



May 14, 2015

Ms. Heather Patterson  
**NMOCD District 2**  
811 S. 1<sup>st</sup> Street  
Artesia, NM 88210

AMARILLO  
921 North Bivins  
Amarillo, Texas 79107  
Phone 806.467.0607  
Fax 806.467.0622

ARTESIA  
408 West Texas Ave.  
Artesia, New Mexico 88210  
Phone 575.746.8768  
Fax 575.746.8905

HOBBS  
318 East Taylor Street  
Hobbs, New Mexico 88240  
Phone 575.393.4261  
Fax 575.393.4658

MIDLAND  
2901 State Hwy 349  
Midland, Texas 79706  
Phone 432.522.2133  
Fax 432.522.2180

OKLAHOMA CITY  
7700 North Hudson Avenue  
Suite 10  
Oklahoma City, Oklahoma 73116  
Phone 405.486.7030  
Fax 806.467.0622

SAN ANTONIO  
13111 Lookout Way  
San Antonio, Texas 78233  
Phone 210.265.8025  
Fax 210.568.2191

Subject: **Soil Assessment and Remediation Work Plan**  
Oxy USA, INC  
Two Marks 36 State #004 SWD  
30-015-34833  
2RP-2977

Dear Ms. Patterson

Oxy USA, INC (Oxy) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The results of our soil assessment and proposed remediation activities consist of the following.

### Background Information

The Two Marks 36 St. #004 SWD is located approximately thirty-three (33) miles southeast of Artesia, New Mexico. The legal location for this location is Unit Letter O, Section 36, Township 21 South, and Range 24 East in Eddy County, New Mexico. More specifically the latitude and longitude for this release are 32.430102 North and -103.454029 West. A site plan is presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of Ector extremely rocky loam with 9 to 25 percent slopes. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is comprised of the Seven Rivers formation consisting of gypsum, anhydrite, salt, dolomite, and siltstone. Drainage courses in this area are normally dry. Ground water in the project vicinity is approximately 28-feet below ground surface (bgs), according to the New Mexico Office of the State Engineer. The referenced groundwater data is presented in [Appendix II](#).

The ranking for this site is **20** Based on the following:

Depth to ground water	<50'
Wellhead Protection Area	>1000'
Distance to surface water body	>1000'

ENVIRONMENTAL CONSULTING  
ENGINEERING  
DRILLING  
CONSTRUCTION  
SPILL MANAGEMENT  
GENERAL CONTRACTING

Toll Free: 866.742.0742  
[www.talonlpe.com](http://www.talonlpe.com)

## Incident Description

A 4-inch steel salt water disposal line failed causing a release of 10bbls of produced water. All of the fluid was contained on the location. Talon mobilized personnel to conduct a site assessment and perform soil sampling within the impacted area utilizing a backhoe. Due to the shallow soils and rockiness of this area, refusal was encountered with the backhoe at depths between 2-feet and 4-feet below ground surface. Laboratory results from the above referenced sampling activities are summarized in the table below.

## Laboratory Results

See [Appendix III](#) for complete report of laboratory results.

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	0	ND	5200	ND	ND
S-1	1	ND	256	ND	ND
S-1	1.5	ND	240	ND	ND
S-1 REFUSAL	2	ND	192	ND	ND
S-2	0	ND	272	ND	ND
S-2	1	ND	304	ND	ND
S-2	2	ND	224	ND	ND
S-2	3	ND	304	ND	ND
S-2 REFUSAL	4	ND	512	ND	ND

(ND) Analyte Not Detected

Based upon the site ranking of **0**, NMOCD Recommended Remedial Action Levels (RRAL) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, and 5,000 mg/kg for TPH.

## Proposed Remedial Actions

- The impacted area in the vicinity of sample location S-1 will be excavated to a depth of 1-foot bgs.
- All of the excavated material will be hauled to an NMOCD approved solid waste disposal facility.
- The excavation will be backfilled with caliche and contoured to match the surrounding terrain.

