

RECEIVED

By OCD; Dr. Oberding at 3:48 pm, Mar 24, 2015

OXY USA, Inc. Monsanto State Battery Delineation Report and Work Plan

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

March 20, 2015

APPROVED

Conditionally

By OCD; Dr. Oberding at 3:48 pm, Mar 24, 2015

Condition for approval- More complete remediation and addressing of deeper contaminants will occur upon site abandonment/sale OR when the tanks are replaced/upgraded.



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**

[1RP-3326](#)

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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 Monsanto State Battery located in Section 16 of Township 25 South, Range 32 East, Lea County, New Mexico.

According to the C-141 the cause of release was Automation failure caused the tanks to overflow and leak 35 bbls of oil and 35 bbls of produced water onto the ground. A vacuum truck recovered 30 bbls of oil and 30 bbls of produced water. The automation was repaired.

III. Surface and Ground Water

The nearest groundwater of record is approximately 3 miles Northwest of the site. The New Mexico Office of State Engineer record is in Section 31 Range 32 East and Township 25 South. The reported depth was 295 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 NMOC (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 100 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 March 20 2014, Safety & Environmental Solutions, Inc. was onsite to determine vertical extent of contamination. All samples were properly packaged, preserved and transported to the Laboratory, Hobbs New Mexico and analyzed for Benzene, Toluene, Ethylbenzene, Xylenes, Total BTEX and Chloride (Cl⁻) (Method SM4500Cl-B). The results of the analysis are presented in the table below:

Sample Date 12/03/2014	Sample ID	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX
Depth	Method					
TT 1 at 12'	BTEX 8021B	<0.200	<0.200	<0.200	2.22	2.22
TT 1 at 13'	BTEX 8021B	<0.200	<0.200	<0.200	2.27	2.27
TT 2 at 9.5'	BTEX 8021B	<0.050	<0.050	<0.050	0.221	<0.300
TT 2 at 13'	BTEX 8021B	<0.050	<0.050	<0.050	<0.150	<0.300

Sample Date 12/03/2014	Sample ID	Chloride (Cl)	Sample ID	GRO (C ₆ -C ₁₀) (mg/kg)	DRO (>C ₁₀ -C ₂₈) (mg/kg)
Depth	Method		Method		
TT 1 at 12'	SM4500Cl-B	224	TPH 8015M	337	5810
TT 1 at 13'	SM4500Cl-B	224	TPH 8015M	430	9110
TT 2 at 9.5'	SM4500Cl-B	1960	TPH 8015M	71.1	1720
TT 2 at 13'	SM4500Cl-B	1410	TPH 8015M	<50.0	779

The backhoe only allowed a 13' depth. At this depth we did not find extent of contamination.

On March 6 2015, Safety & Environmental Solutions, Inc. was onsite to determine vertical extent of contamination. All samples were properly packaged, preserved and transported to the Laboratory, Hobbs New Mexico and analyzed for Benzene, Toluene, Ethylbenzene, Xylenes, Total BTEX and Chloride (Cl⁻) (Method SM4500Cl-B). The results of the analysis are presented in the table below:

Sample Date 03/09/2015	Sample ID	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX
Depth	Method					
BH 1 at 15'	BTEX 8021B	<0.050	0.116	0.672	4.84	5.63
BH 1 at 17.5'	BTEX 8021B	<0.050	<0.050	<0.050	<0.150	<0.300
BH 1 at 18.5'	BTEX 8021B	<0.050	<0.050	<0.050	<0.150	<0.300
BH 2 at 16'	BTEX 8021B	<0.050	<0.050	<0.050	<0.150	<0.300
BH 2 at 18'	BTEX 8021B	<0.050	<0.050	<0.050	<0.150	<0.300

Sample Date 03/09/2015	Sample ID	Chloride (Cl)	Sample ID	GRO (C ₆ -C ₁₀) (mg/kg)	DRO (>C ₁₀ -C ₂₈) (mg/kg)
Depth	Method		Method		
BH 1 at 15'	SM4500Cl-B	1470	TPH 8015M	337	5810
BH 1 at 17.5'	SM4500Cl-B	1410	TPH 8015M	10.5	768
BH 1 at 18.5'	SM4500Cl-B	1680	TPH 8015M	<10.0	838
BH 2 at 16'	SM4500Cl-B	960	TPH 8015M	<10.0	<10.0
BH 2 at 18'	SM4500Cl-B	816	TPH 8015M	<10.0	<10.0

