HOBBS OCD

OCT 16 2013

RECEIVED

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

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 New Mexico O State #40	Facility Type Reserve Pit

Surface Owner State of New Mexico	Mineral Owner	API No. 30-025-38140

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	36	17 S	34 E	1855	South	1978	East	Lea

Latitude 32.7893° N **Longitude** 103.51923° 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.*

N/A

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 155' X 170' X 200' 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:	
Title: Project Manager	Approval Date:	Expiration Date:
E-mail Address: kegan.boyer@chevron.com	Conditions of Approval:	Attached ☐
Date: 10/14/13 Phone: (713) 372-7705		

* Attach Additional Sheets If Necessary

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	New Mexico O State #40	Facility Type	Reserve Pit API # 30-025-38140

Surface Owner	Mineral Owner	Lease No.
State of New Mexico		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	36	17 S	34 E	1885	South	1978	East	Lea

Latitude 32.789444 **Longitude** -103.511944

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 155' x 170' x 200' 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

www.CRAworld.com

FINAL REPORT

Site Closure Report

New Mexico "O" State NCT-1 #40
RP#2673 Unit J, Section 36, T17S, R34E
Lea County, New Mexico

Prepared for: Chevron Environmental Management Company

Conestoga-Rovers & Associates
2135 South Loop, 250 West Midland, Texas 79703
September 2013 • #073824(3)

ORIGINAL

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1.0 INTRODUCTION

This Site Closure Report provides documentation associated with corrective actions at the New Mexico "O" State #40, 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 2673 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 #2673.

The Chevron New Mexico "O" State #40 (hereafter referred to as the "Site"), is located in Section 36 (Unit J), Township 17 South, Range 34 East, Lea County, New Mexico (Figure 1).

The scope of work for the subject 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.
- Implementation of a 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 onsite burial, however, that approach was rejected by the NMOCD. The original C-144 Form is attached as in Appendix A. 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#2673) was assigned to this project. The original C-141 Form is attached in 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. Geoffery Leking met at the NMOCD District I Hobbs office on June 27, 2012 to discuss the path forward at the Site. Topics of discussion include 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 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 13, 2013, CRA and Entact of Dallas, Texas mobilized to the Site to perform soil assessment activities. Heavy equipment was utilized to obtain soil samples from 4 inches, 2 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 4 inch, 2 feet and 6 feet intervals were 10,500, 11,900 and 9,250 mg/kg respectively.

On March 19, 2013, CRA and Entact mobilized to the Site to begin excavation activities. A total of approximately 3,366 cubic yards (cy) of material was removed from the existing remedial excavation, with floor depths ranging from 4-10 feet 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 below ground surface 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 (70'-69.8 mg/kg), SB-2 (70'-108 mg/kg), and SB-3 (70'-29.8 mg/kg) demonstrated decreasing chloride levels with depth to well below recommended remediation and delineation levels. A soil boring analytical summary is provided in Table I. 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 delineation data, and remedial activities performed at the site to date. CRA, CEMC and NMOCD concluded that delineation efforts of 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 Dallas, 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 July 8, 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 July 1, 2013 with the staging of heavy equipment near the borrow pit and excavated pit areas. Backfill of the excavated pit areas began on July 1, 2013. Installation of excavated pit liner (20 mil) started and was completed on July 5, 2013 by Entact. RWI transported approximately 4,032 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 July 8, 2013, with the Site being graded to minimize erosion, ripped with heavy machinery and seeded with a New Mexico native seed mixture (BLM#4). On July 9, 2013, equipment was demobilized from the Site. Site restoration activities and locations are depicted on Figure 3.

3.2 WASTE MANAGEMENT

CRA was responsible for managing waste associated with the 2013 project activities (3,366 cy). Controlled Recovery, Inc. (CRI) landfill was utilized as a disposal facility for impacted soils. CRI is an NMOCD and Chevron approved facility. 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 the CRI landfill's representative. Waste manifests utilized between March 20, 2013 and March 27, 2013 were labeled incorrectly with Central Vacuum Unit #342 information. Correspondence between CRA and CRI landfill on March 27, 2013 identified the incorrectly labeled manifests and addressed the issue, ultimately being resolved with the assistance of CRI landfill agents. Table II indicates the waste manifests that were incorrectly labeled with the Central Vacuum Unit #342. Table II also 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 New Mexico "O" State #40, Lea County, New Mexico, has been completed (RP #2673). 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 #2673) 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 discussions 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. Geoffery Leking met at the NMOCD District I Hobbs office on June 27, 2012 to discuss the path forward at the Site. Topics of discussion include 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 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 13, 2013, CRA and Entact of Dallas, Texas mobilized to the Site to perform soil assessment activities. Heavy equipment was utilized to obtain soil samples from 4 inches, 2 feet, and 6 feet below the existing liner.
- On March 19, 2013, CRA and Entact mobilized to the Site to begin excavation activities. A total of approximately 3,366 cubic yards (cy) of material was removed from the existing remedial excavation, with floor depths ranging from 4-10 feet bgs.
- 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.
- 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 below ground surface bgs. All three soil borings SB-1 (70'-69.8 mg/kg), SB-2 (70'-108 mg/kg) and SB-3 (70'-29.8 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 assessment and restoration activities.
- On July 1, 2013, backfill activities began with RWI hauling clean backfill material to the reserve pit from an off-Site borrow pit - provided by the Pearce Ranch Trust.
- On July 5, 2013, installation of the 20-mil poly liner was installed and backfilling activities commenced atop the liner.
- On July 8, 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).
- On July 9, 2013, all equipment and personnel demobilized from the Site.

5.0 SITE CLOSURE REQUEST

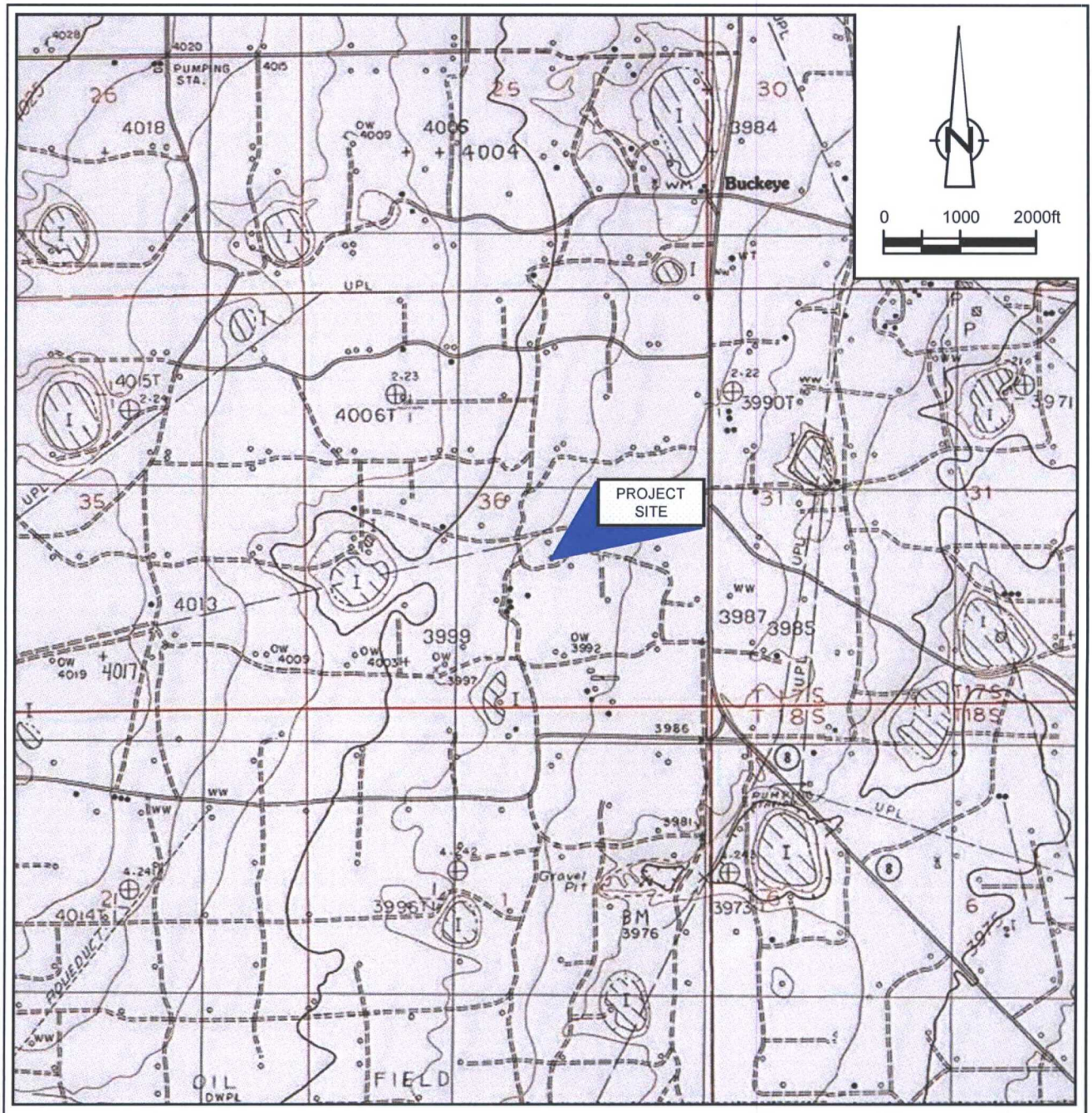
This Site Closure Report provides documentation of the New Mexico "O" State #40 soil assessment activities involving the impacted soil areas and remedial correctional actions performed in accordance to the RP #2673. This report is an attachment to the Final C-141 Form submittal for RP #2673. Based on 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

