



Kegan W. Boyer, P.G.
Project Manager

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Environmental Management
Company
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APPROVED

May 24, 2013

Mr. Geoffrey Leking
New Mexico Oil Conservation Division
District 1
1625 N. French Drive
Hobbs, New Mexico 88240

Re: West Dollarhide Drinkard Unit No. 148, RP # 10-52512
Vacuum Grayburg San Andres Unit No. 250

Dear Mr. Leking,

Please find enclosed for your files copies of the following reports:

- Site Closure Report, Chevron West Dollarhide Drinkard Unit # 148, Section 31 (Unit I), Township 24 South, Range 38 East, Lea County, NM, RP# 10-5-2512 (Final Form C-141 also included with report)
- Pit Closure Report (As attachment to Form C-144), Vacuum Grayburg San Andres Unit #250, API #30-025-38001, Unit Letter H, Section 1, Township 18 South, Range 24 East, Lea County, New Mexico

These reports were prepared by Conestoga-Rovers & Associates (CRA) on behalf of Chevron Environmental Management Company (CEMC) to document remedial activities performed for CEMC at the above-referenced project sites. Also enclosed are electronic copies of both reports on CD-ROM.

Should you have any questions regarding the content of either report, please do not hesitate to contact me by phone at 713-372-7705 or via e-mail at kegan.boyer@chevron.com.

Sincerely,

Kegan W. Boyer, P.G.
Environmental Project Manager

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Chevron Environmental Management Company (CEMC)	Contact Kegan Boyer	
Address 1400 Smith Street, Houston Texas, 77002	Telephone No. 713-372-7705	
Facility Name West Dollarhide Drinkard Unit #148	Facility Type	
Surface Owner George Willis	Mineral Owner Chevron	Lease No.

LOCATION OF RELEASE

Unit Letter I	Section 31	Township 24	Range 38 E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
------------------	---------------	----------------	---------------	---------------	------------------	---------------	----------------	---------------

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 88.043 bbls	Volume Recovered 50.5 bbls
Source of Release 2" West Lateral Line	Date and Hour of Occurrence 5/1/2010 @ 11:30	Date and Hour of Discovery 5/1/2010 @ 11:30
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? 5/1/10 – approx. 8:00pm – E L Gonzales	
By Whom? Ricky Heredia	Date and Hour 5/1/2010 @ 8:00pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*


Describe Cause of Problem and Remedial Action Taken.*

High Pressure 2" line failed causing spill 0.8683 bbls oil and 87.174 bbls Produced Water
Field Specialist shut in pump and isolated leak and called out a vacuum truck

Describe Area Affected and Cleanup Action Taken.*

**Ricky Heredia – Dollarhide Field HES, called Larry Johnson on 5/1/10 @ 11:30 TX. Larry Johnson approved work start – noting to keep him informed.
Free liquids were removed from the spill area. See attached Site Closure Report (April 2013) submitted by Conestoga Rovers & Associates (CRA) on behalf of Chevron documenting Clean Up Action Taken.

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: Kegan Boyer	Approved by District Supervisor:		
Title: CEMC Project Manager	Approval Date:	Expiration Date:	
E-mail Address: kegan.boyer@chevron.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date:	Phone: (713) 372-7705		



SITE CLOSURE REPORT

**CHEVRON WEST DOLLARHIDE DRINKARD UNIT #148
SECTION 31 (UNIT I), TOWNSHIP 24 SOUTH, RANGE 38 EAST
LEA COUNTY, NEW MEXICO
RP# 10-5-2512**

Prepared For:

**Mr. Kegan Boyer
Chevron Environmental Management Company
1400 Smith Street, Room 07086
Houston, Texas 77002**

**Prepared by:
Conestoga-Rovers
& Associates**

**APRIL 2013
REF. NO. 073041 (2)**

2135 South Loop 250 West
Midland, Texas 79703
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1.0 INTRODUCTION

This Site Closure Report provides documentation associated with corrective actions at the West Dollarhide Drinkard Unit #148 (WDDU), Lea County, New Mexico. The closure activities were documented and performed by Conestoga-Rovers & Associates (CRA) under the direction of Chevron Environmental Management Company (CEMC). A remediation permit number, RP 10-5-2512 was assigned to the release incident by the New Mexico Oil Conservation Division (NMOCD) Hobbs office.

The Chevron West Dollarhide Drinkard Unit #148 (hereafter referred to as the "Site"), is located in Section 31 (Unit I), Township 24 South, Range 38 East, Lea County, New Mexico (Figure 1).

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

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

2.0 SITE HISTORY / ASSESSMENT

According to information provided within the C-141 Form filed with the NMOCD, a 2-inch WDDU #64 water injection line released approximately 87.1734 barrels of produced water and 0.8683 barrels of oil south of the WDDU #148 location on May 1, 2010. A reported 50.5 barrels of fluids were recovered by a vacuum truck during response activities.

On May 13, 2010, Ron's Welding Inc. (RWI) and an environmental consultant, Ms. Cindy Crain, mobilized to the site to perform soil assessment tasks. Heavy equipment was utilized to obtain soil samples from various depths down to 17 feet below ground surface (bgs) at six test pit locations. Analytical results demonstrated three locations, SS-3, SS-5 and SS-6 as having elevated chloride (>1,000 mg/kg) concentrations. The three other locations demonstrated hydrocarbon and chloride concentration levels below regulatory levels established for this location. A large remedial excavation with an approximate dimension of 325' x 75' x 5' deep was present at the site, along with a smaller (90' x 40' x 5') remedial excavation situated south of the WDDU #148 well pad. The volume of soils removed offsite to the Sundance facility in Eunice, New Mexico from the excavation and was reported to CRA to be approximately 2,100 cubic yards.

On January 11, 2011, Tom Larson and James Ornelas with CRA, Matt Hudson with Chevron and Marcos Silvestri with AECOM met with the NMOCD District 1 office (Mr. Larry Johnson) to discuss the subject project. Discussions from the meeting included previous NMOCD communications, assessment/delineation data and remedial activities performed at the Site to date. Additional vertical/horizontal delineation and Site restoration activities were also discussed. After review of the information and verbal communication, Mr. Johnson requested that three soil borings be advanced adjacent to the SS-3, SS-5 and SS-6 test pit locations. The objective of the boring program was to evaluate the vertical extent of chloride impacts at the requested locations. Mr. Johnson verbally indicated to Chevron that no additional excavation activities would be required if the soil boring data indicated decreasing trends with regard to depth and groundwater not being threatened by the produced water release.

A correspondence was submitted to the NMOCD by CRA dated January 18, 2011 entitled, "Proposed Delineation and Closure Activities for Remediation Plan 10-5-2512". This plan provided data from the 2010 assessment and corrective action activities, the initial C-141 Form submittal, as well as proposed delineation and closure activities for the release incident. The Proposed Delineation/Closure Activities is provided in Appendix A.

Additional soil assessment and delineation activities were conducted at the Site between April 2011 and January 2012. In April 2011, three soil borings were advanced in the vadose zone beneath the release area to further evaluate the vertical extent of soil impacts. Subsequent soil assessment events were conducted using sidewall and hand augering methods through January 2012.

On June 27, 2012, Tom Larson with CRA and David Pagano with Chevron met with NMOCD staff to finalize the subject project's soil assessment and restoration activities. Discussions from the meeting included review of previous NMOCD communications, 2010-2012 assessment/delineation data, and remedial activities performed at the site to date. Additional soil removal and site restoration activities were discussed and the most recent results of delineation efforts (including soil boring, hand auger and sidewall programs) were reviewed. NMOCD staff concurred that no additional delineation is required; however, additional soil removal in a small area at the northeast end of the existing large excavation was requested by the agency as part of the closure tasks.

3.0 CORRECTIVE ACTIONS

The field implementation of the approved site closure activities began on November 27, 2012. Entact of Dallas, Texas provided labor, heavy equipment and pit lining material. RWI of Hobbs, New Mexico provided haul trucks required for the field operations. CRA was responsible for the overall coordination of field operations, project management tasks and the safety of all CRA employees working on Site. Two fiberglass lines including an unidentified 2-inch line and an identified 3-inch line were located within the excavated pit on November 27, 2012. Both the 2-inch and 3-inch lines were ultimately confirmed as being owned by Chaparral. Hydro-excavation activities were used to positively identify the 2-inch line by Riley Industrial on December 3, 2012. Chaparral, owner of the lines cold tapped the 2-inch line on December 4, 2012, and verified the line as abandoned. As instructed, Chaparral's 3-inch and 2-inch fiberglass lines that were left exposed in the excavation pit were cribbed on December 4, 2012. Impacted soil was removed from the northeast areas of the excavation and transported by RWI to Sundance disposal facility. The proposed and approved field work activities were completed on December 6, 2012. A Site Chronology of the daily work activities is provided in Appendix B. Site photographs documenting work activities are presented in Appendix C.

3.1 LINING AND BACKFILLING OF REMEDIAL EXCAVATIONS

Restoration activities at the Site began on November 27, 2012 with the staging of heavy equipment near the borrow pit and excavated pit areas. Installation of excavated pit liner (20 mil) started and was completed on November 28, 2012 by Entact. Backfill of the excavated pit areas began on November 29, 2012. RWI transported approximately 2,388 cubic yards (cy) of clean fill that was mobilized from an off-site borrow pit provided by Mr. George Willis. Backfill activities were concluded on December 4, 2012, with final grading operations including a crown of backfill materials across former remedial excavation. On December 5 and 6, 2012, impacted soils from the northeast portion of the Site were removed and loaded for transport per NMOCD recommendations for Site closure. A total of 132 cy of impacted soil was hauled to Sundance disposal facility (project total 2,232 cy), in Lea County, New Mexico. On December 6, 2012, the Site was graded to minimize erosion, ripped with heavy machinery and a New Mexico native seed mixture was dispersed for final site closure. On December 7, 2012 equipment was demobilized from the Site.

3.2 WASTE MANAGEMENT

CRA was responsible for managing waste associated with the 2012 project activities (132 cy). Sundance disposal facility was utilized as a disposal facility for impacted soils. Sundance is an NMOCD and Chevron approved facility. The material was loaded into trucks provided by RWI. Each truck leaving the Site was provided with a uniquely numbered non-hazardous waste manifest to accompany each load. The manifest was signed by the generator (CEMC's agent), the transporter, and finally by the Sundance facility's representative. Table 2 provides disposal volumes (in cubic yards), as well as manifest and vehicle numbers for the waste material that was transported off of the Site.

All non-hazardous waste manifests and RWI delivery tickets for this project are included in Appendix D.

Certified Laboratory Reports for the 2011 - 2012 soil sampling events are provided in Appendix E.

4.0 SUMMARY

The agreed upon scope of work and closure plan activities for the reclamation of the Chevron WDDU #148 Lea County, New Mexico, has been completed (RP# 10-5-2512). The following is a summary of project milestones and work performed:

- On May 1, 2010 at 11:30 am, Chevron notified the NMOCD of the release incident near the WDDU #148 wellpad. A C-141 Form was submitted to the agency by Chevron on May 3, 2010.
- On May 13, 2010 on behalf of Chevron, RWI and an environmental consultant (Ms. Cindy Crain) mobilized to the site to perform soil remediation and assessment tasks. Approximately 2,100 cy of soils were removed from the Site and disposed of at the Sundance facility in Eunice, New Mexico. Soil samples were collected from six test trenches within the remedial excavation.
- A correspondence was submitted to the NMOCD by CRA dated January 18, 2011 entitled, "Proposed Delineation and Closure Activities for Remediation Plan 10-5-2512". This plan provided data from the 2010 assessment and corrective action activities, the initial C-141 Form submittal, as well as proposed delineation and closure activities for the release incident.
- In April 2011, CRA advanced three soil borings in the vadose zone beneath the release area to further evaluate the vertical extent of soil impacts. Additional delineation sampling events, using sidewall and hand augering sampling methods were conducted through January 2012.
- On June 27, 2012, after NMOCD reviewed all of the assessment and remediation activities performed to date – the agency approved final project soil assessment and restoration activities per the January 2011 Remediation Plan.
- Final project soil assessment restoration activities involving heavy equipment commenced on November 27, 2012, and were completed on December 6, 2012.
- The two excavation pit floor areas were lined with a (20-mil) plastic liner and covered with approximately 2,388 cy of backfill materials obtained from an off-site location provided by Mr. George Willis.
- On December 5 and 6, 2012, impacted soils were removed from the northeast portion of the Site and loaded for offsite disposal. Approximately 132 cy of impacted soil were transported to the Sundance disposal facility. The total of soils removed from the excavated spill area was approximately 2,232 cy.
- Construction affected areas were graded to minimize surface water runoff and erosion. The ground was then ripped using heavy equipment, and a New Mexico native seed mixture was dispersed for final Site closure.

5.0 SITE CLOSURE REQUEST

This Site Closure Report provides documentation of the West Dollarhide Drinkard Unit #148 soil assessment activities involving the impacted soil areas and remedial correctional actions performed in accordance to the RP# 10-5-2512. Based on NMOCD communication and corrective actions performed to date, CRA, on behalf of CEMC, respectfully request the NMOCD to rule that no further action for this site is warranted. This Site Closure Report concludes the scope of work for this project. Please feel free to contact the CRA Midland office if there are any questions or additional information is required.

All of which is Respectfully Submitted,

CONESTOGA-ROVERS & ASSOCIATES



Thomas C. Larson
Midland Operations Manager



Ryan Kainer
Project Manager

FIGURES

RE: USGS 7.5 Minute Topographic Maps.

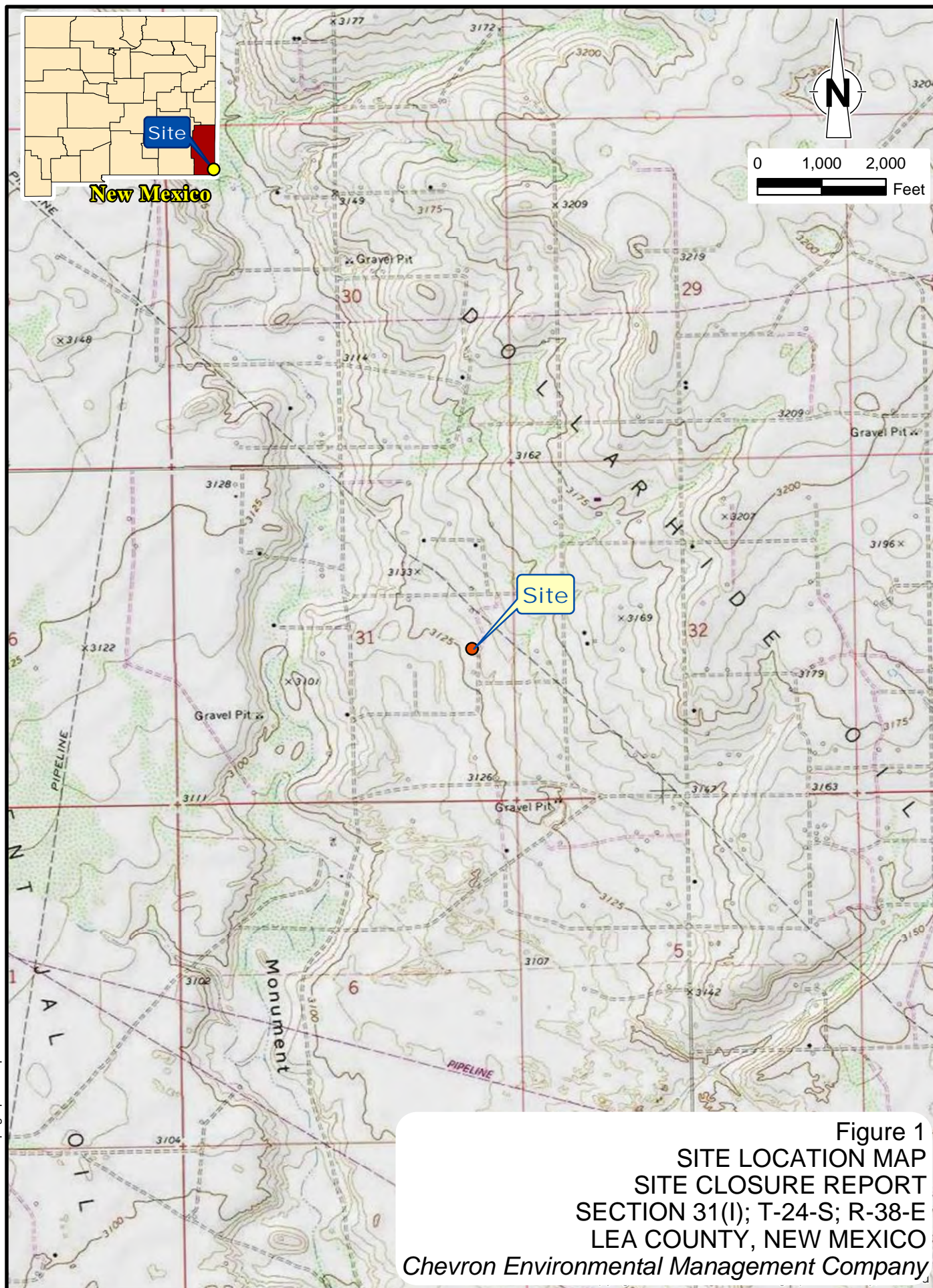


Figure 1
SITE LOCATION MAP
SITE CLOSURE REPORT
SECTION 31(I); T-24-S; R-38-E
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

