

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

HOBBS OCD  
OCT 16 2013  
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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  
Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.  
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

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

**Instructions:** Please submit one application (Form C-144) per individual pit, 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, USA OGRID #: \_\_\_\_\_  
Address: 56 Texas Camp Road, Lovington, New Mexico 88260  
Facility or well name: New Mexico "O" State NCT-1 #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 N 32.7893° Longitude W 103.5123° NAD:  1927   
1983  
Surface Owner:  Federal  State  Private  Tribal Trust or Indian Allotment

2.  
 **Pit:** Subsection F, G or J of 19.15.17.11 NMAC  
Temporary:  Drilling  Workover  
 Permanent  Emergency  Cavitation  P&A  Multi-Well Fluid Management Low Chloride Drilling Fluid  yes  no  
 Lined  Unlined Liner type: Thickness 20 mil  LLDPE  HDPE  PVC  Other Synthetic  
 String-Reinforced  
Liner Seams:  Welded  Factory  Other \_\_\_\_\_ Volume: \_\_\_\_\_ bbl Dimensions: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_

3.  
 **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 \_\_\_\_\_

4.  
 **Alternative Method:**  
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.  
**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 \_\_\_\_\_

6. **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)

7. **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 19.15.16.8 NMAC

8. **Variations 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:*

- Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  
 Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9. **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. Siting criteria does not apply to drying pads or above-grade tanks.*

### General siting

**Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.**

- NM Office of the State Engineer - iWATERS database search;  USGS;  Data obtained from nearby wells

Yes  No  
 NA

**Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.**

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

Yes  No  
 NA

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. **(Does not apply to below grade tanks)**

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

Yes  No

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)**

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

Yes  No

Within an unstable area. **(Does not apply to below grade tanks)**

- 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. **(Does not apply to below grade tanks)**

- FEMA map

Yes  No

### Below Grade Tanks

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

Yes  No

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

Yes  No

### Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)

- Topographic map; Visual inspection (certification) of the proposed site

Yes  No

Within 300 feet from a occupied 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 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.

NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

Yes  No

Within 100 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Yes  No

**Temporary Pit Non-low chloride drilling fluid**

Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any 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 spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

Yes  No

Within 300 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Yes  No

**Permanent Pit or Multi-Well Fluid Management Pit**

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 1000 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 spring or a fresh water well used for domestic or stock watering purposes, 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 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Yes  No

10.

**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: \_\_\_\_\_

11.

**Multi-Well Fluid Management Pit 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.*

- 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
- A List of wells with approved application for permit to drill associated with the pit.
- 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

- Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

12.

**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<sub>2</sub>S, 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

13.

**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  Multi-well Fluid Management Pit  
 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

14.

**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 C 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 H of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.

**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 require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.*

|   |   |
|---|---|
| Ground water is less than 25 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is between 25-50 feet below the bottom of the buried waste<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).<br>- Topographic map; Visual inspection (certification) of the proposed site                        | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.<br>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.<br>- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Written confirmation or verification from the municipality; Written approval obtained from the municipality   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 300 feet of a wetland.<br>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |

|   |  |
|---|--|
| adopted pursuant to NMSA 1978, Section 3-27-3, as amended.<br>- Written confirmation or verification from the municipality; Written approval obtained from the municipality | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within the area overlying a subsurface mine.<br>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division                                 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within an unstable area.<br>- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map     | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within a 100-year floodplain.<br>- FEMA map   | <input type="checkbox"/> Yes <input type="checkbox"/> No |

16.  
**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 E of 19.15.17.13 NMAC
- Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K 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 19.15.17.13 NMAC
- Waste Material Sampling Plan - based upon the appropriate requirements 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 H of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.  
**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): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_

18.  
**OCD Approval:**  Permit Application (including closure plan)  Closure Plan (only)  OCD Conditions (see attachment)

**OCD Representative Signature:** \_\_\_\_\_ **Approval Date:** \_\_\_\_\_

**Title:** \_\_\_\_\_ **OCD Permit Number:** \_\_\_\_\_

19.  
**Closure Report (required within 60 days of closure completion):** 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:** July 9, 2013

20.  
**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.

21.  
**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 for private land only)
- 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

22.

**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): Kegan Boyer Title: CEMC – Project Manager

Signature:  Date: 10/14/13

e-mail address: kegan.boyer@chevron.com Telephone: (713) 372-7705



**CONESTOGA-ROVERS  
& ASSOCIATES**

2135 South Loop, 250 West, Midland, Texas 79703  
Telephone: (432) 686-0086 Fax: (432) 686-0186  
[www.CRAworld.com](http://www.CRAworld.com)

September 30, 2013

Reference No. 073824

Mr. Geoffrey R. Leking  
Environmental Engineer Specialist  
New Mexico Oil Conservation Division, District I  
1625 N. French Drive  
Hobbs, NM 88240

HOBBS OCD

OCT 16 2013

RECEIVED

Dear Mr. Leking:

Re: Pit Closure Report (As Attachment to Form C-144)  
New Mexico "O" State NCT-1 #40 - RP #2673  
Section 36 (Unit J), Township 17 South, Range 34 East  
Lea County, New Mexico

The subject location is the Chevron New Mexico "O" State NCT-1 #40 (hereafter referred to as the "Site"). The Site is located in Unit Letter J, Section 36, Township 17 South, Range 34 East, Lea County, New Mexico. The approximate pit excavation dimensions are 155' x 170' x 200' with an average depth of 6'. The Site coordinates are N 32.7893°, W 103.5123°. The Site location is shown on Figure 1.

### SITE HISTORY

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 Division (NMOCD). The original C-144 Form is attached as 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 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.

Equal  
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Employer

REGISTERED COMPANY FOR  
**ISO 9001**  
ENGINEERING DESIGN



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& ASSOCIATES**

September 30, 2013

Reference No. 073824

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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 included the over-excavation of pit materials to depths of 4-5 feet, off-site 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.

Final C-141 Report, including documentation of 2013 delineation and assessment activities is being filed with the NMOCD under a separate cover.

#### **SITE ASSESSMENT AND CONFIRMATION SOIL SAMPLING**

Initial Site assessment and soil sampling activities were completed in accordance with the New Mexico Oil Conservation Division's (NMOCD's) guidance document *Guidelines for Remediation of Leaks, Spills and Releases*, dated August 13, 1993. Section III of the guidance document provides three general characteristics (Depth to groundwater, Wellhead Protection Area, Distance to Nearest Surface Water Body) to "evaluate a Site's potential risk, the need for remedial action and the level of cleanup, if necessary, required at the Site." Section IV provides ranking criteria for each site-specific characteristic to determine their relative threat to the public, fresh waters and the environment. The sum of each individual characteristic equals the total ranking score. The total ranking score determines the recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (BTEX), total petroleum hydrocarbons (TPH) and chloride in soil.