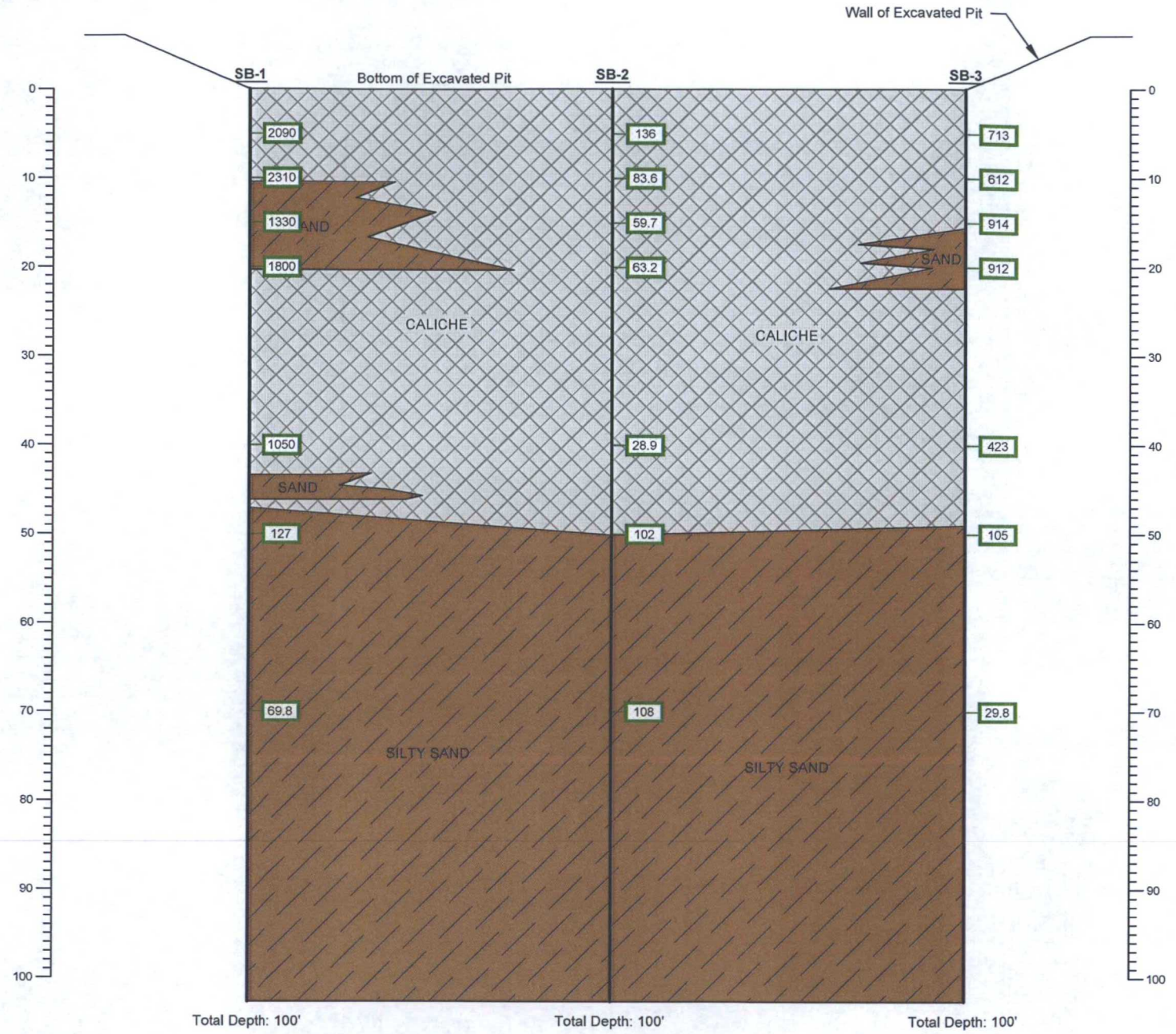


SOURCE: USGS 7.5 MINUTE QUAD
"BUCKEYE AND LOVINGTON SW, NEW MEXICO"

LAT/LONG: 32.7893° NORTH, 103.5123° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

figure 1

SITE LOCATION MAP
NEW MEXICO "O" STATE #40 PIT
SECTION 36, T17S, R34E (RP#2673)
Chevron Environmental Management Company

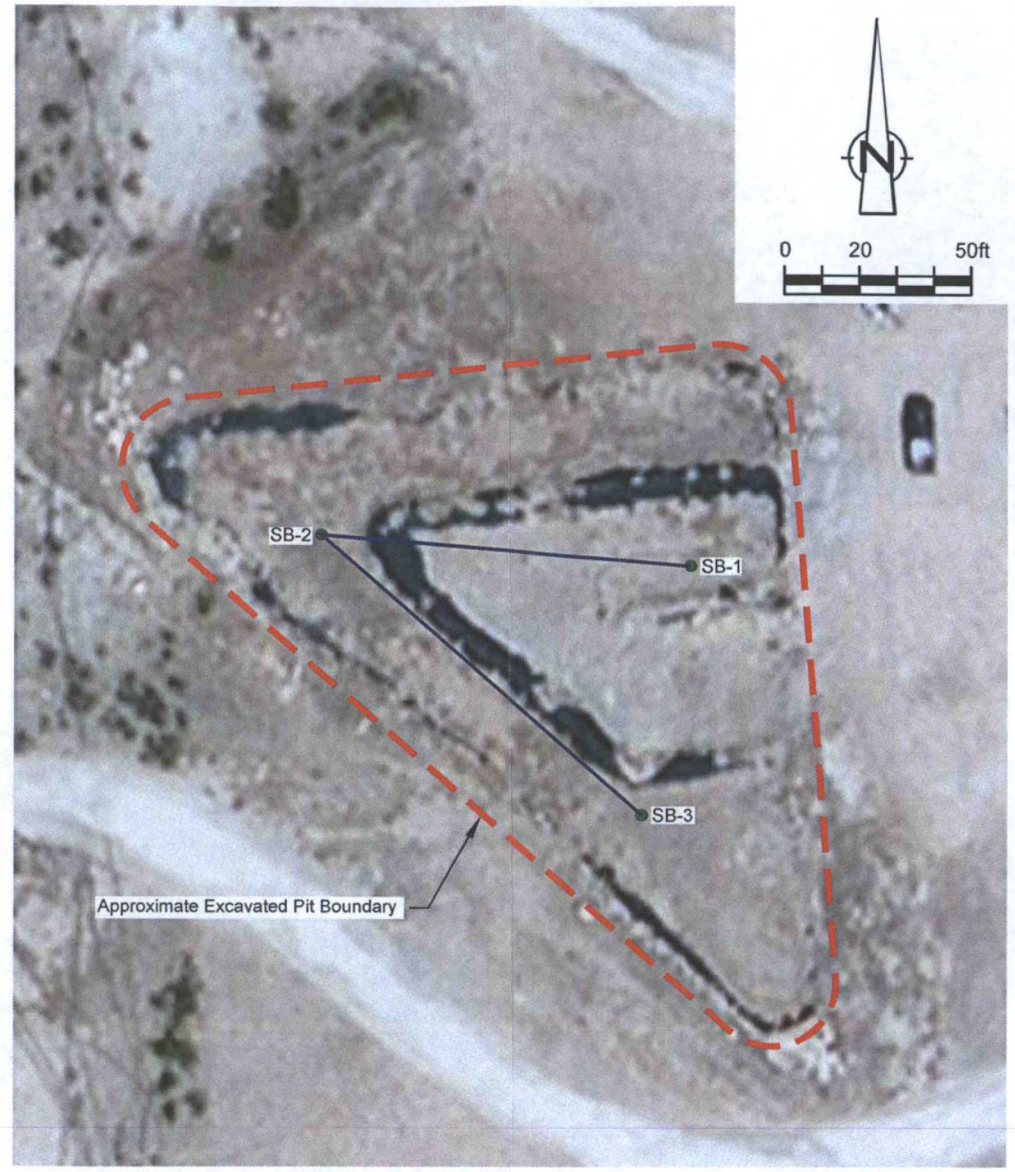


431 Chloride Concentration (mg/kg)
Analysis by EPA Method 300/300.1.

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 7 and 8, 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
NEW MEXICO "O" STATE #40 PIT
SECTION 36, T17S, R34E (RP#2673)
Chevron Environmental Management Company

NOTES:

1. See June 5, 2013 submittal to NMOCD for RP 2673 details and historical data.
2. Approximately 3,366 CY of impacted soils removed from Site and transported to CRI Landfill in Hobbs, New Mexico.
3. Approximately 4,032 CY of clean caliche/top soil transported from off-Site borrow pit (Pearce Ranch Trust) for use as backfill.

LAT/LONG: 32.7893° NORTH, 103.5123° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

figure 3

SITE RESOTRATION MAP
NEW MEXICO "O" STATE #40 PIT
SECTION 36, T17S, R34E (RP#2673)
Chevron Environmental Management Company

TABLE I

SOIL BORING ANALYTICAL SUMMARY
NEW MEXICO "O" STATE #40
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'	5/7/2013	5'	2,090
SB-1-10'	5/7/2013	10'	2,310
SB-1-15'	5/7/2013	15'	1,330
SB-1-20'	5/7/2013	20'	1,800
SB-1-40'	5/7/2013	40'	1,050
SB-1-50'	5/7/2013	50'	127
SB-1-70'	5/7/2013	70'	69.8
SB-1-90'	5/7/2013	90'	NA
SB-2			
SB-2-5'	5/8/2013	5'	136
SB-2-10'	5/8/2013	10'	83.6
SB-2-15'	5/8/2013	15'	59.7
SB-2-20'	5/8/2013	20'	63.2
SB-2-40'	5/8/2013	40'	28.9
SB-2-50'	5/8/2013	50'	102
SB-2-70'	5/8/2013	70'	108
SB-2-90'	5/8/2013	90'	NA
SB-3			
SB-3-5'	5/8/2013	5'	713
SB-3-10'	5/8/2013	10'	612
SB-3-15'	5/8/2013	15'	914
SB-3-20'	5/8/2013	20'	912
SB-3-40'	5/8/2013	40'	423
SB-3-50'	5/8/2013	50'	105
SB-1-70'	5/8/2013	70'	29.8
SB-3-90'	5/8/2013	90'	NA

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
NEW MEXICO "O" STATE #40
LEA COUNTY, NEW MEXICO

DATE	*TRUCK NUMBER*	*MANIFEST NUMBER*	*QUANTITY OF WASTE cubic yards*
3/20/2013	13	487276	18
3/20/2013	13	487224	18
3/20/2013	13	487175	18
3/20/2013	151	487273	18
3/20/2013	151	487215	18
3/20/2013	151	487168	18
3/20/2013	5	487174	18
3/20/2013	5	487220	18
3/20/2013	5	487274	18
3/20/2013	720	487212	18
3/20/2013	720	487169	18
3/20/2013	720	487275	18
3/20/2013	7	487171	18
3/20/2013	7	487272	18
3/20/2013	7	487217	18
3/20/2013	7	487271	18
3/20/2013	7	487216	18
3/20/2013	7	487173	18
3/20/2013	10	487230	18
3/20/2013	10	487280	18
3/20/2013	10	487637	18
3/21/2013	13	487520	18
3/21/2013	13	487562	18
3/21/2013	13	487634	18
3/21/2013	151	487556	18
3/21/2013	151	487509	18
3/21/2013	151	487622	18
3/21/2013	5	487517	18
3/21/2013	5	487626	18
3/21/2013	5	487559	18
3/21/2013	720	487623	18
3/21/2013	720	487511	18
3/21/2013	720	487555	18
3/21/2013	7	487632	18
3/21/2013	7	487508	18
3/21/2013	7	487560	18
3/21/2013	7	487624	18
3/21/2013	7	487512	18
3/21/2013	7	487557	18
3/21/2013	10	487564	18
3/21/2013	10	******	18

