Robert Speer
Portfolio Manager,
Upstream Business Unit
Remediation Team

Chevron Environmental Management Company
1400 Smith St. 07049
Houston, TX 77002
Tel (731) 372-6117
Cell (713) 301-7274
rspeer@chevron.com

October 1, 2015

Kellie Jones
Environmental Specialist, District 1
New Mexico Oil Conservation Division
811 South First St.
Artesia, NM 88210

Re: Central Vacuum Unit 266 Injection Line Release Soil Assessment and Delineation Activities Report

Dear Ms. Jones:

Please find enclosed for your files copies of the following report for the Central Vacuum Unit 266 Injection Line release project site.

- *CVU 266 Injection Line – 2015 Soil Assessment and Delineation Activities Report, Unit E - Section 6 – Township 18 South – Range 35 East, Lea County, NM*

This report was prepared by Conestoga-Rovers & Associates (CRA) on behalf of Chevron Environmental Management Company (CEMC) to document assessment activities for a release of 75 bbls of produced water as documented in our January 2011 submittal of form C-141. Soil sampling in the release area indicate that vertical and horizontal delineation of Chlorides have been achieved at the site, and that no further assessment or remediation activities are warranted for this project.

Should you have any questions regarding the content of this report, please do not hesitate to contact me. I look forward to working with you in the future.

Sincerely,

Rob Speer
Environmental Project Manager

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Chevron (CEMC)	Contact: Rob Speer
Address: 1400 Smith Street, Houston, Texas 77002	Telephone No. (713) 372-6117
Facility Name: Central Vacuum Unit No. 266	Facility Type: Injection Well

Surface Owner: State of New Mexico	Mineral Owner: State of New Mexico	API No. 30-025-30022

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	6	18S	35 E					Lea

Latitude: 32.782766° **Longitude:** -103.510673°

NATURE OF RELEASE

Type of Release: Produced Water/Release to Land	Volume of Release: 75 bbls water	Volume Recovered: Zero (0)
Source of Release: Injection Well	Date and Hour of Occurrence: 01/06/11 and 12:00 Noon	Date and Hour of Discovery: 01/06/11 and 12:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Larry Johnson	
By Whom? Kim Klahsen	Date and Hour: 03/06/09 and 11:58 AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Visible water on location due to a rupture in the injection line. After excavation completed the investigation as to why line ruptured.

Describe Area Affected and Cleanup Action Taken.*

Area affected included well pad and down slope lease road to the southeast. The injection line was shut-in and emergency one-call was initiated for excavation and repair of ruptured line.

Initial sampling activities commenced. Results of soil sampling indicated the presence of chloride concentrations in shallow soils. In response, a comprehensive soil assessment was performed to confirm the extents of the soil impacts.

Results of the additional assessment activities are provided in the attached report.

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

Signature: Rob Speer	OIL CONSERVATION DIVISION	
Printed Name: Rob Speer	Approved by Environmental Specialist:	
Title: Project Manager	Approval Date:	Expiration Date:
E-mail Address: rspeer@chevron .com	Conditions of Approval:	Attached ☐
Date: 9-30-15 Phone: (713) 372-6117		

* Attach Additional Sheets If Necessary

Final

Soil Assessment and Delineation Activities Report

Central Vacuum Unit No. 266 Injection Line Release
Unit E, Section 6, Township 18 South, Range 35 East Lovington, New Mexico

Chevron Environmental Management Company

1755 Wittington Place, Suite 500 Dallas Texas 75234
074635 | Report No 3 | September 28, 2015

Soil Assessment and Delineation Activities Report

Central Vacuum Unit No. 266 Injection Line Release
Unit E, Section 6, Township 18 South, Range 35 East
Lovington, New Mexico

Chevron Environmental Management Company

Thomas C. Larson
Principal, Midland Operations Manager

Jake L. Ferenz
Project Manager

1755 Wittington Place Suite 500 Dallas Texas USA

074635 | Report No 3 |September 28, 2015

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Appendices

1. Introduction

GHD is pleased to present this Soil Assessment and Delineation Activities Report to Chevron Environmental Management Company (CEMC) for the Central Vacuum Unit No. 266 injection line release location (hereafter referred to as the "Site").

2. Project Information and Background

The Site is located in Unit E, Section 6, Township 18 South, Range 35 East, approximately 0.65-miles southwest of Buckeye, New Mexico, in eastern Lea County (Figure 1 and Figure 2).

Chevron submitted an initial C-141 form (Appendix A) to the New Mexico Oil Conservation Division (NMOCD) dated January 10, 2011, describing a release of 75 barrels (bbls) of produced water with zero (0) volume being recovered. The source of the release was recorded to have been a ruptured injection line, and the release was described as follows:

"FS found water running down location. Leak due to rupture in injection line. After excavation is complete.....will investigate cause of rupture."

Crain Environmental (Crain) conducted the initial field assessment activities at the Site in January 2011. Crain's assessment included a site visit, shallow soil sample collection, analytical laboratory analyses and preliminary determinations of impacts to environmental media. GHD met with Ms. Crain on April 21, 2011 to review and transfer the file material for the Site as well as to discuss the history of delineation efforts to date for the Site. A soil analytical summary of Crain's initial sample collection is presented as Table 1.

In 2014, Chevron contracted GHD to perform a comprehensive soil assessment at the Site by implementing a soil boring program. A Site visit was performed on April 8, 2014 by GHD. During the Site visit, boring locations were flagged for utility locating purposes. In addition, the Site was walked to observe Site features; which included oversight of a geophysical site survey by way of Ground Penetrating Radar (GPR) to assess the presence of subsurface utility hazards. Multiple surface and subsurface hazards were identified at the Site. A site details and utility map is presented as Figure 3. On April 14, 2014, GHD advanced eleven soil borings to depths ranging from approximately 35-feet to 60-feet below ground surface (bgs). Results of the 2014 soil boring and sampling program indicated the presence of chloride concentrations in soil.

In October 2014, GHD prepared and submitted a soil assessment and delineation activities report to CEMC detailing recommendations to further investigate and determine the vertical and horizontal extent of chloride impacts at the Site. CEMC concurred with the recommendations outlined in GHD's 2014 report, thus GHD returned to the Site in 2015 to execute the planned field activities. The results of those activities are provided herein.

3. Recommended Remediation Action Limits

Information available on the Petroleum Recovery Research Center (PRRC) Mapping Portal and the United States Geological Survey (USGS) Current Water Database for the Nation; indicates the depth to groundwater at the Site is greater than 100-feet bgs; the nearest private domestic water

source is greater than 200-feet from the release site; the nearest public/municipal water source is greater than 1,000-feet from the release site; and the release site lies more than 1,000 horizontal feet from the nearest surface water body. Consequently, the NMOCD total ranking criteria score is zero (0) for the Site. The anticipated site-specific Recommended Remediation Action Levels (RRALs) to be applied to this location by the NMOCD are 10 milligram per kilogram (mg/kg) for benzene; 50 mg/kg for total benzene, toluene, ethylbenzene, and xylenes (BTEX); 5,000 mg/kg for TPH; and an NMOCD accepted 500 mg/kg for chlorides.

4. Drilling and Sampling - 2014

On April 8, 2014, GHD's contracted service provider, Harrison & Cooper, Inc. (HCI) of Lubbock, Texas submitted an initial New Mexico One Call utility locate ticket (2014110877). GHD submitted a MCBU Chevron Dig Plan with appropriate attachments for approval to the Chevron Buckeye Field Management Team. On April 14, 2014 GHD and HCI mobilized to the Site to begin soil boring activities. The soil borings were pre-cleared via air knife techniques to a depth of 5-feet bgs or until refusal. The remainder of each boring was advanced using an air rotary drill rig. Eleven soil borings were advanced across the Site on April 14 and 15, 2014. Eight soil borings were advanced to total depths of 35-feet bgs and three soil borings were advanced to total depths of 60-feet bgs. Chloride concentrations in soil were field screened by mixing soil samples with distilled water. The rinsate was then screened using Hach chloride test strips to measure chloride concentrations in milligrams per liter (mg/L). This field method led to soil boring (SB-10) being advanced to 60-feet bgs, and soil borings (SB-3 and SB-6) being advanced to 35-feet bgs. All eleven soil borings were plugged with bentonite. Soil borings were logged in accordance with the Unified Soil Classification System and recorded.

Soil samples were collected for laboratory analysis from each boring (SB-1 through SB-11) at varying intervals beginning at the surface (0-feet bgs). Soil samples were packed into laboratory prepared jars and stored in a cooler with ice. The soil samples were sent to Xenco Laboratories (Xenco) in Odessa, Texas for analysis of chlorides by EPA Method E300.0.

4.1 Soil Sampling Analytical Results - 2014

The soil type observed in soil samples collected during the drilling program consisted of light gray, dense-weathered caliche from the surface to approximately 8-feet bgs. Light yellow to orange caliche, weathered to dense, interbedded with well cemented very fine grain sandstone was observed from approximately 8-feet bgs to 25-feet bgs. Unconsolidated, very fine grain, yellow/orange/brown sand interbedded with moderate to well cemented very fine grain sandstone lithologies were noted in the 35-feet and 60-feet interval. Moisture content observed in the soil samples was dry in all instances.

Soil boring samples (SB-1, SB-2, SB-3, SB-4, SB-5, SB-7, SB-8, SB-9 and SB-11) collected from the Site for laboratory analyses were below the Site RRAL (500 mg/kg) for chloride concentrations at total depth. Soil boring samples (SB-6 and SB-10) collected from the Site for laboratory analysis exceeded the Site RRAL at total depths of 35-feet and 60-feet for chloride concentrations (500 mg/kg) at 1,410 mg/kg and 631 mg/kg, respectively. Soil laboratory analytical results from GHD's 2014 activities are summarized in Table 2, and on Figure 4.

5. Drilling and Sampling - 2015

On August 11, 2015, HCI of Lubbock, Texas submitted an initial New Mexico One Call utility locate ticket (2015331929). GHD submitted a MCBU Chevron Dig Plan with appropriate attachments for approval to the Chevron Buckeye Field Management Team. On August 19, 2015 GHD and HCI mobilized to the Site to begin soil boring activities. The soil borings were pre-cleared via air knife techniques to a depth of 5-feet bgs or until refusal. The remainder of each boring was advanced using an air rotary drill rig. On August 20, 2015, four soil borings (SB-12, SB-13, SB-14, and SB-15) were advanced to approximately 35-feet bgs and one boring (SB-16) was advanced to 90-feet bgs. All five soil borings were plugged with bentonite. A photo log documenting the 2014 and 2015 drilling activities is included as Appendix B. Soil borings were logged in accordance with the Unified Soil Classification System and recorded. Visual representation of the 2014 and 2015 boring logs can be found in Appendix C.

Soil samples were collected for laboratory analysis from each boring (SB-12 through SB-16) at varying intervals beginning at the surface (0-feet bgs). Soil samples were packed into laboratory prepared jars and stored in a cooler with ice. The soil samples were sent to Xenco in Midland, Texas for analysis of chlorides by EPA Method 300/300.1. The soil laboratory analytical reports for all sampling activities (2011 to 2015) are included as Appendix D.

5.1 Soil Sampling Analytical Results - 2015

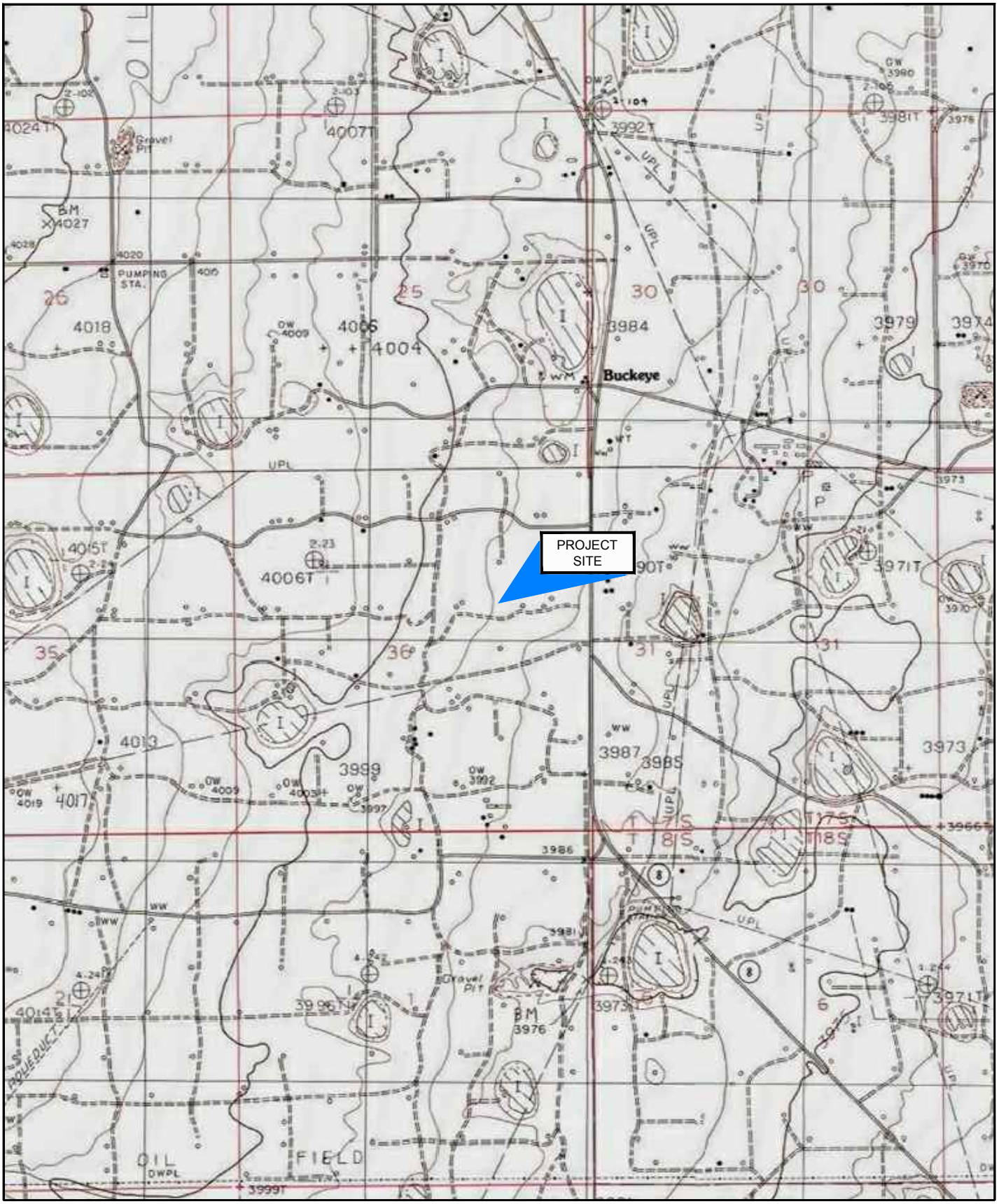
The soil type observed in soil samples collected during the 2015 drilling program consisted of dense and weathered dull yellow to orange caliche from the surface to approximately 15-feet bgs. Pale yellow, weathered and dense caliche interbedded with poor to moderately cemented very fine grain sandstone was observed to approximately 21-feet bgs. Dull orange very fine grain sand with broken caliche interbedded with poor to moderately cemented very fine grain sandstone lithologies were noted to a total depth of approximately 35-feet bgs. Moisture content observed in the soil samples was dry in all instances with the exception of soil boring (SB-16) at the 68-foot interval; which was noted as being moist.