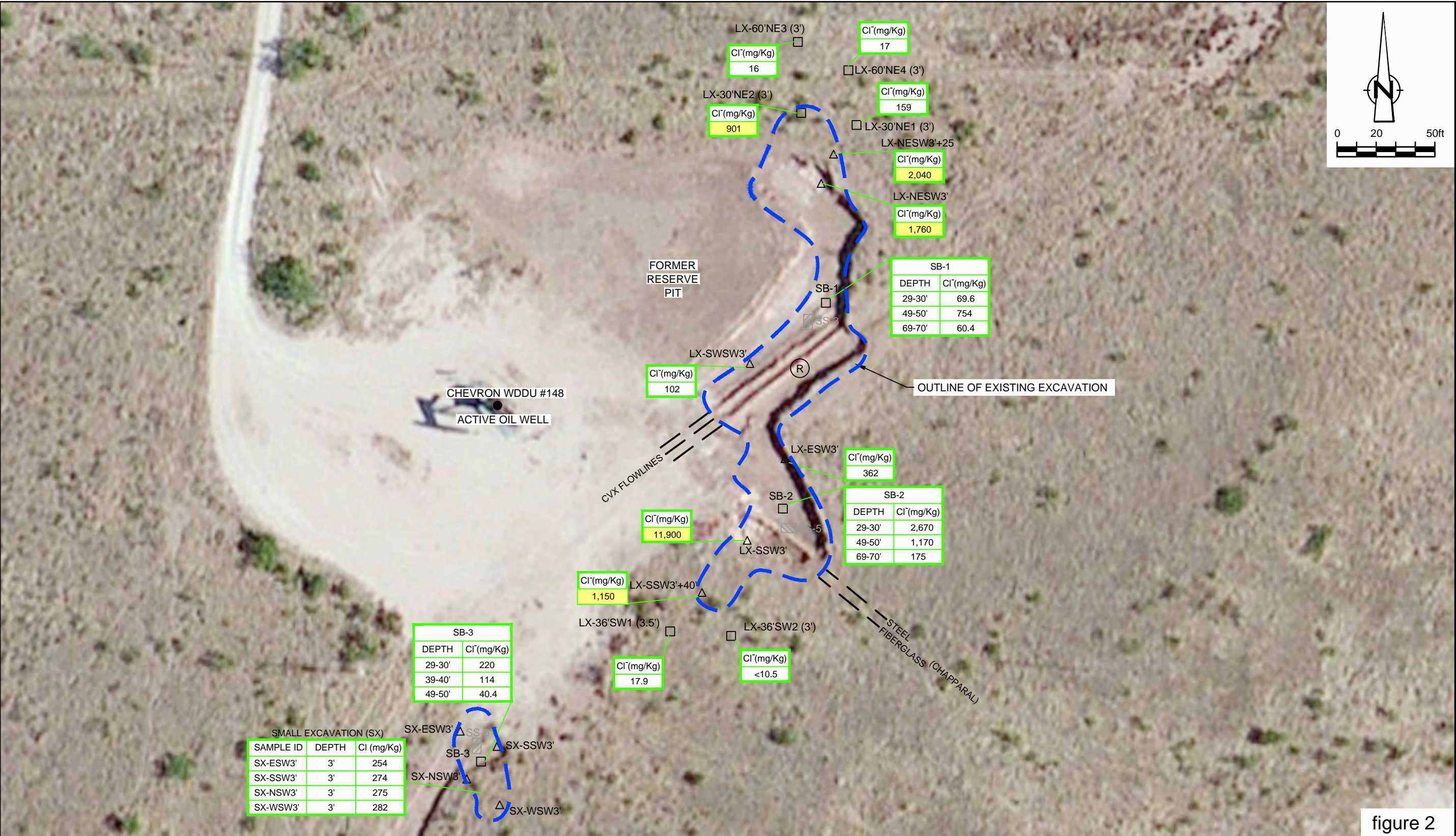


figure 2

Notes:

1. See January 18, 2011 submittal to NMOC for RP10-5-2512 details and historical data.
2. Chloride-Impacted soils primary driver for delineation and remediation purposes.
3. See table 1 for analytical summary and dates.



SOIL BORING AND SIDEWALL SAMPLING RESULTS
SITE CLOSURE REPORT
SECTION 31(I); T-24-S; R-38-E
LEA COUNTY, NEW MEXICO
Chevron Environment Management Company

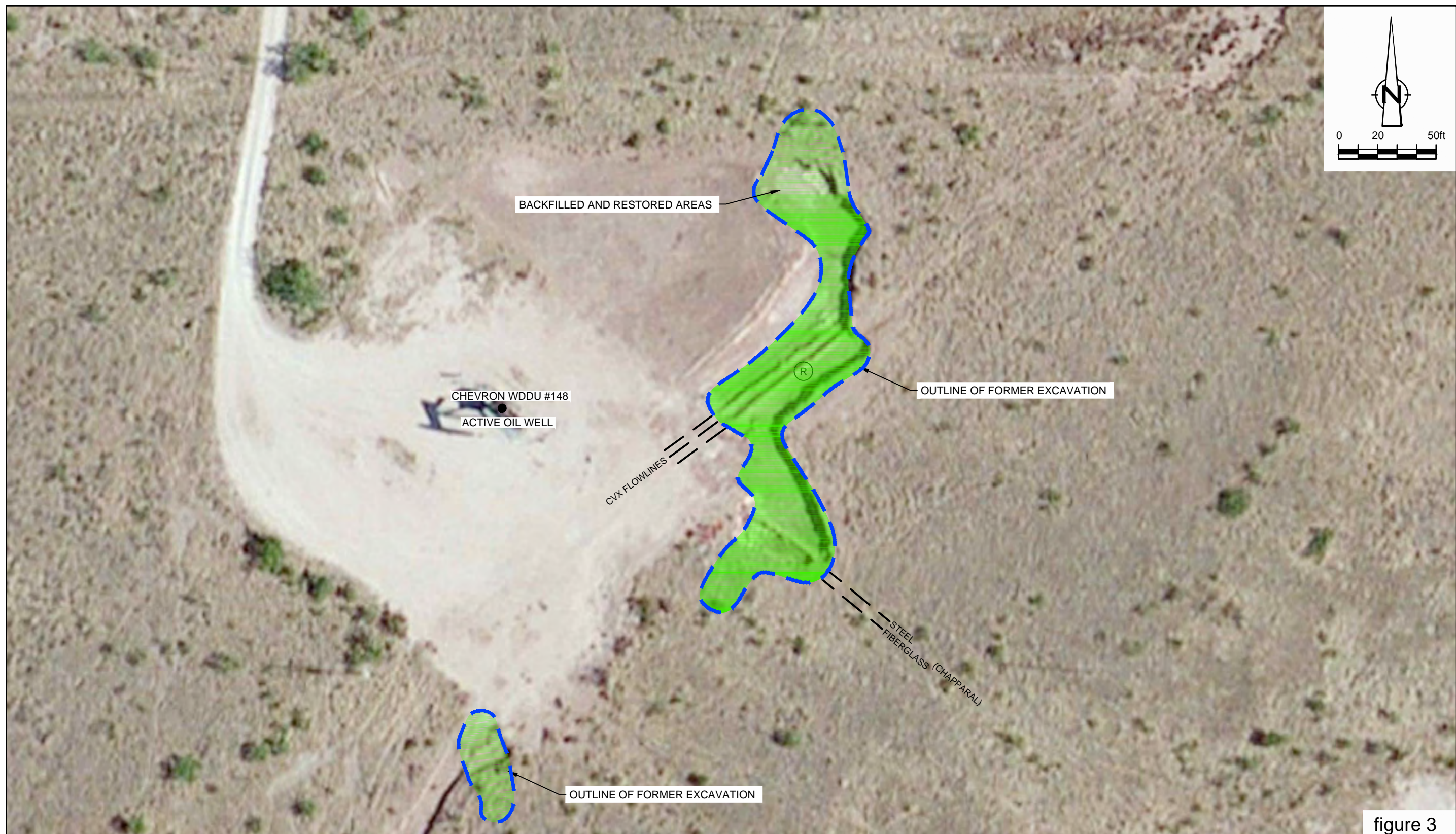


figure 3

Notes:

1. See January 18, 2011 submittal to NMOCD for RP10-5-2512 details and historical data.
2. Approximately 2,232 CY of impacted soils removed from site and transported to sundance services facility in Eunice, New Mexico.
3. Approximately 2,388 CY of clean topsoil (SAND) transported from landowner's property (George Willis) for use as backfill.



Legend

- Ⓡ Release Point
- Outline of Former Excavation

SITE RESTORATION MAP
SITE CLOSURE REPORT
SECTION 31(I); T-24-S; R-38-E
LEA COUNTY, NEW MEXICO

Chevron Environment Management Company

TABLES

TABLE 1
WEST DOLLARHIDE DRINKARD UNIT #148
SOIL ANALYTICAL SUMMARY (2011-2012)
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Depth (feet or inches bgs)	Benzene	Toluene	Ethyl-Benzene	Xylenes	BTEX	TPH			Chloride
								GRO(C6-C10)	DRO(C10-C28)	Total (GRO/DR)	
			(mg/Kg)	(mg/Kg)	(ug/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
*NMOCD Remediation Action Level (Ranking Score: 0)			10mg/Kg				50mg/Kg	---	---	5000 mg/Kg	---
SOIL BORING RESULTS											
SB-1 29-30'	04/28/11	29-30'	< 0.0023	< 0.0023	< 0.0023	< 0.0058	BDL	< 0.2	4.8 J	BDL	69.6
SB-1 49-50'	04/28/11	49-50'	< 0.0023	< 0.0023	< 0.0023	< 0.0057	BDL	< 0.2	< 4.5	BDL	754
SB-1 69-70'	04/28/11	69-70'	< 0.0021	< 0.0021	< 0.0021	< 0.0052	BDL	< 0.2	< 4.3	BDL	60.4
SB-2 29-30'	04/28/11	29-30'	< 0.0021	< 0.0021	< 0.0021	< 0.0052	BDL	< 0.2	< 4.2	BDL	2,670
SB-2 49-50'	04/28/11	49-50'	< 0.0022	< 0.0022	< 0.0022	< 0.0055	BDL	< 0.2	8.0 J	BDL	1,170
SB-2 69-70'	04/28/11	69-70'	< 0.0022	< 0.0022	< 0.0022	< 0.0055	BDL	< 0.2	< 4.5	BDL	175
SB-3 29-30'	04/28/11	29-30'	< 0.0022	< 0.0022	< 0.0022	< 0.0056	BDL	< 0.2	< 4.1	BDL	220
SB-3 39-40'	04/28/11	39-40'	< 0.0020	< 0.0020	< 0.0020	< 0.0050	BDL	< 0.2	< 4.2	BDL	114
SB-3 49-50'	04/28/11	49-50'	< 0.0021	< 0.0021	< 0.0021	< 0.0052	BDL	< 0.2	< 4.1	BDL	40.4 J
SIDEWALL/HAND AUGER CONFIRMATION SAMPLING RESULTS											
SX- NSW 3'	04/28/11	3'	< 0.0021	< 0.0021	< 0.0021	< 0.0053	BDL	< 0.2	40	40	275
SX- WSW 3'	04/28/11	3'	< 0.0019	< 0.0019	< 0.0019	< 0.0048	BDL	< 0.2	10 J	BDL	282
SX- SSW 3'	04/28/11	3'	< 0.0020	< 0.0020	< 0.0020	< 0.0049	BDL	< 0.2	12 J	BDL	274
SX- ESW 3'	04/28/11	3'	< 0.0020	< 0.0020	< 0.0020	< 0.0051	BDL	< 0.2	21	21	254
LX- SSW 3'	04/28/11	3'	< 0.0021	< 0.0021	< 0.0021	< 0.0053	BDL	< 0.2	< 4.0	BDL	11,900
LX- ESW 3'	04/28/11	3'	< 0.0021	< 0.0021	< 0.0021	< 0.0052	BDL	< 0.2	< 4.1	BDL	362
LX-SWSW3'	04/28/11	3'	< 0.0019	< 0.0019	< 0.0019	< 0.0048	BDL	< 0.2	< 4.1	BDL	102
LX-NESW3'	04/28/11	3'	< 0.0020	< 0.0020	< 0.0020	< 0.0050	BDL	< 0.2	210	210	1,760
LX-36'SW1	11/8/11	3.5'	< 0.005	0.0056	< 0.005	0.0059J	BDL	< 1.0	<13	BDL	17.9
LX-36'SW2	11/8/11	3'	< 0.005	< 0.005	< 0.005	< 0.015	BDL	< 1.0	<12	BDL	<10.5
LX-SSW3'+40'	07/25/11	3'	< 0.0054	< 0.0054	< 0.0054	< 0.016	BDL	< 1.1	5.4J	BDL	1,150
LX-NESW3'+25'	07/25/11	3'	< 0.0055	< 0.0055	< 0.0055	< 0.017	BDL	< 1.1	5.3J	BDL	2,040
LX-30'NE1	11/8/11	3'	< 0.0051	< 0.0051	< 0.0051	< 0.015	BDL	< 1.0	<13	BDL	159
LX-30'NE2	11/8/11	3'	< 0.0052	< 0.0052	< 0.0052	< 0.015	BDL	< 1.0	<6.3J	BDL	901
LX-60'NE3	1/16/12	3'	< 0.0055	< 0.0055	< 0.0055	< 0.017	BDL	< 1.1	<16	BDL	16.3
LX-60'NE4	1/16/12	3'	<0.0031J	<0.0032J	<0.0032J	<0.0081	BDL	< 1.1	<16	BDL	16.9

NOTES:

1. Values reported in mg/Kg.
2. <, or BDL: below laboratory detection limits.'J' reported as estimated value.
3. ***NMOCD Remediation Action Levels.**
4. BTEX analyses by EPA Method SW 8021B.
5. TPH analyses by EPA Method SW 8015B.
6. Chloride analyses by Method E300.0.
7. GRO/DRO = Gasoline/Diesel.
8. Elevated chloride concentrations shown as **BOLD**; take into consideration 9-30-2011 DRAFT OCD Guidance for Release Reporting and Corrective Actions.

TABLE 2
WASTE INVENTORY
WEST DOLLARHIDE DRINKARD UNIT #148
SITE CLOSURE REPORT

<i>DATE</i>	<i>TRUCK NUMBER</i>	<i>MANIFEST NUMBER</i>	<i>QUANTITY OF WASTE (cubic yards)</i>
12/05/2012	02	0013124	12
12/05/2012	02	0013129	12
12/06/2012	02	0013120	12
12/06/2012	02	0013123	12
12/05/2012	03	0013126	12
12/05/2012	03	0013128	12
12/06/2012	03	0013122	12
12/06/2012	03	0013119	12
12/05/2012	330	0013125	12
12/05/2012	330	0013127	12
12/06/2012	330	0013121	12
			132 Total

APPENDICES

APPENDIX A



**CONESTOGA-ROVERS
& ASSOCIATES**

2135 S. Loop 250 West
Midland, Texas 79705
Telephone: (432) 686-0086 Fax: (432) 686-0186
<http://www.craworld.com>

January 18, 2011

Reference No. 073041

Mr. Geoffery Leking
New Mexico Oil Conservation Division
District I Office - 1625 N. French Drive
Hobbs, NM 88240

Re: **Proposed Delineation and Closure Activities for Remediation Plan 10-5-2512**
Chevron West Dollarhide Drinkard Unit Well #64 Injection Line Release
(Unit Letter I) of Section 31, Township 24 South, Range 38 East
Lea County, New Mexico

Dear Mr. Leking:

On behalf of Chevron Environmental Management Company (Chevron), Conestoga-Rovers and Associates (CRA) herewith submits this correspondence for Remediation Plan #10-5-2512 to the New Mexico Oil Conservation Division (OCD) regarding proposed assessment and remedial activities associated with the subject injection line release location (Site). The Site is also proximate to the WDDU #148 well location (FIGURE 1). The Dollarhide Chevron office immediately notified Mr. Larry Johnson with the Hobbs OCD office by telephone on May 1, 2010 and submitted the required C-141 Release Notification and Corrective Action Form dated May 3, 2010 (attached).

PROJECT INFORMATION

The subject release location is situated approximately seven miles northeast of Jal, in Lea County, New Mexico. According to information from the C-141 Release Notification and Corrective Action form filed with the New Mexico Oil Conservation Division (OCD), a two-inch WDDU #64 water injection line released approximately 87.1734 barrels of produced water and 0.8683 barrels of oil south of the WDDU #148 location on May 1, 2010. A reported 50.5 barrels of fluids were recovered by a vacuum truck during response activities. The Chevron Midland office and Dollarhide FMT office (Ricky Heredia) have been in contact with the OCD regarding the ongoing status of the assessment and remediation work associated with this produced water release site.