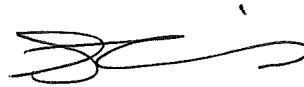
Should you have any questions or if further information is required, please do not hesitate to contact our office at (575)-746-8768

Respectfully submitted,

TALON/LPE

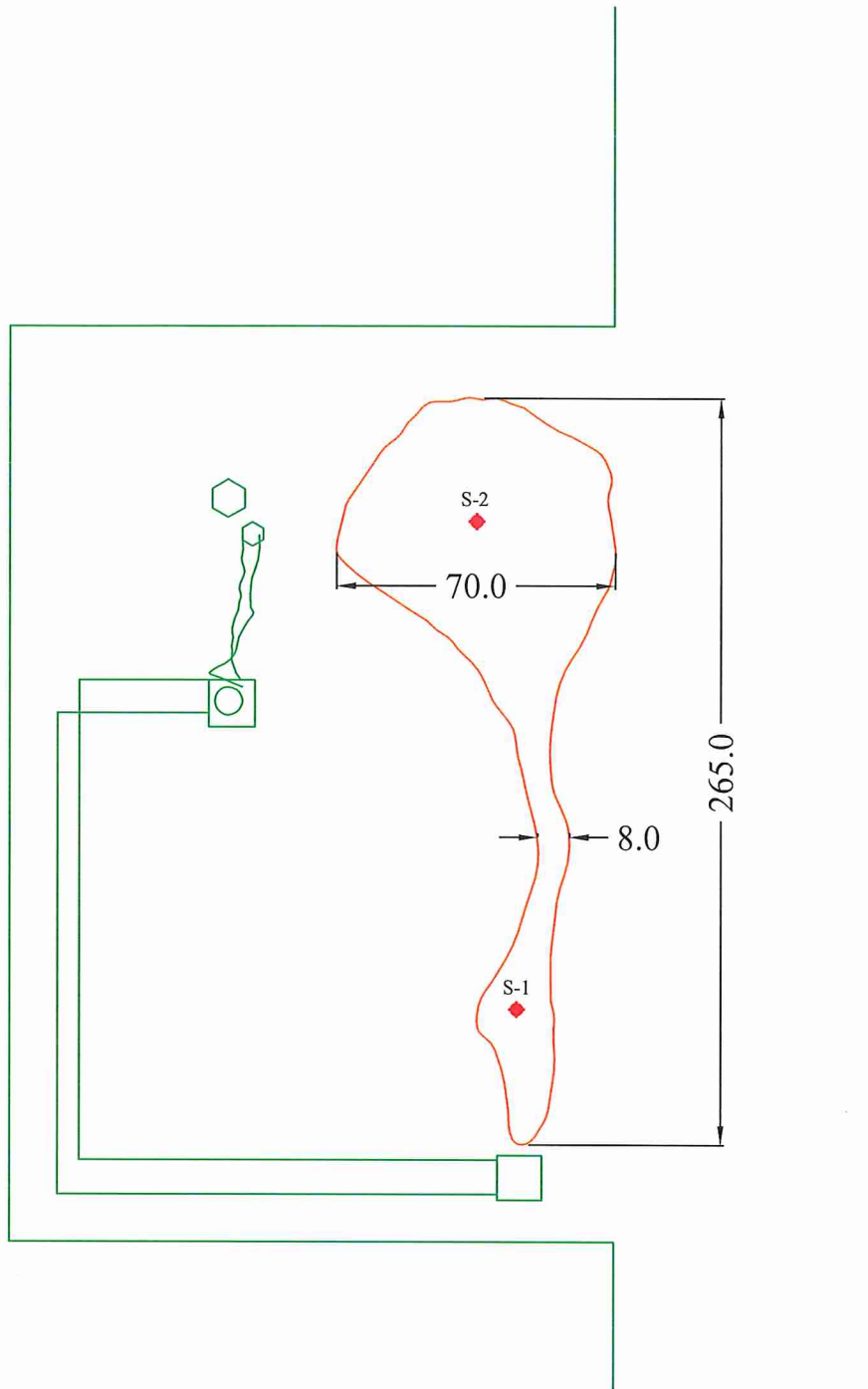


Sheldon L. Hitchcock  
Project Manager



David J. Adkins  
District Manager

# SITE PLAN



NTS  
Scale in Feet

Legend

- Impacted Area
- Sample Location



Date: 05/26/2015

Scale: NTS

Drawn By: TJS

Two Marks 36 State 04  
Oxy - NM - North  
Eddy County, New Mexico  
Figure 1 - Site Plan