Samples collected from four soil borings (SB-12, SB-14, SB-15 and SB-16) were below the Site RRAL (500 mg/kg) for chloride concentrations; with the exception of SB-14 at the 15-foot interval (593 mg/kg). Soil boring (SB-13) exceeded site RRAL (500 mg/kg) at the surface and in the 10-foot to 25-foot interval. This data from the soil boring program demonstrates that the nature and extent of chloride impacts from the release incident are minimal and the potential risk to impact groundwater is extremely low. A soil analytical summary of the 2015 results is presented in Table 3. A Site Details and Analytical Results Map (2014 – 2015) is presented as Figure 4.

6. Conclusions

A thorough subsurface investigation was implemented at the Site. Evaluation of the analytical data obtained from soil assessment and delineation activities performed in April of 2014 and August of 2015 indicates that vertical and horizontal delineation of chloride impacts has been achieved at the Site. Based on data provided in this report, no further delineation or remedial efforts are warranted.

Figures



Source: USGS 7.5 Minute Quad "Buckeye and Lovington SW, Texas"

Lat/Long: 32.7933° North, 103.5097° West

0 1000 2000ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LEA COUNTY, NEW MEXICO
CENTRAL VACUUM UNIT #266

074635-00

Sep 16, 2015

SITE LOCATION MAP

FIGURE 1

CAD File: I:\CAD\Files\07----\074---\074635-Chevron-CVU #266\074635-00\074635-00(003)\074635-00(003)GN-DL001.dwg

Source: USDA FSA Imagery, May 10, 2014

Lat/Long: 32.7933° North, 103.5097° West

0 250 500ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LEA COUNTY, NEW MEXICO
CENTRAL VACUUM UNIT #266

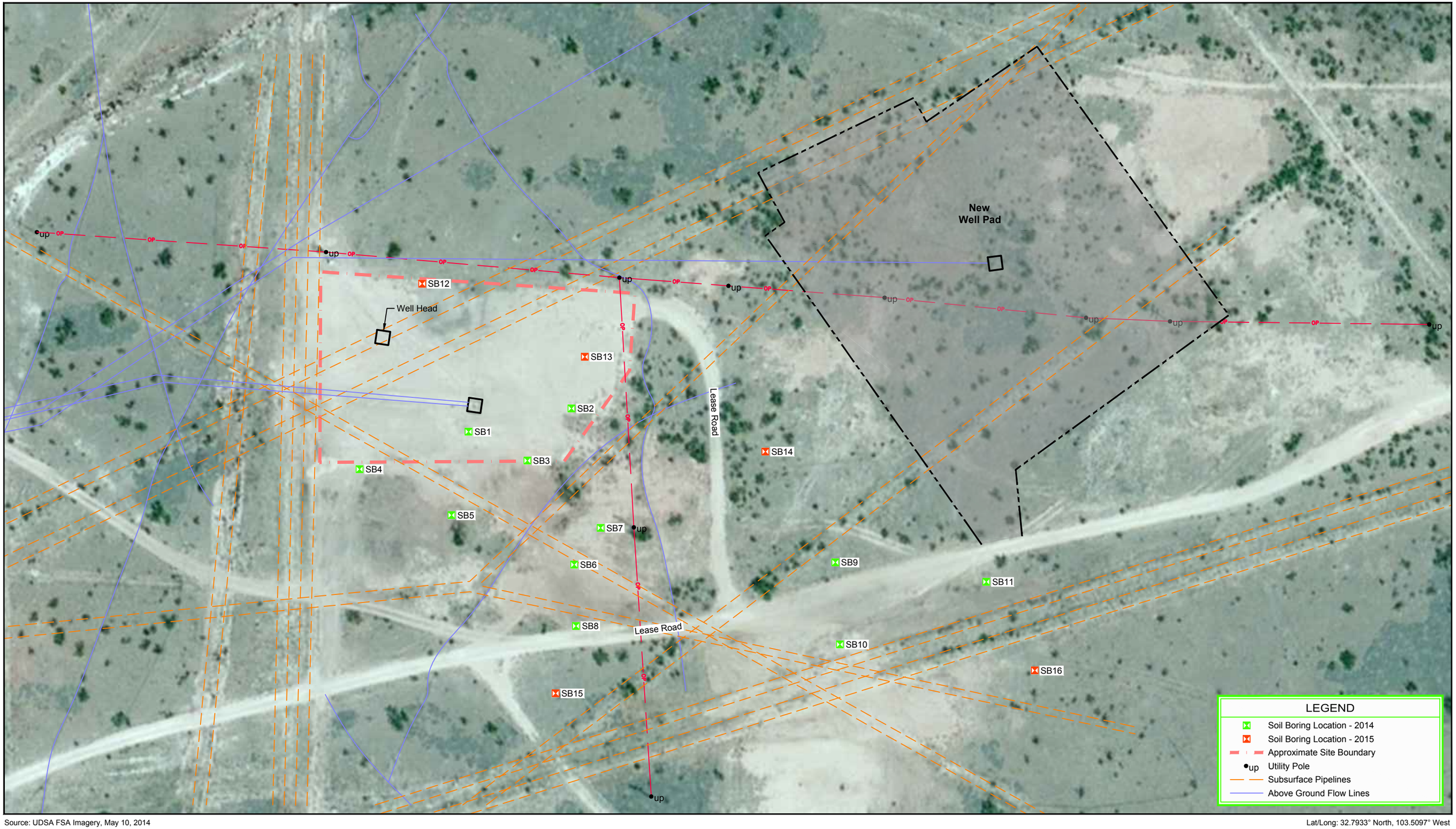
074635-00

Sep 16, 2015

SITE AERIAL MAP

FIGURE 2

CAD File: I:\CAD\Files\07----\074---\074635-Chevron-CVU #266\074635-00\074635-00(003)\074635-00(003)GN-DL001.dwg



Source: UDSA FSA Imagery, May 10, 2014

Lat/Long: 32.7933° North, 103.5097° West

0 40 80ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LEA COUNTY, NEW MEXICO
CENTRAL VACUUM UNIT #266

074635-00

Sep 16, 2015

SITE DETAILS AND UTILITIES MAP

FIGURE 3

CAD File: I:\CAD\Files\07----\074---\074635-Chevron-CVU #266\074635-00\074635-00(003)\074635-00(003)GN-DL001.dwg

NOTE:

1. All analytical results reported in mg/kg.

SB-12 08/20/15							
Depth	0'	5'	10'	15'	20'	25'	35'
Chloride	3.03	5.02	6.76	4.19	<2.15	<2.09	3.49

SB12

SB-13 08/20/15							
Depth	0'	5'	10'	15'	20'	25'	35'
Chloride	28300	260	527	599	613	1180	385

SB13

SB-2 04/15/14						
Depth	0'	5'	10'	15'	25'	35'
Chloride	18300	3250	3080	685	34.9	16.2

SB2

Well Head

SB-1 04/15/14						
Depth	0'	5'	15'	35'	50'	60'
Chloride	7600	1310	976	2760	143	95.7

SB1

SB-3 04/15/14					
Depth	0'	5'	15'	35'	
Chloride	6390	433	16.3	6.73	

SB3

Lease Road

SB-14 08/20/15							
Depth	0'	5'	10'	15'	20'	25'	35'
Chloride	79.5	342	186	593	235	51.6	13.0

SB14

SB4

SB-4 04/15/14				
Depth	0'	5'	15'	35'
Chloride	393	159	17.4	12.2

SB-7 04/15/14						
Depth	0'	5'	10'	15'	25'	35'
Chloride	9000	3430	3950	715	386	388

SB7

SB-9 04/14/14						
Depth	0'	5'	10'	15'	25'	35'
Chloride	17.8	38.10	526	183	17.8	18.3

SB5

SB-5 04/15/14						
Depth	0'	5'	10'	15'	25'	35'
Chloride	760	173	913	185	32.7	22

SB9

SB-11 04/14/14						
Depth	0'	5'	10'	20'	40'	60'
Chloride	7360	1150	169	183	7.57	7.72

SB11

SB6

SB-6 04/15/14						
Depth	0'	5'	10'	15'	25'	35'
Chloride	15500	1630	1070	2330	269	1410

SB-16 08/20/15									
Depth	0'	5'	10'	15'	20'	30'	50'	70'	90'
Chloride	10.7	248	10.9	9.07	3.24	5.04	2.19	<2.12	2.13

SB8

Lease Road

SB10

SB-8 04/14/14						
Depth	0'	5'	10'	15'	25'	35'
Chloride	29600	3220	2220	1430	133	32.2

SB16

SB-10 04/14/14						
Depth	0'	5'	15'	25'	35'	60'
Chloride	4610	851	135	746	1580	631

SB15

SB-15 08/20/15							
Depth	0'	5'	10'	15'	20'	25'	35'
Chloride	45.9	99.1	27.1	17.1	17.9	13.8	12.1

LEGEND

- Soil Boring Location - 2014
- Soil Boring Location - 2015
- Depth — Depth of Sample (ft)

Source: UDSA FSA Imagery, May 10, 2014

Lat/Long: 32.7933° North, 103.5097° West

0 20 60ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

GHD

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LEA COUNTY, NEW MEXICO
CENTRAL VACUUM UNIT #266

074635-00

Sep 29, 2015

SITE DETAILS AND ANALYTICAL RESULTS MAP

FIGURE 4

CAD File: I:\CAD\Files\07----\074---\074635-Chevron-CVU #266\074635-00\074635-00(003)\074635-00(003)GN-DL001.dwg

Tables

Table 1
Soil Analytical Summary - Crain
Central Vacuum Unit No. 266
Lea County, New Mexico

Sample ID	Sample Date	Depth (bgs)	Chlorides (mg/kg)
NMOCD Recommended Remediation Action Levels			***500 (mg/kg)***
SS-1	1/19/11	6"	70,400
SS-1	1/18/11	1'	3,160
SS-1	1/18/11	2'	912
SS-2	1/19/11	6"	19,200
SS-2	1/18/11	1'	2,400
SS-2	1/18/11	2'	1,810
SS-2	1/18/11	3'	1,520
SS-3	1/19/11	6"	46,400
SS-3	1/18/11	1'	1,730
SS-3	1/18/11	2'	2,400
SS-3	1/18/11	3'	1,410
SS-4	1/19/11	6"	57,600
SS-4	1/18/11	1'	8,000
SS-4	1/18/11	2'	4,880
SS-5	1/19/11	6"	51,200
SS-5	1/18/11	1'	11,400
SS-5	1/18/11	2'	5,440
SS-5	1/18/11	3'	5,360
SS-6	1/19/11	6"	42,400
SS-6	1/18/11	1'	2,200
SS-6	1/18/11	2'	6,160
SS-6	1/18/11	3'	3,200

Notes:

1. All analytical results reported in (mg/kg) milligrams per kilogram
2. Chloride analyses by EPA Method E300.0
3. Highlighted cells indicate concentrations exceeding guidance RRALs
4. bgs - below ground surface
5. Depth of samples reported in feet

Table 2
Soil Analytical Summary - 2014
Central Vacuum Unit No. 266
Lea County, New Mexico

Sample ID	Sample Date	Depth (bgs)	Chlorides (mg/kg)
NMOCD Recommended Remediation Action Levels			***500 (mg/kg)***
SB-1	4/15/14	0'	7,600
SB-1	4/15/14	5'	1,310
SB-1	4/15/14	15'	976
SB-1	4/15/14	35'	2,760
SB-1	4/15/14	50'	143
SB-1	4/15/14	60'	95.7
SB-2	4/15/14	0'	18,300
SB-2	4/15/14	5'	3,250
SB-2	4/15/14	10'	3,080
SB-2	4/15/14	15'	685
SB-2	4/15/14	25'	34.9
SB-2	4/15/14	35'	16.2
SB-3	4/15/14	0'	6,390
SB-3	4/15/14	5'	433
SB-3	4/15/14	15'	16.3
SB-3	4/15/14	35'	6.73
SB-4	4/15/14	0'	393
SB-4	4/15/14	5'	159
SB-4	4/15/14	15	17.4
SB-4	4/15/14	35'	12.2
SB-5	4/15/14	0'	760
SB-5	4/15/14	5'	173
SB-5	4/15/14	10'	913
SB-5	4/15/14	15'	185
SB-5	4/15/14	25'	32.7
SB-5	4/15/14	35'	22.0
SB-6	4/14/14	0'	15,500
SB-6	4/14/14	5'	1,630
SB-6	4/14/14	10'	1,070
SB-6	4/14/14	15'	2,330
SB-6	4/14/14	25'	269
SB-6	4/14/14	35'	1,410

Table 2
Soil Analytical Summary - 2014
Central Vacuum Unit No. 266
Lea County, New Mexico

Sample ID	Sample Date	Depth (bgs)	Chlorides (mg/kg)
NMOCD Recommended Remediation Action Levels			***500 (mg/kg)***
SB-7	4/15/14	0'	9,000
SB-7	4/15/14	5'	3,430
SB-7	4/15/14	10'	3,950
SB-7	4/15/14	15'	715
SB-7	4/15/14	25'	386
SB-7	4/15/14	35'	388
SB-8	4/14/14	0'	29,600
SB-8	4/14/14	5'	3,220
SB-8	4/14/14	10'	2,220
SB-8	4/14/14	15'	1,430
SB-8	4/14/14	25'	133
SB-8	4/14/14	35'	32.2
SB-9	4/14/14	0'	17.8
SB-9	4/14/14	5'	38.1
SB-9	4/14/14	10'	526
SB-9	4/14/14	15'	183
SB-9	4/14/14	25'	17.8
SB-9	4/14/14	35'	18.3
SB-10	4/14/14	0'	4,610
SB-10	4/14/14	5'	851
SB-10	4/14/14	15'	135
SB-10	4/14/14	25'	746
SB-10	4/14/14	35'	1,580
SB-10	4/14/14	60'	631
SB-11	4/14/14	0'	7,360
SB-11	4/14/14	5'	1,150
SB-11	4/14/14	10'	169
SB-11	4/14/14	20'	183
SB-11	4/14/14	40'	7.57
SB-11	4/14/14	60'	7.72

Notes:

1. All analytical results reported in (mg/kg) milligrams per kilogram
2. Chloride analyses by EPA Method E300.0
3. Highlighted cells indicate concentrations exceeding guidance RRALs
4. bgs - below ground surface
5. Depth of samples reported in feet

Table 3
Soil Analytical Summary - 2015
Central Vacuum Unit No. 266
Lea County, New Mexico

Sample ID	*Sample Date*	*Depth (bgs)*	*Chlorides (mg/kg)*
NMOCD Recommended Remediation Action Levels			*500 (mg/kg)*
SB-12	8/20/15	0'	3.03
SB-12	8/20/15	5'	5.02
SB-12	8/20/15	10'	6.76
SB-12	8/20/15	15'	4.19
SB-12	8/20/15	20'	<2.15
SB-12	8/20/15	25'	<2.09
SB-12	8/20/15	35'	3.49
SB-13	8/20/15	0'	28,300
SB-13	8/20/15	5'	260
SB-13	8/20/15	10'	527
SB-13	8/20/15	15'	599
SB-13	8/20/15	20'	613
SB-13	8/20/15	25'	1,180
SB-13	8/20/15	35'	385
SB-14	8/20/15	0'	79.5
SB-14	8/20/15	5'	342
SB-14	8/20/15	10'	186
SB-14	8/20/15	15'	593
SB-14	8/20/15	20'	235
SB-14	8/20/15	25'	51.6
SB-14	8/20/15	35'	13.0
SB-15	8/20/15	0'	45.9
SB-15	8/20/15	5'	99.1
SB-15	8/20/15	10'	27.1
SB-15	8/20/15	15'	17.1
SB-15	8/20/15	20'	17.9
SB-15	8/20/15	25'	13.8
SB-15	8/20/15	35'	12.1
SB-16	8/20/15	0'	10.7
SB-16	8/20/15	5'	248
SB-16	8/20/15	10'	10.9
SB-16	8/20/15	15'	9.07
SB-16	8/20/15	20'	3.24
SB-16	8/20/15	30'	5.04
SB-16	8/20/15	50'	2.19
SB-16	8/20/15	70'	<2.12
SB-16	8/20/15	90'	2.13

Notes:

1. All analytical results reported in (mg/kg) milligrams per kilogram
2. Chloride analyses by EPA Method E300.0
3. Highlighted cells indicate concentrations exceeding guidance RRALs
4. bgs - below ground surface
5. Depth of samples reported in feet

Appendices

Appendix A
Original Form C-141

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 March 17, 1999

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

Release Notification and Corrective Action

OPERATOR

X Initial Report Final Report

Name of Company **CHEVRON**	Contact **Josie DeLeon**
Address 56 Texas Camp Road, Lovington NM 88260	Telephone No.Office: 575-396-4414 ext 223 Cellular: 432-425-1528
Facility Name: CVU-66	Facility Type: Injection well

Surface Owner:	Mineral Owner	Lease No.

