# OXY USA, Inc.
# Cotton Draw Unit #10
# Delineation Report and Work Plan

## Section 16, T25S, R32E
## Lea County, New Mexico

**April 23, 2014**

**Prepared for:**

**OXY USA, Inc.**
**1017 W Stanolind Road**
**Hobbs, New Mexico 88240**

**By:**

**Safety & Environmental Solutions, Inc.**
**703 East Clinton Street**
**Hobbs, New Mexico 88240**
**(575) 397-0510**

## TABLE OF CONTENTS

## I. Company Contacts

| Representative | Company | Telephone | E-mail |
|---|---|---|---|
| Austin Tramell | OXY USA, INC. | 575-499-4919 | Austin_Tramell@oxy.com |
| Bob Allen | SESI | 575-397-0510 | ballen@sesi-nm.com |

## II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by OXY USA, INC to perform site assessment of a release area at the Cotton Draw Unit #10 located in Section 16 of Township 25 South, Range 32 East, Lea County, New Mexico.

According to the C-141 dated April 01, 2014 the cause of release was internal corrosion of a 2" steel production flow line.

## III. Surface and Ground Water

The nearest groundwater of record is approximately 7.8 miles north of the site. The New Mexico Office of State Engineer record is in Section 05 Range 32 East and Township 24 South. The reported depth was 380 feet below ground surface (BGS).

## IV. Characterization

The target cleanup levels are determined using the *Guidelines for Remediation of Leaks, Spills and Releases* published by the NMOCD (August 13, 1993). Based on the ranking criteria presented below, the applicable Recommended Remediation Action Levels (RRAL) are 10 parts per million (ppm) Benzene, 50 ppm combined benzene, toluene, ethylbenzene, and total xylenes (BTEX), and 5,000 ppm Total Petroleum Hydrocarbons (TPH).

| | | | |
|---|---|---|---|
| **Depth to Ground Water:** | | | |
| (Vertical distance from contaminants to seasonal high water elevation of groundwater) | Less than 50 feet | 20 points | |
| | 50 feet to 99 feet | 10 points | |
| | >100 feet | 0 points | **X** |
| **Wellhead Protection Area:** | | | |
| (Less than 200 feet from a private domestic water source; or less than 1000 feet from all other water sources) | Yes | 20 points | |
| | No | 0 points | **X** |
| **Distance to Surface Water:** | | | |
| (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches) | Less than 200 feet | 20 points | |
| | 200 feet to 1000 feet | 10 points | |
| | >1000 feet | 0 points | **X** |
| **RANKING SCORE (TOTAL POINTS)** | | | **0** |

## V. Work Performed

On April 3, 2014 SESI was onsite to perform a site assessment. The release area was mapped utilizing a Trimble Juno 3D and site photos were taken.

On April 21, 2014, SESI was onsite to determine vertical extent of contamination using a hand auger to collect samples. SP-1 was taken at the surface and at a depth of 1'

where a hard caliche layer was encountered. Samples were taken at SP-2 at surface and at 1' ft., 2' ft. and 2.5 ft. A hard layer of caliche was encountered the depth of 2.5 ft. Samples were taken at SP-3 at the surface and at 1' ft., 2 ft. and, 2.5 ft. where a hard layer of caliche was encountered. All samples were properly packaged, preserved and transported to Cardinal Laboratories, Hobbs New Mexico and analyzed for Chloride ($Cl^-$) (Method SM4500Cl-B). The results of the analysis are presented in the table below:

| Lab ID | Sample ID | Cl (mg/kg) |
|---|---|---|
| **Analysis Date:** | **-** | |
| 5-1-2014 | Sample Pt 1 @ Surface | 20800 |
| 5-1-2014 | Sample Pt 1 @ 1' BGS | 3640 |
| 5-1-2014 | Sample Pt 2 @ Surface | 36800 |
| 5-1-2014 | Sample Pt 2 @ 1' BGS | 1070 |
| 5-1-2014 | Sample Pt 2 @ 2' BGS | 2320 |
| 5-1-2014 | Sample Pt 2 @ 2'6" BGS | 8480 |
| 5-1-2014 | Sample Pt 3 @ Surface | 14700 |
| 5-1-2014 | Sample Pt 3 @ 1' BGS | 3800 |
| 5-1-2014 | Sample Pt 3 @ 2' BGS | 11600 |
| 5-1-2014 | Sample Pt 3 @ 2'6" BS | 12000 |

