C.9

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Desiree Crenshaw
Company Name: CRA
Company Address: 2135 S Loop 250 W
City/State/Zip: Midland TX 79782
Telephone No: 432 230 4310 Fax No:
Sampler Signature:

Project Name: State G
Project #: 042079-201202
Project Loc: New Mexico
PO #:
Report Format: ☐ Standard ☐ TRRP ☐ NPDES
e-mail: dcrenshaw@craworld.com

(lab use only)
ORDER #: 445445

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 8015M 8015B DRO/GRO	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) (24, 48, 72 hrs)	Standard TAT
	Site B Floor	0	2.5	7-11-12	1040			X									X			X								X	

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	7-11-12	1505			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Bill Rehm	Date 7-11-12	Time 15:05

Laboratory Comments:

Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) on lid (Y) N
Custody seals on container(s) Y (N)
Custody seals on cooler(s) Y (N)
Sample Hand Delivered (Y) N
by Sampler/Client Rep. ? (Y) N
by Courier? UPS DHL FedEx Lone Star
407 C.G.

Temperature Upon Receipt: As Read 4.5 Corrected 3.0 °C

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 07/11/2012 03:05:00 PM

Work Order #: 445445

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)?	3
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles/ container?	**Yes**
#6 *Custody Seals Signed and dated for Containers/coolers	**Yes**
#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)?	**Yes**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**

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

Analyst:	PH Device/Lot#:

Checklist completed by: Date: 07/11/2012

Checklist reviewed by: Date: 07/11/2012

Analytical Report 445661

for

Conestoga Rovers & Associates

Project Manager: Desiree Crenshaw

State G

042079

20-JUL-12

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-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)

20-JUL-12

Project Manager: **Desiree Crenshaw**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No: **445661**
State G
Project Address: New Mexico

Desiree Crenshaw:

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 445661. 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. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. 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. 445661 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,

Nicholas Straccione
Project Manager

Sample Cross Reference 445661

Conestoga Rovers & Associates, Midland, TX

State G

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Site A SW	S	07-13-12 13:00	0 - 2.5	445661-001
Site B SW Wall	S	07-13-12 13:05	0 - 2.5	445661-002
Site B NE Wall	S	07-13-12 13:10	0 - 2.5	445661-003

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates

Project Name: State G

Project ID:	*042079*	*Report Date:*	*20-JUL-12*
Work Order Number:	*445661*	*Date Received:*	*07/13/2012*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Hits Summary 445661

Conestoga Rovers & Associates, Midland, TX

State G

Sample Id: **Site A SW**	Matrix: **Soil**	% Moisture: **5.95**
Lab Sample Id: **445661-001**	Date Collected: **Jul-13-12 13:00**	Basis: **Dry Weight**
Sample Depth: **0 - 2.5**	Date Received: **Jul-13-12 17:32**	

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

Seq Number: 892429 Date Prep: Jul-17-12 11:07

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2820	mg/kg	07/17/12 11:07		10

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Seq Number: 892326 Date Prep: Jul-16-12 08:30

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
TPH_DRO	PHCG1028	548	mg/kg	07/16/12 12:42		1

Project: Midland Odessa Standard List of prices

Hits Summary 445661

Conestoga Rovers & Associates, Midland, TX

State G

Sample Id: **Site A SW**	Matrix: **Soil**	% Moisture:
Lab Sample Id: **445661-001**	Date Collected: **Jul-13-12 13:00**	Basis: **Wet Weight**
Sample Depth: **0 - 2.5**	Date Received: **Jul-13-12 17:32**	

Analytical Method: Percent Moisture

Seq Number: 892320

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	5.95	%	07/16/12 12:00		1

Project: Midland Odessa Standard List of prices

Hits Summary 445661

Conestoga Rovers & Associates, Midland, TX

State G

Sample Id: **Site B SW Wall**	Matrix: **Soil**	% Moisture: **6.14**
Lab Sample Id: **445661-002**	Date Collected: **Jul-13-12 13:05**	Basis: **Dry Weight**
Sample Depth: **0 - 2.5**	Date Received: **Jul-13-12 17:32**	

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

Seq Number: 892429 Date Prep: Jul-17-12 11:39

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	430	mg/kg	07/17/12 11:39		10

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Seq Number: 892326 Date Prep: Jul-16-12 08:30

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
TPH _GRO	PHC612	19.5	mg/kg	07/16/12 13:14		1
TPH_DRO	PHCG1028	1060	mg/kg	07/16/12 13:14		1