The Site is not located within 1000 feet of any surface water bodies or wellhead protection areas. Review of surface elevation and depth to water data from the online Petroleum Resource Center's New Mexico Pit Rule Mapping Portal indicates the depth to groundwater beneath the Site to be slightly greater than 100 feet below the ground surface. Consequently, OCD Recommended Remediation Action Levels (RRALs) applied to this site are 10 ppm benzene, 50 ppm BTEX, 5,000 ppm TPH and 1,000 ppm chlorides.

On May 13, and on behalf of Chevron, Ron's Welding Inc. (RWI) and an environmental consultant, Ms. Cindy Crain, mobilized to the site to perform soil assessment tasks. Heavy equipment was utilized to obtain soil samples from various depths down to 17 feet below ground surface (bgs) at six test pit

Equal
Employment Opportunity
Employer



locations (see attached analytical table). Analytical results demonstrate three locations, SS-3, SS-5 and SS-6 with elevated chloride (>1000 mg/kg) concentrations. The three other locations demonstrated hydrocarbon and chloride concentration levels below RRALs established for this location. The Site sketch provides locations of the test pits and the configuration of the resulting remedial excavation. Three active pipelines, including the high-pressure injection line – are exposed in the excavation. A large remedial excavation with an approximate dimension of 325' x 75' x 5' deep exists at the site. A smaller (90' x 40' x 5') remedial excavation is situated south of the WDDU #148 well pad. The volume of soils removed offsite to the Sundance facility in Eunice, NM, from the excavation has been reported to CRA to be approximately 2,100 cubic yards.

On January 11, 2011, Tom Larson and James Ornelas with CRA, Matt Hudson with Chevron and Marcos Silvestri with AECOM met you at the OCD District 1 office to discuss the subject project. Discussions from the meeting included previous OCD communications, assessment/delineation data (see attached) and remedial activities performed at the Site to date. Additional vertical/horizontal delineation and Site restoration activities were also discussed and are outlined below in the proposed Site closure activities.

PROPOSED SITE CLOSURE ACTIVITIES

Additional Horizontal and Vertical Delineation

Results of the soil sampling (test pit) analysis and notification of the removal of impacted soils (to 5' bgs) at the WDDU #64 injection line release site were communicated by Chevron to Larry Johnson with the OCD District 1 office in Hobbs, NM in the summer of 2010. After review of the information and in a verbal communication, Mr. Johnson requested that three soil borings be advanced adjacent to the SS-3, SS-5 and SS-6 test pit locations (see attached table of analytical results and map). Note the subject test pit locations (3) have elevated chloride concentrations in the soils at depth. The objective of the boring program is to evaluate the vertical extent of chloride impacts at the respective locations. As requested, Chevron proposes the installation of three soil borings adjacent to test pits to a proposed depth of 40' bgs. Prior to boring installation, the ramp construction to access the boring locations will be required. Soil boring samples will be collected in 5 foot intervals from the excavation floor to the proposed total depth of 40 feet. CRA will log the lithology and characteristics of soils within the borings. The depth, location and sampling intervals will be based on the professional judgment of the CRA geologist/site supervisor and field conditions encountered. Soil samples will be analyzed by ALS Laboratories of Houston, Texas for chlorides using EPA Method 300; benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B and Total Petroleum Hydrocarbons (TPH) using EPA Method 8015 (modified) for DRO/GRO). The soil borings will be plugged with bentonite and boring records will be provided to the State of New Mexico. Proposed soil boring and sidewall sample locations are provided in FIGURE 2.

In addition, four sidewall samples will be collected in the larger remedial excavation northeast of the WDDU #148 wellhead and four sidewall samples will be collected from the smaller remedial excavation south of the WDDU #148 wellhead. The sidewall samples will be utilized to evaluate the horizontal extent of soil impacts and will be analyzed for the same analytical suite proposed for the soil borings.



**CONESTOGA-ROVERS
& ASSOCIATES**

January 18, 2011

3

Reference No. 073041

Results of the additional horizontal and vertical delineation activities will be compiled and submitted to the OCD District 1 office for review. Recommendations for any additional assessment and remediation activities, as appropriate, will be discussed with the OCD at this time.

Site Restoration Activities

The proposed Site restoration activities will not be initiated without OCD concurrence and notifications. Subsequent to OCD review of the additional horizontal and vertical delineation data, additional soil removal may or may not be proposed by Chevron. At this time and for remediation plan discussion purposes, Chevron proposes the following at this active pipeline location:

- Installation of a 20-mil poly liner on the floor (approximately 5 feet) of the two remedial excavations
- Importation of clean, soil and caliche materials (approximately 2,500 cubic yards) above the liners to match the surface topography
- Ripping and seeding of the construction-affected area utilizing a seed mixture as designated by the property owner

The implemented remediation plan and Site closure activities will be compiled and included in the FINAL C-141 report associated with this release incident. Chevron is prepared to begin the proposed work immediately to OCD concurrence. Please contact Tom Larson with CRA at 423-686-0086 if you would like to discuss this matter in more detail. Thanks in advance for your considerations and we look forward to working with the OCD on this remediation plan. Your timely response to this correspondence is appreciated.

Yours truly,
CONESTOGA-ROVERS & ASSOCIATES

Thomas C. Larson
Operations Manager

Enclosures:

FIGURE 1 - Site Location Map
FIGURE 2 - Proposed Soil Boring Location Map
OCD Initial Report Form C-141
Soil Analytical Table From Delineation Activities

cc.: Mr. Matt Hudson, Chevron Environmental Management Company (Houston)
Mr. Marcos Silvestri, AECOM (Houston)

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Chevron	Contact Ricky Heredia
Address PO Drawer 29 Andrews, Texas 79714	Telephone No. 432-523-365 ext 7603
Facility Name West Dollarhide Drinkard Unit <i>148</i>	Facility Type
Surface Owner George Willis	Mineral Owner Chevron
Lease No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	31	24 S	38 E					

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Produce Water	Volume of Release 88.043 bbls	Volume Recovered 50.5 bbls
Source of Release 2" West Lateral line	Date and Hour of Occurrence 5/1/2010 11:30	Date and Hour of Discovery 5/1/2010 11:30
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom : 5-1-10 approx 8:00pm EL Gonzales	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

I called Larry Johnson 5-6- @ 11:30 TX. He said self started & keep him informed

Describe Cause of Problem and Remedial Action Taken.*

High Pressure 2" line failed causing spill 0.8683 bbls oil and 87.174 bbls Produce Water
Field Specialist shut in pump and isolated leak called out vacuum truck

Describe Area Affected and Cleanup Action Taken.*

Free liquids were removed from the spill area. The impacted area will be evaluated for depth and quantity of chlorides. If additional remediation is needed a work plan will submitted to the NM ODD describing the proposed actions to be taken.

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.

OIL CONSERVATION DIVISION

Signature: <i>Ricky Heredia</i>	Approved by District Supervisor:	
Printed Name: <i>Ricky Heredia</i>	Approval Date:	Expiration Date:
Title: Dollarhide Field HES	Conditions of Approval:	
E-mail Address: <i>rhrc@chevron.com</i>	Attached <input type="checkbox"/>	
Date: 5/3/2010 Phone: 432-238-2343		

* Attach Additional Sheets If Necessary

Table 1:
Summary of Laboratory Analysis of Soil Samples from Delineation Activities
Chevron, West Dollarhide Drinkard Unit (WDDU) # 148
Unit Letter I, Section 31, Township 24 South, Range 38 East
Lea County, New Mexico

Sample Date	Soil Sample Number	Sample Depth (feet BGS)	TPH - GRO (C6 - C10) (mg/kg)	TPH - DRO (>C10 - C28) (mg/kg)	Total TPH (mg/kg)	Benzene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
WQCC Standard					5,000	10	50	1,000
5/13/10	SS-1	0-6"	<10.0	158	158	<0.050	<0.45	20,600
5/13/10		3	<10.0	<10.0	<20.0	---	---	4,640
5/13/10		5	---	---	---	---	---	3,200
5/13/10		7.5	---	---	---	---	---	1,090
5/13/10		10	---	---	---	---	---	880
5/13/10		15	---	---	---	---	---	256
5/13/10	SS-2	0-6"	<10.0	<10.0	<20.0	<0.050	<0.45	<16
5/13/10		2.5	<10.0	<10.0	<20.0	---	---	1,090
5/13/10		5	---	---	---	---	---	---
5/13/10		7.5	---	---	---	---	---	---
5/13/10		10	---	---	---	---	---	608
5/13/10		15	---	---	---	---	---	304
5/13/10	SS-3	0-6"	395	11,400	11,795	<0.050	4.98	20,000
5/13/10		2.5	2,330	5,630	7,960	0.378	40,358	3,840
5/13/10		5	55.6	290	345.6	<0.050	3.325	3,480
5/13/10		7.5	<10.0	43.3	43.3	---	---	4,160
5/13/10		10	---	---	---	---	---	3,680
7/14/10		15	---	---	---	---	---	4,320
5/13/10	SS-4	0-6"	1,160	16,000	17,160	0.127	15,937	4,800
5/13/10		2.5	<10.0	<10.0	<20.0	---	---	3,360
5/13/10		5	---	---	---	---	---	1,300
5/13/10		7.5	---	---	---	---	---	4,320
5/13/10		10	---	---	---	---	---	6,300
5/13/10		15	---	---	---	---	---	4,240
7/14/10		20	---	---	---	---	---	464
5/13/10	SS-5	0-6"	1,380	24,200	25,580	0.120	13.11	10,800
5/13/10		2.5	19.6	189	208.6	---	---	3,720
5/13/10		5	---	---	---	---	---	4,160
5/14/10		7.5	---	---	---	---	---	1,490
5/14/10		10	---	---	---	---	---	1,100
5/14/10		15	---	---	---	---	---	2,040
8/9/10		17	---	---	---	---	---	1,420
5/14/10	SS-6	0-6"	<10.0	19.9	19.9	<0.050	0.61	4,720
5/14/10		2.5	<10.0	<10.0	<20.0	---	---	1,800
5/14/10		5	---	---	---	---	---	2,440
5/14/10		7.5	---	---	---	---	---	2,920
5/14/10		10	---	---	---	---	---	1,520

Notes: *Samples Analyzed by Cardinal Laboratories, Hobbs, New Mexico*

1. BGS: Depth in feet below ground surface
2. mg/kg: Milligrams per kilogram
3. ---: No Data Available
4. <: Less than method detection limit



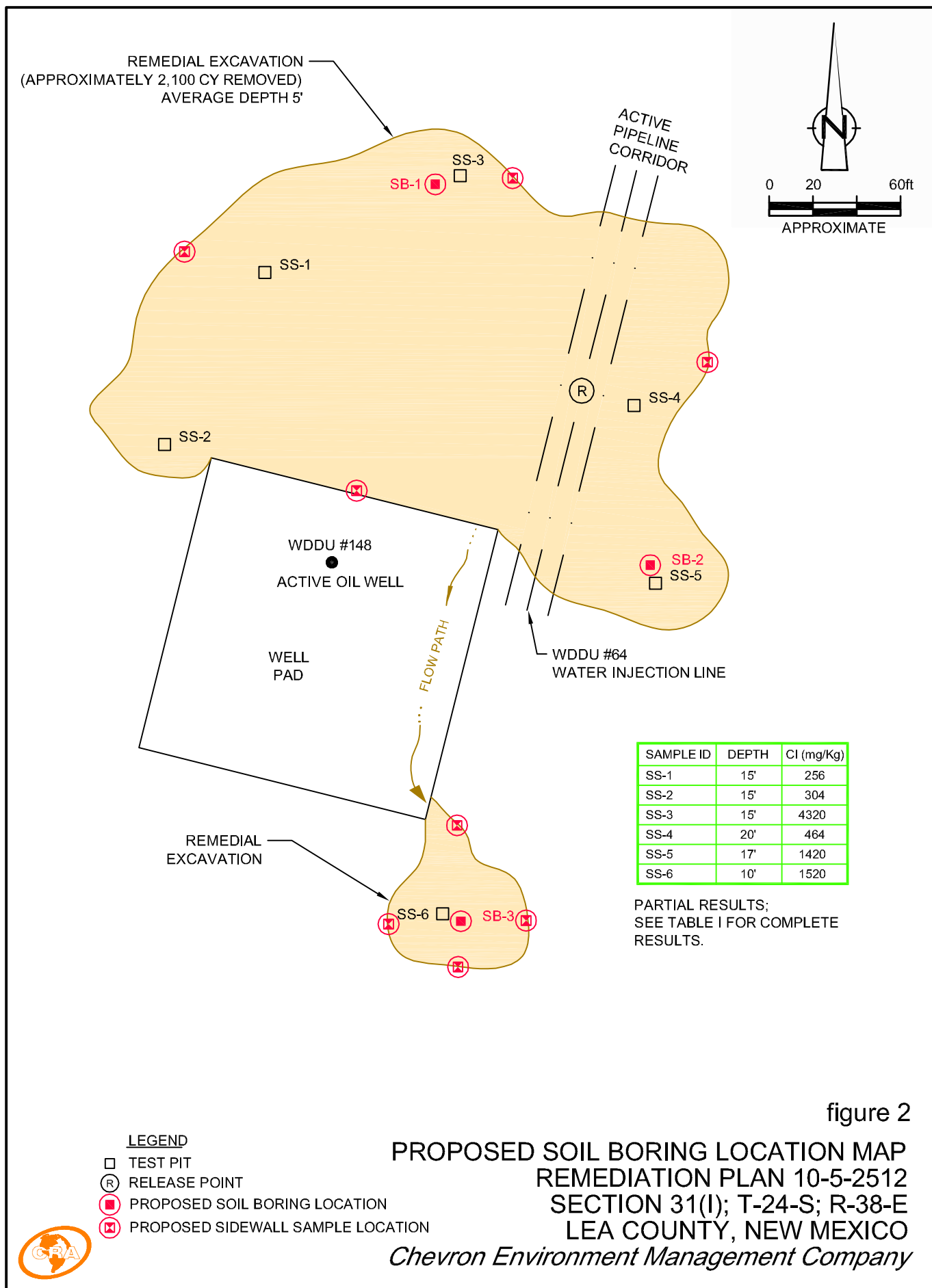
SOURCE: USGS TOPOGRAPHIC MAP
JAL NE 7.5 MINUTE QUADRANGLE
32.17294° N, 103.09325° W

figure 1

SITE LOCATION MAP
REMEDATION PLAN 10-5-2512
SECTION 31(I); T-24-S; R-38-E
LEA COUNTY, NEW MEXICO

Chevron Environment Management Company





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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Chevron Environmental Management Company (CEMC)	Contact Kegan Boyer
Address 1400 Smith Street, Houston Texas, 77002	Telephone No. 713-372-7705
Facility Name West Dollarhide Drinkard Unit #148	Facility Type

Surface Owner George Willis	Mineral Owner Chevron	Lease No.
-----------------------------	-----------------------	-----------

LOCATION OF RELEASE

Unit Letter I	Section 31	Township 24	Range 38 E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
------------------	---------------	----------------	---------------	---------------	------------------	---------------	----------------	---------------

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 88.043 bbls	Volume Recovered 50.5 bbls
Source of Release 2" West Lateral Line	Date and Hour of Occurrence 5/1/2010 @ 11:30	Date and Hour of Discovery 5/1/2010 @ 11:30
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? 5/1/10 – approx. 8:00pm – E L Gonzales	
By Whom? Ricky Heredia	Date and Hour 5/1/2010 @ 8:00pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

High Pressure 2" line failed causing spill 0.8683 bbls oil and 87.174 bbls Produced Water
Field Specialist shut in pump and isolated leak and called out a vacuum truck

Describe Area Affected and Cleanup Action Taken.*

**Ricky Heredia – Dollarhide Field HES, called Larry Johnson on 5/1/10 @ 11:30 TX. Larry Johnson approved work start – noting to keep him informed. Free liquids were removed from the spill area. See attached Site Closure Report (April 2013) submitted by Conestoga Rovers & Associates (CRA) on behalf of Chevron documenting Clean Up Action Taken.

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:	<u>OIL CONSERVATION DIVISION</u>		
Printed Name: Kegan Boyer	Approved by District Supervisor:		
Title: CEMC Project Manager	Approval Date:	Expiration Date:	
E-mail Address: kegan.boyer@chevron.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 04/12/13	Phone: (713) 372-7705		

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
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1000 Rio Brazos Road, Aztec, NM 87410
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Form C-141
Revised October 10, 2003

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side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Chevron Environmental Management Company (CEMC)	Contact Kegan Boyer
Address 1400 Smith Street, Houston Texas, 77002	Telephone No. 713-372-7705
Facility Name West Dollarhide Drinkard Unit #148	Facility Type

Surface Owner George Willis	Mineral Owner Chevron	Lease No.
-----------------------------	-----------------------	-----------

LOCATION OF RELEASE

Unit Letter I	Section 31	Township 24	Range 38 E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
------------------	---------------	----------------	---------------	---------------	------------------	---------------	----------------	---------------

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 88.043 bbls	Volume Recovered 50.5 bbls
Source of Release 2" West Lateral Line	Date and Hour of Occurrence 5/1/2010 @ 11:30	Date and Hour of Discovery 5/1/2010 @ 11:30
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? 5/1/10 – approx. 8:00pm – E L Gonzales	
By Whom? Ricky Heredia	Date and Hour 5/1/2010 @ 8:00pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

High Pressure 2" line failed causing spill 0.8683 bbls oil and 87.174 bbls Produced Water
Field Specialist shut in pump and isolated leak and called out a vacuum truck

Describe Area Affected and Cleanup Action Taken.*

**Ricky Heredia – Dollarhide Field HES, called Larry Johnson on 5/1/10 @ 11:30 TX. Larry Johnson approved work start – noting to keep him informed.
Free liquids were removed from the spill area. See attached report submitted by Conestoga Rovers & Associates (CRA) for Clean Up Action Taken.

