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

HOBBS OCD
OCT 16 2013
RECEIVED

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 August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Chevron Environmental Management Co.	Contact Kegan Boyer
Address 1400 Smith Street Room 07076	Telephone No. (713) 372-7705
Facility Name Central Vacuum Unit #342	Facility Type Reserve Pit

Surface Owner State of New Mexico	Mineral Owner	API No. 30-025-38002

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	36	17S	34E	81.2	North	1186.4	East	Lea

Latitude 32.798689° N **Longitude** 103.5089550° W

NATURE OF RELEASE

Type of Release C141 submittal requested by L Johnson	Volume of Release Unknown	Volume Recovered Unknown
Source of Release Reserve Pit	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
N/A

Describe Area Affected and Cleanup Action Taken.*
Per NMOCD directives, a reserve pit area of approximately 85' X 110' X 100' was over-excavated and sampled. Geoffery Leking approved work start – noting to keep him informed. See attached Site Closure Report (September 2013) submitted by Conestoga Rovers & Associates (CRA) on behalf of Chevron Environmental Management Company documenting remediation and closure activities.

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: Kegan Boyer	OIL CONSERVATION DIVISION	
Printed Name: Kegan Boyer	Approved by Environmental Specialist: Jennifer Nobui	
Title: Project Manager	Approval Date: 11/21/2022	Expiration Date:
E-mail Address: kegan.boyer@chevron.com	Conditions of Approval:	Attached ☐
Date: 10/14/13 Phone: (713) 372-7705		

Jennifer Nobui
Environmental Specialist A

* Attach Additional Sheets If Necessary

www.CRAworld.com

FINAL REPORT

CENTRAL VACUUM UNIT #342 RESERVE PIT

CLOSURE REPORT (RP #2672)

Section 36, (Unit A), Township 17 South, Range 34 East
Lea County, New Mexico

Prepared for: CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland, Texas 79703

September 2013 073823 (3)

ORIGINAL

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LIST OF APPENDICIES

1.0 INTRODUCTION

This Site Closure Report provides documentation associated with corrective actions at the Central Vacuum Unit #342, Lea County, New Mexico. The closure activities were documented and performed by Conestoga-Rovers & Associates (CRA) under the direction of Chevron Environmental Management Company (CEMC). A remediation permit number, RP 2672 was assigned to this project by the New Mexico Oil Conservation Division (NMOCD) Hobbs, New Mexico office. This report is an attachment to the Final C-141 Form submittal for RP #2672.

The Chevron Central Vacuum Unit #342 (hereafter referred to as the "Site"), is located in Section 36 (Unit A), Township 17 South, Range 34 East, Lea County, New Mexico (Figure 1).

The scope of work for the subject Site, corrective actions and corresponding activities was developed between CEMC, NMOCD and CRA personnel. CRA was responsible for the project management, general oversight of the reclamation activities and documentation of the field work. The agreed upon scope of services included:

- Obtaining proper site specific training, permits and involving appropriate stakeholders needed to conclude scope of work.
- Remove impacted soils excavated from the Site and transport to a Chevron approved waste facility.
- Implement soil boring program consisting of three (SB-1, SB-2 and SB-3) soil borings to a depth of 100 feet.
- Lay poly liner in an excavated pit area and backfill the excavation pit using clean topsoil transported from an off-site source.
- Provide final backfilling, grading, ripping and seed dispersal for the affected area of the Site.
- Prepare Site Closure documents for submittal with the Final C-141 Release Notification and Corrective Action Form to the NMOCD requesting site closure.

2.0 SITE HISTORY / ASSESSMENT

On April 7, 2010, Chevron submitted a C-144 Form proposing pit closure. The original C-144 closure plan for this reserve pit was on-site burial, however, that approach was rejected by the NMOCD. The original C-144 Form is attached as Appendix A. The Final C-144 form documenting remediation and pit closure activities has been submitted under separate cover to the NMOCD District I office. After a site inspection by the NMOCD, the agency requested that a C-141 Release Notification and Corrective Action Form should be filed by Chevron and consequently, a Remediation Permit number (RP#2672) was assigned to this project. The original C-141 Form is attached as Appendix B.

On January 11, 2011, CRA, CEMC and AECOM met at the NMOCD District I Hobbs office to discuss the path forward at the Site. Topics of discussion included modifications (waste excavation and removal vs. onsite trench burial) to the 2010 Closure Workplan and objectives necessary to close the pit as directed by the NMOCD District I Hobbs office.

Subsequent to the January 11, 2011 meeting between CRA, CEMC, AECOM and the NMOCD, a Closure Request Workplan prepared by CRA (April 13, 2011) on behalf of Chevron was submitted to the NMOCD.

Subsequent to the Closure Request Workplan prepared by CRA (April 13, 2011), CRA, Chevron (David Pagano) and Mr. Geoffrey Leking met at the NMOCD District I Hobbs office on June 27, 2012 to discuss the path forward at the Site. Topics of discussion included the over-excavation of pit materials to depths of 4-5 feet, offsite disposal of pit materials to an NMOCD-permitted facility, delineation/confirmation sampling of the excavation floor subsurface (as appropriate), site restoration tasks as proposed in the workplan, backfilling, lining, grading, seeding and closure documentation (C-141 Final and C-144 Pit Closure) being submitted upon NMOCD concurrence of vertical delineation of the Site.

On March 27, 2013, CRA and Entact of Pearland, Texas mobilized to the Site to perform soil assessment activities. Heavy equipment was utilized to obtain soil samples from 1 foot, 4 feet, and 6 feet below the existing liner. No hydrocarbons were detected above the regulatory levels; however, chloride concentrations exhibited elevated concentrations well above recommended remediation and delineation levels. The chloride concentrations for the 1 foot, 4 feet and 6 feet intervals were 13,100, 12,500 and 13,500 mg/kg respectively.

On April 8, 2013, CRA and Entact mobilized to the Site to begin excavation activities. A total of approximately 1,494 cubic yards (cy) of material was removed from the existing remedial excavation, with floor depths ranging from approximately 0 to 6 feet below ground surface (bgs).

In May 2013, after discussions and approval from the NMOCD Hobbs District I office, three soil borings (SB-1, SB-2 and SB-3) were installed within the existing remedial excavation to a depth of 100 feet bgs. Soil samples were collected at 5 to 10 foot intervals in an effort to horizontally and vertically evaluate the extent of chloride impacts. All three soil borings SB-1 (75'-4.94 mg/kg), SB-2 (80'-4.22 mg/kg), and SB-3 (90'-209 mg/kg) demonstrated decreasing chloride levels with depth to well below recommended remediation and delineation levels. A soil cross section depicting subsurface conditions is provided in Figure 2. Certified Laboratory Reports for the 2013 soil sampling events are provided in Appendix E.

On June 5, 2013, Tom Larson with CRA and Kegan Boyer with CEMC met with NMOCD staff to finalize the Site's soil assessment and restoration activities. Discussions from the meeting included review of previous NMOCD communications, May 2013 soil boring assessment/delineation data and remedial activities performed at the Site to date. CRA, CEMC and the NMOCD concluded that delineation efforts with regard to chloride impacts have been reached, and closure/remediation efforts were acceptable and to proceed with backfilling and lining activities. In addition, Final C-141 and C-144 reports were to be completed and submitted to NMOCD upon completion of field activities.

3.0 CORRECTIVE ACTIONS

The field implementation of the approved Site closure activities began on March 7, 2013. Entact of Pearland, Texas provided labor, heavy equipment and pit lining material. RWI of Hobbs, New Mexico provided haul trucks required for the field operations. CRA was responsible for the overall coordination of field operations, project management tasks and the safety of all CRA employees working on site. The proposed and approved field work activities were completed on June 29, 2013. A Site Chronology of the daily work activities is provided in Appendix C. Site photographs documenting work activities are presented in Appendix D. Certified Laboratory Reports for the 2013 soil sampling events are provided in Appendix E.

3.1 LINING AND BACKFILLING OF REMEDIAL EXCAVATIONS

Restoration activities at the Site began on June 24, 2013 with the staging of heavy equipment near the borrow pit and excavated pit areas. Backfill of the excavated pit areas began on June 25, 2013. Installation of excavated pit liner (20 mil) started and was completed on June 26, 2013 by Entact. RWI transported approximately 1,710 cubic yards (cy) of clean fill that was obtained from an off-site borrow pit owned by the Pearce Ranch Trust. Backfill activities were concluded on June 29, 2013, with the Site being graded to minimize erosion, ripped with heavy machinery and seeded with an approved native grass seed (BLM#4). On June 29, 2013, equipment was demobilized from the Site. Site restoration activities and locations are depicted on Figure 3. A site inspection on August 26, 2013 revealed vegetative growth (Appendix D, photos 13 and 14) over the restored area.

3.2 WASTE MANAGEMENT

CRA was responsible for managing waste associated with the 2013 project activities. Control Recovery, Inc. (CRI) landfill was utilized as a disposal facility for impacted soils. CRI is a NMOCD and Chevron-approved facility. A total of 1,494 cubic yards (cy) of materials were disposed of at CRI. The material was loaded into trucks provided by RWI. Each truck leaving the Site was provided with a uniquely numbered non-hazardous waste manifest to accompany each load. The manifest was signed by the generator (CEMC's agent), the transporter and finally by CRI landfill's representative. Table II provides disposal volumes (in cubic yards), as well as manifest and vehicle numbers for the waste material that was transported off of the Site. Waste manifest (electronic) copies are attached to this report in a CD as Appendix F.

4.0 SUMMARY

The agreed upon scope of work and closure plan activities for the reclamation of the Chevron CVU #342 (RP# 2672), Lea County, New Mexico has been completed. The following is a summary of project milestones and work performed:

- On April 7, 2010, Chevron submitted a C-144 Form proposing pit closure. The original C-144 closure plan for this reserve pit was onsite burial; however, that approach was rejected by the New Mexico Oil Conservation Commission (NMOCD). After a site inspection by the NMOCD, the agency requested that a C-141 Release Notification and Corrective Action Form should be filed by Chevron and consequently, a Remediation Permit number (RP#2672) was assigned to this project.
- On January 11, 2011, CRA, CEMC and AECOM met at the NMOCD District I Hobbs office to discuss the path forward at the Site. Topics of discussion included modifications (waste excavation and removal vs. onsite trench burial) to the 2010 closure workplan and objectives necessary to close the pit as directed by the NMOCD District I Hobbs office.
- Subsequent to the January 11, 2011 meeting between CRA, CEMC, AECOM and the NMOCD, a Closure Request Workplan prepared by CRA (April 13, 2011) on behalf of Chevron was submitted to the NMOCD.
- Subsequent to the Closure Request Workplan prepared by CRA (April 13, 2011), CRA, Chevron (David Pagano), and Mr. Geoffrey Leking met at the NMOCD District I Hobbs office on June 27, 2012 to discuss the path forward at the Site. Topics of discussion included the over-excavation of pit materials to depths of 4-5 feet, offsite disposal of pit materials to a NMOCD-permitted facility, delineation/confirmation sampling of the excavation floor, subsurface (as appropriate), site restoration tasks as proposed in the workplan, backfilling, lining, grading, seeding and closure documentation (C-141 Final and C-144 pit closure) being submitted upon NMOCD concurrence of vertical delineation of the Site.
- On March 27, 2013, CRA and Entact of Pearland, Texas mobilized to the Site to perform soil assessment activities. Heavy equipment was utilized to obtain soil samples from 1 foot, 4 feet and 6 feet below the existing liner.
- On April 3, 2013, CRA and CEMC personnel met with Geoffrey Leking with the NMOCD to discuss the status of this pit closure project and to propose vertical delineation approaches in association with existing conditions at the Site.
- On April 8, 2013, CRA and Entact mobilized to the Site to begin excavation activities. A total of approximately 1,494 cubic yards (cy) of material was

removed from the existing remedial excavation, with floor depths ranging from approximately 6 feet bgs.

- In May 2013, after discussions and approval from the NMOCD Hobbs District I offices, three soil borings (SB-1, SB-2 and SB-3) were installed within the existing remedial excavation to a depth of 100 feet below ground surface bgs. All three soil borings SB-1 (75'-4.94 mg/kg), SB-2 (80'-4.22 mg/kg) and SB-3 (90'-209 mg/kg) demonstrated decreasing chloride levels with depth to well below recommended remediation and delineation levels.
- On June 5, 2013, Tom Larson with CRA and Kegan Boyer with CEMC met with NMOCD staff to review delineation results and to finalize the Site's soil and restoration activities.
- On June 24, 2013, backfill activities began with preparation of equipment, Site and scope of work.
- On June 25, 2013, RWI began hauling clean backfill material to the reserve pit from an off-site borrow pit provided by the Pierce Ranch Trust.
- On June 26, 2013, installation of the 20-mil poly liner was installed and backfilling activities commenced atop the liner.
- On June 29, 2013, backfill activities were concluded by returning the construction affected areas to existing grade. The Site was then ripped and seeded using an approved native grass seed mixture (BLM#4). Demobilization of equipment and personnel from the Site concluded.
- On August 26, 2013, a site inspection revealed significant vegetative cover across the former reserve pit area.

5.0 SITE CLOSURE REQUEST

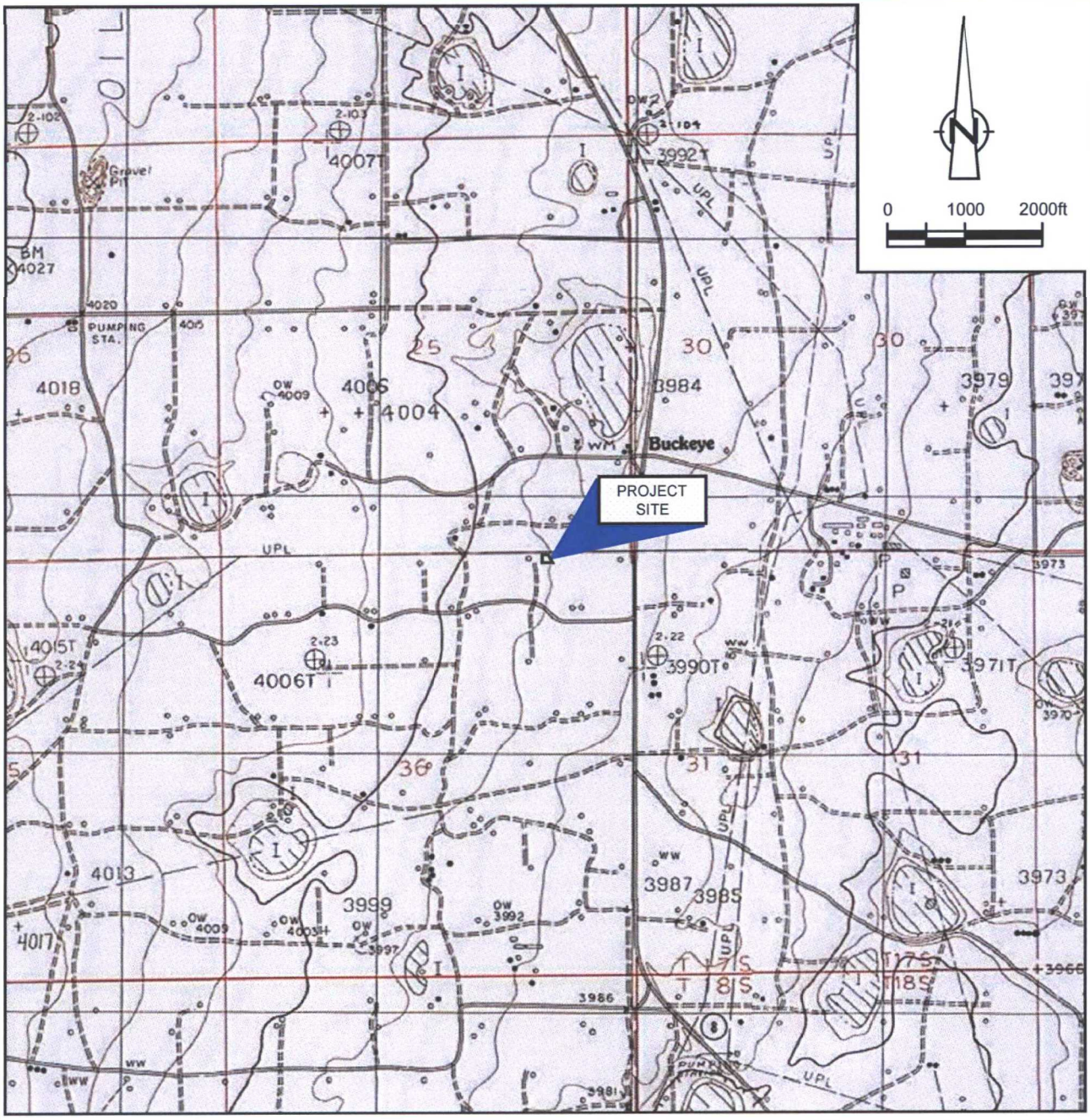
This Site Closure Report provides documentation of the Central Vacuum Unit #342 soil assessment activities involving the impacted soil areas and remedial correctional actions performed in accordance to the RP# 2672. This report is an attachment to the Final C-141 Form submittal for RP #2672. Based on NMOCD communication and corrective actions performed to date, CRA, on behalf of CEMC, respectfully requests the NMOCD to rule that no further action for this site is warranted. This Site Closure Report concludes the scope of work for this project. Please feel free to contact the CRA Midland office if there are any questions or additional information is required.