According to the Petroleum Recovery Research Center (PRRC) database and the New Mexico Office of the State Engineer (NMOSE), there are several water wells in the general vicinity of the Site and the average depth to groundwater in the vicinity of the Site is approximately 107 feet below ground surface (bgs). Appendix C is a topographic map depicting the average depths to groundwater, distance to surface water bodies and any wellheads. Based on average depth to groundwater (>100 feet below ground surface), Wellhead Protection (water source <1,000 feet & <200 feet private) and surface body of water (>1,000 feet) for the Site, the RRALs were determined to be 10 mg/kg for benzene, 50 mg/kg for BTEX, and 100mg/kg for TPH (Guidelines for Remediation of Leaks, Spills, and Releases, August 13, 1993). The RRAL for chloride was determined to be 500 mg/kg based on the NMOCD's Guidance for Release Reporting and Corrective Actions under Rules 29 and 30 of the Oil and Gas Regulations (DRAFT), September 30, 2011 guidance.



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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. Analytical results are summarized in Table I. A soil cross section depicting subsurface conditions is provided in Figure 2. Certified Laboratory Reports for the 2013 soil boring sampling events are provided in Appendix D.

### **PROTOCOLS AND PROCEDURES**

On June 5, 2013, CRA and CEMC met with Geoffrey Leking, Environmental Engineer Specialist, of the NMOCD District I Hobbs office to discuss the protocols and procedures required for closure of the reserve pit. Meeting discussions included the following:

- The vertical and horizontal delineation of chloride and (any) hydrocarbon impacts had been achieved to the satisfaction of the NMOCD District I office.
- Procedures for excavation and backfilling of imported clean materials (caliche and sandy soils) from approximately 4-10 feet to 4 feet below grade to ensure a uniform/level surface.
- Procedures for installation of a 20 mil poly liner in the excavated area and procedures for backfilling the remaining excavation with clean materials.
- Procedures to complete backfill activities utilizing clean top soil (1-2 ft.) and use of heavy machinery for grading purposes.
- Procedures for construction affected areas of pit floor/release site to be graded to match surface contours and seeded using mixtures utilized by local agencies such as the BLM, County Ag Agency and/or as directed by property owner.



**CONESTOGA-ROVERS  
& ASSOCIATES**

September 30, 2013

Reference No. 073824

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- Protocol for submittal of final C-144 Form (Pit Closure) to the NMOCD summarizing Site closure activities.

#### **DISPOSAL FACILITY NAME AND PERMIT NUMBER**

CRA was responsible for managing waste associated with the 2013 project activities (3,366 cy). Controlled Recovery, Inc. (CRI) of Hobbs, New Mexico was utilized as the disposal facility for impacted soils. The permit number for CRI is R9166. CRI is an NMOCD and Chevron approved facility. The material was loaded into trucks provided by RWI Construction, Inc. (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. Copies of the Manifests are included in Appendix F in electronic form on a CD.

#### **SOIL BACKFILL AND COVER DESIGN SPECIFICATIONS**

The excavation was backfilled with imported clean materials (caliche and sandy soils) from approximately 4-10 feet to 4 feet below grade to ensure a uniform/level surface. A 20 mil poly liner was emplaced in excavated area and the excavation was backfilled with clean materials.

Backfill activities were completed utilizing clean top soil (1-2 ft.) and use of heavy machinery for grading purposes.

#### **RE-VEGETATION ACTIVITIES**

Re-vegetation activities included "construction affected areas of release Site". Heavy machinery was used to grade the Site to approximate original surface contour to minimize erosion. Topsoil was ripped, seeded with an approved native grass, and fertilized to ensure maximum growth potential.



**CONESTOGA-ROVERS  
& ASSOCIATES**

September 30, 2013

Reference No. 073824

- 5 -

### SITE RECLAMATION

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. Photos documenting Site reclamation activities are presented in Appendix E.

After meeting with the NMOCD, approved 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.

### RECOMMENDATIONS

CRA recommends no further action be required for the Site and requests closure of the New Mexico "O" State NCT-1 #40 Pit (RP #2673). Attached to the front of this closure report is a completed and signed Form C-144.



**CONESTOGA-ROVERS  
& ASSOCIATES**

September 30, 2013

Reference No. 073824

- 6 -

If you have any questions or comments with regards to this closure request, please do not hesitate to contact our Midland office at (432) 686-0086.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

A handwritten signature in blue ink that reads 'Jake Ferenz'.