On April 22, 2014, SESI, along with Custom Welding were on site to install (4) four test trenches to determine further contamination. Test Trenches samples were taken at 1 ft., 4ft., 5ft and 6 ft. away from the pipelines. A hard layer of caliche was encountered at the 6 ft. All samples were properly packaged, preserved and transported to Cardinal Laboratories, Hobbs New Mexico and analyzed for Chloride ($Cl^-$) (Method SM4500Cl-B). The results of the analysis are presented in the table below:

| Lab ID | Sample ID | Cl (mg/kg) |
|---|---|---|
| **Analysis Date:** | **-** | |
| 5-1-2014 | TT-1 @ 3' | 2960 |
| 5-1-2014 | TT-1 @ 4' | 528 |
| 5-1-2014 | TT-1 @ 5' | 2200 |
| 5-1-2014 | TT-1 @ 6' | 1500 |

## VI. Action Plan

Due to the extreme depth to groundwater and the hard caliche layer encountered at 2.5 ft. BGS, the following action plan is proposed:

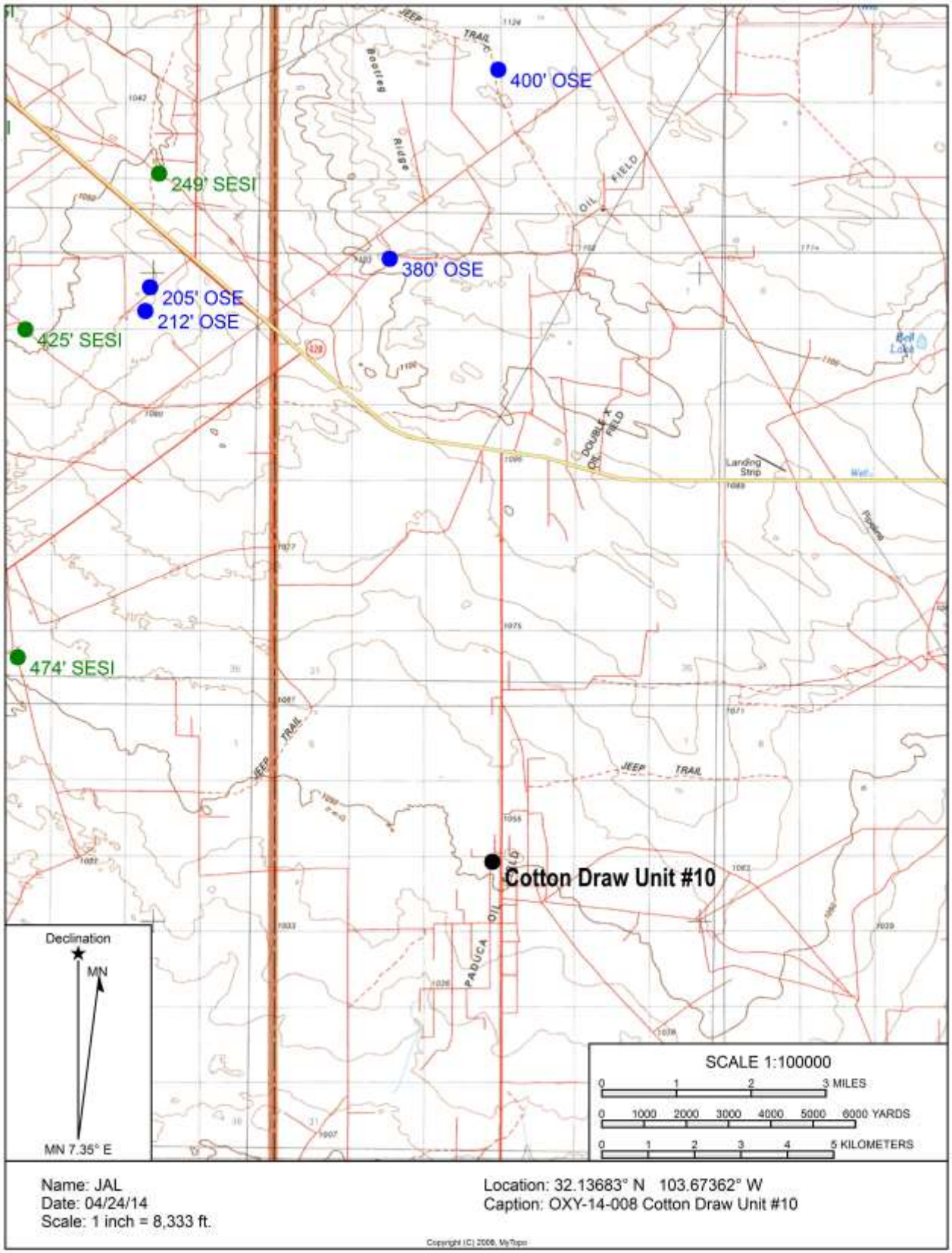
1. All contaminated soil with a chloride concentration over 1,500 PPM will be removed and transported to an approved NMOCD facility for disposal.
2. The excavated area will be backfilled with native soil and returned to natural grade.
3. No further action is necessary.