All of which is Respectfully Submitted,

CONESTOGA-ROVERS & ASSOCIATES

Thomas C. Larson
Midland Operations Manager

Jake Ferenz
Project Manager



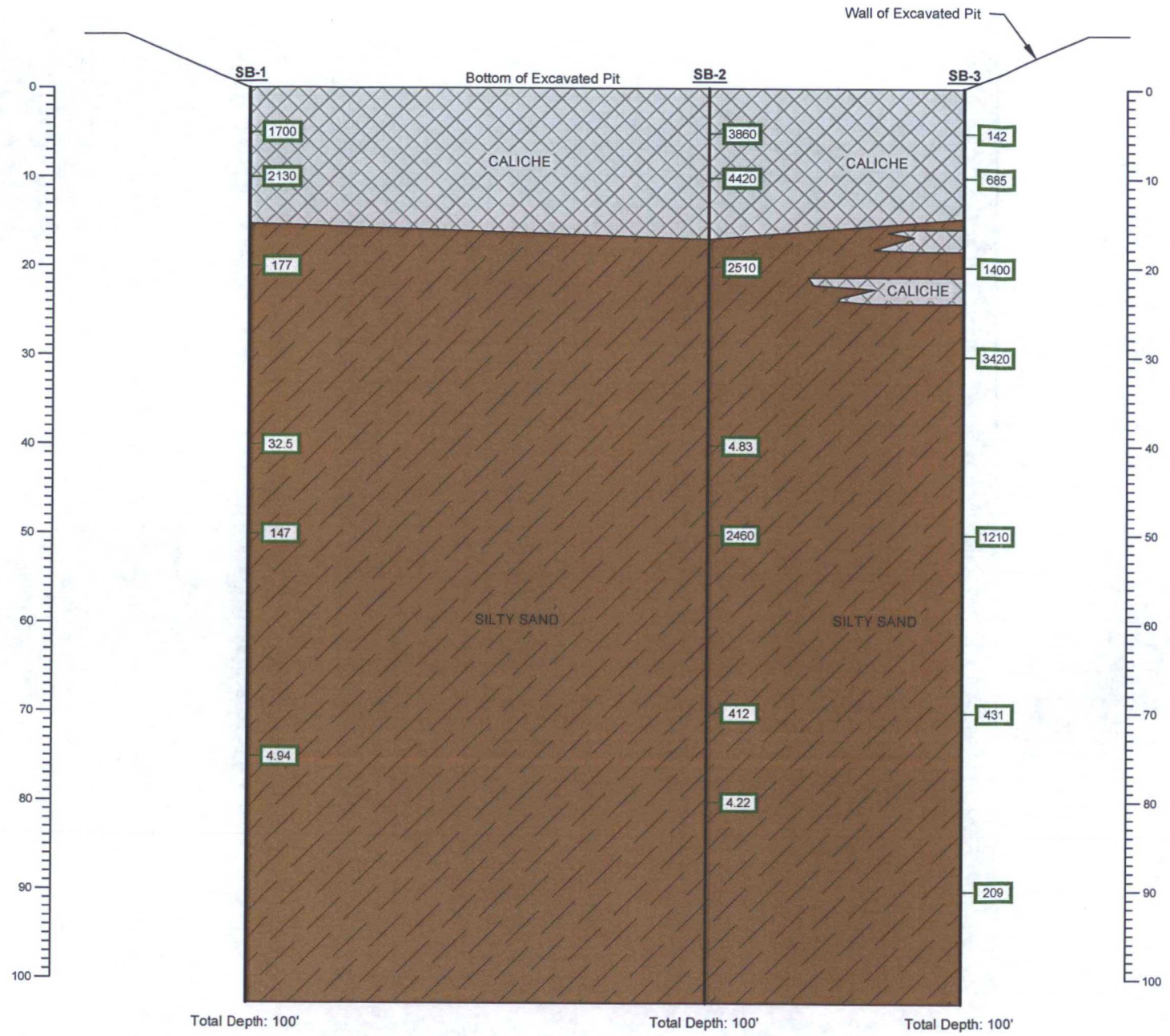
SOURCE: USGS 7.5 MINUTE □UADS
"BUC□EYE AND LOVINGTON SW, NEW ME□ICO"

LAT/LONG: 32.798689° NORTH, 103.508955° WEST
COORDINATE: NAD83 DATUM, U.S. □OOT
STATE PLANE □ONE - NEW ME□ICO EAST

figure 1

SITE LOCATION MAP
CENTRAL VACUUM UNIT 342 RESERVE PIT
SECTION 36, T 17S, R 34E (RP #2672)
Chevron Environmental Management Company

073823-2013(000)GN-DL001_ MAY 14/2013

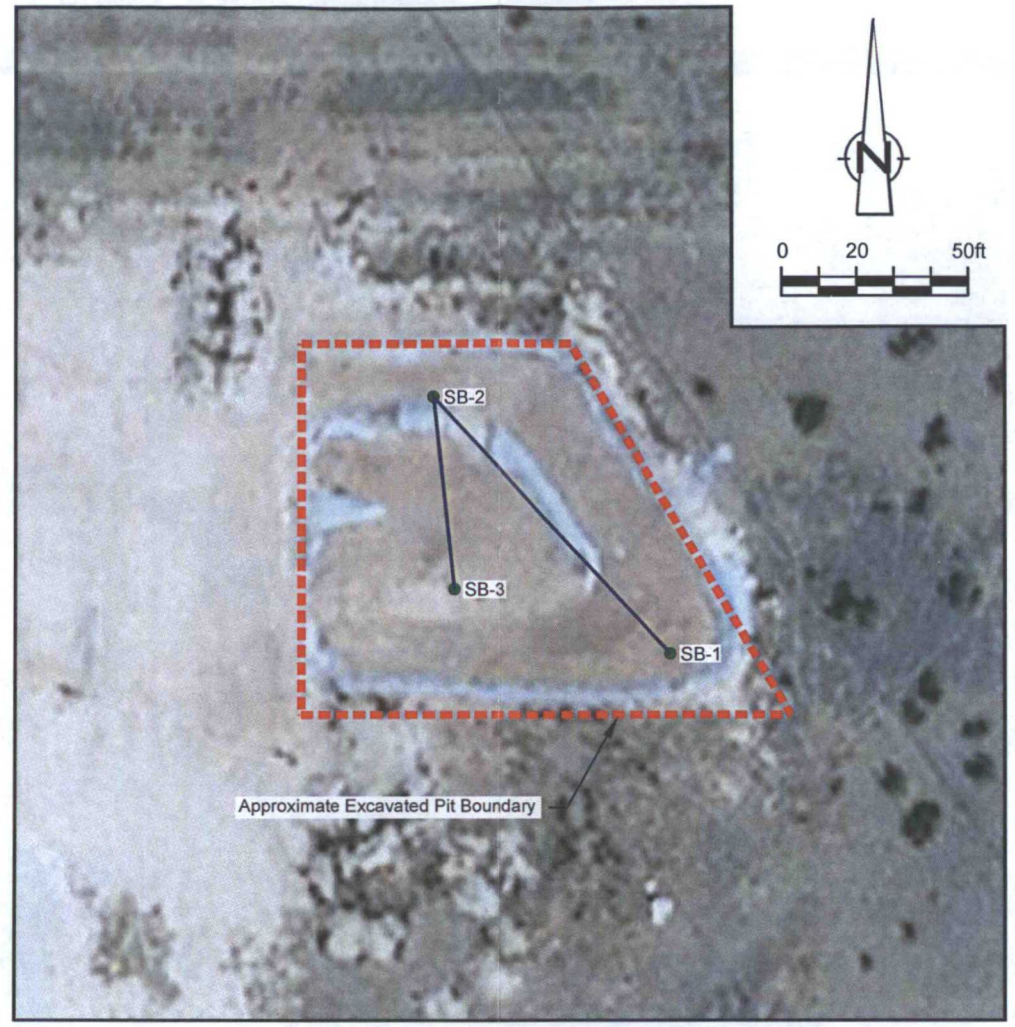


431 Chloride Concentration (mg/kg)
Analysis by EPA Method 300/300.1.

SOIL DESCRIPTIONS

CALICHE - White, tan, dry, indurated at top of unit. Dense to very dense, increasing in silty sands toward base of unit.

SILTY SAND - Reddish brown, tan, firm to dense, moist toward bottom of unit.



NOTES:

1. Soil borings advanced May 6 and 7, 2013.
2. Samples evaluated using drill cuttings and split spoon sampler.
3. Boundaries between soil units are approximate.
4. Harrison & Cooper (Lubbock, Texas) drilling contractor. Six-inch borehole using Ingersol Rand 11RTH60 (2006) drill rig.
5. All borings plugged with drill cuttings and approximately 20 bags of bentonite.

figure 2

SOIL CROSS-SECTION
CENTRAL VACUUM UNIT 342 RESERVE PIT
SECTION 36, T 17S, R 34E (RP #2672)
Chevron Environmental Management Company

073823-2013(000)GN-DL001_ JUL 11/2013

LAT/LONG: 32.798689° NORTH, 103.508955° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

figure 3

SITE RESTORATION MAP
CENTRAL VACUUM UNIT 342 RESERVE PIT
SECTION 36, T 17S, R 34E (RP #2672)
Chevron Environmental Management Company

073823-00(003)GN-DL001 SEP 3/2013

TABLE I

SOIL BORING ANALYTICAL SUMMARY
CENTRAL VACUUM UNIT #342
LEA COUNTY, NEW MEXICO

Sample ID	*Sample Date*	*Depth (feet bgs)*	*Chloride*
			(mg/kg)
NMOCD Recommended Remediation Action Levels (Total Ranking Score = 10)			***500***
SB-1			
SB-1-5'	5/6/2013	5'	1,700
SB-1-10'	5/6/2013	10'	2,130
SB-1-20'	5/6/2013	20'	177
SB-1-40'	5/6/2013	40'	32.5
SB-1-50'	5/6/2013	50'	147
SB-1-75'	5/6/2013	75'	4.94
SB-1-100'	5/6/2013	100'	NA
SB-2			
SB-2-5'	5/6/2013	5'	3,860
SB-2-10'	5/6/2013	10'	4,420
SB-2-20'	5/6/2013	20'	2,510
SB-2-40'	5/6/2013	40'	4.83
SB-2-50'	5/6/2013	50'	2,460
SB-2-70'	5/6/2013	70'	412
SB-2-80'	5/6/2013	80'	4.22
SB-2-90'	5/6/2013	90'	NA
SB-2-100'	5/6/2013	100'	NA
SB-3			
SB-3-5'	5/7/2013	5'	142
SB-3-10'	5/7/2013	10'	685
SB-3-20'	5/7/2013	20'	1,400
SB-3-30'	5/7/2013	30'	3,420
SB-3-50'	5/7/2013	50'	1,210
SB-3-70'	5/7/2013	70'	431
SB-3-90'	5/7/2013	90'	209

Notes:

1. Chlorides analyzed by E300.0
2. NA - indicates sample was not analyzed
3. Highlighted cells indicated concentrations above regulatory guidelines
4. Chloride - RRALs based on NMOCD September 30, 2011 (DRAFT) guidance Release Reporting and Corrective Actions Under Rule 29 & 30

TABLE II
WASTE INVENTORY
CENTRAL VACUUM UNIT #342
LEA COUNTY, NEW MEXICO

DATE	*TRUCK NUMBER*	*MANIFEST NUMBER*	*QUANTITY OF WASTE cubic yards*
4/9/2013	2	492809	18
4/9/2013	2	492757	18
4/9/2013	2	492708	18
4/9/2013	5	492688	18
4/9/2013	5	492741	18
4/9/2013	5	492800	18
4/9/2013	7	492746	18
4/9/2013	7	492694	18
4/9/2013	7	492795	18
4/9/2013	10	492812	18
4/9/2013	10	492752	18
4/9/2013	10	492705	18
4/9/2013	13	492691	18
4/9/2013	13	492745	18
4/9/2013	13	492801	18
4/9/2013	151	492689	18
4/9/2013	151	492742	18
4/9/2013	151	492792	18
4/9/2013	720	492802	18
4/9/2013	720	492754	18
4/9/2013	720	492702	18
4/10/2013	2	493129	18
4/10/2013	2	493028	18
4/10/2013	2	493074	18
4/10/2013	5	493016	18
4/10/2013	5	493061	18
4/10/2013	5	493117	18
4/10/2013	7	493123	18
4/10/2013	7	493069	18
4/10/2013	7	493024	18
4/10/2013	10	493119	18
4/10/2013	10	493064	18
4/10/2013	10	493019	18
4/10/2013	13	493022	18
4/10/2013	13	493067	18
4/10/2013	13	493122	18
4/10/2013	151	493110	18
4/10/2013	151	493062	18
4/10/2013	151	493017	18
4/10/2013	720	493015	18
4/10/2013	720	493063	18
4/10/2013	720	493116	18

TABLE II
WASTE INVENTORY
CENTRAL VACUUM UNIT #342
LEA COUNTY, NEW MEXICO

DATE	*TRUCK NUMBER*	*MANIFEST NUMBER*	*QUANTITY OF WASTE cubic yards*
4/11/2013	10	493361	18
4/11/2013	10	493417	18
4/11/2013	10	493316	18
4/11/2013	5	493414	18
4/11/2013	5	493306	18
4/11/2013	5	493363	18
4/11/2013	13	493416	18
4/11/2013	13	493360	18
4/11/2013	13	493308	18
4/11/2013	5	493307	18
4/11/2013	5	493415	18
4/11/2013	5	493355	18
4/11/2013	2	493419	18
4/11/2013	2	493364	18
4/11/2013	2	493319	18
4/11/2013	720	493418	18
4/11/2013	720	493368	18
4/11/2013	720	493318	18
4/11/2013	7	493413	18
4/11/2013	7	493359	18
4/11/2013	7	493312	18
4/12/2013	10	493630	18
4/12/2013	10	493683	18
4/12/2013	5	493628	18
4/12/2013	5	493673	18
4/12/2013	13	493627	18
4/12/2013	13	493679	18
4/12/2013	5	493675	18
4/12/2013	5	493625	18
4/12/2013	2	493631	18
4/12/2013	2	493678	18
4/12/2013	720	493676	18
4/12/2013	720	493629	18
4/12/2013	7	493626	18
4/12/2013	7	493674	18
4/13/2013	10	493869	18
4/13/2013	13	493868	18
4/13/2013	5	493864	18
4/13/2013	7	493858	18
4/13/2013	720	493863	18
4/13/2013	7	493866	18
			Total: 1494

Chevron

Rodney Bailey
Environmental Advisor

Chevron North America
Exploration and Production
Mid Continent Business Unit/HES
15 Smith Rd
Midland, Texas 79705
Office 432-687-7123
Cell 432-894-3519
Fax 866-569-5650

April, 7 2010

Mr. Larry Johnson
NMOCD District Office
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Drilling Pits; Central Vacuum Unit 342 and New Mexico O-40, Closure Plans;
CVU 342, S 36, T 17S, R 34 E, API # 30-025-38002
NM O-40, S 36, T 17S, R 34 E, API # 30-025-38140

Chevron would like to submit this work plan for the closure of drilling pits CVU 342 and NM O-40. Also attached are Pit closure form C-144 for each location.

- Chevron will excavate each pit and liner and store the material adjacent to the excavation.
- The soil beneath the temporary pit will be sampled to determine whether a release has occurred. If a release has occurred Chevron will excavate or blend the soil till closure limits stated in 19.15.17.13.(B) (1) (b) (i) are reached.
- A 20 mil poly liner with welded seams will be placed in the excavation
- The previously excavated material will be returned to the pit, on top of the pit liner. The pit liner will be folded over the backfilled material. (original pit contents)
- A second pit liner will be placed on top of the back filled pit. Clean soil will be used as backfill on top of the liner. The center will be slightly mounded to promote rain water runoff and keep it from pooling in the center.
- Area will be contoured to match surrounding area
- Area will be seeded with NMOCD approved seed.

Chevron will began closure of these drilling pits as soon as we receive NMOCD approval.

If you have any questions please call me at 432-687-7123.

Respectfully,

Rodney Bailey
Environmental Advisor
Chevron North America

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

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action:
- ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
- ☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
- ☐ Modification to an existing permit
- ☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: Chevron OGRID #:
Address: 15 Smith Rd Midland Tx 79705
Facility or well name: Central Vacuum Unit 342
API Number: 30-025-38002 OCD Permit Number:
U/L or Qtr/Qtr Section 36 Township 17S Range 34E County: Lea
Center of Proposed Design: Latitude Longitude NAD: ☐1927 ☐ 1983
Surface Owner: ☐ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☑ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☑ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☑ Lined ☐ Unlined Liner type: Thickness 80 mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
☐ String-Reinforced
Liner Seams: ☑ Welded ☐ Factory ☐ Other Volume: bbl Dimensions: L x W x D

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other
☐ Lined ☐ Unlined Liner type: Thickness mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
Liner Seams: ☐ Welded ☐ Factory ☐ Other

4.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: bbl Type of fluid:
Tank Construction material:
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness mil ☐ HDPE ☐ PVC ☐ Other

5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.
Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☐ Alternate. Please specify_____

7.
Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

8.
Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.3.103 NMAC

9.
Administrative Approvals and Exceptions:
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.
Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☑ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☑ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☑ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☑ No ☐ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☑ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☑ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☑ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☑ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☑ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☑ No

16.
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)
Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:
☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☒ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☒ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☒ No

18.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.
Name (Print): Rodney Bailey Title: Environmental Advisor
Signature: Rodney Bailey Date: 4-7-10
e-mail address: bailerg@chevron.com Telephone: 432-687-7123

20.
OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)
OCD Representative Signature: _____ **Approval Date:** _____
Title: _____ **OCD Permit Number:** _____

21.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC
Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.
☐ **Closure Completion Date:** _____

22.
Closure Method:
☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

23.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.
Disposal Facility Name: _____ Disposal Facility Permit Number: _____
Disposal Facility Name: _____ Disposal Facility Permit Number: _____
Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No
Required for impacted areas which will not be used for future service and operations:
☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***
☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits)
☐ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☐ Disposal Facility Name and Permit Number
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique
☐ Site Reclamation (Photo Documentation)
On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐1927 ☐ 1983

25.
Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
Name (Print): Rodney Bailey Title: Environmental Advisor
Signature: Rodney Bailey Date: 4-7-10
e-mail address: _____ Telephone: _____

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	Matt Hudson
Address	1400 Smith Street Room 19001A	Telephone No.	(713) 372-1046
Facility Name	Central Vacuum Unit #342	Facility Type	Reserve Pit API #30-025-38002

Surface Owner State of New Mexico	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	36	17 S	34 E	81.2	North	1186.4	East	Lea

Latitude 32.798611 **Longitude** -103.509167

NATURE OF RELEASE

Type of Release C141 submittal requested by L Johnson	Volume of Release Unknown	Volume Recovered Unknown
Source of Release Reserve Pit	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.*
Larry Johnson requested that a C141 be prepared for this location following a Site Inspection.

Describe Area Affected and Cleanup Action Taken.*
Per NMOCD directives, a reserve pit area of approximately 85' x 110' x 100' will be over-excavated and sampled. A remediation plan including analytical results and closure plan will be developed and submitted to the District 1 office for review and approval.

