

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

2RP-2323  
NMLB1415447019

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 : LIME ROCK RESOURCES II-A, LP	Contact : Mike Barrett
Address : 1111 Bagby Street Suite 4600, Houston, TX 77002	Telephone No.: 575-623-8424
Facility Name : West Red Lake #23	Facility Type: well

Surface Owner : BLM	Mineral Owner: BLM	Lease No.: API #30-015-00822
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#### LOCATION OF RELEASE

2RP-2323

Unit Letter G	Section 8	Township 18S	Range 27E	Feet from the 1650'	North/South Line FNL	Feet from the 1650'	East/West Line FEL	County Eddy
------------------	--------------	-----------------	--------------	------------------------	-------------------------	------------------------	-----------------------	-------------

Latitude 32.764967 N Longitude -104.297305 W

#### NATURE OF RELEASE

Type of Release: Produced Fluids	Volume of Release: 25 bbls PW & 5 bbls Oil	Volume Recovered: 13 bbls PW & 2 bbls Oil
Source of Release: Injection Line Leak	Date and Hour of Occurrence: 5/29/14 11:30 am	Date and Hour of Discovery: 5/29/14 @11:30 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? BLM/Jim Amos-voicemail & OCD/Mike Bratcher	
By Whom? Kimberly M. Wilson with Talon/LPE	Date and Hour : 5/29/14 @ 3:45 pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	


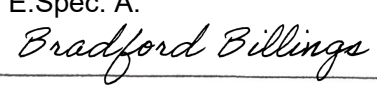
If a Watercourse was Impacted, Describe Fully.\* NA

Describe Cause of Problem and Remedial Action Taken.\* A high pressure injection line leak caused a release of 25 barrels of produced water and 5 barrels of oil. All wells were shut in and the flow line was repaired. A vac truck was immediately called to the location and recovered 13 barrels of produced water and 2 barrels of oil. Talon/LPE was contacted for initial site assessment and to generate a work plan. A backhoe was used to berm the flow path to prevent further migration.

Describe Area Affected and Cleanup Action Taken.\* The release flowed off the northwest corner of location and down the draw approximately 250 yards, pooling at the culvert under the lease road. The impacted areas on location were excavated 0.5' deep, backfilled with topsoil and seeded with BLM #3 & 4 seed mix per approved work plan. Due to the steep ravine, the draw could not be excavated. A lined catch basin was installed at the bottom of the draw. The draw was flushed with three truckloads of fresh water and resampled. The pooling area at end of flow path (S-9) was excavated 0.5' deep.

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: 	E.Spec. A.	
Printed Name: Michael Barrett	Approved by District Supervisor: 	
Title: Production Supervisor	Approval Date: 05/26/2020	Expiration Date:
E-mail Address: mbarrett@limerockresources.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 6/29/2014 Phone: 575-623-8424		

\* Attach Additional Sheets If Necessary

**David Adkins**

---

**From:** David Adkins  
**Sent:** Tuesday, June 17, 2014 12:46 PM  
**To:** 'Amos, James'; 'Bratcher, Mike, EMNRD'  
**Cc:** 'Michael Barrett'; Jerry Smith  
**Subject:** RE: work plan, Lime Rock WRL 23  
**Attachments:** H401733 TALON.PDF; 20140617124407193.pdf

Gentlemen,

Attached please find our recent lab results and a site plan for your convenience. The chloride results in the draw (S-8) were 1560 mg/kg after flushing three truckloads of water. Originally, the results at S-8 were 14,600 mg/kg total chlorides following the release. Another sample was collected at the bottom of the draw per BLM direction. Sample location S-11 results indicated 128 mg/kg total chlorides.

Therefore, on behalf of Lime Rock Resources, we respectfully request permission to remove the drainage catch basin, back fill and seed the seed the work area. Thank you.

Respectfully,

**David J. Adkins**  
District Manager  
Talon/LPE  
408 West Texas Avenue  
Artesia, New Mexico 88210  
(575) 746.8768 phone  
(575) 746.8905 fax  
(575) 441.4835 cell  
Email: [dadkins@talonlpe.com](mailto:dadkins@talonlpe.com)  
Web: [www.talonlpe.com](http://www.talonlpe.com)



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---

**From:** Amos, James [<mailto:jamos@blm.gov>]  
**Sent:** Tuesday, June 03, 2014 5:24 AM  
**To:** David Adkins  
**Cc:** Michael Barrett; [jsmith@limerockresources.com](mailto:jsmith@limerockresources.com)  
**Subject:** Re: work plan, Lime Rock WRL 23

David,

I'm okay with your work plan. I would like to see samples post flush of the lower portion upon completion. Seed mix of 3 & 4 should be used on the areas where the surface material will be removed and clean material brought in. I suggest a berm be constructed just above the excavation area to divert water away from the area. It doesn't need to be much of one, just stable. If any questions please get back to me. Closure will be dependent on the samples from the lower reaches. thanks

On Mon, Jun 2, 2014 at 4:24 PM, David Adkins <[dadkins@talonlpe.com](mailto:dadkins@talonlpe.com)> wrote:

Gentlemen,

Attached please find the proposed work plan for the above referenced incident. OCD has given verbal approval. Tomorrow midmorning we will begin installation of the catch basin and Wednesday we will begin flushing the draw. Please let us know if you have any questions. Thank you.