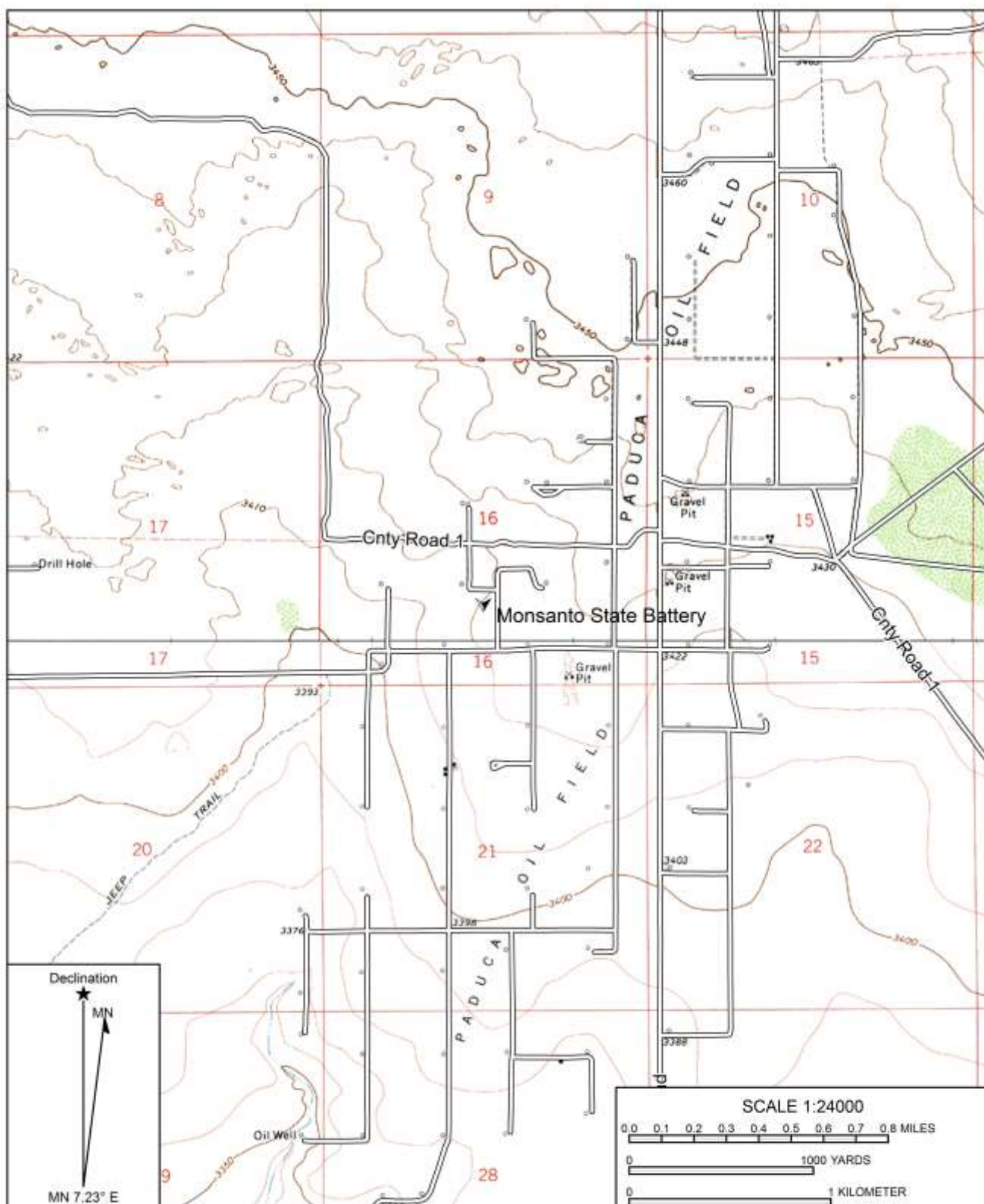
VI. Action Plan

Due to the extreme depth to groundwater in this area, the entire spill site will be excavated to a depth of 2'. All contaminated soil will be transported to Sundance Services, an NMOCD approval facility, for disposal. Some TPH contaminated will be left in place and placing a liner in the excavation would not allow further remediate by aeration. Samples will be taken from the excavation to document the amount of contamination being left in place. The excavation will be backfilled with clean soil and return to grade.