Jake Ferenz  
Project Manager

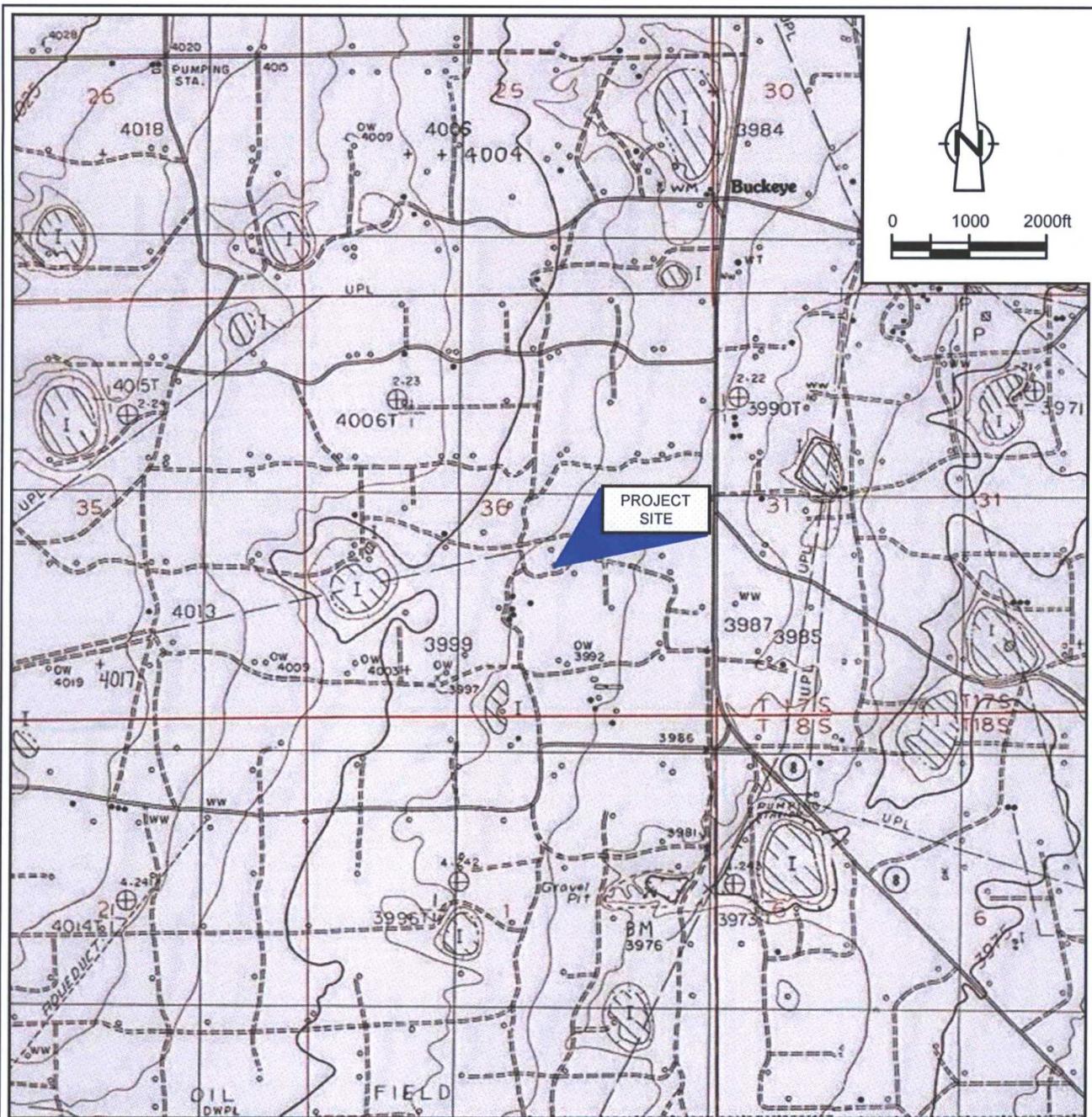
A handwritten signature in blue ink that reads 'Thomas C. Larson'.

Thomas C. Larson  
Midland Operations Manager

JF/pd/2

cc: Mr. David Pagano (Chevron Buckeye FMT) w/encl.  
Mr. Kegan Boyer (CEMC Houston) w/encl.

Encl: Figure 1 - Site Location Map  
Figure 2 - Soil Cross-Section Map  
Figure 3 - Site Restoration Map  
Table I - Soil Boring Analytical Summary  
Table II - Waste Inventory  
Appendix A - Original C-144 Form  
Appendix B - Original C-141 Form  
Appendix C - Petroleum Recovery Research Center Distance-to-Groundwater Radius Map  
Appendix D - Certified Laboratory Reports  
Appendix E - Site Reclamation Photo Documentation  
Appendix F - Waste Manifests (CD)



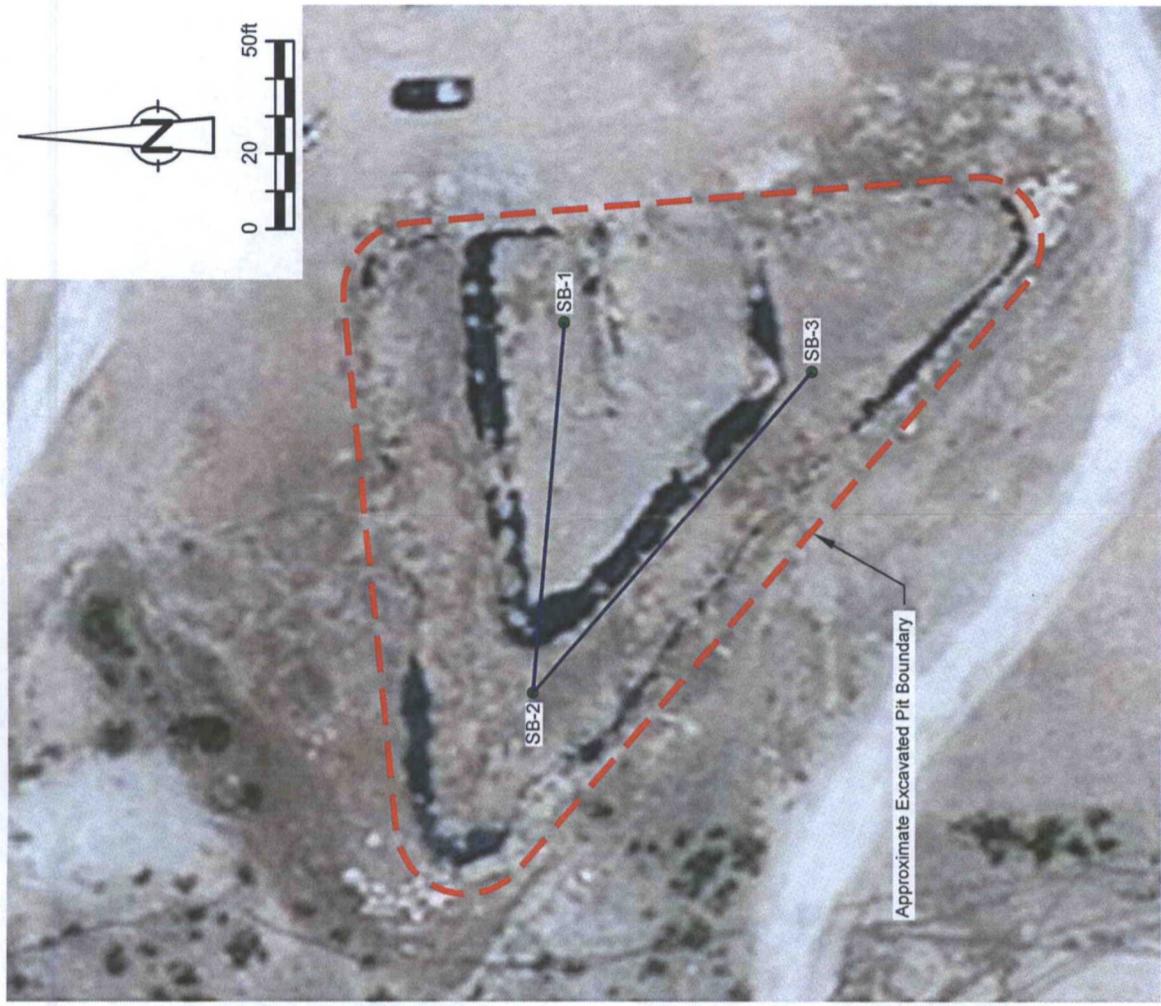
SOURCE: USGS 7.5 MINUTE QUAD  
 "BUCKEYE AND LOVINGTON SW, NEW MEXICO"