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:		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Kegan Boyer		Approved by District Supervisor:	
Title: CEMC Project Manager		Approval Date:	Expiration Date:
E-mail Address: kegan.boyer@chevron.com		Conditions of Approval:	Attached <input type="checkbox"/>
Date: 04/12/13 Phone: (713) 372-7705			

* Attach Additional Sheets If Necessary

APPENDIX B

Site Chronology – West Dollarhide Drinkard Unit #148 Restoration Project

Section 31 (Unit I), Township 24 South, Range 38 East
Lea County, New Mexico

<p style="text-align: center;">November 27, 2012 (Tuesday)</p>	<p>Received Dollarhide FMT site specific safety training for Entact staff. Located the site and borrow pit locations. Began field activities with safety meeting attended by Chevron, CRA, and Entact staff. Discussed CVX permits needed for the project activities. Discussed with Chaparral avenues of identifying the 2-inch fiberglass line located within the excavated pit (Robert Aaron). The 2-inch line was assumed active due to measures taken that have not proved positive identification of line ownership. Hazard identification (signs) with orange construction fencing was installed around the well and overhead electrical lines. The excavator was taken to the borrow pit for backfilling. The dozer was taken to the excavation pit area. Eric Page (CEMC) was contacted by Tom Larson and Ryan Kainer to inform of a change order to the project, regarding the line verification activities. Hydro-vacuum of the area near the header, 2-inch line and 3-inch (identified) line was proposed to investigate the path of the 2-inch line and to positively identify this line.</p>
<p style="text-align: center;">November 28, 2012 (Wednesday)</p>	<p>Entact received an excavation permit from Chevron OPCO Dollarhide to prep the bottom of the excavated pits for lining purposes. A confined space permit was also received from OPCO Dollarhide to enter the larger excavated pit and begin installing the liner. The liner was completely installed within the larger excavated pit, excluding the 30' buffer area surrounding the Chaparral lines. As of November 28, 2012, the 2-inch fiberglass line was to be assumed active. A 15' barrier on each side of the line was installed for safe measure and to avoid contact. Riley Industrial was contacted to perform hydro-vac of the 2-inch line near the 3-inch line adjacent to the header area and a CVX injection line. Riley performed the one call for the designated area of investigation. This work was started on Monday, December 3, 2012. It was anticipated that this investigation would evaluate the activity of the 2 inch line that exists within the excavated pit. When the 2-inch line was determined abandoned, work continued within 15' of both lines including cribbing and backfilling. Clark Badley (CVX) was contacted for information included with the 2-inch line at the CVX injection trench. Mr. Badley commented that two lines in this area were breached during the trenching.</p>
<p style="text-align: center;">November 29, 2012 (Thursday)</p>	<p>Backfill of the two lined pits began on November 29, 2012. Entact and RWI loaded and transported 48 truck loads with 12 cubic yards within each load. Approximately 576 cubic yards of backfill material was emplaced within the excavated pits. Riley Industrial performed hydro-vac activities on the unidentified 2 inch fiberglass line on Monday, December 3, 2012. The location investigated was east of the #148 site near the Chaparral header. Chaparral, along with CRA staff, will be onsite during this investigation.</p>
<p style="text-align: center;">November 30, 2012 (Friday)</p>	<p>Continued with backfilling operations. Loaded and hauled 69 loads at 12 cy per load. Emplaced materials into pits.</p>

December 1, 2012 (Saturday)	Continued with backfilling operations. Loaded and hauled 46 loads at 12 cy per load. Emplaced materials into pits. Three day total backfill haul was 1956 cy. Activities were shut down on Sunday.
December 3, 2012 (Monday)	SWA was implemented for morning fog to lift. Hydroexcavation activities of 'unknown 2-inch' line at crossing and manifold locations near Chaparral header were performed using Riley (OPCO supplier) in an attempt to find the 'dead end'. Did not find dead end but Chaparral used field observations to claim ownership of the 'unknown 2-inch' line. Hauled 36 loads at 12 cys (432 cy) - total backfill haul for project to date was 199 loads at 12 cys/load = 2,388 cys.
December 4, 2012 (Tuesday)	Chaparral 'cold tapped' the previously unknown 2-inch line the morning of December 4, 2012. No liquids were present in the line (verified as abandoned line). As instructed, cribbed Chaparral's 3-inch and 2-inch lines that were left exposed in the remedial excavation using sandbags. Completed backfilling area surrounding Chaparral pipelines. Performed final grade operations, with crown, across former remedial excavations. Kegan Boyer was onsite to observe site operations.
December 5, 2012 (Wednesday)	Moved excavator to backfilled remediation site for loading of impacted soils for transportation to Sundance (Chevron SFU) facility near Eunice, New Mexico. Hauled 6 loads at 12 cys each for daily haul of 72 cys. Kegan Boyer was onsite to observe site operations.
December 6, 2012 (Thursday)	Hauled out all of the remaining impacted soils to Sundance - 5 loads at 12 cys each = 60 cy for the day. Total impacted soils to Sundance 132 cys - retained executed copies of manifests for CEMC and OPCO. Seeded site with grass mixture.

APPENDIX C



PHOTO 1: Remedial Excavation – May 2010



PHOTO 2: Remedial Excavation – May 2010



PHOTOGRAPH LOG
Chevron West Dollarhide Drinkard Unit#148
Lea County, New Mexico



PHOTO 3: Remedial Excavation – May 2010



PHOTO 4: Remedial Excavation – May 2010, Showing Test Pit Location



PHOTGRAPHIC LOG
Chevron West Dollarhide Unit #148
Lea County, New Mexico



PHOTO 5: View of Soil Boring Activities – April 2011



PHOTO 6: View of Soil Boring Activities – April 2011



PHOTOGRAPH LOG
Chevron West Dollarhide Drinkard Unit #148
Lea County, New Mexico



PHOTO 7: Sand material to be used for backfill (Mr. George Willis Property)



PHOTO 8: Sand material used to backfill (Mr. George Willis Property)



PHOTOGRAPHIC LOG
Chevron West Dollarhide Unit #148
Lea County, New Mexico



PHOTO 9: View of Supported Chaparral Water Injection Lines
and Backfilling Activities - December 2012



PHOTO 10: View of Supported Chaparral Water Injection Lines
and Backfilling Activities - December 2012



PHOTOGRAPH LOG
Chevron West Dollarhide Drinkard Unit #148
Lea County, New Mexico



PHOTO 11: View of Backfilling Activities (20 mil Poly Liner) – December 2012



PHOTO 12: View of Backfilling Activities – December 2012



PHOTOGRAPHIC LOG
Chevron West Dollarhide Unit #148
Lea County, New Mexico



PHOTO 13: View of Final Grading Activities – December 2012



PHOTO 14: View of Final Grading Activities – December 2012



APPENDIX D

228979

NON-HAZARDOUS
WASTE MANIFEST

1. Generator ID Number

N/A

2. Page 1 of 1

3. Emergency Response Phone

432.301.4066

4. Waste Tracking Number

0013125

5. Generator's Name and Mailing Address

Chevron Environmental Management Company

1400 Smith St, Room 07088

Houston, TX 77002

Generator's Site Address (if different than mailing address)

West Dollarhide Drinkard Unit (WDDU) #148

Sec 31, Unit I, T24S, R38E (Lee Co.)

Jal, NM 88252

Generator's Phone:

(713) 372-7705 Attn: Kegan Boyer

6. Transporter 1 Company Name

L.H. Chaney Materials, Inc.

U.S. EPA ID Number

TXD980808085 TCEQ: 40491

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

Sundance Services (Parabo, Inc.)

P. O. Box 1737

Eunice, NM 88231

U.S. EPA ID Number

Permit # NM-01-003

Facility's Phone:

575-304-2511

9. Waste Shipping Name and Description

10. Containers

No.

Type

11. Total
Quantity

12. Unit
Wt./Vol.

1. Non DOT Regulated Material

1

DT

12

Y

13. Special Handling Instructions and Additional Information

(1) 873041

Soil impacted with Chlorides

Injection line leak that released produced water.

LEAK D PPE: safety glasses/gloves

(2)

(3)

(4)

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

Generator's/Offor's Printed/Typed Name

KEGAN BOYER

Signature

[Signature]

Month Day Year

12 05 12

15. International Shipments

☐ Import to U.S.

☐ Export from U.S.

As Agent of Chevron Environmental Management Company

Transporter Signature (for exports only):

Port of entry/exit:

Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Transporter 2 Printed/Typed Name

Signature

Month Day Year

12 25 12

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space

☐ Quantity

☐ Type

☐ Residue

☐ Partial Rejection

☐ Full Rejection

17b. Alternate Facility (or Generator)

Manifest Reference Number:

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name

Signature

Connie Romero

[Signature]

Month Day Year

12 15 2012

DESIGNATED FACILITY'S COPY

228977

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number N/A	2. Page 1 of 1	3. Emergency Response Phone 432.301.4058	4. Waste Tracking Number 0013124
5. Generator's Name and Mailing Address Chevron Environmental Management Company 1400 Smith St, Room 07086 UWDOLN1010-FSH Houston, TX 77002			Generator's Site Address (if different than mailing address) West Dollenhede Drinkard Unit (WDDU) #148 Sec 31, Unit I, T24S, R38E (Lee Co.) Jal, NM 88252		
Generator's Phone: (713) 372-7705 Attn: Kegan Boyer					
6. Transporter 1 Company Name L.H. Chaney Materials, Inc. RWE Gillet St #02			U.S. EPA ID Number TXD0800000003 TCEQ-40494		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address Sundance Services (Parabo, Inc.) P. O. Box 1737 Eunice, NM 88231			U.S. EPA ID Number Permit # NM-01-003		
Facility's Phone: 575-394-2511					
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.
		No.	Type		
1. Non DOT Regulated Material		1	DT	12	Y
2.					
3.					
4.					
13. Special Handling Instructions and Additional Information (1) 973041 Soil impacted with Crude Oil. Inspection for leaks that released produced water. Leaked O PPE, safety glasses, gloves.					
(2)					
(3)					
(4)					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's/Offoror's Printed/Typed Name KEGAN BOYER		Signature <i>[Signature]</i>		Month Day Year 12 05 12	
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		As Agent of Chevron Environmental Management Company			
Transporter Signature (for exports only):		Port of entry/exit: _____			
16. Transporter Acknowledgment of Receipt of Materials		Date leaving U.S.: _____			
Transporter 1 Printed/Typed Name		Signature		Month Day Year	
Transporter 2 Printed/Typed Name		Signature		Month Day Year	
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
17b. Alternate Facility (or Generator)		Manifest Reference Number: _____			
Facility's Phone:		U.S. EPA ID Number			
17c. Signature of Alternate Facility (or Generator)		Month Day Year			
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a					
Printed/Typed Name Connie Romero		Signature <i>[Signature]</i>		Month Day Year 12 5 2012	

TK # 228929
0013129

NON-HAZARDOUS
WASTE MANIFEST

1. Generator ID Number

N/A

2. Page 1 of

3. Emergency Response Phone

432.301.4056

4. Waste Tracking Number

0013129

5. Generator's Name and Mailing Address

Chevron Environmental Management Company
1400 Smith St, Room 07086 WBS # 14WDOL N1010-SFH
Houston, TX 77002

Generator's Site Address (if different than mailing address)

West Dollarhide Drinkard Unit (WDDU) #148
Sec 31, Unit 1, T24S, R38E (Lee Co.)
Jal, NM 88252

Generator's Phone: (713) 372-7705 Attn: Kegan Boyer

6. Transporter 1 Company Name

~~L.H. Chaney Materials, Inc.~~ *RHI Gilbert's #02*

U.S. EPA ID Number

~~TXD000000005~~ TCEQ-40401

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

Sundance Services (Parabo, Inc.)
P. O. Box 1737
Eunice, NM 88231

U.S. EPA ID Number

Permit # NM-01-003

Facility's Phone: 575-394-2511

9. Waste Shipping Name and Description

10. Containers

11. Total Quantity

12. Unit Wt./Vol.

No.

Type

1. Non DOT Regulated Material

1

DT

12

Y

2.

3.

4.

13. Special Handling Instructions and Additional Information

(1) 073041 Soil impacted with Chlorides Section line leak that released produced water Level D PPE, safety glasses/gloves

(2)

(3)

(4)

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

Generator's/Offor's Printed/Typed Name

KEGAN BOYER

Signature

As Agent of Chevron Environmental Management Company

Month Day Year

12 05 12

15. International Shipments

☐ Import to U.S.

☐ Export from U.S.

Port of entry/exit:

Date leaving U.S.:

Transporter Signature (for exports only):

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

Transporter 2 Printed/Typed Name

Signature

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space

☐ Quantity

☐ Type

☐ Residue

☐ Partial Rejection

☐ Full Rejection

17b. Alternate Facility (or Generator)

Manifest Reference Number:

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name

Connie Romero

Signature

[Signature]

Month Day Year


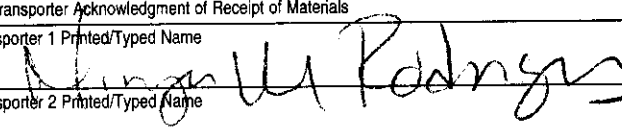
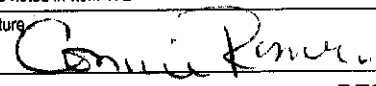
12 5 12

228927

GENERATOR
INT'L
TRANSPORTER
DESIGNATED FACILITY

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number N/A	2. Page 1 of 1	3. Emergency Response Phone 432.301.4056	4. Waste Tracking Number 0013128	
5. Generator's Name and Mailing Address Chevron Environmental Management Company 1400 Smith St, Room 07088 Houston, TX 77002				Generator's Site Address (if different than mailing address) West Dollarhide Drinkard Unit (WDDU) #148 Sec 31, Unit 1, T24S, R38E (Lea Co.) Jal, NM 88252		
Generator's Phone: (713) 372-7705 Attn: Kegan Boyer						
6. Transporter 1 Company Name L.H. Cheney Materials, Inc. RWI				U.S. EPA ID Number TXD90000000005 TCEQ-40401		
7. Transporter 2 Company Name				U.S. EPA ID Number		
8. Designated Facility Name and Site Address Sundance Services (Parabo, Inc.) P. O. Box 1737 Eunice, NM 88231				U.S. EPA ID Number Permit # NM-01-003		
Facility's Phone: 575-394-2511						
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
		No.	Type			
1. Non DOT Regulated Material		1	DT	12	Y	
2.						
3.						
4.						
13. Special Handling Instructions and Additional Information						
(1) 673041 Soil Impacted with Chlorides. Injection into tanks that released produced water. Level D PPE, safety glasses/goggles. (2) (3) (4)						
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.						
Generator's/Offor's Printed/Typed Name KEGAN BOYER			Signature 		Month Day Year 12 05 12	
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.			Port of entry/exit: Date leaving U.S.:			
16. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name 			Signature		Month Day Year	
Transporter 2 Printed/Typed Name			Signature		Month Day Year	
17. Discrepancy						
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number:						
17b. Alternate Facility (or Generator) U.S. EPA ID Number						
Facility's Phone:						
17c. Signature of Alternate Facility (or Generator) Month Day Year						
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a						
Printed/Typed Name Connie Romero			Signature 		Month Day Year 12 05 2012	

228970

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number N/A	2. Page 1 of 1	3. Emergency Response Phone 432.301.4058	4. Waste Tracking Number 0013126
5. Generator's Name and Mailing Address Chevron Environmental Management Company 1400 Smith St, Room 07086 Houston, TX 77002			Generator's Site Address (if different than mailing address) West Dolarhide Drinkard Unit (WDDU) #148 Sec 31, Unit I, T24S, R38E (Lee Co.) Jal, NM 88252		
Generator's Phone: (713) 372-7705 Attn: Kegan Boyer			U.S. EPA ID Number TXD9006659985 TCEQ-40404		
6. Transporter 1 Company Name L.H. Chaney Materials, Inc. RWI			# 3		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address Sundance Services (Parabo, Inc.) P. O. Box 1737 Eunice, NM 88231			U.S. EPA ID Number Permit # NM-01-003		
Facility's Phone: 575-394-2511					
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.
		No.	Type		
1. Non DOT Regulated Material		1	DT	12	Y
2.					
3.					
4.					
13. Special Handling Instructions and Additional Information					
(1) 073041 Soil impacted with Chlorides Injection fire tank that released produced water. Lower D-RPE; safety glasses/gloves					
(2)					
(3)					
(4)					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's/Offeror's Printed/Typed Name KEGAN BOYER			Signature 		Month Day Year 12 05 12
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.			Port of entry/exit: _____ Date leaving U.S.: _____		
16. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name 			Signature		Month Day Year
Transporter 2 Printed/Typed Name			Signature		Month Day Year
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number: _____					
17b. Alternate Facility (or Generator) U.S. EPA ID Number					
Facility's Phone: _____					
17c. Signature of Alternate Facility (or Generator) Month Day Year					
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name Connie Romero			Signature 		Month Day Year 11 15 2012

TK# 228933

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number

N/A

2. Page 1 of

3. Emergency Response Phone

432.301.4060

4. Waste Tracking Number

0013127

5. Generator's Name and Mailing Address

Chevron Environmental Management Company

1400 Smith St, Room 07086 WBS# UWDOLN1010-FSH
Houston, TX 77002

Generator's Site Address (if different than mailing address)

West Doherty Drive Unit (WDDU) #148
Sec 31, Unit I, T24S, R38E (Lea Co.)
Jal, NM 88252

Generator's Phone:

(713) 372-7705 Attn: Kegan Boyer

6. Transporter 1 Company Name

~~L.H. Cheney Materials, Inc.~~ RWE

7. Transporter 2 Company Name

330

U.S. EPA ID Number

TXD000000005 TCEQ-40401

8. Designated Facility Name and Site Address

Sundance Services (Parabo, Inc.)
P. O. Box 1737
Eunice, NM 88231

U.S. EPA ID Number

U.S. EPA ID Number

Permit # NM-01-003

Facility's Phone:

575-394-2511

9. Waste Shipping Name and Description

1. Non DOT Regulated Material

10. Containers

No.