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



Name: PADUCA BREAKS NW,
 Date: 03/19/15
 Scale: 1 inch = 2,000 ft.

Location: 032.1265737° N, 103.6793846° W
 Caption: Monsanto State Battery

Figure 2
Site Plan



Monsanto State Battery

Appendix A

Analytical Results



PHONE (575) 293-2326 • 101 E. MARLAND • HOBBS, NM 88240

December 06, 2014

Bob Allen
Safety & Environmental Solutions
703 East Clinton
Hobbs, NM 88240

RE: MONSANTO STATE BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 12/04/14 8:00.

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 TUEQ website at www.tueq.texas.gov/field/sta/lab_accred_conf.html.

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

Method EPA 552.2	Halocetic 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,

Coley D. Keene
Lab Director/Quality Manager



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

Received:	12/04/2014	Sampling Date:	12/03/2014
Reported:	12/08/2014	Sampling Type:	Soil
Project Name:	MONSANTO STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	QXY-14-005	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

STEX 80218		mg/kg		Analysed By: CK						
Analyte	Result	Reporting Limit	Analysed	Method Blank	IS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.200	0.200	12/08/2014	ND	1.01	95.3	2.00	1.78		
Toluene*	<0.200	0.200	12/08/2014	ND	1.88	93.8	2.00	1.90		
Ethylbenzene*	<0.200	0.200	12/08/2014	ND	1.76	87.8	2.00	3.30		
Total Xylenes*	2.22	0.600	12/08/2014	ND	5.35	89.2	6.00	3.55		
Total STEX	2.22	1.20	12/08/2014	ND						

Sample: 4-Bromofluorobenzene (P0) Chloride, 2H45000-8 108 % 61-134 mg/kg Analyzed By: AP									
Analyte	Result	Reporting Limit	Analyzed	Method Blank	SS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	12/04/2014	ND	400	100	400	3.92	

TPH 8015H	mg/kg	Analyzed By: CK					S-06		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BC	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	415	100	12/04/2014	ND	199	99.5	200	0.693	
DRO >C10-C28	7590	100	12/04/2014	ND	204	102	200	0.660	

Sarngasir: 4-Chlorooctane	184 %	47.2-157
Sarngasir: 4-Chlorooctadecane	290 %	32.1-176

Cardinal Laboratories

*=Accredited Analyte

[illegible]

Colby L. Kenna

Cecily D. Keene, Lab Director/Quality Manager



PHONE (575) 393-3226 • 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: 12/04/2014
Reported: 12/08/2014
Project Name: MONSANTO STATE BATTERY
Project Number: OXY-14-005
Project Location: LEA COUNTY, NM

Sampling Date: 12/03/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: TT-1 13' BGS (H403692-02)

BTX 80218		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	SS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.200	0.200	12/08/2014	ND	1.91	95.3	2.00	1.76		
Toluene*	<0.200	0.200	12/08/2014	ND	1.88	93.8	2.00	1.90		
Ethylbenzene*	<0.200	0.200	12/08/2014	ND	1.76	87.8	2.00	3.30		
Total Xylenes*	2.27	0.800	12/08/2014	ND	5.38	89.2	6.00	3.55		
Total BTX	2.27	1.20	12/08/2014	ND						

Surrogate: 4-Bromofluorobenzene (P02) 107 % 61-154

Chloride, SM4500C-S		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	SS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	15.0	12/04/2014	ND	400	100	400	3.92		

THH 8015H	mg/kg		Analyzed By: CK					5-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	SS	% Recovery	True Value QC	RPD	Qualifier
GRO C8-C10	430	100	12/04/2014	ND	199	99.5	200	0.653	
DRO >C10-C28	9110	100	12/04/2014	ND	204	102	200	0.660	

