



January 30, 2013

Mr. Mike Bratcher
NMOCD District 2
1301 West Grand Avenue
Artesia, NM 88210

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

ARTESIA
408 West Texas Ave.
Artesia, New Mexico 88210
Phone 576.746.8768
Fax 576.746.8905

AUSTIN
911 West Anderson Lane
Suite 202
Austin, Texas 78757
Phone 512.989.3428
Fax 512.989.3487

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

MIDLAND
2801 State Hwy 349
Midland, Texas 79706
Phone 432.522.2133
Fax 432.522.2180

SAN ANTONIO
11 Commercial Place
Schertz, Texas 78154
Phone 210.285.8026
Fax 210.568.2191

TULSA
525 South Main Street
Suite 535
Tulsa, Oklahoma 74103
Phone 918.742.0871
Fax 918.382.0232

Subject: **Remediation and Closure Report**
Lime Rock Resources II-A, L.P.
West Red Lake No. 60
30-015-28781 2RP-1168

Dear Mr. Bratcher,

Lime Rock Resources II-A, L.P. (Lime Rock) contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the referenced West Red Lake No. 60. The completed remediation activities and closure request are submitted herein.

Incident Date

May 28, 2012

Background Information

The West Red Lake No. 60 is located approximately ten (10) miles southeast of Artesia, New Mexico. The legal location for the site is Section 5, Township 18 South and Range 27 East in Eddy County, New Mexico. More Specifically the latitude and longitude for the release are 32.76944 North and -104.30223 West.

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 under lain by gypsum and hard caliches. Drainage courses in this area are normally dry. The New Mexico State Engineer web site indicates the nearest ground water data to be in S32-T17S-R27E. The ground water in the area is reported to be 140' below ground surface (bgs). The referenced groundwater data is presented in Appendix I.

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

ENVIRONMENTAL CONSULTING
ENGINEERING
DRILLING
CONSTRUCTION
SPILL MANAGEMENT
GENERAL CONTRACTING

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

Toll Free: 866.742.0742
www.talonlpe.com

Incident Description

On May 28, 2012 a 0.25-inch corroded valve failed at the wellhead causing 82 barrels of produced water to be released. The well was shut in, the valve was replaced and the impacted flow path was flushed with a truck load of fresh water. The release traveled across the location in a flow path measuring approximately 200-feet long by 54-feet wide. The release then traveled off the location and followed an erosion channel to the southwest ending east of the West Red Lake Unit No. 50 location. The entire flow path measured approximately 1,520-feet long by 4-feet to 75-feet wide in some locations. A site plan illustrating the impacted areas is attached.

Remedial Actions Taken

On September 28, 2012 Talon personnel mobilized to the site to begin excavation of the impacted area in accordance with the approved work plan and stipulations. The impacted soil within the area of the release was excavated and transported to Lea Land, LLC a NMOC approved solid waste disposal facility, pursuant to the work plan.

On October 3, 2012 Talon personnel mobilized to the site to for soil sampling activities at sample location S-5, in the storm water erosion channel draw per BLM requirements. A grab soil sample was collected and submitted for laboratory analysis. The sample location is illustrated on the attached site plan.

The soil sample was collected by Talon personnel wearing clean nitrile gloves. The soil sample was placed in a laboratory provided sample container and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis. The sample was tested for total chlorides via Method SM 4500Cl-B. The complete laboratory report is attached as Appendix II.

Analytical Results

Analytical results received from Cardinal Laboratories are summarized below:

Report Date: October 10, 2012, post excavation samples

<u>Sample</u>	<u>Depth</u>	<u>Chlorides</u>
S-5, Flow path	1.5'	16 mg/kg

Summary

- The depth to groundwater in the project vicinity is 140-feet below land surface per the New Mexico State Engineer Database.
- The impacted soil within the cellar of the wellhead was excavated to a depth of 4-feet deep and a 20 mil liner was placed into the bottom of the cellar before backfilling.

Not provided
to OCD? →
AT S2?

- The chloride impacted areas on location and immediately off the location at sample point S-2 was excavated to 2-feet deep below land surface.
- Soil samples were collected from the sidewalls and bottom of the excavation located on location. The soil samples were tested for chlorides using the field titration test method. The test results were approved by Jennifer Van Curen with the BLM before starting to backfill.
- A containment pit lined with 20 mil liner was installed at the bottom of the draw, below soil sample location S-5.
- On November 13, 2012 the draw was flushed using 530 barrels of fresh water. The water used for flushing the draw was removed with a vac truck from the lined containment pit. Samples were collected from the removed fluids and tested on site using the field titration method for chloride. Test results reported the chlorides to be 354 mg/kg.
- The excavated soil was transported to Lea Land, a NMOCD approved solid waste facility for disposal.
- The location was reconstructed using caliche from a local borrow pit.
- The excavated area at S-2 was backfilled to grade using new material transported from a local borrow pit. The area was contoured to match existing terrain.
- The location was downsized and the downsized portion will be seeded using the BLM seed mix No. 3 and 4.
- A berm was constructed around the location and south of the drilling pit to prevent future storm water runoff across the location and into the draw.
- Based on the depth to groundwater and the remedial actions implemented, it is unlikely that the impacts identified from this release will pose a threat to groundwater.