Respectfully submitted,

**David J. Adkins**  
District Manager  
Talon/LPE  
408 West Texas Avenue

Artesia, New Mexico 88210  
(575) 746.8768 phone  
(575) 746.8905 fax

(575) 441.4835 cell

Email: [dadkins@talonlpe.com](mailto:dadkins@talonlpe.com)

Web: [www.talonlpe.com](http://www.talonlpe.com)



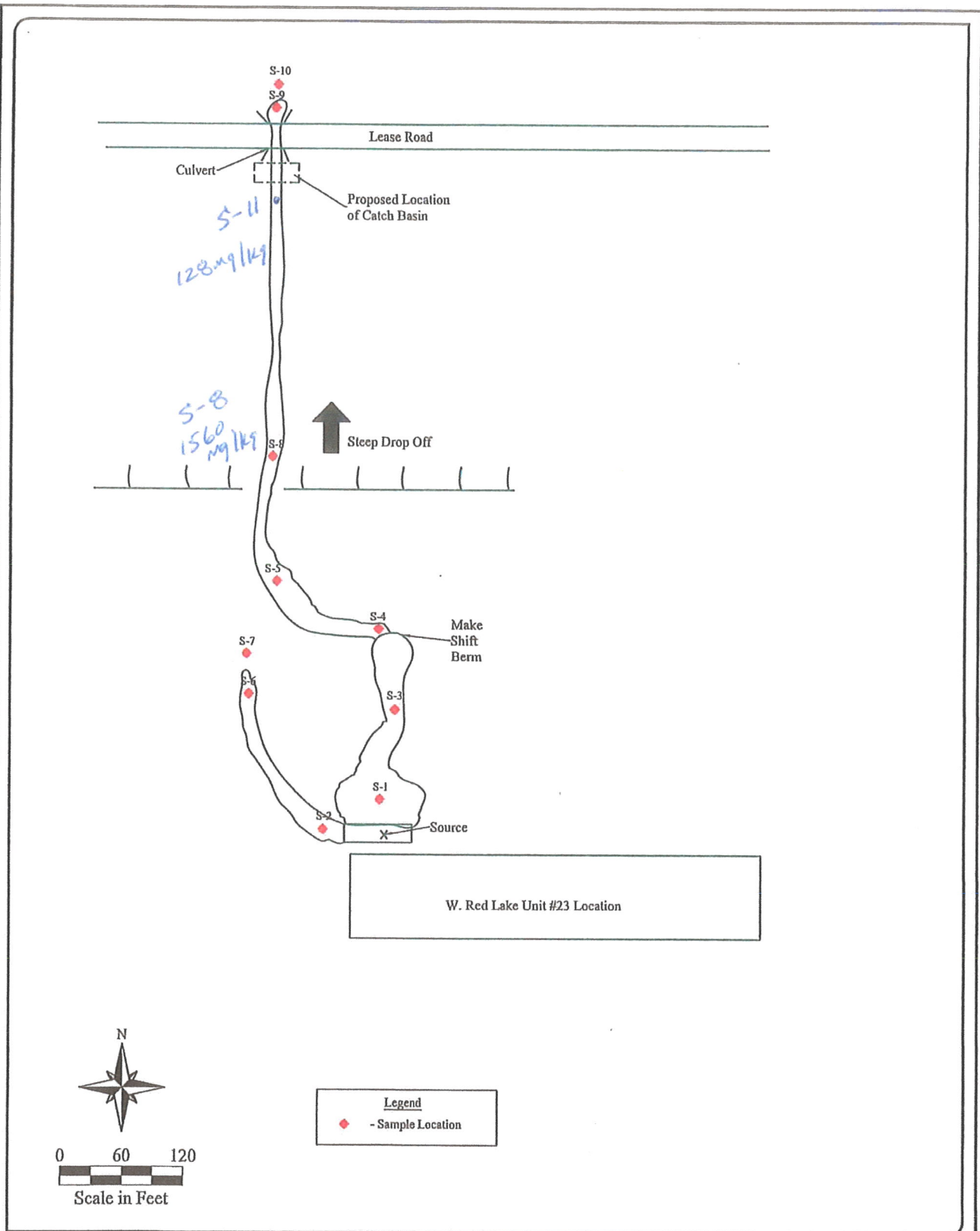
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James A. Amos  
Bureau of Land Management  
Carlsbad Field Office  
Supervisory Environmental Protection Specialist  
620 East Greene Street  
Carlsbad, NM. 88220  
Office: (575) 234-5909  
Fax: (575) 234-5927  
Cell: (575) 361-2648  
E-mail: [jamos@blm.gov](mailto:jamos@blm.gov)