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:	OIL CONSERVATION DIVISION	
Printed Name: Matt Hudson	Approved by District Supervisor:	
Title: Project Manager	Approval Date:	Expiration Date:
E-mail Address: mhudson@chevron.com	Conditions of Approval:	Attached ☐
Date: Phone: 713-372-1046		

* Attach Additional Sheets If Necessary

Site Chronology – CVU #342 Reserve Pit Restoration Project

Unit A, Section 36, T17S, R34E

March 7, 2013 (Thursday)	Performed GPR Survey of the perimeter of the reserve pit. Identified one underground utility (metal pipe)
March 26, 2013 (Tuesday)	Received Vacuum FMT approval for Dig Plan to include soil sampling and pit excavation.
March 27, 2013 (Thursday)	Completed soil sample collection within pit area.
April 2, 2013 (Tuesday)	Receive soil sample results identifying elevated Chloride results 5' below the liner. Riley hydro-vac the areas identified as disturbed areas with GPR, no indication of underground pipes were found. Identified the electrical line from the solar panel to the well head.
April 4, 2013 (Thursday)	Equipment mobilize here from Chevron O State site
April 5, 2013 (Friday)	Entact shut down for work to complete offsite training requirement.
April 8, 2013 (Monday)	Completed dig plan, excavation permit, and permit to work. Begin back dragging pit material within the CVU 342 Pit. Material was excavated immediately below the liner and stockpiled within the pit.
April 9, 2013 (Tuesday)	Entact began loading pit material with 20 cy belly dump trucks. Seven dump trucks transported approximately 378 cy of pit material (within three trips) for disposal within CRI Landfill (Hobbs, NM). Total waste hauled off to date included 378 cy.
April 10, 2013 (Wednesday)	Entact continued to load pit material with 7 x 20 cy belly dump trucks. The trucks completed three trips, totaling 378 cy of pit material disposed within CRI Landfill. Total waste hauled off to date includes 756 cy.
April 11, 2013 (Thursday)	Entact continued to load pit material with 7 x 20 cy belly dump trucks. The trucks completed three trips, totaling 378 cy of pit material disposed within CRI Landfill. Total waste hauled off to date includes 1,134 cy.
April 12, 2013 (Friday)	Entact continued to load pit material with 7 x 20 cy belly dump trucks. The trucks completed two trips, totaling 252 cy of pit material disposed within CRI Landfill. Total waste hauled off to date includes 1,386 cy.
April 13, 2013 (Saturday)	Entact continued to load pit material with 6 x 20 cy belly dump trucks. The trucks completed one trip, totaling 108 cy of pit material disposed within CRI Landfill. Total waste hauled off to date is 1,494 cy – hauling suspended. Plan to install borings at base of excavated pit to evaluate vertical extent of impacts.
April 15, 2013 (Monday)	Demobe equipment and secure site with barricade. Site field work suspended.
April 25, 2013 (Thursday)	Inspect excavation barricade – barricade in good condition.

May 6, 2013 (Monday)	Receive Vacuum FMT approval of dig plan and excavation permit to work. CRA and Harrison and Cooper (H&C) mobilize to Site. SWA is issued for ramp construction. Completed sampling and soil borings SB-1 and SB-2 within excavated pit.
May 7, 2013 (Tuesday)	Receive Vacuum FMT excavation permit to work. CRA and H&C mob to Site. Completed sampling and soil boring SB-3 from within the excavated pit.
June 5, 2013 (Wednesday)	CRA (Tom Larson) and Kegan Boyer (CEMC) mob to NMOCD District I, Hobbs office for meeting regarding closure activities.
June 24, 2013 (Monday)	On-Site personnel attend FMT contractor safety briefing. Site walk through and discussion on backfilling activities. Mini-excavator arrives on-site. Flagging and barriers are erected on-site. Dozer arrives on-site and Entact performs inspections on equipment. Site secured at EOD.
June 25, 2013 (Tuesday)	On-site personnel attend FMT contractor safety briefing. Five belly dump trucks arrive on-site. Receive Vacuum FMT PTW. The trucks complete 10 loads totaling 180 cy to date. Dozer equipment failure – mechanic on site for repair and parts are ordered. Site secured at EOD.
June 26, 2013 (Wednesday)	On-site personnel attend FMT contractor safety briefing. Receive FMT PTW. Mini-excavator is used to continue backfill activities in preparation for liner installation. Dozer is repaired and backfill activities are continued. Liner installation is completed (approx. 2.5 rolls). Site secured at EOD.
June 27, 2013 (Thursday)	On-site personnel attend FMT contractor safety briefing. Receive FMT PTW. Backfilling activities have resumed. RWI on-site with four 18 cy dump trucks. Trucks completed 52 loads totaling, 936 cy for day and - 1,116 cy hauled to date. Site secured at EOD.
June 28, 2013 (Friday)	On-site personnel attend FMT contractor safety briefing. Receive FMT PTW. SWA (lightning) 30 min. RWI on-site with four 18 cy belly dump trucks. Trucks completed 33 loads today. 14 loads for today were caliche. Remaining 19 loads were top soil. Totaling 594 cy for the day. Total project cubic yards hauled to date totaling – 1,710. Soil hauling activities are concluded today. Borrow pit area is cleaned and returned to original grade. Site secured at EOD.
June 29, 2013 (Saturday)	CRA on-Site field manager holds TGSM. FMT PTW received for daily work activities. Final grade and seeding activities performed today. Backfill ripped, seeded and returned to original grade. Work completed at CVU-342. Mobilization to O-State #40 for a Monday (1st) a.m. start.

PHOTO 1: View of reserve pit facing west before any remedial work activities

PHOTO 2: View of reserve pit facing southwest before any remedial work activities

PHOTOGRAPH LOG
Central Vacuum Unit #342
Lea County, New Mexico
Chevron Environmental Management Company

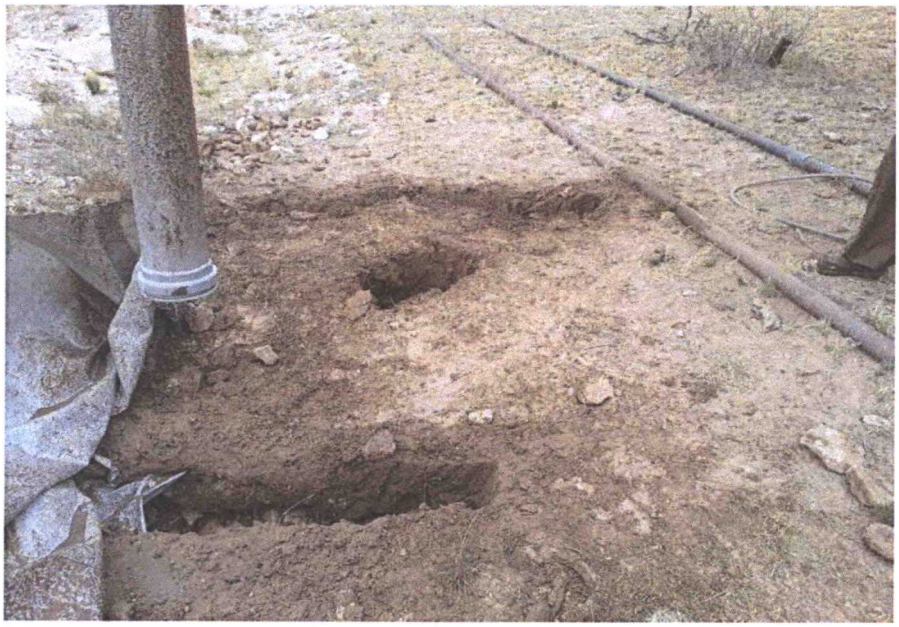


PHOTO 3: View of hydro-vac activities – April 2, 2013

PHOTO 4: View of excavation/waste removal activities

PHOTOGRAPH LOG
Central Vacuum Unit #342
Lea County, New Mexico
Chevron Environmental Management Company

CRA

PHOTO 5: View of excavation activities

PHOTO 6: View of excavated reserve pit facing southeast

PHOTOGRAPH LOG
Central Vacuum Unit #342
Lea County, New Mexico
Chevron Environmental Management Company

073823

PHOTO 7: View of excavated pit and entrance ramp facing southeast

PHOTO 8: View of drill rig inside excavated reserve pit facing east

PHOTOGRAPH LOG
Central Vacuum Unit #342
Lea County, New Mexico
Chevron Environmental Management Company

073823

PHOTO 9: View of backfill activities facing northeast

PHOTO 10: View of backfilling activities facing northeast, ready for liner material

PHOTOGRAPH LOG
Central Vacuum Unit #342
Lea County, New Mexico
Chevron Environmental Management Company

PHOTO 11: View of 20 mil poly liner installation facing northeast

PHOTO 12: View of 20 mil poly liner installation facing northwest

PHOTOGRAPH LOG
Central Vacuum Unit #342
Lea County, New Mexico
Chevron Environmental Management Company

073823

PHOTO 13: View of final grading and seeding activities completed with new vegetative growth already taking place - facing southeast.

PHOTO 14: View of final grading and seeding activities completed facing northeast. Flags are representative of entrance ramp location during remedial activities for the Site.

PHOTOGRAPH LOG
Central Vacuum Unit #342
Lea County, New Mexico
Chevron Environmental Management Company

073823

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

April 01, 2013

Project: CVU 342 Pit

Submittal Date: 03/28/2013
Group Number: 1378598
PO Number: 4056668
Release Number: LEA COUNTY, NM
State of Sample Origin: NM

Client Sample Description	Lancaster Labs (LLI) #
CVX-342-01 Composite Soil	6999648

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	Conestoga-Rovers & Associates	Attn: Ryan Kainer
ELECTRONIC COPY TO	Conestoga-Rovers & Associates	Attn: Chris Knight

Respectfully Submitted,

Wendy A. Kozma
Principal Specialist Group Leader

(717) 556-7257

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Analysis Report

Sample Description: CVX-342-01 Composite Soil
CVU 342 Pit - 073823

LLI Sample # SW 6999648
LLI Group # 1378598
Account # 11713

Project Name: CVU 342 Pit

Collected: 03/27/2013 14:00 by CV

Submitted: 03/28/2013 08:45
Reported: 04/01/2013 16:16

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

34201

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Dilution Factor
GC Volatiles	**SW-846 8015B**		mg/kg		mg/kg	
01638	TPH-GRO soil C6-C10	n.a.	0.4	J	1.4	25.64
GC Volatiles	**SW-846 8021B**		mg/kg		mg/kg	
08179	Benzene	71-43-2	0.0037	J	0.0068	25.64
08179	Ethylbenzene	100-41-4	0.0054	J	0.0068	25.64
08179	Toluene	108-88-3	0.0034	J	0.0068	25.64
08179	Total Xylenes	1330-20-7	0.0075	J	0.020	25.64
GC Petroleum Hydrocarbons	**SW-846 8015B**		mg/kg		mg/kg	
08270	TPH-DRO soil C10-C28	n.a.	58		16	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	
05256	#4 Fuel Oil	68476-31-3	N.D.		16	1
05256	Coal Tar Oil	8001-58-9	N.D.		16	1
05256	Diesel/#2 Fuel	68334-30-5	14	J	16	1
05256	#6 Fuel Oil	68553-00-4	N.D.		120	1
05256	Gasoline	8006-61-9	N.D.		16	1
05256	Kerosene	8008-20-6	N.D.		40	1
05256	Mineral Spirits	8030-30-6	N.D.		40	1
05256	Motor Oil	n.a.	N.D.		40	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.
There is an unidentifiable product eluting in the carbon range we would most typically see Mineral Spirits and/or Kerosene in. This product is not contributing to overall result of the Diesel/#2 Fuel oil detected in this sample. The QC limits for Mineral Spirits and Kerosene have been raised accordingly.

Wet Chemistry	**EPA 300.0**		mg/kg		mg/kg	
07333	Chloride by IC (solid)	16887-00-6	21,800		13,100	1000
Wet Chemistry	**SM 2540 G-1997**		%		%	
00111	Moisture	n.a.	24.2		0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Analysis Report

Sample Description: CVX-342-01 Composite Soil
CVU 342 Pit - 073823

LLI Sample # SW 6999648
LLI Group # 1378598
Account # 11713

Project Name: CVU 342 Pit

Collected: 03/27/2013 14:00 by CV

Submitted: 03/28/2013 08:45
Reported: 04/01/2013 16:16

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

34201

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01638	TPH-GRO soil C6-C10	SW-846 8015B	1	13087A16A	03/28/2013 20:57	Laura M Krieger	25.64
08179	BTEX by 8021	SW-846 8021B	1	13087A16A	03/28/2013 20:57	Laura M Krieger	25.64
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201308730547	03/28/2013 14:43	Mitchell R Washel	n.a.
08270	TPH-DRO soil C10-C28	SW-846 8015B	1	130870011A	03/30/2013 15:53	Tracy A Cole	1
05256	TPH by GC-FID (Soils)	SW-846 8015B modified	1	130870010A	03/29/2013 12:52	Heather E Williams	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	130870011A	03/28/2013 19:00	Sally L Appleyard	1
04833	Extraction / Fuel TPH (Soils)	SW-846 3550B	1	130870010A	03/28/2013 19:00	Sally L Appleyard	1
07333	Chloride by IC (solid)	EPA 300.0	2	13088088201A	03/30/2013 21:39	Joseph E McKenzie	1000
01352	Deionized Water Extraction	EPA 300.0	1	13088088201A	03/29/2013 10:00	Joseph E McKenzie	1
00111	Moisture	SM 2540 G-1997	1	13087820002B	03/28/2013 21:46	Scott W Freisher	1

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1378598
Reported: 04/01/13 at 04:16 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13087A16A	Sample number(s): 6999648							
Benzene	N.D.	0.0050	mg/kg	96		80-120		
Ethylbenzene	N.D.	0.0050	mg/kg	94		80-120		
Toluene	N.D.	0.0050	mg/kg	93		80-120		
TPH-GRO soil C6-C10	N.D.	1.0	mg/kg	74	77	67-119	3	30
Total Xylenes	N.D.	0.015	mg/kg	94		80-120		
Batch number: 130870010A	Sample number(s): 6999648							
#4 Fuel Oil	N.D.	12.	mg/kg					
Coal Tar Oil	N.D.	12.	mg/kg					
Diesel/#2 Fuel	N.D.	12.	mg/kg	96		71-124		
#6 Fuel Oil	N.D.	90.	mg/kg					
Gasoline	N.D.	12.	mg/kg					
Kerosene	N.D.	12.	mg/kg					
Mineral Spirits	N.D.	12.	mg/kg					
Motor Oil	N.D.	30.	mg/kg					
Batch number: 130870011A	Sample number(s): 6999648							
TPH-DRO soil C10-C28	N.D.	12.	mg/kg	88		76-120		
Batch number: 13088088201A	Sample number(s): 6999648							
Chloride by IC (solid)	N.D.	10.0	mg/kg	106		90-110		
Batch number: 13087820002B	Sample number(s): 6999648							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13087A16A	Sample number(s): 6999648 UNSPK: P996541								
Benzene	95	96	52-135	9	30				
Ethylbenzene	95	95	56-132	8	30				
Toluene	93	93	59-129	8	30				
Total Xylenes	94	95	53-145	9	30				
Batch number: 130870010A	Sample number(s): 6999648 UNSPK: 34201					BKG: 34201			
#4 Fuel Oil						N.D.	N.D.	0 (1)	20

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1378598
Reported: 04/01/13 at 04:16 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Coal Tar Oil						N.D.	N.D.	0 (1)	20
Diesel/#2 Fuel	98		37-129			11 J	8.1 J	26* (1)	20
#6 Fuel Oil						N.D.	N.D.	0 (1)	20
Gasoline						N.D.	N.D.	0 (1)	20
Kerosene						N.D.	N.D.	0 (1)	20
Mineral Spirits						N.D.	N.D.	0 (1)	20
Motor Oil						N.D.	N.D.	0 (1)	20
Batch number: 130870011A	Sample number(s): 6999648 UNSPK: 6999648 BKG: 6999648								
TPH-DRO soil C10-C28	88		30-159			44	33	29* (1)	20
Batch number: 13088088201A	Sample number(s): 6999648 UNSPK: 6999648 BKG: 6999648								
Chloride by IC (solid)	10049 (2)		90-110			16,500	17,000	3 (1)	20
Batch number: 13087820002B	Sample number(s): 6999648 BKG: P998328								
Moisture						26.4	27.1	3	13

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TPH-GRO soil C6-C10
Batch number: 13087A16A

	Trifluorotoluene-F	Trifluorotoluene-P
6999648	79	91
Blank	88	98
LCS	84	85
LCSD	86	
MS		88
MSD		90
Limits:	61-122	73-117

Analysis Name: TPH by GC-FID (Soils)
Batch number: 130870010A

	Chlorobenzene	Orthoterphenyl
6999648	67	75
Blank	69	99
DUP	63	73
LCS	76	94
MS	88	83
Limits:	46-131	51-127

Analysis Name: TPH-DRO soil C10-C28

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1378598
Reported: 04/01/13 at 04:16 PM

Surrogate Quality Control

Batch number: 130870011A

	Orthoterphenyl
6999648	81
Blank	99
DUP	79
LCS	101
MS	94
Limits:	52-136

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Environmental Services Analysis Request/Chain of Custody

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Acct. # 11713 Group # 1378598 Sample # 6999648

Client: Conestoga-Rovers & Associates					Matrix						Analyses Requested										For Lab Use Only
Project Name/#: CVU 342 Pit - 073823	Site ID #:										Preservation Codes										SF #:
Project Manager: Ryan Kainer	P.O. #:										O	O	O								SCR #:
Sampler: Christopher Vela	PWSID #:																				Preservation Codes: H = HCl, T = Thiosulfate, N = HNO_3, B = NaOH, S = H_2SO_4, P = H_3PO_4, O = Other
Phone #: 432-686-0086	Quote #:																				
State where sample(s) were collected: New Mexico																					
Sample Identification	Collection Date	Collection Time	Grab	Composite	Sediment / Soil ☑	Ground / Potable ☐	Surface / NPDES ☐	Water	Other:	Total # of Containers	TPH 8015	Chlorides 300	BTEX 8021								Remarks
CVX-342-01	3/27/13	1400		x	x					2	x	x	x								

Turnaround Time Requested (TAT) (please check): Standard ☐ Rush ☑ (Rush TAT is subject to Lancaster Laboratories approval and surcharges.)	Relinquished by: [signature]	Date 3/27/13	Time 4:17 pm	Received by:	Date / Time
Date results are needed: 48 hrs	Relinquished by:	Date	Time	Received by:	Date / Time
Rush results requested by (please check): E-Mail ☑ Phone ☐ E-mail Address: rkainer@craworld.com Phone: 432-686-0086	Relinquished by:	Date	Time	Received by:	Date / Time
Data Package Options (please check if required): Type I (Validation/non-CLP) ☐ MA MCP ☐	Relinquished by:	Date	Time	Received by:	Date / Time
Type III (Reduced non-CLP) ☐ CT RCP ☐; Type IV (CLP SOW) ☐ TX TRRP-13 ☐	Relinquished by:	Date	Time	Received by: [signature]	Date 3/28/13 Time 0845
Type VI (Raw Data Only) ☐	Relinquished by Commercial Carrier:				
EDD Required? Yes ☐ No ☐ If yes, format:	UPS ___ FedEx ✓ Other ___			Temperature upon receipt 2.0 °C	

Issued by Dept. 40 Management 7045.01

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.
>	greater than
J	estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ryan Kainer
CRA-Midland
2135 South Loop 250 West
Midland, TX, 79703

Report Date: April 1, 2013

Work Order: 13032812

Project Location: Lea Co., NM
Project Name: CVU #342
Project Number: 073823

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
324798	CVX-342-01	soil	2013-03-27	14:00	2013-03-28