Project: Midland Odessa Standard List of prices

Conestoga Rovers & Associates, Midland, TX

State G

Sample Id: **Site B SW Wall**	Matrix: **Soil**	% Moisture:
Lab Sample Id: **445661-002**	Date Collected: **Jul-13-12 13:05**	Basis: **Wet Weight**
Sample Depth: **0 - 2.5**	Date Received: **Jul-13-12 17:32**	

Analytical Method: Percent Moisture

Seq Number: 892320

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	6.14	%	07/16/12 12:00		1

Project: Midland Odessa Standard List of prices

Conestoga Rovers & Associates, Midland, TX

State G

Sample Id: **Site B NE Wall**	Matrix: **Soil**	% Moisture: **6.22**
Lab Sample Id: **445661-003**	Date Collected: **Jul-13-12 13:10**	Basis: **Dry Weight**
Sample Depth: **0 - 2.5**	Date Received: **Jul-13-12 17:32**	

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

Seq Number: 892429 Date Prep: Jul-17-12 11:55

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	40.0	mg/kg	07/17/12 11:55		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P

Seq Number: 892326 Date Prep: Jul-16-12 08:30

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
TPH_DRO	PHCG1028	1020	mg/kg	07/16/12 13:47		1

Project: Midland Odessa Standard List of prices

Conestoga Rovers & Associates, Midland, TX

State G

Sample Id: **Site B NE Wall**	Matrix: **Soil**	% Moisture:
Lab Sample Id: **445661-003**	Date Collected: **Jul-13-12 13:10**	Basis: **Wet Weight**
Sample Depth: **0 - 2.5**	Date Received: **Jul-13-12 17:32**	

Analytical Method: Percent Moisture

Seq Number: 892320

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	6.22	%	07/16/12 12:00		1

Project: Midland Odessa Standard List of prices

Certificate of Analysis Summary 445661

Conestoga Rovers & Associates, Midland, TX

Project Name: State G

Project Id: 042079
Contact: Desiree Crenshaw
Project Location: New Mexico

Date Received in Lab: Fri Jul-13-12 05:32 pm
Report Date: 20-JUL-12
Project Manager: Nicholas Straccione

Analysis Requested											
	Lab Id:	445661-001		445661-002		445661-003					
	Field Id:	Site A SW		Site B SW Wall		Site B NE Wall					
	Depth:	0-2.5		0-2.5		0-2.5					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Jul-13-12 13:00		Jul-13-12 13:05		Jul-13-12 13:10					
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	Jul-17-12 11:07		Jul-17-12 11:39		Jul-17-12 11:55					
	Analyzed:	Jul-17-12 11:07		Jul-17-12 11:39		Jul-17-12 11:55					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		2820	10.6	430	10.7	40.0	1.07				
Percent Moisture	***Extracted:***										
	Analyzed:	Jul-16-12 12:00		Jul-16-12 12:00		Jul-16-12 12:00					
	Units/RL:	%	RL	%	RL	%	RL				
Percent Moisture		5.95	1.00	6.14	1.00	6.22	1.00				
TPH By SW8015 Mod	***Extracted:***	Jul-16-12 08:30		Jul-16-12 08:30		Jul-16-12 08:30					
	Analyzed:	Jul-16-12 12:42		Jul-16-12 13:14		Jul-16-12 13:47					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
TPH _GRO		ND	15.9	19.5	15.9	ND	16.0				
TPH_DRO		548	15.9	1060	15.9	1020	16.0				

Nicholas Straccione
Project Manager

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 quantiation 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

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6017 Financial Drive, Norcross, GA 30071	(770) 449-8800	(770) 449-5477
3725 E. Atlanta Ave, Phoenix, AZ 85040	(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: State G

Work Orders : 445661, **Project ID:** 042079

Lab Batch #: 892326 **Sample:** 445661-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/12 12:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.6	99.9	88	70-135	
o-Terphenyl	46.4	50.0	93	70-135	

Lab Batch #: 892326 **Sample:** 445661-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/12 13:14

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.8	99.6	89	70-135	
o-Terphenyl	48.3	49.8	97	70-135	

Lab Batch #: 892326 **Sample:** 445661-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/12 13:47

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.5	99.8	89	70-135	
o-Terphenyl	47.2	49.9	95	70-135	

Lab Batch #: 892326 **Sample:** 624650-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/16/12 12:09

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.4	100	89	70-135	
o-Terphenyl	47.5	50.0	95	70-135	

Lab Batch #: 892326 **Sample:** 624650-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/17/12 00:28

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	57.3	50.0	115	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: State G

Work Orders : 445661,

Project ID: 042079

Lab Batch #: 892326 **Sample:** 624650-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/17/12 00:58