Surrogate: 1-Chlorooctane 179 % 47.2-137

Surrogate: 1-Chlorooctadecane 303 % 32.1-178

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*=Accredited Analyte

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Coley D. Keene, Lab Director/Quality Manager



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

Received: 12/04/2014
Reported: 12/08/2014
Project Name: MONSANTO STATE BATTERY
Project Number: OXY-14-005
Project Location: LEA COUNTY, NM

Sampling Date:	12/03/2014
Sampling Type:	Soil
Sampling Condition:	Cool & Intact
Sample Received By:	Jodi Henson

STEK 00240

1992/1993

Analysed By: CM

Analyte	Result	Reporting Limit	Analysed	Method Blank	SD	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/08/2014	ND	1.91	95.3	2.00	1.78	
Toluene*	<0.050	0.050	12/08/2014	ND	1.88	93.8	2.00	1.90	
Ethylbenzene*	<0.050	0.050	12/08/2014	ND	1.78	87.8	2.00	3.30	
Total Xylenes*	0.223	0.150	12/08/2014	ND	5.35	89.2	6.00	3.55	
Total BTEX	<0.300	0.300	12/08/2014	ND					

Surrogate: 4-Bromobenzonitrile (P11)

1992

66-154

Chloride, SM4500C-8

1000/1000

Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	SS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1980	15.0	12/04/2014	ND	400	100	400	3.92	

TPM SOLSM

1999/2000

Analyzed Rec CM

Analyte	Result	Reporting Limit	Analyzed	Method Basis	SS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	71.1	50.0	12/04/2014	ND	199	99.5	200	0.853	
DRO >C10-C28	1720	50.0	12/04/2014	ND	204	102	200	0.660	

Summary: 1-Chlorooctane

1998

47.2-157

Keywords: 1-Chlorooctadecane

1990

321-178

Cardinal Laboratories

*=Accredited Analyte

Affidavit: I declare under penalty of perjury that the foregoing is true and correct. Executed on _____ at _____, California.

Chas. L. Kime

Ceiley D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBE, NM 88240

Analytical Results For:

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

Received: 12/04/2014
Reported: 12/08/2014
Project Name: MONSANTO STATE BATTERY
Project Number: OXY-14-005
Project Location: LEA COUNTY, NM

Sampling Date: 12/03/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: TT-2 13' BGS (H403692-04)

BTEX 60218		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/08/2014	ND	1.91	95.3	2.00	1.78	
Toluene*	<0.050	0.050	12/08/2014	ND	1.88	93.8	2.00	1.90	
Ethylbenzene*	<0.050	0.050	12/08/2014	ND	1.76	87.8	2.00	3.30	
Total Xylenes*	<0.150	0.150	12/08/2014	ND	5.35	89.2	6.00	3.55	
Total BTEX	<0.300	0.300	12/08/2014	ND					

Surrogate: 4-Bromofluorobenzene (PVI) 104 % 61-134

Chloride, SM4500C-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1410	16.0	12/04/2014	ND	400	100	400	3.92	

TPH 8015H		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	12/04/2014	ND	199	99.5	200	0.653	
DRO >C10-C28	779	50.0	12/04/2014	ND	204	102	200	0.660	

Surrogate: 1-Chlorooctane 124 % 47.2-157

Surrogate: 1-Chlorooctadecane 116 % 32.1-176

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*=Accredited Analyte

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Cekey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interferences.
ND	Analyte NOT DETECTED at or above the reporting limit.
RPD	Relative Percent Difference.
**	Sample not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SH4000C-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.

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*Accredited Analyte

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Coley D. Keene, Lab Director/Quality Manager



ARDINAL LABORATORIES
111 East Bernard, Hobbs, NM 88240
(505) 393-2328 Fax (505) 393-2478

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Safety & Environmental Solutions, Inc.

Project Manager: Bob Allen

Address: 703 East Clinton

City: Hobbs

State: NM

Zip: 88240

Phone #: 575-397-0510

Fax #: 575-393-4388

Project #: 044-14-005

Project Name: WADSWORTH STORM WATER

Project Location: 10th Street

Sample Name: Storm Water

Sample ID: 14020650

Lab I.D.:

Sample I.D.:

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Bill To

Company Name: Safety & Environmental Solutions, Inc.