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Report Contents

Case Narrative

Samples for project CVU #342 were received by TraceAnalysis, Inc. on 2013-03-28 and assigned to work order 13032812. Samples for work order 13032812 were received intact at a temperature of 1.3 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
TPH 418.1	E 418.1	84842	2013-04-01 at 09:30	100150	2013-04-01 at 09:32

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 13032812 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 324798 - CVX-342-01

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	100150	Date Analyzed:	2013-04-01	Analyzed By:	DS
Prep Batch:	84842	Sample Preparation:	2013-04-01	Prepared By:	DS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	Qs		**164**	mg/Kg	1	10.0

Method Blanks

Method Blank (1) QC Batch: 100150

QC Batch:	100150	Date Analyzed:	2013-04-01	Analyzed By:	DS
Prep Batch:	84842	QC Preparation:	2013-04-01	Prepared By:	DS

Parameter	Flag	Cert	MDL Result	Units	RL
TRPHC			<5.72	mg/Kg	10

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 100150 | Date Analyzed: 2013-04-01 | Analyzed By: DS
Prep Batch: 84842 | QC Preparation: 2013-04-01 | Prepared By: DS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			266	mg/Kg	1	250	<5.72	106	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			259	mg/Kg	1	250	<5.72	104	80 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 324798

QC Batch: 100150 | Date Analyzed: 2013-04-01 | Analyzed By: DS
Prep Batch: 84842 | QC Preparation: 2013-04-01 | Prepared By: DS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	Qs Qs		347	mg/Kg	1	250	164	73	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC	Qs Qs		362	mg/Kg	1	250	164	79	80 - 120	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Calibration Standards

Standard (CCV-1)

QC Batch: 100150 Date Analyzed: 2013-04-01 Analyzed By: DS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	100	112	112	80 - 120	2013-04-01

Standard (CCV-2)

QC Batch: 100150 Date Analyzed: 2013-04-01 Analyzed By: DS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	100	110	110	80 - 120	2013-04-01

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-12-8	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 13032812

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

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5002 Basin Street, Suite A1, Midland, Texas 79703, Tel (432) 689-6301, Fax (432) 689-6313

200 East Sunset Rd., Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944

BioAquatic Testing, 2501 Mayes Rd., Ste 100, Carrollton, Texas 75006, Tel (972) 242-7750

Company Name:	Conestoga-Rovers & Associates	Phone #:	432-686-0086
Address:	2135 S. Loop 250 West, Midland, TX 79703	Fax #:	
Contact Person:	Ryan Kainer	E-mail:	rkainer@craworld.com
Invoice to:	SAME AS ABOVE		
Project #:	73823	Project Name:	CVU 342 P
Project Location: (include state)	Buckeye, NM	Sampler Signature:	[signature]

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	Matrix: WATER	SOIL	AIR	SLUDGE	Preservative Method: HCL	HNO_3	H_2SO_4	NaOH	ICE	NONE	Sampling: DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B / 200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity	Na, Ca, Mg, K, TDS, EC			Turn Around Time if different from standard	Hold
324798	CVX-342-01	1	4 oz		x							x		3/27/13	14:00			x																		48 hrs	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp
[signature]	CRA	3/28/13	14:00	[signature]	TA	3/28/13	12:50	INST 12-1, OBS 1.3 °C, COR 1.3 °C
[signature]	TA	3/28/13	15:30					INST ____, OBS ____ °C, COR ____ °C
				[signature]	[signature]	3/29/13	9:30	INST 123, OBS 3.2 °C, COR 3.6 °C

LAB USE ONLY: Intact Y / N; Headspace Y / N / NA; Log-in Review [initials]

REMARKS: Attached all Lubbock

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

Carrier # FS: ZP-793115

Submittal of samples constitutes agreement to Terms and Conditions

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E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ryan Kainer
CRA-Midland
2135 South Loop 250 West
Midland, TX, 79703

Report Date: April 1, 2013

Work Order: 13032911

Project Location: Lea Co., NM
Project Name: CVU #342
Project Number: 073823

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
324854	CVX-342-02	soil	2013-03-23	14:10	2013-03-28

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Report Contents

Case Narrative

Samples for project CVU #342 were received by TraceAnalysis, Inc. on 2013-03-28 and assigned to work order 13032911. Samples for work order 13032911 were received intact at a temperature of 1.3 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
TPH 418.1	E 418.1	84842	2013-04-01 at 09:30	100150	2013-04-01 at 09:32

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 13032911 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 324854 - CVX-342-02

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	100150	Date Analyzed:	2013-04-01	Analyzed By:	DS
Prep Batch:	84842	Sample Preparation:	2013-04-01	Prepared By:	DS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
TRPHC	Qs		**155**	mg/Kg	1	10.0

Method Blanks

Method Blank (1) QC Batch: 100150

QC Batch:	100150	Date Analyzed:	2013-04-01	Analyzed By:	DS
Prep Batch:	84842	QC Preparation:	2013-04-01	Prepared By:	DS

Parameter	Flag	Cert	MDL Result	Units	RL
TRPHC			<5.72	mg/Kg	10

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 100150 Date Analyzed: 2013-04-01 Analyzed By: DS
Prep Batch: 84842 QC Preparation: 2013-04-01 Prepared By: DS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			266	mg/Kg	1	250	<5.72	106	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			259	mg/Kg	1	250	<5.72	104	80 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 324798

QC Batch: 100150 Date Analyzed: 2013-04-01 Analyzed By: DS
Prep Batch: 84842 QC Preparation: 2013-04-01 Prepared By: DS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC Qs	Qs		347	mg/Kg	1	250	164	73	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC Qs	Qs		362	mg/Kg	1	250	164	79	80 - 120	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Calibration Standards

Standard (CCV-1)

QC Batch: 100150 | Date Analyzed: 2013-04-01 | Analyzed By: DS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	100	112	112	80 - 120	2013-04-01

Standard (CCV-2)

QC Batch: 100150 | Date Analyzed: 2013-04-01 | Analyzed By: DS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	100	110	110	80 - 120	2013-04-01

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-12-8	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

13032911

LAB Order ID # ______ Page 1 of 1

TraceAnalysis, Inc.
email: lab@traceanalysis.com

6701 Aberdeen Ave, Ste 9, Lubbock, Texas 79424, Tel (806) 794-1296, Fax (806) 794-1298, 1 (800) 378-1296
5002 Basin Street, Suite A1, Midland, Texas 79703, Tel (432) 689-6301, Fax (432) 689-6313
200 East Sunset Rd., Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944
BioAquatic Testing, 2501 Mayes Rd., Ste 100, Carrollton, Texas 75006, Tel (972) 242-7750

Company Name: Conestoga-Rovers & Associates	Phone #: 432-686-0086
Address: 2135 S. Loop 250 West, Midland, TX 79703	Fax #:
Contact Person: Ryan Kainer	E-mail: rkainer@craworld.com
Invoice to: SAME AS ABOVE	
Project #: 73823	Project Name: CVU 342 Pit
Project Location: (include state) Buckeye, NM	Sampler Signature: [signature]

ANALYSIS REQUEST (Circle or Specify Method No.)

Analysis columns: MTBE 8021B / 602 / 8260B / 624; BTEX 8021B / 602 / 8260B / 624; TPH 418.1 / TX1005 / DRO / TVHC; PAH 8270C / 625; Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B / 200.7; TCLP Metals Ag As Ba Cd Cr Pb Se Hg; TCLP Volatiles; TCLP Semi Volatiles; TCLP Pesticides; RCI; GC/MS Vol. 8260B / 624; GC/MS Semi. Vol. 8270C/625; PCB's 8082 / 608; Pesticides 8081A / 608; BOD, TSS, pH; Moisture Content; Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity; Na, Ca, Mg, K, TDS, EC; Turn Around Time if different from standard; Hold

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	Matrix: WATER	SOIL	AIR	SLUDGE	Preservative: HCL	HNO_3	H_2SO_4	NaOH	ICE	NONE	DATE	TIME	TPH 418.1	Turn Around Time
324854	CVX-342-02	1	4 oz		x							x		3/27/13	1410	x	~~48 Hrs~~ 24

Relinquished by	Company	Date	Time	Received by	Company	Date	Time	Temp
[signature]	CRA	3/28/13	[illegible]	[signature]	TA	3/28/13	1:??	INST 1R? OBS 1.3 °C COR 1.3 °C
[signature]	TA	3/28/13	1530					INST ___ OBS ___ °C COR ___ °C
				[signature]	[illegible]	3/29/13	9:50	INST 163 OBS 3.2 °C COR 3.6 °C

LAB USE ONLY: Intact Y/N; Headspace Y/N/NA; Log-in Review [initials]; Carrier # [illegible] 2/?/3/15

REMARKS: Lubbock - all

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions

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13032911

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972•242•7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ryan Kainer
CRA-Midland
2135 South Loop 250 West
Midland, TX, 79703

Report Date: April 1, 2013

Work Order: 13032912

Project Location: Lea Co., NM
Project Name: CVU #342
Project Number: 073823

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
324855	CVX-342-03	soil	2013-03-27	14:20	2013-03-28

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Report Contents

Case Narrative

Samples for project CVU #342 were received by TraceAnalysis, Inc. on 2013-03-28 and assigned to work order 13032912. Samples for work order 13032912 were received intact at a temperature of 1.3 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
TPH 418.1	E 418.1	84842	2013-04-01 at 09:30	100150	2013-04-01 at 09:32

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 13032912 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 324855 - CVX-342-03

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	100150	Date Analyzed:	2013-04-01	Analyzed By:	DS
Prep Batch:	84842	Sample Preparation:	2013-04-01	Prepared By:	DS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	Qs		**335**	mg/Kg	1	10.0

Method Blanks

Method Blank (1) QC Batch: 100150

QC Batch:	100150	Date Analyzed:	2013-04-01	Analyzed By:	DS
Prep Batch:	84842	QC Preparation:	2013-04-01	Prepared By:	DS

Parameter	Flag	Cert	MDL Result	Units	RL
TRPHC			<5.72	mg/Kg	10

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 100150 | Date Analyzed: 2013-04-01 | Analyzed By: DS
Prep Batch: 84842 | QC Preparation: 2013-04-01 | Prepared By: DS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			266	mg/Kg	1	250	<5.72	106	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			259	mg/Kg	1	250	<5.72	104	80 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 324798

QC Batch: 100150 | Date Analyzed: 2013-04-01 | Analyzed By: DS
Prep Batch: 84842 | QC Preparation: 2013-04-01 | Prepared By: DS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC Qs	Qs		347	mg/Kg	1	250	164	73	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC Qs	Qs		362	mg/Kg	1	250	164	79	80 - 120	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Calibration Standards

Standard (CCV-1)

QC Batch: 100150 Date Analyzed: 2013-04-01 Analyzed By: DS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	100	112	112	80 - 120	2013-04-01

Standard (CCV-2)

QC Batch: 100150 Date Analyzed: 2013-04-01 Analyzed By: DS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	100	110	110	80 - 120	2013-04-01

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-12-8	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 13032912

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Ave, Ste 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

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Tel (915) 585-3443
Fax (915) 585-4944

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name:	Conestoga-Rovers & Associates	Phone #:	432-686-0086
Address:	2135 S. Loop 250 West, Midland, TX 79703	Fax #:	
Contact Person:	Ryan Kainer	E-mail:	rkainer@craworld.com
Invoice to:	SAME AS ABOVE		
Project #:	73823	Project Name:	CVU 342 Pit
Project Location: (include state)	Buckeye, NM	Sampler Signature:	

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B / 200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity	Na, Ca, Mg, K, TDS, EC			Turn Around Time if different from standard	Hold
324855	CVX-342-03	1	4 oz		x							x		3/27/13	1420			x																		48 hrs	

	Company:	Date:	Time:		Company:	Date:	Time:		
Relinquished by:	CRA	3/28/13	1400	Received by:	TA	3/28/13	1535	INST	1.4 °C
								OBS	1.4 °C
								COR	1.3 °C
Relinquished by:	TA	3/28/13	1530	Received by:				INST	°C
								OBS	°C
								COR	°C
Relinquished by:				Received by:		3/29/13	9:55	INST	1.3 °C
								OBS	3.2 °C
								COR	3.6 °C

LAB USE ONLY

Intact Y / N

Headspace Y / N / NA

Log-in Review

REMARKS: Lubbock all

- Dry Weight Basis Required
- TRRP Report Required
- Check if Special Reporting Limits Are Needed

Carrier # 98. 2P793115

Submittal of samples constitutes agreement to Terms and Conditions

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13032912

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
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(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972•242•7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ryan Kainer
CRA-Midland
2135 South Loop 250 West
Midland, TX, 79703

Report Date: April 1, 2013

Work Order: 13032913

Project Location: Lea Co., NM
Project Name: CVU #342
Project Number: 073823

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
324856	CVX-342-SP	soil	2013-03-27	14:30	2013-03-28

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Report Contents

Case Narrative

Samples for project CVU #342 were received by TraceAnalysis, Inc. on 2013-03-28 and assigned to work order 13032913. Samples for work order 13032913 were received intact at a temperature of 1.3 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
TPH 418.1	E 418.1	84842	2013-04-01 at 09:30	100150	2013-04-01 at 09:32

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 13032913 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 324856 - CVX-342-SP

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	100150	Date Analyzed:	2013-04-01	Analyzed By:	DS
Prep Batch:	84842	Sample Preparation:	2013-04-01	Prepared By:	DS

Parameter	Flag	Cert	Result	RL	Units	Dilution	RL
TRPHC	Qs,U		<10.0		mg/Kg	1	10.0

Method Blanks

Method Blank (1) QC Batch: 100150

QC Batch:	100150	Date Analyzed:	2013-04-01	Analyzed By:	DS
Prep Batch:	84842	QC Preparation:	2013-04-01	Prepared By:	DS

Parameter	Flag	Cert	MDL Result	Units	RL
TRPHC			<5.72	mg/Kg	10

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 100150 Date Analyzed: 2013-04-01 Analyzed By: DS
Prep Batch: 84842 QC Preparation: 2013-04-01 Prepared By: DS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			266	mg/Kg	1	250	<5.72	106	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC			259	mg/Kg	1	250	<5.72	104	80 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 324798

QC Batch: 100150 Date Analyzed: 2013-04-01 Analyzed By: DS
Prep Batch: 84842 QC Preparation: 2013-04-01 Prepared By: DS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC Qs	Qs		347	mg/Kg	1	250	164	73	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC Qs	Qs		362	mg/Kg	1	250	164	79	80 - 120	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Calibration Standards

Standard (CCV-1)

QC Batch: 100150 Date Analyzed: 2013-04-01 Analyzed By: DS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	100	112	112	80 - 120	2013-04-01

Standard (CCV-2)

QC Batch: 100150 Date Analyzed: 2013-04-01 Analyzed By: DS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC			mg/Kg	100	110	110	80 - 120	2013-04-01

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Name	Definition
MDL	Method Detection Limit
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-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-12-8	Lubbock

Standard Flags

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Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

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Please note, each attachment may consist of more than one page.

LAB Order ID # 13032913

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Ave, Ste 9, Lubbock, Texas 79424, Tel (806) 794-1296, Fax (806) 794-1298, 1 (800) 378-1296

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BioAquatic Testing, 2501 Mayes Rd., Ste 100, Carrollton, Texas 75006, Tel (972) 242-7750

Company Name: Conestoga-Rovers & Associates	Phone #: 432-686-0086
Address: 2135 S. Loop 250 West, Midland, TX 79703	Fax #:
Contact Person: Ryan Kainer	E-mail: rkainer@craworld.com
Invoice to: SAME AS ABOVE	
Project #: 73823	Project Name: CVU 342 Pit
Project Location: (include state) Buckeye, NM	Sampler Signature: [signature]

ANALYSIS REQUEST (Circle or Specify Method No.)

Analyses listed: MTBE 8021B / 602 / 8260B / 624; BTEX 8021B / 602 / 8260B / 624; TPH 418.1 / TX1005 / DRO / TVHC (TPH 418.1 circled); PAH 8270C / 625; Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B / 200.7; TCLP Metals Ag As Ba Cd Cr Pb Se Hg; TCLP Volatiles; TCLP Semi Volatiles; TCLP Pesticides; RCI; GC/MS Vol. 8260B / 624; GC/MS Semi. Vol. 8270C/625; PCB's 8082 / 608; Pesticides 8081A / 608; BOD, TSS, pH; Moisture Content; Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity; Na, Ca, Mg, K, TDS, EC; Turn Around Time if different from standard; Hold

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	Matrix	Preservative Method	Date	Time	Analysis	Turn Around Time
324856	CVX-342-SP	1	4 oz	SOIL (x)	ICE (x)	3/27/13	1430	TPH 418.1 (x)	48 hrs

Relinquished by	Company	Date	Time	Received by	Company	Date	Time	Temp
[signature]		3/27/13	3/28/13 1400	[signature]	TA	3/28/13	12:50	INST IR-1; OBS 4.7 °C; COR 4.3 °C
[signature]	TA	3/28/13	1530		Company:	Date:	Time:	INST; OBS °C; COR °C
	Company:	Date:	Time:	[signature]		3/28/13	9:55	INST IR-3; OBS 3.2 °C; COR 3.0 °C

LAB USE ONLY: Intact (Y)/N; Headspace Y/N/NA; Log-in Review [initials]

REMARKS: Lubbock all

☐ Dry Weight Basis Required

☐ TRRP Report Required

☐ Check If Special Reporting Limits Are Needed

Carrier # FedEx: 2PA3115

Submittal of samples constitutes agreement to Terms and Conditions

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13032913

eurofins | Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

April 01, 2013

Project: CVU 342 Pit

Submittal Date: 03/28/2013
Group Number: 1378599
PO Number: 4056668
Release Number: LEA COUNTY, NM
State of Sample Origin: NM

Client Sample Description	Lancaster Labs (LLI) #
CVX-342-02 Composite Soil	6999649

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	Conestoga-Rovers & Associates	Attn: Ryan Kainer
ELECTRONIC COPY TO	Conestoga-Rovers & Associates	Attn: Chris Knight

Respectfully Submitted,

Wendy A. Kozma
Principal Specialist Group Leader

(717) 556-7257

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Analysis Report

Sample Description: CVX-342-02 Composite Soil
CVU 342 Pit - 073823

LLI Sample # SW 6999649
LLI Group # 1378599
Account # 11713

Project Name: CVU 342 Pit

Collected: 03/27/2013 14:10 by CV

Submitted: 03/28/2013 08:45
Reported: 04/01/2013 16:16

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

34202

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
GC Volatiles	**SW-846 8015B**		mg/kg	mg/kg	
01638	TPH-GRO soil C6-C10	n.a.	18	1.3	25.38
GC Volatiles	**SW-846 8021B**		mg/kg	mg/kg	
08179	Benzene	71-43-2	0.0050 J	0.0064	25.38
08179	Ethylbenzene	100-41-4	0.14	0.0064	25.38
08179	Toluene	108-88-3	0.032	0.0064	25.38
08179	Total Xylenes	1330-20-7	0.29	0.019	25.38
GC Petroleum Hydrocarbons	**SW-846 8015B**		mg/kg	mg/kg	
08270	TPH-DRO soil C10-C28	n.a.	80	15	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg	mg/kg	
05256	#4 Fuel Oil	68476-31-3	N.D.	15	1
05256	Coal Tar Oil	8001-58-9	N.D.	15	1
05256	Diesel/#2 Fuel	68334-30-5	41	15	1
05256	#6 Fuel Oil	68553-00-4	N.D.	110	1
05256	Gasoline	8006-61-9	N.D.	15	1
05256	Kerosene	8008-20-6	N.D.	15	1
05256	Mineral Spirits	8030-30-6	N.D.	15	1
05256	Motor Oil	n.a.	N.D.	38	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.
There is an unidentifiable product eluting in the carbon range we would most typically see Mineral Spirits and/or Kerosene in. This product is not contributing to overall result of the Diesel/#2 Fuel oil detected in this sample. The QC limits for Mineral Spirits and Kerosene have been raised accordingly.

Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	31,200	12,500	1000
Wet Chemistry	**SM 2540 G-1997**		%	%	
00111	Moisture	n.a.	21.3	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Analysis Report

Sample Description: CVX-342-02 Composite Soil
CVU 342 Pit - 073823

LLI Sample # SW 6999649
LLI Group # 1378599
Account # 11713

Project Name: CVU 342 Pit

Collected: 03/27/2013 14:10 by CV

Submitted: 03/28/2013 08:45
Reported: 04/01/2013 16:16

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

34202

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01638	TPH-GRO soil C6-C10	SW-846 8015B	1	13087A16A	03/29/2013 13:30	Laura M Krieger	25.38
08179	BTEX by 8021	SW-846 8021B	1	13087A16A	03/29/2013 13:30	Laura M Krieger	25.38
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201308730547	03/28/2013 14:45	Mitchell R Washel	n.a.
08270	TPH-DRO soil C10-C28	SW-846 8015B	1	130870011A	03/30/2013 14:53	Tracy A Cole	1
05256	TPH by GC-FID (Soils)	SW-846 8015B modified	1	130870010A	03/29/2013 15:09	Heather E Williams	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	130870011A	03/28/2013 19:00	Sally L Appleyard	1
04833	Extraction / Fuel TPH (Soils)	SW-846 3550B	1	130870010A	03/28/2013 19:00	Sally L Appleyard	1
07333	Chloride by IC (solid)	EPA 300.0	2	13088088201A	03/30/2013 22:24	Joseph E McKenzie	1000
01352	Deionized Water Extraction	EPA 300.0	1	13088088201A	03/29/2013 10:00	Joseph E McKenzie	1
00111	Moisture	SM 2540 G-1997	1	13087820002B	03/28/2013 21:46	Scott W Freisher	1

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1378599
Reported: 04/01/13 at 04:16 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13087A16A	Sample number(s): 6999649							
Benzene	N.D.	0.0050	mg/kg	96		80-120		
Ethylbenzene	N.D.	0.0050	mg/kg	94		80-120		
Toluene	N.D.	0.0050	mg/kg	93		80-120		
TPH-GRO soil C6-C10	N.D.	1.0	mg/kg	74	77	67-119	3	30
Total Xylenes	N.D.	0.015	mg/kg	94		80-120		
Batch number: 130870010A	Sample number(s): 6999649							
#4 Fuel Oil	N.D.	12.	mg/kg					
Coal Tar Oil	N.D.	12.	mg/kg					
Diesel/#2 Fuel	N.D.	12.	mg/kg	96		71-124		
#6 Fuel Oil	N.D.	90.	mg/kg					
Gasoline	N.D.	12.	mg/kg					
Kerosene	N.D.	12.	mg/kg					
Mineral Spirits	N.D.	12.	mg/kg					
Motor Oil	N.D.	30.	mg/kg					
Batch number: 130870011A	Sample number(s): 6999649							
TPH-DRO soil C10-C28	N.D.	12.	mg/kg	88		76-120		
Batch number: 13088088201A	Sample number(s): 6999649							
Chloride by IC (solid)	N.D.	10.0	mg/kg	106		90-110		
Batch number: 13087820002B	Sample number(s): 6999649							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13087A16A	Sample number(s): 6999649 UNSPK: P996541								
Benzene	95	96	52-135	9	30				
Ethylbenzene	95	95	56-132	8	30				
Toluene	93	93	59-129	8	30				
Total Xylenes	94	95	53-145	9	30				
Batch number: 130870010A	Sample number(s): 6999649 UNSPK: 34201					BKG: 34201			
#4 Fuel Oil						N.D.	N.D.	0 (1)	20

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1378599
Reported: 04/01/13 at 04:16 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Coal Tar Oil						N.D.	N.D.	0 (1)	20
Diesel/#2 Fuel	98		37-129			11 J	8.1 J	26* (1)	20
#6 Fuel Oil						N.D.	N.D.	0 (1)	20
Gasoline						N.D.	N.D.	0 (1)	20
Kerosene						N.D.	N.D.	0 (1)	20
Mineral Spirits						N.D.	N.D.	0 (1)	20
Motor Oil						N.D.	N.D.	0 (1)	20
Batch number: 130870011A	Sample number(s): 6999649 UNSPK: P999648 BKG: P999648								
TPH-DRO soil C10-C28	88		30-159			44	33	29* (1)	20
Batch number: 13088088201A	Sample number(s): 6999649 UNSPK: P999648 BKG: P999648								
Chloride by IC (solid)	10049 (2)		90-110			16,500	17,000	3 (1)	20
Batch number: 13087820002B	Sample number(s): 6999649 BKG: P998328								
Moisture						26.4	27.1	3	13

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TPH-GRO soil C6-C10
Batch number: 13087A16A

	Trifluorotoluene-F	Trifluorotoluene-P
6999649	77	75
Blank	88	98
LCS	84	85
LCSD	86	
MS		88
MSD		90
Limits:	61-122	73-117

Analysis Name: TPH by GC-FID (Soils)
Batch number: 130870010A

	Chlorobenzene	Orthoterphenyl
6999649	62	78
Blank	69	99
DUP	63	73
LCS	76	94
MS	88	83
Limits:	46-131	51-127

Analysis Name: TPH-DRO soil C10-C28

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1378599
Reported: 04/01/13 at 04:16 PM

Surrogate Quality Control

Batch number: 130870011A

	Orthoterphenyl
6999649	85
Blank	99
DUP	79
LCS	101
MS	94
Limits:	52-136

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Environmental Services Analysis Request/Chain of Custody

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Acct. # 11713 Group # 1378599 Sample # 6999649

Client: Conestoga-Rovers & Associates	
Project Name/#: CVU 342 Pit - 073823	Site ID #:
Project Manager: Ryan Kainer	P.O. #:
Sampler: Christopher Vela	PWSID #:
Phone #: 432-686-0086	Quote #:
State where sample(s) were collected: New Mexico	

Matrix: Sediment ☐ / Soil ☑; Water: Ground ☐ Potable ☐ / Surface ☐ NPDES ☐; Other:

Analyses Requested / Preservation Codes: TPH 8015 (O), Chlorides 300 (O), BTEX 8021 (O)

Sample Identification	Collection Date	Collection Time	Grab	Composite	Soil	Water	Other	Total # of Containers	TPH 8015	Chlorides 300	BTEX 8021	Remarks
CVX-342-02	3/22/13	1410		x	x			2	x	x	x	

For Lab Use Only
SF #:
SCR #:

Preservation Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 P = H_3PO_4
O = Other

Turnaround Time Requested (TAT) (please check): Standard ☐ Rush ☑
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)

Date results are needed: 48 hrs

Rush results requested by (please check): E-Mail ☑ Phone ☐

E-mail Address: rkainer@craworld.com

Phone: 432-686-0086

Data Package Options (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐
Type III (Reduced non-CLP) ☐ CT RCP ☐
Type IV (CLP SOW) ☐ TX TRRP-13 ☐
Type VI (Raw Data Only) ☐

EDD Required? Yes ☐ No ☐ If yes, format:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	3/22/13	4:17 pm			
			[signature]	3/28/13	0845

Relinquished by Commercial Carrier:
UPS ____ FedEx ✓ Other ____

Temperature upon receipt 2.0 °C

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7045.01

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.
>	greater than
J	estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

April 01, 2013

Project: CVU 342 Pit

Submittal Date: 03/28/2013
Group Number: 1378600
PO Number: 4056668
Release Number: LEA COUNTY, NM
State of Sample Origin: NM

Client Sample Description	Lancaster Labs (LLI) #
CVX-342-03 Composite Soil	6999650

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	Conestoga-Rovers & Associates	Attn: Ryan Kainer
ELECTRONIC COPY TO	Conestoga-Rovers & Associates	Attn: Chris Knight

Respectfully Submitted,

Wendy A. Kozma
Principal Specialist Group Leader

(717) 556-7257

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Analysis Report

Sample Description: CVX-342-03 Composite Soil
CVU 342 Pit - 073823

LLI Sample # SW 6999650
LLI Group # 1378600
Account # 11713

Project Name: CVU 342 Pit

Collected: 03/27/2013 14:20 by CV

Submitted: 03/28/2013 08:45
Reported: 04/01/2013 16:17

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

34203

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
GC Volatiles	**SW-846 8015B**		mg/kg	mg/kg	
01638	TPH-GRO soil C6-C10	n.a.	13	1.4	25.18
GC Volatiles	**SW-846 8021B**		mg/kg	mg/kg	
08179	Benzene	71-43-2	0.0044 J	0.0068	25.18
08179	Ethylbenzene	100-41-4	0.086	0.0068	25.18
08179	Toluene	108-88-3	0.017	0.0068	25.18
08179	Total Xylenes	1330-20-7	0.18	0.020	25.18
GC Petroleum Hydrocarbons	**SW-846 8015B**		mg/kg	mg/kg	
08270	TPH-DRO soil C10-C28	n.a.	91	16	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg	mg/kg	
05256	#4 Fuel Oil	68476-31-3	N.D.	16	1
05256	Coal Tar Oil	8001-58-9	N.D.	16	1
05256	Diesel/#2 Fuel	68334-30-5	88	16	1
05256	#6 Fuel Oil	68553-00-4	N.D.	120	1
05256	Gasoline	8006-61-9	N.D.	16	1
05256	Kerosene	8008-20-6	N.D.	16	1
05256	Mineral Spirits	8030-30-6	N.D.	16	1
05256	Motor Oil	n.a.	N.D.	41	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.
There is an unidentifiable product eluting in the carbon range we would most typically see Mineral Spirits and/or Kerosene in. This product is not contributing to overall result of the Diesel/#2 Fuel oil detected in this sample. The QC limits for Mineral Spirits and Kerosene have been raised accordingly.

Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	33,500	13,500	1000
Wet Chemistry	**SM 2540 G-1997**		%	%	
00111	Moisture	n.a.	26.1	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Analysis Report

Sample Description: CVX-342-03 Composite Soil
CVU 342 Pit - 073823

LLI Sample # SW 6999650
LLI Group # 1378600
Account # 11713

Project Name: CVU 342 Pit

Collected: 03/27/2013 14:20 by CV

Submitted: 03/28/2013 08:45
Reported: 04/01/2013 16:17

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

34203

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01638	TPH-GRO soil C6-C10	SW-846 8015B	1	13087A16A	03/29/2013 14:08	Laura M Krieger	25.18
08179	BTEX by 8021	SW-846 8021B	1	13087A16A	03/29/2013 14:08	Laura M Krieger	25.18
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201308730547	03/28/2013 14:47	Mitchell R Washel	n.a.
08270	TPH-DRO soil C10-C28	SW-846 8015B	1	130870011A	03/30/2013 16:33	Tracy A Cole	1
05256	TPH by GC-FID (Soils)	SW-846 8015B modified	1	130870010A	03/29/2013 16:40	Heather E Williams	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	130870011A	03/28/2013 19:00	Sally L Appleyard	1
04833	Extraction / Fuel TPH (Soils)	SW-846 3550B	1	130870010A	03/28/2013 19:00	Sally L Appleyard	1
07333	Chloride by IC (solid)	EPA 300.0	2	13088088201A	03/30/2013 22:40	Joseph E McKenzie	1000
01352	Deionized Water Extraction	EPA 300.0	1	13088088201A	03/29/2013 10:00	Joseph E McKenzie	1
00111	Moisture	SM 2540 G-1997	1	13087820002B	03/28/2013 21:46	Scott W Freisher	1

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1378600
Reported: 04/01/13 at 04:17 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13087A16A	Sample number(s): 6999650							
Benzene	N.D.	0.0050	mg/kg	96		80-120		
Ethylbenzene	N.D.	0.0050	mg/kg	94		80-120		
Toluene	N.D.	0.0050	mg/kg	93		80-120		
TPH-GRO soil C6-C10	N.D.	1.0	mg/kg	74	77	67-119	3	30
Total Xylenes	N.D.	0.015	mg/kg	94		80-120		
Batch number: 130870010A	Sample number(s): 6999650							
#4 Fuel Oil	N.D.	12.	mg/kg					
Coal Tar Oil	N.D.	12.	mg/kg					
Diesel/#2 Fuel	N.D.	12.	mg/kg	96		71-124		
#6 Fuel Oil	N.D.	90.	mg/kg					
Gasoline	N.D.	12.	mg/kg					
Kerosene	N.D.	12.	mg/kg					
Mineral Spirits	N.D.	12.	mg/kg					
Motor Oil	N.D.	30.	mg/kg					
Batch number: 130870011A	Sample number(s): 6999650							
TPH-DRO soil C10-C28	N.D.	12.	mg/kg	88		76-120		
Batch number: 13088088201A	Sample number(s): 6999650							
Chloride by IC (solid)	N.D.	10.0	mg/kg	106		90-110		
Batch number: 13087820002B	Sample number(s): 6999650							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13087A16A	Sample number(s): 6999650 UNSPK: P996541								
Benzene	95	96	52-135	9	30				
Ethylbenzene	95	95	56-132	8	30				
Toluene	93	93	59-129	8	30				
Total Xylenes	94	95	53-145	9	30				
Batch number: 130870010A	Sample number(s): 6999650 UNSPK: 34201 BKG: 34201								
#4 Fuel Oil						N.D.	N.D.	0 (1)	20

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1378600
Reported: 04/01/13 at 04:17 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Coal Tar Oil						N.D.	N.D.	0 (1)	20
Diesel/#2 Fuel	98		37-129			11 J	8.1 J	26* (1)	20
#6 Fuel Oil						N.D.	N.D.	0 (1)	20
Gasoline						N.D.	N.D.	0 (1)	20
Kerosene						N.D.	N.D.	0 (1)	20
Mineral Spirits						N.D.	N.D.	0 (1)	20
Motor Oil						N.D.	N.D.	0 (1)	20
Batch number: 130870011A	Sample number(s): 6999650 UNSPK: P999648 BKG: P999648								
TPH-DRO soil C10-C28	88		30-159			44	33	29* (1)	20
Batch number: 13088088201A	Sample number(s): 6999650 UNSPK: P999648 BKG: P999648								
Chloride by IC (solid)	10049 (2)		90-110			16,500	17,000	3 (1)	20
Batch number: 13087820002B	Sample number(s): 6999650 BKG: P998328								
Moisture						26.4	27.1	3	13

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TPH-GRO soil C6-C10
Batch number: 13087A16A

	Trifluorotoluene-F	Trifluorotoluene-P
6999650	82	85
Blank	88	98
LCS	84	85
LCSD	86	
MS		88
MSD		90
Limits:	61-122	73-117

Analysis Name: TPH by GC-FID (Soils)
Batch number: 130870010A

	Chlorobenzene	Orthoterphenyl
6999650	74	83
Blank	69	99
DUP	63	73
LCS	76	94
MS	88	83
Limits:	46-131	51-127

Analysis Name: TPH-DRO soil C10-C28

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1378600
Reported: 04/01/13 at 04:17 PM

Surrogate Quality Control

Batch number: 130870011A

	Orthoterphenyl
6999650	90
Blank	99
DUP	79
LCS	101
MS	94
Limits:	52-136

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Environmental Services Analysis Request/Chain of Custody

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Acct. # 11713 Group # 1378600 Sample # 6999650

Client: Conestoga-Rovers & Associates

Project Name/#: CVU 342 Pit - 073823 Site ID #:

Project Manager: Ryan Kainer P.O. #:

Sampler: Christopher Vela PWSID #:

Phone #: 432-686-0086 Quote #:

State where sample(s) were collected: New Mexico

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil	Matrix: Water	Other:	Total # of Containers	TPH 8015	Chlorides 300	BTEX 8021	Remarks
CVX-342-03	3/27/13	1420		x	x			2	x	x	x	

Matrix: Sediment ☐ Soil ☑ Water: Ground ☐ Surface ☐ Potable ☐ NPDES ☐

Analyses Requested — Preservation Codes: O O O

For Lab Use Only: SF #: _____ SCR #: _____

Preservation Codes: H = HCl; T = Thiosulfate; N = HNO_3; B = NaOH; S = H_2SO_4; P = H_3PO_4; O = Other

Turnaround Time Requested (TAT) (please check): Standard ☐ Rush ☑

(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)

Date results are needed: 48 hrs

Rush results requested by (please check): E-Mail ☑ Phone ☐

E-mail Address: rkainer@craworld.com

Phone: 432-686-0086

Data Package Options (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐

Type III (Reduced non-CLP) ☐ CT RCP ☐

Type IV (CLP SOW) ☐ TX TRRP-13 ☐

Type VI (Raw Data Only) ☐

EDD Required? Yes ☐ No ☐ If yes, format: _____

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	3/27/13	4:30 pm			
			[signature] Deborah Mesa	3/28/13	0845

Relinquished by Commercial Carrier: UPS _____ FedEx ✓ Other _____

Temperature upon receipt 2.0 °C

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.
>	greater than
J	estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

April 02, 2013

Project: CVU 342 Pit

Submittal Date: 03/28/2013
Group Number: 1378603
PO Number: 4056668
Release Number: LEA COUNTY, NM
State of Sample Origin: NM

Client Sample Description	Lancaster Labs (LLI) #
CVX-342-SP Composite Soil	6999656
Trip Blank Water	6999657

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	Conestoga-Rovers & Associates	Attn: Ryan Kainer
ELECTRONIC COPY TO	Conestoga-Rovers & Associates	Attn: Chris Knight

Respectfully Submitted,

Wendy A. Kozma
Principal Specialist Group Leader

(717) 556-7257

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Analysis Report

Sample Description: CVX-342-SP Composite Soil
CVX 342 Pit - 073823

LLI Sample # SW 6999656
LLI Group # 1378603
Account # 11713

Project Name: CVU 342 Pit

Collected: 03/27/2013 14:30 by CV

Submitted: 03/28/2013 08:45
Reported: 04/02/2013 11:12

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

342SP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Dilution Factor
GC Volatiles	**SW-846 8015B**		mg/kg		mg/kg	
01638	TPH-GRO soil C6-C10	n.a.	N.D.		1.1	25.8
GC Volatiles	**SW-846 8021B**		mg/kg		mg/kg	
08179	Benzene	71-43-2	N.D.		0.0053	25.8
08179	Ethylbenzene	100-41-4	N.D.		0.0053	25.8
08179	Toluene	108-88-3	N.D.		0.0053	25.8
08179	Total Xylenes	1330-20-7	N.D.		0.016	25.8
GC Petroleum Hydrocarbons	**SW-846 8015B**		mg/kg		mg/kg	
08270	TPH-DRO soil C10-C28	n.a.	5.1	J	12	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	
05256	#4 Fuel Oil	68476-31-3	N.D.		12	1
05256	Coal Tar Oil	8001-58-9	N.D.		12	1
05256	Diesel/#2 Fuel	68334-30-5	4.6	J	12	1
05256	#6 Fuel Oil	68553-00-4	N.D.		92	1
05256	Gasoline	8006-61-9	N.D.		12	1
05256	Kerosene	8008-20-6	N.D.		12	1
05256	Mineral Spirits	8030-30-6	N.D.		12	1
05256	Motor Oil	n.a.	N.D.		31	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

Wet Chemistry	**EPA 300.0**		mg/kg		mg/kg	
07333	Chloride by IC (solid)	16887-00-6	490		204	20
Wet Chemistry	**SM 2540 G-1997**		%		%	
00111	Moisture	n.a.	2.2		0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01638	TPH-GRO soil C6-C10	SW-846 8015B	1	13087A16A	03/28/2013 21:35	Laura M Krieger	25.8
08179	BTEX by 8021	SW-846 8021B	1	13087A16A	03/28/2013 21:35	Laura M Krieger	25.8
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201308730547	03/28/2013 14:48	Mitchell R Washel	n.a.