**GROUNDWATER DATA**  
**INITIAL C-141**



# 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	Distance	Depth Well	Depth Water	Water Column
<a href="#">C 02428</a>			ED	4	2	1	12	22S	24E	551426	3586017*	2249	450	400	50

Average Depth to Water: 400 feet

Minimum Depth: 400 feet

Maximum Depth: 400 feet

Record Count: 1

Basin/County Search:

County: Eddy

UTMNAD83 Radius Search (in meters):

Easting (X): 551725

Northing (Y): 3588247

Radius: 2500

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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

**NM OIL CONSERVATION**  
ARTESIA DISTRICT

APR 29 2015

Form C-141  
Revised August 8, 2011

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

RECEIVED

**Release Notification and Corrective Action**

NAB 1512156316

**OPERATOR**

☒ Initial Report ☐ Final Report

Name of Company: <b>OXY USA INC</b>	Contact: <b>Chris Jones</b>
Address: <b>102 S. Main St. Carlsbad, NM 88220</b>	Telephone No.: <b>575-628-4121</b>
Facility Name: <b>Two Marks 36 State #4 SWD</b>	Facility Type: <b>SWD</b>

Surface Owner: <b>State</b>	Mineral Owner:	API No.: <b>30-015-34833</b>
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**LOCATION OF RELEASE**

Unit Letter <b>O</b>	Section <b>36</b>	Township <b>21S</b>	Range <b>24E</b>	Feet from the <b>670'</b>	North/South Line <b>South</b>	Feet from the <b>1905'</b>	East/West Line <b>East</b>	County <b>Eddy</b>
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Latitude **32.430102 N** Longitude **-103.454029 W**

**NATURE OF RELEASE**

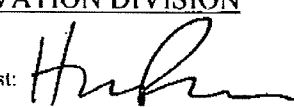
Type of Release: <b>Produced Water</b>	Volume of Release: <b>10 bbls</b>	Volume Recovered: <b>0 bbls</b>
Source of Release: <b>4" Steel Line Leak</b>	Date and Hour of Occurrence <b>3/30/2015</b>	Date and Hour of Discovery <b>3/30/2015</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken: **A 4" steel salt water disposal line caused a 10 barrel release on location due to stress on the line. All fluids stayed on location.**

Describe Area Affected and Cleanup Action Taken.\* ☐ The impacted area was on location only measuring approximately 60' x 80'. Talon/LPE was contracted to perform initial site assessment and soil sampling activities.

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: <b>Chris Jones</b> <small>Digitally signed by Chris Jones DN: cn=Chris Jones, o=ou, email=cjones88@yahoo.com Date: 2015.04.28 15:48:06 +0500</small>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Chris Jones</b>	Approved by Environmental Specialist: 	
Title: <b>HES Specialist</b>	Approval Date: <b>5/11/15</b>	Expiration Date: <b>N/A</b>
E-mail Address: <b>Christopher.Jones@oxy.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>4/28/2015</b>	Phone: <b>575-628-4121</b>	

**Remediation per O.C.D. Rules & Guidelines**  
**SUBMIT REMEDIATION PROPOSAL NO**  
**LATER THAN: 5/11/15**

\* Attach Additional Sheets If Necessary

2RP-2977



# LABORATORY RESULTS



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

May 07, 2015

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: TWO MARKS 36 STATE 4

Enclosed are the results of analyses for samples received by the laboratory on 04/30/15 11:15.