TABLE II WASTE INVENTORY NEW MEXICO "O" STATE #40 LEA COUNTY, NEW MEXICO			
DATE	*TRUCK NUMBER*	*MANIFEST NUMBER*	*QUANTITY OF WASTE cubic yards*
3/21/2013	10	487514	18
3/22/2013	13	487877	18
3/22/2013	13	487829	18
3/22/2013	13	487784	18
3/22/2013	151	487782	18
3/22/2013	151	487828	18
3/22/2013	151	487876	18
3/22/2013	5	487884	18
3/22/2013	5	487832	18
3/22/2013	5	487791	18
3/22/2013	1	487888	18
3/22/2013	720	487882	18
3/22/2013	720	487788	18
3/22/2013	720	487830	18
3/22/2013	7	487889	18
3/22/2013	7	487799	18
3/22/2013	7	******	18
3/22/2013	7	487839	18
3/22/2013	7	487792	18
3/22/2013	7	487831	18
3/22/2013	12	487797	18
3/22/2013	12	487843	18
3/22/2013	12	487896	18
3/22/2013	1	487798	18
3/22/2013	1	487834	18
3/23/2013	13	488162	18
3/23/2013	13	488083	18
3/23/2013	13	488110	18
3/23/2013	151	488088	18
3/23/2013	151	488118	18
3/23/2013	151	488167	18
3/23/2013	5	488164	18
3/23/2013	5	488113	18
3/23/2013	5	488087	18
3/23/2013	720	488109	18
3/23/2013	720	488080	18
3/23/2013	720	488157	18
3/23/2013	7	488086	18
3/23/2013	7	488160	18
3/23/2013	7	488114	18
3/23/2013	7	488159	18

TABLE II
WASTE INVENTORY
NEW MEXICO "O" STATE #40
LEA COUNTY, NEW MEXICO

DATE	*TRUCK NUMBER*	*MANIFEST NUMBER*	*QUANTITY OF WASTE cubic yards*
3/23/2013	7	488112	18
3/23/2013	7	488082	18
3/23/2013	12	488081	18
3/23/2013	12	488106	18
3/23/2013	12	488163	18
3/23/2013	1	488153	18
3/23/2013	1	488105	18
3/23/2013	1	488076	18
3/25/2013	13	488525	18
3/25/2013	13	488616	18
3/25/2013	13	488568	18
3/25/2013	151	488614	18
3/25/2013	151	488522	18
3/25/2013	151	488562	18
3/25/2013	5	488524	18
3/25/2013	5	488617	18
3/25/2013	5	488567	18
3/25/2013	720	488622	18
3/25/2013	720	488573	18
3/25/2013	720	488526	18
3/25/2013	7	488618	18
3/25/2013	7	488565	18
3/25/2013	7	488521	18
3/25/2013	7	488523	18
3/25/2013	7	488566	18
3/25/2013	7	488615	18
3/25/2013	12	488625	18
3/25/2013	12	488574	18
3/25/2013	12	488528	18
3/25/2013	1	488613	18
3/25/2013	1	488563	18
3/25/2013	1	488520	18
3/26/2013	13	488904	18
3/26/2013	13	488858	18
3/26/2013	13	488811	18
3/26/2013	151	488894	18
3/26/2013	151	488849	18
3/26/2013	151	488802	18
3/26/2013	5	488805	18
3/26/2013	5	488852	18
3/26/2013	5	488899	18

TABLE II
WASTE INVENTORY
NEW MEXICO "O" STATE #40
LEA COUNTY, NEW MEXICO

DATE	*TRUCK NUMBER*	*MANIFEST NUMBER*	*QUANTITY OF WASTE cubic yards*
3/26/2013	720	488910	18
3/26/2013	720	488857	18
3/26/2013	720	488808	18
3/26/2013	7	488804	18
3/26/2013	7	488851	18
3/26/2013	7	488901	18
3/26/2013	7	488861	18
3/26/2013	7	488812	18
3/26/2013	7	488911	18
3/26/2013	12	488903	18
3/26/2013	12	488806	18
3/26/2013	12	488853	18
3/26/2013	1	488847	18
3/26/2013	1	488803	18
3/26/2013	1	488895	18
3/27/2013	1	489174	18
3/27/2013	1	489230	18
3/27/2013	1	489111	18
3/27/2013	5	489173	18
3/27/2013	5	489232	18
3/27/2013	5	489112	18
3/27/2013	7	489182	18
3/27/2013	7	489235	18
3/27/2013	7	489121	18
3/27/2013	12	489249	18
3/27/2013	12	489109	18
3/27/2013	12	489171	18
3/27/2013	13	489116	18
3/27/2013	13	489176	18
3/27/2013	13	489234	18
3/27/2013	151	489224	18
3/27/2013	151	489170	18
3/27/2013	151	489110	18
3/27/2013	720	489239	18
3/27/2013	720	489181	18
3/27/2013	720	489119	18
3/28/2013	5	489439	18
3/28/2013	7	489443	18
3/28/2013	7	489436	18
3/28/2013	12	489449	18
3/28/2013	13	489441	18

TABLE II
WASTE INVENTORY
NEW MEXICO "O" STATE #40
LEA COUNTY, NEW MEXICO

DATE	*TRUCK NUMBER*	*MANIFEST NUMBER*	*QUANTITY OF WASTE cubic yards*
3/28/2013	151	489435	18
3/28/2013	720	489434	18
4/2/2013	5	490687	18
4/2/2013	5	490757	18
4/2/2013	5	490833	18
4/2/2013	7	490690	18
4/2/2013	7	490765	18
4/2/2013	7	490835	18
4/2/2013	7	490832	18
4/2/2013	7	490679	18
4/2/2013	7	490746	18
4/2/2013	10	490760	18
4/2/2013	10	490688	18
4/2/2013	10	490829	18
4/2/2013	13	490834	18
4/2/2013	13	490763	18
4/2/2013	13	490689	18
4/2/2013	151	490739	18
4/2/2013	151	490676	18
4/2/2013	151	490831	18
4/2/2013	720	490830	18
4/2/2013	720	490755	18
4/2/2013	720	490684	18
			Total: 3,366

Note:

1) Highlighted cells indicate waste manifest was originally labeled incorrectly with Central Vacuum Unit #342

2) ****** Indicates that haul load was received by R360 Environmental Solutions, but driver did not return to site with ticket number

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: New Mexico O-40
API Number: 30-025-38140 OCD Permit Number:
U/L or Qtr/Qtr ~~J~~ 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 20 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

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☑ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ *(Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☑ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System ☐ Alternative

Proposed Closure Method: ☐ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☑ In-place Burial ☑ On-site Trench Burial
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.
Waste Excavation and Removal 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.***

- ☐ 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
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☐ 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

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 Briley Title: Env. Advisor

Signature: Rodney Briley Date: 4-7-10

e-mail address: brileyrg@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 Briley Title: Env. Advisor

Signature: Rodney Briley Date: 4-7-10

e-mail address: _____ Telephone: _____

Site Chronology – New Mexico "O" State NCT-1 #40 Reserve Pit Restoration Project

Unit J, Section 36, T17S, R34E (RP#2673)

March 7, 2013 (Thursday)	Performed GPR Survey of the peremeter of the reserve pit. Identified one underground utility (metal pipe)
March 12, 2013 (Tuesday)	Completed One Call and identified a pipeline adjacent to the southwest side of the pit berm along with four above ground poly pipelines along the northwest corner of the pit stockpile area. Pipelines were marked by Chevron Vacuum FMT. Hydro-vac potential underground utilities.
March 13, 2013 (Wednesday)	Received Vacuum FMT approval for Dig Plan to include soil sampling and pit excavation. Completed soil sample collection within pit area.
March 18, 2013 (Monday)	CRA and Entact MOB to site. Equipment was brought on-site; Entact installed signage and flagged off hazard areas.
March 19, 2013 (Tuesday)	Entact began back dragging pit material to one side of the reserve pit. Material was excavated from immediately below the liner and stockpiled within the pit.
March 20, 2013 (Wednesday)	Entact began loading pit material within 20 cy belly dump trucks. 7 dump trucks transported approximately 378 cy of pit material (within 3 trips) for disposal within CRI Landfill (Hobbs, NM). Total waste hauled off to date included 378 cy.
March 21, 2013 (Thursday)	Entact continued to load pit material within 7-20 cy belly dump trucks. The trucks completed 3 trips, totaling 378 cy of pit material disposed within CRI Landfill. Total waste hauled off to date includes 756 cys.
March 22, 2013 (Friday)	Entact continued to load pit material within 8-20 cy belly dump trucks. The trucks completed 3 trips, totaling 432 cy of pit material disposed within CRI Landfill. Total waste hauled off to date includes 1,188 cys.
March 23, 2013 (Saturday)	Entact continued to load pit material within 8-20 cy belly dump trucks. The trucks completed 3 trips, totaling 432 cy of pit material disposed within CRI Landfill. Total waste hauled off to date includes 1,620 cys.
March 25, 2013 (Monday)	Entact continued to load pit material within 8-20 cy belly dump trucks. The trucks completed 3 trips, totaling 432 cy of pit material disposed within CRI Landfill. Total waste hauled off to date includes 2,052 cys.
March 26, 2013 (Tuesday)	Entact continued to load pit material within 8-20 cy belly dump trucks. The trucks completed 3 trips, totaling 432 cy of pit material disposed within CRI Landfill. Total waste hauled off to date includes 2,484 cys.
March 27, 2013 (Wednesday)	Entact continued to load pit material within 7-20 cy belly dump trucks. The trucks completed 3 trips, totaling 378 cy of pit material disposed within CRI Landfill. Total waste hauled

	off to date includes 2,862 cys.
March 28, 2013 (Thursday)	Entact continued to load pit material within 7-20 cy belly dump trucks. The trucks completed 1 trip, totaling 126 cy of pit material disposed within CRI Landfill. Total waste hauled off to date includes 2,988 cys. Entact constructed entry/exit ramps within the excavated pit at the southeast end. Entact and CRA DMOB from site for Easter Holiday
March 29-31, 2013	Off for Easter Holiday
April 1, 2013 (Monday)	Entact and CRA MOB back to site. No loads hauled off site today.
April 2, 2013 (Tuesday)	Entact continued to load pit material within 7-20 cy belly dump trucks. The trucks completed 3 trips, totaling 378 cy of pit material disposed within CRI Landfill. Total waste hauled off to date includes 3,366 cys. Completed haul off of pit material.
April 3, 2013 (Wednesday)	Entact constructs entry/exit ramp at the northeast end of the excavated pit and levels excavated pit floor in preparation of the soil boring rig. Barricade excavation.
April 4, 2013 (Thursday)	Demob equipment and move trailer over to CVU 342 site.
April 25, 2013 (Thursday)	Performed site inspection and found barricade on west side of excavation was down. Contacted Entact (C. Bell) who came out and repaired barricade.
May 7, 2013 (Tuesday)	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. RWI performs dirt work/ramp construction. Completed sampling and soil boring (SB-1) within excavated pit.
May 8, 2013 (Wednesday)	Receive Vacuum FMT excavation permit to work. CRA and H&C mob to Site. Completed sampling and soil borings (SB-2 and SB-3) 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 29, 2013 (Saturday)	Mobilization of equipment from CVU-342 to O-State occurred today. Ready for work start 07/01/13.
July 1, 2013 (Monday)	On-Site personnel attend FMT briefing meeting. Receive FMT PTW. SWA is initiated due to weather. Trucks are sent home. Backfill using stockpile material commenced today. Stockpile material has been utilized to completion of backfill activities for day. Site secured at EOD.
July 2, 2013 (Tuesday)	On-Site personnel attend FMT briefing meeting. Receive FMT PTW. RWI on-site w/ 4 trucks. Backfill activities begin w/ loads from borrow pit location. 62 loads of material today. 1116 cy of material to date. Site secured at EOD.
July 3, 2013 (Wednesday)	On-Site personnel attend FMT briefing meeting. Receive FMT PTW. RWI on-site w/ 4 trucks. Down time for trucks today, due to Dozer catch-up. Dirt work for preparation to lay liner.