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	55.9	50.0	112	70-135	

Lab Batch #: 892326 **Sample:** 445607-003 S / MS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/16/12 23:28

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	56.5	50.0	113	70-135	

Lab Batch #: 892326 **Sample:** 445607-003 SD / MSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/16/12 23:58

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	51.1	50.0	102	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: State G

Work Order #: 445661 **Project ID:** 042079

Analyst: TTE **Date Prepared:** 07/17/2012 **Date Analyzed:** 07/17/2012

Lab Batch ID: 892429 **Sample:** 624711-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<1.00	100	104	104	100	105	105	1	80-120	20	

Analyst: KEB **Date Prepared:** 07/16/2012 **Date Analyzed:** 07/17/2012

Lab Batch ID: 892326 **Sample:** 624650-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
TPH _GRO	<15.0	1000	776	78	1000	782	78	1	70-135	35	
TPH_DRO	<15.0	1000	937	94	1000	928	93	1	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: State G

Work Order #: 445661
Lab Batch #: 892429
Project ID: 042079
Date Analyzed: 07/17/2012
Date Prepared: 07/17/2012
Analyst: TTE
QC- Sample ID: 445661-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	2820	1060	4000	111	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: State G

Work Order # : 445661 **Project ID:** 042079

Lab Batch ID: 892326 **QC- Sample ID:** 445607-003 S **Batch #:** 1 **Matrix:** Solid

Date Analyzed: 07/16/2012 **Date Prepared:** 07/16/2012 **Analyst:** KEB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
TPH _GRO	<16.5	1100	772	70	1100	781	71	1	70-135	35	
TPH_DRO	<16.5	1100	939	85	1100	942	86	0	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: State G

Work Order #: 445661

Lab Batch #: 892320 **Project ID:** 042079

Date Analyzed: 07/16/2012 12:00 **Date Prepared:** 07/16/2012 **Analyst:** WRU

QC- Sample ID: 445661-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.95	5.85	2	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Desiree Crenshaw
Company Name: CRA
Company Address: 2135 S Loop 250 W
City/State/Zip: Midland TX 79703
Telephone No: 432 686 4310
Fax No:
Sampler Signature: [signature]
e-mail: dcrenshaw@craworld.com

Project Name: State G
Project #: 092079
Project Loc: New Mexico
PO #:
Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 445661

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	TPH: 418.1 8015M 8015B (GRO/DRO)	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
001	Site A North Floor	0	2.5	7-13-12	1300			↓											↓			↓								↓	
002	Site B SW Wall	0	2.5	↓	1305			↓											↓			↓								↓	
003	Site B NE Wall	0	2.5	↓	1310			↓											↓			↓								↓	

Analyze For: TCLP: / TOTAL:

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	7-13-12	1732			
			Received by ELOT: [signature]	7-13-12	17:32

Laboratory Comments:

	Y	N
Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
~~Custody seals on cooler(s)~~	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: As Read 2.0 Corrected 0.5 °C

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 07/13/2012 05:32:00 PM

Work Order #: 445661

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)?	.5
#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/ container?	**N/A**
#6 *Custody Seals Signed and dated for Containers/coolers	**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)?	**Yes**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**