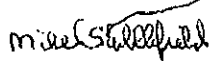
Closure

On behalf of Lime Rock Resources II-A, L.P., we respectfully request that no further actions be required and that closure with respect to this release be granted.


If we can provide additional information or be of further assistance please contact our office at 575.746.8768.

Respectfully submitted,

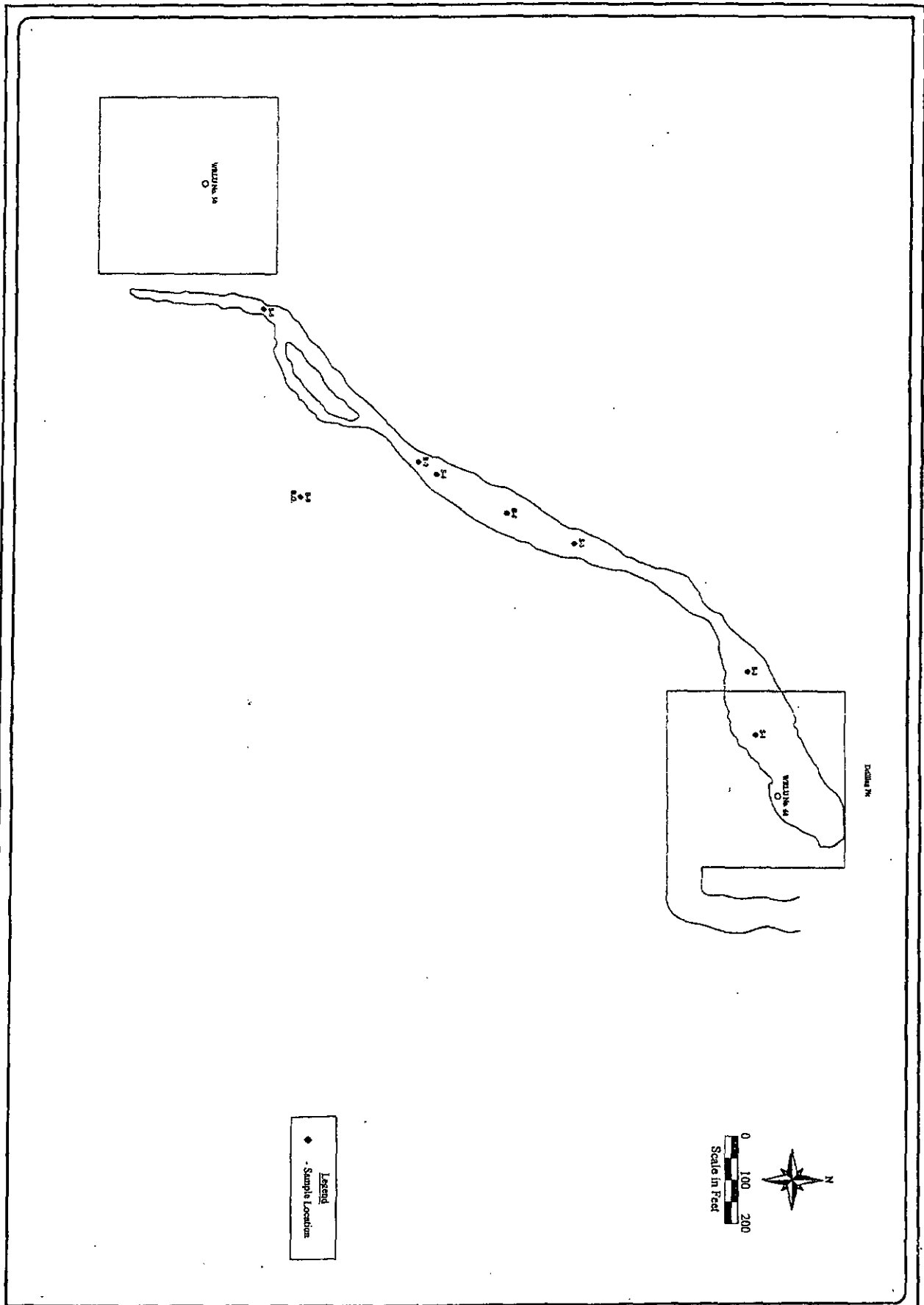
TALON/LPE



Mike Stubblefield
Project Manager



David J. Adkins
District Manager



Date: 07/11/2012
 Scale: 1" = 200'
 Drawn By: TJS

West Red Lake Unit No. 60
 Lime Rock Resources, LLC
 Eddy County, New Mexico
 Figure 1 - Site Plan

SITE MAP

APPENDIX I
GROUNDWATER DATA



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 Code	Subbasin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
RA 03714			CH	4	4	2	08	18S	27E	566212	3625253*	1445	381		
RA 03661			ED	3	2	3	32	17S	27E	565186	3628038*	1998	330	140	190
RA 03664			CH	3	2	3	32	17S	27E	565186	3628038*	1998	400	100	300
Average Depth to Water:													120 feet		
Minimum Depth:													100 feet		
Maximum Depth:													140 feet		

Record Count: 3

UTM NAD83 Radius Search (in meters):

Easting (X): 565005

Northing (Y): 3626048

Radius: 2000

*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.