LOCATION OF RELEASE-API # 30-025-25796

Longitude: degrees minutes seconds Lattitude: degrees minutes seconds

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	6	18.0S	35E		North		West	Lea

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 75 BW	Volume Recovered0
Source of Release : Injection well	Date and Hour of Occurrence Jan 6, 2011 @ approx 12: 00 Noon	Date and Hour of Discovery Jan 6, 2011 12:00 p.m.
Was Immediate Notice Given? x Yes ☐ No Not Required	If YES, To Whom? Mr. Larry Johnson	
By Whom? /Kim Klahsen		
Was a Watercourse Reached? ☐ Yes x No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*FS found water running down location. Leak due to rupture in injection line. After excavation complete will investigate cause of rupture.

Describe Area Affected and Cleanup Action Taken.*Shut in and called in "one call" for excavation for repair of line.

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

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Josie DeLeon	Approved byDistrict Supervisor:	
Title: Safety Specialist	Approval Date:	Expiration Date:
Date: January 10, 2011 Phone: 432-425-1528	Conditions of Approval:	Attached ☐

* Attach Additional Sheets If Necessary

Appendix B
Photograph Log

Photo 1 – View of drilling activities (SB-4) facing south west

Photo 2 – View of drilling activities (SB-2) facing east

Site Photographs

Photo 3 – View of drilling activities (SB-4) facing north east

Photo 4 – View of drilling activities (SB-11) facing south east

Site Photographs

Photo 3 – View of air knife/bore hole clearance activities facing north east

Photo 4 – View of drilling activities (SB-13) facing north east

Site Photographs

Photo 3 – View of air rotary drill rig and overhead utility observation facing north

Photo 4 – View of drilling activities (SB-14) facing north

Site Photographs

Appendix C
Soil Boring Logs

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

No. SB-1

Client: CEMC

File No.: 74635
Date: 4/15/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 2:05 pm Finish Time: 2:50 pm
							☒				Pad Material: Caliche, light gray, crushed-broken, dry
							☒	5			Caliche: Light gray, dense-weathered, dry
								10			Caliche: Light yellow-orange, dense-weathered,dry
							☒	15			
								20			Caliche: Light yellow-orange, weathered-dense, interbedded with well cemented, very fine grain sandstone, dry
								25			Sand: Light yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								30			
							☒	35			Sand: Bright yellowish-brown, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								40			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

Client: CEMC

No. SB-1

File No.: 74635
Date: 4/15/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 2:05 pm Finish Time: 2:50 pm
								45			
							☒	50			Sand: Bright yellowish-brown, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								55			
							☒	60			Total Depth = 60-Feet
								65			
								70			
								75			
								80			

☒ Sampling Interval

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

Water First Noted

Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

No. SB-2

Client: CEMC

File No.: 74635
Date: 4/15/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 1:15 pm Finish Time: 1:45 pm
							☒	⬭			Pad Material: Caliche, light gray, crushed-broken, dry
							☒	5			Caliche: Light gray, dense-weathered, dry
							☒	10			Caliche: Light yellow-orange, dense-weathered, dry
							☒	15			
								20			Caliche: Light yellow-orange, weathered-dense, interbedded with well cemented very fine grain sandstone, dry
							☒	25			Sand: Light yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								30			
							☒	35			Sand: Bright yellowish brown, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry. **Total Depth = 35-feet**
								40			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

No. SB-3

Client: CEMC

File No.: 74635
Date: 4/15/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 12:30 pm Finish Time: 1:00 pm
							☒				Pad Material: Caliche, light gray, crushed-broken, dry
							☒	5			Caliche: Light gray, dense-weathered, dry
								10			Caliche: Light yellow-orange, dense-weathered, dry
							☒	15			
								20			Caliche: Light yellow-orange, weathered-dense interbedded with well cemented very fine grain sandstone, dry
								25			Sand: Light yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								30			
							☒	35			Sand: Bright yellowish brown, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry. **Total Depth = 35-feet**
								40			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

No. SB-4

Client: CEMC

File No.: 74635
Date: 4/15/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 10:45 am Finish Time: 11:10 am
							☒	0			Pad Material: Caliche, light gray, crushed-broken, dry
											Caliche: Light gray, dense-weathered, dry
							☒	5			
								10			Caliche: Light yellow-orange, dense-weathered, dry
							☒	15			
											Caliche: Light yellow-orange, weathered-dense interbedded with well cemented very fine grain sandstone, dry
								20			
											Sand: Light yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								25			
								30			Sand: Bright yellowish brown, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry. **Total Depth = 35-feet**
							☒	35			
								40			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

No. SB-5

Client: CEMC

File No.: 74635
Date: 4/15/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 11:25 am Finish Time: 11:55 am
							☒				Top Soil: Clayey, sandy silt, grayish yellow brown, unconsolidated, broken caliche in matrix, dry
							☒	5			Caliche: Light gray, dense-weathered, dry
							☒	10			Caliche: Light yellow-orange, dense-weathered, dry
							☒	15			
								20			Caliche: Light yellow-orange, weathered-dense interbedded with well cemented very fine grain sandstone, dry
							☒	25			Sand: Light yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								30			
							☒	35			Total Depth = 35-feet
								40			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

Client: CEMC

No. SB-6

File No.: 74635
Date: 4/14/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 4:10 pm Finish Time: 4:40 pm
							☒				Top Soil: Clayey sandy silt, grayish yellow brown, unconsolidated, broken caliche in matrix, dry
							☒	5			Caliche: Light gray, dense-weathered, dry
							☒	10			Caliche: Light yellow-orange, dense-weathered, dry
							☒	15			
								20			Caliche: Light yellow-orange, weathered-dense interbedded with well cemented very fine grain sandstone, dry
							☒	25			Sand: Light yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
							☒	30			
								35			Total Depth = 35-feet
								40			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

Client: CEMC

No. SB-7

File No.: 74635
Date: 4/15/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 10:00 am Finish Time: 10:30 am
							☒	0			Top Soil: Clayey sandy silt, grayish yellow brown, unconsolidated, broken caliche in matrix, dry
							☒	5			Caliche: Light gray, dense-weathered, dry
							☒	10			Caliche: Light yellow-orange, dense-weathered, dry
							☒	15			
								20			Caliche: Light yellow-orange, weathered-dense interbedded with well cemented very fine grain sandstone, dry
							☒	25			Sand: Yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								30			
							☒	35			Total Depth = 35-feet
								40			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

No. SB-8

Client: CEMC

File No.: 74635
Date: 4/14/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 3:30 pm Finish Time: 4:00 pm
							☒				Top Soil: Clayey sandy silt, grayish yellow brown, unconsolidated, broken caliche in matrix, dry
							☒	5			Caliche: Light gray, dense-weathered, dry
							☒	10			Caliche: Light yellow-orange, dense-weathered, dry
							☒	15			
								20			Caliche: Light yellow-orange, weathered-dense interbedded with well cemented very fine grain sandstone, dry
							☒	25			Sand: Yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								30			
							☒	35			Total Depth = 35-feet
								40			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

Client: CEMC

No. SB-9

File No.: 74635
Date: 4/14/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 2:50 pm Finish Time: 3:15 pm
							⬭				Top Soil: Clayey sandy silt, grayish yellow brown, unconsolidated, broken caliche in matrix, dry
							☒	5			Caliche: Light gray, dense-weathered, dry
							☒	10			Caliche: Light yellow-orange, dense-weathered, dry
							☒	15			
								20			Caliche: Light yellow-orange, weathered-dense interbedded with well cemented very fine grain sandstone, dry
							☒	25			Sand: Yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								30			
							☒	35			Total Depth = 35-feet
								40			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

Client: CEMC

No. SB-10

File No.: 74635
Date: 4/14/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 1:10 pm Finish Time: 2:30 pm
							☒	0			Top Soil: Clayey sandy silt, grayish yellow brown, unconsolidated, broken caliche in matrix, dry
							☒	5			Caliche: Light gray, dense-weathered, dry
							☒	10			Caliche: Light yellow-orange, dense-weathered, dry
							☒	15			
								20			Caliche: Light yellow-orange, weathered-dense interbedded with well cemented very fine grain sandstone, dry
							☒	25			
								30			Sand: Yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
							☒	35			
								40			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

Client: CEMC

No. SB-10

File No.: 74635
Date: 4/14/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 1:10 pm Finish Time: 2:30 pm
								45			Sand: Yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								50			
								55			Sand: Dull yellow-orange, very fine grain, unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
							☒	60			Sand: Dull orange, very fine grain, unconsolidated interbedded with slight-moderate cemented very fine grain sandstone, dry. **Total Depth = 60-feet**
								65			
								70			
								75			
								80			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

Client: CEMC

No. SB-11

File No.: 74635
Date: 4/14/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 11:55 pm Finish Time: 12:45 pm
							☒	0			Top Soil: Clayey sandy silt, grayish yellow brown, unconsolidated, broken caliche in matrix, dry
							☒	5			Caliche: Light gray, dense-weathered, dry
							☒	10			Caliche: Light yellow-orange, dense-weathered, dry
								15			
							☒	20			Caliche: Light yellow-orange, weathered-dense interbedded with well cemented very fine grain sandstone, dry
								25			Sand: Yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								30			
								35			
							☒	40			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

SOIL BORING LOG

Project: Central Vacuum Unit #266
Lea County, New Mexico

Client: CEMC

No. SB-11

File No.: 74635
Date: 4/14/2014
Drilling Co.: Harrison & Cooper, Inc.
Supervisor: Kenny Cooper
Type Rig: Air/Mud Rotary
Logged by: John Fergerson

LABORATORY TEST DATA (Results Reported in mg/kg)						FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Chlorides	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 11:55 pm Finish Time: 12:45 pm
											Sand: Yellow-orange, very fine grain unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								45			
								50			Sand: Dull yellow-orange, very fine grain, unconsolidated, interbedded with moderate-well cemented very fine grain sandstone, dry
								55			
							☒	60			Total Depth = 60-feet
								65			
								70			
								75			
								80			

☒ Sampling Interval

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

▽ Water First Noted

⬭ Analyzed Sample

STRATIGRAPHIC LOG

PROJECT NAME: CVU # 266
PROJECT NUMBER: 074635
CLIENT: CEMC
LOCATION: Lea County, New Mexico

HOLE DESIGNATION: SB-12
DATE COMPLETED: August 20, 2015
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: J. Fergerson

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE USCS
0	Well Pad Material, crushed caliche mixed with sand, dry					
2	CALICHE, dull yellowish orange, dense-weathered, slightly moist	2.00		AIR	1.0	
4						
6				AIR	1.0	
8						
10	becomes light yellowish orange, weathered-dense, dry			AIR	1.0	
12						
14	becomes pale yellow, weathered-dense, interbedded with poor-moderately cemented very fine grained sandstone, dry			AIR	1.0	
16						
18						
20	SAND, dull orange, very fine grained, unconsolidated with broken caliche in matrix, interbedded with poor-moderately cemented very fine grained sandstone, dry	20.00		AIR	1.0	SP
22						
24						

NOTES:

STRATIGRAPHIC LOG

PROJECT NAME: CVU # 266
PROJECT NUMBER: 074635
CLIENT: CEMC
LOCATION: Lea County, New Mexico

HOLE DESIGNATION: SB-12
DATE COMPLETED: August 20, 2015
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: J. Fergerson

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE USCS
26	becomes dull yellowish orange, moderate-well cemented very fine grained sandstone, no caliche			AIR	1.0	
28						
30						
32				AIR	1.0	
34						
	BOREHOLE TERMINATED @ 35.0ft BGS	35.00				
36						
38						
40						
42						
44						
46						
48						

NOTES:

STRATIGRAPHIC LOG

PROJECT NAME: CVU # 266
PROJECT NUMBER: 074635
CLIENT: CEMC
LOCATION: Lea County, New Mexico

HOLE DESIGNATION: SB-13
DATE COMPLETED: August 20, 2015
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: J. Fergerson

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE USCS
0	Well Pad Material, crushed caliche mixed with sand, dry					
2	CALICHE, dull yellowish orange, dense-weathered, slightly moist	2.00		AIR	1.0	
4						
6				AIR	1.0	
8						
10	becomes light yellowish orange, weathered-dense, dry			AIR	1.0	
12						
14	becomes pale yellow, weathered-dense, interbedded with poor-moderately cemented very fine grained sandstone, dry			AIR	1.0	
16						
18						
20	SAND, dull orange, very fine grained, unconsolidated with broken caliche in matrix, interbedded with poor-moderately cemented very fine grained sandstone, dry	20.00		AIR	1.0	SP
22						
24						

NOTES:

STRATIGRAPHIC LOG

PROJECT NAME: CVU # 266
PROJECT NUMBER: 074635
CLIENT: CEMC
LOCATION: Lea County, New Mexico

HOLE DESIGNATION: SB-13
DATE COMPLETED: August 20, 2015
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: J. Fergerson

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE USCS
26	becomes dull yellowish orange, moderate-well cemented very fine grained sandstone, no caliche			AIR	1.0	
28						
30						
32				AIR	1.0	
34						
	BOREHOLE TERMINATED @ 35.0ft BGS	35.00				
36						
38						
40						
42						
44						
46						
48						

NOTES:

STRATIGRAPHIC LOG

PROJECT NAME: CVU # 266
PROJECT NUMBER: 074635
CLIENT: CEMC
LOCATION: Lea County, New Mexico

HOLE DESIGNATION: SB-14
DATE COMPLETED: August 20, 2015
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: J. Fergerson