Type

11. Total Quantity

12. Unit Wt./Vol.

1

DT

12

Y

13. Special Handling Instructions and Additional Information

(1) 073041

Soil Impacted with Chlorides

Injection and leak that released production water

Low D PPE, Safety glasses/goggles

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

Generator's/Offor's Printed/Typed Name

KEGAN BOYER

Signature

[Signature]

Month Day Year
12 05 12

15. International Shipments

☐ Import to U.S.

☐ Export from U.S.

As Agent of Chevron Environmental Management Company

Transporter Signature (for exports only):

Port of entry/exit:

Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Transporter 2 Printed/Typed Name

Signature

Signature

Month Day Year

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space

☐ Quantity

☐ Type

☐ Residue

☐ Partial Rejection

☐ Full Rejection

17b. Alternate Facility (or Generator)

Manifest Reference Number:

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item T7a

Printed/Typed Name

Connie Romero

Signature

[Signature]

Month Day Year

12 5 2012

TK¹¹ 229064

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number N/A		2. Page 1 of 3		3. Emergency Response Phone 432.301.4066		4. Waste Tracking Number 0013123	
5. Generator's Name and Mailing Address Chevron Environmental Management Company 1400 Smith St, Room 07088 Houston, TX 77002					Generator's Site Address (if different than mailing address) West Dollarhide Drinkard Unit (WDDU) #148 Sec 31, Unit I, T24S, R38E (Lea Co.) Jal, NM 88262				
Generator's Phone: (713) 372-7705 Attn: Kegan Boyer					U.S. EPA ID Number TXD000000005 TCEG-40491				
6. Transporter 1 Company Name L.H. Cheney Materials, Inc.					U.S. EPA ID Number				
7. Transporter 2 Company Name RNF Gilbert's #02					U.S. EPA ID Number				
8. Designated Facility Name and Site Address Sundance Services (Parabo, Inc.) P. O. Box 1737 Eunice, NM 88231					U.S. EPA ID Number Permit # NM-01-003				
Facility's Phone: 575-304-2511									
9. Waste Shipping Name and Description					10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
					No.	Type			
1. Non DOT Regulated Material					1	DT	12	Y	
2.									
3.									
4.									
13. Special Handling Instructions and Additional Information									
(1) 073041 Soil Impacted with Chlorides Injection line leak that released produced water. Level D PPE: safety glasses/gloves									
(2)									
(3)									
(4)									
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.									
Generator's/Offeror's Printed/Typed Name KEGAN BOYER					Signature 		Month Day Year 12 06 12		
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.					As Agent of Chevron Environmental Management Company				
Transporter Signature (for exports only):					Port of entry/exit:				
16. Transporter Acknowledgment of Receipt of Materials					Date leaving U.S.:				
Transporter 1 Printed/Typed Name					Signature		Month Day Year		
Transporter 2 Printed/Typed Name					Signature		Month Day Year		
17. Discrepancy									
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection									
17b. Alternate Facility (or Generator)					Manifest Reference Number:				
Facility's Phone:					U.S. EPA ID Number				
17c. Signature of Alternate Facility (or Generator)					Month Day Year				
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a									
Printed/Typed Name Connie Romero					Signature 		Month Day Year 12 06 12		

NON-HAZARDOUS
WASTE MANIFEST

1. Generator ID Number

N/A

2. Page 1 of 1

3. Emergency Response Phone

432.301.4056

4. Waste Tracking Number

0013122

5. Generator's Name and Mailing Address

Chevron Environmental Management Company
1400 Smith St, Room 07086
Houston, TX 77002

Generator's Site Address (if different than mailing address)

West Dolarhide Drinkard Unit (WDDU) #148
Sec 31, Unit I, T24S, R38E (Lea Co.)
Jal, NM 88252

Generator's Phone:

(713) 372-7705 Attn: Kegan Boyer

6. Transporter 1 Company Name

L.H. Cheney Materials, Inc.

7. Transporter 2 Company Name

8. Designated Facility Name and Site Address

Sundance Services (Parabo, Inc.)
P. O. Box 1737
Eunice, NM 88231

Facility's Phone:

575-394-2511

9. Waste Shipping Name and Description

10. Containers

11. Total

12. Unit

No.

Type

Quantity

Wt./Vol.

1. Non DOT Regulated Material

1

DT

12

Y

2.

3.

4.

13. Special Handling Instructions and Additional Information

(1) 073041

Soil Impacted with Chlorides

Injection line leak that released produced water.

Level of PPE, safety glasses/gloves

(2)

(3)

(4)

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

Generator's/Offor's Printed/Typed Name

KEGAN BOYER

Signature

As Agent of Chevron Environmental Management Company

Month Day Year

12 06 12

15. International Shipments

☐ Import to U.S.☐ Export from U.S.

Port of entry/exit:

Date leaving U.S.:

Transporter Signature (for exports only):

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

Transporter 2 Printed/Typed Name

Signature

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space

☐ Quantity☐ Type☐ Residue☐ Partial Rejection☐ Full Rejection

17b. Alternate Facility (or Generator)

Manifest Reference Number:

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name

Connie Romero

Signature

Month Day Year


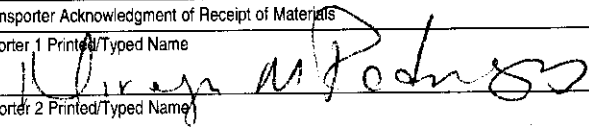
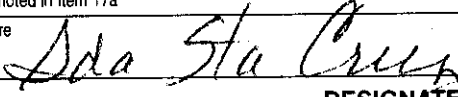
12 06 2012

TK # 229067
0013121

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number N/A	2. Page 1 of 1	3. Emergency Response Phone 432.301.4056	4. Waste Tracking Number 0013121	
5. Generator's Name and Mailing Address Chevron Environmental Management Company 1400 Smith St. Room 07086 WINDOLNIDIO - FHS Houston, TX 77002			Generator's Site Address (If different than mailing address) West Deltahide Drinkard Unit (WDDU) #148 Sec 31, Unit 1, T24S, R38E (Lea Co.) Jal, NM 88252			
Generator's Phone: (713) 372-7705 Attn: Kegan Boyer			U.S. EPA ID Number TCEG-4049-1			
6. Transporter 1 Company Name L.H. Chaney Materials, Inc. RWI			U.S. EPA ID Number			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address Sundance Services (Parabo, Inc.) P. O. Box 1737 Eunice, NM 88231			U.S. EPA ID Number Permit # NM-01-003			
Facility's Phone: 575-394-2511						
9. Waste Shipping Name and Description			10. Containers		11. Total Quantity	
			No.	Type	12. Unit Wt./Vol.	
1. Non DOT Regulated Material			1	DT	12 Y	
2.						
3.						
4.						
13. Special Handling Instructions and Additional Information (1) 073041 Soil Impacted with Chlorides Injection line that has released produced water. LEAK D PPE, safety glasses/gloves						
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.						
Generator's/Offor's Printed/Typed Name KEGAN BOYER			Signature <i>[Signature]</i>		Month Day Year 12 06 12	
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.			Port of entry/exit: Date leaving U.S.:			
16. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name <i>[Signature]</i>			Signature <i>[Signature]</i>		Month Day Year 12 6 12	
Transporter 2 Printed/Typed Name			Signature		Month Day Year	
17. Discrepancy						
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number:						
17b. Alternate Facility (or Generator) U.S. EPA ID Number						
Facility's Phone:						
17c. Signature of Alternate Facility (or Generator)						
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a						
Printed/Typed Name Connie Romero			Signature <i>[Signature]</i>		Month Day Year 12 4 2012	

GENERATOR
TRANSPORTER
DESIGNATED FACILITY

229084

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number N/A	2. Page 1 of 1	3. Emergency Response Phone 432.301.4056	4. Waste Tracking Number 0013119	
5. Generator's Name and Mailing Address Chevron Environmental Management Company 1400 Smith St, Room 07088 Houston, TX 77002			Generator's Site Address (if different than mailing address) West Dollarhide Drinkard Unit (WDDU) #148 Sec 31, Unit I, T24S, R38E (Lea Co.) Jal, NM 88252			
Generator's Phone: (713) 372-7705 Attn: Kegan Boyer			U.S. EPA ID Number TXD000000000000 TGEA-40401			
6. Transporter 1 Company Name L.H. Chaney Materials, Inc. RNT			# 3			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address Sundance Services (Parabo, Inc.) P. O. Box 1737 Eunice, NM 88231			U.S. EPA ID Number Permit # NM-01-003			
Facility's Phone: 575-394-2511						
9. Waste Shipping Name and Description			10. Containers		11. Total Quantity	12. Unit Wt./Vol.
			No.	Type		
1. Non DOT Regulated Material			1	DT	12	Y
2.						
3.						
4.						
13. Special Handling Instructions and Additional Information						
(1) 073041 Soil Impacted with Chlorides						
(2)						
(3)						
(4)						
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.						
Generator's/Offoror's Printed/Typed Name KEGAN BOYER			Signature 		Month 12	Day 06
			As Agent of Chevron Environmental Management Company		Year 12	
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____						
16. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name 			Signature		Month	Day
Transporter 2 Printed/Typed Name			Signature		Month	Day
17. Discrepancy						
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
17b. Alternate Facility (or Generator) Sundance Plant			Manifest Reference Number: _____			
Facility's Phone: (575) 394-3212			U.S. EPA ID Number			
17c. Signature of Alternate Facility (or Generator)			Month Day Year			
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a						
Printed/Typed Name Ida Santa Cruz			Signature 		Month 12	Day 06
					Year 12	

229085

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number <div style="text-align: center;">N/A</div>	2. Page 1 of 1	3. Emergency Response Phone 432.301.4056	4. Waste Tracking Number 0013120
5. Generator's Name and Mailing Address Chevron Environmental Management Company 1400 Smith St, Room 07086 UWDOLN1010-FSH Houston, TX 77002 (713) 372-7705 Attn: Kegan Boyer			Generator's Site Address (if different than mailing address) West Doharide Drinkard Unit (WDDU) #148 Sec 31, Unit 1, T24S, R38E (Lea Co.) Jal, NM 88252		
6. Generator's Phone: 1-800-455-6111			U.S. EPA ID Number TX0000000005 TCEQ-40404		
6. Transporter 1 Company Name McClanay Materials, Inc.			U.S. EPA ID Number		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address Sundance Services (Parabo, Inc.) P. O. Box 1737 Eunice, NM 88231 575-394-2511			U.S. EPA ID Number Permit # NM-01-003		
Facility's Phone:					
9. Waste Shipping Name and Description			10. Containers		11. Total Quantity
			No.	Type	12. Unit Wt./Vol.
1. Non DOT Regulated Material			1	DT	12
2.					
3.					
4.					
13. Special Handling Instructions and Additional Information (1) 073041 Soil Impacted with Chlorides Injection line leak that released produced water. Level D PPE; safety glasses/gloves					
(2)					
(3)					
(4)					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's/Offor's Printed/Typed Name KEGAN BOYER			Signature <i>[Signature]</i> As Agent of Chevron Environmental Management Company		Month Day Year 12 06 12
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:					
16. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name			Signature		Month Day Year
Transporter 2 Printed/Typed Name			Signature		Month Day Year
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number: U.S. EPA ID Number					
17b. Alternate Facility (or Generator)					
Facility's Phone: Sundance Serv			Month Day Year		
17c. Signature of Alternate Facility (or Generator) 575-394-3212			Month Day Year		
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name Ida Santa Cruz			Signature <i>[Signature]</i>		Month Day Year 12 6 12

DESIGNATED FACILITY TO GENERATOR

APPENDIX E

Analysis Request/ Environmental Services Chain of Custody



For Lancaster Laboratories use only

Acct. # 11713 Group# 1244470 Sample # 6271808-25

COC # 258611

Please print. Instructions on reverse side correspond with circled numbers.

1 Client: <u>CRA/CEML</u> Acct. #: _____ Project Name/ #: <u>073041</u> PWSID #: _____ Project Manager: <u>T. Larson</u> P.O. #: _____ Sampler: <u>T. Larson</u> Quote #: _____ Name of state where samples were collected: <u>NM</u>		4 Matrix <input type="checkbox"/> Potable <input type="checkbox"/> Check if NPDES Applicable <input type="checkbox"/> Water <input type="checkbox"/> Other		5 Analyses Requested <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="10">Preservation Codes</th> </tr> <tr> <td><u>BTEX 8021</u></td> <td><u>TPH 8015</u></td> <td><u>LI 320</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>										Preservation Codes										<u>BTEX 8021</u>	<u>TPH 8015</u>	<u>LI 320</u>								6 Temperature of samples upon receipt (if requested)	
Preservation Codes																																			
<u>BTEX 8021</u>	<u>TPH 8015</u>	<u>LI 320</u>																																	
2 Sample Identification		3 Composite	Date Collected	Time Collected	Grab	Soil	Water	Other	Total # of Containers	Remarks																									
SB1 (29-30')			4.28.11	1145	X	X				2	X X X																								
SB1 (49-50')				1230																															
SB1 (69-70')				1300																															
SB2 (29-30')				1320																															
SB2 (49-50')				1335																															
SB2 (69-70')				1400																															
SB3 (29-30')				1429																															
SB3 (49-50')				1449																															
SB3 (69-70')				1459																															

7 Turnaround Time Requested (TAT) (please circle): Normal Rush (Rush TAT is subject to Lancaster Laboratories approval and surcharge.) <u>5 day</u> Date results are needed: _____ Rush results requested by (please circle): Phone Fax E-mail Phone #: _____ Fax #: _____ E-mail address: _____				Relinquished by: <u>[Signature]</u> Date <u>4/27/11</u> Time <u>1200</u>				Received by: _____ Date _____ Time _____			
Relinquished by: <u>Tom Larson</u> Date <u>4/28/11</u> Time <u>1825</u>				Received by: _____ Date _____ Time _____							
Relinquished by: _____ Date _____ Time _____				Received by: _____ Date _____ Time _____							
Relinquished by: _____ Date _____ Time _____				Received by: _____ Date _____ Time _____							

8 Data Package Options (please circle if required) Type I (validation/NJ Reg) TX TRRP-13 Type II (Tier II) MA MCP CT RCP Type III (Reduced NJ) Type IV (CLP SOW) Type VI (Raw Data Only)		SDG Complete? Yes No Site-specific QC (MS/MSD/Dup)? Yes No Internal COC Required? Yes / No		Relinquished by: _____ Date _____ Time _____ Received by: <u>[Signature]</u> Date <u>4/29/11</u> Time <u>0900</u>			
--	--	--	--	--	--	--	--

Analysis Request/ Environmental Services Chain of Custody



For Lancaster Laboratories use only

Acct. # 11713 Group# 1244470 Sample # 6271808-25 **COC #** 258612

Please print. Instructions on reverse side correspond with circled numbers.