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](http://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

**Analytical Results For:**

TALON LPE  
DAVID ADKINS  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 04/30/2015  
Reported: 05/07/2015  
Project Name: TWO MARKS 36 STATE 4  
Project Number: 70060843701  
Project Location: EDDY

Sampling Date: 04/29/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S - 1 0 ' (H501128-01)**

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	05/01/2015	ND	2.03	101	2.00	5.73		
Toluene*	<0.050	0.050	05/01/2015	ND	2.25	112	2.00	5.72		
Ethylbenzene*	<0.050	0.050	05/01/2015	ND	2.05	103	2.00	5.17		
Total Xylenes*	<0.150	0.150	05/01/2015	ND	6.19	103	6.00	5.71		
Total BTEX	<0.300	0.300	05/01/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 108 % 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	5200	16.0	05/05/2015	ND	416	104	400	0.00			

TPH 8015M			mg/kg							Analyzed By: CK	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	05/01/2015	ND	196	98.0	200	1.79			
DRO >C10-C28	<10.0	10.0	05/01/2015	ND	203	101	200	0.456			


Surrogate: 1-Chlorooctane 93.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 88.3 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

TALON LPE  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

Received:	04/30/2015	Sampling Date:	04/29/2015
Reported:	05/07/2015	Sampling Type:	Soil
Project Name:	TWO MARKS 36 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	70060843701	Sample Received By:	Jodi Henson
Project Location:	EDDY		

**Sample ID: S - 1 1' (H501128-02)**

BTEX 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/04/2015	ND	1.96	98.2	2.00	3.34		
Toluene*	<0.050	0.050	05/04/2015	ND	1.77	88.5	2.00	3.77		
Ethylbenzene*	<0.050	0.050	05/04/2015	ND	1.69	84.5	2.00	4.85		
Total Xylenes*	<0.150	0.150	05/04/2015	ND	5.59	93.2	6.00	5.02		
Total BTEX	<0.300	0.300	05/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 107 % 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	256	16.0	05/05/2015	ND	416	104	400	0.00		

TPH 8015M			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	05/02/2015	ND	196	98.0	200	1.79		
DRO >C10-C28	<10.0	10.0	05/02/2015	ND	203	101	200	0.456		

Surrogate: 1-Chlorooctane 96.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 93.1 % 52.1-176

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

TALON LPE  
DAVID ADKINS  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 04/30/2015  
Reported: 05/07/2015  
Project Name: TWO MARKS 36 STATE 4  
Project Number: 70060843701  
Project Location: EDDY

Sampling Date: 04/29/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S - 1 1.5' (H501128-03)**

BTEX 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/04/2015	ND	1.96	98.2	2.00	3.34		
Toluene*	<0.050	0.050	05/04/2015	ND	1.77	88.5	2.00	3.77		
Ethylbenzene*	<0.050	0.050	05/04/2015	ND	1.69	84.5	2.00	4.85		
Total Xylenes*	<0.150	0.150	05/04/2015	ND	5.59	93.2	6.00	5.02		
Total BTEX	<0.300	0.300	05/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 110 % 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	240	16.0	05/05/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/04/2015	ND	197	98.4	200	0.528	
DRO >C10-C28	<10.0	10.0	05/04/2015	ND	203	102	200	1.44	

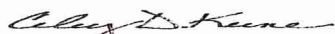
Surrogate: 1-Chlorooctane 91.8 % 47.2-157

Surrogate: 1-Chlorooctadecane 88.2 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

TALON LPE  
DAVID ADKINS  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 04/30/2015  
Reported: 05/07/2015  
Project Name: TWO MARKS 36 STATE 4  
Project Number: 70060843701  
Project Location: EDDY

Sampling Date: 04/29/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S - 1 2 ' REFUSAL ( R ) (H501128-04)**

BTEx 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/04/2015	ND	1.96	98.2	2.00	3.34		
Toluene*	<0.050	0.050	05/04/2015	ND	1.77	88.5	2.00	3.77		
Ethylbenzene*	<0.050	0.050	05/04/2015	ND	1.69	84.5	2.00	4.85		
Total Xylenes*	<0.150	0.150	05/04/2015	ND	5.59	93.2	6.00	5.02		
Total BTEx	<0.300	0.300	05/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 109 % 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	192	16.0	05/05/2015	ND	416	104	400	0.00		