July 3, 2013 (Wednesday)	Pit is ready for liner install on July 5th. 24 truckloads hauled today, totaling 432 cy today and 1548 cy hauled to date. Site secured at EOD.
July 4, 2013 (Thursday)	NO WORK TODAY – JULY 4TH HOLIDAY
July 5, 2013 (Friday)	On-Site personnel attend FMT briefing meeting. Receive FMT PTW. RWI on-site w/ 4 trucks. Liner installation began and was completed today. Backfilling activities resumed. Total of 56 truckloads hauled today, totaling 1008 cy for day, and 2556 cy hauled to date.
July 6, 2013 (Saturday)	On-Site personnel attend FMT briefing meeting. Receive FMT PTW. RWI on-site w/ 4 trucks. Dozer having trouble keeping up with truckloads, trucks slowed down. Worked an extra hour today. Backfill complete. Topsoil haul start tomorrow. A total of 56 truckloads hauled today, totaling 1008 cy for day, and 3564 cy hauled to date.
July 8, 2013 (Monday)	On-Site personnel attend FMT briefing meeting. Receive FMT PTW. RWI on-site w/ 4 trucks. Hauling of topsoil is completed today. A total of 26 loads, 9 per truck where hauled today. End of day haul total is 468 cy. This marks the end of backfilling activities. Total project backfill hauled to date is 4,032 cy. Site has been graded and seeded w/ BLM #4 seed mixture. Demob of machines will take place July 9, 2013. Site is clean and secure.

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

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

PHOTOGRAPH LOG
New Mexico O State #40
Lea County, New Mexico
Chevron Environmental Management Company

PHOTO 3: View of excavation/waste removal activities

PHOTO 4: View of excavation/waste removal activities facing southwest

PHOTO 5: View of excavated reserve pit facing south

PHOTO 6: View of excavated pit and entrance ramp facing north

PHOTO 7: View of drill rig inside excavated reserve pit facing north

PHOTO 8: View of backfill activities facing north

PHOTO 9: View of backfill activities facing west

PHOTO 10: View of backfilling activities facing south

PHOTO 9: View of backfill ready for 20 mil poly liner installation facing northwest

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

PHOTOGRAPH LOG
New Mexico O State #40
Lea County, New Mexico
Chevron Environmental Management Company

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

PHOTO 13: View of final grading and seeding activities facing north

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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

March 19, 2013

Project: NM "O" State

Submittal Date: 03/15/2013
Group Number: 1375688
PO Number: 4056668
Release Number: LEA COUNTY, NM
State of Sample Origin: NM

Client Sample Description	Lancaster Labs (LLI) #
CVX-NMO-02 Composite Soil	6984188

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-NMO-02 Composite Soil
NM "O" State - 073824

LLI Sample # SW 6984188
LLI Group # 1375688
Account # 11713

Project Name: NM "O" State

Collected: 03/13/2013 16:30 by GQ

Submitted: 03/15/2013 09:15
Reported: 03/19/2013 15:26

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

NMO02

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.	1.7	1.1	25.41
GC Volatiles	**SW-846 8021B**		mg/kg	mg/kg	
08179	Benzene	71-43-2	0.0055 J	0.0056	25.41
08179	Ethylbenzene	100-41-4	0.023	0.0056	25.41
08179	Toluene	108-88-3	0.012	0.0056	25.41
08179	Total Xylenes	1330-20-7	0.078	0.017	25.41
GC Petroleum Hydrocarbons	**SW-846 8015B**		mg/kg	mg/kg	
08270	TPH-DRO soil C10-C28	n.a.	27	13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg	mg/kg	
05256	#4 Fuel Oil	68476-31-3	N.D.	13	1
05256	Coal Tar Oil	8001-58-9	N.D.	13	1
05256	Diesel/#2 Fuel	68334-30-5	N.D.	13	1
05256	#6 Fuel Oil	68553-00-4	N.D.	100	1
05256	Gasoline	8006-61-9	N.D.	13	1
05256	Kerosene	8008-20-6	N.D.	13	1
05256	Mineral Spirits	8030-30-6	N.D.	13	1
05256	Motor Oil	n.a.	N.D.	33	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	11,900	5,480	500
Wet Chemistry	**SM 2540 G-1997**		%	%	
00111	Moisture	n.a.	9.9	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	13077A16A	03/18/2013 20:40	Laura M Krieger	25.41
08179	BTEX by 8021	SW-846 8021B	1	13077A16A	03/18/2013 20:40	Laura M Krieger	25.41
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201307430405	03/15/2013 15:45	Mitchell R Washel	n.a.

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Analysis Report

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Sample Description: CVX-NMO-02 Composite Soil
NM "O" State - 073824

LLI Sample # SW 6984188
LLI Group # 1375688
Account # 11713

Project Name: NM "O" State

Collected: 03/13/2013 16:30 by GQ

Submitted: 03/15/2013 09:15
Reported: 03/19/2013 15:26

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

NMO02

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	130740008A	03/19/2013 02:48	Christine E Dolman	1
05256	TPH by GC-FID (Soils)	SW-846 8015B modified	1	130740009A	03/18/2013 19:50	Heather E Williams	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	130740008A	03/16/2013 08:00	Joseph S Feister	1
04833	Extraction / Fuel TPH (Soils)	SW-846 3550B	1	130740009A	03/16/2013 08:00	Joseph S Feister	1
07333	Chloride by IC (solid)	EPA 300.0	1	13074074201A	03/16/2013 02:24	Christopher D Meeks	500
01352	Deionized Water Extraction	EPA 300.0	1	13074074201A	03/15/2013 06:50	Nancy J Shoop	1
00111	Moisture	SM 2540 G-1997	1	13074820001B	03/15/2013 18:51	Scott W Freisher	1

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Analysis Report

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1375688
Reported: 03/19/13 at 03:26 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: 13077A16A	Sample number(s): 6984188							
Benzene	N.D.	0.0050	mg/kg	90	92	80-120	2	30
Ethylbenzene	N.D.	0.0050	mg/kg	92	95	80-120	3	30
Toluene	N.D.	0.0050	mg/kg	93	94	80-120	2	30
TPH-GRO soil C6-C10	N.D.	1.0	mg/kg	80	82	67-119	2	30
Total Xylenes	N.D.	0.015	mg/kg	91	94	80-120	3	30
Batch number: 130740008A	Sample number(s): 6984188							
TPH-DRO soil C10-C28	N.D.	12.	mg/kg	92		76-120		
Batch number: 130740009A	Sample number(s): 6984188							
#4 Fuel Oil	N.D.	12.	mg/kg					
Coal Tar Oil	N.D.	12.	mg/kg					
Diesel/#2 Fuel	N.D.	12.	mg/kg	101		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: 13074074201A	Sample number(s): 6984188							
Chloride by IC (solid)	N.D.	10.0	mg/kg	104		90-110		
Batch number: 13074820001B	Sample number(s): 6984188							
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: 130740008A	Sample number(s): 6984188 UNSPK: P984186 BKG: P984186								
TPH-DRO soil C10-C28	81		30-159			6.4 J	5.4 J	17 (1)	20
Batch number: 130740009A	Sample number(s): 6984188 UNSPK: NMO01 BKG: NMO01								
#4 Fuel Oil						N.D.	N.D.	0 (1)	20
Coal Tar Oil						N.D.	N.D.	0 (1)	20
Diesel/#2 Fuel	92		37-129			N.D.	N.D.	0 (1)	20
#6 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1375688
Reported: 03/19/13 at 03:26 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
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: 13074074201A	Sample number(s): 6984188 UNSPK: P982229 BKG: P982229								
Chloride by IC (solid)	154*		90-110			22.4	19.4	14 (1)	20
Batch number: 13074820001B	Sample number(s): 6984188 BKG: P982162								
Moisture						14.1	15.8	11	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: 13077A16A

	Trifluorotoluene-F	Trifluorotoluene-P
6984188	70	82
Blank	86	96
LCS	80	90
LCSD	83	90
Limits:	61-122	73-117

Analysis Name: TPH-DRO soil C10-C28
Batch number: 130740008A

	Orthoterphenyl
6984188	81
Blank	94
DUP	79
LCS	96
MS	89
Limits:	52-136

Analysis Name: TPH by GC-FID (Soils)
Batch number: 130740009A

	Chlorobenzene	Orthoterphenyl
6984188	84	91
Blank	88	98
DUP	83	78
LCS	90	93
MS	122	83

*- 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1375688
Reported: 03/19/13 at 03:26 PM

Surrogate Quality Control

Limits: 46-131 51-127

*- 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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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.

Environmental Services Analysis Request/Chain of Custody

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Acct. # 11713 Group # 1375688 Sample # 6984188

Client: Conestoga-Rovers & Associates	
Project Name/#: NM "O" State - 073824	Site ID #:
Project Manager: Ryan Kainer	P.O. #:
Sampler: Glenn Quinney	PWSID #:
Phone #: 432-686-0086	Quote #:
State where sample(s) were collected: New Mexico	

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

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-NMO-02	3/13/13	1630		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

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	3/14/13	1600			
			[signature]	3/15/13	0915

Relinquished by Commercial Carrier:
UPS ____ FedEx X Other ____

Temperature upon receipt 1.4 °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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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

March 19, 2013

Project: NM "O" State

Submittal Date: 03/15/2013
Group Number: 1375689
PO Number: 4056668
Release Number: LEA COUNTY, NM
State of Sample Origin: NM

Client Sample Description	Lancaster Labs (LLI) #
CVX-NMO-03 Composite Soil	6984189

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-NMO-03 Composite Soil
NM "O" State - 073824

LLI Sample # SW 6984189
LLI Group # 1375689
Account # 11713

Project Name: NM "O" State

Collected: 03/13/2013 17:00 by GQ

Submitted: 03/15/2013 09:15
Reported: 03/19/2013 15:27

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

NMO03

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.	17		1.1	24.06
GC Volatiles	**SW-846 8021B**		mg/kg		mg/kg	
08179	Benzene	71-43-2	0.0086		0.0054	24.06
08179	Ethylbenzene	100-41-4	0.071		0.0054	24.06
08179	Toluene	108-88-3	0.018		0.0054	24.06
08179	Total Xylenes	1330-20-7	0.15		0.016	24.06
GC Petroleum Hydrocarbons	**SW-846 8015B**		mg/kg		mg/kg	
08270	TPH-DRO soil C10-C28	n.a.	99		13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	
05256	#4 Fuel Oil	68476-31-3	N.D.		13	1
05256	Coal Tar Oil	8001-58-9	N.D.		13	1
05256	Diesel/#2 Fuel	68334-30-5	N.D.		13	1
05256	#6 Fuel Oil	68553-00-4	61	J	100	1
05256	Gasoline	8006-61-9	N.D.		13	1
05256	Kerosene	8008-20-6	N.D.		13	1
05256	Mineral Spirits	8030-30-6	N.D.		13	1
05256	Motor Oil	n.a.	N.D.		34	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	9,260		5,540	500
Wet Chemistry	**SM 2540 G-1997**		%		%	
00111	Moisture	n.a.	10.8		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	13077A16A	03/18/2013 21:18	Laura M Krieger	24.06
08179	BTEX by 8021	SW-846 8021B	1	13077A16A	03/18/2013 21:18	Laura M Krieger	24.06
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201307430405	03/15/2013 15:47	Mitchell R Washel	n.a.