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*





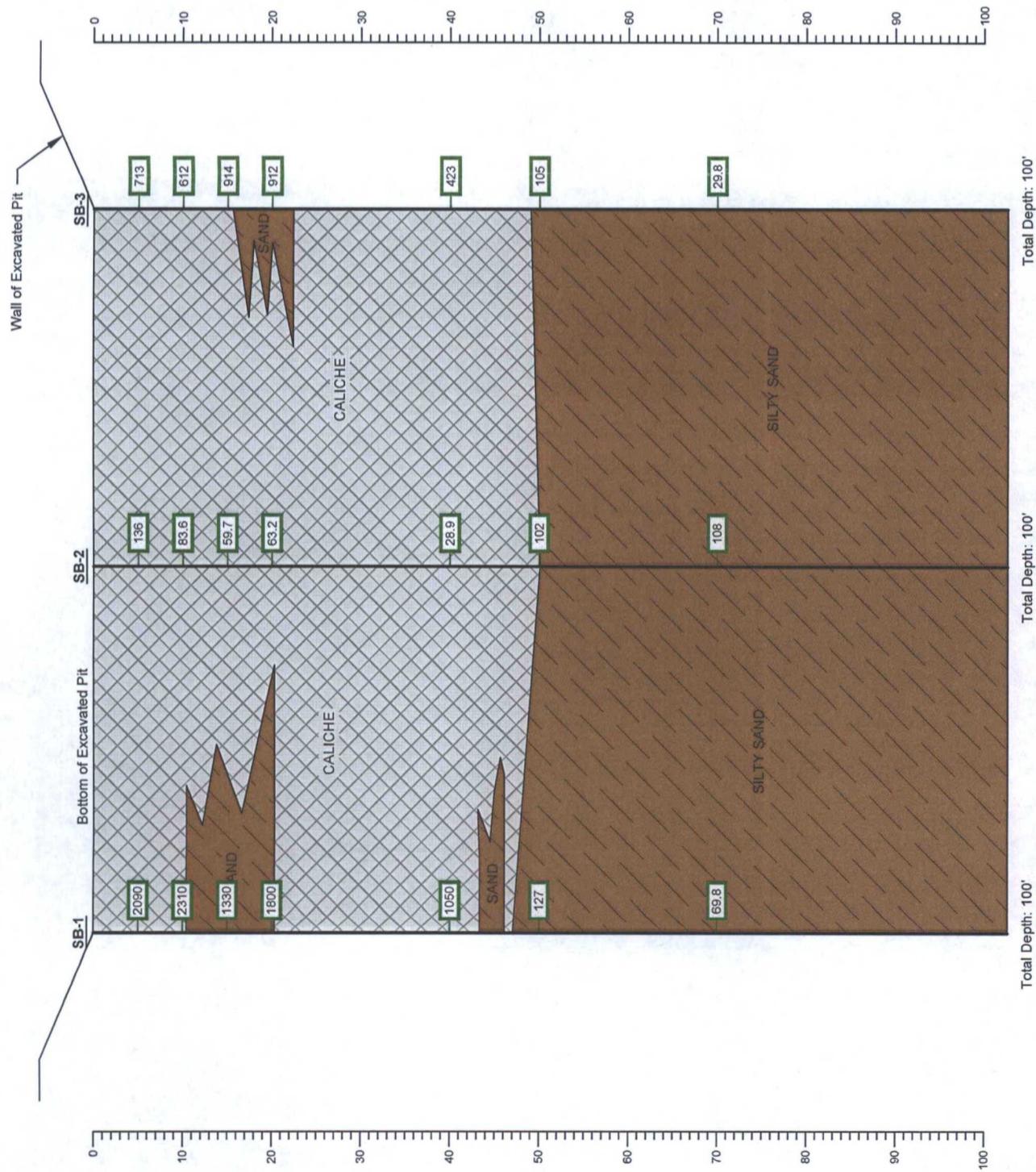
**NOTES:**

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*



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





**NOTES:**

1. See June 5, 2013 submittal to NMOCDD 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.

| LEGEND  |                                    |
|---|------------------------------------|
|  | Approximate Excavated Pit Boundary |

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



073824-00(003)GN-DL001 SEP 3/2013

**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)    |
| <b>NMOCD Remediation Action Levels (Total Ranking Score = 10)</b> |             |                  | <b>500</b> |
| 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-3-70'  | 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 <i>cubic</i><br><i>yards</i> |
|-----------|--------------|-----------------|--|
| 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   |
| 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   |

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

| DATE      | TRUCK NUMBER | MANIFEST NUMBER | QUANTITY OF WASTE <i>cubic yards</i> |
|-----------|--------------|-----------------|--------------------------------------|
| 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                                   |
| 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                                   |

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

| DATE      | TRUCK NUMBER | MANIFEST NUMBER | QUANTITY OF WASTE <i>cubic yards</i> |
|-----------|--------------|-----------------|--------------------------------------|
| 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                                   |
| 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                                   |

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

| DATE          | TRUCK NUMBER | MANIFEST NUMBER | QUANTITY OF WASTE <i>cubic yards</i> |
|---------------|--------------|-----------------|--------------------------------------|
| 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                                   |
| 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                                   |
| <b>Total:</b> |              |                 | <b>3,366</b>                         |



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,

A handwritten signature in cursive script that reads "Rodney Bailey".

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 0-40  
API Number: 30-025-38140 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr 36 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:**  
Submission 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.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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).<br>- Topographic map; Visual inspection (certification) of the proposed site   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.<br>(Applies to temporary, emergency, or cavitation pits and below-grade tanks)<br>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><input type="checkbox"/> NA |
| Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.<br>(Applies to permanent pits)<br>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><input type="checkbox"/> 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.<br>- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.<br>- Written confirmation or verification from the municipality; Written approval obtained from the municipality  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                |
| Within 500 feet of a wetland.<br>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                |
| Within the area overlying a subsurface mine.<br>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                |
| Within an unstable area.<br>- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                |
| Within a 100-year floodplain.<br>- FEMA map  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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<sub>2</sub>S, 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 identify 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.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is between 50 and 100 feet below the bottom of the buried waste<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> 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).<br>- Topographic map; Visual inspection (certification) of the proposed site  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.<br>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.<br>- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.<br>- Written confirmation or verification from the municipality; Written approval obtained from the municipality   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                |
| Within 500 feet of a wetland.<br>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                |
| Within the area overlying a subsurface mine.<br>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                |
| Within an unstable area.<br>- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                |
| Within a 100-year floodplain.<br>- FEMA map   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                |