## VII. Figures & Appendices

Figure 1 – Vicinity Map
Figure 2 – Site Plan
Figure 3 – NMOCD Trend Map

Appendix A – Analytical Results
Appendix B – C-141

# Figure 1
# Vicinity Map


400' OSE
249' SESI
380' OSE
205' OSE
212' OSE
425' SESI
474' SESI
Cotton Draw Unit #10
JEEP TRAIL
Boston Ridge
OIL FIELD
DOUBLE X OIL FIELD
PADUCA OIL FIELD
Landing Strip
Red Lake
Declination
MN
MN 7.35° E
SCALE 1:100000
0 1 2 3 MILES
0 1000 2000 3000 4000 5000 6000 YARDS
0 1 2 3 4 5 KILOMETERS
Name: JAL
Date: 04/24/14
Scale: 1 inch = 8,333 ft.
Location: 32.13683° N 103.67362° W
Caption: OXY-14-008 Cotton Draw Unit #10
Copyright (C) 2008, MyTopo

# Figure 2
# Site Plan


OXY-14-008 Cotton Draw Unit #10

# Figure 3
# NMOCD Trend Map


NMOCD Trend Map

# Appendix A
# Analytical Results

CARDINAL Laboratories

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

May 01, 2014

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: COTTONDRAW UNIT 10

Enclosed are the results of analyses for samples received by the laboratory on 05/01/14 8:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

| | |
|---|---|
| Method EPA 552.2 | Haloacetic Acids (HAA-5) |
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

Page 1 of 7

CARDINAL Laboratories

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

***Analytical Results For:***

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

| | | | |
|---|---|---|---|
| Received: | 05/01/2014 | Sampling Date: | 04/21/2014 |
| Reported: | 05/01/2014 | Sampling Type: | Soil |
| Project Name: | COTTONDRAW UNIT 10 | Sampling Condition: | ** (See Notes) |
| Project Number: | OXY-14-008 | Sample Received By: | Celey D. Keene |
| Project Location: | C1 | | |

**Sample ID: SAMPLE PT 1 @ SURFACE (H401318-01)**

Chloride, SM4500Cl-B mg/kg Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **20800** | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

**Sample ID: SAMPLE PT 1 @ 1' BGS (H401318-02)**

Chloride, SM4500Cl-B mg/kg Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **3640** | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

**Sample ID: SAMPLE PT 2 @ SURFACE (H401318-03)**

Chloride, SM4500Cl-B mg/kg Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **36800** | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

**Sample ID: SAMPLE PT 2 @ 1' BGS (H401318-04)**

Chloride, SM4500Cl-B mg/kg Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **1070** | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

Cardinal Laboratories *=Accredited Analyte



Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

***Analytical Results For:***

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

| | | | |
|---|---|---|---|
| Received: | 05/01/2014 | Sampling Date: | 04/21/2014 |
| Reported: | 05/01/2014 | Sampling Type: | Soil |
| Project Name: | COTTONDRAW UNIT 10 | Sampling Condition: | ** (See Notes) |
| Project Number: | OXY-14-008 | Sample Received By: | Celey D. Keene |
| Project Location: | C1 | | |