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE USCS
0	Well Pad Material, crushed caliche mixed with sand, slightly moist					
2	CALICHE, dull yellowish orange, dense-weathered, slightly moist	2.00		AIR	1.0	
4						
6				AIR	1.0	
8	becomes light yellowish orange, weathered-dense, dry					
10				AIR	1.0	
12	becomes pale yellow, weathered-dense, interbedded with poor-moderately cemented very fine grained sandstone, dry					
14				AIR	1.0	
16						
18	SAND, dull orange, very fine grained, unconsolidated with broken caliche in matrix, interbedded with poor-moderately cemented very fine grained sandstone, dry	18.00				SP
20				AIR	1.0	
22						
24						

NOTES:

STRATIGRAPHIC LOG

PROJECT NAME: CVU # 266
PROJECT NUMBER: 074635
CLIENT: CEMC
LOCATION: Lea County, New Mexico

HOLE DESIGNATION: SB-14
DATE COMPLETED: August 20, 2015
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: J. Fergerson

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	INTERVAL	REC (ft)	USCS
26						
28	becomes dull yellowish orange, moderate-well cemented very fine grained sandstone, no caliche			AIR	1.0	
30						
32				AIR	1.0	
34						
	BOREHOLE TERMINATED @ 35.0ft BGS	35.00				
36						
38						
40						
42						
44						
46						
48						

NOTES:

STRATIGRAPHIC LOG

PROJECT NAME: CVU # 266
PROJECT NUMBER: 074635
CLIENT: CEMC
LOCATION: Lea County, New Mexico

HOLE DESIGNATION: SB-15
DATE COMPLETED: August 20, 2015
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: J. Fergerson

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	INTERVAL	REC (ft)	USCS
	Clayey SILT, grayish yellow brown, with broken caliche in matrix, slightly moist					ML
2	CALICHE, dull yellowish orange, dense-weathered, slightly moist	2.00		AIR	1.0	
4						
6				AIR	1.0	
8	becomes light yellowish orange, weathered-dense, dry					
10				AIR	1.0	
12	becomes pale yellow, weathered-dense, interbedded with poor-moderately cemented very fine grained sandstone, dry					
14				AIR	1.0	
16						
18	SAND, dull orange, very fine grained, unconsolidated with broken caliche in matrix, interbedded with poor-moderately cemented very fine grained sandstone, dry	18.00				SP
20				AIR	1.0	
22						
24						

NOTES:

STRATIGRAPHIC LOG

PROJECT NAME: CVU # 266
PROJECT NUMBER: 074635
CLIENT: CEMC
LOCATION: Lea County, New Mexico

HOLE DESIGNATION: SB-15
DATE COMPLETED: August 20, 2015
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: J. Fergerson

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	INTERVAL	REC (ft)	USCS
26						
28	becomes dull yellowish orange, moderate-well cemented very fine grained sandstone, no caliche			AIR	1.0	
30						
32				AIR	1.0	
34						
	BOREHOLE TERMINATED @ 35.0ft BGS	35.00				
36						
38						
40						
42						
44						
46						
48						

NOTES:

STRATIGRAPHIC LOG

PROJECT NAME: CVU # 266
PROJECT NUMBER: 074635
CLIENT: CEMC
LOCATION: Lea County, New Mexico

HOLE DESIGNATION: SB-16
DATE COMPLETED: August 20, 2015
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: J. Fergerson

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE USCS
0	Clayey SILT, grayish yellow brown, with broken caliche in matrix, slightly moist					ML
2	CALICHE, dull yellowish orange, dense-weathered, slightly moist	2.00		AIR	1.0	
4						
6				AIR	1.0	
8	becomes light yellowish orange, weathered-dense, dry					
10				AIR	1.0	
12	becomes pale yellow, weathered-dense, interbedded with poor-moderately cemented very fine grained sandstone, dry					
14				AIR	1.0	
16						
18	SAND, dull orange, very fine grained, unconsolidated with broken caliche in matrix, interbedded with poor-moderately cemented very fine grained sandstone, dry	18.00				SP
20				AIR	1.0	
22						
24						

NOTES:

STRATIGRAPHIC LOG

PROJECT NAME: CVU # 266
PROJECT NUMBER: 074635
CLIENT: CEMC
LOCATION: Lea County, New Mexico

HOLE DESIGNATION: SB-16
DATE COMPLETED: August 20, 2015
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: J. Fergerson

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	INTERVAL	REC (ft)	USCS
26						
28				AIR	1.0	
30						
32				AIR	1.0	
34						
36				AIR	1.0	
38						
40						
42				AIR	1.0	
44						
46				AIR	1.0	
48						

NOTES:

STRATIGRAPHIC LOG

PROJECT NAME: CVU # 266
PROJECT NUMBER: 074635
CLIENT: CEMC
LOCATION: Lea County, New Mexico

HOLE DESIGNATION: SB-16
DATE COMPLETED: August 20, 2015
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: J. Fergerson

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	INTERVAL	REC (ft)	USCS
52				AIR	1.0	
54						
56				AIR	1.0	
58						
60				AIR	1.0	
62						
64				AIR	1.0	
66						
68				AIR	1.0	
70						
72				AIR	1.0	
74						

NOTES:

STRATIGRAPHIC LOG

PROJECT NAME: CVU # 266
PROJECT NUMBER: 074635
CLIENT: CEMC
LOCATION: Lea County, New Mexico

HOLE DESIGNATION: SB-16
DATE COMPLETED: August 20, 2015
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: J. Fergerson

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE USCS
76						
78	becomes bright yellowish brown, dry			AIR	1.0	
80						
82				AIR	1.0	
84						
86						
88				AIR	1.0	
90	BOREHOLE TERMINATED @ 90.0ft BGS	90.00				
92						
94						
96						
98						

NOTES:

Appendix D
Soil Laboratory Analytical Reports

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 24, 2011

CINDY CRAIN

CRAIN ENVIRONMENTAL

2925 E. 17TH STREET

ODESSA, TX 79761

RE: CVU #266

Enclosed are the results of analyses for samples received by the laboratory on 01/19/11 14:19.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene
Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CRAIN ENVIRONMENTAL
CINDY CRAIN
2925 E. 17TH STREET
ODESSA TX, 79761
Fax To: (432) 272-0304

Received:	01/19/2011	Sampling Date:	01/18/2011
Reported:	01/24/2011	Sampling Type:	Soil
Project Name:	CVU #266	Sampling Condition:	Cool & Intact
Project Number:	0111-002	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SS - 1 (1') (H100143-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: LR**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3160**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 1 (2') (H100143-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: LR**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**912**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 2 (1') (H100143-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: LR**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2400**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 2 (2') (H100143-04)

Chloride, SM4500Cl-B mg/kg **Analyzed By: LR**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1810**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 2 (3') (H100143-05)

Chloride, SM4500Cl-B mg/kg **Analyzed By: LR**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1520**	16.0	01/21/2011	ND	432	108	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CRAIN ENVIRONMENTAL
CINDY CRAIN
2925 E. 17TH STREET
ODESSA TX, 79761
Fax To: (432) 272-0304

Received:	01/19/2011	Sampling Date:	01/18/2011
Reported:	01/24/2011	Sampling Type:	Soil
Project Name:	CVU #266	Sampling Condition:	Cool & Intact
Project Number:	0111-002	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SS - 3 (1') (H100143-06)

Chloride, SM4500Cl-B mg/kg **Analyzed By: LR**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1730**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 3 (2') (H100143-07)

Chloride, SM4500Cl-B mg/kg **Analyzed By: LR**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2400**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 3 (3') (H100143-08)

Chloride, SM4500Cl-B mg/kg **Analyzed By: LR**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1410**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 4 (1') (H100143-09)

Chloride, SM4500Cl-B mg/kg **Analyzed By: LR**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**8000**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 4 (2') (H100143-10)

Chloride, SM4500Cl-B mg/kg **Analyzed By: LR**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4880**	16.0	01/21/2011	ND	432	108	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CRAIN ENVIRONMENTAL
CINDY CRAIN
2925 E. 17TH STREET
ODESSA TX, 79761
Fax To: (432) 272-0304

Received:	01/19/2011	Sampling Date:	01/18/2011
Reported:	01/24/2011	Sampling Type:	Soil
Project Name:	CVU #266	Sampling Condition:	Cool & Intact
Project Number:	0111-002	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SS - 5 (1') (H100143-11)

Chloride, SM4500Cl-B mg/kg **Analyzed By: LR**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**11400**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 5 (2') (H100143-12)

Chloride, SM4500Cl-B mg/kg **Analyzed By: LR**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5440**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 5 (3') (H100143-13)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5360**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 6 (1') (H100143-14)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2200**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 6 (2') (H100143-15)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6160**	16.0	01/21/2011	ND	432	108	400	0.00	

Cardinal Laboratories

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CRAIN ENVIRONMENTAL
CINDY CRAIN
2925 E. 17TH STREET
ODESSA TX, 79761
Fax To: (432) 272-0304

Received:	01/19/2011	Sampling Date:	01/18/2011
Reported:	01/24/2011	Sampling Type:	Soil
Project Name:	CVU #266	Sampling Condition:	Cool & Intact
Project Number:	0111-002	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SS - 6 (3') (H100143-16)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3200**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 1 (6") (H100143-17)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**70400**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 2 (6") (H100143-18)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**19200**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 3 (6") (H100143-19)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**46400**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 4 (6") (H100143-20)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**57600**	16.0	01/21/2011	ND	432	108	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

CRAIN ENVIRONMENTAL
CINDY CRAIN
2925 E. 17TH STREET
ODESSA TX, 79761
Fax To: (432) 272-0304

Received:	01/19/2011	Sampling Date:	01/19/2011
Reported:	01/24/2011	Sampling Type:	Soil
Project Name:	CVU #266	Sampling Condition:	Cool & Intact
Project Number:	0111-002	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SS - 5 (6") (H100143-21)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**51200**	16.0	01/21/2011	ND	432	108	400	0.00	

Sample ID: SS - 6 (6") (H100143-22)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**42400**	16.0	01/21/2011	ND	432	108	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Crain Environmental
Project Manager: Cindy Crain
Address: 2925 East 17th St
City: Odessa State: TX Zip: 79761
Phone #: 432-530-9797 Fax #: 432-272-0304
Project #: 011-002 Project Owner: Chevron
Project Name: CVU # 266
Project Location: Lea Co. NM
Sampler Name:

BILL TO
P.O. #:
Company:
Attn:
Address: Email
City: Email State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST: Chlorides

FOR LAB USE ONLY Lab I.D.	Sample I.D.		(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chlorides
H10043-1	SS-1	(1')	G	1			X							1-18-11	9:30	✓
2	SS-1	(2')	G	1			X								9:56	✓
3	SS-2	(1')	G	1			X								10:15	✓
4	SS-2	(2')	G	1			X								10:25	✓
5	SS-2	(3')	G	1			X								10:40	✓
6	SS-3	(1')	G	1			X								10:05	✓
7	SS-3	(2')	G	1			X								11:15	✓
8	SS-3	(3')	G	1			X								11:25	✓
9	SS-4	(1')	G	1			X								12:00	✓
10	SS-4	(2')	G	1			X								12:15	✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Vicki Gaughan Date: 1-19-11 Time: 8:19
Received By: Jodi Henson
Relinquished By: Date: Time:
Received By:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:
Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
4.5°C
CHECKED BY: (Initials)

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS: E-mail Results to: Cindy.crain@gmail.com

FORM-006
Revision 1.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

2-3

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Crain Environmental		**BILL TO**	
Project Manager: Cindy Crain		P.O. #:	
Address: 2925 East 17th St		Company:	
City: Odessa State: T.X. Zip: 79761		Attn:	
Phone #: 432-530-9797 Fax #: 432-272-0304		Address:	
Project #: 0111-002 Project Owner: Chevron		City:	
Project Name: CVU # 266		State: Zip:	
Project Location: Lea Co. N.M.		Phone #:	
Sampler Name: Virgil Quaglieri		Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE / COOL	OTHER:	SAMPLING DATE	SAMPLING TIME	ANALYSIS REQUEST: Chlorides
H10011-11	55-5 (1')	G	1			/							1-12-11	12:20	/
12	55-5 (2')	G	1			/								12:30	/
13	55-5 (3')	G	1			/								12:40	/
14	55-6 (1')	G	1			/								12:50	/
15	55-6 (2')	G	1			/								13:00	/
16	55-6 (3')	G	1			/								13:10	/
	5														

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Virgil Quaglieri	Date: 1-19-11 Time: 2:19	Received By: Jodi Henson	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No; 4.5° C	CHECKED BY: (Initials)	REMARKS: Email Results to: cindy.crain@gmail.com

FORM-006
Revision 1.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

#26

3-3

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Crain Environmental		**BILL TO**	
Project Manager: Cindy Crain		P.O. #:	
Address: 2925 East 17th St		Company:	
City: Odessa	State: T.X. Zip: 79761	Attn:	
Phone #: 432-530-9797	Fax #: 432-272-0304	Address:	
Project #: 0111-002	Project Owner: Chevron	City: Lovington	
Project Name: C.V.U # 266		State: N.M. Zip:	
Project Location: Lea Co. N.M.		Phone #:	
Sampler Name: Virgil Quaglies.		Fax #:	

ANALYSIS REQUEST: Chloride

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	PRESERV.: ACID/BASE	ICE / COOL	OTHER	SAMPLING: DATE	TIME	Chloride
H10014 3-17	SS-1 (6")	G	1			X							1-19-11	8:20	✓
18	SS-2 (6")	G	1			X								8:25	✓
19	SS-3 (6")	G	1			X								8:30	✓
20	SS-4 (6")	G	1			X								8:35	✓
21	SS-5 (6")	G	1			X								8:40	✓
22	SS-6 (6")	G	1			X								8:45	✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Virgil Quaglies	Date: 1-19-11 Time: 8:19	Received By: Jodi Henson	Phone Result: ☐ Yes ☐ No	Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No; 4.5°C	CHECKED BY: (Initials) JH	REMARKS: Email Results to: cindy.crain@gmail.com	

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

FORM-006
Revision 1.0

#26

Analytical Report 483548

for

Conestoga Rovers & Associates

Project Manager: Chris Knight

CEMC- CVU#226

074635

28-APR-14

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-16-TX), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

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

Xenco-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)

28-APR-14

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

Reference: XENCO Report No(s): **483548**
CEMC- CVU#226
Project Address: Lea County, NM

Chris Knight:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 483548. 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. 483548 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 483548