18. **On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
- Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19. **Operator Application Certification:**

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Rodney Bailey Title: Env. Advisor  
Signature: Rodney Bailey Date: 4-7-10  
e-mail address: baileyr@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 identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.*  
Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_  
Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_  
Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?  
 Yes (If yes, please demonstrate compliance to the items below)  No  
*Required for impacted areas which will not be used for future service and operations:*  
 Site Reclamation (Photo Documentation)  
 Soil Backfilling and Cover Installation  
 Re-vegetation Application Rates and Seeding Technique

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

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

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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised October 10, 2003

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

**Release Notification and Corrective Action**

**OPERATOR**  Initial Report  Final Report

|                 |                                      |               |                                |
|-----------------|--------------------------------------|---------------|--------------------------------|
| Name of Company | Chevron Environmental Management Co. | Contact       | Matt Hudson                    |
| Address         | 1400 Smith Street Room 19001A        | Telephone No. | (713) 372-1046                 |
| Facility Name   | New Mexico O State #40               | Facility Type | Reserve Pit API # 30-025-38140 |

|               |                     |               |  |           |  |
|---------------|---------------------|---------------|--|-----------|--|
| Surface Owner | State of New Mexico | Mineral Owner |  | Lease No. |  |
|---------------|---------------------|---------------|--|-----------|--|

**LOCATION OF RELEASE**

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| 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? | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom?                          |         |                            |         |
| By Whom?                    |   | Date and Hour                             |         |                            |         |
| Was a Watercourse Reached?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.

|                 |                     |                                   |                  |
|-----------------|---------------------|-----------------------------------|------------------|
|                 |                     | <b>OIL CONSERVATION DIVISION</b>  |                  |
| Signature:      |                     | Approved by District Supervisor:  |                  |
| Printed Name:   | Matt Hudson         | Approval Date:                    | Expiration Date: |
| Title:          | Project Manager     | Conditions of Approval:           |                  |
| E-mail Address: | mHUDSON@chevron.com | Attached <input type="checkbox"/> |                  |
| Date:           | Phone: 713-372-1046 |                                   |                  |

\* Attach Additional Sheets If Necessary



# 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

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

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



### Sample Cross Reference 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  
Work Order Number(s): 462766

Report Date: 16-MAY-13  
Date Received: 05/09/2013

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### Sample receipt non conformances and comments:

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### 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 |
|                                   | 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        |
| 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 |
|                                   | Units/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: 1.5%

Kelsey Brooks  
Project Manager



# Certificate of Analysis Summary 462766

Conestoga Rovers & Associates, Midland, TX



Project Id: 073824

Contact: Tom Larson

Project Location: New Mexico

Project Name: CEMC NM Ostate #40

Date Received in Lab: Thu May-09-13 09:10 am

Report Date: 16-MAY-13

Project Manager: Kelsey Brooks

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 462766-007      | 462766-008      | 462766-009      | 462766-010      | 462766-011      | 462766-012      |
|--|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|  | <i>Field Id:</i>  | SB-1 70'        | SB-1 90'        | SB-2 5'         | SB-2 10'        | SB-2 15'        | SB-2 20'        |
|  | <i>Depth:</i>     |                 |                 |                 |                 |                 |                 |
|  | <i>Matrix:</i>    | SOIL            | SOIL            | SOIL            | SOIL            | SOIL            | SOIL            |
|  | <i>Sampled:</i>   | 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 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 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 |
|  | <i>Analyzed:</i>  | 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 |
|  | <i>Units/RL:</i>  | 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       |
| <b>Percent Moisture</b>                  | <i>Extracted:</i> | 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 |
|  | <i>Analyzed:</i>  |                 |                 |                 |                 |                 |                 |
|  | <i>Units/RL:</i>  | % 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       |

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Version: 1.5%

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

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 462766-013      | 462766-014      | 462766-015      | 462766-016      | 462766-017      | 462766-018      |
|--|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|  | <i>Field Id:</i>  | SB-2 40'        | SB-2 50'        | SB-2 70'        | SB-2 90'        | SB-3 5'         | SB-3 10'        |
|  | <i>Depth:</i>     |                 |                 |                 |                 |                 |                 |
|  | <i>Matrix:</i>    | SOIL            | SOIL            | SOIL            | SOIL            | SOIL            | SOIL            |
|  | <i>Sampled:</i>   | 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 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 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 |
|  | <i>Analyzed:</i>  | 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 |
|  | <i>Units/RL:</i>  | 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        |
| <b>Percent Moisture</b>                  | <i>Extracted:</i> |                 |                 |                 |                 |                 |                 |
|  | <i>Analyzed:</i>  | 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 |
|  | <i>Units/RL:</i>  | % 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: 1.5%

Kelsey Brooks  
Project Manager



# Certificate of Analysis Summary 462766

Conestoga Rovers & Associates, Midland, TX



Project Id: 073824

Contact: Tom Larson

Project Location: New Mexico

Project Name: CEMC NM Ostate #40

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 |                 |
|                                   | 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        |                 |
| 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 |
|                                   | Units/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: 1.5

Kelsey Brooks  
Project Manager





# Certificate of Analytical Results 462766



Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id: SB-1 10'  
Lab Sample Id: 462766-002

Matrix: Soil  
Date Collected: 05.07.13 14.35

Date Received: 05.09.13 09.10

Analytical Method: Inorganic Anions by EPA 300/300.1  
Tech: AMB  
Analyst: AMB  
Seq Number: 913663

Date Prep: 05.10.13 10.00

Prep Method: E300P  
% Moisture: 7.8  
Basis: Dry Weight

| 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  
Analyst: WRU  
Seq Number: 913378

% Moisture:  
Basis: Wet Weight

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





# Certificate of Analytical Results 462766



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   |



# Certificate of Analytical Results 462766



Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id: SB-1 40'  
Lab Sample Id: 462766-005

Matrix: Soil  
Date Collected: 05.07.13 14.50

Date Received: 05.09.13 09.10

Analytical Method: Inorganic Anions by EPA 300/300.1  
Tech: AMB  
Analyst: AMB  
Seq Number: 913663

Prep Method: E300P  
% Moisture: 5.52  
Date Prep: 05.10.13 10.00  
Basis: Dry Weight

| 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  
Analyst: WRU  
Seq Number: 913378

% Moisture:  
Basis: Wet Weight

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





# Certificate of Analytical Results 462766



Conestoga Rovers & Associates, Midland, TX  
CEMC NM Ostate #40

Sample Id: SB-1 70'  
Lab Sample Id: 462766-007

Matrix: Soil  
Date Collected: 05.07.13 15.00

Date Received: 05.09.13 09.10

Analytical Method: Inorganic Anions by EPA 300/300.1  
Tech: AMB  
Analyst: AMB  
Seq Number: 913663