APPENDIX II
LABORATORY RESULTS



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

October 10, 2012

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: WEST RED LAKE UNIT NO. 60

Enclosed are the results of analyses for samples received by the laboratory on 10/04/12 10:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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:

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

Received:	10/04/2012	Sampling Date:	10/03/2012
Reported:	10/10/2012	Sampling Type:	Soil
Project Name:	WEST RED LAKE UNIT NO. 60	Sampling Condition:	** (See Notes)
Project Number:	701307.038.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 5 - T18S - R27E		

Sample ID: S - 5 1.5' (H202419-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/08/2012	ND	400	100	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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 SM4500C-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

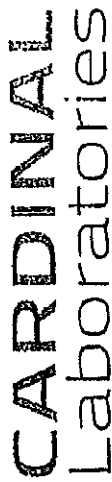
Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Dalton M. P.E.</u>		BILL TO		ANALYSIS REQUEST	
Project Manager: <u>Mike Stubbinsfield</u>		P.O. #:			
Address: <u>408 W. Texas</u>		Company: <u>Dalton</u>			
City: <u>Arlington</u>		Attn:			
State: <u>TX</u> Zip: <u>76010</u>		Address:			
Phone #: <u>817-746-8768</u> Fax #: <u>817-746-8905</u>		City:			
Project #: <u>761307.038.01</u>		State:			
Project Owner: <u>Linn Rock</u>		Zip:			
Project Name: <u>W. Red Lake #60</u>		Phone #:			
Project Location: <u>5-18-27</u>		Fax #:			
Sampler Name: <u>Kimberly M. Wilson</u>					
FOR LAB USE ONLY					
Lab I.D. <u>H202419</u>	Sample I.D. <u>3-5 65'</u>	# CONTAINERS 5	(G) RAB OR (C) OMP 5	MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER:	PRESERV: DATE TIME <u>10/3/12 8:00a</u> <i>(Whitaker)</i>

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

Relinquished By: <u>Kimberly M. Wilson</u>	Date: <u>10/4/12</u>	Received By: <u>[Signature]</u>	Time: <u>6:45a</u>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #: _____
Relinquished By: <u>[Signature]</u>	Date: <u>10/14/12</u>	Received By: <u>Dee Benson</u>	Time: <u>10:35a</u>	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #: _____
Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____					
REMARKS:					

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2466

FINAL C-141

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

RECEIVED

FEB 07 2013

Form C-141
Revised October 10, 2003

NMOCD ARTESIA
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 #60	Facility Type: Injection Well
Surface Owner : BLM	Mineral Owner: BLM
Lease No. : API #30-015-28781 2RP-1168	

LOCATION OF RELEASE

Unit Letter N	Section 5	Township 18S	Range 27E	Feet from the 50'	North/South Line FSL	Feet from the 1930'	East/West Line FWL	County Eddy
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Latitude 32.76944 N Longitude -104.30223 W

NATURE OF RELEASE

Type of Release : Produced Water	Volume of Release : 82 bbls PW	Volume Recovered: -0- bbl PW
Source of Release : 1/4" needle valve on filter pot @ wellhead	Date and Hour of Occurrence: 5/28/12 am	Date and Hour of Discovery: 5/28/12 8:00 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Voicemail to BLM & OCD	
By Whom? Mike Barrett w/LRR	Date and Hour : 5/28/12 @ 6:00 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.*

Describe Cause of Problem and Remedial Action Taken.* A 0.25-inch corroded valve failed at the wellhead causing 82 barrels of produced water to be released. The well was shut in, the valve was replaced and the impacted flow path was flushed with a load of fresh water.

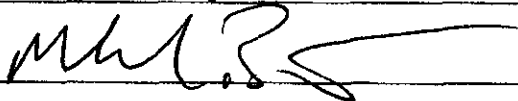
Describe Area Affected and Cleanup Action Taken.*

Talon/LPE was also contacted for the correction of the release. The impacted area were excavated to a depth of 2-foot deep in the impacted areas. Analytical testing was completed and the impacted soil was transported to Lea Land, LLC an approved disposal facility. A 20 Mil liner was installed in the temporary containment ditch constructed at the bottom of the draw. The draw was flushed with fresh water and vacuumed out. The excavated areas and containment ditch were backfilled to grade with new material transported from a local borrow pit.

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:



Printed Name: Michael Barrett

Approved by District Supervisor:

Title: Production Supervisor

Approval Date:

Expiration Date:

E-mail Address: mbarrett@limerockresources.com

Conditions of Approval:

Attached ☐

Date: 1/30/2013

Phone: 575-623-8424

* Attach Additional Sheets If Necessary