**Sample ID: SAMPLE PT 2 @ 2' BGS (H401318-05)**

Chloride, SM4500Cl-B — mg/kg — Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 2320 | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

**Sample ID: SAMPLE PT 2 @ 2'6" BGS (H401318-06)**

Chloride, SM4500Cl-B — mg/kg — Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 8480 | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

**Sample ID: SAMPLE PT 3 @ SURFACE (H401318-07)**

Chloride, SM4500Cl-B — mg/kg — Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14700 | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

**Sample ID: SAMPLE PT 3 @ 1' BGS (H401318-08)**

Chloride, SM4500Cl-B — mg/kg — Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 3800 | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

**Sample ID: SAMPLE PT 3 @ 2' BGS (H401318-09)**

Chloride, SM4500Cl-B — mg/kg — Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 11600 | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

Cardinal Laboratories — *=Accredited Analyte



Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

***Analytical Results For:***

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

| | | | |
|---|---|---|---|
| Received: | 05/01/2014 | Sampling Date: | 04/21/2014 |
| Reported: | 05/01/2014 | Sampling Type: | Soil |
| Project Name: | COTTONDRAW UNIT 10 | Sampling Condition: | ** (See Notes) |
| Project Number: | OXY-14-008 | Sample Received By: | Celey D. Keene |
| Project Location: | C1 | | |

**Sample ID: SAMPLE PT 3 @ 2'6" BGS (H401318-10)**

Chloride, SM4500Cl-B — mg/kg — Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **12000** | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

**Sample ID: TT-1 @ 3' BGS (H401318-11)**

Chloride, SM4500Cl-B — mg/kg — Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **2960** | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

**Sample ID: TT-1 @ 4' BGS (H401318-12)**

Chloride, SM4500Cl-B — mg/kg — Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **528** | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

**Sample ID: TT-1 @ 5' BGS (H401318-13)**

Chloride, SM4500Cl-B — mg/kg — Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **2200** | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

**Sample ID: TT-1 @ 6' BGS (H401318-14)**

Chloride, SM4500Cl-B — mg/kg — Analyzed By: AP

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **1500** | 16.0 | 05/01/2014 | ND | 416 | 104 | 400 | 3.92 | |

Cardinal Laboratories *=Accredited Analyte



Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

## Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte



Celey D. Keene, Lab Director/Quality Manager

# CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326 Fax (505) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 2

| | | | |
|---|---|---|---|
| Company Name: | Safety & Environmental Solutions, Inc. | BILL TO | |
| Project Manager: | Bob Allen | P.O. #: | |
| Address: | 703 East Clinton | Company: | Same |
| City: | Hobbs State: NM Zip: 88240 | Attn: | |
| Phone #: | 575-397-0510 Fax #: 575-393-4388 | Address: | |
| Project #: | OXY-14-008 Project Owner: Antelope Ridge Unit | City: | |
| Project Name: | Cottondraw Unit 10 | State: Zip: | |
| Project Location: | C1 | Phone #: | |
| Sampler Name: | Roberto Parra | Fax #: | |

ANALYSIS REQUEST: Chlorides

| FOR LAB USE ONLY Lab I.D. | Sample I.D. | (G)RAB OR (C)OMP. | # CONTAINERS | MATRIX: GROUNDWATER | WASTEWATER | SOIL | OIL | SLUDGE | OTHER: | PRESERV: ACID/BASE | ICE / COOL | OTHER: | SAMPLING: DATE | TIME | Chlorides |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H401378- | | | | | | | | | | | | | | | |
| 01 | Sample #1 @ surface | G | 1 | | | ✓ | | | | | | ✓ | 4.21.14 | 9:00 AM | ✓ |
| 02 | Sample #1 @ 1' bgs | | | | | | | | | | | | | 9:05 AM | |
| 03 | Sample #2 @ surface | | | | | | | | | | | | | 9:15 AM | |
| 04 | Sample #2 @ 1' bgs | | | | | | | | | | | | | 9:20 AM | |
| 05 | Sample #2 @ 2' bgs | | | | | | | | | | | | | 9:25 AM | |
| 06 | Sample #2 @ 2'6" bgs | | | | | | | | | | | | | 9:30 AM | |
| 07 | Sample #3 @ surface | | | | | | | | | | | | | 10:00 AM | |
| 08 | Sample #3 @ 1' bgs | | | | | | | | | | | | | 10:05 AM | |
| 09 | Sample #3 @ 2' bgs | | | | | | | | | | | | | 10:10 AM | |
| 10 | Sample #3 @ 2'6" bgs | | | | | | | | | | | | | 10:15 AM | |