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Analysis Report

Sample Description: CVX-NMO-03 Composite Soil
NM "O" State - 073824

Project Name: NM "O" State

Collected: 03/13/2013 17:00 by GQ

Submitted: 03/15/2013 09:15
Reported: 03/19/2013 15:27

LLI Sample # SW 6984189
LLI Group # 1375689
Account # 11713

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

NMO03

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	130740008A	03/19/2013 03:11	Christine E Dolman	1
05256	TPH by GC-FID (Soils)	SW-846 8015B modified	1	130740009A	03/18/2013 20:36	Heather E Williams	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	130740008A	03/16/2013 08:00	Joseph S Feister	1
04833	Extraction / Fuel TPH (Soils)	SW-846 3550B	1	130740009A	03/16/2013 08:00	Joseph S Feister	1
07333	Chloride by IC (solid)	EPA 300.0	1	13074074201A	03/16/2013 02:40	Christopher D Meeks	500
01352	Deionized Water Extraction	EPA 300.0	1	13074074201A	03/15/2013 06:50	Nancy J Shoop	1
00111	Moisture	SM 2540 G-1997	1	13074820001B	03/15/2013 18:51	Scott W Freisher	1

Quality Control Summary

Client Name: Conestoga-Rovers & Associates
Reported: 03/19/13 at 03:27 PM

Group Number: 1375689

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: 13077A16A	Sample number(s): 6984189							
Benzene	N.D.	0.0050	mg/kg	90	92	80-120	2	30
Ethylbenzene	N.D.	0.0050	mg/kg	92	95	80-120	3	30
Toluene	N.D.	0.0050	mg/kg	93	94	80-120	2	30
TPH-GRO soil C6-C10	N.D.	1.0	mg/kg	80	82	67-119	2	30
Total Xylenes	N.D.	0.015	mg/kg	91	94	80-120	3	30
Batch number: 130740008A	Sample number(s): 6984189							
TPH-DRO soil C10-C28	N.D.	12.	mg/kg	92		76-120		
Batch number: 130740009A	Sample number(s): 6984189							
#4 Fuel Oil	N.D.	12.	mg/kg					
Coal Tar Oil	N.D.	12.	mg/kg					
Diesel/#2 Fuel	N.D.	12.	mg/kg	101		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: 13074074201A	Sample number(s): 6984189							
Chloride by IC (solid)	N.D.	10.0	mg/kg	104		90-110		
Batch number: 13074820001B	Sample number(s): 6984189							
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: 130740008A	Sample number(s): 6984189 UNSPK: P984186 BKG: P984186								
TPH-DRO soil C10-C28	81		30-159			6.4 J	5.4 J	17 (1)	20
Batch number: 130740009A	Sample number(s): 6984189 UNSPK: NMO01 BKG: NMO01								
#4 Fuel Oil						N.D.	N.D.	0 (1)	20
Coal Tar Oil						N.D.	N.D.	0 (1)	20
Diesel/#2 Fuel	92		37-129			N.D.	N.D.	0 (1)	20
#6 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1375689
Reported: 03/19/13 at 03:27 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
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: 13074074201A	Sample number(s): 6984189 UNSPK: P982229 BKG: P982229								
Chloride by IC (solid)	154*		90-110			22.4	19.4	14 (1)	20
Batch number: 13074820001B	Sample number(s): 6984189 BKG: P982162								
Moisture						14.1	15.8	11	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: 13077A16A

	Trifluorotoluene-F	Trifluorotoluene-P
6984189	74	70*
Blank	86	96
LCS	80	90
LCSD	83	90
Limits:	61-122	73-117

Analysis Name: TPH-DRO soil C10-C28
Batch number: 130740008A

	Orthoterphenyl
6984189	79
Blank	94
DUP	79
LCS	96
MS	89
Limits:	52-136

Analysis Name: TPH by GC-FID (Soils)
Batch number: 130740009A

	Chlorobenzene	Orthoterphenyl
6984189	86	74
Blank	88	98
DUP	83	78
LCS	90	93
MS	122	83

*- 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1375689
Reported: 03/19/13 at 03:27 PM

Surrogate Quality Control

Limits: 46-131 51-127

*- 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 # 1375689 Sample # 6984189

Client: Conestoga-Rovers & Associates		
Project Name/#: NM "O" State - 073824	Site ID #:	
Project Manager: Ryan Kainer	P.O. #:	
Sampler: Glenn Quinney	PWSID #:	
Phone #: 432-686-0086	Quote #:	
State where sample(s) were collected: New Mexico		

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

Analyses Requested / Preservation Codes

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

Sample Identification	Collection Date	Collection Time	Grab	Composite	Soil	Water	Other:	Total # of Containers	TPH 8015 (O)	Chlorides 300 (O)	BTEX 8021 (O)	Remarks
CVX-NMO-03	3/13/13	1700		x	x			2	x	x	x	

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]	3/14/13	1600			
			Pat [signature]	3/15/13	0915

Relinquished by Commercial Carrier: UPS ______ FedEx X Other ______

Temperature upon receipt 1.4 °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

March 19, 2013

Project: NM "O" State

Submittal Date: 03/15/2013
Group Number: 1375690
PO Number: 4056668
Release Number: LEA COUNTY, NM
State of Sample Origin: NM

Client Sample Description	Lancaster Labs (LLI) #
CVX-NMO-SP Composite Soil	6984190

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-NMO-SP Composite Soil
NM "O" State - 073824

LLI Sample # SW 6984190
LLI Group # 1375690
Account # 11713

Project Name: NM "O" State

Collected: 03/13/2013 17:15 by GQ

Submitted: 03/15/2013 09:15
Reported: 03/19/2013 15:55

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

NMOSP

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.	0.2 J	1.1	25.83
GC Volatiles	**SW-846 8021B**		mg/kg	mg/kg	
08179	Benzene	71-43-2	N.D.	0.0053	25.83
08179	Ethylbenzene	100-41-4	0.0021 J	0.0053	25.83
08179	Toluene	108-88-3	N.D.	0.0053	25.83
08179	Total Xylenes	1330-20-7	N.D.	0.016	25.83
GC Petroleum Hydrocarbons	**SW-846 8015B**		mg/kg	mg/kg	
08270	TPH-DRO soil C10-C28	n.a.	42	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	N.D.	12	1
05256	#6 Fuel Oil	68553-00-4	N.D.	93	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.	140	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	809	205	20
Wet Chemistry	**SM 2540 G-1997**		%	%	
00111	Moisture	n.a.	3.3	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.

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	13077A16A	03/18/2013 21:56	Laura M Krieger	25.83
08179	BTEX by 8021	SW-846 8021B	1	13077A16A	03/18/2013 21:56	Laura M Krieger	25.83
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201307430405	03/15/2013 15:49	Mitchell R Washel	n.a.

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Analysis Report

Sample Description: CVX-NMO-SP Composite Soil
NM "O" State - 073824

LLI Sample # SW 6984190
LLI Group # 1375690
Account # 11713

Project Name: NM "O" State

Collected: 03/13/2013 17:15 by GQ

Submitted: 03/15/2013 09:15
Reported: 03/19/2013 15:55

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

NMOSP

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	130740008A	03/19/2013 03:34	Christine E Dolman	1
05256	TPH by GC-FID (Soils)	SW-846 8015B modified	1	130740009A	03/18/2013 21:21	Heather E Williams	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	130740008A	03/16/2013 08:00	Joseph S Feister	1
04833	Extraction / Fuel TPH (Soils)	SW-846 3550B	1	130740009A	03/16/2013 08:00	Joseph S Feister	1
07333	Chloride by IC (solid)	EPA 300.0	1	13074074201A	03/19/2013 11:02	Christopher D Meeks	20
01352	Deionized Water Extraction	EPA 300.0	1	13074074201A	03/15/2013 06:50	Nancy J Shoop	1
00111	Moisture	SM 2540 G-1997	1	13074820001B	03/15/2013 18:51	Scott W Freisher	1

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1375690
Reported: 03/19/13 at 03:55 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: 13077A16A	Sample number(s): 6984190							
Benzene	N.D.	0.0050	mg/kg	90	92	80-120	2	30
Ethylbenzene	N.D.	0.0050	mg/kg	92	95	80-120	3	30
Toluene	N.D.	0.0050	mg/kg	93	94	80-120	2	30
TPH-GRO soil C6-C10	N.D.	1.0	mg/kg	80	82	67-119	2	30
Total Xylenes	N.D.	0.015	mg/kg	91	94	80-120	3	30
Batch number: 130740008A	Sample number(s): 6984190							
TPH-DRO soil C10-C28	N.D.	12.	mg/kg	92		76-120		
Batch number: 130740009A	Sample number(s): 6984190							
#4 Fuel Oil	N.D.	12.	mg/kg					
Coal Tar Oil	N.D.	12.	mg/kg					
Diesel/#2 Fuel	N.D.	12.	mg/kg	101		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: 13074074201A	Sample number(s): 6984190							
Chloride by IC (solid)	N.D.	10.0	mg/kg	104		90-110		
Batch number: 13074820001B	Sample number(s): 6984190							
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: 130740008A	Sample number(s): 6984190 UNSPK: P984186 BKG: P984186								
TPH-DRO soil C10-C28	81		30-159			6.4 J	5.4 J	17 (1)	20
Batch number: 130740009A	Sample number(s): 6984190 UNSPK: NMO01 BKG: NMO01								
#4 Fuel Oil						N.D.	N.D.	0 (1)	20
Coal Tar Oil						N.D.	N.D.	0 (1)	20
Diesel/#2 Fuel	92		37-129			N.D.	N.D.	0 (1)	20
#6 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1375690
Reported: 03/19/13 at 03:55 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
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: 13074074201A	Sample number(s): 6984190 UNSPK: P982229 BKG: P982229								
Chloride by IC (solid)	154*		90-110			22.4	19.4	14 (1)	20
Batch number: 13074820001B	Sample number(s): 6984190 BKG: P982162								
Moisture						14.1	15.8	11	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: 13077A16A

	Trifluorotoluene-F	Trifluorotoluene-P
6984190	78	90
Blank	86	96
LCS	80	90
LCSD	83	90
Limits:	61-122	73-117

Analysis Name: TPH-DRO soil C10-C28
Batch number: 130740008A

	Orthoterphenyl
6984190	92
Blank	94
DUP	79
LCS	96
MS	89
Limits:	52-136

Analysis Name: TPH by GC-FID (Soils)
Batch number: 130740009A

	Chlorobenzene	Orthoterphenyl
6984190	86	97
Blank	88	98
DUP	83	78
LCS	90	93
MS	122	83