1 Client: _____ Acct. #: _____ Project Name/ #: _____ PWSID #: _____ Project Manager: _____ P.O. #: _____ Sampler: _____ Quote #: _____ Name of state where samples were collected: <u>1</u>				Matrix Check if Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Applicable <input type="checkbox"/>		5 Analyses Requested										For Lab Use Only FSC: _____ SCR#: _____	
						Preservation Codes										Preservation Codes H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ O=Other	
						4 Total # of Containers (Handwritten: 80213, 8015, 300)										6 Temperature of samples upon receipt (if requested)	
2 Sample Identification		Date Collected	Time Collected	3 Grab Composite	Soil	Water	Other	Remarks									
SX - NSW 3'		4.28.11	1505	X	X			2	X	X	X						
SX - WSW 3'			1515														
SX - SSW 3'			1510														
SX - ESW 3'			1520														
LX - SSW 3'			1430														
LX - ESW 3'			1435														
LX - SWSW 3'			1440														
LX - NWSW 3'			1445														
Temp Blank								1									
Trip Blank								6	X								
7 Turnaround Time Requested (TAT) (please circle): Normal <u>Rush</u> (Rush TAT is subject to Lancaster Laboratories approval and surcharge.) Date results are needed: _____ Rush results requested by (please circle): Phone Fax E-mail Phone #: _____ Fax #: _____ E-mail address: _____				Relinquished by: <u>Tom Langer</u> Date <u>4.28.11</u> Time <u>185</u>		Received by: _____ Date _____ Time _____		9									
Relinquished by: _____ Date _____ Time _____				Received by: _____ Date _____ Time _____		Relinquished by: _____ Date _____ Time _____		Received by: _____ Date _____ Time _____									
Relinquished by: _____ Date _____ Time _____				Received by: _____ Date _____ Time _____		Relinquished by: _____ Date _____ Time _____		Received by: _____ Date _____ Time _____									
Relinquished by: _____ Date _____ Time _____				Received by: _____ Date _____ Time _____		Relinquished by: _____ Date _____ Time _____		Received by: <u>Deborah Nesbitt</u> <u>4/29/11</u> <u>0900</u>									
8 Data Package Options (please circle if required) Type I (validation/NJ Reg) TX TRRP-13 Type II (Tier II) MA MCP CT RCP Type III (Reduced NJ) Site-specific QC (MS/MSD/Dup)? Yes No Type IV (CLP SOW) Internal COC Required? Yes / No _____ Type VI (Raw Data Only)				SDG Complete? Yes No													

CRA Simplified Scope of Work (SSOW)/Laboratory Services Purchase Order

Project Summary:

Project Name: Produced Water Line Release
 CRA Project No./Phase/Task: 073041
 Project Location: Lea County, New Mexico
 Client Name: Chevron Environmental Management Company
 QAPP Title: _____

Database Summary:

Database Maintained: ☐ Yes ☒ No
 Database Contact: _____
 Database Facility Code: _____

SSOW Ref. Code

Note: Is there more than one laboratory
 for this event? (SSOW__ of __) ☐ Yes ☒ No

Event Summary:

Phase/Study Title: West Dollarhide Drinkard Unit #148
 Event Description: Soil Assessment & Remediation

 Start Date: 4/11/2011
 Sampling Duration: 5 days

 Sampling Frequency: one-time

Rush TAT: 5 days ☐ NA
 Final Report & EDD TAT: 5 days Sample Batching: sample event
 Date Bottles Required: 4/8/2011
 Bottle Shipping Address: CRA/ 2135 S. Loop 250 West
Midland, Texas
 Phone Number: 432-686-0086 Attention: Tom Larson

Contacts:

	Name	Address	Phone	Cell	Email
Client Project Manager:	Matt Hudson		713-372-9207		mHUDSON@chevron.com
Consulting Firm:	CRA				
Project Manager:	Tom Larson	2135 S. Loop 250 West, Midland, Texas 79703	432-686-0086	432-553-1681	tlarson@croworld.com
Field Leader:					
Laboratory (Vendor):	Lancaster Laboratories				
Lab Project Manager:	Wendy Kozma	2425 New Holland Pike, Lancaster, PA 17605-2425	717-656-2300		wkozma@lancasterlabs.com
Chemistry/Data Mgt. Firm:	CRA				
Chemist:	Lynch, Patricia	6320 Rothway Suite 100, Houston, Texas, 77040	713-734-3090		plynch@croworld.com
Data Manager:	Lidstone, Julie	651 Colby Drive, Waterloo, Ontario N2V 1C2	519-884-0510		jilidstone@croworld.com

Lab Deliverables

EDD Format ☐ CRA EQUIS EZEDD ☐ CRA EQUIS 4-file ☐ Other (Please Specify) NA
 Hardcopy Level Requested ☒ CRA Standard ☐ Expanded ☐ Other (Please Specify) _____
 CRA Data Review Level ☐ Compliance ☐ Reduced Validation ☐ Reg III Innovative _____
☐ Full Validation ☐ 10/90-Full/Innovative ☐ Other (Please Specify) NA

Additional Reporting Requirements

Form 1's include: ☐ MDLs ☒ PQLs ☒ J Values
 TICs: ☐ Yes ☒ No
 Soil Reporting: ☒ Dry ☐ Wet
 Database Exports - ☐ Yes ☐ No
 Reporting down to MDL

Lab Deliverables Distribution

Rush TAT Data (email deliverable only) : Tom Larson
 Final EDD & Result Summary (PDF) : _____
 Final Lab Report ☒ PDF ☐ CD ☐ Hard Copy : Tom Larson

Data Management Deliverables

☐ EQUIS Database ☐ Cross Tab Table ☐ Flat File ☐ Databox ☐ Other (please specify): _____

Data Management Deliverables Distribution

Distribution List: NA

Data Management DV TAT: _____

Comments

*** additional Final Lab Report copy (in *.pdf format) is available on CRA's MyPortal Site in the Project File folder or on Program specific SharePoint site; please contact project Chemist

SSOW Email Distribution List: mHUDSON@chevron.com; tlARSON@croworld.com; wkozma@lancasterlabs.com; plynch@croworld.com; jilidstone@croworld.com

Prepared By:	Patricia L. Lynch	Date:	4/5/2011	Revision No.:	0	Revision Date:	
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CRA Simplified Scope of Work (SSOW)/Laboratory Services Purchase Order

SSOW Ref. Code

Project Name: Produced Water Line Release
 CRA Project No./Phase/Task: 073041
 Project Location: Lea County, New Mexico

Phase/Study Title: West Dollarhide Drinkard Unit #148
 Event Description: Soil Assessment & Remediation

Item	Sample Matrix	Analytical Parameters	Analytical Methods	Holding Time	Unit Prices	Applicable Surcharge Multiplier ⁽¹⁾	Extended Prices	Estimated Sample Qty/Event	Field QC Samples							Total Sample Qty.	Billable Samples	Estimated Cost/Event
									MS	MSD	Lab Dup	Trip Bk	RBik	Fld Dup	Other			
1	Soil	BTEX	SW8021	14 days	\$ 17.69	1.35	\$ 23.88	28				3				31	31	\$740.33
2	Soil	TPH/ GRO	SW8015	14 days	\$ 1.75	1.35	\$ 2.36	28								28	28	\$66.15
3	Soil	TPH/ DRO	SW8015	14 days	\$ 37.56	1.35	\$ 50.71	28								28	28	\$1,419.77
4	Soil	Chloride	EPA300	28 days	\$ 24.82	1.35	\$ 33.51	28								28	28	\$938.20
5	Soil	Moisture	EPA 160.3	7 days	\$ 4.55	1.35	\$ 6.14	28								28	28	\$171.99

⁽¹⁾ Explanation of Surcharges:

Estimated Event Subtotal: \$2,471.43
 Laboratory Surcharge(s): \$865.00
 Estimated Event Total Costs: \$3,336.43

Lab Contracting Summary:

Governing Terms and Conditions

- ☐ Master Agreement Number: _____
☐ Exhibit "A" Terms and Conditions
☐ Client Contract

CRA Purchase Order Number: 4038151

Name of Client: Chevron Environmental Management Company

Other Additional Insureds: _____

Governing Law: New Mexico

Currency: US

Address Invoice to: CRA/ Pat Lynch
6320 Rothway, Suite 100
Houston, Texas 77040

Patricia L. Lynch 4/5/2011
 (authorized CRA signature) (date signed)

Wendy Kozma 4/6/2011
 (authorized Vendor signature) (date signed)

Typed name constitutes authorized signature.

Vendor to provide and deliver all items or services set out or otherwise described below subject to the governing terms and conditions checked above. This Purchase Order expressly limits acceptance to such terms and conditions. Any additional or different terms proposed by Vendor are rejected unless expressly agreed to in writing by CRA. To accept this Purchase Order, Vendor must sign, date, and return one copy of this page to issuer before starting any work. CRA's receipt of Signature of this Purchase Order may be sent by facsimile (with confirmation by transmitting machine) and/or transmitted by portable document file (PDF) which shall be treated as an original signature, and any such signature, facsimile, PDF file, or copy of this signed Purchase Order shall be valid as an original and shall be binding as if it were the original. Show Purchase Order No. on all correspondence, insurance certificates, invoices, and delivery papers.

Environmental Sample Administration Receipt Documentation Log

Client/Project: CRA/CEMC

Shipping Container Sealed: YES NO

Date of Receipt: 4/29/11

Custody Seal Present *: YES NO

Time of Receipt: 0900

* Custody seal was intact unless otherwise noted in the discrepancy section

Source Code: 50-1

Package: Chilled Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	9493	5.5	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: D. Meslund / 208 Date/Time: 4/29/11 0915

Lancaster Laboratories Analytical Report
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425

Sample Number: SW 6271808

SB1(29-30') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 11:45 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB129

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	69.6	5.9	1

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	05/09/2011 10:42	Ashley M Adams	1

Sample Number: SW 6271809

SB1(49-50') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 12:30 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB149

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	754	114	20

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	05/09/2011 16:55	Ashley M Adams	20

Sample Number: SW 6271810

SB1(69-70') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 13:00 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB169

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
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Reference ID:
1244470100511164642

Lancaster Laboratories Analytical Report
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425

Sample Number: SW 6271810

SB1(69-70') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 13:00 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB169

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
	Wet Chemistry	EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	60.4	27.1	5

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	05/09/2011 11:56	Ashley M Adams	5

Sample Number: SW 6271811

SB2(29-30') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 13:20 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB229

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
	Wet Chemistry	EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	2,670	267	50

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	05/09/2011 17:09	Ashley M Adams	50

Sample Number: SW 6271812

SB2(49-50') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 13:35 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB249

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
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Reference ID:
1244470100511164642

Lancaster Laboratories Analytical Report
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425

Sample Number: SW 6271812

SB2(49-50') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 13:35 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB249

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	1,170	271	50

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	05/09/2011 17:23	Ashley M Adams	50

Sample Number: SW 6271813

SB2(69-70') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 14:00 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB269

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	175	28.0	5

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	05/09/2011 13:07	Ashley M Adams	5

Sample Number: SW 6271814

SB3(29-30') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 14:29 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB329

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
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Reference ID:
1244470100511164642

Lancaster Laboratories Analytical Report
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425

Sample Number: SW 6271814

SB3(29-30') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 14:29 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB329

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	220	26.1	5

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	05/09/2011 13:22	Ashley M Adams	5

Sample Number: SW 6271815

SB3(39-40') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 14:49 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB339

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	114	26.4	5

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	05/09/2011 13:36	Ashley M Adams	5

Sample Number: SW 6271816

SB3(49-50') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 14:59 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB349

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
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Reference ID:
1244470100511164642

Lancaster Laboratories Analytical Report
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425

Sample Number: SW 6271816

SB3(49-50') Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 14:59 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SB349

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	40.4 J	25.9	5

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	05/09/2011 13:50	Ashley M Adams	5

Sample Number: SW 6271817

SX-NSW3' Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 15:05 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SX-NS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	275	25.5	5

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	05/09/2011 14:04	Ashley M Adams	5

Sample Number: SW 6271818

SX-WSW3' Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 15:15 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SX-WS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
---------	---------------	------------	------------	----------------------------	-----------------

Reference ID:
1244470100511164642

Lancaster Laboratories Analytical Report
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425

Sample Number: SW 6271818

SX-WSW3' Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 15:15 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SX-WS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	282	25.5	5

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	05/09/2011 14:18	Ashley M Adams	5

Sample Number: SW 6271819

SX-SSW3' Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 15:10 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SX-SS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	274	25.3	5

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	05/09/2011 15:01	Ashley M Adams	5

Sample Number: SW 6271820

SX-ESW3' Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 15:20 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SX-ES

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
---------	---------------	------------	------------	----------------------------	-----------------

Reference ID:
1244470100511164642

Lancaster Laboratories Analytical Report
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425

Sample Number: SW 6271820

SX-ESW3' Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 15:20 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

SX-ES

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	1,270	254	50

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	05/10/2011 09:57	Ashley M Adams	50

Sample Number: SW 6271821

LX-SSW3' Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 14:30 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

LX-SS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	11,900	2,540	500

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	05/10/2011 10:11	Ashley M Adams	500

Sample Number: SW 6271822

LX-ESW3' Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 14:35 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

LX-ES

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
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Reference ID:
1244470100511164642

Lancaster Laboratories Analytical Report
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425

Sample Number: SW 6271822

LX-ESW3' Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 14:35 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

LX-ES

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	362	51.0	10

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	05/10/2011 10:25	Ashley M Adams	10

Sample Number: SW 6271823

LX-SWSW3' Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 14:40 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

LX-SW

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	869	102	20

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	05/10/2011 10:40	Ashley M Adams	20

Sample Number: SW 6271824

LX-NWSW3' Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 14:45 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

LX-NW

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
---------	---------------	------------	------------	----------------------------	-----------------

Reference ID:
1244470100511164642

Lancaster Laboratories Analytical Report
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425

Sample Number: SW 6271824

LX-NWSW3' Grab Soil
West Dollarhide Drinkard Unit #148

Account Number: 11713
Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland TX 79703

Collected: 04/28/2011 14:45 by TL

Submitted: 04/29/2011 09:00

Reported: 05/10/2011 16:47

LX-NW

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Wet Chemistry EPA 300.0					
07333	Chloride by IC (solid)	16887-00-6	mg/kg 1,760	mg/kg 254	50

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	05/10/2011 10:54	Ashley M Adams	50

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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

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Partial Report

Page 1 of 5

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

May 10, 2011

Project: Dollarhide

Submittal Date: 04/29/2011
Group Number: 1244470
PO Number: 4038151
Release Number: DOLLARHIDE
State of Sample Origin: NM

<u>Client Sample Description</u>	<u>Lancaster Labs #</u>	<u>Collected</u>
SB1(29-30') Grab Soil	6271808	04/28/2011 11:45
West Dollarhide Drinkard Unit #148		
SB1(49-50') Grab Soil	6271809	04/28/2011 12:30
West Dollarhide Drinkard Unit #148		
SB1(69-70') Grab Soil	6271810	04/28/2011 13:00
West Dollarhide Drinkard Unit #148		
SB2(29-30') Grab Soil	6271811	04/28/2011 13:20
West Dollarhide Drinkard Unit #148		
SB2(49-50') Grab Soil	6271812	04/28/2011 13:35
West Dollarhide Drinkard Unit #148		
SB2(69-70') Grab Soil	6271813	04/28/2011 14:00
West Dollarhide Drinkard Unit #148		
SB3(29-30') Grab Soil	6271814	04/28/2011 14:29
West Dollarhide Drinkard Unit #148		
SB3(39-40') Grab Soil	6271815	04/28/2011 14:49
West Dollarhide Drinkard Unit #148		
SB3(49-50') Grab Soil	6271816	04/28/2011 14:59
West Dollarhide Drinkard Unit #148		
SX-NSW3' Grab Soil	6271817	04/28/2011 15:05
West Dollarhide Drinkard Unit #148		
SX-WSW3' Grab Soil	6271818	04/28/2011 15:15
West Dollarhide Drinkard Unit #148		
SX-SSW3' Grab Soil	6271819	04/28/2011 15:10
West Dollarhide Drinkard Unit #148		
SX-ESW3' Grab Soil	6271820	04/28/2011 15:20
West Dollarhide Drinkard Unit #148		
LX-SSW3' Grab Soil	6271821	04/28/2011 14:30
West Dollarhide Drinkard Unit #148		
LX-ESW3' Grab Soil	6271822	04/28/2011 14:35
West Dollarhide Drinkard Unit #148		
LX-SWSW3' Grab Soil	6271823	04/28/2011 14:40
West Dollarhide Drinkard Unit #148		
LX-NWSW3' Grab Soil	6271824	04/28/2011 14:45
West Dollarhide Drinkard Unit #148		

METHODOLOGY

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

May 10, 2011

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

ELECTRONIC COPY TO
ELECTRONIC COPY TO

Conestoga-Rovers & Associates
LLI

Attn: Tom Larson
Attn: EDD Group - Report

Questions? Contact your Client Services Representative
Wendy A Kozma at (717) 656-2300 Ext. 1522

Respectfully Submitted,

Partial Report

Lancaster Laboratories

Page 3 of 5

Analytical Report

Conestoga-Rovers & Associates
Project: Dollarhide

Report Date: 5/10/2011 16:47
Submit Date: 4/29/2011 9:00

Analysis Name	Units	6271808	Dry MDL	6271809	Dry MDL	6271810	Dry MDL
		SB1(29-30')		SB1(49-50')		SB1(69-70')	
		Dry Result		Dry Result		Dry Result	
Chloride by IC (solid)	mg/kg	69.6	5.9	754	114	60.4	27.1
Analysis Name	Units	6271811	Dry MDL	6271812	Dry MDL	6271813	Dry MDL
		SB2(29-30')		SB2(49-50')		SB2(69-70')	
		Dry Result		Dry Result		Dry Result	
Chloride by IC (solid)	mg/kg	2,670	267	1,170	271	175	28.0
Analysis Name	Units	6271814	Dry MDL	6271815	Dry MDL	6271816	Dry MDL
		SB3(29-30')		SB3(39-40')		SB3(49-50')	
		Dry Result		Dry Result		Dry Result	
Chloride by IC (solid)	mg/kg	220	26.1	114	26.4	40.4 J	25.9
Analysis Name	Units	6271817	Dry MDL	6271818	Dry MDL	6271819	Dry MDL
		SX-NSW3'		SX-WSW3'		SX-SSW3'	
		Dry Result		Dry Result		Dry Result	
Chloride by IC (solid)	mg/kg	275	25.5	282	25.5	274	25.3
Analysis Name	Units	6271820	Dry MDL	6271821	Dry MDL	6271822	Dry MDL
		SX-ESW3'		LX-SSW3'		LX-ESW3'	
		Dry Result		Dry Result		Dry Result	
Chloride by IC (solid)	mg/kg	1,270	254	11,900	2,540	362	51.0
Analysis Name	Units	6271823	Dry MDL	6271824	Dry MDL		Dry MDL
		LX-SWSW3'		LX-NWSW3'			
		Dry Result		Dry Result			
Chloride by IC (solid)	mg/kg	869	102	1,760	254		