TPH 8015M			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	05/04/2015	ND	197	98.4	200	0.528		
DRO >C10-C28	<10.0	10.0	05/04/2015	ND	203	102	200	1.44		

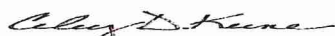
Surrogate: 1-Chlorooctane 86.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 82.9 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

TALON LPE  
DAVID ADKINS  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 04/30/2015  
Reported: 05/07/2015  
Project Name: TWO MARKS 36 STATE 4  
Project Number: 70060843701  
Project Location: EDDY

Sampling Date: 04/29/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S - 2 0 ' (H501128-05)**

BTEx 8021B			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/04/2015	ND	1.96	98.2	2.00	3.34	
Toluene*	<0.050	0.050	05/04/2015	ND	1.77	88.5	2.00	3.77	
Ethylbenzene*	<0.050	0.050	05/04/2015	ND	1.69	84.5	2.00	4.85	
Total Xylenes*	<0.150	0.150	05/04/2015	ND	5.59	93.2	6.00	5.02	
Total BTEX	<0.300	0.300	05/04/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 109 % 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	272	16.0	05/05/2015	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/04/2015	ND	197	98.4	200	0.528	
DRO >C10-C28	<10.0	10.0	05/04/2015	ND	203	102	200	1.44	

Surrogate: 1-Chlorooctane 89.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 85.5 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

TALON LPE  
DAVID ADKINS  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 04/30/2015  
Reported: 05/07/2015  
Project Name: TWO MARKS 36 STATE 4  
Project Number: 70060843701  
Project Location: EDDY

Sampling Date: 04/29/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S - 2 1 ' (H501128-06)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/05/2015	ND	1.96	98.2	2.00	3.34	
Toluene*	<0.050	0.050	05/05/2015	ND	1.77	88.5	2.00	3.77	
Ethylbenzene*	<0.050	0.050	05/05/2015	ND	1.69	84.5	2.00	4.85	
Total Xylenes*	<0.150	0.150	05/05/2015	ND	5.59	93.2	6.00	5.02	
Total BTEX	<0.300	0.300	05/05/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 109 % 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	304	16.0	05/05/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/04/2015	ND	197	98.4	200	0.528	
DRO >C10-C28	<10.0	10.0	05/04/2015	ND	203	102	200	1.44	

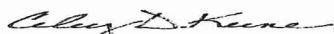
Surrogate: 1-Chlorooctane 86.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 80.3 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

TALON LPE  
DAVID ADKINS  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 04/30/2015  
Reported: 05/07/2015  
Project Name: TWO MARKS 36 STATE 4  
Project Number: 70060843701  
Project Location: EDDY

Sampling Date: 04/29/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S - 2 2' (H501128-07)**

BTEX 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/05/2015	ND	1.96	98.2	2.00	3.34		
Toluene*	<0.050	0.050	05/05/2015	ND	1.77	88.5	2.00	3.77		
Ethylbenzene*	<0.050	0.050	05/05/2015	ND	1.69	84.5	2.00	4.85		
Total Xylenes*	<0.150	0.150	05/05/2015	ND	5.59	93.2	6.00	5.02		
Total BTEX	<0.300	0.300	05/05/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 108 % 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	224	16.0	05/05/2015	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	05/04/2015	ND	197	98.4	200	0.528		
DRO >C10-C28	<10.0	10.0	05/04/2015	ND	203	102	200	1.44		

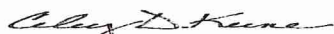
Surrogate: 1-Chlorooctane 93.4 % 47.2-157

Surrogate: 1-Chlorooctadecane 86.7 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 TALON LPE  
 DAVID ADKINS  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

 Received: 04/30/2015  
 Reported: 05/07/2015  
 Project Name: TWO MARKS 36 STATE 4  
 Project Number: 70060843701  
 Project Location: EDDY

 Sampling Date: 04/29/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S - 2 3' (H501128-08)**