Date: 06/02/2014

Scale: 1" = 120'

Drawn By: TJS

West Red Lake Unit #23

Devon Energy Corporation

Lea County, New Mexico

Figure 1 - Site Plan



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

June 16, 2014

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: WEST RED LAKE #23

Enclosed are the results of analyses for samples received by the laboratory on 06/06/14 14:30.

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



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

**Analytical Results For:**

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

Received: 06/06/2014  
Reported: 06/16/2014  
Project Name: WEST RED LAKE #23  
Project Number: 701307.062.01  
Project Location: NOT GIVEN

Sampling Date: 06/05/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kathy Perez

**Sample ID: S-8 0' (H401733-01)**

BTX 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/10/2014	ND	2.31	115	2.00	1.63	
Toluene*	<0.050	0.050	06/10/2014	ND	1.86	93.1	2.00	14.0	
Ethylbenzene*	<0.050	0.050	06/10/2014	ND	2.10	105	2.00	0.396	
Total Xylenes*	<0.150	0.150	06/10/2014	ND	6.37	106	6.00	0.661	
Total BTX	<0.300	0.300	06/10/2014	ND					

Surrogate: Dibromofluoromethane 98.3 % 61.3-142

Surrogate: Toluene-d8 108 % 71.3-129

Surrogate: 4-Bromofluorobenzene 122 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1560	16.0	06/12/2014	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	32.7	10.0	06/12/2014	ND	180	89.8	200	0.936	
DRO >C10-C28	382	10.0	06/12/2014	ND	175	87.5	200	3.58	

Surrogate: 1-Chlorooctane 70.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 82.4 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 06/06/2014  
Reported: 06/16/2014  
Project Name: WEST RED LAKE #23  
Project Number: 701307.062.01  
Project Location: NOT GIVEN

Sampling Date: 06/05/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kathy Perez

**Sample ID: S-11 0' (H401733-02)****BTEX 8260B****mg/kg****Analyzed By: ms**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/10/2014	ND	2.31	115	2.00	1.63	
Toluene*	<0.050	0.050	06/10/2014	ND	1.86	93.1	2.00	14.0	
Ethylbenzene*	<0.050	0.050	06/10/2014	ND	2.10	105	2.00	0.396	
Total Xylenes*	<0.150	0.150	06/10/2014	ND	6.37	106	6.00	0.661	
Total BTEX	<0.300	0.300	06/10/2014	ND					

Surrogate: Dibromofluoromethane 107 % 61.3-142

Surrogate: Toluene-d8 107 % 71.3-129

Surrogate: 4-Bromofluorobenzene 94.2 % 65.7-141

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	06/12/2014	ND	400	100	400	3.92	

**TPH 8015M****mg/kg****Analyzed By: MS****S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/13/2014	ND	180	89.8	200	0.936	
DRO >C10-C28	<10.0	10.0	06/13/2014	ND	175	87.5	200	3.58	

Surrogate: 1-Chlorooctane 64.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 77.3 % 63.6-154

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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### Notes and Definitions

- S-04      The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- 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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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



ANALYSIS REQUEST

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

Curtis & Curtis, Inc  
4500 North Prince  
Clovis, NM 88130  
Phone: (575) 762-4759

6/30/14

Talon / LPE, LTD  
1 Acre BLM # 3 & 4, Broadcast Rate  
2 - 1/2 Acre Bags @ 24.39 Bulk Pounds Each  
Job: Lime Rock - W. Red Lake #23  
30-015-00822  
701307.062.01

Lot#: M-12310

Item	Origin	Purity	Germ	Dormant	Germ & Dormant	Test Date	Total PLS Pounds
Sideoats Grama	Texas	35.87%	48.00%	32.00%	80.00%	03/14	14.00
Niner							
Blue Grama	Texas	6.34%	97.00%	0.00%	97.00%	12/13	3.00
Hachita							
Alkali Sacaton	New Mexico	4.46%	70.00%	22.00%	92.00%	11/13	2.00
VNS							
Four Wing Saltbush	New Mexico	37.27%	54.00%	1.00%	55.00%	03/14	10.00
VNS							
Other Crop:	0.13%	There Are 2 Bags For This Mix			Total Bulk Pounds:		49
Weed Seed:	0.32%	This Bag Weighs 24.39 Bulk Pounds					
Inert Matter:	15.61%	Use This Bag For 1/2 Acres					