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

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice and all costs of collection, including attorney's fees.

| | | | | | |
|---|---|---|---|---|---|
| Sampled/Relinquished: Roberto Parra | Date: 5-1-14 | Received By: | Phone Result: ☐ Yes ☐ No | Add'l Phone #: | |
| Relinquished By: | Time: 7:00am / 8:15 | Received By: | Fax Result: ☐ Yes ☐ No | Add'l Fax #: | |
| Delivered By: (Circle One) Sampler - UPS - Bus - Other: | Temp. 22.2°C | Sample Condition: Cool ☐ Yes ☑ No; Intact ☑ Yes ☐ No | CHECKED BY: (Initials) cdh | REMARKS: Email: Santiago@sesi-nm.com; ballen@sesi-nm.com; office@sesi-nm.com; RParra@sesi-nm.com. RUSH | |

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

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CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326 Fax (505) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 2 of 2

| | | | |
|---|---|---|---|
| Company Name: | Safety & Environmental Solutions, Inc. | BILL TO | |
| Project Manager: | Bob Allen | P.O. #: | |
| Address: | 703 East Clinton | Company: | Same |
| City: | Hobbs State: NM Zip: 88240 | Attn: | |
| Phone #: | 575-397-0510 Fax #: 575-393-4388 | Address: | |
| Project #: | 0X4-14-008 Project Owner: Apache Tramel | City: | |
| Project Name: | Cotton draw unit #1 | State: Zip: | |
| Project Location: | CI | Phone #: | |
| Sampler Name: | Roberto Rosa | Fax #: | |

| Lab I.D. | Sample I.D. | (G)RAB OR (C)OMP. | # CONTAINERS | MATRIX: GROUNDWATER | WASTEWATER | SOIL | OIL | SLUDGE | OTHER | PRESERV: ACID/BASE | ICE / COOL | OTHER | SAMPLING: DATE | TIME | ANALYSIS REQUEST: Chlorides |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H401318- | | | | | | | | | | | | | | | |
| 11 | TT-1@ 3' bgs | G | 1 | | | ✓ | | | | | | ✓ | 4.22.14 | 9:30am | ✓ |
| 12 | TT-1@ 4' bgs | G | 1 | | | ✓ | | | | | | ✓ | 4.22.14 | 9:35am | ✓ |
| 13 | TT-1@ 5' bgs | G | 1 | | | ✓ | | | | | | ✓ | 4.22.14 | 9:40am | ✓ |
| 14 | TT-1@ 6' bgs | G | 1 | | | ✓ | | | | | | ✓ | 4.22.14 | 9:10AM | ✓ |

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

Terms and Conditions: Interest will be charged on all accounts over 30 days past due at the rate of 24% per annum from the original date of invoice and all costs of collection, including attorney's fees.

| | | | |
|---|---|---|---|
| Sampler Relinquished: Robert Rosa | Date: 5.1.14 | Received By: Chylleene | Phone Result: ☐ Yes ☐ No Add'l Phone #: |
| Relinquished By: | Time: 8:15 | Received By: | Fax Result: ☐ Yes ☐ No Add'l Fax #: |
| Delivered By: (Circle One) Sampler - UPS - Bus - Other: | Temp. 22.2c | Sample Condition: Cool ☑ Yes ☐ No; Intact ☐ Yes ☐ No | CHECKED BY: (Initials) GH |

REMARKS: RUSH

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

#54

# Appendix B
# C-141

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

# Release Notification and Corrective Action

## OPERATOR

☒ Initial Report ☐ Final Report

| | |
|---|---|
| Name of Company Oxy USA Inc. | Contact Austin Tramell |
| Address 1017 W Stanolind Road | Telephone No. 575-499-4919 |
| Facility Name Cotton Draw Unit 10 | Facility Type Well location |

| | | |
|---|---|---|
| Surface Owner BLM | Mineral Owner | API No. 30-025-08195 |

## LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|---|---|---|---|---|---|---|---|---|
| A | 16 | 25S | 32E | 660 | N | 660 | E | Lea |