Partial Report

Laboratory Sample Analysis Record

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CAT No.	Analysis Name	Method	Trial ID	Batch	Analysis Date/Time	Analyst	Dilution
6271808	SB1(29-30') Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	5/9/11 1042	Ashley M Adams	1
6271809	SB1(49-50') Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	5/9/11 1655	Ashley M Adams	20
6271810	SB1(69-70') Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	5/9/11 1156	Ashley M Adams	5
6271811	SB2(29-30') Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	5/9/11 1709	Ashley M Adams	50
6271812	SB2(49-50') Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	5/9/11 1723	Ashley M Adams	50
6271813	SB2(69-70') Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	5/9/11 1307	Ashley M Adams	5
6271814	SB3(29-30') Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	5/9/11 1322	Ashley M Adams	5
6271815	SB3(39-40') Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	5/9/11 1336	Ashley M Adams	5
6271816	SB3(49-50') Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	5/9/11 1350	Ashley M Adams	5
6271817	SX-NSW3' Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203A	5/9/11 1404	Ashley M Adams	5
6271818	SX-WSW3' Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	5/9/11 1418	Ashley M Adams	5
6271819	SX-SSW3' Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	5/9/11 1501	Ashley M Adams	5
6271820	SX-ESW3' Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	5/10/11 0957	Ashley M Adams	50
6271821	LX-SSW3' Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	5/10/11 1011	Ashley M Adams	500
6271822	LX-ESW3' Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	5/10/11 1025	Ashley M Adams	10
6271823	LX-SWSW3' Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	5/10/11 1040	Ashley M Adams	20
6271824	LX-NWSW3' Grab Soil						
07333	Chloride by IC (solid)	EPA 300.0	1	11128621203B	5/10/11 1054	Ashley M Adams	50

Partial Report

Page 5 of 5

Comments

6271808 SB1(29-30') Grab Soil

6271809 SB1(49-50') Grab Soil

6271810 SB1(69-70') Grab Soil

6271811 SB2(29-30') Grab Soil

6271812 SB2(49-50') Grab Soil

6271813 SB2(69-70') Grab Soil

6271814 SB3(29-30') Grab Soil

6271815 SB3(39-40') Grab Soil

6271816 SB3(49-50') Grab Soil

6271817 SX-NSW3' Grab Soil

6271818 SX-WSW3' Grab Soil

6271819 SX-SSW3' Grab Soil

6271820 SX-ESW3' Grab Soil

6271821 LX-SSW3' Grab Soil

6271822 LX-ESW3' Grab Soil

6271823 LX-SWSW3' Grab Soil

6271824 LX-NWSW3' Grab Soil

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Conestoga-Rovers & Associates
9033 Meridian Way
West Chester OH 45069

August 05, 2011

Project: West Dollarhide Drinkard Unit #148

Submittal Date: 07/26/2011
Group Number: 1258212
PO Number: 4040977
Release Number: LEA COUNTY, NM
State of Sample Origin: NMClient Sample DescriptionLX-SSW3'+40' Grab Soil
LX-NWSW3'+25' Grab Soil
Trip Blank WaterLancaster Labs (LLI) #6355183
6355184
6355185

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

ELECTRONIC Conestoga-Rovers & Associates
COPY TO
ELECTRONIC LLI
COPY TO

Attn: Tom Larson

Attn: EDD Group - Report

Questions? Contact your Client Services Representative
Wendy A Kozma at (717) 656-2300 Ext. 1522

Respectfully Submitted,



Erik J. Frederiksen
Manager



Analysis Report

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

Page 1 of 1

Sample Description: LX-SSW3'+40' Grab Soil
West Dollarhide Drinkard Unit #148

LLI Sample # SW 6355183
LLI Group # 1258212
Account # 11713

Project Name: West Dollarhide Drinkard Unit #148

Collected: 07/25/2011 11:45 by TL

Conestoga-Rovers & Associates

Submitted: 07/26/2011 09:30

9033 Meridian Way

Reported: 08/05/2011 10:30

West Chester OH 45069

WDDSS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
GC Volatiles					
01638	TPH-GRO soil C6-C10	SW-846 8015B n.a.	mg/kg N.D.	mg/kg 1.1	25.46
GC Volatiles					
08179	Benzene	SW-846 8021B 71-43-2	mg/kg N.D.	mg/kg 0.0054	25.46
08179	Ethylbenzene	100-41-4	N.D.	0.0054	25.46
08179	Toluene	108-88-3	N.D.	0.0054	25.46
08179	Total Xylenes	1330-20-7	N.D.	0.016	25.46
GC Petroleum					
Hydrocarbons					
08270	TPH-DRO soil C10-C28	SW-846 8015B n.a.	mg/kg 5.4 J	mg/kg 15	1
Wet Chemistry					
07333	Chloride by IC (solid)	EPA 300.0 16887-00-6	mg/kg 1,150	mg/kg 540	50
Wet Chemistry					
00111	Moisture	SM20 2540 G n.a.	% 6.3	% 0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

The temperature of the sample bottle(s) upon receipt at the lab was 3.7 - 7.1 C using an IR thermometer.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01638	TPH-GRO soil C6-C10	SW-846 8015B	1	11207A16C	07/30/2011 15:30	Carrie E Miller	25.46
08179	BTEX by 8021	SW-846 8021B	1	11207A16C	07/30/2011 15:30	Carrie E Miller	25.46
01150	GC - Bulk Soil Prep	SW-846 5030A	1	201120825029	07/27/2011 08:38	Larry E Bevins	n.a.
08270	TPH-DRO soil C10-C28	SW-846 8015B	1	112140013A	08/03/2011 22:35	Elizabeth J Marin	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	112140013A	08/02/2011 17:50	Sally L Appleyard	1
07333	Chloride by IC (solid)	EPA 300.0	1	11212495201A	08/02/2011 23:36	Ashley M Adams	50
01352	Deionized Water Extraction	EPA 300.0	1	11212495201A	07/31/2011 21:00	James S Mathiot	1
00111	Moisture	SM20 2540 G	1	11208820005B	07/27/2011 19:00	Scott W Freisher	1



Analysis Report

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Page 1 of 1

Sample Description: LX-NWSW3'+25' Grab Soil
West Dollarhide Drinkard Unit #148

LLI Sample # SW 6355184
LLI Group # 1258212
Account # 11713

Project Name: West Dollarhide Drinkard Unit #148

Collected: 07/25/2011 12:40 by TL

Conestoga-Rovers & Associates

Submitted: 07/26/2011 09:30

9033 Meridian Way

Reported: 08/05/2011 10:30

West Chester OH 45069

WDDNW

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
GC Volatiles					
01638	TPH-GRO soil C6-C10	SW-846 8015B n.a.	mg/kg N.D.	mg/kg 1.1	25.69
GC Volatiles					
08179	Benzene	SW-846 8021B 71-43-2	mg/kg N.D.	mg/kg 0.0055	25.69
08179	Ethylbenzene	100-41-4	N.D.	0.0055	25.69
08179	Toluene	108-88-3	N.D.	0.0055	25.69
08179	Total Xylenes	1330-20-7	N.D.	0.017	25.69
GC Petroleum Hydrocarbons					
08270	TPH-DRO soil C10-C28	SW-846 8015B n.a.	mg/kg 5.3 J	mg/kg 13	1
Wet Chemistry					
07333	Chloride by IC (solid)	EPA 300.0 16887-00-6	mg/kg 2,040	mg/kg 535	50
Wet Chemistry					
00111	Moisture	SM20 2540 G n.a.	% 7.3	% 0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

The temperature of the sample bottle(s) upon receipt at the lab was 3.7 - 7.1 C using an IR thermometer.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01638	TPH-GRO soil C6-C10	SW-846 8015B	1	11207A16C	07/30/2011 16:08	Carrie E Miller	25.69
08179	BTEX by 8021	SW-846 8021B	1	11207A16C	07/30/2011 16:08	Carrie E Miller	25.69
01150	GC - Bulk Soil Prep	SW-846 5030A	1	201120825029	07/27/2011 08:37	Larry E Bevins	n.a.
08270	TPH-DRO soil C10-C28	SW-846 8015B	1	112140013A	08/03/2011 22:56	Elizabeth J Marin	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	112140013A	08/02/2011 17:50	Sally L Appleyard	1
07333	Chloride by IC (solid)	EPA 300.0	1	11212495201A	08/02/2011 23:49	Ashley M Adams	50
01352	Deionized Water Extraction	EPA 300.0	1	11212495201A	07/31/2011 21:00	James S Mathiot	1
00111	Moisture	SM20 2540 G	1	11208820005B	07/27/2011 19:00	Scott W Freisher	1



Analysis Report

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Page 1 of 1

Sample Description: Trip Blank Water
West Dollarhide Drinkard Unit #148

LLI Sample # WW 6355185
LLI Group # 1258212
Account # 11713

Project Name: West Dollarhide Drinkard Unit #148

Collected: 07/25/2011

Conestoga-Rovers & Associates

Submitted: 07/26/2011 09:30

9033 Meridian Way

Reported: 08/05/2011 10:30

West Chester OH 45069

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

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	11209A53A	07/30/2011 04:19	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11209A53A	07/30/2011 04:19	Laura M Krieger	1

Quality Control Summary

Client Name: Conestoga-Rovers & Associates
Reported: 08/05/11 at 10:30 AM

Group Number: 1258212

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

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11207A16C	Sample number(s): 6355183-6355184							
Benzene	N.D.	0.0050	mg/kg	96	92	76-118	4	30
Ethylbenzene	N.D.	0.0050	mg/kg	94	90	77-115	4	30
Toluene	N.D.	0.0050	mg/kg	96	92	80-120	4	30
TPH-GRO soil C6-C10	N.D.	1.0	mg/kg	89	85	67-119	5	30
Total Xylenes	N.D.	0.015	mg/kg	96	92	78-115	4	30
Batch number: 11209A53A	Sample number(s): 6355185							
Benzene	N.D.	0.0010	mg/l	105	105	80-120	0	30
Ethylbenzene	N.D.	0.0010	mg/l	105	100	80-120	5	30
Toluene	N.D.	0.0010	mg/l	105	105	80-120	0	30
Total Xylenes	N.D.	0.0030	mg/l	107	103	80-120	3	30
Batch number: 112140013A	Sample number(s): 6355183-6355184							
TPH-DRO soil C10-C28	N.D.	12.	mg/kg	93	88	76-117	5	20
Batch number: 11212495201A	Sample number(s): 6355183-6355184							
Chloride by IC (solid)	N.D.	10.0	mg/kg	110		90-110		
Batch number: 11208820005B	Sample number(s): 6355183-6355184							
Moisture				100		99-101		

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11212495201A	Sample number(s): 6355183-6355184 UNSPK: P355492 BKG: P355492								
Chloride by IC (solid)	-735		90-110			1,350	1,120	19 (1)	20
	(2)								
Batch number: 11208820005B	Sample number(s): 6355183-6355184 BKG: P355108								
Moisture						17.9	18.3	2	15

Surrogate Quality Control

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

*- Outside of specification

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

Quality Control Summary

Client Name: Conestoga-Rovers & Associates

Group Number: 1258212

Reported: 08/05/11 at 10:30 AM

Surrogate Quality Control

Analysis Name: TPH-GRO soil C6-C10

Batch number: 11207A16C

	Trifluorotoluene-F	Trifluorotoluene-P
6355183	84	89
6355184	76	88
Blank	85	105
LCS	90	96
LCSD	85	90

Limits: 61-122 73-117

Analysis Name: Method 8021 Water Master

Batch number: 11209A53A

	Trifluorotoluene-F	Trifluorotoluene-P
6355185		68
Blank	73	69
LCS	106	70
LCSD	82	68

Limits: 63-135 58-146

Analysis Name: TPH-DRO soil C10-C28

Batch number: 112140013A

Orthoterphenyl

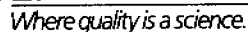
6355183	91
6355184	89
Blank	91
LCS	98
LCSD	95

Limits: 59-129

*- Outside of specification

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

016364



Acct. # 11713

Sample #: 6355183-85

SCR#:

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Conestoga-Rovers & Associates
6320 Rothway, Suite 100
Houston TX 77040

November 16, 2011

Project: West Dollarhide Drinkard Unit #148

Submittal Date: 11/09/2011

Group Number: 1275488

PO Number: 4040977

Release Number: LEA COUNTY, NM

State of Sample Origin: NM

Client Sample Description

Lancaster Labs #

Collected

LX-36'SW1 (3.5') Grab Soil	6463966	11/07/2011 13:00
West Dollarhide Drinkard Unit #148		
LX-36'SW2 (3') Grab Soil	6463967	11/07/2011 13:15
West Dollarhide Drinkard Unit #148		
LX-30'NE1 (3') Grab Soil	6463968	11/07/2011 13:30
West Dollarhide Drinkard Unit #148		
LX-30'NE2 (3') Grab Soil	6463969	11/07/2011 13:45
West Dollarhide Drinkard Unit #148		

METHODOLOGY

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

ELECTRONIC COPY TO

Conestoga-Rovers & Associates

Attn: Tom Larson

Questions? Contact your Client Services Representative

Wendy A Kozma at (717) 656-2300 Ext. 1522

Respectfully Submitted,


Sarah M. Snyder
Senior Specialist

Conestoga-Rovers & Associates
 Project: West Dollarhide Drinkard Unit #148
 SDG:

Report Date: 11/16/2011 13:33
 Submit Date: 11/9/2011 9:35

Analysis Name	Units	6463966 LX-36'SW1 (3.5')	Dry LOQ	6463967 LX-36'SW2 (3')	Dry LOQ	6463968 LX-30'NE1 (3')	Dry LOQ
		Dry Result		Dry Result		Dry Result	
TPH-GRO soil C6-C10	mg/kg	N.D.	1	N.D.	1.0	N.D.	1.0
Benzene	ug/kg	N.D.	5.0	N.D.	5.0	N.D.	5.1
Ethylbenzene	ug/kg	N.D.	5.0	N.D.	5.0	N.D.	5.1
Toluene	ug/kg	5.6	5.0	N.D.	5.0	N.D.	5.1
Total Xylenes	ug/kg	5.9 J	15	N.D.	15	N.D.	15
TPH-DRO soil C10-C28	mg/kg	N.D.	13	N.D.	12	N.D.	13
Chloride by IC (solid)	mg/kg	17.9	10.6	N.D.	10.5	159	53.2
Moisture	%	4.2	0.50	3.1	0.50	5.2	0.50

Analysis Name	Units	6463969 LX-30'NE2 (3')	Dry LOQ
		Dry Result	
TPH-GRO soil C6-C10	mg/kg	N.D.	1.0
Benzene	ug/kg	N.D.	5.2
Ethylbenzene	ug/kg	N.D.	5.2
Toluene	ug/kg	N.D.	5.2
Total Xylenes	ug/kg	N.D.	16
TPH-DRO soil C10-C28	mg/kg	6.3 J	13
Chloride by IC (solid)	mg/kg	901	542
Moisture	%	6.5	0.50