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 575.748.8905

HOBBS  
318 East Taylor Street  
Hobbs, New Mexico 88241  
Phone 505.393.4261  
Fax 505.393.4658

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

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

SAN ANTONIO  
13111 Lookout Way  
San Antonio, TX 78233  
Phone 210.265.8025  
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www.talonlpe.com

**NM OIL CONSERVATION**  
ARTESIA DISTRICT

JUN 02 2014

RECEIVED

June 2, 2014

Mr. Mike Bratcher  
NMOCD District 2  
811 S. 1<sup>st</sup> Street  
Artesia, NM 88210

Subject: **Soil Assessment and Remediation Work Plan**  
Lime Rock Resources  
West Red Lake Unit #23  
API #: 30-015-00822

2RP-2323

Dear Mr. Bratcher:

Lime Rock Resources 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.

**Incident Date**

May 29, 2014

**Background Information**

The West Red Lake Unit #23 is located approximately sixteen (16) miles southeast of Artesia in Eddy County, New Mexico. The legal location for this site is Section 8, Township 18 South, and Range 27 East. More specifically the latitude and longitude for the release point are 32.764967 North and -104.29730 West. A site plan is presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is made up of weathered Gypsum. The local surface and shallow geology, Paleozoic Age sedimentary deposits, is comprised of the Guadeloupien Artesia Group, Tansil and Yates formations which include silty soils underlain by gypsum and hard caliches. Drainage courses in this area are normally dry. According to the New Mexico State Engineer web site indicates the nearest ground water data to be in S8-T18S-R27E. The ground water in Section 8 is reported to be a depth of 140' below ground surface (bgs). See [Appendix II](#) for the referenced groundwater data.

The ranking for this site is 0 based on the following:

Depth to ground water	>100'
Wellhead Protection Area	>1000'
Distance to surface water body	>1000'

### Incident Description

A high pressure injection line leak causing a release of 25 barrels of produced water and 5 barrels of oil. All wells were shut in and the flow line was repaired. A vac truck was immediately called to the location and recovered 13 barrels of produced water and 2 barrels of oil. The release flowed off the northwest corner of location and down the draw approximately 250 yards, pooling at the culvert under the lease road. A backhoe was used to berm the flow path to prevent further migration. On May 29, 2014 Talon mobilized personnel to the location for initial site assessment and soil sampling activities to generate a work plan. The results of these sampling activities are summarized in the table below.

### Laboratory Results

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

June 2, 2014

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	0'	1.32	26000	<10	497
	0.5'	<0.300	80	<10	<10
S-2	0.5'	<0.300	208	<10	<10
	1'	<0.300	256	<10	<10
S-3	0'	56.2	22800	246	1170
	1'	<0.300	208	<10	<10
S-4	0'	30.9	26000	175	2520
	0.5'	<1.20	144	<10	2450
S-5	0'	0.856	20000	<10	190
	0.5'	<0.300	256	<10	<10
S-6	0'	<0.300	11800	<10	114
	0.5'	<0.300	64	<10	<10
S-7	0'	<0.300	<16	<10	<10
S-8	0'	4.85	14600	15.5	82
S-9	0'	<0.300	1440	<10	<10
S-10	0'	<0.300	192	<10	<10

Based upon the site ranking of 0, NMOCD Recommended Remedial Action Levels (RRAL's) are 50 mg/kg for BTEX, 10 mg for Benzene, and 5,000 mg/kg for TPH. The chloride remediation standard to be 1,000 mg/kg based upon a water table depth greater than 100-feet deep.

### **Proposed Remedial Actions**

- The impacted areas in the vicinity of sample locations S-1, S-6 and S-3 thru S-5 will be excavated to a depth of 0.5-feet deep. All contaminated soil will be transported to an approved NMOCD disposal facility.
- The excavated areas will be backfilled with new topsoil, re-contoured and seeded using BLM recommended seed mix.
- A lined catch basin will be constructed at the bottom of the draw, prior to the culvert.
- The area from the flow path in the vicinity of S-8 will be flushed with clean water and a vac truck will be used to recover the water from the lined basin.
- A final report documenting all field activities and lab reports will be provided to the BLM Carlsbad Office and NMOCD District II Office.