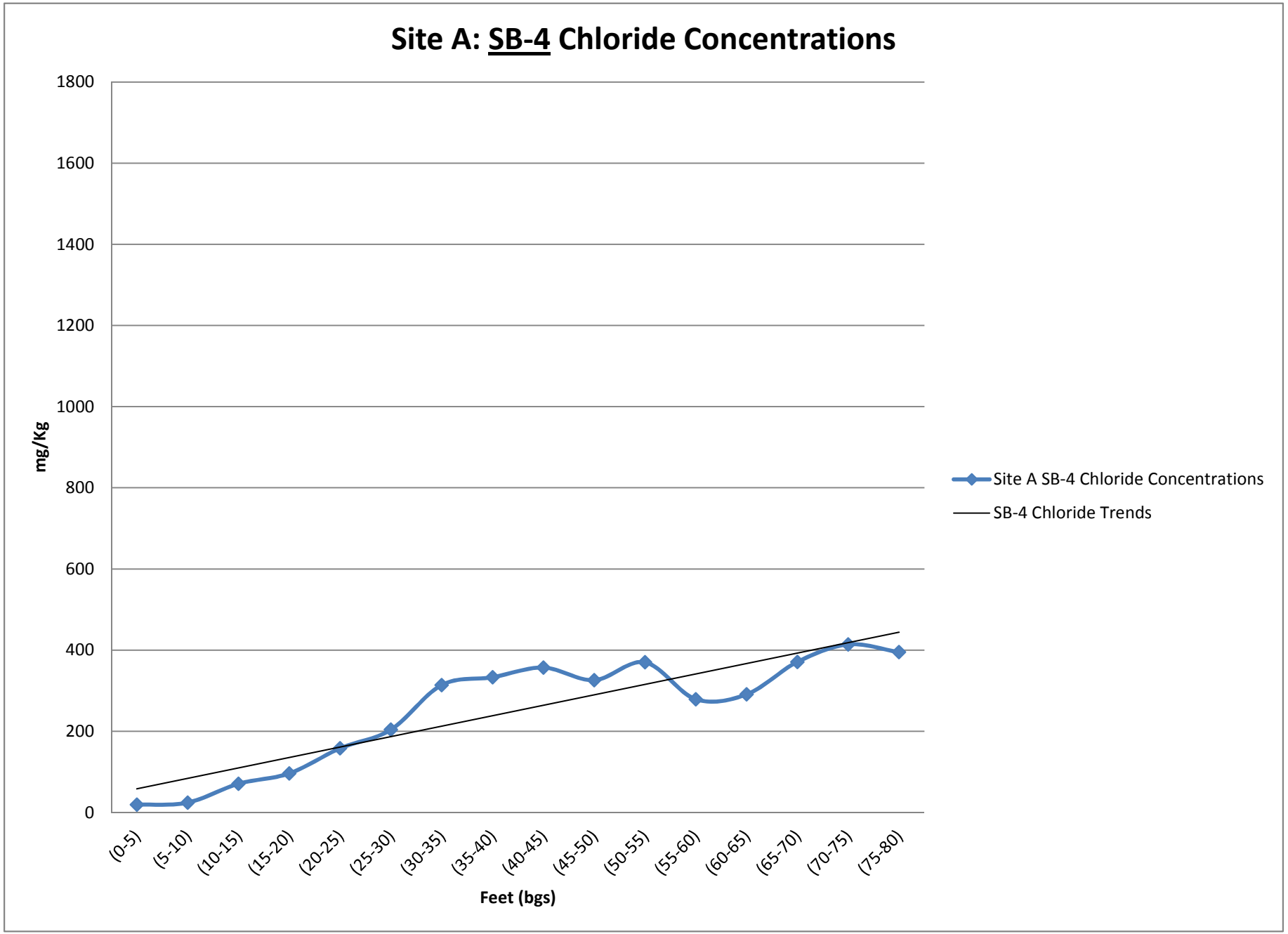
*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

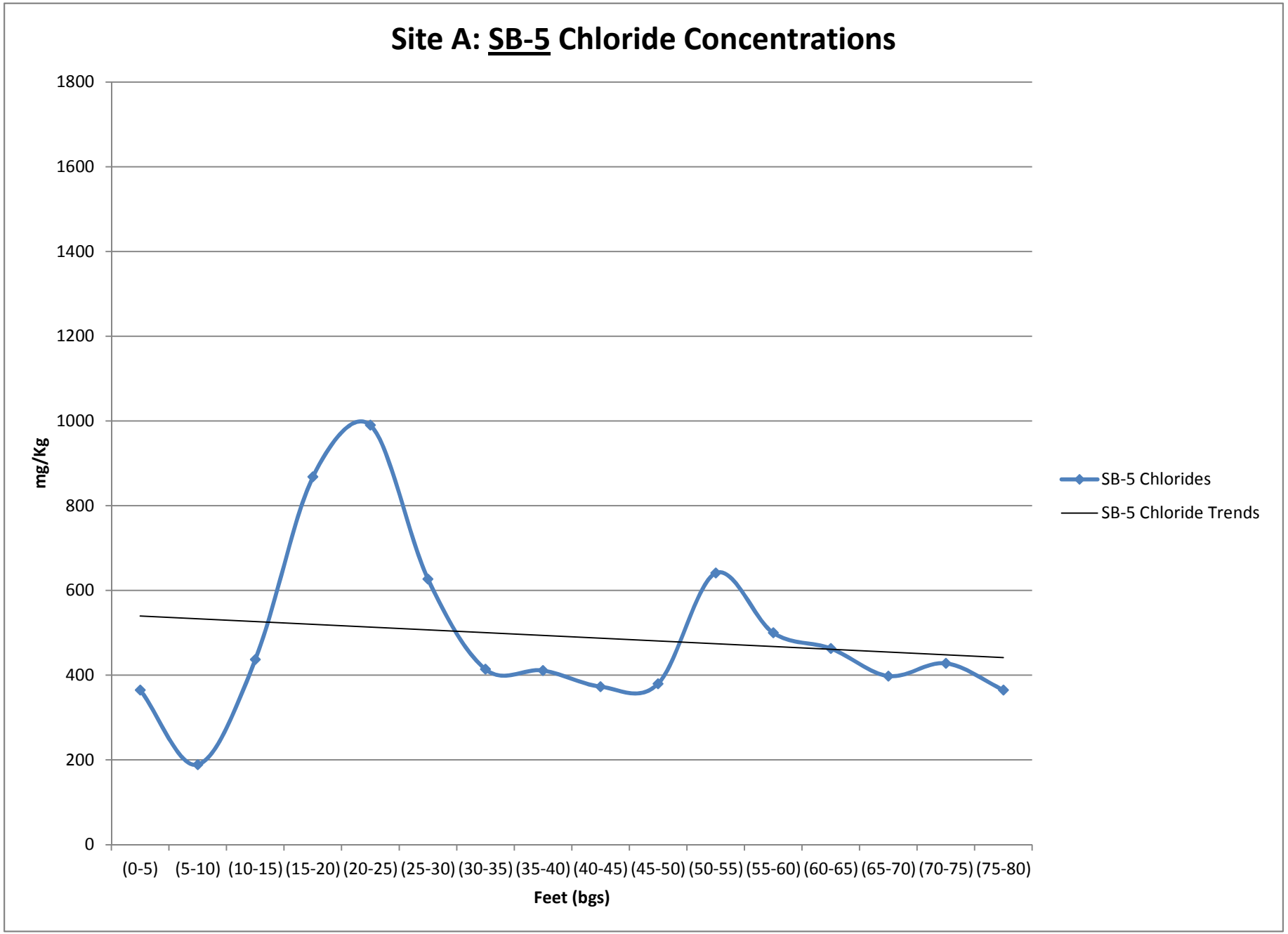
Analyst:	PH Device/Lot#:

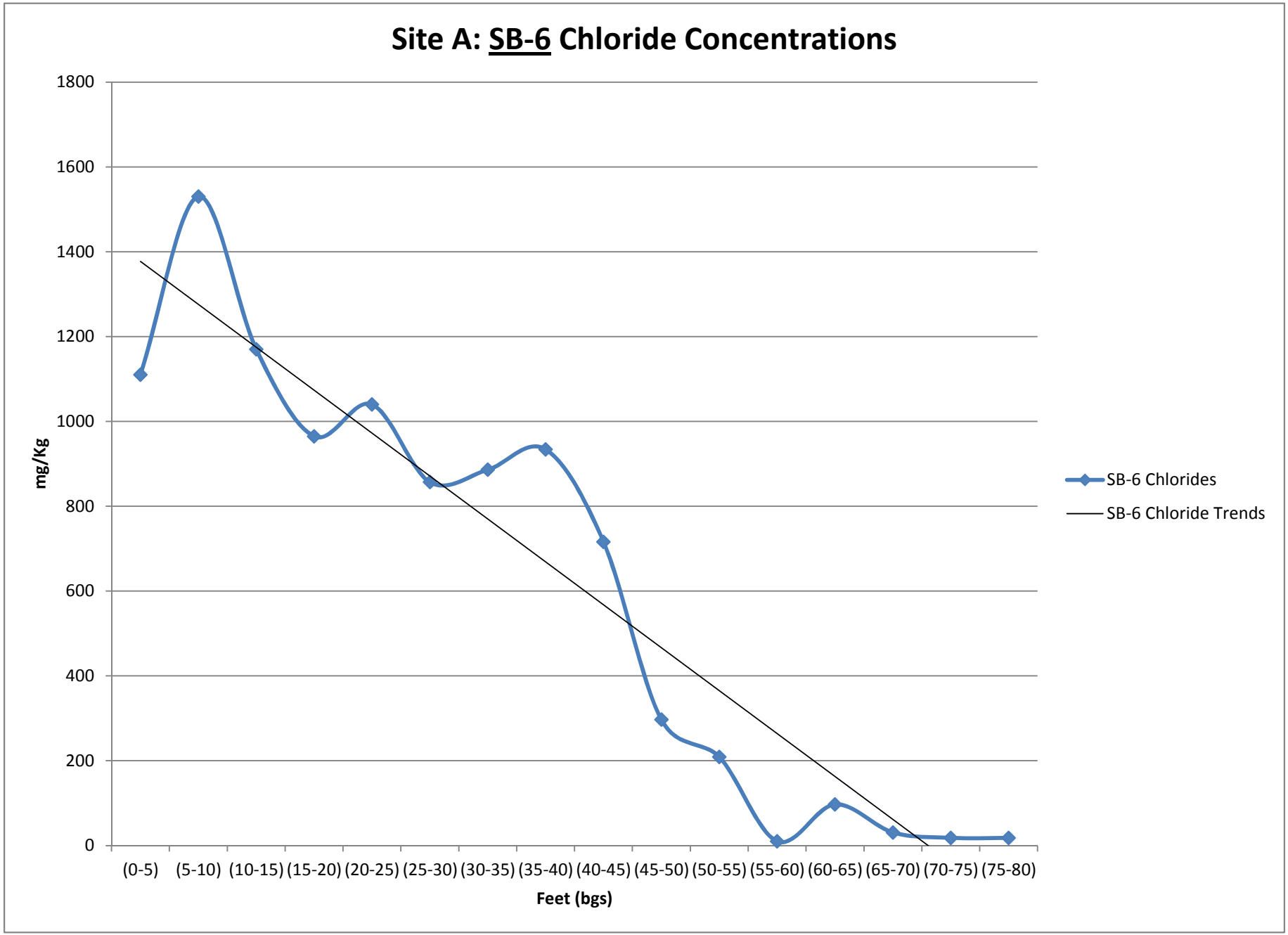
Checklist completed by: _____ Date: 07/16/2012