CAT No.	Analysis Name	Method	Trial ID	Batch	Analysis Date/Time	Analyst	Dilution
6463966 LX-36'SW1 (3.5') Grab Soil							
01638	TPH-GRO soil C6-C10	SW-846 8015B	1	11315A31A	11/12/11 0358	Laura M Krieger	23.83
08179	BTEX by 8021	SW-846 8021B	1	11315A31A	11/12/11 0358	Laura M Krieger	23.83
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201131326144	11/9/11 2127	Lois E Hiltz	n.a.
08270	TPH-DRO soil C10-C28	SW-846 8015B	1	113180011A	11/15/11 0720	Anita M Dale	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	113180011A	11/14/11 1800	David S Schrum	1
07333	Chloride by IC (solid)	EPA 300.0	1	11314621201B	11/11/11 1551	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	11314621201B	11/10/11 0740	William L Hamaker Jr	1
00111	Moisture	SM20 2540 G	1	11314820008B	11/10/11 1922	Scott W Freisher	1
6463967 LX-36'SW2 (3') Grab Soil							
01638	TPH-GRO soil C6-C10	SW-846 8015B	1	11315A31A	11/12/11 0434	Laura M Krieger	24.27
08179	BTEX by 8021	SW-846 8021B	1	11315A31A	11/12/11 0434	Laura M Krieger	24.27
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201131326144	11/9/11 2135	Lois E Hiltz	n.a.
08270	TPH-DRO soil C10-C28	SW-846 8015B	1	113180011A	11/15/11 0754	Anita M Dale	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	113180011A	11/14/11 1800	David S Schrum	1
07333	Chloride by IC (solid)	EPA 300.0	1	11314621201B	11/11/11 1636	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	11314621201B	11/10/11 0740	William L Hamaker Jr	1
00111	Moisture	SM20 2540 G	1	11314820008B	11/10/11 1922	Scott W Freisher	1
6463968 LX-30'NE1 (3') Grab Soil							
01638	TPH-GRO soil C6-C10	SW-846 8015B	1	11315A31A	11/12/11 0510	Laura M Krieger	24.08
08179	BTEX by 8021	SW-846 8021B	1	11315A31A	11/12/11 0510	Laura M Krieger	24.08
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201131326144	11/9/11 2137	Lois E Hiltz	n.a.
08270	TPH-DRO soil C10-C28	SW-846 8015B	1	113180011A	11/15/11 0810	Anita M Dale	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	113180011A	11/14/11 1800	David S Schrum	1
07333	Chloride by IC (solid)	EPA 300.0	1	11314621201B	11/14/11 1948	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	11314621201B	11/10/11 0740	William L Hamaker Jr	1
00111	Moisture	SM20 2540 G	1	11314820008B	11/10/11 1922	Scott W Freisher	1
6463969 LX-30'NE2 (3') Grab Soil							
01638	TPH-GRO soil C6-C10	SW-846 8015B	1	11315A31A	11/12/11 1125	Laura M Krieger	24.44
08179	BTEX by 8021	SW-846 8021B	1	11315A31A	11/12/11 1125	Laura M Krieger	24.44
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201131326144	11/9/11 2139	Lois E Hiltz	n.a.
08270	TPH-DRO soil C10-C28	SW-846 8015B	1	113180011A	11/15/11 0827	Anita M Dale	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	113180011A	11/14/11 1800	David S Schrum	1
07333	Chloride by IC (solid)	EPA 300.0	1	11314621201B	11/14/11 2002	Ashley M Adams	50
01352	Deionized Water Extraction	EPA 300.0	1	11314621201B	11/10/11 0740	William L Hamaker Jr	1
00111	Moisture	SM20 2540 G	1	11314820008B	11/10/11 1922	Scott W Freisher	1

Client Name: Conestoga-Rovers & Associates

Group Number: 1275488

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	Max RPD
Batch number: 11315A31A		Sample number(s): 6463966-6463969						
Benzene	N.D.	5.0	ug/kg	90		76-118		
Ethylbenzene	N.D.	5.0	ug/kg	91		77-115		
Toluene	N.D.	5.0	ug/kg	90		80-120		
TPH-GRO soil C6-C10	N.D.	1.0	mg/kg	91	91	67-119	1	30
Total Xylenes	N.D.	15.	ug/kg	94		78-115		
Batch number: 113180011A		Sample number(s): 6463966-6463969						
TPH-DRO soil C10-C28	N.D.	12.	mg/kg	80		76-117		
Batch number: 11314621201B		Sample number(s): 6463966-6463969						
Chloride by IC (solid)	N.D.	10.0	mg/kg	105		90-110		
Batch number: 11314820008B		Sample number(s): 6463966-6463969						
Moisture				100		99-101		

Sample Matrix Quality Control

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

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
Batch number: 11315A31A		Sample number(s): 6463966-6463969 UNSPK: P461995							
Benzene	102	89	52-135	9	30				
Ethylbenzene	102	95	56-132	4	30				
Toluene	102	93	59-129	5	30				
Total Xylenes	105	97	66-112	5	30				

* - Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Batch number: 113180011A

Sample number(s): 6463966-6463969 UNSPK: 6463966 BKG: 6463966

TPH-DRO soil C10-C28	81	30-159	N.D.	N.D.	0 (1)	20
----------------------	----	--------	------	------	-------	----

Batch number: 11314621201B

Sample number(s): 6463966-6463969 UNSPK: 6463966 BKG: 6463966

Chloride by IC (solid)	101	90-110	17.1	16.5	3 (1)	20
------------------------	-----	--------	------	------	-------	----

Batch number: 11314820008B

Sample number(s): 6463966-6463969 BKG: P461478

Moisture			16.6	16.8	1	15
----------	--	--	------	------	---	----

Surrogate Quality Control

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

Analysis Name: TPH-GRO soil C6-C10

Batch number: 11315A31A

	Trifluorotoluene-F	Trifluorotoluene-P
6463966	107	101
6463967	104	99
6463968	104	99
6463969	99	92
Blank	107	102
LCS	118	103
LCSD	120	
MS		80
MSD		82
Limits:	61-122	73-117

Analysis Name: TPH-DRO soil C10-C28

Batch number: 113180011A

	Orthoterphenyl
6463966	89
6463967	89
6463968	90
6463969	88
Blank	87

* - Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

DUP	88
LCS	91
MS	91
Limits:	59-129

* - Outside of specification

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

QC Comment

#VALUE!

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

6463966 LX-36'SW1 (3.5') Grab Soil

00111 Moisture

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

6463967 LX-36'SW2 (3') Grab Soil

00111 Moisture

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

6463968 LX-30'NE1 (3') Grab Soil

00111 Moisture

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

6463969 LX-30'NE2 (3') Grab Soil

00111 Moisture

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

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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

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ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Conestoga-Rovers & Associates
6320 Rothway, Suite 100
Houston TX 77040

January 25, 2012

Project: West Dollarhide Drinkard Unit #148

Submittal Date: 01/18/2012

Group Number: 1285444

PO Number: 4043920

Release Number: LEA COUNTY, NM

State of Sample Origin: NM

Client Sample DescriptionLX-60'NE3(3') Grab Soil Sample
LX-60'NE4(3') Grab Soil SampleLancaster Labs (LLI) #6524411
6524412

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

ELECTRONIC Conestoga-Rovers & Associates
COPY TO
ELECTRONIC LLI
COPY TO

Attn: Tom Larson

Attn: EDD Group - Report

Questions? Contact your Client Services Representative
Wendy A Kozma at (717) 656-2300 Ext. 1522

Respectfully Submitted,


Valerie L. Tomayko
Principal Specialist

Sample Description: LX-60'NE3(3') Grab Soil Sample
West Dollarhide Drinkard Unit #148

LLI Sample # SW 6524411
LLI Group # 1285444
Account # 11713

Project Name: West Dollarhide Drinkard Unit #148

Collected: 01/16/2012 14:30 by TL

Conestoga-Rovers & Associates

Submitted: 01/18/2012 09:15

6320 Rothway, Suite 100

Reported: 01/25/2012 16:05

Houston TX 77040

WDNE3

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
GC Volatiles					
01638	TPH-GRO soil C6-C10	SW-846 8015B n.a.	mg/kg N.D.	mg/kg 1.1	25.35
GC Volatiles					
08179	Benzene	SW-846 8021B 71-43-2	mg/kg N.D.	mg/kg 0.0055	25.35
08179	Ethylbenzene	100-41-4	N.D.	0.0055	25.35
08179	Toluene	108-88-3	N.D.	0.0055	25.35
08179	Total Xylenes	1330-20-7	N.D.	0.017	25.35
GC Petroleum Hydrocarbons					
08270	TPH-DRO soil C10-C28	SW-846 8015B n.a.	mg/kg N.D.	mg/kg 16	1
Reporting limits were raised due to limited sample volume.					
Wet Chemistry					
07333	Chloride by IC (solid)	EPA 300.0 16887-00-6	mg/kg 16.3	mg/kg 10.8	1
Wet Chemistry					
00111	Moisture	SM20 2540 G n.a.	% 8.2	% 0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01638	TPH-GRO soil C6-C10	SW-846 8015B	1	12023A16A	01/23/2012 21:34	Laura M Krieger	25.35
08179	BTEX by 8021	SW-846 8021B	1	12023A16A	01/23/2012 21:34	Laura M Krieger	25.35
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201201826606	01/18/2012 17:28	Scott W Freisher	n.a.
08270	TPH-DRO soil C10-C28	SW-846 8015B	1	120180020A	01/20/2012 03:31	Michele D Hamilton	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	120180020A	01/19/2012 08:10	Katheryne V Sponheimer	1
07333	Chloride by IC (solid)	EPA 300.0	1	12019019201A	01/19/2012 22:35	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	12019019201A	01/19/2012 09:00	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	12018820001B	01/18/2012 18:32	Scott W Freisher	1

Sample Description: LX-60'NE4(3') Grab Soil Sample
West Dollarhide Drinkard Unit #148

LLI Sample # SW 6524412
LLI Group # 1285444
Account # 11713

Project Name: West Dollarhide Drinkard Unit #148

Collected: 01/16/2012 14:45 by TL

Conestoga-Rovers & Associates

Submitted: 01/18/2012 09:15

6320 Rothway, Suite 100

Reported: 01/25/2012 16:05

Houston TX 77040

WDNE4

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
GC Volatiles					
01638	TPH-GRO soil C6-C10	SW-846 8015B n.a.	mg/kg N.D.	mg/kg 1.1	25.96
GC Volatiles					
08179	Benzene	SW-846 8021B 71-43-2	mg/kg 0.0031 J	mg/kg 0.0055	25.96
08179	Ethylbenzene	100-41-4	0.0032 J	0.0055	25.96
08179	Toluene	108-88-3	0.0032 J	0.0055	25.96
08179	Total Xylenes	1330-20-7	0.0081 J	0.017	25.96
GC Petroleum Hydrocarbons					
08270	TPH-DRO soil C10-C28	SW-846 8015B n.a.	mg/kg N.D.	mg/kg 16	1
Reporting limits were raised due to limited sample volume.					
Wet Chemistry					
07333	Chloride by IC (solid)	EPA 300.0 16887-00-6	mg/kg 16.9	mg/kg 10.6	1
Wet Chemistry					
00111	Moisture	SM20 2540 G n.a.	% 6.0	% 0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01638	TPH-GRO soil C6-C10	SW-846 8015B	1	12023A16A	01/23/2012 22:12	Laura M Krieger	25.96
08179	BTEX by 8021	SW-846 8021B	1	12023A16A	01/23/2012 22:12	Laura M Krieger	25.96
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201201826606	01/18/2012 17:29	Scott W Freisher	n.a.
08270	TPH-DRO soil C10-C28	SW-846 8015B	1	120180020A	01/20/2012 03:05	Michele D Hamilton	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	120180020A	01/19/2012 08:10	Katheryne V Sponheimer	1
07333	Chloride by IC (solid)	EPA 300.0	1	12019019201A	01/19/2012 22:49	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	12019019201A	01/19/2012 09:00	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	12018820001B	01/18/2012 18:32	Scott W Freisher	1

Quality Control SummaryClient Name: Conestoga-Rovers & Associates
Reported: 01/25/12 at 04:05 PM

Group Number: 1285444

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

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

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 12023A16A	Sample number(s): 6524411-6524412							
Benzene	N.D.	0.0050	mg/kg	92		76-118		
Ethylbenzene	N.D.	0.0050	mg/kg	94		77-115		
Toluene	N.D.	0.0050	mg/kg	96		80-120		
TPH-GRO soil C6-C10	N.D.	1.0	mg/kg	91		67-119		
Total Xylenes	N.D.	0.015	mg/kg	97		78-115		
Batch number: 120180020A	Sample number(s): 6524411-6524412							
TPH-DRO soil C10-C28	N.D.	12.	mg/kg	82	82	76-117	0	20
Batch number: 12019019201A	Sample number(s): 6524411-6524412							
Chloride by IC (solid)	N.D.	10.0	mg/kg	110		90-110		
Batch number: 12018820001B	Sample number(s): 6524411-6524412							
Moisture				100		99-101		

Sample Matrix Quality Control

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

Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 12023A16A	Sample number(s): 6524411-6524412 UNSPK: P523559								
Benzene	121	116	52-135	5	30				
Ethylbenzene	125	118	56-132	6	30				
Toluene	128	122	59-129	6	30				
TPH-GRO soil C6-C10	106	113	39-118	0	30				
Total Xylenes	129*	122*	66-112	6	30				
Batch number: 12019019201A	Sample number(s): 6524411-6524412 UNSPK: P522615 BKG: P522615								
Chloride by IC (solid)	300 (2)		90-110			115	118	3 (1)	20
Batch number: 12018820001B	Sample number(s): 6524411-6524412 BKG: P524105								
Moisture						72.6	72.7	0	15

Surrogate Quality Control

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

*- Outside of specification

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

Quality Control Summary

Client Name: Conestoga-Rovers & Associates

Group Number: 1285444

Reported: 01/25/12 at 04:05 PM

Surrogate Quality Control

Analysis Name: Method 8021 Soil Master

Batch number: 12023A16A

Trifluorotoluene-F Trifluorotoluene-P

6524411	83	83
6524412	81	81
Blank	103	108
LCS	101	95
MS	72	71*
MSD	72	67*

Limits: 61-122 73-117

Analysis Name: TPH-DRO soil C10-C28

Batch number: 120180020A

Orthoterphenyl

6524411	89
6524412	90
Blank	94
LCS	93
LCSD	93

Limits: 59-129

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody



For Lancaster Laboratories use only

Acct. # 11713 Group# 1285444 Sample # 6524411-12

COC # 217887

Please print. Instructions on reverse side correspond with circled numbers.

1 Client: <u>CRA/CEMC</u> Acct. #: _____ Project Name/ #: <u>WDDU #143/073041</u> PWSID #: _____ Project Manager: <u>Tom Larson</u> P.O. #: <u>See SOW</u> Sampler: <u>Tom Larson</u> Quote #: _____ Name of state where samples were collected: <u>New Mexico</u>				4				5 Analyses Requested								For Lab Use Only FSC: _____ SCR#: _____																																																																																																																																																																																			
								Preservation Codes <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;"> <u>8021 BTEX</u> <u>8015 and THT C10</u> <u>Chlorides</u> <u>barium</u> </td> <td style="width:50%;"></td> </tr> </table>								<u>8021 BTEX</u> <u>8015 and THT C10</u> <u>Chlorides</u> <u>barium</u>		6 Preservation Codes H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ O=Other																																																																																																																																																																																	
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<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:25%;">Sample Identification</th> <th style="width:10%;">Date Collected</th> <th style="width:10%;">Time Collected</th> <th style="width:5%;">pH</th> <th style="width:5%;">DO</th> <th style="width:5%;">Temp</th> <th style="width:5%;">Salinity</th> <th style="width:5%;">TSS</th> <th style="width:5%;">Total Solids</th> <th style="width:5%;">Total Solids</th> <th style="width:5%;">Total Solids</th> <th style="width:5%;">Total Solids</th> <th style="width:5%;">Total Solids</th> <th style="width:5%;">Total Solids</th> <th style="width:5%;">Total Solids</th> </tr> </thead> <tbody> <tr> <td>LX-60'NE3 (3')</td> <td>1.16.12</td> <td>1430</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td>2</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>LX-60'NE4 (3')</td> <td>1.16.12</td> <td>1445</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td>2</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> </tr> <tr><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>														Sample Identification	Date Collected	Time Collected	pH	DO	Temp	Salinity	TSS	Total Solids	Total Solids	Total Solids	Total Solids	Total Solids	Total Solids	Total Solids	LX-60'NE3 (3')	1.16.12	1430	X	X				2	X	X	X	X			LX-60'NE4 (3')	1.16.12	1445	X	X				2	X	X	X	X																																																																																																																																										<u>SSOW enclosed</u>	
Sample Identification	Date Collected	Time Collected	pH	DO	Temp	Salinity	TSS	Total Solids	Total Solids	Total Solids	Total Solids	Total Solids	Total Solids	Total Solids																																																																																																																																																																																					
LX-60'NE3 (3')	1.16.12	1430	X	X				2	X	X	X	X																																																																																																																																																																																							
LX-60'NE4 (3')	1.16.12	1445	X	X				2	X	X	X	X																																																																																																																																																																																							
7 Turnaround Time Requested (TAT) (please circle): Normal Rush (Rush TAT is subject to Lancaster Laboratories approval and surcharge.) Date results are needed: <u>5 day TAT</u> Rush results requested by (please circle): Phone Fax E-mail Phone #: _____ Fax #: _____ E-mail address: <u>tlarson@craworld.com</u>														Relinquished by: <u>Tom Larson</u> Date: <u>1.17.12</u> Time: <u>1500</u> Relinquished by: _____ Date: _____ Time: _____ Relinquished by: _____ Date: _____ Time: _____ Relinquished by: _____ Date: _____ Time: _____ Relinquished by: _____ Date: _____ Time: _____		Received by: <u>to Fax</u> Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____ Received by: <u>Kristi Ziegler</u> Date: <u>1-18-12</u> Time: <u>0915</u>																																																																																																																																																																																			
8 Data Package Options (please circle if required) Type I (validation/NJ Reg) TX TRRP-13 Type II (Tier II) MA MCP CT RCP Type III (Reduced NJ) Site-specific QC (MS/MSD/Dup)? Yes No Type IV (CLP SOW) (If yes, indicate QC sample and submit triplicate volume.) Type VI (Raw Data Only) Internal COC Required? Yes / No														SDG Complete? Yes No																																																																																																																																																																																					

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/L), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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

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