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

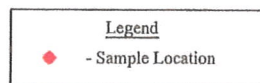
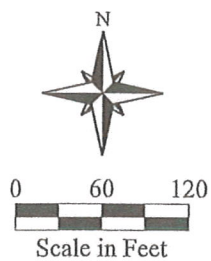
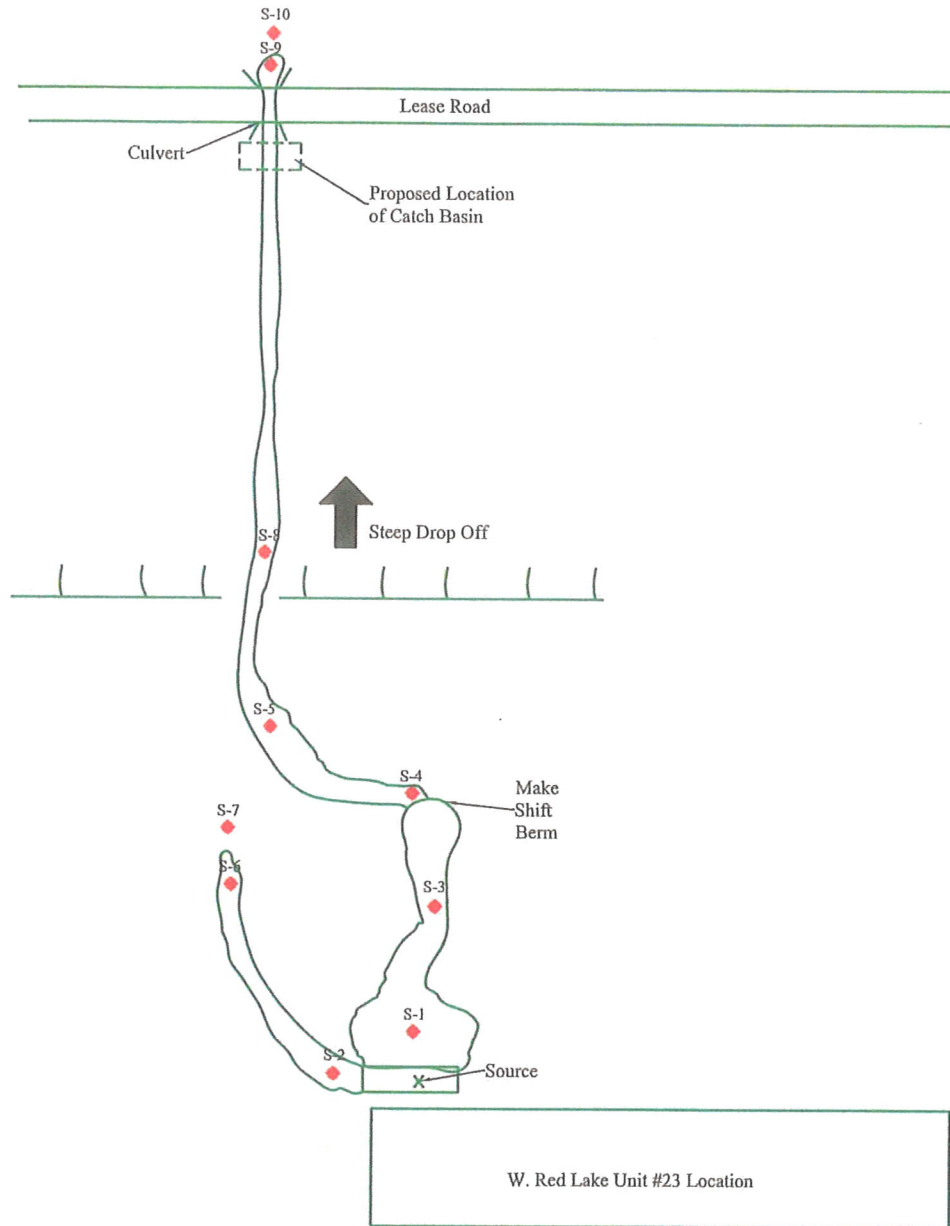
Respectfully submitted,

Kimberly M. Wilson  
Project Manager

David J. Adkins  
District Manager

## APPENDIX I

### SITE MAP



Date: 06/02/2014  
Scale: 1" = 120'  
Drawn By: TJS

West Red Lake Unit #23  
Devon Energy Corporation  
Lea County, New Mexico  
Figure 1 - Site Plan

**APPENDIX II**  
**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="#">RA 03714</a>			CH	4	4	2	08	18S	27E	566212	3625253*	447	381		
<a href="#">RA 03661</a>			ED	3	2	3	32	17S	27E	565186	3628038*	2523	330	140	190
<a href="#">RA 03664</a>			CH	3	2	3	32	17S	27E	565186	3628038*	2523	400	100	300

Average Depth to Water: 120 feet

Minimum Depth: 100 feet

Maximum Depth: 140 feet

Record Count: 3

UTMNAD83 Radius Search (in meters):

**Easting (X):** 566011

**Northing (Y):** 3625653

**Radius:** 3000

\*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.