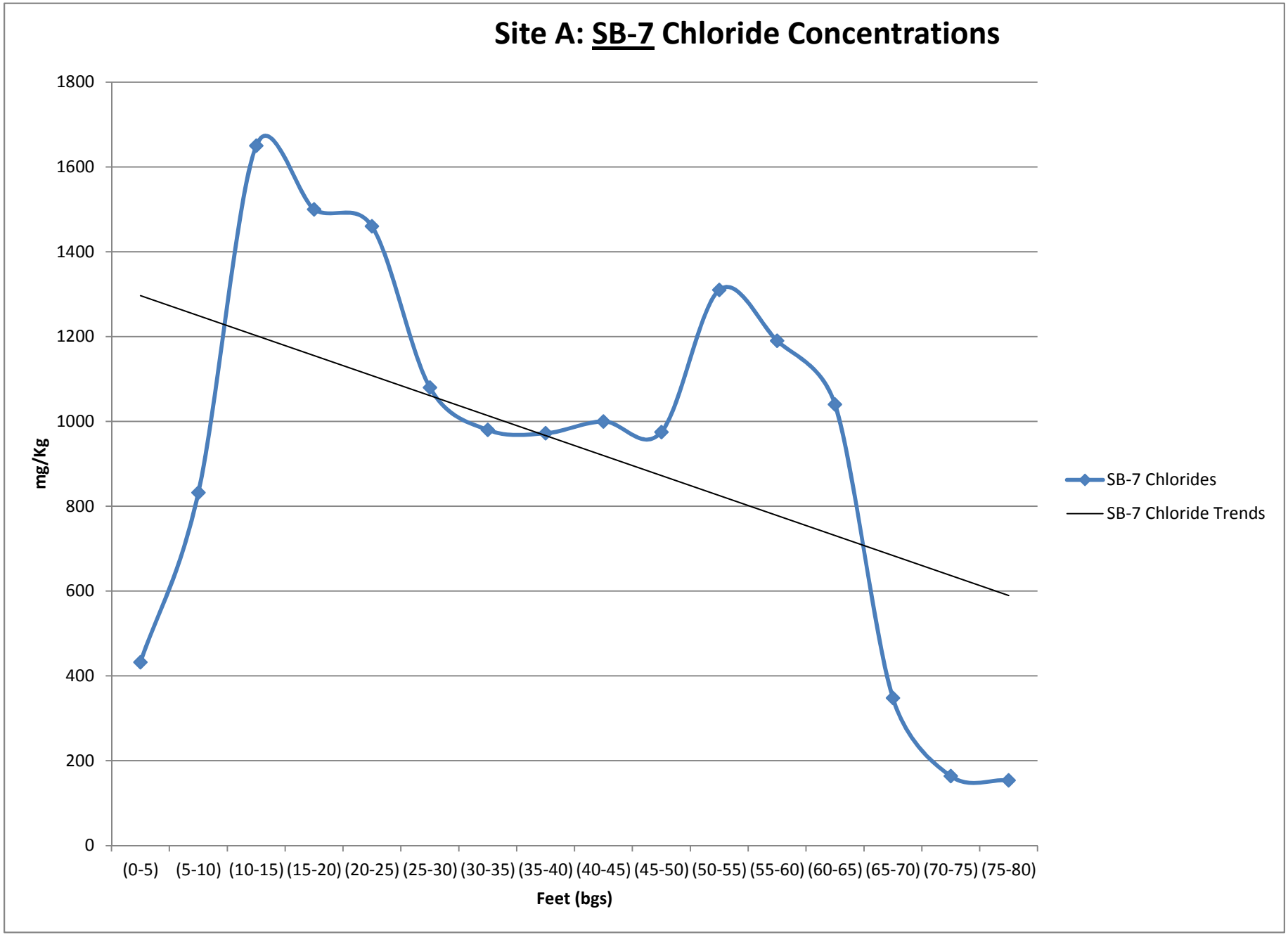
Checklist reviewed by: _____ Date: 07/16/2012