Conestoga Rovers & Associates, Midland, TX

CEMC- CVU#226

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
074635-JMF-SB11	S	04-14-14 12:00	- 0 ft	483548-001
074635-JMF-SB11	S	04-14-14 12:15	- 5 ft	483548-002
074635-JMF-SB11	S	04-14-14 12:20	- 10 ft	483548-003
074635-JMF-SB11	S	04-14-14 12:25	- 20 ft	483548-004
074635-JMF-SB11	S	04-14-14 12:30	- 40 ft	483548-005
074635-JMF-SB11	S	04-14-14 12:35	- 60 ft	483548-006
074635-JMF-SB10	S	04-14-14 13:10	- 0 ft	483548-007
074635-JMF-SB10	S	04-14-14 13:15	- 5 ft	483548-008
074635-JMF-SB10	S	04-14-14 13:25	- 15 ft	483548-009
074635-JMF-SB10	S	04-14-14 13:30	- 25 ft	483548-010
074635-JMF-SB10	S	04-14-14 13:35	- 35 ft	483548-011
074635-JMF-SB9	S	04-14-14 14:50	- 0 ft	483548-012
074635-JMF-SB9	S	04-14-14 14:55	- 5 ft	483548-013
074635-JMF-SB9	S	04-14-14 15:00	- 10 ft	483548-014
074635-JMF-SB9	S	04-14-14 15:05	- 15 ft	483548-015
074635-JMF-SB9	S	04-14-14 15:10	- 25 ft	483548-016
074635-JMF-SB9	S	04-14-14 15:15	- 35 ft	483548-017
074635-JMF-SB10	S	04-14-14 14:25	- 60 ft	483548-018
074635-JMF-SB8	S	04-14-14 15:30	- 0 ft	483548-019
074635-JMF-SB8	S	04-14-14 15:35	- 5 ft	483548-020
074635-JMF-SB8	S	04-14-14 15:40	- 10 ft	483548-021
074635-JMF-SB8	S	04-14-14 15:45	- 15 ft	483548-022
074635-JMF-SB8	S	04-14-14 15:50	- 25 ft	483548-023
074635-JMF-SB8	S	04-14-14 15:55	- 35 ft	483548-024
074635-JMF-SB6	S	04-14-14 16:10	- 0 ft	483548-025
074635-JMF-SB6	S	04-14-14 16:15	- 5 ft	483548-026
074635-JMF-SB6	S	04-14-14 16:20	- 10 ft	483548-027
074635-JMF-SB6	S	04-14-14 16:25	- 15 ft	483548-028
074635-JMF-SB6	S	04-14-14 16:30	- 25 ft	483548-029
074635-JMF-SB6	S	04-14-14 16:35	- 35 ft	483548-030
074635-JMF-SB7	S	04-15-14 10:00	- 0 ft	483548-031
074635-JMF-SB7	S	04-15-14 10:05	- 5 ft	483548-032
074635-JMF-SB7	S	04-15-14 10:10	- 10 ft	483548-033
074635-JMF-SB7	S	04-15-14 10:15	- 15 ft	483548-034
074635-JMF-SB7	S	04-15-14 10:20	- 25 ft	483548-035
074635-JMF-SB7	S	04-15-14 10:25	- 35 ft	483548-036
074635-JMF-SB4	S	04-15-14 10:45	- 0 ft	483548-037
074635-JMF-SB4	S	04-15-14 10:50	- 5 ft	483548-038
074635-JMF-SB4	S	04-15-14 11:00	- 15 ft	483548-039
074635-JMF-SB4	S	04-15-14 11:05	- 35 ft	483548-040
074635-JMF-SB5	S	04-15-14 11:25	- 0 ft	483548-041
074635-JMF-SB5	S	04-15-14 11:30	- 5 ft	483548-042
074635-JMF-SB5	S	04-15-14 11:35	- 10 ft	483548-043

Sample Cross Reference 483548

Conestoga Rovers & Associates, Midland, TX

CEMC- CVU#226

074635-JMF-SB5	S	04-15-14 11:40	- 15 ft	483548-044
074635-JMF-SB5	S	04-15-14 11:45	- 25 ft	483548-045
074635-JMF-SB5	S	04-15-14 11:50	- 35 ft	483548-046
074635-JMF-SB3	S	04-15-14 12:30	- 0 ft	483548-047
074635-JMF-SB3	S	04-15-14 12:35	- 5 ft	483548-048
074635-JMF-SB3	S	04-15-14 12:45	- 15 ft	483548-049
074635-JMF-SB3	S	04-15-14 12:55	- 35 ft	483548-050
074635-JMF-SB2	S	04-15-14 13:15	- 0 ft	483548-051
074635-JMF-SB2	S	04-15-14 13:20	- 5 ft	483548-052
074635-JMF-SB2	S	04-15-14 13:25	- 10 ft	483548-053
074635-JMF-SB2	S	04-15-14 13:30	- 15 ft	483548-054
074635-JMF-SB2	S	04-15-14 13:35	- 25 ft	483548-055
074635-JMF-SB2	S	04-15-14 13:40	- 35 ft	483548-056
074635-JMF-SB1	S	04-15-14 14:05	- 0 ft	483548-057
074635-JMF-SB1	S	04-15-14 14:10	- 5 ft	483548-058
074635-JMF-SB1	S	04-15-14 14:20	- 15 ft	483548-059
074635-JMF-SB1	S	04-15-14 14:35	- 35 ft	483548-060
074635-JMF-SB1	S	04-15-14 14:40	- 50 ft	483548-061
074635-JMF-SB1	S	04-15-14 14:45	- 60 ft	483548-062

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-939306 Inorganic Anions by EPA 300/300.1

Chloride recovered above QC limits in the Matrix Spike. Samples affected are: 483548-033, -047, -032, -043, -042, -030, -031, -041, -029, -035, -037, -044, -036, -045, -046, -034, -038, -039, -040.

The Laboratory Control Sample for Chloride is within laboratory Control Limits

Certificate of Analysis Summary 483548

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Chris Knight
Project Location: Lea County, NM

Date Received in Lab: Thu Apr-17-14 10:20 am
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	483548-001		483548-002		483548-003		483548-004		483548-005		483548-006	
	Field Id:	074635-JMF-SB11		074635-JMF-SB11		074635-JMF-SB11		074635-JMF-SB11		074635-JMF-SB11		074635-JMF-SB11	
	Depth:	0 ft		5 ft		10 ft		20 ft		40 ft		60 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-14-14 12:00		Apr-14-14 12:15		Apr-14-14 12:20		Apr-14-14 12:25		Apr-14-14 12:30		Apr-14-14 12:35	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30	
	Analyzed:	Apr-22-14 02:51		Apr-22-14 03:14		Apr-22-14 03:37		Apr-22-14 04:45		Apr-22-14 05:07		Apr-22-14 05:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		7360	211	1150	42.9	169	10.9	183	10.7	7.57	2.09	7.72	2.11
Percent Moisture	***Extracted:***												
	Analyzed:	Apr-18-14 12:25		Apr-18-14 12:25		Apr-18-14 12:25		Apr-18-14 12:25		Apr-18-14 12:25		Apr-18-14 12:25	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		5.23	1.00	6.76	1.00	8.20	1.00	6.42	1.00	4.52	1.00	5.32	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483548

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Chris Knight
Project Location: Lea County, NM

Date Received in Lab: Thu Apr-17-14 10:20 am
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	483548-007		483548-008		483548-009		483548-010		483548-011		483548-012	
	Field Id:	074635-JMF-SB10		074635-JMF-SB10		074635-JMF-SB10		074635-JMF-SB10		074635-JMF-SB10		074635-JMF-SB9	
	Depth:	0 ft		5 ft		15 ft		25 ft		35 ft		0 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-14-14 13:10		Apr-14-14 13:15		Apr-14-14 13:25		Apr-14-14 13:30		Apr-14-14 13:35		Apr-14-14 14:50	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30	
	Analyzed:	Apr-22-14 05:53		Apr-22-14 06:15		Apr-22-14 08:31		Apr-22-14 09:57		Apr-22-14 10:19		Apr-22-14 10:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		4610	102	851	108	135	11.3	746	42.4	1580	106	17.8	4.25
Percent Moisture	***Extracted:***												
	Analyzed:	Apr-18-14 12:25		Apr-18-14 12:25		Apr-18-14 12:25		Apr-18-14 12:25		Apr-18-14 12:25		Apr-18-14 12:25	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		1.56	1.00	7.33	1.00	11.3	1.00	5.77	1.00	5.62	1.00	5.89	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483548

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Chris Knight
Project Location: Lea County, NM

Date Received in Lab: Thu Apr-17-14 10:20 am
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	483548-013		483548-014		483548-015		483548-016		483548-017		483548-018	
	Field Id:	074635-JMF-SB9		074635-JMF-SB9		074635-JMF-SB9		074635-JMF-SB9		074635-JMF-SB9		074635-JMF-SB10	
	Depth:	5 ft		10 ft		15 ft		25 ft		35 ft		60 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-14-14 14:55		Apr-14-14 15:00		Apr-14-14 15:05		Apr-14-14 15:10		Apr-14-14 15:15		Apr-14-14 14:25	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30	
	Analyzed:	Apr-22-14 11:05		Apr-22-14 11:27		Apr-22-14 14:51		Apr-22-14 15:14		Apr-22-14 15:37		Apr-22-14 15:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		38.1	4.41	526	10.8	183	11.0	17.8	2.10	18.3	2.07	631	14.6
Percent Moisture	***Extracted:***												
	Analyzed:	Apr-18-14 12:25		Apr-18-14 12:25		Apr-18-14 12:25		Apr-18-14 12:25		Apr-18-14 12:25		Apr-18-14 12:25	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.21	1.00	7.82	1.00	9.30	1.00	4.59	1.00	3.57	1.00	31.4	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483548

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Chris Knight
Project Location: Lea County, NM

Date Received in Lab: Thu Apr-17-14 10:20 am
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	483548-019		483548-020		483548-021		483548-022		483548-023		483548-024	
	Field Id:	074635-JMF-SB8		074635-JMF-SB8		074635-JMF-SB8		074635-JMF-SB8		074635-JMF-SB8		074635-JMF-SB8	
	Depth:	0 ft		5 ft		10 ft		15 ft		25 ft		35 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-14-14 15:30		Apr-14-14 15:35		Apr-14-14 15:40		Apr-14-14 15:45		Apr-14-14 15:50		Apr-14-14 15:55	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30	
	Analyzed:	Apr-22-14 16:22		Apr-22-14 17:07		Apr-22-14 17:30		Apr-22-14 17:52		Apr-22-14 18:15		Apr-22-14 19:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		29600	1020	3220	113	2220	109	1430	41.7	133	4.34	32.2	2.21
Percent Moisture	***Extracted:***												
	Analyzed:	Apr-18-14 12:25		Apr-18-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		2.40	1.00	11.2	1.00	8.05	1.00	4.00	1.00	7.82	1.00	9.39	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483548

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Chris Knight
Project Location: Lea County, NM

Date Received in Lab: Thu Apr-17-14 10:20 am
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	483548-025		483548-026		483548-027		483548-028		483548-029		483548-030	
	Field Id:	074635-JMF-SB6		074635-JMF-SB6		074635-JMF-SB6		074635-JMF-SB6		074635-JMF-SB6		074635-JMF-SB6	
	Depth:	0 ft		5 ft		10 ft		15 ft		25 ft		35 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-14-14 16:10		Apr-14-14 16:15		Apr-14-14 16:20		Apr-14-14 16:25		Apr-14-14 16:30		Apr-14-14 16:35	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30	
	Analyzed:	Apr-22-14 19:46		Apr-22-14 20:08		Apr-22-14 20:31		Apr-22-14 20:54		Apr-23-14 12:11		Apr-23-14 12:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		15500	407	1630	106	1070	41.9	2330	108	269	11.0	1410	42.9
Percent Moisture	***Extracted:***												
	Analyzed:	Apr-17-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		1.82	1.00	5.79	1.00	4.64	1.00	7.83	1.00	9.14	1.00	6.68	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483548

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Chris Knight
Project Location: Lea County, NM

Date Received in Lab: Thu Apr-17-14 10:20 am
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	483548-031		483548-032		483548-033		483548-034		483548-035		483548-036	
	Field Id:	074635-JMF-SB7		074635-JMF-SB7		074635-JMF-SB7		074635-JMF-SB7		074635-JMF-SB7		074635-JMF-SB7	
	Depth:	0 ft		5 ft		10 ft		15 ft		25 ft		35 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-15-14 10:00		Apr-15-14 10:05		Apr-15-14 10:10		Apr-15-14 10:15		Apr-15-14 10:20		Apr-15-14 10:25	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30	
	Analyzed:	Apr-23-14 13:19		Apr-23-14 13:42		Apr-23-14 14:04		Apr-23-14 14:27		Apr-23-14 15:35		Apr-23-14 15:58	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9000	420	3430	113	3950	110	715	21.6	386	10.6	388	10.5
Percent Moisture	***Extracted:***												
	Analyzed:	Apr-17-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.77	1.00	11.4	1.00	9.16	1.00	7.36	1.00	5.48	1.00	5.12	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483548

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Chris Knight
Project Location: Lea County, NM

Date Received in Lab: Thu Apr-17-14 10:20 am
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	483548-037		483548-038		483548-039		483548-040		483548-041		483548-042	
	Field Id:	074635-JMF-SB4		074635-JMF-SB4		074635-JMF-SB4		074635-JMF-SB4		074635-JMF-SB5		074635-JMF-SB5	
	Depth:	0 ft		5 ft		15 ft		35 ft		0 ft		5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-15-14 10:45		Apr-15-14 10:50		Apr-15-14 11:00		Apr-15-14 11:05		Apr-15-14 11:25		Apr-15-14 11:30	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30	
	Analyzed:	Apr-23-14 16:21		Apr-23-14 16:43		Apr-23-14 17:06		Apr-23-14 18:14		Apr-23-14 18:37		Apr-23-14 19:00	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		393	10.0	159	10.3	17.4	2.08	12.2	2.14	760	42.0	173	10.4
Percent Moisture	***Extracted:***												
	Analyzed:	Apr-17-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25		Apr-17-14 12:25		Apr-21-14 13:00		Apr-21-14 13:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		ND	1.00	2.69	1.00	3.80	1.00	6.36	1.00	4.65	1.00	4.19	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483548

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Chris Knight
Project Location: Lea County, NM

Date Received in Lab: Thu Apr-17-14 10:20 am
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	483548-043		483548-044		483548-045		483548-046		483548-047		483548-048	
	Field Id:	074635-JMF-SB5		074635-JMF-SB5		074635-JMF-SB5		074635-JMF-SB5		074635-JMF-SB3		074635-JMF-SB3	
	Depth:	10 ft		15 ft		25 ft		35 ft		0 ft		5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-15-14 11:35		Apr-15-14 11:40		Apr-15-14 11:45		Apr-15-14 11:50		Apr-15-14 12:30		Apr-15-14 12:35	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-24-14 10:30	
	Analyzed:	Apr-23-14 20:08		Apr-23-14 20:31		Apr-23-14 20:53		Apr-23-14 21:16		Apr-23-14 21:39		Apr-25-14 09:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		913	43.3	185	10.8	32.7	4.69	22.0	3.99	6390	204	433	21.3
Percent Moisture	***Extracted:***												
	Analyzed:	Apr-21-14 13:00		Apr-21-14 13:00		Apr-21-14 13:00		Apr-21-14 13:00		Apr-21-14 13:00		Apr-21-14 13:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.67	1.00	7.20	1.00	14.7	1.00	49.9	1.00	1.81	1.00	6.13	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483548

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Chris Knight
Project Location: Lea County, NM

Date Received in Lab: Thu Apr-17-14 10:20 am
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	483548-049		483548-050		483548-051		483548-052		483548-053		483548-054	
	Field Id:	074635-JMF-SB3		074635-JMF-SB3		074635-JMF-SB2		074635-JMF-SB2		074635-JMF-SB2		074635-JMF-SB2	
	Depth:	15 ft		35 ft		0 ft		5 ft		10 ft		15 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-15-14 12:45		Apr-15-14 12:55		Apr-15-14 13:15		Apr-15-14 13:20		Apr-15-14 13:25		Apr-15-14 13:30	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30	
	Analyzed:	Apr-23-14 23:55		Apr-24-14 00:40		Apr-24-14 01:03		Apr-24-14 01:26		Apr-24-14 01:48		Apr-24-14 02:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		16.3	2.08	6.73	2.16	18300	405	3250	108	3080	107	685	20.9
Percent Moisture	***Extracted:***												
	Analyzed:	Apr-21-14 13:00		Apr-21-14 13:00		Apr-21-14 13:00		Apr-21-14 13:00		Apr-21-14 13:00		Apr-21-14 13:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.71	1.00	7.51	1.00	1.18	1.00	7.47	1.00	6.46	1.00	4.52	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483548