6/2/14 12:26 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

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 : LIME ROCK RESOURCES II-A, LP	Contact : Mike Barrett
Address : 1111 Bagby Street Suite 4600, Houston, TX 77002	Telephone No. : 575-623-8424
Facility Name : <u>West Red Lake #23</u>	Facility Type: well

Surface Owner : BLM	Mineral Owner: BLM	Lease No. : API #30-015-00822
---------------------	--------------------	-------------------------------

#### LOCATION OF RELEASE

Unit Letter G	Section 8	Township 18S	Range 27E	Feet from the 1650'	North/South Line FNL	Feet from the 1650'	East/West Line FEL	County Eddy
------------------	--------------	-----------------	--------------	------------------------	-------------------------	------------------------	-----------------------	-------------

Latitude 32.764967 N Longitude -104.297305 W

#### NATURE OF RELEASE

Type of Release : Produced Fluids	Volume of Release : 25 bbls PW & 5 bbls Oil	Volume Recovered: 13 bbls PW & 2 bbls Oil
Source of Release : Injection Line Leak	Date and Hour of Occurrence: 5/29/14 11:30 am	Date and Hour of Discovery: 5/29/14 @11:30 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? BLM/Jim Amos-voicemail & OCD/Mike Bratcher	
By Whom? Kimberly M. Wilson with Talon/LPE	Date and Hour : 5/29/14 @ 3:45 pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

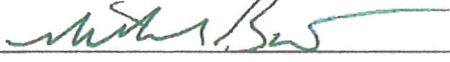
If a Watercourse was Impacted, Describe Cause of Problem and Remedial Action Taken.\*

A high pressure injection line leak caused a release of 25 barrels of produced water and 5 barrels of oil. All wells were shut in and the flow line was repaired. A vac truck was immediately called to the location and recovered 13 barrels of produced water and 2 barrels of oil. Talon/LPE was contacted for initial site assessment and to generate a work plan.

The release flowed off the northwest corner of location and down the draw approximately 250 yards, pooling at the culvert under the lease road. A backhoe was used to berm the flow path to prevent further migration.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC 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, NMOC 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: 	Approved by District Supervisor:	
Printed Name: Michael Barrett	Approval Date:	Expiration Date:
Title: Production Supervisor	Conditions of Approval:	Attached <input type="checkbox"/>
E-mail Address: mbarrett@limerockresources.com		
Date: 5/30/2014 <sup>2014</sup> Phone: 575-623-8424		

\* Attach Additional Sheets If Necessary

**APPENDIX III**  
**LABORATORY RESULTS**



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

June 02, 2014

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: WEST RED LAKE #23

Enclosed are the results of analyses for samples received by the laboratory on 05/30/14 10:20.

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



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

**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-1 0' (H401662-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.204	0.050	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	0.506	0.050	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	0.199	0.050	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	0.416	0.150	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	1.32	0.300	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	26000	16.0	06/02/2014	ND	416	104	400	3.77	

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	05/30/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	497	10.0	05/30/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 87.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 95.9 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-1 0.5' (H401662-02)**

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	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	<0.050	0.050	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	<0.050	0.050	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	<0.150	0.150	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	<0.300	0.300	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/02/2014	ND	416	104	400	3.77	

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	05/30/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	<10.0	10.0	05/30/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 78.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 81.6 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-2 0.5' (H401662-03)**

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	05/30/2014	ND	2.12	106	2.00	0.844		
Toluene*	<0.050	0.050	05/30/2014	ND	2.11	106	2.00	1.26		
Ethylbenzene*	<0.050	0.050	05/30/2014	ND	2.04	102	2.00	1.76		
Total Xylenes*	<0.150	0.150	05/30/2014	ND	6.39	106	6.00	1.82		
Total BTEX	<0.300	0.300	05/30/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 89.4-126

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	06/02/2014	ND	416	104	400	3.77		

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	05/30/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	<10.0	10.0	05/30/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 78.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 80.1 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-2 1' (H401662-04)****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	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	<0.050	0.050	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	<0.050	0.050	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	<0.150	0.150	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	<0.300	0.300	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 89.4-126

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>256</b>	16.0	06/02/2014	ND	416	104	400	3.77	

**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	05/30/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	<10.0	10.0	05/30/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 79.1 % 65.2-140

Surrogate: 1-Chlorooctadecane 74.8 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-3 0' (H401662-05)**