APPENDIX D


Site A: SB-4 Chloride Concentrations
1800
1600
1400
1200
1000
800
600
400
200
0
mg/Kg
(0-5)
(5-10)
(10-15)
(15-20)
(20-25)
(25-30)
(30-35)
(35-40)
(40-45)
(45-50)
(50-55)
(55-60)
(60-65)
(65-70)
(70-75)
(75-80)
Feet (bgs)
Site A SB-4 Chloride Concentrations
SB-4 Chloride Trends


Site A: SB-5 Chloride Concentrations
1800
1600
1400
1200
1000
800
600
400
200
0
mg/Kg
(0-5)
(5-10)
(10-15)
(15-20)
(20-25)
(25-30)
(30-35)
(35-40)
(40-45)
(45-50)
(50-55)
(55-60)
(60-65)
(65-70)
(70-75)
(75-80)
Feet (bgs)
SB-5 Chlorides
SB-5 Chloride Trends


Site A: SB-6 Chloride Concentrations
1800
1600
1400
1200
1000
800
600
400
200
0
mg/Kg
(0-5)
(5-10)
(10-15)
(15-20)
(20-25)
(25-30)
(30-35)
(35-40)
(40-45)
(45-50)
(50-55)
(55-60)
(60-65)
(65-70)
(70-75)
(75-80)
Feet (bgs)
SB-6 Chlorides
SB-6 Chloride Trends


Site A: SB-7 Chloride Concentrations
1800
1600
1400
1200
1000
800
600
400
200
0
mg/Kg
(0-5)
(5-10)
(10-15)
(15-20)
(20-25)
(25-30)
(30-35)
(35-40)
(40-45)
(45-50)
(50-55)
(55-60)
(60-65)
(65-70)
(70-75)
(75-80)
Feet (bgs)
SB-7 Chlorides
SB-7 Chloride Trends

APPENDIX E

This Memorandum is an acknowledgment that a Bill of Lading has been issued and is not Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper No. 645800

Carrier No. 786001

Page 1 of 1 — Sundance Services (Name of carrier) (SCAC)

Date 7-17-12

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO:
Consignee: Sundance Services (Parabo)
Street: 1001 6th Street
City: Eunice State, NM Zip Code 88231

FROM:
Shipper: Chevron Environmental Management Company State 6 Lease
Street: Section 9 Township 14S Range 33E Unit
City: Lovington State NM Zip Code 88260
24 hr. Emergency Contact Tel. No. 432 230 4310

Route

Vehicle Number

No. of Units & Container Type	HM	BASIC DESCRIPTION Proper Shipping Name, Hazard Class UN or NA Number, Packing Group or UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 CM		NON DOT Regulated Material (Soil)	12 cy			

PLACARDS TENDERED: YES ☐ NO ☐

REMIT C.O.D. TO: ADDRESS

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding ________ per ________."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

________ Signature

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked — Check box if charges are to be collect ☐

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER: CRA for Chevron
PER: Chevron
[signature]

CARRIER: Sun Dance Service
PER: Troy Calder
DATE: 7-17-12

4

Permanent post-office address of shipper.

This Memorandum

is an acknowledgment that a Bill of Lading has been issued and is not Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper No. 645800

Carrier No. 756002

Page 1 of 1

Sundance Services

(Name of carrier) (SCAC)

Date 7-17-12

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO:
Consignee Sundance Services (Parvin)

Street 1001 6th Street

City Eunice State, NM Zip Code 88231

FROM:
Shipper Chevron Environmental Management Company State G-Lease

Street Section 9 Township 14S Range 33E Unit Letter J & S

City Lovington State NM Zip Code 88260

24 hr. Emergency Contact Tel. No. 432 230 4310

Route

Vehicle Number

No. of Units & Container Type	HM	BASIC DESCRIPTION Proper Shipping Name, Hazard Class UN or NA Number, Packing Group or UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1CM		Non Dot Regulated Material (Soil)				

PLACARDS TENDERED: YES ☐ NO ☐

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

_____ Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

_____ (Signature of Consignor)

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER CRA for Chevron

PER Chevron

DATE

CARRIER Sundance Service

PER ALT

DATE 7-17-12

4

Permanent post-office address of shipper.