*- 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1375690
Reported: 03/19/13 at 03:55 PM

Surrogate Quality Control

Limits: 46-131 51-127

*- 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 # 1375690 Sample # 6984190

Client: Conestoga-Rovers & Associates			
Project Name/#: NM "O" State - 073824	Site ID #:		
Project Manager: Ryan Kainer	P.O. #:		
Sampler: Glenn Quinney	PWSID #:		
Phone #: 432-686-0086	Quote #:		
State where sample(s) were collected: New Mexico			

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

Analyses Requested / Preservation Codes: O O O

Sample Identification	Collection Date	Collection Time	Grab	Composite	Soil	Water	Other:	Total # of Containers	TPH 8015	Chlorides 300	BTEX 8021	Remarks
CVX-NMO-SP	3/13/13	1715		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]	3/14/13	1600			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: Pat [signature]	3/15/13	0915

Relinquished by Commercial Carrier: UPS ____ FedEx X Other ____

Temperature upon receipt 1.4 °C

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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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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: March 19, 2013

Work Order: 13031406

Project Location: Lea Co., NM
Project Name: NM "O" State #40
Project Number: 073824

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
323424	CVX-MNO-01	soil	2013-03-13	16:00	2013-03-14

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 NM "O" State #40 were received by TraceAnalysis, Inc. on 2013-03-14 and assigned to work order 13031406. Samples for work order 13031406 were received intact at a temperature of 2.3 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	84564	2013-03-19 at 08:00	99814	2013-03-19 at 08:15

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 13031406 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: 323424 - CVX-MNO-01

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	99814	Date Analyzed:	2013-03-19	Analyzed By:	DS
Prep Batch:	84564	Sample Preparation:	2013-03-19	Prepared By:	DS

Parameter	Flag	Cert	Result	RL	Units	Dilution	RL
TRPHC	Qs		**15.6**		mg/Kg	1	10.0

Method Blanks

Method Blank (1) QC Batch: 99814

QC Batch:	99814	Date Analyzed:	2013-03-19	Analyzed By:	DS
Prep Batch:	84564	QC Preparation:	2013-03-19	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: 99814 | Date Analyzed: 2013-03-19 | Analyzed By: DS
Prep Batch: 84564 | QC Preparation: 2013-03-19 | Prepared By: DS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			288	mg/Kg	1	250	<5.72	115	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			281	mg/Kg	1	250	<5.72	112	80 - 120	2	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: 323447

QC Batch: 99814 | Date Analyzed: 2013-03-19 | Analyzed By: DS
Prep Batch: 84564 | QC Preparation: 2013-03-19 | Prepared By: DS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	Qs Qs		314	mg/Kg	1	250	166	59	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		320	mg/Kg	1	250	166	62	80 - 120	2	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: 99814 | Date Analyzed: 2013-03-19 | 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	2013-03-19

Standard (CCV-2)

QC Batch: 99814 | Date Analyzed: 2013-03-19 | 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	2013-03-19

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 # 130314006

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Ave, Ste 9
Lubbock, Texas 79424
Tel (806) 794-1296
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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 #:	73824	Project Name:	NM "O" State 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
323424	CVX-MNO-01	1	4 oz		x							x		3/13/13	1600			x																		48 hrs	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST 12.1
	CRA	3/14/13	10:30		TA	3/14/13	10:30	OBS 2.3 °C
								COR 2.3 °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST _____
	TA	3/14/13	15:30					OBS _____ °C
								COR _____ °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST 12.3
						3/15/13	9:40	OBS 2.3 °C
								COR 2.1 °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 # Fargo FedEx ZP 7745 412

Submittal of samples constitutes agreement to Terms and Conditions

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TRACEANALYSIS, INC.

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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: March 19, 2013

Work Order: 13031420

Project Location: Lea Co., NM
Project Name: NM "O" State #40
Project Number: 073824

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
323446	CVX-MNO-02	soil	2013-03-13	16:30	2013-03-14

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.

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

Report Contents

Case Narrative

Samples for project NM "O" State #40 were received by TraceAnalysis, Inc. on 2013-03-14 and assigned to work order 13031420. Samples for work order 13031420 were received intact at a temperature of 2.3 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	84564	2013-03-19 at 08:00	99814	2013-03-19 at 08:15

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 13031420 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: 323446 - CVX-MNO-02

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	99814	Date Analyzed:	2013-03-19	Analyzed By:	DS
Prep Batch:	84564	Sample Preparation:	2013-03-19	Prepared By:	DS

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
TRPHC	Qs		**68.2**	mg/Kg	1	10.0

Method Blanks

Method Blank (1) QC Batch: 99814

QC Batch:	99814	Date Analyzed:	2013-03-19	Analyzed By:	DS
Prep Batch:	84564	QC Preparation:	2013-03-19	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: 99814 | Date Analyzed: 2013-03-19 | Analyzed By: DS
Prep Batch: 84564 | QC Preparation: 2013-03-19 | Prepared By: DS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			288	mg/Kg	1	250	<5.72	115	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			281	mg/Kg	1	250	<5.72	112	80 - 120	2	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: 323447

QC Batch: 99814 | Date Analyzed: 2013-03-19 | Analyzed By: DS
Prep Batch: 84564 | QC Preparation: 2013-03-19 | Prepared By: DS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC Qs	Qs		314	mg/Kg	1	250	166	59	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		320	mg/Kg	1	250	166	62	80 - 120	2	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: 99814 | Date Analyzed: 2013-03-19 | 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	2013-03-19

Standard (CCV-2)

QC Batch: 99814 | Date Analyzed: 2013-03-19 | 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	2013-03-19

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
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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
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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 # 1303142U

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Ave, Ste 9
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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 #:	73824	Project Name:	NM "O" State 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
323446	CVX-MNO-02	1	4 oz		x							x		3/13/13	1630			x																		48 hrs	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST / OBS / COR
BK	CRA	3/14/13	10:30		TA	3/14/13	10:30	INST 1.3 °C / OBS 2.3 °C / COR 2.3 °C
	TA	3/14/13	15:30					INST ____ °C / OBS ____ °C / COR ____ °C
						3/15/13	9:40	INST 2.3 °C / OBS 2.3 °C / COR 2.1 °C

Submittal of samples constitutes agreement to Terms and Conditions

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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 # UPS: ZP 745412

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: March 19, 2013

Work Order: 13031421

Project Location: Lea Co., NM
Project Name: NM "O" State #40
Project Number: 073824

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
323447	CVX-MNO-03	soil	2013-03-13	17:00	2013-03-14

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 NM "O" State #40 were received by TraceAnalysis, Inc. on 2013-03-14 and assigned to work order 13031421. Samples for work order 13031421 were received intact at a temperature of 2.3 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	84564	2013-03-19 at 08:00	99814	2013-03-19 at 08:15

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 13031421 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: 323447 - CVX-MNO-03

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	99814	Date Analyzed:	2013-03-19	Analyzed By:	DS
Prep Batch:	84564	Sample Preparation:	2013-03-19	Prepared By:	DS

Parameter	Flag	Cert	Result	RL	Units	Dilution	RL
TRPHC	Qs		**166**		mg/Kg	1	10.0

Method Blanks

Method Blank (1) QC Batch: 99814

QC Batch:	99814	Date Analyzed:	2013-03-19	Analyzed By:	DS
Prep Batch:	84564	QC Preparation:	2013-03-19	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: 99814 | Date Analyzed: 2013-03-19 | Analyzed By: DS
Prep Batch: 84564 | QC Preparation: 2013-03-19 | Prepared By: DS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			288	mg/Kg	1	250	<5.72	115	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			281	mg/Kg	1	250	<5.72	112	80 - 120	2	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: 323447

QC Batch: 99814 | Date Analyzed: 2013-03-19 | Analyzed By: DS
Prep Batch: 84564 | QC Preparation: 2013-03-19 | Prepared By: DS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC Qs	Qs		314	mg/Kg	1	250	166	59	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		320	mg/Kg	1	250	166	62	80 - 120	2	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: 99814 | Date Analyzed: 2013-03-19 | 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	2013-03-19

Standard (CCV-2)

QC Batch: 99814 | Date Analyzed: 2013-03-19 | 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	2013-03-19

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

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 # 1303142 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 #:	73824	Project Name:	NM "O" State Pit
Project Location: (include state)	Buckeye, NM	Sampler Signature:	

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
323447	CVX-MNO-03	1	4 oz		x							x		3/13/13	1700

ANALYSIS REQUEST (Circle or Specify Method No.)

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
		x																			48 hrs	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
BK	CRA	3/14/13	10:30		TA	3/14/13	10:30	INST RT OBS 2.3 °C COR 2.3 °C
	TA	3/14/13	15:30					INST _____ OBS _____ °C COR _____ °C
						3/15/13	9:40	INST RT OBS 2.3 °C COR 2.1 °C

LAB USE ONLY

Intact Y / N

Headspace Y / N NA

Log-in Review _____

REMARKS: Lubbock acct

☐ Dry Weight Basis Required

☐ TRRP Report Required

☐ Check If Special Reporting Limits Are Needed

Carrier # FedEx 2P 745412

Submittal of samples constitutes agreement to Terms and Conditions

ORIGINAL COPY

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: March 19, 2013

Work Order: 13031422

Project Location: Lea Co., NM
Project Name: NM "O" State #40
Project Number: 073824

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
323448	CVX-MNO-SP	soil	2013-03-13	17:15	2013-03-14

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.

Michael Abel

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

Report Contents

Case Narrative

Samples for project NM "O" State #40 were received by TraceAnalysis, Inc. on 2013-03-14 and assigned to work order 13031422. Samples for work order 13031422 were received intact at a temperature of 2.3 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	84564	2013-03-19 at 08:00	99814	2013-03-19 at 08:15

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 13031422 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: 323448 - CVX-MNO-SP

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	99814	Date Analyzed:	2013-03-19	Analyzed By:	DS
Prep Batch:	84564	Sample Preparation:	2013-03-19	Prepared By:	DS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
TRPHC	Qs		**122**	mg/Kg	1	10.0

Method Blanks

Method Blank (1) QC Batch: 99814

QC Batch:	99814	Date Analyzed:	2013-03-19	Analyzed By:	DS
Prep Batch:	84564	QC Preparation:	2013-03-19	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: 99814 | Date Analyzed: 2013-03-19 | Analyzed By: DS
Prep Batch: 84564 | QC Preparation: 2013-03-19 | Prepared By: DS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC			288	mg/Kg	1	250	<5.72	115	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			281	mg/Kg	1	250	<5.72	112	80 - 120	2	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: 323447

QC Batch: 99814 | Date Analyzed: 2013-03-19 | Analyzed By: DS
Prep Batch: 84564 | QC Preparation: 2013-03-19 | Prepared By: DS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC Qs	Qs		314	mg/Kg	1	250	166	59	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		320	mg/Kg	1	250	166	62	80 - 120	2	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: 99814 | Date Analyzed: 2013-03-19 | 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	2013-03-19

Standard (CCV-2)

QC Batch: 99814 | Date Analyzed: 2013-03-19 | 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	2013-03-19

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.
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Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
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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 # 1J0014212