BTEX 8021B		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	3.70	0.200	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	16.3	0.200	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	11.6	0.200	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	24.6	0.600	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	56.2	1.20	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 148 % 89.4-126

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	22800	16.0	06/02/2014	ND	416	104	400	3.77	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	246	10.0	05/30/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	1170	10.0	05/30/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 65.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 65.6 % 63.6-154

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Celest D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-3 1' (H401662-06)**

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	05/30/2014	ND	2.12	106	2.00	0.844	
<b>Toluene*</b>	<b>0.059</b>	0.050	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	<0.050	0.050	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	<0.150	0.150	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	<0.300	0.300	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 89.4-126

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>208</b>	16.0	06/02/2014	ND	416	104	400	3.77	

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	06/01/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	<10.0	10.0	06/01/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 97.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 96.4 % 63.6-154

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\*==Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/30/2014	Sampling Date:	05/29/2014
Reported:	06/02/2014	Sampling Type:	Soil
Project Name:	WEST RED LAKE #23	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: S-4 0' (H401662-07)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	3.32	0.200	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	9.54	0.200	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	5.83	0.200	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	12.2	0.600	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	30.9	1.20	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	26000	16.0	06/02/2014	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	175	50.0	05/30/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	2520	50.0	05/30/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 85.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 141 % 63.6-154

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-4 0.5' (H401662-08)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	<0.200	0.200	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	<0.200	0.200	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	<0.600	0.600	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	<1.20	1.20	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	06/02/2014	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	05/30/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	2450	50.0	05/30/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 76.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 286 % 63.6-154

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**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-5 0' (H401662-09)**

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	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	0.116	0.050	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	0.203	0.050	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	0.537	0.150	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	0.856	0.300	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 89.4-126

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	20000	16.0	06/02/2014	ND	416	104	400	3.77	

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	06/01/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	190	10.0	06/01/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 99.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 107 % 63.6-154

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**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-5 0.5' (H401662-10)**

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	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	<0.050	0.050	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	<0.050	0.050	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	<0.150	0.150	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	<0.300	0.300	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 89.4-126

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	06/02/2014	ND	416	104	400	3.77	

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	06/01/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	<10.0	10.0	06/01/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 94.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.9 % 63.6-154

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**Analytical Results For:**

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

Received:	05/30/2014	Sampling Date:	05/29/2014
Reported:	06/02/2014	Sampling Type:	Soil
Project Name:	WEST RED LAKE #23	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: S-6 0' (H401662-11)**

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	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	0.050	0.050	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	<0.050	0.050	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	<0.150	0.150	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	<0.300	0.300	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 89.4-126

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11800	16.0	06/02/2014	ND	416	104	400	3.77	

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	06/02/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	114	10.0	06/02/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 103 % 65.2-140

Surrogate: 1-Chlorooctadecane 100 % 63.6-154

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**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-6 0.5' (H401662-12)**

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	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	<0.050	0.050	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	<0.050	0.050	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	<0.150	0.150	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	<0.300	0.300	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	06/02/2014	ND	416	104	400	3.77	

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	06/02/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	<10.0	10.0	06/02/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 101 % 65.2-140

Surrogate: 1-Chlorooctadecane 109 % 63.6-154

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**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-7 0' (H401662-13)****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	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	<0.050	0.050	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	<0.050	0.050	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	<0.150	0.150	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	<0.300	0.300	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 89.4-126

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/02/2014	ND	416	104	400	3.77	

**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	06/02/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	<10.0	10.0	06/02/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 98.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 107 % 63.6-154

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**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-8 0' (H401662-14)****BTEX 8021B****mg/kg****Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.291	0.050	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	1.22	0.050	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	1.06	0.050	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	2.28	0.150	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	4.85	0.300	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 126 % 89.4-126

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14600	16.0	06/02/2014	ND	416	104	400	3.77	

**TPH 8015M****mg/kg****Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	15.5	10.0	06/02/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	82.0	10.0	06/02/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 82.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 87.2 % 63.6-154

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**Analytical Results For:**

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

Received:	05/30/2014	Sampling Date:	05/29/2014
Reported:	06/02/2014	Sampling Type:	Soil
Project Name:	WEST RED LAKE #23	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: S-9 0' (H401662-15)**

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	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	<0.050	0.050	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	<0.050	0.050	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	<0.150	0.150	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	<0.300	0.300	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1440	16.0	06/02/2014	ND	416	104	400	3.77		

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	06/02/2014	ND	160	79.8	200	7.66		
DRO >C10-C28	<10.0	10.0	06/02/2014	ND	178	89.1	200	6.09		

Surrogate: 1-Chlorooctane 89.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 87.6 % 63.6-154