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Analysis Report

Sample Description: CVX-342-SP Composite Soil
CVX 342 Pit - 073823

LLI Sample # SW 6999656
LLI Group # 1378603
Account # 11713

Project Name: CVU 342 Pit

Collected: 03/27/2013 14:30 by CV

Submitted: 03/28/2013 08:45
Reported: 04/02/2013 11:12

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

342SP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08270	TPH-DRO soil C10-C28	SW-846 8015B	1	130870011A	03/30/2013 15:13	Tracy A Cole	1
05256	TPH by GC-FID (Soils)	SW-846 8015B modified	1	130870010A	03/29/2013 15:55	Heather E Williams	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	130870011A	03/28/2013 19:00	Sally L Appleyard	1
04833	Extraction / Fuel TPH (Soils)	SW-846 3550B	1	130870010A	03/28/2013 19:00	Sally L Appleyard	1
07333	Chloride by IC (solid)	EPA 300.0	1	13088088201A	03/30/2013 22:55	Joseph E McKenzie	20
01352	Deionized Water Extraction	EPA 300.0	1	13088088201A	03/29/2013 10:00	Joseph E McKenzie	1
00111	Moisture	SM 2540 G-1997	1	13087820002B	03/28/2013 21:46	Scott W Freisher	1

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Analysis Report

Sample Description: Trip Blank Water
CVX 342 Pit - 073823

Project Name: CVU 342 Pit

LLI Sample # WW 6999657
LLI Group # 1378603
Account # 11713

Collected: 03/27/2013

Submitted: 03/28/2013 08:45
Reported: 04/02/2013 11:12

Conestoga-Rovers & Associates
13091 Pond Springs Road
Austin TX 78729

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC Volatiles	**SW-846 8021B**		mg/l	mg/l	
02102	Benzene	71-43-2	N.D.	0.0010	1
02102	Ethylbenzene	100-41-4	N.D.	0.0010	1
02102	Toluene	108-88-3	N.D.	0.0010	1
02102	Total Xylenes	1330-20-7	N.D.	0.0030	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	13087B53A	03/29/2013 17:17	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13087B53A	03/29/2013 17:17	Catherine J Schwarz	1

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1378603
Reported: 04/02/13 at 11:12 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13087A16A	Sample number(s): 6999656							
Benzene	N.D.	0.0050	mg/kg	96		80-120		
Ethylbenzene	N.D.	0.0050	mg/kg	94		80-120		
Toluene	N.D.	0.0050	mg/kg	93		80-120		
TPH-GRO soil C6-C10	N.D.	1.0	mg/kg	74	77	67-119	3	30
Total Xylenes	N.D.	0.015	mg/kg	94		80-120		
Batch number: 13087B53A	Sample number(s): 6999657							
Benzene	N.D.	0.0010	mg/l	105		80-120		
Ethylbenzene	N.D.	0.0010	mg/l	106		80-120		
Toluene	N.D.	0.0010	mg/l	104		80-120		
Total Xylenes	N.D.	0.0030	mg/l	109		80-120		
Batch number: 130870010A	Sample number(s): 6999656							
#4 Fuel Oil	N.D.	12.	mg/kg					
Coal Tar Oil	N.D.	12.	mg/kg					
Diesel/#2 Fuel	N.D.	12.	mg/kg	96		71-124		
#6 Fuel Oil	N.D.	90.	mg/kg					
Gasoline	N.D.	12.	mg/kg					
Kerosene	N.D.	12.	mg/kg					
Mineral Spirits	N.D.	12.	mg/kg					
Motor Oil	N.D.	30.	mg/kg					
Batch number: 130870011A	Sample number(s): 6999656							
TPH-DRO soil C10-C28	N.D.	12.	mg/kg	88		76-120		
Batch number: 13088088201A	Sample number(s): 6999656							
Chloride by IC (solid)	N.D.	10.0	mg/kg	106		90-110		
Batch number: 13087820002B	Sample number(s): 6999656							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13087A16A	Sample number(s): 6999656 UNSPK: P996541								
Benzene	95	96	52-135	9	30				

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1378603
Reported: 04/02/13 at 11:12 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Ethylbenzene	95	95	56-132	8	30				
Toluene	93	93	59-129	8	30				
Total Xylenes	94	95	53-145	9	30				
Batch number: 13087B53A	Sample number(s): 6999657 UNSPK: P998998								
Benzene	109	108	80-130	1	30				
Ethylbenzene	111	110	80-133	1	30				
Toluene	109	107	80-133	1	30				
Total Xylenes	114	112	80-132	1	30				
Batch number: 130870010A	Sample number(s): 6999656 UNSPK: 34201 BKG: 34201								
#4 Fuel Oil						N.D.	N.D.	0 (1)	20
Coal Tar Oil						N.D.	N.D.	0 (1)	20
Diesel/#2 Fuel	98		37-129			11 J	8.1 J	26* (1)	20
#6 Fuel Oil						N.D.	N.D.	0 (1)	20
Gasoline						N.D.	N.D.	0 (1)	20
Kerosene						N.D.	N.D.	0 (1)	20
Mineral Spirits						N.D.	N.D.	0 (1)	20
Motor Oil						N.D.	N.D.	0 (1)	20
Batch number: 130870011A	Sample number(s): 6999656 UNSPK: P999648 BKG: P999648								
TPH-DRO soil C10-C28	88		30-159			44	33	29* (1)	20
Batch number: 13088088201A	Sample number(s): 6999656 UNSPK: P999648 BKG: P999648								
Chloride by IC (solid)	10049 (2)		90-110			16,500	17,000	3 (1)	20
Batch number: 13087820002B	Sample number(s): 6999656 BKG: P998328								
Moisture						26.4	27.1	3	13

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Method 8021 Soil Master
Batch number: 13087A16A

	Trifluorotoluene-F	Trifluorotoluene-P
6999656	86	98
Blank	88	98
LCS	84	85
LCSD	86	
MS		88
MSD		90
Limits:	61-122	73-117

Analysis Name: Method 8021 Water Master

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1378603
Reported: 04/02/13 at 11:12 AM

Surrogate Quality Control

Batch number: 13087B53A

	Trifluorotoluene-P
6999657	80
Blank	80
LCS	81
MS	81
MSD	81
Limits:	51-120

Analysis Name: TPH by GC-FID (Soils)
Batch number: 130870010A

	Chlorobenzene	Orthoterphenyl
6999656	76	96
Blank	69	99
DUP	63	73
LCS	76	94
MS	88	83
Limits:	46-131	51-127

Analysis Name: TPH-DRO soil C10-C28
Batch number: 130870011A

	Orthoterphenyl
6999656	94
Blank	99
DUP	79
LCS	101
MS	94
Limits:	52-136

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Environmental Services Analysis Request/Chain of Custody

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Acct. # 11713 Group # 1378603 Sample # 6999656-57

Client: Conestoga-Rovers & Associates

Project Name/#: CVU 342 - 073823 | Site ID #:

Project Manager: Ryan Kainer | P.O. #:

Sampler: Christopher Vela | PWSID #:

Phone #: 432-686-0086 | Quote #:

State where sample(s) were collected: New Mexico

Sample Identification	Collection Date	Collection Time	Grab	Composite	Soil	Sediment	Water (Potable / NPDES / Ground / Surface)	Other:	Total # of Containers	TPH 8015	Chlorides 300	BTEX 8021								Remarks
Preservation Codes										O	O	O								
CVX-342-SP	3/27/13	1430		x	x				2	x	x	x								

Matrix: Soil ☑

For Lab Use Only
SF #:
SCR #:

Preservation Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 P = H_3PO_4
O = Other

Turnaround Time Requested (TAT) (please check): Standard ☐ Rush ☑
(Rush TAT is subject to Lancaster Laboratories approval and surcharges.)

Date results are needed: 48 hrs

Rush results requested by (please check): E-Mail ☑ Phone ☐

E-mail Address: rkainer@craworld.com

Phone: 432-686-0086

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	3/27/13	4:17pm			
			[signature]	3/28/13	0845

Relinquished by Commercial Carrier:
UPS ____ FedEx ✓ Other ____

Temperature upon receipt 2.0 °C

Data Package Options (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐
Type III (Reduced non-CLP) ☐ CT RCP ☐
Type IV (CLP SOW) ☐ TX TRRP-13 ☐
Type VI (Raw Data Only) ☐

EDD Required? Yes ☐ No ☐ If yes, format: ____

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

Analytical Report 462651

for

Conestoga Rovers & Associates

Project Manager: Tom Larson

CEMC CVU 342

073823

16-MAY-13

Collected By: Client

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)

XENCO Laboratories

16-MAY-13

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

Reference: XENCO Report No(s): **462651**
CEMC CVU 342
Project Address: New Mexico

Tom Larson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 462651. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 462651 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

XENCO Laboratories

Sample Cross Reference 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-1 5'	S	05-06-13 13:25		462651-001
SB-1 10'	S	05-06-13 13:40		462651-002
SB-1 20'	S	05-06-13 13:45		462651-003
SB-1 40'	S	05-06-13 13:55		462651-004
SB-1 50'	S	05-06-13 14:10		462651-005
SB-1 75'	S	05-06-13 14:25		462651-006
SB-1 100'	S	05-06-13 14:35		462651-007
SB-2 5'	S	05-06-13 15:20		462651-008
SB-2 10'	S	05-06-13 15:25		462651-009
SB-2 20'	S	05-06-13 15:35		462651-010
SB-2 40'	S	05-06-13 15:38		462651-011
SB-2 50'	S	05-06-13 15:40		462651-012
SB-2 70'	S	05-06-13 15:45		462651-013
SB-2 80'	S	05-06-13 15:55		462651-014
SB-2 90'	S	05-06-13 16:05		462651-015
SB-2 100'	S	05-06-13 16:15		462651-016
SB-3 5'	S	05-07-13 09:50		462651-017
SB-3 10'	S	05-07-13 10:00		462651-018
SB-3 20'	S	05-07-13 10:05		462651-019
SB-3 30'	S	05-07-13 10:10		462651-020
SB-3 50'	S	05-07-13 10:15		462651-021
SB-3 70'	S	05-07-13 10:30		462651-022
SB-3 90'	S	05-07-13 10:35		462651-023

CASE NARRATIVE

XENCO Laboratories

Client Name: Conestoga Rovers & Associates
Project Name: CEMC CVU 342

Project ID:	*073823*	Report Date:	*16-MAY-13*
Work Order Number(s):	*462651*	Date Received:	*05/07/2013*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-913372 Inorganic Anions by EPA 300/300.1
E300

Batch 913372, Chloride recovered below QC limits in the Matrix Spike.
Samples affected are: 462651-020.
The Laboratory Control Sample for Chloride is within laboratory Control Limits

Batch: LBA-913623 Inorganic Anions by EPA 300/300.1
E300

Batch 913623, Chloride recovered below QC limits in the Matrix Spike.
Samples affected are: 462651-019, -022, -008, -021, -010, -011, -013, -009, -012, -018, -014, -006, -017.
The Laboratory Control Sample for Chloride is within laboratory Control Limits

XENCO Laboratories

Certificate of Analysis Summary 462651

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC CVU 342

Project Id: 073823
Contact: Tom Larson
Project Location: New Mexico

Date Received in Lab: Tue May-07-13 04:50 pm
Report Date: 16-MAY-13
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	462651-001		462651-002		462651-003		462651-004		462651-005		462651-006	
	Field Id:	SB-1 5'		SB-1 10'		SB-1 20'		SB-1 40'		SB-1 50'		SB-1 75'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-06-13 13:25		May-06-13 13:40		May-06-13 13:45		May-06-13 13:55		May-06-13 14:10		May-06-13 14:25	
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-09-13 14:00		May-09-13 14:00		May-09-13 14:00		May-09-13 14:00		May-09-13 14:00		May-10-13 08:00	
	Analyzed:	May-09-13 17:09		May-09-13 17:31		May-09-13 17:53		May-09-13 18:15		May-09-13 19:20		May-10-13 10:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1700	41.8	2130	41.1	177	4.28	32.5	3.10	147	4.19	4.94	3.07
Percent Moisture	*Extracted:*												
	Analyzed:	May-08-13 15:15		May-08-13 15:15		May-08-13 15:15		May-08-13 15:15		May-08-13 15:15		May-08-13 15:15	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.20	1.00	2.66	1.00	6.54	1.00	3.34	1.00	4.52	1.00	2.34	1.00

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Kelsey Brooks
Project Manager

XENCO Laboratories

Certificate of Analysis Summary 462651

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC CVU 342

Project Id: 073823
Contact: Tom Larson
Project Location: New Mexico

Date Received in Lab: Tue May-07-13 04:50 pm
Report Date: 16-MAY-13
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	462651-007		462651-008		462651-009		462651-010		462651-011		462651-012	
	Field Id:	SB-1 100'		SB-2 5'		SB-2 10'		SB-2 20'		SB-2 40'		SB-2 50'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-06-13 14:35		May-06-13 15:20		May-06-13 15:25		May-06-13 15:35		May-06-13 15:38		May-06-13 15:40	
Inorganic Anions by EPA 300/300.1	*Extracted:*			May-10-13 08:00		May-10-13 08:00		May-10-13 08:00		May-10-13 08:00		May-10-13 08:00	
	Analyzed:			May-10-13 11:41		May-10-13 10:14		May-10-13 12:02		May-10-13 12:24		May-10-13 13:29	
	Units/RL:			mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride				3860	103	4420	106	2510	41.9	4.83	3.81	2460	41.8
Percent Moisture	*Extracted:*												
	Analyzed:	May-08-13 15:15		May-08-13 15:15		May-08-13 15:15		May-08-13 15:15		May-08-13 15:15		May-08-13 15:15	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.77	1.00	3.07	1.00	5.30	1.00	4.56	1.00	21.2	1.00	4.31	1.00

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Kelsey Brooks
Project Manager

XENCO Laboratories

Certificate of Analysis Summary 462651

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC CVU 342

Project Id: 073823
Contact: Tom Larson
Project Location: New Mexico

Date Received in Lab: Tue May-07-13 04:50 pm
Report Date: 16-MAY-13
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	462651-013		462651-014		462651-015		462651-016		462651-017		462651-018	
	Field Id:	SB-2 70'		SB-2 80'		SB-2 90'		SB-2 100'		SB-3 5'		SB-3 10'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-06-13 15:45		May-06-13 15:55		May-06-13 16:05		May-06-13 16:15		May-07-13 09:50		May-07-13 10:00	
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-10-13 08:00		May-10-13 08:00						May-10-13 08:00		May-10-13 08:00	
	Analyzed:	May-10-13 13:51		May-10-13 14:13						May-10-13 16:01		May-10-13 16:23	
	Units/RL:	mg/kg	RL	mg/kg	RL					mg/kg	RL	mg/kg	RL
Chloride		412	10.7	4.22	3.29					142	4.31	685	21.5
Percent Moisture	*Extracted:*												
	Analyzed:	May-08-13 15:15		May-08-13 16:20		May-08-13 16:20		May-08-13 16:20		May-08-13 16:20		May-08-13 16:20	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.44	1.00	19.1	1.00	5.13	1.00	6.82	1.00	7.22	1.00	7.15	1.00

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Kelsey Brooks
Project Manager

XENCO Laboratories

Certificate of Analysis Summary 462651

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC CVU 342

Project Id: 073823
Contact: Tom Larson
Project Location: New Mexico

Date Received in Lab: Tue May-07-13 04:50 pm
Report Date: 16-MAY-13
Project Manager: Kelsey Brooks

Analysis Requested																	
	Lab Id:	462651-019		462651-020		462651-021		462651-022		462651-023							
	Field Id:	SB-3 20'		SB-3 30'		SB-3 50'		SB-3 70'		SB-3 90'							
	Depth:																
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL							
	Sampled:	May-07-13 10:05		May-07-13 10:10		May-07-13 10:15		May-07-13 10:30		May-07-13 10:35							
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-10-13 08:00		May-09-13 16:00		May-10-13 08:00		May-10-13 08:00									
	Analyzed:	May-10-13 16:44		May-10-13 04:06		May-10-13 17:06		May-10-13 18:12									
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL								
Chloride		1400	42.4	3420	43.0	1210	21.1	431	10.3								
Percent Moisture	*Extracted:*																
	Analyzed:	May-08-13 16:45		May-08-13 16:45		May-08-13 16:45		May-08-13 16:45		May-08-13 16:45							
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL						
Percent Moisture		5.63	1.00	6.94	1.00	5.19	1.00	2.97	1.00	4.09	1.00						

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Kelsey Brooks
Project Manager