Project Manager: Bob Allen

Address: 703 East Clinton

City: Hobbs

State: NM

Zip: 88240

Phone #: 575-397-0510

Fax #: 575-393-4388

Project #: 044-14-005

Project Name: WADSWORTH STORM WATER

Project Location: 10th Street

Sample Name: Storm Water

Sample ID: 14020650

Lab I.D.:

Sample I.D.:

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Analysis Request

Company Name: Safety & Environmental Solutions, Inc.

Project Manager: Bob Allen

Address: 703 East Clinton

City: Hobbs

State: NM

Zip: 88240

Phone #: 575-397-0510

Fax #: 575-393-4388

Project #: 044-14-005

Project Name: WADSWORTH STORM WATER

Project Location: 10th Street

Sample Name: Storm Water

Sample ID: 14020650

Lab I.D.:

Sample I.D.:

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

March 12, 2015

Bob Allen
Safety & Environmental Solutions
703 East Clinton
Hobbs, NM 88240

RE: MONSANTO STATE BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 03/09/15 16:50.

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 accredited 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
Lab Director/Quality Manager



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:	03/09/2015	Sampling Date:	03/06/2015
Reported:	03/12/2015	Sampling Type:	Soil
Project Name:	MONSANTO STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	OXY-14-005	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: BH-1 15' (H500647-01)

BTEX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene ⁺	<0.050	0.050	03/11/2015	ND	2.10	105	2.00	1.08	
Toluene ⁺	0.116	0.050	03/11/2015	ND	1.92	96.1	2.00	1.13	
Ethylbenzene ⁺	0.672	0.050	03/11/2015	ND	2.23	112	2.00	0.897	
Total Xylenes ⁺	4.84	0.150	03/11/2015	ND	6.10	102	6.00	0.213	
Total BTEX	5.63	0.300	03/11/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 129 % 61-154

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1470	16.0	03/10/2015	ND	416	104	400	0.00	
TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	337	50.0	03/11/2015	ND	193	96.5	200	1.64	
DRO >C10-C28	5810	50.0	03/11/2015	ND	203	102	200	0.942	

Surrogate: 1-Chlorooctane 118 % 47.2-157

Surrogate: 1-Chlorooctadecane 157 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 03/09/2015
 Reported: 03/12/2015
 Project Name: MONSANTO STATE BATTERY
 Project Number: OXY-14-005
 Project Location: LEA COUNTY, NM

 Sampling Date: 03/06/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: BH-1 17.5' (H500647-02)

BTX 80218		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/11/2015	ND	2.10	105	2.00	1.08	
Toluene*	<0.050	0.050	03/11/2015	ND	1.92	96.1	2.00	1.13	
Ethylbenzene*	<0.050	0.050	03/11/2015	ND	2.23	112	2.00	0.897	
Total Xylenes*	<0.150	0.150	03/11/2015	ND	6.10	102	6.00	0.213	
Total BTX	<0.300	0.300	03/11/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 119 % 61-134

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1410	16.0	03/10/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	10.5	10.0	03/11/2015	ND	193	96.5	200	1.64	
DRO >C10-C28	768	10.0	03/11/2015	ND	203	102	200	0.942	

Surrogate: 1-Chlorooctane 89.4 % 47.2-157

Surrogate: 1-Chlorooctadecane 97.6 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



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: 03/09/2015
Reported: 03/12/2015
Project Name: MONSANTO STATE BATTERY
Project Number: OXY-14-005
Project Location: LEA COUNTY, NM

Sampling Date: 03/06/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BH-1 18.5' (H500647-03)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/11/2015	ND	2.09	105	2.00	0.506	
Toluene*	<0.050	0.050	03/11/2015	ND	1.95	97.5	2.00	0.0885	
Ethylbenzene*	<0.050	0.050	03/11/2015	ND	2.31	115	2.00	1.36	
Total Xylenes*	<0.150	0.150	03/11/2015	ND	6.27	104	6.00	1.52	
Total BTX	<0.300	0.300	03/11/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 119 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1680	16.0	03/10/2015	ND	416	104	400	0.00		
TPH 8015M		mg/kg		Analyzed By: MS						

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2015	ND	193	96.5	200	1.64	
DRO >C10-C28	838	10.0	03/11/2015	ND	203	102	200	0.942	