Latitude 32.13683° Longitude -103.67362°

## NATURE OF RELEASE

| | | |
|---|---|---|
| Type of Release Produced Water | Volume of Release 35BBL | Volume Recovered 30BBL |
| Source of Release 2" steel production line due to internal corrosion | Date and Hour of Occurrence 04/01/2014 @ 2:00 PM | Date and Hour of Discovery |
| Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required | If YES, To Whom? Geoffrey Leking NMOCD, Jennifer Van Curen BLM | |
| By Whom? Austin Tramell | Date and Hour 04/02/2014 @02:37 PM | |
| Was a Watercourse Reached? ☐ Yes ☒ No | If YES, Volume Impacting the Watercourse. | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Internal corrosion on a 2" steel production flow line cause 35 bbls of produced water to leak onto the ground. 30 bbls of fluid was recovered and well was shut in.

Describe Area Affected and Cleanup Action Taken.*

The affected area is approximately 18'x40'. Remediation will be completed in accordance with an approved remediation plan from the NMOCD and the BLM.

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: Austin Tramell | Approved by Environmental Specialist: | |
| Title: HES Specialist | Approval Date: | Expiration Date: |
| E-mail Address: Austin_tramell@oxy.com | Conditions of Approval: | Attached ☐ |
| Date: 04/14/2014 Phone: 575-499-4919 | | |

* Attach Additional Sheets If Necessary

# Appendix C
# Site Photographs

Photo #1 – East of fence line facing west

Photo #2 – West of fence line facing west

Photo #3 – Release Point

Photo #4 – Spill area facing east

Photo #5 - Spill are facing north east end

Photo #6 – Spill area facing north West end

Photo # 7 – Spill area facing south west end

Photo #8 – Spill are facing south east end

Photo #9 – Bottom of spill area

# Appendix D
# NMOSE Water Column/Average Depth to Water

# New Mexico Office of the State Engineer
# Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

| POD Number | POD Sub-basin | County | Q 64 | Q 16 | Q 4 | Sec | Tws | Rng | X | Y | Depth Well | Depth Water | Water Column |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 02216 | CUB | LE | 2 | 2 | 4 | 21 | 23S | 32E | 625035 | 3573261* | 585 | 400 | 185 |

Average Depth to Water: **400 feet**

Minimum Depth: **400 feet**

Maximum Depth: **400 feet**

**Record Count:** 1

**PLSS Search:**

**Section(s):** 21 **Township:** 23S **Range:** 32E

***UTM location was derived from PLSS - see Help**

# New Mexico Office of the State Engineer
# Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

| POD Number | POD Sub-Code | basin | County | Q 64 | Q 16 | Q 4 | Sec | Tws | Rng | X | Y | Depth Well | Depth Water | Water Column |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 03555 POD1 | C | | LE | 2 | 2 | 1 | 05 | 24S | 32E | 622709 | 3569231 | 600 | 380 | 220 |

Average Depth to Water: **380 feet**

Minimum Depth: **380 feet**

Maximum Depth: **380 feet**

**Record Count:** 1

**PLSS Search:**

**Section(s):** 5 **Township:** 24S **Range:** 32E

# New Mexico Office of the State Engineer
# Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

| POD Number | POD Sub-basin Code | County | Q 64 | Q 16 | Q 4 | Sec | Twn | Rng | X | Y | Depth Well | Depth Water | Water Column |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 02405 | C | ED | 4 | 1 | | 02 | 24S | 31E | 617690 | 3568631* | 275 | 160 | 115 |
| C 02460 | C | ED | | | 3 | 02 | 24S | 31E | 617496 | 3568022* | 320 | | |
| C 02460 POD2 | C | ED | | | 3 | 02 | 24S | 31E | 617496 | 3568022* | 320 | | |
| C 02464 | C | ED | 3 | 4 | 1 | 02 | 24S | 31E | 617589 | 3568530* | 320 | 205 | 115 |

Average Depth to Water: **182 feet**

Minimum Depth: **160 feet**

Maximum Depth: **205 feet**

**Record Count:** 4

**PLSS Search:**

**Section(s):** 2 **Township:** 24S **Range:** 31E

***UTM location was derived from PLSS - see Help**