This Memorandum

is an acknowledgment that a Bill of Lading has been issued and is not Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper No. 645800

Carrier No. 786003

Page 1 of 1

Sundance Services

(Name of carrier) (SCAC)

Date 7-12-12

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO:
Consignee Sundance Services (Parato)

Street 1001 6th Street

City Eunice State, NM Zip Code 88231

FROM: Shipper Chevron Environmental Management Company State G Lease

Street Section 9 Township 14S Range 33E Unit Lett. I #5

City Lovington State NM Zip Code 88260

24 hr. Emergency Contact Tel. No. 432 230 4310

Route

Vehicle Number

No. of Units & Container Type	HM	BASIC DESCRIPTION Proper Shipping Name, Hazard Class UN or NA Number, Packing Group or UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 CM		Non DOT Regulated Material (Soil)	12 cy			

PLACARDS TENDERED: YES ☐ NO ☐

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of Item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

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_____ Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

_____ (Signature of Consignor)

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER CRA for Chevron

PER Chevron

CARRIER _____

PER _____

DATE 7-12-12

4

Permanent post-office address of shipper.

This Memorandum

is an acknowledgment that a Bill of Lading has been issued and is not Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper No. 645600

Carrier No. 7802

Page 1 of 1

Sundance Services

(Name of carrier) (SCAC)

Date 7-12-12

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO:

Consignee Sundance Services (Parabo)

Street 1001 6th Street

City Eunice State, NM Zip Code 88231

FROM: Shipper Chevron Environmental Management Company Site 6 Loop

Street Section 9 Township 14S Range 33E Unit Letter I+J

City Lampton State NM Zip Code 88260

24 hr. Emergency Contact Tel. No. 432 230 4310

Route

Vehicle Number

No. of Units & Container Type	HM	BASIC DESCRIPTION Proper Shipping Name, Hazard Class UN or NA Number, Packing Group or UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 CM		Non Dot Regulated Material (Soil)	12 cy			

PLACARDS TENDERED: YES ☐ NO ☐

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
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(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

_____ Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

_____ (Signature of Consignor)

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER CRA

PER Chevron

CARRIER

PER Sundance

DATE 7-13-12

4

Permanent post-office address of shipper.

This Memorandum is an acknowledgment that a Bill of Lading has been issued and is not Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper No. 64553

Carrier No. 73600

Page 1 of 1

(Name of carrier) (SCAC)

Date 11/12

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO:
Consignee Sundance Services
Street
City Eunice State, NM Zip Code 88231

FROM:
Shipper CRA For Chevron
Street 2135 S Loop 250 W
City Midland State TX Zip Code 79785

24 hr. Emergency Contact Tel. No.

Route

Vehicle Number 3952

No. of Units & Container Type	HM	BASIC DESCRIPTION Proper Shipping Name, Hazard Class UN or NA Number, Packing Group or UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1	N	EXEMPT WASTE	12 cy			

PLACARDS TENDERED: YES ☐ NO ☐

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding ______ per ______."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
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I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked
Check box if charges are to be collect ☐

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER CRA
PER Chevron

CARRIER Ray Calder
PER Sundance
DATE 11-12

4

Permanent post-office address of shipper.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

This Memorandum

is an acknowledgment that a Bill of Lading has been issued and is not Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper No. 693800 786005

Carrier No. _____

Date 7-11-12

Page 1 of 1

_____ (Name of carrier) _____ (SCAC)

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO:

Consignee Sundance Services

Street _____

City Eunice State, NM Zip Code 88231

FROM:

Shipper CRA For Chevron

Street 2135 S Loop 250 W

City Midland State TX Zip Code 79703

24 hr. Emergency Contact Tel. No. 432 978 3962

Route _____ Vehicle Number _____

No. of Units & Container Type	HM	BASIC DESCRIPTION Proper Shipping Name, Hazard Class UN or NA Number, Packing Group or UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1	N	EXEMPT WASTE	12cy			

PLACARDS TENDERED: YES ☐ NO ☐

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

_____ Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

_____ (Signature of Consignor)

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER CRA

PER Chevron

DATE _____

CARRIER Ray Calder

PER Sundance

DATE 7-11-12

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Permanent post-office address of shipper.