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-1 5'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-001**	Date Collected: 05.06.13 13.25	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	4.2
Analyst:	AMB	Date Prep:	05.09.13 14.00	Basis:	Dry Weight
Seq Number:	913609				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1700**	41.8	mg/kg	05.09.13 17.09		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.20**	1.00	%	05.08.13 15.15		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-1 10'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-002**	Date Collected: 05.06.13 13.40	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	2.66
Analyst:	AMB	Date Prep:	05.09.13 14.00	Basis:	Dry Weight
Seq Number:	913609				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2130**	41.1	mg/kg	05.09.13 17.31		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**2.66**	1.00	%	05.08.13 15.15		1

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Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-1 20'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-003**	Date Collected: 05.06.13 13.45	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.54
Analyst:	AMB	Date Prep:	05.09.13 14.00	Basis:	Dry Weight
Seq Number:	913609				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**177**	4.28	mg/kg	05.09.13 17.53		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**6.54**	1.00	%	05.08.13 15.15		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-1 40'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-004**	Date Collected: 05.06.13 13.55	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	3.34
Analyst:	AMB	Date Prep:	05.09.13 14.00	Basis:	Dry Weight
Seq Number:	913609				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**32.5**	3.10	mg/kg	05.09.13 18.15		1.5

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**3.34**	1.00	%	05.08.13 15.15		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-1 50'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-005**	Date Collected: 05.06.13 14.10	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	4.52
Analyst:	AMB	Date Prep:	05.09.13 14.00	Basis:	Dry Weight
Seq Number:	913609				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**147**	4.19	mg/kg	05.09.13 19.20		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.52**	1.00	%	05.08.13 15.15		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-1 75'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-006**	Date Collected: 05.06.13 14.25	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	2.34
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4.94**	3.07	mg/kg	05.10.13 10.57		1.5

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**2.34**	1.00	%	05.08.13 15.15		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-1 100'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-007**	Date Collected: 05.06.13 14.35	

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**3.77**	1.00	%	05.08.13 15.15		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 5'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-008**	Date Collected: 05.06.13 15.20	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	3.07
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3860**	103	mg/kg	05.10.13 11.41		50

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**3.07**	1.00	%	05.08.13 15.15		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 10'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-009**	Date Collected: 05.06.13 15.25	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	5.3
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4420**	106	mg/kg	05.10.13 10.14		50

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.30**	1.00	%	05.08.13 15.15		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 20'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-010**	Date Collected: 05.06.13 15.35	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	4.56
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2510**	41.9	mg/kg	05.10.13 12.02		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.56**	1.00	%	05.08.13 15.15		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 40'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-011**	Date Collected: 05.06.13 15.38	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	21.2
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4.83**	3.81	mg/kg	05.10.13 12.24		1.5

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**21.2**	1.00	%	05.08.13 15.15		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 50'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-012**	Date Collected: 05.06.13 15.40	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	4.31
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2460**	41.8	mg/kg	05.10.13 13.29		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.31**	1.00	%	05.08.13 15.15		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 70'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-013**	Date Collected: 05.06.13 15.45	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.44
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**412**	10.7	mg/kg	05.10.13 13.51		5

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**6.44**	1.00	%	05.08.13 15.15		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 80'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-014**	Date Collected: 05.06.13 15.55	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	19.1
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4.22**	3.29	mg/kg	05.10.13 14.13		1.33

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**19.1**	1.00	%	05.08.13 16.20		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 90'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-015**	Date Collected: 05.06.13 16.05	

Analytical Method:	**Percent Moisture**	
Tech:	SHSM	% Moisture:
Analyst:	WRU	Basis: Wet Weight
Seq Number:	913266	

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.13**	1.00	%	05.08.13 16.20		1

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Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 100'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-016**	Date Collected: 05.06.13 16.15	

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**6.82**	1.00	%	05.08.13 16.20		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 5'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-017**	Date Collected: 05.07.13 09.50	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	7.22
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**142**	4.31	mg/kg	05.10.13 16.01		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**7.22**	1.00	%	05.08.13 16.20		1

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Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 10'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-018**	Date Collected: 05.07.13 10.00	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	7.15
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**685**	21.5	mg/kg	05.10.13 16.23		10

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**7.15**	1.00	%	05.08.13 16.20		1

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Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 20'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-019**	Date Collected: 05.07.13 10.05	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	5.63
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1400**	42.4	mg/kg	05.10.13 16.44		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913267		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.63**	1.00	%	05.08.13 16.45		1

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Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 30'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-020**	Date Collected: 05.07.13 10.10	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P	
Tech:	AMB			% Moisture: 6.94	
Analyst:	AMB	Date Prep:	05.09.13 16.00	Basis: Dry Weight	
Seq Number:	913372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3420**	43.0	mg/kg	05.10.13 04.06		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913267		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**6.94**	1.00	%	05.08.13 16.45		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 50'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-021**	Date Collected: 05.07.13 10.15	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	5.19
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1210**	21.1	mg/kg	05.10.13 17.06		10

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913267		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.19**	1.00	%	05.08.13 16.45		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 70'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-022**	Date Collected: 05.07.13 10.30	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	2.97
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**431**	10.3	mg/kg	05.10.13 18.12		5

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913267		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**2.97**	1.00	%	05.08.13 16.45		1

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 90'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-023**	Date Collected: 05.07.13 10.35	

Analytical Method:	**Percent Moisture**
Tech:	SHSM
Analyst:	WRU
Seq Number:	913267

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.09**	1.00	%	05.08.13 16.45		1

XENCO Laboratories

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

XENCO Laboratories

QC Summary 462651

Conestoga Rovers & Associates

CEMC CVU 342

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913609 — Matrix: Solid — Date Prep: 05/09/2013
MB Sample Id: 637998-1-BLK — LCS Sample Id: 637998-1-BKS — LCSD Sample Id: 637998-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<2.00	50.0	51.5	103	51.4	103	80-120	0	20	mg/kg	05/09/13 15:21	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913372 — Matrix: Solid — Date Prep: 05/09/2013
MB Sample Id: 637855-1-BLK — LCS Sample Id: 637855-1-BKS — LCSD Sample Id: 637855-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<2.00	50.0	51.6	103	51.7	103	80-120	0	20	mg/kg	05/09/13 22:41	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913623 — Matrix: Solid — Date Prep: 05/10/2013
MB Sample Id: 638012-1-BLK — LCS Sample Id: 638012-1-BKS — LCSD Sample Id: 638012-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<2.00	50.0	51.6	103	51.2	102	80-120	1	20	mg/kg	05/10/13 09:10	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913609 — Matrix: Soil — Date Prep: 05/09/2013
Parent Sample Id: 462609-001 — MS Sample Id: 462609-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	<2.66	66.5	78.5	118	80-120	mg/kg	05/09/13 16:26	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913372 — Matrix: Soil — Date Prep: 05/09/2013
Parent Sample Id: 462651-020 — MS Sample Id: 462651-020 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	3420	1070	4390	91	80-120	mg/kg	05/10/13 04:28	

XENCO Laboratories

QC Summary 462651

Conestoga Rovers & Associates

CEMC CVU 342

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913372 — Matrix: Soil — Date Prep: 05/09/2013
Parent Sample Id: 462827-001 — MS Sample Id: 462827-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	98.1	112	213	103	80-120	mg/kg	05/09/13 23:46	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913623 — Matrix: Soil — Date Prep: 05/10/2013
Parent Sample Id: 462651-009 — MS Sample Id: 462651-009 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	4420	2640	7130	103	80-120	mg/kg	05/10/13 10:36	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913623 — Matrix: Soil — Date Prep: 05/10/2013
Parent Sample Id: 462711-003 — MS Sample Id: 462711-003 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	5590	6310	5840	4	80-120	mg/kg	05/10/13 15:18	X

Analytical Method: Percent Moisture
Seq Number: 913266 — Matrix: Solid
MB Sample Id: 913266-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	05/08/13 15:15	

Analytical Method: Percent Moisture
Seq Number: 913267 — Matrix: Solid
MB Sample Id: 913267-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	05/08/13 16:45	

XENCO Laboratories

QC Summary 462651

Conestoga Rovers & Associates

CEMC CVU 342

Analytical Method: **Percent Moisture**
Seq Number: 913266 Matrix: Soil
Parent Sample Id: 462609-001 MD Sample Id: 462609-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	<1.00	<1.00	0	20	%	05/08/13 15:15	U

Analytical Method: **Percent Moisture**
Seq Number: 913267 Matrix: Soil
Parent Sample Id: 462651-019 MD Sample Id: 462651-019 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	5.63	6.47	14	20	%	05/08/13 16:45	

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☑ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330721 Page 1 of 3

Company-City: CRA Midland **Phone:** 6860086
Lab Only: 462651

Project Name-Location: CEMC CVU 342 ☐ Previously done at XENCO **Project ID:** 073823

TAT: ASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d Standard TAT is project specific. It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other (NM) **Proj. Manager (PM):** Tom Larson

E-mail Results to ☐ PM and tlarson@craworld.com **Fax No:**

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to: See SSOW (C. Knight CRA)

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER: NMOCD

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name: Tom Larson **Signature:** T Larson

Analysis columns: VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs | VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other: | PAHs SIM 8310 8270 | TX-1005 DRO GRO MA EPH MA VPH | SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL | OC Pesticides PCBs Herbicides OP Pesticides | Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2 | SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs) | EDB / DBCP | Cl- Chlorides 300.0 EPA | TATASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d | Addn: PAH above mg/L W, mg/Kg S Highest Hit | Hold Samples (Surcharges will apply and are pre-approved) | Sample Clean-ups are pre-approved as needed

#	Sample ID	Sampling Date 2013	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	Cl- Chlorides 300.0 EPA	TAT (5d)	Hold Samples
1	SB-1 5'	5-6	1325		S		X	1	4oz	C	C	X	X	
2	10'	↓	1340		↓		↓		↓	↓	↓	↓	X	
3	20'	↓	1345		↓		↓		↓	↓	↓	↓	X	
4	40'	↓	1355		↓		↓		↓	↓	↓	↓	X	
5	50'	↓	1410		↓		↓		↓	↓	↓	↓	X	
6	75'	↓	1425		↓		↓		↓	↓	↓	↓	X	
7	100'	↓	1435		↓		↓		↓	↓	↓	↓		X
8	SB-2 5'	5-6	1520		↓		↓		↓	↓	↓	↓	X	
9	10'	↓	1525		↓		↓		↓	↓	↓	↓	X	
10	20'	↓	1535		↓		↓		↓	↓	↓	↓	X	

Remarks: Addn: Date Rcv. by: From:

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) T Larson	5-7-13 1651	2)	
3)		4)	
5)		6) Kmcgkere	5/7/13 16:55

Total Containers per COC: Cooler Temp: 6.0 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool, <4C) (C), None (NA), See Label (L), Other (O)
Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other **Cont. Type:** Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)
Matrix: Air (A), Product (P), Solid (S), Water (W), Liquid (L)

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Notice: Signature of this document and relinquishment of these samples constitutes a valid purchase order from client company to Xenco Laboratories and its affiliates, subcontractors and assigns under Xenco's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories
☐ 4143 Greenbriar Drive, Stafford, TX 77477 281-240-4200
☐ 5332, Blackberry Drive, San Antonio, TX 78238 210-509-3334
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 214-902-0300
☐ 12600 West I-20 East, Odessa, TX 79765 432-563-1800

Serial #: 330719 Page 2 of 3

Company-City: See Pg 1 Phone:
Lab Only: 462651

Project Name-Location ☐ Previously done at XENCO Project ID

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific. It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other
Proj. Manager (PM) Tom Carson

E-mail Results to ☐ PM and Fax No:

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: P.O. No: ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Signature

Analyses: VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs; VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:; PAHs SIM 8310 8270; TX-1005 DRO GRO MA EPH MA VPH; SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL; OC Pesticides PCBs Herbicides OP Pesticides; Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2; SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs); EDB / DBCP; Cl- chlorides 300.0 EPA

TATASAP 5h 12h 24h 48h 3d (5d circled) 7d 10d 21d
Addn: PAH above mg/L W, mg/Kg S Highest Hit
Hold Samples (Surcharges will apply and are pre-approved)
Sample Clean-ups are pre-approved as needed

Remarks

#	Sample ID	Sampling Date 2013	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	Cl- chlorides 300.0 EPA	TAT 5d	Hold Samples	Addn: Date Rcv. by: From:	#
1	SB-2 40'	5-6	1538		S		X	1	4oz	C	C	X	X			1
2	↓ 50'	↓	1540		↓		↓	↓	↓	↓	↓	↓	X			2
3	70'		1545										X			3
4	80'		1555										X			4
5	90'		1605											X		5
6	100'		1615											X		6
7	SB-3 5'	5-7	950										X			7
8	↓ 10'	↓	1000										X			8
9	20'		1005										X			9
10	30'		1010										X			10

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) [signature]	5-7-13 1650	2)	
2	3)		4)	
3	5)		6) [signature]	5/7/13 16:50

Total Containers per COC: Cooler Temp: 6.0 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool, <4C) (C), None (NA), See Label (L), Other (O) ________
Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other ________ **Cont. Type:** Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)
Matrix: Air (A), Product (P), Solid (S), Water (W), Liquid (L)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330720 Page 3 of 3

Company-City See Pg 1 **Phone**

Lab Only: 462651

Project Name-Location ☐ Previously done at XENCO **Project ID**

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other

Proj. Manager (PM) Tom Larson

E-mail Results to ☐ PM and **Fax No:**

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**

QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name **Signature**

	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
1	SB-3 50'	5-7 2013	1015		S		X	1	4oz	C	C
2	70'	↓	1030		↓		↓	↓	↓	↓	↓
3	90'	↓	1035		↓		↓	↓	↓	↓	↓
4											
5											
6											
7											
8											
9											
10											

VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs
VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:
PAHs SIM 8310 8270
TX-1005 DRO GRO MA EPH MA VPH
SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL
OC Pesticides PCBs Herbicides OP Pesticides
Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2
SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)
EDB / DBCP
Cl - Chloride 300.0 EPA
TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d
Addn: PAH above mg/L W, mg/Kg S Highest Hit
Hold Samples (Surcharges will apply and are pre-approved)

Remarks
Sample Clean-ups are pre-approved as needed
Addn: Date Rcv. by: From:

Final 1.001

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) TL	5.7.13 1650	2)	
3)		4)	
5)		6)	5/7/13 16:50

Total Containers per COC: Cooler Temp: 6.0 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/07/2013 04:50:00 PM

Work Order #: 462651

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)?	6
#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?	Yes
#6 *Custody Seals Signed and dated?	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: Kelsey Brooks Date: 05/08/2013

Checklist reviewed by: Kelsey Brooks Date: 05/08/2013

Analytical Report 462651

for

Conestoga Rovers & Associates

Project Manager: Tom Larson

CEMC CVU 342

073823

21-MAY-13

Collected By: Client

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)

XENCO Laboratories

21-MAY-13

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

Reference: XENCO Report No(s): **462651**
CEMC CVU 342
Project Address: New Mexico

Tom Larson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 462651. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 462651 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

XENCO Laboratories

Sample Cross Reference 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-1 5'	S	05-06-13 13:25		462651-001
SB-1 10'	S	05-06-13 13:40		462651-002
SB-1 20'	S	05-06-13 13:45		462651-003
SB-1 40'	S	05-06-13 13:55		462651-004
SB-1 50'	S	05-06-13 14:10		462651-005
SB-1 75'	S	05-06-13 14:25		462651-006
SB-1 100'	S	05-06-13 14:35		462651-007
SB-2 5'	S	05-06-13 15:20		462651-008
SB-2 10'	S	05-06-13 15:25		462651-009
SB-2 20'	S	05-06-13 15:35		462651-010
SB-2 40'	S	05-06-13 15:38		462651-011
SB-2 50'	S	05-06-13 15:40		462651-012
SB-2 70'	S	05-06-13 15:45		462651-013
SB-2 80'	S	05-06-13 15:55		462651-014
SB-2 90'	S	05-06-13 16:05		462651-015
SB-2 100'	S	05-06-13 16:15		462651-016
SB-3 5'	S	05-07-13 09:50		462651-017
SB-3 10'	S	05-07-13 10:00		462651-018
SB-3 20'	S	05-07-13 10:05		462651-019
SB-3 30'	S	05-07-13 10:10		462651-020
SB-3 50'	S	05-07-13 10:15		462651-021
SB-3 70'	S	05-07-13 10:30		462651-022
SB-3 90'	S	05-07-13 10:35		462651-023

XENCO Laboratories

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: CEMC CVU 342

Project ID:	*073823*	Report Date:	*21-MAY-13*
Work Order Number(s):	*462651*	Date Received:	*05/07/2013*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-913372 Inorganic Anions by EPA 300/300.1
E300

Batch 913372, Chloride recovered below QC limits in the Matrix Spike.
Samples affected are: 462651-020.
The Laboratory Control Sample for Chloride is within laboratory Control Limits

Batch: LBA-913623 Inorganic Anions by EPA 300/300.1
E300

Batch 913623, Chloride recovered below QC limits in the Matrix Spike.
Samples affected are: 462651-019, -022, -008, -021, -010, -011, -013, -009, -012, -018, -023, -014, -006, -017.
The Laboratory Control Sample for Chloride is within laboratory Control Limits

XENCO Laboratories

Certificate of Analysis Summary 462651

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC CVU 342

Project Id: 073823
Contact: Tom Larson
Project Location: New Mexico

Date Received in Lab: Tue May-07-13 04:50 pm
Report Date: 21-MAY-13
Project Manager: Kelsey Brooks

Analysis Requested	*Lab Id:*	462651-001		462651-002		462651-003		462651-004		462651-005		462651-006	
	Field Id:	SB-1 5'		SB-1 10'		SB-1 20'		SB-1 40'		SB-1 50'		SB-1 75'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-06-13 13:25		May-06-13 13:40		May-06-13 13:45		May-06-13 13:55		May-06-13 14:10		May-06-13 14:25	
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-09-13 14:00		May-09-13 14:00		May-09-13 14:00		May-09-13 14:00		May-09-13 14:00		May-10-13 08:00	
	Analyzed:	May-09-13 17:09		May-09-13 17:31		May-09-13 17:53		May-09-13 18:15		May-09-13 19:20		May-10-13 10:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1700	41.8	2130	41.1	177	4.28	32.5	3.10	147	4.19	4.94	3.07
Percent Moisture	*Extracted:*												
	Analyzed:	May-08-13 15:15		May-08-13 15:15		May-08-13 15:15		May-08-13 15:15		May-08-13 15:15		May-08-13 15:15	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.20	1.00	2.66	1.00	6.54	1.00	3.34	1.00	4.52	1.00	2.34	1.00