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Chris Knight
Project Location: Lea County, NM

Date Received in Lab: Thu Apr-17-14 10:20 am
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	483548-055		483548-056		483548-057		483548-058		483548-059		483548-060	
	Field Id:	074635-JMF-SB2		074635-JMF-SB2		074635-JMF-SB1		074635-JMF-SB1		074635-JMF-SB1		074635-JMF-SB1	
	Depth:	25 ft		35 ft		0 ft		5 ft		15 ft		35 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-15-14 13:35		Apr-15-14 13:40		Apr-15-14 14:05		Apr-15-14 14:10		Apr-15-14 14:20		Apr-15-14 14:35	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30		Apr-21-14 10:30	
	Analyzed:	Apr-24-14 03:19		Apr-24-14 03:42		Apr-24-14 04:05		Apr-24-14 04:27		Apr-24-14 04:50		Apr-24-14 05:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		34.9	2.05	16.2	2.12	7600	404	1310	42.3	976	41.2	2760	106
Percent Moisture	***Extracted:***												
	Analyzed:	Apr-21-14 13:00		Apr-21-14 13:00		Apr-21-14 13:00		Apr-21-14 13:00		Apr-21-14 13:00		Apr-21-14 13:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		2.49	1.00	5.54	1.00	1.05	1.00	5.40	1.00	3.02	1.00	6.05	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483548

Conestoga Rovers & Associates, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Chris Knight
Project Location: Lea County, NM

Date Received in Lab: Thu Apr-17-14 10:20 am
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested								
	Lab Id:	483548-061		483548-062				
	Field Id:	074635-JMF-SB1		074635-JMF-SB1				
	Depth:	50 ft		60 ft				
	Matrix:	SOIL		SOIL				
	Sampled:	Apr-15-14 14:40		Apr-15-14 14:45				
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-21-14 10:30		Apr-21-14 10:30				
	Analyzed:	Apr-24-14 05:58		Apr-24-14 06:21				
	Units/RL:	mg/kg	RL	mg/kg	RL			
Chloride		143	4.32	95.7	4.24			
Percent Moisture	***Extracted:***							
	Analyzed:	Apr-21-14 13:00		Apr-21-14 13:00				
	Units/RL:	%	RL	%	RL			
Percent Moisture		7.37	1.00	5.64	1.00			

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

BS / BSD Recoveries

Project Name: CEMC- CVU#226

Work Order #: 483548 **Project ID:** 074635

Analyst: AMB **Date Prepared:** 04/21/2014 **Date Analyzed:** 04/21/2014

Lab Batch ID: 939208 **Sample:** 654348-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	47.0	94	50.0	47.1	94	0	80-120	20	

Analyst: AMB **Date Prepared:** 04/21/2014 **Date Analyzed:** 04/22/2014

Lab Batch ID: 939281 **Sample:** 654349-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	48.1	96	50.0	45.7	91	5	80-120	20	

Analyst: AMB **Date Prepared:** 04/21/2014 **Date Analyzed:** 04/23/2014

Lab Batch ID: 939306 **Sample:** 654350-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	48.5	97	50.0	48.3	97	0	80-120	20	

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

BS / BSD Recoveries

Project Name: CEMC- CVU#226

Work Order #: 483548 **Project ID:** 074635

Analyst: AMB **Date Prepared:** 04/21/2014 **Date Analyzed:** 04/23/2014

Lab Batch ID: 939364 **Sample:** 654351-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	49.5	99	50.0	48.7	97	2	80-120	20	

Analyst: AMB **Date Prepared:** 04/24/2014 **Date Analyzed:** 04/25/2014

Lab Batch ID: 939494 **Sample:** 654464-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	52.0	104	50.0	51.8	104	0	80-120	20	

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

Form 3 - MS Recoveries

Project Name: CEMC- CVU#226

Work Order #: 483548

Lab Batch #: 939208 **Project ID:** 074635

Date Analyzed: 04/21/2014 **Date Prepared:** 04/21/2014 **Analyst:** AMB

QC- Sample ID: 483546-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	4.56	50.4	53.0	96	80-120	

Lab Batch #: 939208

Date Analyzed: 04/22/2014 **Date Prepared:** 04/21/2014 **Analyst:** AMB

QC- Sample ID: 483546-011 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	4.38	50.8	51.2	92	80-120	

Lab Batch #: 939281

Date Analyzed: 04/22/2014 **Date Prepared:** 04/21/2014 **Analyst:** AMB

QC- Sample ID: 483548-009 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	135	282	415	99	80-120	

Lab Batch #: 939281

Date Analyzed: 04/22/2014 **Date Prepared:** 04/21/2014 **Analyst:** AMB

QC- Sample ID: 483548-019 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	29600	25600	54200	96	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS Recoveries

Project Name: CEMC- CVU#226

Work Order #: 483548

Lab Batch #: 939306 **Project ID:** 074635

Date Analyzed: 04/23/2014 **Date Prepared:** 04/21/2014 **Analyst:** AMB

QC- Sample ID: 483548-029 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	269	275	753	176	80-120	X

Lab Batch #: 939306

Date Analyzed: 04/23/2014 **Date Prepared:** 04/21/2014 **Analyst:** AMB

QC- Sample ID: 483548-039 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	17.4	52.0	62.3	86	80-120	

Lab Batch #: 939364

Date Analyzed: 04/24/2014 **Date Prepared:** 04/21/2014 **Analyst:** AMB

QC- Sample ID: 483548-049 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	16.3	51.9	67.8	99	80-120	

Lab Batch #: 939364

Date Analyzed: 04/24/2014 **Date Prepared:** 04/21/2014 **Analyst:** AMB

QC- Sample ID: 483548-059 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	976	1030	2130	112	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS Recoveries

Project Name: CEMC- CVU#226

Work Order #: 483548

Lab Batch #: 939494 **Project ID:** 074635

Date Analyzed: 04/25/2014 **Date Prepared:** 04/24/2014 **Analyst:** AMB

QC- Sample ID: 483806-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	228	583	814	101	80-120	

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

BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: CEMC- CVU#226

Work Order #: 483548

Lab Batch #: 938962 **Project ID:** 074635
Date Analyzed: 04/18/2014 12:25 **Date Prepared:** 04/18/2014 **Analyst:** WRU
QC- Sample ID: 483548-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.23	5.22	0	20	

Lab Batch #: 938962
Date Analyzed: 04/18/2014 12:25 **Date Prepared:** 04/18/2014 **Analyst:** WRU
QC- Sample ID: 483548-011 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.62	4.92	13	20	

Lab Batch #: 938964
Date Analyzed: 04/17/2014 12:25 **Date Prepared:** 04/17/2014 **Analyst:** WRU
QC- Sample ID: 483548-021 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	8.05	6.67	19	20	

Lab Batch #: 938964
Date Analyzed: 04/17/2014 12:25 **Date Prepared:** 04/17/2014 **Analyst:** WRU
QC- Sample ID: 483548-031 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	4.77	2.87	50	20	F

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

Sample Duplicate Recovery

Project Name: CEMC- CVU#226

Work Order #: 483548

Lab Batch #: 939116 **Project ID:** 074635
Date Analyzed: 04/21/2014 13:00 **Date Prepared:** 04/21/2014 **Analyst:** WRU
QC- Sample ID: 483548-041 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture **Analyte**	**Parent Sample Result [A]**	**Sample Duplicate Result [B]**	**RPD**	**Control Limits %RPD**	**Flag**
Percent Moisture	4.65	4.53	3	20	

Lab Batch #: 939116
Date Analyzed: 04/21/2014 13:00 **Date Prepared:** 04/21/2014 **Analyst:** WRU
QC- Sample ID: 483548-051 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture **Analyte**	**Parent Sample Result [A]**	**Sample Duplicate Result [B]**	**RPD**	**Control Limits %RPD**	**Flag**
Percent Moisture	1.18	1.18	0	20	

Lab Batch #: 939121
Date Analyzed: 04/21/2014 13:00 **Date Prepared:** 04/21/2014 **Analyst:** WRU
QC- Sample ID: 483548-061 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture **Analyte**	**Parent Sample Result [A]**	**Sample Duplicate Result [B]**	**RPD**	**Control Limits %RPD**	**Flag**
Percent Moisture	7.37	7.19	2	20	

Lab Batch #: 939121
Date Analyzed: 04/21/2014 13:00 **Date Prepared:** 04/21/2014 **Analyst:** WRU
QC- Sample ID: 483561-003 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture **Analyte**	**Parent Sample Result [A]**	**Sample Duplicate Result [B]**	**RPD**	**Control Limits %RPD**	**Flag**
Percent Moisture	5.27	5.48	4	20	

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

CHAIN OF CUSTODY

Page 1 Of 7

XENCO LABORATORIES

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Dallas, Texas (214-902-0300) | Norcross, Georgia (770-449-8800) | Tampa, Florida (813-620-2000)

Service Center - San Antonio, Texas (210-509-3334) | www.xenco.com

Xenco Quote # | Xenco Job # 483548

Client / Reporting Information

Company Name / Branch: CRA, Inc

Company Address: 2135 S Loop 250 West Midland, TX 79703

Email: | Phone No: 432-686-0086

Project Contact: Chris Knight / Jake Ferenz

Samplers's Name: John Fergerson

Project Information

Project Name/Number: 074635

Project Location: CENC - CVU #264 Lea County, New Mexico

Invoice To:

PO Number:

Analytical Information

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chlorides	Field Comments
1	074635-JMF-SB11	0'	4-14-14	1200	S	1								X	X	
2	074635-JMF-SB11	5'	4/14/14	1215	S	1								X	X	
3	074635-JMF-SB11	10'	4/14/14	1220	S	1								X	X	
4	074635-JMF-SB11	20'	4/14/14	1225	S	1								X	X	
5	074635-JMF-SB11	40'	4/14/14	1230	S	1								X	X	
6	074635-JMF-SB11	60'	4/14/14	1235	S	1								X	X	
7	074635-JMF-SB10	0'	4/14/14	1310	S	1								X	X	
8	074635-JMF-SB10	5'	4/14/14	1315	S	1								X	X	
9	074635-JMF-SB10	15'	4/14/14	1325	S	1								X	X	
10	074635-JMF-SB10	25'	4/14/14	1330	S	1								X	X	

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [x] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		4/17/14 1020	1	2	4-17-14	2
	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3			3	4	10:20	4
	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor
5			5			✓ 0 1 = 1°C

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

CHAIN OF CUSTODY

Page 2 Of 7

XENCO LABORATORIES

Setting the Standard since 1990

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www.xenco.com

Odessa, Texas (432-563-1800)
Norcross, Georgia (770-449-8800)
Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)

Xenco Quote #
Xenco Job #

Client / Reporting Information

Company Name / Branch: CRA, Inc
Company Address: 2135 S. Loop 250 West
Midland, TX 79703
Email:
Phone No: 432-686-0086
Project Contact: Chris Knight / Jake Ferenz
Samplers's Name: John Fergerson

Project Information

Project Name/Number: 074635
Project Location: CENC-CVD#266
Lea County, New Mexico
Invoice To:
PO Number:

Analytical Information

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chlorides	Field Comments
1	074635-JMF-SB10	35'	4/14/14	1335	S	1								X	X	
2	074635-JMF-SB9	0'	4/14/14	1450	S	1								X	X	
3	074635-JMF-SB9	5'	4/14/14	1455	S	1								X	X	
4	074635-JMF-SB9	10'	4/14/14	1500	S	1								X	X	
5	074635-JMF-SB9	15'	4/14/14	1505	S	1								X	X	
6	074635-JMF-SB9	25'	4/14/14	1510	S	1								X	X	
7	074635-JMF-SB9	35'	4/14/14	1515	S	1								X	X	
8	074635-JMF-SB10	60'	4/14/14	1425	S	1								X	X	
9	074635-JMF-SB8	0	4/14/14	1530	S	1								X	X	
10	074635-JMF-SB8	5	4/14/14	1535	S	1								X	X	

Turnaround Time (Business days)

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- [ ] Next Day EMERGENCY
- [x] 7 Day TAT
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Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		4/17/14 1020	1 Julian M	2	4-17-14	2
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time: 10:25	Received By:
			3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: ✓
			5			Cooler Temp. 0 Thermo. Corr. Factor +1 = 1°C

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CHAIN OF CUSTODY

Page 3 Of 7

XENCO LABORATORIES

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Norcross, Georgia (770-449-8800)
Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)
www.xenco.com

Xenco Quote # | Xenco Job #

Client / Reporting Information

Company Name / Branch: CRA, Inc
Company Address: 21355 Loop250 West Midland, TX 79703
Email: | Phone No: 432-686-0086
Project Contact: Chris Knight / Jake Ferenz
Samplers's Name: John Fergerson

Project Information

Project Name/Number: 074635
Project Location: CENC-CVU #266 Lea County, New Mexico
Invoice To:
PO Number:

Analytical Information

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chlorides	Field Comments
1	074635-JMF-SB8	10	4/14/14	1540	S	1								X	X	
2	074635-JMF-SB8	15	4/14/14	1545	S	1								X	X	
3	074635-JMF-SB8	25	4/14/14	1550	S	1								X	X	
4	074635-JMF-SB8	35	4/14/14	1555	S	1								X	X	
5	074635-JMF-SB6	0	4/14/14	1610	S	1								X	X	
6	074635-JMF-SB6	5	4/14/14	1615	S	1								X	X	
7	074635-JMF-SB6	10	4/14/14	1620	S	1								X	X	
8	074635-JMF-SB6	15	4/14/14	1625	S	1								X	X	
9	074635-JMF-SB6	25	4/14/14	1630	S	1								X	X	
10	074635-JMF-SB6	35	4/14/14	1635	S	1								X	X	

Turnaround Time (Business days)

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Notes:

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SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		4/17/14 1020	1 JJian M	2	4-17-14 10:20	2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: ✓

Cooler Temp. 0 +1 = 1°C. Thermo. Corr. Factor

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Service Center - San Antonio, Texas (210-509-3334) | www.xenco.com

Xenco Quote # | Xenco Job #

Client / Reporting Information

Company Name / Branch: CRA, Inc

Company Address: 2135 S Loop 250 West Midland, TX 79703

Email: | Phone No: 432-686-0086

Project Contact: Chris Knight / Dr Jake Ferenz

Samplers's Name: John Fergerson

Project Information

Project Name/Number: 074635

Project Location: CEMC-CVU #266 Lea County, New Mexico

Invoice To:

PO Number:

Analytical Information

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chlorides								Field Comments
1	074635-JMF-SB7	0	4/15/14	1000	S	1								X	X								
2	074635-JMF-SB7	5	4/15/14	1005	S	1								X	X								
3	074635-JMF-SB7	10	4/15/14	1010	S	1								X	X								
4	074635-JMF-SB7	15	4/15/14	1015	S	1								X	X								
5	074635-JMF-SB7	25	4/15/14	1020	S	1								X	X								
6	074635-JMF-SB7	35	4/15/14	1025	S	1								X	X								
7	074635-JMF-SB4	0	4/15/14	1045	S	1								X	X								
8	074635-JMF-SB4	5	4/15/14	1050	S	1								X	X								
9	074635-JMF-SB4	15	4/15/14	1100	S	1								X	X								
10	074635-JMF-SB4	35	4/15/14	1105	S	1								X	X								

Turnaround Time (Business days)

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TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		4/12/14 1020	1 Julian M	2	4-17-14	2
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time: 10:20	Received By:
			3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: ✓
			5			Cooler Temp. 0 +1 Thermo. Corr. Factor =1°C.