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**Analytical Results For:**

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

Received: 05/30/2014  
Reported: 06/02/2014  
Project Name: WEST RED LAKE #23  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 05/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-10 0' (H401662-16)**

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	05/30/2014	ND	2.12	106	2.00	0.844	
Toluene*	<0.050	0.050	05/30/2014	ND	2.11	106	2.00	1.26	
Ethylbenzene*	<0.050	0.050	05/30/2014	ND	2.04	102	2.00	1.76	
Total Xylenes*	<0.150	0.150	05/30/2014	ND	6.39	106	6.00	1.82	
Total BTEX	<0.300	0.300	05/30/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 89.4-126

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	06/02/2014	ND	416	104	400	3.77	

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	06/02/2014	ND	160	79.8	200	7.66	
DRO >C10-C28	<10.0	10.0	06/02/2014	ND	178	89.1	200	6.09	

Surrogate: 1-Chlorooctane 88.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 93.9 % 63.6-154

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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### 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 interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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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\*--Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

RG 10F-2

ANALYSIS REQUEST

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ANALYSIS REQUEST

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<p><b>PLEASE NOTE:</b> Liability and Damages, Capacity liability and clients' execution liability for any claim arising without regard to negligence, All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Central within 30 days after completion of the applicable service. In no event shall Central be liable for incidental or consequential damages, including without limitation, business interruption, loss of data, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services furnished by Central, regardless of whether such claim is based upon any of the above stated reasons of exculpation.</p>			
<p><b>Relinquished By:</b></p>	<p><b>Date:</b> 3/30/14</p>	<p><b>Received By:</b></p>	<p><b>Phone Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p><b>REMARKS:</b></p>	<p><b>Fax Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><b>Add'l Phone #:</b></p>	<p><b>Add'l Fax #:</b></p>

1

#54



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

June 16, 2014

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: WEST RED LAKE #23

Enclosed are the results of analyses for samples received by the laboratory on 06/06/14 14:30.

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



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**Analytical Results For:**

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

Received: 06/06/2014  
Reported: 06/16/2014  
Project Name: WEST RED LAKE #23  
Project Number: 701307.062.01  
Project Location: NOT GIVEN

Sampling Date: 06/05/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kathy Perez

**Sample ID: S-8 0' (H401733-01)**

BTEx 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/10/2014	ND	2.31	115	2.00	1.63	
Toluene*	<0.050	0.050	06/10/2014	ND	1.86	93.1	2.00	14.0	
Ethylbenzene*	<0.050	0.050	06/10/2014	ND	2.10	105	2.00	0.396	
Total Xylenes*	<0.150	0.150	06/10/2014	ND	6.37	106	6.00	0.661	
Total BTEx	<0.300	0.300	06/10/2014	ND					

Surrogate: Dibromofluoromethane 98.3 % 61.3-142  
Surrogate: Toluene-d8 108 % 71.3-129  
Surrogate: 4-Bromofluorobenzene 122 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1560	16.0	06/12/2014	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	32.7	10.0	06/12/2014	ND	180	89.8	200	0.936	
DRO >C10-C28	382	10.0	06/12/2014	ND	175	87.5	200	3.58	

Surrogate: 1-Chlorooctane 70.2 % 65.2-140  
Surrogate: 1-Chlorooctadecane 82.4 % 63.6-154

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 06/06/2014  
Reported: 06/16/2014  
Project Name: WEST RED LAKE #23  
Project Number: 701307.062.01  
Project Location: NOT GIVEN

Sampling Date: 06/05/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kathy Perez

**Sample ID: S-11 0' (H401733-02)**

BTEx 8260B			mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/10/2014	ND	2.31	115	2.00	1.63		
Toluene*	<0.050	0.050	06/10/2014	ND	1.86	93.1	2.00	14.0		
Ethylbenzene*	<0.050	0.050	06/10/2014	ND	2.10	105	2.00	0.396		
Total Xylenes*	<0.150	0.150	06/10/2014	ND	6.37	106	6.00	0.661		
Total BTEx	<0.300	0.300	06/10/2014	ND						

Surrogate: Dibromofluoromethane 107 % 61.3-142

Surrogate: Toluene-d8 107 % 71.3-129

Surrogate: 4-Bromofluorobenzene 94.2 % 65.7-141

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	06/12/2014	ND	400	100	400	3.92		

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	06/13/2014	ND	180	89.8	200	0.936		
DRO >C10-C28	<10.0	10.0	06/13/2014	ND	175	87.5	200	3.58		

Surrogate: 1-Chlorooctane 64.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 77.3 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

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**Notes and Definitions**

- S-04            The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- 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



ANALYSIS REQUEST

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