BTEX 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/05/2015	ND	1.90	95.2	2.00	0.220		
Toluene*	<0.050	0.050	05/05/2015	ND	1.71	85.6	2.00	0.421		
Ethylbenzene*	<0.050	0.050	05/05/2015	ND	1.64	82.0	2.00	2.17		
Total Xylenes*	<0.150	0.150	05/05/2015	ND	5.39	89.8	6.00	2.17		
Total BTEX	<0.300	0.300	05/05/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 109 % 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	304	16.0	05/05/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	05/04/2015	ND	197	98.4	200	0.528		
DRO >C10-C28	<10.0	10.0	05/04/2015	ND	203	102	200	1.44		

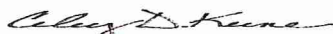
Surrogate: 1-Chlorooctane 93.7 % 47.2-157

Surrogate: 1-Chlorooctadecane 88.3 % 52.1-176

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

TALON LPE  
DAVID ADKINS  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 04/30/2015  
Reported: 05/07/2015  
Project Name: TWO MARKS 36 STATE 4  
Project Number: 70060843701  
Project Location: EDDY

Sampling Date: 04/29/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S - 2 4 ' REFUSAL (R) (H501128-09)**

BTEX 8021B			mg/kg						
			Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/05/2015	ND	1.90	95.2	2.00	0.220	
Toluene*	<0.050	0.050	05/05/2015	ND	1.71	85.6	2.00	0.421	
Ethylbenzene*	<0.050	0.050	05/05/2015	ND	1.64	82.0	2.00	2.17	
Total Xylenes*	<0.150	0.150	05/05/2015	ND	5.39	89.8	6.00	2.17	
Total BTEX	<0.300	0.300	05/05/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 103 % 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	512	16.0	05/05/2015	ND	416	104	400	0.00	

TPH 8015M			mg/kg						
			Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/04/2015	ND	197	98.4	200	0.528	
DRO >C10-C28	<10.0	10.0	05/04/2015	ND	203	102	200	1.44	

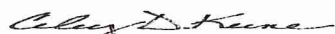
Surrogate: 1-Chlorooctane 87.7 % 47.2-157

Surrogate: 1-Chlorooctadecane 82.5 % 52.1-176

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**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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Celey D. Keene, Lab Director/Quality Manager





CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Talon/LPE		P.O. #:		BIL TO		ANALYSIS REQUEST	
Project Manager: Adkins		Company: Oxy					
Address: 408 W. Texas Ave.		Attn: Chris Jones					
City: Artesia		Address:					
Phone #: 575-746-8768		State: NM zip: 88210					
Fax #: 575-746-8905		City:					
Project #: 70060843701		Project Owner: C22					
Project Name: Two Moks 36 State 4		State:					
Project Location: Eddy		Zip:					
Sampler Name: G. Baeza		Phone #:					
Fax #:							
FOR LAB USE ONLY		MATRIX		PRESERV		SAMPLING	
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS	
H501128		1 S-1 0		✓		✓	
2 S-1 1		✓		✓		✓	
3 S-1 1.5		✓		✓		✓	
4 S-1 2 Refusal(R)		✓		✓		✓	
5 S-2 0		✓		✓		✓	
6 S-2 1		✓		✓		✓	
7 S-2 2		✓		✓		✓	
8 S-2 3		✓		✓		✓	
9 S-2 4 Refusal(R)		✓		✓		✓	
DATE		TIME		BTEx		TPH	
4-29-15 12:40		✓		✓		✓	
4-29-15 12:47		✓		✓		✓	
4-29-15 12:55		✓		✓		✓	
4-29-15 1:00		✓		✓		✓	
4-29-15 1:20		✓		✓		✓	
4-29-15 1:28		✓		✓		✓	
4-29-15 1:31		✓		✓		✓	
4-29-15 1:40		✓		✓		✓	
4-29-15 1:49		✓		✓		✓	
Total Chlorides							
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Relinquished By: [Signature]		Date: 4-30-15		Time: 11:15		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Fax #:	
Delivered By: (Circle One)		Sample Condition		CHECKED BY: [Signature]		REMARKS:	
Sampler - UPS - Bus - Other:		Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>		5.40e		W00# 0950487565	
						Project 1124449	
						Task 01040502	
						Elemoak 2019	

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

#54