Prep Method: E300P  
% Moisture: 4.19  
Date Prep: 05.10.13 10.00  
Basis: Dry Weight

| 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  
Analyst: WRU  
Seq Number: 913378

% Moisture:  
Basis: Wet Weight

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



# Certificate of Analytical Results 462766



Conestoga Rovers & Associates, Midland, TX  
CEMC NM Ostate #40

Sample Id: SB-1 90'  
Lab Sample Id: 462766-008

Matrix: Soil  
Date Collected: 05.07.13 15.10

Date Received: 05.09.13 09.10

Analytical Method: Percent Moisture  
Tech: SHSM  
Analyst: WRU  
Seq Number: 913378

% Moisture:  
Basis: Wet Weight

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



# Certificate of Analytical Results 462766



Conestoga Rovers & Associates, Midland, TX  
CEMC NM Ostate #40

|   |                                |                               |
|---|--------------------------------|-------------------------------|
| <b>Sample Id:</b> 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: <b>Inorganic Anions by EPA 300/300.1</b> |                                | 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: <b>Percent Moisture</b> |  |                   |
| 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   |







# 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   |



# Certificate of Analytical Results 462766



Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id: SB-2 40'  
Lab Sample Id: 462766-013

Matrix: Soil  
Date Collected: 05.08.13 10.40

Date Received: 05.09.13 09.10

Analytical Method: Inorganic Anions by EPA 300/300.1  
Tech: AMB  
Analyst: AMB  
Seq Number: 913663

Prep Method: E300P  
% Moisture: 6.27  
Date Prep: 05.10.13 10.00  
Basis: Dry Weight

| 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  
Analyst: WRU  
Seq Number: 913378

% Moisture:  
Basis: Wet Weight

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



# Certificate of Analytical Results 462766



## Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id: SB-2 50'  
Lab Sample Id: 462766-014

Matrix: Soil  
Date Collected: 05.08.13 10.45

Date Received: 05.09.13 09.10

Analytical Method: Inorganic Anions by EPA 300/300.1  
Tech: AMB  
Analyst: AMB  
Seq Number: 913663

Date Prep: 05.10.13 10.00

Prep Method: E300P  
% Moisture: 5.82  
Basis: Dry Weight

| 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  
Analyst: WRU  
Seq Number: 913378

% Moisture:  
Basis: Wet Weight

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





# Certificate of Analytical Results 462766



Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id: SB-2 90'  
Lab Sample Id: 462766-016

Matrix: Soil  
Date Collected: 05.08.13 11.05

Date Received: 05.09.13 09.10

Analytical Method: Percent Moisture  
Tech: SHSM  
Analyst: WRU  
Seq Number: 913386

% Moisture:  
Basis: Wet Weight

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





# Certificate of Analytical Results 462766



Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id: SB-3 10'  
Lab Sample Id: 462766-018

Matrix: Soil  
Date Collected: 05.08.13 12.05

Date Received: 05.09.13 09.10

Analytical Method: Inorganic Anions by EPA 300/300.1  
Tech: AMB  
Analyst: AMB  
Seq Number: 913663

Date Prep: 05.10.13 10.00

Prep Method: E300P  
% Moisture: 5.71  
Basis: Dry Weight

| 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  
Analyst: WRU  
Seq Number: 913386

% Moisture:  
Basis: Wet Weight

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





# Certificate of Analytical Results 462766



## Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id: SB-3 20'  
Lab Sample Id: 462766-020

Matrix: Soil  
Date Collected: 05.08.13 12.10

Date Received: 05.09.13 09.10

Analytical Method: Inorganic Anions by EPA 300/300.1  
Tech: AMB  
Analyst: AMB  
Seq Number: 913663

Date Prep: 05.10.13 10.00

Prep Method: E300P  
% Moisture: 4.91  
Basis: Dry Weight

| 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  
Analyst: WRU  
Seq Number: 913386

% Moisture:  
Basis: Wet Weight

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





# Certificate of Analytical Results 462766



## Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id: SB-3 50'  
Lab Sample Id: 462766-022

Matrix: Soil  
Date Collected: 05.08.13 12.15

Date Received: 05.09.13 09.10

Analytical Method: Inorganic Anions by EPA 300/300.1  
Tech: AMB  
Analyst: AMB  
Seq Number: 913664

Date Prep: 05.10.13 10.00

Prep Method: E300P  
% Moisture: 5.22  
Basis: Dry Weight

| 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  
Analyst: WRU  
Seq Number: 913386

% Moisture:  
Basis: Wet Weight

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



# Certificate of Analytical Results 462766



Conestoga Rovers & Associates, Midland, TX  
CEMC NM Ostate #40

|   |                                |                               |
|---|--------------------------------|-------------------------------|
| <b>Sample Id:</b> 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: <b>Inorganic Anions by EPA 300/300.1</b> |                                | 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: <b>Percent Moisture</b> |  | % Moisture:       |
| Tech: SHSM                                 |  | Basis: Wet Weight |
| Analyst: WRU                               |  |                   |
| 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   |



# Certificate of Analytical Results 462766



Conestoga Rovers & Associates, Midland, TX

CEMC NM Ostate #40

Sample Id: SB-3 90'  
Lab Sample Id: 462766-024

Matrix: Soil  
Date Collected: 05.08.13 12.25

Date Received: 05.09.13 09.10

Analytical Method: Percent Moisture  
Tech: SHSM  
Analyst: WRU  
Seq Number: 913386

% Moisture:  
Basis: Wet Weight

| Parameter        | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|------------------|------------|--------|------|-------|----------------|------|-----|
| Percent Moisture | TMOIST     | 5.38   | 1.00 | %     | 05.09.13 16.00 |      | 1   |



## Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

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|----------------|----------------|
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| (770) 449-8800 | (770) 449-5477 |
| (602) 437-0330 |                |



**Conestoga Rovers & Associates**

CEMC NM Ostate #40

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

Seq Number: 913663

Matrix: Solid

Prep Method: E300P

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**

Seq Number: 913664

Matrix: Solid

Prep Method: E300P

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**

Seq Number: 913663

Matrix: Soil

Prep Method: E300P

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**

Seq Number: 913663

Matrix: Soil

Prep Method: E300P

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**

Seq Number: 913664

Matrix: Soil

Prep Method: E300P

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 |      |



**QC Summary 462766**



**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  
Parent Sample Id: 462621-005

Matrix: Soil  
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  
Parent Sample Id: 462766-016