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks
Project Manager

XENCO Laboratories

Certificate of Analysis Summary 462651

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC CVU 342

Project Id: 073823
Contact: Tom Larson
Project Location: New Mexico

Date Received in Lab: Tue May-07-13 04:50 pm
Report Date: 21-MAY-13
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	462651-007		462651-008		462651-009		462651-010		462651-011		462651-012	
	Field Id:	SB-1 100'		SB-2 5'		SB-2 10'		SB-2 20'		SB-2 40'		SB-2 50'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-06-13 14:35		May-06-13 15:20		May-06-13 15:25		May-06-13 15:35		May-06-13 15:38		May-06-13 15:40	
Inorganic Anions by EPA 300/300.1	*Extracted:*			May-10-13 08:00		May-10-13 08:00		May-10-13 08:00		May-10-13 08:00		May-10-13 08:00	
	Analyzed:			May-10-13 11:41		May-10-13 10:14		May-10-13 12:02		May-10-13 12:24		May-10-13 13:29	
	Units/RL:			mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride				3860	103	4420	106	2510	41.9	4.83	3.81	2460	41.8
Percent Moisture	*Extracted:*												
	Analyzed:	May-08-13 15:15		May-08-13 15:15		May-08-13 15:15		May-08-13 15:15		May-08-13 15:15		May-08-13 15:15	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.77	1.00	3.07	1.00	5.30	1.00	4.56	1.00	21.2	1.00	4.31	1.00

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks
Project Manager

XENCO Laboratories

Certificate of Analysis Summary 462651

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC CVU 342

Project Id: 073823
Contact: Tom Larson
Project Location: New Mexico

Date Received in Lab: Tue May-07-13 04:50 pm
Report Date: 21-MAY-13
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	462651-013		462651-014		462651-015		462651-016		462651-017		462651-018	
	Field Id:	SB-2 70'		SB-2 80'		SB-2 90'		SB-2 100'		SB-3 5'		SB-3 10'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-06-13 15:45		May-06-13 15:55		May-06-13 16:05		May-06-13 16:15		May-07-13 09:50		May-07-13 10:00	
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-10-13 08:00		May-10-13 08:00						May-10-13 08:00		May-10-13 08:00	
	Analyzed:	May-10-13 13:51		May-10-13 14:13						May-10-13 16:01		May-10-13 16:23	
	Units/RL:	mg/kg	RL	mg/kg	RL					mg/kg	RL	mg/kg	RL
Chloride		412	10.7	4.22	3.29					142	4.31	685	21.5
Percent Moisture	*Extracted:*												
	Analyzed:	May-08-13 15:15		May-08-13 16:20		May-08-13 16:20		May-08-13 16:20		May-08-13 16:20		May-08-13 16:20	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.44	1.00	19.1	1.00	5.13	1.00	6.82	1.00	7.22	1.00	7.15	1.00

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks
Project Manager

XENCO Laboratories

Certificate of Analysis Summary 462651

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC CVU 342

Project Id: 073823
Contact: Tom Larson
Project Location: New Mexico

Date Received in Lab: Tue May-07-13 04:50 pm
Report Date: 21-MAY-13
Project Manager: Kelsey Brooks

Analysis Requested												
	Lab Id:	462651-019		462651-020		462651-021		462651-022		462651-023		
	Field Id:	SB-3 20'		SB-3 30'		SB-3 50'		SB-3 70'		SB-3 90'		
	Depth:											
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	May-07-13 10:05		May-07-13 10:10		May-07-13 10:15		May-07-13 10:30		May-07-13 10:35		
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-10-13 08:00		May-09-13 16:00		May-10-13 08:00		May-10-13 08:00		May-13-13 10:00		
	Analyzed:	May-10-13 16:44		May-10-13 04:06		May-10-13 17:06		May-10-13 18:12		** ** ** **		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		1400	42.4	3420	43.0	1210	21.1	431	10.3	209	4.17	
Percent Moisture	*Extracted:*											
	Analyzed:	May-08-13 16:45		May-08-13 16:45		May-08-13 16:45		May-08-13 16:45		May-08-13 16:45		
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	
Percent Moisture		5.63	1.00	6.94	1.00	5.19	1.00	2.97	1.00	4.09	1.00	

Kelsey Brooks
Project Manager

XENCO Laboratories

Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-1 5'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-001**	Date Collected: 05.06.13 13.25	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	4.2
Analyst:	AMB	Date Prep:	05.09.13 14.00	Basis:	Dry Weight
Seq Number:	913609				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1700**	41.8	mg/kg	05.09.13 17.09		20

Analytical Method:	**Percent Moisture**				
Tech:	SHSM			% Moisture:	
Analyst:	WRU			Basis:	Wet Weight
Seq Number:	913266				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.20**	1.00	%	05.08.13 15.15		1

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Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-1 10'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-002**	Date Collected: 05.06.13 13.40	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	2.66
Analyst:	AMB	Date Prep:	05.09.13 14.00	Basis:	Dry Weight
Seq Number:	913609				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2130**	41.1	mg/kg	05.09.13 17.31		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**2.66**	1.00	%	05.08.13 15.15		1

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Certificate of Analytical Results 462651

Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-1 20'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-003**	Date Collected: 05.06.13 13.45	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.54
Analyst:	AMB	Date Prep:	05.09.13 14.00	Basis:	Dry Weight
Seq Number:	913609				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**177**	4.28	mg/kg	05.09.13 17.53		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**6.54**	1.00	%	05.08.13 15.15		1

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CEMC CVU 342

Sample Id:	**SB-1 40'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-004**	Date Collected: 05.06.13 13.55	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	3.34
Analyst:	AMB	Date Prep:	05.09.13 14.00	Basis:	Dry Weight
Seq Number:	913609				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**32.5**	3.10	mg/kg	05.09.13 18.15		1.5

Analytical Method:	**Percent Moisture**				
Tech:	SHSM			% Moisture:	
Analyst:	WRU			Basis:	Wet Weight
Seq Number:	913266				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**3.34**	1.00	%	05.08.13 15.15		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-1 50'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-005**	Date Collected: 05.06.13 14.10	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	4.52
Analyst:	AMB	Date Prep:	05.09.13 14.00	Basis:	Dry Weight
Seq Number:	913609				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**147**	4.19	mg/kg	05.09.13 19.20		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.52**	1.00	%	05.08.13 15.15		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-1 75'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-006**	Date Collected: 05.06.13 14.25	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P	
Tech:	AMB			% Moisture: 2.34	
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis: Dry Weight	
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4.94**	3.07	mg/kg	05.10.13 10.57		1.5

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**2.34**	1.00	%	05.08.13 15.15		1

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CEMC CVU 342

Sample Id:	**SB-1 100'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-007**	Date Collected: 05.06.13 14.35	

Analytical Method:	**Percent Moisture**		
Tech:	SHSM		% Moisture:
Analyst:	WRU		Basis: Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**3.77**	1.00	%	05.08.13 15.15		1

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CEMC CVU 342

Sample Id:	**SB-2 5'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-008**	Date Collected: 05.06.13 15.20	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	3.07
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3860**	103	mg/kg	05.10.13 11.41		50

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**3.07**	1.00	%	05.08.13 15.15		1

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CEMC CVU 342

Sample Id:	**SB-2 10'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-009**	Date Collected: 05.06.13 15.25	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	5.3
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4420**	106	mg/kg	05.10.13 10.14		50

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.30**	1.00	%	05.08.13 15.15		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 20'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-010**	Date Collected: 05.06.13 15.35	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	4.56
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2510**	41.9	mg/kg	05.10.13 12.02		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.56**	1.00	%	05.08.13 15.15		1

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CEMC CVU 342

Sample Id:	**SB-2 40'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-011**	Date Collected: 05.06.13 15.38	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	21.2
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4.83**	3.81	mg/kg	05.10.13 12.24		1.5

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**21.2**	1.00	%	05.08.13 15.15		1

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CEMC CVU 342

Sample Id:	**SB-2 50'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-012**	Date Collected: 05.06.13 15.40	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	4.31
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2460**	41.8	mg/kg	05.10.13 13.29		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.31**	1.00	%	05.08.13 15.15		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 70'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-013**	Date Collected: 05.06.13 15.45	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.44
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**412**	10.7	mg/kg	05.10.13 13.51		5

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**6.44**	1.00	%	05.08.13 15.15		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 80'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-014**	Date Collected: 05.06.13 15.55	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	19.1
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4.22**	3.29	mg/kg	05.10.13 14.13		1.33

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**19.1**	1.00	%	05.08.13 16.20		1

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CEMC CVU 342

Sample Id:	**SB-2 90'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-015**	Date Collected: 05.06.13 16.05	

Analytical Method:	**Percent Moisture**	
Tech:	SHSM	% Moisture:
Analyst:	WRU	Basis: Wet Weight
Seq Number:	913266	

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.13**	1.00	%	05.08.13 16.20		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-2 100'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-016**	Date Collected: 05.06.13 16.15	

Analytical Method:	**Percent Moisture**
Tech:	SHSM
Analyst:	WRU
Seq Number:	913266

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**6.82**	1.00	%	05.08.13 16.20		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 5'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-017**	Date Collected: 05.07.13 09.50	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	7.22
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**142**	4.31	mg/kg	05.10.13 16.01		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**7.22**	1.00	%	05.08.13 16.20		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 10'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-018**	Date Collected: 05.07.13 10.00	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	7.15
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**685**	21.5	mg/kg	05.10.13 16.23		10

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913266		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**7.15**	1.00	%	05.08.13 16.20		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 20'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-019**	Date Collected: 05.07.13 10.05	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	5.63
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1400**	42.4	mg/kg	05.10.13 16.44		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913267		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.63**	1.00	%	05.08.13 16.45		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 30'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-020**	Date Collected: 05.07.13 10.10	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.94
Analyst:	AMB	Date Prep:	05.09.13 16.00	Basis:	Dry Weight
Seq Number:	913372				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3420**	43.0	mg/kg	05.10.13 04.06		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913267		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**6.94**	1.00	%	05.08.13 16.45		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id: SB-3 50' Matrix: Soil Date Received: 05.07.13 16.50
Lab Sample Id: 462651-021 Date Collected: 05.07.13 10.15

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Tech: AMB % Moisture: 5.19
Analyst: AMB Date Prep: 05.10.13 08.00 Basis: Dry Weight
Seq Number: 913623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1210**	21.1	mg/kg	05.10.13 17.06		10

Analytical Method: **Percent Moisture**
Tech: SHSM % Moisture:
Analyst: WRU Basis: Wet Weight
Seq Number: 913267

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.19**	1.00	%	05.08.13 16.45		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 70'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-022**	Date Collected: 05.07.13 10.30	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	2.97
Analyst:	AMB	Date Prep:	05.10.13 08.00	Basis:	Dry Weight
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**431**	10.3	mg/kg	05.10.13 18.12		5

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913267		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**2.97**	1.00	%	05.08.13 16.45		1

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Conestoga Rovers & Associates, Midland, TX

CEMC CVU 342

Sample Id:	**SB-3 90'**	Matrix: Soil	Date Received: 05.07.13 16.50
Lab Sample Id:	**462651-023**	Date Collected: 05.07.13 10.35	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P	
Tech:	AMB			% Moisture: 4.09	
Analyst:	AMB	Date Prep:	05.13.13 10.00	Basis: Dry Weight	
Seq Number:	913623				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**209**	4.17	mg/kg	05.10.13 18.33		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913267		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.09**	1.00	%	05.08.13 16.45		1

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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.
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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	

XENCO Laboratories

QC Summary 462651

Conestoga Rovers & Associates

CEMC CVU 342

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913609 — Matrix: Solid — Date Prep: 05.09.13
MB Sample Id: 637998-1-BLK — LCS Sample Id: 637998-1-BKS — LCSD Sample Id: 637998-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<2.00	50.0	51.5	103	51.4	103	80-120	0	20	mg/kg	05.09.13 15:21	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913372 — Matrix: Solid — Date Prep: 05.09.13
MB Sample Id: 637855-1-BLK — LCS Sample Id: 637855-1-BKS — LCSD Sample Id: 637855-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<2.00	50.0	51.6	103	51.7	103	80-120	0	20	mg/kg	05.09.13 22:41	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913623 — Matrix: Solid — Date Prep: 05.10.13
MB Sample Id: 638012-1-BLK — LCS Sample Id: 638012-1-BKS — LCSD Sample Id: 638012-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<2.00	50.0	51.6	103	51.2	102	80-120	1	20	mg/kg	05.10.13 09:10	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913609 — Matrix: Soil — Date Prep: 05.09.13
Parent Sample Id: 462609-001 — MS Sample Id: 462609-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	<2.66	66.5	78.5	118	80-120	mg/kg	05.09.13 16:26	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913372 — Matrix: Soil — Date Prep: 05.09.13
Parent Sample Id: 462651-020 — MS Sample Id: 462651-020 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	3420	1070	4390	91	80-120	mg/kg	05.10.13 04:28	

XENCO Laboratories

QC Summary 462651

Conestoga Rovers & Associates

CEMC CVU 342

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913372 — Matrix: Soil — Date Prep: 05.09.13
Parent Sample Id: 462827-001 — MS Sample Id: 462827-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	98.1	112	213	103	80-120	mg/kg	05.09.13 23:46	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913623 — Matrix: Soil — Date Prep: 05.10.13
Parent Sample Id: 462651-009 — MS Sample Id: 462651-009 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	4420	2640	7130	103	80-120	mg/kg	05.10.13 10:36	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913623 — Matrix: Soil — Date Prep: 05.10.13
Parent Sample Id: 462711-003 — MS Sample Id: 462711-003 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	5590	6310	5840	4	80-120	mg/kg	05.10.13 15:18	X

Analytical Method: Percent Moisture
Seq Number: 913266 — Matrix: Solid
MB Sample Id: 913266-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	05.08.13 15:15	

Analytical Method: Percent Moisture
Seq Number: 913267 — Matrix: Solid
MB Sample Id: 913267-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	05.08.13 16:45	

XENCO Laboratories

QC Summary 462651

Conestoga Rovers & Associates

CEMC CVU 342

Analytical Method: Percent Moisture
Seq Number: 913266 Matrix: Soil
Parent Sample Id: 462609-001 MD Sample Id: 462609-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	<1.00	<1.00	0	20	%	05.08.13 15:15	U

Analytical Method: Percent Moisture
Seq Number: 913267 Matrix: Soil
Parent Sample Id: 462651-019 MD Sample Id: 462651-019 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	5.63	6.47	14	20	%	05.08.13 16:45	

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

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☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330721 Page 1 of 3

Company-City: CRA Midland **Phone:** 6866086
Project Name-Location: CEMC CV4342 ☐ Previously done at XENCO **Project ID:** 673823
Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other (NM) **Proj. Manager (PM):** Tom Larson
E-mail Results to: ☐PM and tlarson@craworld.com **Fax No:**
Invoice to ☐Accounting ☐Inc. Invoice with Final Report ☐Invoice must have a P.O.
Bill to: See SOW (C. Knight CRA)
Quote/Pricing: **P.O. No:** ☐ Call for P.O.
Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER: NMOCD
Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)
Sampler Name: Tom Larson **Signature:**

Lab Only: 462651

TAT: ASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Cl- chlorides 300.0 EPA	TAT ASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Remarks: Sample Clean-ups are pre-approved as needed	Addn: Date Rcv. by: From:	
1	SB-1 5'	7-7-13 5-6	1325		S		X	1	4oz	C	C										X	X				1
2	10'		1340																			X				2
3	25'		1345																			X				3
4	40'		1355																			X				4
5	50'		1410																			X				5
6	75'		1425																			X				6
7	100'		1435																					X		7
8	SB-2 5'	5-6	1520																			X				8
9	10'		1525																			X				9
10	20'		1535																			X				10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) TL	7-7-13 1651	2)	
3)		4)	
5)		6)	7/7/13 16:55

Total Containers per COC: Cooler Temp: 6.0 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool, <4C) (C), None (NA),See Label (L), Other (O) _____
Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other _____ **Cont. Type:** Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)

Matrix: Air (A), Product (P), Solid (S), Water (W), Liquid (L)

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Notice: Signature of this document and relinquishment of these samples constitutes a valid purchase order from client company to Xenco Laboratories and its affiliates, subcontractors and assigns under Xenco's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

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☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330719 Page 2 of 3

Company-City See Pg 1 **Phone**

Lab Only: 462651

Project Name-Location ☐ Previously done at XENCO **Project ID**

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other

Proj. Manager (PM) Tom Larson

E-mail Results to ☐ PM and **Fax No:**

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW TRRP
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name **Signature**

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
1	SB-2 40'	5-6 2013	1530		S		X	1	C	4oz	C
2	50'		1540								
3	70'		1545								
4	80'		1555								
5	90'		1605								
6	100'		1615								
7	SB-3 5'	5-7	950								
8	10'		1000								
9	20'		1005								
10	30'		1010								

	VOA: Full-List BTEX-MTBE EtOH Oxyg	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Cl - chlorides 300.0 EPA	TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed	Addn: Date Rcv. by: From:
1										X	X				
2											X				
3											X				
4											X				
5													X		
6													X		
7											X				
8											X				
9											X				
10											X				

Remarks

Final 1.002

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) [signature]	5.7.13 1650	2)	
3)		4)	
5)		6) [signature]	5/7/13 16:50

Total Containers per COC: Cooler Temp: 6.0 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool, <4C) (C), None (NA),See Label (L), Other (O) _____
Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other _____ **Cont. Type:** Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)

Matrix: Air (A), Product (P), Solid (S), Water (W), Liquid (L)

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Serial #: 330720 Page 3 of 3

Company-City See Pg 1 **Phone**

Lab Only: 462651

Project Name-Location ☐ Previously done at XENCO **Project ID**

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other

Proj. Manager (PM) Tom Larson

E-mail Results to ☐ PM and **Fax No:**

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
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Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW TRRP

QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name **Signature**

	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
1	SB-3 50'	5-7 2013	1015		S		X	1	4oz	C	C
2	70'		1030								
3	90'		1035								
4											
5											
6											
7											
8											
9											
10											

VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs
VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:
PAHs SIM 8310 8270
TX-1005 DRO GRO MA EPH MA VPH
SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL
OC Pesticides PCBs Herbicides OP Pesticides
Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2
SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)
EDB / DBCP

Cl - Chlorides 300.0 EPA

TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d
Addn: PAH above mg/L W, mg/Kg S Highest Hit
Hold Samples (Surcharges will apply and are pre-approved)

Remarks

Sample Clean-ups are pre-approved as needed

Addn: Date Rcv. by: From:

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) Tom Larson TL	5.7.13 1650	2)	
2	3)		4)	
3	5)		6) Kim Teel	5/7/13 16:50

Total Containers per COC: Cooler Temp: 6.0 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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Final 1.002

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/07/2013 04:50:00 PM

Work Order #: 462651

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)?	6
#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?	Yes
#6 *Custody Seals Signed and dated?	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: Kelsey Brooks Date: 05/08/2013

Checklist reviewed by: Kelsey Brooks Date: 05/08/2013

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 160589

CONDITIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 160589
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Approved, uploaded signed c141	11/21/2022