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CHAIN OF CUSTODY

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XENCO LABORATORIES

Setting the Standard since 1990

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Service Center - San Antonio, Texas (210-509-3334) www.xenco.com

Xenco Quote # | Xenco Job #

Client / Reporting Information

Company Name / Branch: CRA, Inc

Company Address: 21355 Loop 250 West Midland, TX 79703

Email: | Phone No: 432-686-0086

Project Contact: Chris Knight / Jake Ferenz

Samplers's Name: John Ferguson

Project Information

Project Name/Number: 074635

Project Location: CENC - CVU #266 Lea County, New Mexico

Invoice To:

PO Number:

Analytical Information

Chlorides

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chlorides	Field Comments
1	074635-JMF-SB5	0'	4/15/14	1125	S	1								X	X	
2	074635-JMF-SB5	5'	4/15/14	1130	S	1								X	X	
3	074635-JMF-SB5	10'	4/15/14	1135	S	1								X	X	
4	074635-JMF-SB5	15'	4/15/14	1140	S	1								X	X	
5	074635-JMF-SB5	25'	4/15/14	1145	S	1								X	X	
6	074635-JMF-SB5	35'	4/15/14	1150	S	1								X	X	
7	074635-JMF-SB3	0'	4/15/14	1230	S	1								X	X	
8	074635-JMF-SB3	5'	4/15/14	1235	S	1								X	X	
9	074635-JMF-SB3	15'	4/15/14	1245	S	1								X	X	
10	074635-JMF-SB3	35'	4/15/14	1255	S	1								X	X	

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [X] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
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TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		4/17/14 1020	1	2	4-17-14	2
2	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time: 10:20	Received By:
3			3	4		4
4	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice ✓ Cooler Temp. 0 Thermo. Corr. Factor +1 = 1°C.
5			5			

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

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Page 6 Of 7

XENCO LABORATORIES

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Service Center - San Antonio, Texas (210-509-3334) | www.xenco.com

Xenco Quote # | Xenco Job #

Client / Reporting Information

Company Name / Branch: CRA, Inc

Company Address: 2135 S Loop 250 West Midland, TX 79703

Email: | Phone No: 432-686-0086

Project Contact: Chris Knight / Jake Ferenz

Samplers's Name: John Fergerson

Project Information

Project Name/Number: 074635

Project Location: CENC - CVU #266 Lea County, New Mexico

Invoice To:

PO Number:

Analytical Information

Chlorides

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chlorides	Field Comments
1	074635-JMF-SB2	0	4/15/14	1315	S	1								X	X	
2	074635-JMF-SB2	5	4/15/14	1320	S	1								X	X	
3	074635-JMF-SB2	10	4/15/14	1325	S	1								X	X	
4	074635-JMF-SB2	15	4/15/14	1330	S	1								X	X	
5	074635-JMF-SB2	25	4/15/14	1335	S	1								X	X	
6	074635-JMF-SB2	35	4/15/14	1340	S	1								X	X	
7	074635-JMF-SB1	0	4/15/14	1405	S	1								X	X	
8	074635-JMF-SB1	5	4/15/14	1410	S	1								X	X	
9	074635-JMF-SB1	15	4/15/14	1420	S	1								X	X	
10	074635-JMF-SB1	35	4/15/14	1435	S	1								X	X	

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [x] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		4/17/14 1020	Julian M.	2	4-17-14	2
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time: 10:20	Received By:
			3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: ✓
			5			Cooler Temp. 0 +1 = 1°C. Thermo. Corr. Factor

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

CHAIN OF CUSTODY

Page 7 Of 7

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200)
Dallas, Texas (214-902-0300)
Service Center - San Antonio, Texas (210-509-3334)
www.xenco.com

Odessa, Texas (432-563-1800)
Norcross, Georgia (770-449-8800)
Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)

Xenco Quote # | Xenco Job #

Client / Reporting Information

Company Name / Branch: CRA, Inc
Company Address: 2135 S Loop 250 West Midland, TX 79703
Email: Phone No: 432-686-0086
Project Contact: Chris Knight / Jake Ferenz
Samplers's Name: John Forgerson

Project Information

Project Name/Number: 074635
Project Location: CENC - CVU #266 Lea County, New Mexico
Invoice To:
PO Number:

Analytical Information

Chlorides

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	074635-JMF-SB1	50	4/15/14	1440	S	1								X	X
2	074635-JMF-SB1	60	4/15/14	1445	S	1								X	X
3															
4															
5															
6															
7															
8															
9															
10															

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [x] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		4/17/14 1020	1 Julian M	2	4-17-14	2
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time: 10:20	Received By:
			3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: ✓ Cooler Temp. 0 +1 = 1°C. Thermo. Corr. Factor
			5			

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

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 04/17/2014 10:20:00 AM

Work Order #: 483548

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

Temperature Measuring device used :

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

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

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 04/18/2014

Checklist reviewed by: Kelsey Brooks Date: 04/18/2014

Analytical Report 514049

for

GHD Services, INC- Midland

Project Manager: Jacob Ferenz

CEMC- CVU#226

074635

01-SEP-15

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

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)

01-SEP-15

Project Manager: **Jacob Ferenz**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **514049**
CEMC- CVU#226
Project Address: NM

Jacob Ferenz:

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) 514049. 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. 514049 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 514049

GHD Services, INC- Midland, Midland, TX

CEMC- CVU#226

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS-082015-JR-SB-13 0'	S	08-20-15 09:45	- 0 ft	514049-001
SS-082015-JR-SB-13 5'	S	08-20-15 09:50	- 5 ft	514049-002
SS-082015-JR-SB-13 10'	S	08-20-15 09:55	- 10 ft	514049-003
SS-082015-JR-SB-13 15'	S	08-20-15 10:00	- 15 ft	514049-004
SS-082015-JR-SB-13 20'	S	08-20-15 10:05	- 20 ft	514049-005
SS-082015-JR-SB-13 25'	S	08-20-15 10:10	- 25 ft	514049-006
SS-082015-JR-SB-13 35'	S	08-20-15 10:15	- 35 ft	514049-007
SS-082015-JR-SB-12 0'	S	08-20-15 10:20	- 0 ft	514049-008
SS-082015-JR-SB-12 5'	S	08-20-15 10:25	- 5 ft	514049-009
SS-082015-JR-SB-12 10'	S	08-20-15 10:30	- 10 ft	514049-010
SS-082015-JR-SB-12 15'	S	08-20-15 10:35	- 15 ft	514049-011
SS-082015-JR-SB-12 20'	S	08-20-15 10:40	- 20 ft	514049-012
SS-082015-JR-SB-12 25'	S	08-20-15 10:45	- 25 ft	514049-013
SS-082015-JR-SB-12 35'	S	08-20-15 10:50	- 35 ft	514049-014
SS-082015-JR-SB-15 0'	S	08-20-15 10:55	- 0 ft	514049-015
SS-082015-JR-SB-15 5'	S	08-20-15 11:00	- 5 ft	514049-016
SS-082015-JR-SB-15 10'	S	08-20-15 11:05	- 10 ft	514049-017
SS-082015-JR-SB-15 15'	S	08-20-15 11:10	- 15 ft	514049-018
SS-082015-JR-SB-15 20'	S	08-20-15 11:15	- 20 ft	514049-019
SS-082015-JR-SB-15 25'	S	08-20-15 11:20	- 25 ft	514049-020
SS-082015-JR-SB-15 35'	S	08-20-15 11:25	- 35 ft	514049-021
SS-082015-JR-SB-14 0'	S	08-20-15 11:30	- 0 ft	514049-022
SS-082015-JR-SB-14 5'	S	08-20-15 11:35	- 5 ft	514049-023
SS-082015-JR-SB-14 10'	S	08-20-15 11:40	- 10 ft	514049-024
SS-082015-JR-SB-14 15'	S	08-20-15 11:45	- 15 ft	514049-025
SS-082015-JR-SB-14 20'	S	08-20-15 11:50	- 20 ft	514049-026
SS-082015-JR-SB-14 25'	S	08-20-15 11:55	- 25 ft	514049-027
SS-082015-JR-SB-14 35'	S	08-20-15 12:00	- 35 ft	514049-028
SS-082015-JR-SB-16 0'	S	08-20-15 14:05	- 0 ft	514049-029
SS-082015-JR-SB-16 5'	S	08-20-15 14:10	- 5 ft	514049-030
SS-082015-JR-SB-16 10'	S	08-20-15 14:15	- 10 ft	514049-031
SS-082015-JR-SB-16 15'	S	08-20-15 14:20	- 15 ft	514049-032
SS-082015-JR-SB-16 20'	S	08-20-15 14:25	- 20 ft	514049-033
SS-082015-JR-SB-16 30'	S	08-20-15 14:30	- 30 ft	514049-034
SS-082015-JR-SB-16 50'	S	08-20-15 14:35	- 50 ft	514049-035
SS-082015-JR-SB-16 70'	S	08-20-15 14:40	- 70 ft	514049-036
SS-082015-JR-SB-16 90'	S	08-20-15 14:45	- 90 ft	514049-037

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 514049

GHD Services, INC- Midland, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Jacob Ferenz
Project Location: NM

Date Received in Lab: Fri Aug-21-15 04:15 pm
Report Date: 01-SEP-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	514049-001		514049-002		514049-003		514049-004		514049-005		514049-006	
	Field Id:	SS-082015-JR-SB-13 0'		SS-082015-JR-SB-13 5'		SS-082015-JR-SB-13 10'		SS-082015-JR-SB-13 15'		SS-082015-JR-SB-13 20'		SS-082015-JR-SB-13 25'	
	Depth:	0 ft		5 ft		10 ft		15 ft		20 ft		25 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-20-15 09:45		Aug-20-15 09:50		Aug-20-15 09:55		Aug-20-15 10:00		Aug-20-15 10:05		Aug-20-15 10:10	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Aug-29-15 11:30		Aug-29-15 11:30		Aug-29-15 11:30		Aug-29-15 11:30		Aug-29-15 11:30		Aug-29-15 11:30	
	Analyzed:	Aug-30-15 06:06		Aug-30-15 06:29		Aug-30-15 06:52		Aug-30-15 07:14		Aug-30-15 08:00		Aug-30-15 08:22	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		28300	1220	260	21.2	527	28.0	599	46.2	613	27.8	1180	61.2
Percent Moisture	***Extracted:***												
	Analyzed:	Aug-28-15 17:30		Aug-28-15 17:30		Aug-28-15 17:30		Aug-28-15 17:30		Aug-28-15 17:30		Aug-28-15 17:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		17.8	1.00	5.56	1.00	28.7	1.00	13.3	1.00	28.1	1.00	34.7	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 514049

GHD Services, INC- Midland, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Jacob Ferenz
Project Location: NM

Date Received in Lab: Fri Aug-21-15 04:15 pm
Report Date: 01-SEP-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	514049-007		514049-008		514049-009		514049-010		514049-011		514049-012	
	Field Id:	SS-082015-JR-SB-13 35'		SS-082015-JR-SB-12 0'		SS-082015-JR-SB-12 5'		SS-082015-JR-SB-12 10'		SS-082015-JR-SB-12 15'		SS-082015-JR-SB-12 20'	
	Depth:	35 ft		0 ft		5 ft		10 ft		15 ft		20 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-20-15 10:15		Aug-20-15 10:20		Aug-20-15 10:25		Aug-20-15 10:30		Aug-20-15 10:35		Aug-20-15 10:40	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Aug-29-15 11:30		Aug-29-15 11:30		Aug-29-15 11:30		Aug-29-15 11:30		Aug-29-15 11:30		Aug-29-15 11:30	
	Analyzed:	Aug-30-15 08:45		Aug-30-15 09:08		Aug-30-15 10:16		Aug-30-15 10:39		Aug-30-15 11:24		Aug-30-15 11:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		385	16.0	3.03	2.11	5.02	2.13	6.76	2.08	4.19	2.11	ND	2.15
Percent Moisture	***Extracted:***												
	Analyzed:	Aug-28-15 17:30		Aug-28-15 17:30		Aug-28-15 17:30		Aug-28-15 17:30		Aug-28-15 17:30		Aug-28-15 17:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		37.5	1.00	5.19	1.00	6.31	1.00	4.03	1.00	5.37	1.00	6.84	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 514049

GHD Services, INC- Midland, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Jacob Ferenz
Project Location: NM

Date Received in Lab: Fri Aug-21-15 04:15 pm
Report Date: 01-SEP-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	514049-013		514049-014		514049-015		514049-016		514049-017		514049-018	
	Field Id:	SS-082015-JR-SB-12 25'		SS-082015-JR-SB-12 35'		SS-082015-JR-SB-15 0'		SS-082015-JR-SB-15 5'		SS-082015-JR-SB-15 10'		SS-082015-JR-SB-15 15'	
	Depth:	25 ft		35 ft		0 ft		5 ft		10 ft		15 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-20-15 10:45		Aug-20-15 10:50		Aug-20-15 10:55		Aug-20-15 11:00		Aug-20-15 11:05		Aug-20-15 11:10	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Aug-29-15 11:30		Aug-30-15 16:00		Aug-30-15 16:00		Aug-30-15 16:00		Aug-30-15 16:00		Aug-30-15 16:00	
	Analyzed:	Aug-30-15 12:10		Aug-30-15 17:48		Aug-30-15 18:34		Aug-30-15 18:56		Aug-30-15 19:19		Aug-30-15 19:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		ND	2.09	3.49	2.20	45.9	10.4	99.1	11.2	27.1	2.24	17.1	2.20
Percent Moisture	***Extracted:***												
	Analyzed:	Aug-28-15 17:30		Aug-28-15 17:30		Aug-28-15 17:30		Aug-28-15 17:30		Aug-28-15 17:30		Aug-28-15 17:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.43	1.00	9.20	1.00	3.87	1.00	10.8	1.00	10.5	1.00	9.04	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 514049

GHD Services, INC- Midland, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Jacob Ferenz
Project Location: NM

Date Received in Lab: Fri Aug-21-15 04:15 pm
Report Date: 01-SEP-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	514049-019		514049-020		514049-021		514049-022		514049-023		514049-024	
	Field Id:	SS-082015-JR-SB-15 20'		SS-082015-JR-SB-15 25'		SS-082015-JR-SB-15 35'		SS-082015-JR-SB-14 0'		SS-082015-JR-SB-14 5'		SS-082015-JR-SB-14 10'	
	Depth:	20 ft		25 ft		35 ft		0 ft		5 ft		10 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-20-15 11:15		Aug-20-15 11:20		Aug-20-15 11:25		Aug-20-15 11:30		Aug-20-15 11:35		Aug-20-15 11:40	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Aug-30-15 16:00		Aug-30-15 16:00		Aug-30-15 16:00		Aug-30-15 16:00		Aug-30-15 16:00		Aug-30-15 16:00	
	Analyzed:	Aug-30-15 20:04		Aug-30-15 21:12		Aug-30-15 21:35		Aug-30-15 21:57		Aug-30-15 22:20		Aug-30-15 22:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		17.9	2.21	13.8	2.16	12.1	2.12	79.5	10.8	342	21.0	186	12.3
Percent Moisture	***Extracted:***												
	Analyzed:	Aug-28-15 17:30		Aug-28-15 17:30		Aug-31-15 17:30		Aug-31-15 17:30		Aug-31-15 17:30		Aug-31-15 17:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.58	1.00	7.44	1.00	5.83	1.00	7.10	1.00	4.70	1.00	18.9	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 514049