Matrix: Soil  
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 |      |



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Serial #: 330716 Page 1 of 3

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

| Company-City: <b>CRA</b> <b>MIDLAND</b>  |                                | Phone: <b>432-686-0086</b>                   |                 |
|--|--------------------------------|--|-----------------|
| Project Name-Location: <b>CENCO NM OSTATE #48</b>  |                                | Project ID: <b>073824</b>                    |                 |
| Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other: <b>QMD</b>  |                                | Proj. Manager (PM): <b>Tom Larson</b>        |                 |
| E-mail Results to: <b>tlason@cenworld.com</b>  |                                | Fax No.:                                     |                 |
| Invoice to: <input type="checkbox"/> Accounting <input type="checkbox"/> Inc. Invoice with Final Report <input type="checkbox"/> Invoice must have a P.O.  |                                | Bill to: <b>SEE SS&amp;W C.C. KNIGHT CRA</b> |                 |
| Quote/Pricing: <b>P.O. No.:</b>  |                                | <input type="checkbox"/> Call for P.O.       |                 |
| Reg Program: <b>UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW TRRP</b>   |                                |  |                 |
| QAPP Per-Contract: <b>CLP AGCEE NAVY DOE DOD USACE OTHER: NMOCD</b>  |                                |  |                 |
| Special DLs (GW DW QAPP MDLs RLS See Lab PM Included Call PM)  |                                |  |                 |
| Sampler Name: <b>JAKE FERRELL</b>  | Signature: <b>Jake Ferrell</b> |  |                 |
| Sample ID  | Sampling Date                  | Time   | Depth ft' in" m |
| 1) <b>SB-1</b>   | <b>5-7-13</b>                  | <b>2:30pm</b>                                | <b>5</b>        |
| 2) <b>10'</b>  |                                | <b>2:35</b>                                  | <b>5</b>        |
| 3) <b>15'</b>  |                                | <b>2:40</b>                                  | <b>5</b>        |
| 4) <b>20'</b>  |                                | <b>2:45</b>                                  | <b>5</b>        |
| 5) <b>40'</b>  |                                | <b>2:50</b>                                  | <b>5</b>        |
| 6) <b>50'</b>  |                                | <b>2:55</b>                                  | <b>5</b>        |
| 7) <b>70'</b>  |                                | <b>3:00</b>                                  | <b>5</b>        |
| 8) <b>90'</b>  |                                | <b>3:10</b>                                  | <b>5</b>        |
| 9) <b>SB-2</b>   | <b>5-8-13</b>                  | <b>10:20 AM</b>                              | <b>5</b>        |
| 10) <b>10'</b>   |                                | <b>10:25</b>                                 | <b>5</b>        |
| Relinquished by (Initials and Sign): <b>J. Ferrell</b>   |                                | Date & Time: <b>5-9-13 9:10 AM</b>           |                 |
| Relinquished to (Initials and Sign): <b>Shirley</b>  |                                | Date & Time: <b>5/13 9:10</b>                |                 |
| VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs<br>VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:<br>PAHs SIM 8310 8270<br>TX-1005 DRO GRO MA EPH MA VPH<br>SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL<br>OC Pesticides PCBs Herbicides OP Pesticides<br>Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2<br>SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)<br>EDB / DBCP<br><b>Cl - Chlorides 300, 0 EPA</b> |                                |  |                 |
| 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.  |                                |  |                 |
| Total Containers per COC: <b>50</b>  |                                |  |                 |
| Cooler Temp: <b>5.0</b> °C   |                                |  |                 |
| Addn: _____ Date _____ Rcv. by: _____ From: _____<br>Hold Samples (Surcharges will apply and are pre-approved)<br>Sample Clean-ups are pre-approved as needed  |                                |  |                 |

Preservatives: Various (N), 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), Fedlar 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)  
 Notice: Signature of this document and relinquishment of these samples constitutes a valid purchase order from client company to Xenco Laboratories and its affiliates, subcontractors and assigns under Xenco's standard terms and conditions of service unless previously negotiated under a fully executed client contract.  
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Serial #: 330717 Page 2 of 3

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

Company-City: **CLM MINDAARD** Phone: **432-646-0086**

Project Name-Location: **CLM ALMOSTATE #10** Project ID: **073824**

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

E-mail Results to: **ELMSON@CRAWFORD.COM** and **ELMSON@CRAWFORD.COM** Fax No:

Invoice to:  Accounting  Inc. Invoice with Final Report  Invoice must have a P.O. Bill to: **SEE SS&D CC.KRUGER@CLM**

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: **WVMSD****

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

| Sample ID | Sampling Date | Time | Depth ft' In" m | Matrix | Composite | Grab | # Containers | Container Size | Container Type | Preservatives | Relinquished by (Initials and Sign) | Date & Time | Relinquished to (Initials and Sign) | Date & Time | Cooler Temp: <b>5D</b> °C |
|-----------|---------------|------|-----------------|--------|-----------|------|--------------|----------------|----------------|---------------|-------------------------------------|-------------|-------------------------------------|-------------|---------------------------|
| 1         | 5B-2          | 15'  | 5.8.13          | 10:35  | 10:35     | S    | X            | 14oz           | CC             | CC            |                                     | 5.9.13      | 5.11.13                             |             |                           |
| 2         |               | 40'  |                 | 10:40  |           |      |              |                |                |               |                                     |             |                                     |             |                           |
| 3         |               | 50'  |                 | 10:45  |           |      |              |                |                |               |                                     |             |                                     |             |                           |
| 4         |               | 70'  |                 | 10:50  |           |      |              |                |                |               |                                     |             |                                     |             |                           |
| 5         |               | 90'  |                 | 11:05  |           |      |              |                |                |               |                                     |             |                                     |             |                           |
| 6         | 5B-3          | 5'   |                 | 12:00  |           |      |              |                |                |               |                                     |             |                                     |             |                           |
| 7         |               | 10'  |                 | 12:05  |           |      |              |                |                |               |                                     |             |                                     |             |                           |
| 8         |               | 15'  |                 | 12:09  |           |      |              |                |                |               |                                     |             |                                     |             |                           |
| 9         |               | 20'  | 5.8.13          | 12:10  |           |      |              |                |                |               |                                     |             |                                     |             |                           |
| 10        |               |      |                 |        |           |      |              |                |                |               |                                     |             |                                     |             |                           |

Lab Only: **ALMOSTATE**

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.