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 #: 73824	Project Name: NM "O" State 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
323448	CVX-MNO-SP	1	4 oz		x							x		3/13/13	1715			x																			48 hrs	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
DKL	CRA	3/14/13	10:30		TA	3/14/13	10:30	INST 2.3 °C OBS 2.3 °C COR 2.3 °C
	TA	3/14/13	15:30					INST ____ °C OBS ____ °C COR ____ °C
					TA	3/15/13	9:40	INST 2.3 °C OBS 2.3 °C COR 2.7 °C

Submittal of samples constitutes agreement to Terms and Conditions

ORIGINAL COPY

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 # Courier ZP745412

Analytical Report 462766

for

Conestoga Rovers & Associates

Project Manager: Tom Larson

CEMC NM Ostate #40

073824

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)

16-MAY-13

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

Reference: XENCO Report No(s): **462766**
CEMC NM Ostate #40
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) 462766. 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. 462766 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

Sample Cross Reference 462766

Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-1 5'	S	05-07-13 14:30		462766-001
SB-1 10'	S	05-07-13 14:35		462766-002
SB-1 15'	S	05-07-13 14:40		462766-003
SB-1 20'	S	05-07-13 14:45		462766-004
SB-1 40'	S	05-07-13 14:50		462766-005
SB-1 50'	S	05-07-13 14:55		462766-006
SB-1 70'	S	05-07-13 15:00		462766-007
SB-1 90'	S	05-07-13 15:10		462766-008
SB-2 5'	S	05-08-13 10:20		462766-009
SB-2 10'	S	05-08-13 10:25		462766-010
SB-2 15'	S	05-08-13 10:30		462766-011
SB-2 20'	S	05-08-13 10:35		462766-012
SB-2 40'	S	05-08-13 10:40		462766-013
SB-2 50'	S	05-08-13 10:45		462766-014
SB-2 70'	S	05-08-13 10:50		462766-015
SB-2 90'	S	05-08-13 11:05		462766-016
SB-3 5'	S	05-08-13 12:00		462766-017
SB-3 10'	S	05-08-13 12:05		462766-018
SB-3 15'	S	05-08-13 12:07		462766-019
SB-3 20'	S	05-08-13 12:10		462766-020
SB-3 40'	S	05-08-13 12:13		462766-021
SB-3 50'	S	05-08-13 12:15		462766-022
SB-3 70'	S	05-08-13 12:20		462766-023
SB-3 90'	S	05-08-13 12:25		462766-024

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: CEMC NM Ostate #40

Project ID:	*073824*	Report Date:	*16-MAY-13*
Work Order Number(s):	*462766*	Date Received:	*05/09/2013*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-913663 Inorganic Anions by EPA 300/300.1
E300

Batch 913663, Chloride recovered above QC limits in the Matrix Spike.
Samples affected are: 462766-004, -005, -014, -006, -013, -015, -017, -001, -002, -009, -012, -011, -007, -019, -020, -018, -003, -010.
The Laboratory Control Sample for Chloride is within laboratory Control Limits

Certificate of Analysis Summary 462766

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC NM Ostate #40

Project Id: 073824
Contact: Tom Larson
Project Location: New Mexico

Date Received in Lab: Thu May-09-13 09:10 am
Report Date: 16-MAY-13
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	462766-001		462766-002		462766-003		462766-004		462766-005		462766-006	
	Field Id:	SB-1 5'		SB-1 10'		SB-1 15'		SB-1 20'		SB-1 40'		SB-1 50'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-07-13 14:30		May-07-13 14:35		May-07-13 14:40		May-07-13 14:45		May-07-13 14:50		May-07-13 14:55	
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-10-13 10:00		May-10-13 10:00		May-10-13 10:00		May-10-13 10:00		May-10-13 10:00		May-10-13 10:00	
	Analyzed:	May-10-13 22:10		May-10-13 22:54		May-10-13 23:15		May-10-13 23:37		May-10-13 23:59		May-11-13 00:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2090	42.8	2310	43.4	1330	20.9	1800	42.6	1050	21.2	127	4.17
Percent Moisture	*Extracted:*												
	Analyzed:	May-09-13 15:00		May-09-13 15:00		May-09-13 15:00		May-09-13 15:00		May-09-13 15:00		May-09-13 15:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.51	1.00	7.80	1.00	4.27	1.00	6.00	1.00	5.52	1.00	4.06	1.00

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Version: 1.%

Kelsey Brooks
Project Manager

XENCO Laboratories

Certificate of Analysis Summary 462766

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC NM Ostate #40

Project Id: 073824
Contact: Tom Larson
Project Location: New Mexico

Date Received in Lab: Thu May-09-13 09:10 am
Report Date: 16-MAY-13
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	462766-007		462766-008		462766-009		462766-010		462766-011		462766-012	
	Field Id:	SB-1 70'		SB-1 90'		SB-2 5'		SB-2 10'		SB-2 15'		SB-2 20'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-07-13 15:00		May-07-13 15:10		May-08-13 10:20		May-08-13 10:25		May-08-13 10:30		May-08-13 10:35	
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-10-13 10:00				May-10-13 10:00		May-10-13 10:00		May-10-13 10:00		May-10-13 10:00	
	Analyzed:	May-11-13 01:25				May-11-13 02:09		May-11-13 02:30		May-11-13 06:29		May-11-13 03:36	
	Units/RL:	mg/kg	RL			mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		69.8	4.17			136	4.32	83.6	4.38	59.7	4.22	63.2	4.21
Percent Moisture	*Extracted:*												
	Analyzed:	May-09-13 15:00		May-09-13 15:00		May-09-13 15:00		May-09-13 15:00		May-09-13 15:20		May-09-13 15:20	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.19	1.00	13.7	1.00	7.46	1.00	8.61	1.00	5.30	1.00	5.03	1.00

XENCO Laboratories

Certificate of Analysis Summary 462766

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC NM Ostate #40

Project Id: 073824
Contact: Tom Larson
Project Location: New Mexico

Date Received in Lab: Thu May-09-13 09:10 am
Report Date: 16-MAY-13
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	462766-013		462766-014		462766-015		462766-016		462766-017		462766-018	
	Field Id:	SB-2 40'		SB-2 50'		SB-2 70'		SB-2 90'		SB-3 5'		SB-3 10'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-08-13 10:40		May-08-13 10:45		May-08-13 10:50		May-08-13 11:05		May-08-13 12:00		May-08-13 12:05	
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-10-13 10:00		May-10-13 10:00		May-10-13 10:00				May-10-13 10:00		May-10-13 10:00	
	Analyzed:	May-11-13 03:57		May-11-13 04:19		May-11-13 04:41				May-11-13 06:07		May-11-13 02:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			mg/kg	RL	mg/kg	RL
Chloride		28.9	4.27	102	4.25	108	4.18			713	20.4	612	10.6
Percent Moisture	*Extracted:*												
	Analyzed:	May-09-13 15:20		May-09-13 15:20		May-09-13 15:20		May-09-13 16:00		May-09-13 16:00		May-09-13 16:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.27	1.00	5.82	1.00	4.37	1.00	5.04	1.00	2.17	1.00	5.71	1.00

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Version: 1.%

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 462766

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC NM Ostate #40

Project Id: 073824
Contact: Tom Larson
Project Location: New Mexico

Date Received in Lab: Thu May-09-13 09:10 am
Report Date: 16-MAY-13
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	462766-019		462766-020		462766-021		462766-022		462766-023		462766-024	
	Field Id:	SB-3 15'		SB-3 20'		SB-3 40'		SB-3 50'		SB-3 70'		SB-3 90'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-08-13 12:07		May-08-13 12:10		May-08-13 12:13		May-08-13 12:15		May-08-13 12:20		May-08-13 12:25	
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-10-13 10:00		May-10-13 10:00		May-10-13 10:00		May-10-13 10:00		May-10-13 10:00			
	Analyzed:	May-11-13 06:51		May-11-13 07:12		May-11-13 09:23		May-11-13 10:06		May-11-13 10:28			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		914	21.3	912	21.0	423	10.6	105	4.22	29.8	4.19		
Percent Moisture	*Extracted:*												
	Analyzed:	May-09-13 16:00		May-09-13 16:00		May-09-13 16:00		May-09-13 16:00		May-09-13 16:00		May-09-13 16:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.01	1.00	4.91	1.00	5.68	1.00	5.22	1.00	4.48	1.00	5.38	1.00

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Version: 1.%

Kelsey Brooks
Project Manager

XENCO Laboratories

Certificate of Analytical Results 462766

Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id: SB-1 5' Matrix: Soil Date Received: 05.09.13 09.10

Lab Sample Id: **462766-001** Date Collected: 05.07.13 14.30

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

Tech: AMB % Moisture: 6.51

Analyst: AMB Date Prep: 05.10.13 10.00 Basis: Dry Weight

Seq Number: 913663

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2090**	42.8	mg/kg	05.10.13 22.10		20

Analytical Method: **Percent Moisture**

Tech: SHSM % Moisture:

Analyst: WRU Basis: Wet Weight

Seq Number: 913378

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**6.51**	1.00	%	05.09.13 15.00		1

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Certificate of Analytical Results 462766

Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-1 10'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-002**	Date Collected: 05.07.13 14.35	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P	
Tech:	AMB			% Moisture: 7.8	
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis: Dry Weight	
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2310**	43.4	mg/kg	05.10.13 22.54		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**7.80**	1.00	%	05.09.13 15.00		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-1 15'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-003**	Date Collected: 05.07.13 14.40	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P	
Tech:	AMB			% Moisture: 4.27	
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis: Dry Weight	
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1330**	20.9	mg/kg	05.10.13 23.15		10

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.27**	1.00	%	05.09.13 15.00		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-1 20'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-004**	Date Collected: 05.07.13 14.45	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P	
Tech:	AMB			% Moisture: 6	
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis: Dry Weight	
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1800**	42.6	mg/kg	05.10.13 23.37		20

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**6.00**	1.00	%	05.09.13 15.00		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-1 40'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-005**	Date Collected: 05.07.13 14.50	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	5.52
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis:	Dry Weight
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1050**	21.2	mg/kg	05.10.13 23.59		10

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.52**	1.00	%	05.09.13 15.00		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id: SB-1 50' Matrix: Soil Date Received: 05.09.13 09.10

Lab Sample Id: 462766-006 Date Collected: 05.07.13 14.55

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

Tech: AMB % Moisture: 4.06

Analyst: AMB Date Prep: 05.10.13 10.00 Basis: Dry Weight

Seq Number: 913663

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**127**	4.17	mg/kg	05.11.13 00.20		2

Analytical Method: **Percent Moisture**

Tech: SHSM % Moisture:

Analyst: WRU Basis: Wet Weight

Seq Number: 913378

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.06**	1.00	%	05.09.13 15.00		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-1 70'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-007**	Date Collected: 05.07.13 15.00	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P	
Tech:	AMB			% Moisture: 4.19	
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis: Dry Weight	
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**69.8**	4.17	mg/kg	05.11.13 01.25		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.19**	1.00	%	05.09.13 15.00		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-1 90'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-008**	Date Collected: 05.07.13 15.10	