GHD Services, INC- Midland, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Jacob Ferenz
Project Location: NM

Date Received in Lab: Fri Aug-21-15 04:15 pm
Report Date: 01-SEP-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	514049-025		514049-026		514049-027		514049-028		514049-029		514049-030	
	Field Id:	SS-082015-JR-SB-14 15'		SS-082015-JR-SB-14 20'		SS-082015-JR-SB-14 25'		SS-082015-JR-SB-14 35'		SS-082015-JR-SB-16 0'		SS-082015-JR-SB-16 5'	
	Depth:	15 ft		20 ft		25 ft		35 ft		0 ft		5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-20-15 11:45		Aug-20-15 11:50		Aug-20-15 11:55		Aug-20-15 12:00		Aug-20-15 14:05		Aug-20-15 14:10	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Aug-30-15 16:00		Aug-30-15 16:00		Aug-30-15 16:00		Aug-30-15 16:00		Aug-30-15 16:00		Aug-30-15 16:00	
	Analyzed:	Aug-30-15 23:28		Aug-30-15 23:51		Aug-31-15 00:13		Aug-31-15 00:36		Aug-31-15 01:44		Aug-31-15 02:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		593	21.3	235	11.4	51.6	2.11	13.0	2.08	10.7	10.3	248	10.3
Percent Moisture	***Extracted:***												
	Analyzed:	Aug-31-15 17:30		Aug-31-15 17:30		Aug-31-15 17:30		Aug-31-15 17:30		Aug-31-15 17:30		Aug-31-15 17:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.16	1.00	12.1	1.00	5.15	1.00	4.02	1.00	2.80	1.00	3.19	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 514049

GHD Services, INC- Midland, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Jacob Ferenz
Project Location: NM

Date Received in Lab: Fri Aug-21-15 04:15 pm
Report Date: 01-SEP-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	514049-031		514049-032		514049-033		514049-034		514049-035		514049-036	
	Field Id:	SS-082015-JR-SB-16 10'		SS-082015-JR-SB-16 15'		SS-082015-JR-SB-16 20'		SS-082015-JR-SB-16 30'		SS-082015-JR-SB-16 50'		SS-082015-JR-SB-16 70'	
	Depth:	10 ft		15 ft		20 ft		30 ft		50 ft		70 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-20-15 14:15		Aug-20-15 14:20		Aug-20-15 14:25		Aug-20-15 14:30		Aug-20-15 14:35		Aug-20-15 14:40	
Inorganic Anions by EPA 300/300.1	***Extracted:***	Aug-30-15 16:00		Aug-30-15 16:00		Aug-30-15 16:00		Aug-31-15 14:30		Aug-31-15 14:30		Aug-31-15 14:30	
	Analyzed:	Aug-31-15 02:29		Aug-31-15 02:52		Aug-31-15 03:15		Aug-31-15 23:01		Aug-31-15 23:46		Sep-01-15 00:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		10.9	2.15	9.07	2.27	3.24	2.25	5.04	2.15	2.19	2.09	ND	2.12
Percent Moisture	***Extracted:***												
	Analyzed:	Aug-31-15 17:30		Aug-31-15 17:30		Aug-31-15 17:30		Aug-31-15 17:30		Aug-31-15 17:30		Aug-31-15 17:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.19	1.00	11.9	1.00	11.1	1.00	6.93	1.00	4.09	1.00	5.48	1.00

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 514049

GHD Services, INC- Midland, Midland, TX

Project Name: CEMC- CVU#226

Project Id: 074635
Contact: Jacob Ferenz
Project Location: NM

Date Received in Lab: Fri Aug-21-15 04:15 pm
Report Date: 01-SEP-15
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	514049-037					
	Field Id:	SS-082015-JR-SB-16 90'					
	Depth:	90 ft					
	Matrix:	SOIL					
	Sampled:	Aug-20-15 14:45					
Inorganic Anions by EPA 300/300.1	***Extracted:***	Aug-31-15 14:30					
	Analyzed:	Sep-01-15 00:31					
	Units/RL:	mg/kg RL					
Chloride		2.13 2.02					
Percent Moisture	***Extracted:***						
	Analyzed:	Aug-31-15 17:30					
	Units/RL:	% RL					
Percent Moisture		1.04 1.00					

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

BS / BSD Recoveries

Project Name: CEMC- CVU#226

Work Order #: 514049 **Project ID:** 074635

Analyst: JUM **Date Prepared:** 08/29/2015 **Date Analyzed:** 08/30/2015

Lab Batch ID: 975769 **Sample:** 697375-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	49.6	99	50.0	50.0	100	1	90-110	20	

Analyst: JUM **Date Prepared:** 08/30/2015 **Date Analyzed:** 08/30/2015

Lab Batch ID: 975781 **Sample:** 697396-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	51.4	103	50.0	50.8	102	1	90-110	20	

Analyst: JUM **Date Prepared:** 08/31/2015 **Date Analyzed:** 08/31/2015

Lab Batch ID: 975899 **Sample:** 697473-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	49.5	99	50.0	49.6	99	0	90-110	20	

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

Form 3 - MS Recoveries

Project Name: CEMC- CVU#226

Work Order #: 514049

Lab Batch #: 975769 **Project ID:** 074635

Date Analyzed: 08/30/2015 **Date Prepared:** 08/29/2015 **Analyst:** JUM

QC- Sample ID: 514048-010 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	20.4	51.1	70.6	98	80-120	

Lab Batch #: 975769

Date Analyzed: 08/30/2015 **Date Prepared:** 08/29/2015 **Analyst:** JUM

QC- Sample ID: 514049-004 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	599	1150	1840	108	80-120	

Lab Batch #: 975781

Date Analyzed: 08/30/2015 **Date Prepared:** 08/30/2015 **Analyst:** JUM

QC- Sample ID: 514049-014 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	3.49	55.1	61.9	106	80-120	

Lab Batch #: 975781

Date Analyzed: 08/30/2015 **Date Prepared:** 08/30/2015 **Analyst:** JUM

QC- Sample ID: 514049-024 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	186	308	504	103	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS Recoveries

Project Name: CEMC- CVU#226

Work Order #: 514049

Lab Batch #: 975899 **Project ID:** 074635

Date Analyzed: 08/31/2015 **Date Prepared:** 08/31/2015 **Analyst:** JUM

QC- Sample ID: 514049-034 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	5.04	53.7	58.4	99	80-120	

Lab Batch #: 975899

Date Analyzed: 09/01/2015 **Date Prepared:** 08/31/2015 **Analyst:** JUM

QC- Sample ID: 514050-007 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	68.9	75.4	143	98	80-120	

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

BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: CEMC- CVU#226

Work Order #: 514049

Lab Batch #: 975826 **Project ID:** 074635
Date Analyzed: 08/28/2015 17:30 **Date Prepared:** 08/28/2015 **Analyst:** WRU
QC- Sample ID: 514049-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	17.8	15.9	11	20	

Lab Batch #: 975826
Date Analyzed: 08/28/2015 17:30 **Date Prepared:** 08/28/2015 **Analyst:** WRU
QC- Sample ID: 514049-011 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.37	4.91	9	20	

Lab Batch #: 975936
Date Analyzed: 08/31/2015 17:30 **Date Prepared:** 08/31/2015 **Analyst:** WRU
QC- Sample ID: 514049-021 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.83	5.94	2	20	

Lab Batch #: 975936
Date Analyzed: 08/31/2015 17:30 **Date Prepared:** 08/31/2015 **Analyst:** WRU
QC- Sample ID: 514049-031 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	7.19	7.18	0	20	

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

Sample Duplicate Recovery

Project Name: CEMC- CVU#226

Work Order #: 514049

Lab Batch #: 975939 **Project ID:** 074635

Date Analyzed: 08/31/2015 17:30 **Date Prepared:** 08/31/2015 **Analyst:** WRU

QC- Sample ID: 514049-037 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	1.04	<1.00	NC	20	U

Lab Batch #: 975939

Date Analyzed: 08/31/2015 17:30 **Date Prepared:** 08/31/2015 **Analyst:** WRU

QC- Sample ID: 514050-014 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	6.59	6.60	0	20	

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

BRL - Below Reporting Limit

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Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

www.xenco.com

Xenco Quote #

Xenco Job # 514049

Client / Reporting Information

Company Name / Branch: GHD - Dallas

Company Address: 1755 Wittington Pl., Ste. 500 Dallas, TX 75234

Email: ~~JR~~ ~~jacob~~ jake.ferenz@ghd.com

Phone No:

Project Contact: Jacob Ferenz

Samplers's Name: Jennifer Riedel

Project Information

Project Name/Number: CEMC/0746 35

Project Location: CNU-2666

Invoice To:

PO Number:

Analytical Information

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chlorides	Field Comments
1	SS-082015-JR-SB-13	0'	8/20	0945	S	1								X	X	
2	SS-082015-JR-SB-13	5'	8/20	0950	S	1										
3	SS-082015-JR-SB-13	10'	8/20	0955	S	1										
4	SS-082015-JR-SB-13	15'	8/20	1000	S	1										
5	SS-082015-JR-SB-13	20'	8/20	1005	S	1										
6	SS-082015-JR-SB-13	25'	8/20	1010	S	1										
7	SS-082015-JR-SB-13	35'	8/20	1015	S	1										
8	SS-082015-JR-SB-12	0'	8/20	1020	S	1										
9	SS-082015-JR-SB-12	5'	8/20	1025	S	1										
10	SS-082015-JR-SB-12	10'	8/20	1030	S	1								↓	↓	

Turnaround Time (Business days)

- ☐ Same Day TAT
- ☐ 5 Day TAT
- ☐ Next Day EMERGENCY
- ☒ 7 Day TAT
- ☐ 2 Day EMERGENCY
- ☐ Contract TAT
- ☐ 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- ☐ Level II Std QC
- ☐ Level IV (Full Data Pkg /raw data)
- ☐ Level III Std QC+ Forms
- ☐ TRRP Level IV
- ☐ Level 3 (CLP Forms)
- ☐ UST / RG -411
- ☐ TRRP Checklist

Notes:

See SSDW

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		8/21/15 1615	1	2	8/21/15 1615	2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable ☐	On Ice ☒ Cooler Temp. 3.4° Thermo. Corr. Factor

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Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

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Xenco Quote #

Xenco Job # 514049

Client / Reporting Information

Company Name / Branch: GHD - Dallas

Company Address: 1755 Wittington Pl., Ste. 500 Dallas, TX 75234

Email: ~~jacob~~ jake.ferenz@ghd.com

Phone No: 972-331-8500

Project Contact: Jacob Ferenz

Samplers's Name: Jennifer Riedel

Project Information

Project Name/Number: CEMC/0744635

Project Location: CNU-2606

Invoice To:

PO Number:

Analytical Information

Chlorides

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	SS-082015-JR-SB-12	15'	8/20	1035	S	1								X	
2	SS-082015-JR-SB-12	20'	8/20	1040	S	1								X	
3	SS-082015-JR-SB-12	25'	8/20	1045	S	1									
4	SS-082015-JR-SB-12	35'	8/20	1050	S	1									
5	SS-082015-JR-SB-15	0'	8/20	1055	S	1									
6	SS-082015-JR-SB-15	5'	8/20	1100	S	1									
7	SS-082015-JR-SB-15	10'	8/20	1105	S	1									
8	SS-082015-JR-SB-15	15'	8/20	1110	S	1									
9	SS-082015-JR-SB-15	20'	8/20	1115	S	1									
10	SS-082015-JR-SB-15	25'	8/20	1120	S	1									

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- ☐ TRRP Checklist

Notes:

See SSDW

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	[signature]	8/21/15 1615	1 [signature]	2	8/21/15 1615	2
3			3	4		4
5			5	Custody Seal #	Preserved where applicable ☐	On Ice ☒ Cooler Temp. 3.4° Thermo. Corr. Factor

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Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

Xenco Quote #

Xenco Job # 514049

Client / Reporting Information

Company Name / Branch: GHD - Dallas

Company Address: 1755 Wittington Place, Ste. 500 Dallas, TX 75234

Email: jake.ferenz@ghd.com

Phone No: 972-331-8500

Project Contact: Jacob Ferenz

Samplers's Name: Jennifer Riedel

Project Information

Project Name/Number: CEMC/ 0746635

Project Location: CNL-266

Invoice To:

PO Number:

Analytical Information

Chlorides

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chlorides	Field Comments
1	SS-082015-JR-SB-15	35'	8/20	1125	S	1								X	X	
2	SS-082015-JR-SB-14	0'	8/20	1130	S	1										
3	SS-082015-JR-SB-14	5'	8/20	1135	S	1										
4	SS-082015-JR-SB-14	10'	8/20	1140	S	1										
5	SS-082015-JR-SB-14	15'	8/20	1145	S	1										
6	SS-082015-JR-SB-14	20'	8/20	1150	S	1										
7	SS-082015-JR-SB-14	25'	8/20	1155	S	1										
8	SS-082015-JR-SB-14	35'	8/20	1200	S	1										
9	SS-082015-JR-SB-16	0'	8/20	1405	S	1										
10	SS-082015-JR-SB-16	5'	8/20	1410	S	1										

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [x] 7 Day TAT
- [ ] 2 Day EMERGENCY
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- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes: See SSOW

FED-EX / UPS: Tracking #

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	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		8/21/15 1615	1	2	8/21/15 1615	2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X — Cooler Temp. 3.4° — Thermo. Corr. Factor

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Norcross, Georgia (770-449-8800)
Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)

Xenco Quote #
Xenco Job # 514049

Client / Reporting Information

Company Name / Branch: GHD - Dallas
Company Address: 1755 Wittington Place, Ste. 500, Dallas, TX 75234
Email: jake.ferenz@ghd.com Phone No: 972-331-8500
Project Contact: Jacob Ferenz
Samplers's Name: Jennifer Riedel

Project Information

Project Name/Number: CEMC/074635
Project Location: ONU-266
Invoice To:
PO Number:

Analytical Information

Chlorides

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	SS-082015-JR-SB-16	10'	8/20	1415	S	1								X	
2	SS-082015-JR-SB-16	15'	8/20	1420	S	1									
3	SS-082015-JR-SB-16	20'	8/20	1425	S	1									
4	SS-082015-JR-SB-16	30'	8/20	1430	S	1									
5	SS-082015-JR-SB-16	50'	8/20	1435	S	1									
6	SS-082015-JR-SB-16	70'	8/20	1440	S	1									
7	SS-082015-JR-SB-16	90'	8/20	1445	S	1									
8															
9															
10															

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [X] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

See SSDW

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		8/21/15 1615	1	2	8/21/15 1615	2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X; Cooler Temp. 3.4° Thermo. Corr. Factor

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

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 08/21/2015 04:15:00 PM

Work Order #: 514049

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

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.4
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**No**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**N/A**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**N/A**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

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

Analyst:

PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 08/23/2015

Checklist reviewed by: Kelsey Brooks Date: 08/25/2015