VOA: Full-List BTEX-MTBE EIOH 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, 05PA

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:

Total Containers per COC: **XX**

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

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

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

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Serial #: **330718** Page **3** of **3**

## ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

| Company-City<br><i>CLP MIAHID</i>   |               | Phone<br><i>432-686-0886</i>  |                 | Lab Only:<br><i>432-686-0886</i>   |                |                                   |                |   |               |                           |                            |
|---|---------------|---|-----------------|--|----------------|-----------------------------------|----------------|---|---------------|---------------------------|----------------------------|
| Project Name-Location<br><i>Call LIN OSTATE #40</i>   |               | Previously done at XENCO<br><input type="checkbox"/>                |                 | 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<br><i>LA</i>  |               | Proj. Manager (PM)<br><i>693824</i>                                 |                 | Project ID<br><i>693824</i>  |                |                                   |                |   |               |                           |                            |
| E-mail Results to<br><i>tlarsen@crowworld.com</i>   |               | Fax No:   |                 | Remarks  |                |                                   |                |   |               |                           |                            |
| Invoice to <input type="checkbox"/> Accounting <input type="checkbox"/> Inc. Invoice with Final Report <input type="checkbox"/> Invoice must have a P.O. Bill to: <i>SEE SSOW (C. August CLP)</i> |               | P.O. No:  |                 | Sample Clean-ups are pre-approved as needed  |                |                                   |                |   |               |                           |                            |
| Quote/Pricing:  |               | Call for P.O.   |                 | Addn: Date Rcv. by: From:  |                |                                   |                |   |               |                           |                            |
| Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW TRRP   |               | QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER: <i>ATWOOD</i> |                 | Special DLs (GW DW QAPP MDLs RLS See Lab PM Included Call PM)  |                |                                   |                |   |               |                           |                            |
| Sampler Name<br><i>WATERBOR</i>   |               | Signature<br><i>John F...</i>                                       |                 | VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs<br>VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:<br>PAHs SIM 8310 8270<br>TX-1005 DRO GRO MA EPH MA VPH<br>SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL<br>OC Pesticides PCBs Herbicides OP Pesticides<br>Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2<br>SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)<br>EDB / DBCP<br><i>Cl- chlorides, 700.0 TEST</i> |                |                                   |                |   |               |                           |                            |
| Sample ID   | Sampling Date | Time  | Depth ft' In" m | Matrix   | Composite Grab | # Containers                      | Container Size | Container Type  | Preservatives | Total Containers per COC: | Cooler Temp: <i>5.0</i> °C |
| 1   | SB-3          | 40'   | 5-8-13          | 12:13  | S              | X                                 | 1              | 402   | C             | X                         |                            |
| 2   |               | 50'   | 5-8-13          | 12:15  | S              | X                                 | 1              | 402   | C             | X                         |                            |
| 3   |               | 70'   | 5-8-13          | 12:20  | S              | X                                 | 1              | 402   | C             | X                         |                            |
| 4   |               | 90'   | 5-8-13          | 12:25  | S              | X                                 | 1              | 402   | C             | X                         |                            |
| 5   |               |   |                 |  |                |                                   |                |   |               |                           |                            |
| 6   |               |   |                 |  |                |                                   |                |   |               |                           |                            |
| 7   |               |   |                 |  |                |                                   |                |   |               |                           |                            |
| 8   |               |   |                 |  |                |                                   |                |   |               |                           |                            |
| 9   |               |   |                 |  |                |                                   |                |   |               |                           |                            |
| 10  |               |   |                 |  |                |                                   |                |   |               |                           |                            |
| Relinquished by (Initials and Sign)<br><i>John F...</i>   |               | Date & Time<br><i>5-8-13 9:11 AM</i>                                |                 | Relinquished to (Initials and Sign)<br><i>John F...</i>  |                | Date & Time<br><i>5/9/13 5:10</i> |                | Other (O) 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

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 05/09/2013 09:10:00 AM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 462766

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  
Kelsey Brooks

Date: 05/09/2013

Checklist reviewed by: Kelsey Brooks  
Kelsey Brooks

Date: 05/09/2013



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



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



PHOTO 5: View of excavated reserve pit facing south



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



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



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



PHOTO 8: View of backfill activities facing north



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



PHOTO 9: View of backfill activities facing west



PHOTO 10: View of backfilling activities facing south



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



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*

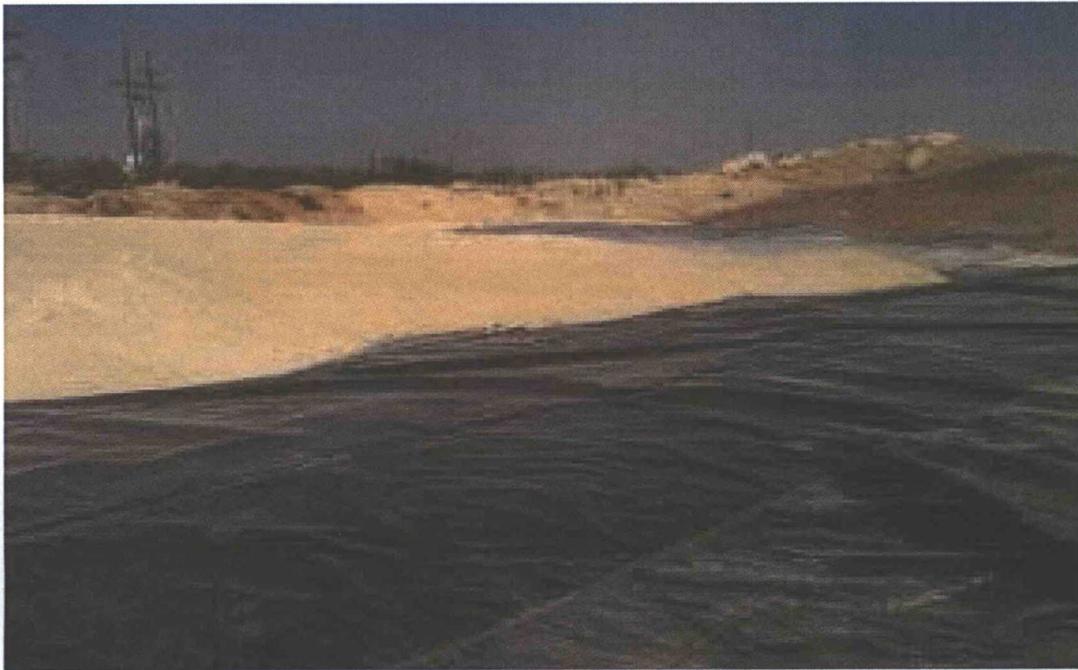


PHOTO 12: View of 20 mil poly liner installation/backfill facing northwest



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



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