Surrogate: 1-Chlorooctane 92.0 % 47.2-157

Surrogate: 1-Chlorooctadecane 103 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



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:	03/09/2015	Sampling Date:	03/06/2015
Reported:	03/12/2015	Sampling Type:	Soil
Project Name:	MONSANTO STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	OXY-14-005	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: BH-2 16' (H500647-04)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/11/2015	ND	2.09	105	2.00	0.506		
Toluene*	<0.050	0.050	03/11/2015	ND	1.95	97.5	2.00	0.0885		
Ethylbenzene*	<0.050	0.050	03/11/2015	ND	2.31	115	2.00	1.36		
Total Xylenes*	<0.150	0.150	03/11/2015	ND	6.27	104	6.00	1.52		
Total BTEx	<0.300	0.300	03/11/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 61-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	960	16.0	03/10/2015	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPO	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2015	ND	193	96.5	200	1.64	
DRO >C10-C28	<10.0	10.0	03/11/2015	ND	203	102	200	0.942	

Surrogate: 1-Chlorooctane 86.3 % 47.2-157

Surrogate: 1-Chlorooctadecane 95.6 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 03/09/2015
 Reported: 03/12/2015
 Project Name: MONSANTO STATE BATTERY
 Project Number: OXY-14-005
 Project Location: LEA COUNTY, NM

 Sampling Date: 03/06/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: BH-2 18' (H500647-05)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/11/2015	ND	2.09	105	2.00	0.506		
Toluene*	<0.050	0.050	03/11/2015	ND	1.95	97.5	2.00	0.0885		
Ethylbenzene*	<0.050	0.050	03/11/2015	ND	2.31	115	2.00	1.36		
Total Xylenes*	<0.150	0.150	03/11/2015	ND	6.27	104	6.00	1.52		
Total BTX	<0.300	0.300	03/11/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 61-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	03/10/2015	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/11/2015	ND	193	96.5	200	1.64	
DRO >C10-C28	<10.0	10.0	03/11/2015	ND	203	102	200	0.942	

Surrogate: 1-Chlorooctane 80.8 % 47.2-157

Surrogate: 1-Chlorooctadecane 86.5 % 52.1-176

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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

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

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[illegible]

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
 1230 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 4, 2011

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

Release Notification and Corrective Action

OPERATOR		<input checked="" type="checkbox"/> Initial Report	<input type="checkbox"/> Final Report
Name of Company	Oxy Permian Ltd.	Contact	Austin Trammell
Address	1017 W. Stamford Rd., Hobbs, NM 88240	Telephone No.	(575) 499-4919
Facility Name	Monsanto State Battery	Facility Type	Gathering
Surface Owner	State	Mineral Owner	API No. n/a

LOCATION OF RELEASE

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

Latitude N 32.12676° Longitude W 103.67994°

NATURE OF RELEASE

Type of Release	Oil and Produced water	Volume of Release	35 bbls oil, 35 bbls produced water	Volume Recovered	30 bbls oil, 30 bbls produced water
Source of Release	Overload tripped on water transfer pump causing tank overflow	Date and Hour of Occurrence	01/05/2014	Date and Hour of Discovery	
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Tomas Obering-NMOCD		
By Whom?	Austin Trammell	Date and Hour	09/08/14		
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.*

Automation failure caused the tanks to overflow and leak 35 bbls of oil and 35 bbls of produced water onto the ground. A vacuum truck recovered 30 bbls oil and 30 bbls of the produced water. The automation was repaired.

Describe Area Affected and Cleanup Action Taken.*

The affected area is approximately 60' x 150' on location. Remediation will be completed in accordance with an approved remediation plan from NMOCD.

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 Trammell	Approved by Environmental Specialist:	
Title: HES Operations Specialist	Approval Date:	Expiration Date:
E-mail Address: Austin.Trammell@oxy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: _____ Phone: (575) 499-4919		

* Attach Additional Sheets If Necessary

Appendix C

Site Photographs



Location Sign



Spill facing northwest



Spill facing north



Spill facing northeast



Spill facing east



Spill facing southeast



Spill facing northeast



Spill facing southwest



Spill facing southwest



Spill facing south