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**13.7**	1.00	%	05.09.13 15.00		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-2 5'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-009**	Date Collected: 05.08.13 10.20	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P
Tech:	AMB			% Moisture: 7.46
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis: Dry Weight
Seq Number:	913663			

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**136**	4.32	mg/kg	05.11.13 02.09		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**7.46**	1.00	%	05.09.13 15.00		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-2 10'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-010**	Date Collected: 05.08.13 10.25	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	8.61
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis:	Dry Weight
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**83.6**	4.38	mg/kg	05.11.13 02.30		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**8.61**	1.00	%	05.09.13 15.00		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-2 15'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-011**	Date Collected: 05.08.13 10.30	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	5.3
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis:	Dry Weight
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**59.7**	4.22	mg/kg	05.11.13 06.29		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.30**	1.00	%	05.09.13 15.20		1

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Certificate of Analytical Results 462766

Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-2 20'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-012**	Date Collected: 05.08.13 10.35	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P	
Tech:	AMB			% Moisture: 5.03	
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis: Dry Weight	
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**63.2**	4.21	mg/kg	05.11.13 03.36		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.03**	1.00	%	05.09.13 15.20		1

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Certificate of Analytical Results 462766

Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-2 40'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-013**	Date Collected: 05.08.13 10.40	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P
Tech:	AMB			% Moisture: 6.27
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis: Dry Weight
Seq Number:	913663			

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28.9**	4.27	mg/kg	05.11.13 03.57		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**6.27**	1.00	%	05.09.13 15.20		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-2 50'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-014**	Date Collected: 05.08.13 10.45	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P	
Tech:	AMB			% Moisture: 5.82	
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis: Dry Weight	
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**102**	4.25	mg/kg	05.11.13 04.19		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.82**	1.00	%	05.09.13 15.20		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-2 70'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-015**	Date Collected: 05.08.13 10.50	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P	
Tech:	AMB			% Moisture: 4.37	
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis: Dry Weight	
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**108**	4.18	mg/kg	05.11.13 04.41		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913378		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.37**	1.00	%	05.09.13 15.20		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-2 90'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-016**	Date Collected: 05.08.13 11.05	

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913386		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.04**	1.00	%	05.09.13 16.00		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-3 5'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-017**	Date Collected: 05.08.13 12.00	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P
Tech:	AMB			% Moisture: 2.17
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis: Dry Weight
Seq Number:	913663			

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**713**	20.4	mg/kg	05.11.13 06.07		10

Analytical Method:	**Percent Moisture**		
Tech:	SHSM		% Moisture:
Analyst:	WRU		Basis: Wet Weight
Seq Number:	913386		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**2.17**	1.00	%	05.09.13 16.00		1

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Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-3 10'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-018**	Date Collected: 05.08.13 12.05	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P	
Tech:	AMB			% Moisture: 5.71	
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis: Dry Weight	
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**612**	10.6	mg/kg	05.11.13 02.52		5

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913386		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.71**	1.00	%	05.09.13 16.00		1

Final 1.000

XENCO Laboratories

Certificate of Analytical Results 462766

Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-3 15'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-019**	Date Collected: 05.08.13 12.07	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	6.01
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis:	Dry Weight
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**914**	21.3	mg/kg	05.11.13 06.51		10

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913386		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**6.01**	1.00	%	05.09.13 16.00		1

XENCO Laboratories

Certificate of Analytical Results 462766

Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-3 20'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-020**	Date Collected: 05.08.13 12.10	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	4.91
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis:	Dry Weight
Seq Number:	913663				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**912**	21.0	mg/kg	05.11.13 07.12		10

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913386		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.91**	1.00	%	05.09.13 16.00		1

XENCO Laboratories

Certificate of Analytical Results 462766

Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-3 40'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-021**	Date Collected: 05.08.13 12.13	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	5.68
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis:	Dry Weight
Seq Number:	913664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**423**	10.6	mg/kg	05.11.13 09.23		5

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913386		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.68**	1.00	%	05.09.13 16.00		1

XENCO Laboratories

Certificate of Analytical Results 462766

Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-3 50'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-022**	Date Collected: 05.08.13 12.15	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method:	E300P
Tech:	AMB			% Moisture:	5.22
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis:	Dry Weight
Seq Number:	913664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**105**	4.22	mg/kg	05.11.13 10.06		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis:	Wet Weight
Seq Number:	913386		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.22**	1.00	%	05.09.13 16.00		1

XENCO Laboratories

Certificate of Analytical Results 462766

Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id:	**SB-3 70'**	Matrix: Soil	Date Received: 05.09.13 09.10
Lab Sample Id:	**462766-023**	Date Collected: 05.08.13 12.20	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**			Prep Method: E300P
Tech:	AMB			% Moisture: 4.48
Analyst:	AMB	Date Prep:	05.10.13 10.00	Basis: Dry Weight
Seq Number:	913664			

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**29.8**	4.19	mg/kg	05.11.13 10.28		2

Analytical Method:	**Percent Moisture**		
Tech:	SHSM	% Moisture:	
Analyst:	WRU	Basis: Wet Weight	
Seq Number:	913386		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**4.48**	1.00	%	05.09.13 16.00		1

XENCO Laboratories

Certificate of Analytical Results 462766

Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id: SB-3 90' Matrix: Soil Date Received: 05.09.13 09.10

Lab Sample Id: 462766-024 Date Collected: 05.08.13 12.25

Analytical Method: **Percent Moisture**

Tech: SHSM % Moisture:

Analyst: WRU Basis: Wet Weight

Seq Number: 913386

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	**5.38**	1.00	%	05.09.13 16.00		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

Conestoga Rovers & Associates

CEMC NM Ostate #40

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913663 — Matrix: Solid — Date Prep: 05/10/2013
MB Sample Id: 638042-1-BLK — LCS Sample Id: 638042-1-BKS — LCSD Sample Id: 638042-1-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	51.7	103	51.6	103	80-120	0	20	mg/kg	05/10/13 21:27	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913664 — Matrix: Solid — Date Prep: 05/10/2013
MB Sample Id: 638044-1-BLK — LCS Sample Id: 638044-1-BKS — LCSD Sample Id: 638044-1-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	50.3	101	52.3	105	80-120	4	20	mg/kg	05/11/13 08:39	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913663 — Matrix: Soil — Date Prep: 05/10/2013
Parent Sample Id: 462766-001 — MS Sample Id: 462766-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	2090	1070	3410	123	80-120	mg/kg	05/10/13 22:32	X

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913663 — Matrix: Soil — Date Prep: 05/10/2013
Parent Sample Id: 462766-018 — MS Sample Id: 462766-018 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	612	265	848	89	80-120	mg/kg	05/11/13 03:14	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 913664 — Matrix: Soil — Date Prep: 05/10/2013
Parent Sample Id: 462766-021 — MS Sample Id: 462766-021 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	423	265	724	114	80-120	mg/kg	05/11/13 09:44	

Conestoga Rovers & Associates

CEMC NM Ostate #40

Analytical Method: Percent Moisture
Seq Number: 913378 Matrix: Solid
MB Sample Id: 913378-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	05/09/13 14:00	

Analytical Method: Percent Moisture
Seq Number: 913386 Matrix: Solid
MB Sample Id: 913386-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	05/09/13 16:00	

Analytical Method: Percent Moisture
Seq Number: 913378 Matrix: Soil
Parent Sample Id: 462621-005 MD Sample Id: 462621-005 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	11.1	10.6	5	20	%	05/09/13 14:00	

Analytical Method: Percent Moisture
Seq Number: 913386 Matrix: Soil
Parent Sample Id: 462766-016 MD Sample Id: 462766-016 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	5.04	4.87	3	20	%	05/09/13 16:00	

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 #: 330716 Page 1 of 3

Company-City: CRA MIDLAND **Phone:** 432-686-0086

Lab Only: 462766

Project Name-Location: CEMC NM OSTATE #40 ☐ Previously done at XENCO **Project ID:** 073824

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@crawld.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 JAKE FERENZ **Signature** Jake Ferenz

	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, oEPA	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:
1	SB-1 5'	5.7.13	2:30pm		S		X	1	4oz	C	C										X	X				
2	10'		2:35		S		X	1													X	X				
3	15'		2:40		S		X	1													X	X				
4	20'		2:45		S		X	1													X	X				
5	40'		2:50		S		X	1													X	X				
6	50'		2:55		S		X	1													X	X				
7	70'		3:00		S		X	1													X	X				
8	90'	5.7.13	3:10		S		X	1													X		X			
9	SB-2 5'	5.8.13	10:20 AM		S		X	1													X	X				
10	10'	5.8.13	10:25		S		X	1													X	X				

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) JF - Jake Ferenz	5.9.13 9:11AM	2)	
3)		4)	
5)		6) [signature]	5/9/13 9:10

Total Containers per COC: Cooler Temp: 5.0 °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

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☐ 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 #: 330717 Page 2 of 3

Company-City: CRA MIDLAND **Phone:** 432-686-0086
Lab Only: 462766
Project Name-Location: LEMC UNOSTATE #10 ☐ Previously done at XENCO **Project ID:** 073824
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)**
E-mail Results to ~~PM~~ and tlmson@crawrld.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 JAKE FERGUSON **Signature**

	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, 0EPA	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	SB-2 15'	5.8.13	10:30 AM		S		X	1	4oz	C	C										X	X					1
2	20'		10:35																		X	X					2
3	40'		10:40																		X	X					3
4	50'		10:45																		X	X					4
5	70'		10:50																		X	X					5
6	90'		11:05																		X		X				6
7	SB-3 5'		12 noon																		X	X					7
8	10'		12:05 pm																		X	X					8
9	15'		12:07																		X	X					9
10	20'	5.8.13	12:10																		X	X					10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) JF	5.9.13 9:11 AM	2)	
3)		4)	
5)		6)	5/9/13 9:10

Total Containers per COC: Cooler Temp: 5.0 °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 1.000

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

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☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330718 Page 3 of 3

Company-City: CRA Midland **Phone:** 432-686-0086
Lab Only: 462766

Project Name-Location: CEMC NM O State #40 ☐ Previously done at XENCO **Project ID:** 073824

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)**

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: [illegible] **Signature:** [illegible signature]

Analyses (column headings): 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, 300.0EPA | 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 | Remarks: Addn: Date Rcv. by: From:

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	Cl - chlorides, 300.0EPA	TAT	Hold Samples	
1	SB-3 40'	5-8-13	12:13		S		X	1	4oz	C	C	X	X		1
2	↓ 50'	5-8-13	12:15		S		X	1	4oz	C	C	X	X		2
3	70'	5-8-13	12:20		S		X	1	4oz	C	C	X	X		3
4	90'	5-8-13	12:25		S		X	1	4oz	C	C	X		X	4
5															5
6															6
7															7
8															8
9															9
10															10

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) [signature]	5-9-13 9:11am	2)	
2	3)		4)	
3	5)		6) [signature]	5/9/13 9:10

Total Containers per COC: Cooler Temp: 5.0 °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: 05/09/2013 09:10:00 AM

Work Order #: 462766

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

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	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: 05/09/2013

Checklist reviewed by: Kelsey Brooks Date: 05/09/2013