

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

5. Lease Serial No.

NMNM-117806

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

LOGAN 35 K FEDERAL #15

9. API Well No.

30-015-41434

10. Field and Pool, or Exploratory Area

Red Lake: Glorieta-Yeso NE (96836)

AND

Eddy County, New Mexico

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

LIME ROCK RESOURCES II-A, L.P.

3a. Address c/o Mike Pippin LLC

3104 N. Sullivan, Farmington, NM 87401

3b. Phone No. (include area code)

505-327-4573

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1650' FSL & 2460' FWL Unit K

OGRID#: 277558

Sec. 54 T17S, R27E

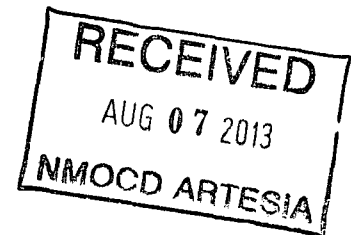
35

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
☒ Notice of Intent	☐ Acidize ☐ Deepen ☐ Production (Start/Resume) ☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing ☐ Fracture Treat ☐ Reclamation ☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair ☐ New Construction ☐ Recomplete ☒ Other Change Well Plan
	☒ Change Plans ☐ Plug and Abandon ☐ Temporarily Abandon
	☐ Convert to Injection ☐ Plug Back ☐ Water Disposal

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once Testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

LIME ROCK would like to change the well plan on this oil well due to an error. The BHL target has not changed. We moved the landing spot 25' closer to the proposed BHL. We previously had it landing 25' north of our target box. The revised directional drilling plan is attached.



Accepted for record

CRSade 8/7/13

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Mike Pippin

Title

Petroleum Engineer (Agent)

Signature

Mike Pippin

Date

July 22, 2013

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

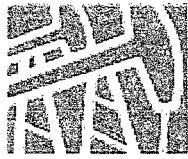
APPROVED

AUG 5 2013

/s/ Chris Walls

BUREAU OF LAND MANAGEMENT
UNITED STATES DEPARTMENT OF THE INTERIOR

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false or fraudulent statements or representations as to any matter within its jurisdiction.



**LIME ROCK
RESOURCES**

Lime Rock Resources

EDDY COUNTY, NM (NAD 27)

Sec 35-T17S-R27E

Logan 35K Federal #15

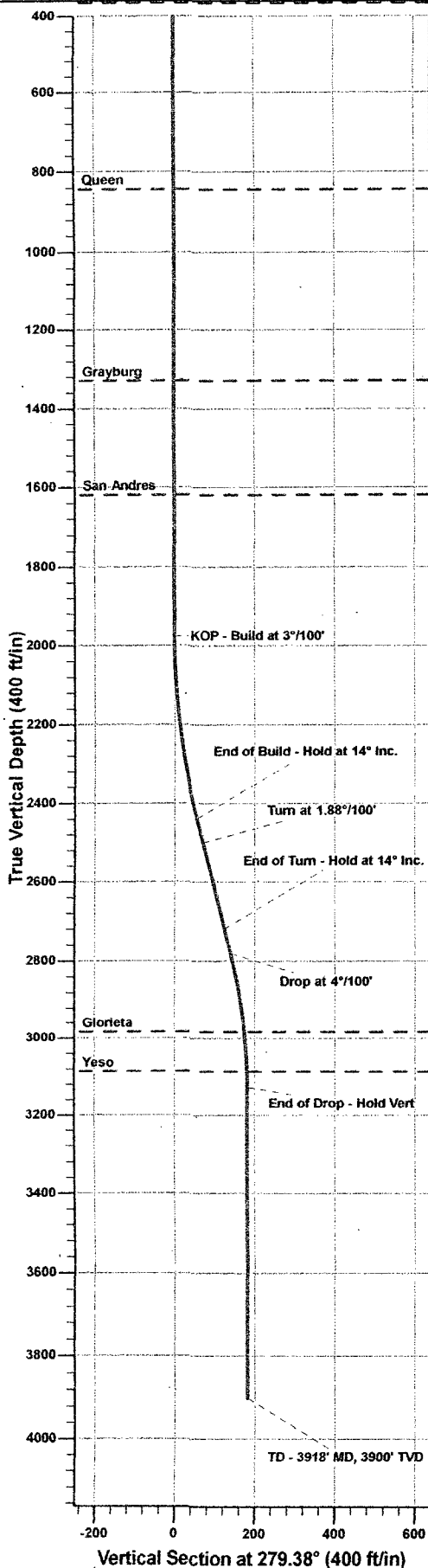
Wellbore #1

Plan: Plan #2

Standard Planning Report

22 July, 2013





ANNOTATIONS

MD	TVD	Inc	Azi	+N/-S	+E/-W	VS	Departure	Annotation
1976.28	1976.28	0.00	0.00	0.00	0.00	0.00	0.00	KOP - Build at 3°/100'
2442.95	2438.32	14.00	287.52	17.08	-54.16	56.73	56.73	End of Build - Hold at 14° Inc.
2506.52	2500.00	14.00	287.52	21.71	-68.76	71.38	72.11	Turn at 1.88°/100'
2731.37	2718.27	14.00	270.00	29.90	-121.92	125.17	126.17	End of Turn - Hold at 14° Inc.
2795.47	2780.47	14.00	270.00	29.90	-137.43	140.47	141.68	Drop at 4°/100'
3145.47	3127.00	0.00	270.00	29.90	-179.98	182.45	184.23	End of Drop - Hold Vert
3918.48	3900.00	0.00	270.00	29.90	-179.98	182.45	184.23	TD - 3918' MD, 3900' TVD, 29.9° N & 180° W of SHL

WELL DETAILS: Logan 35K Federal #15

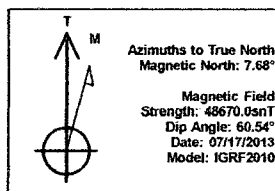
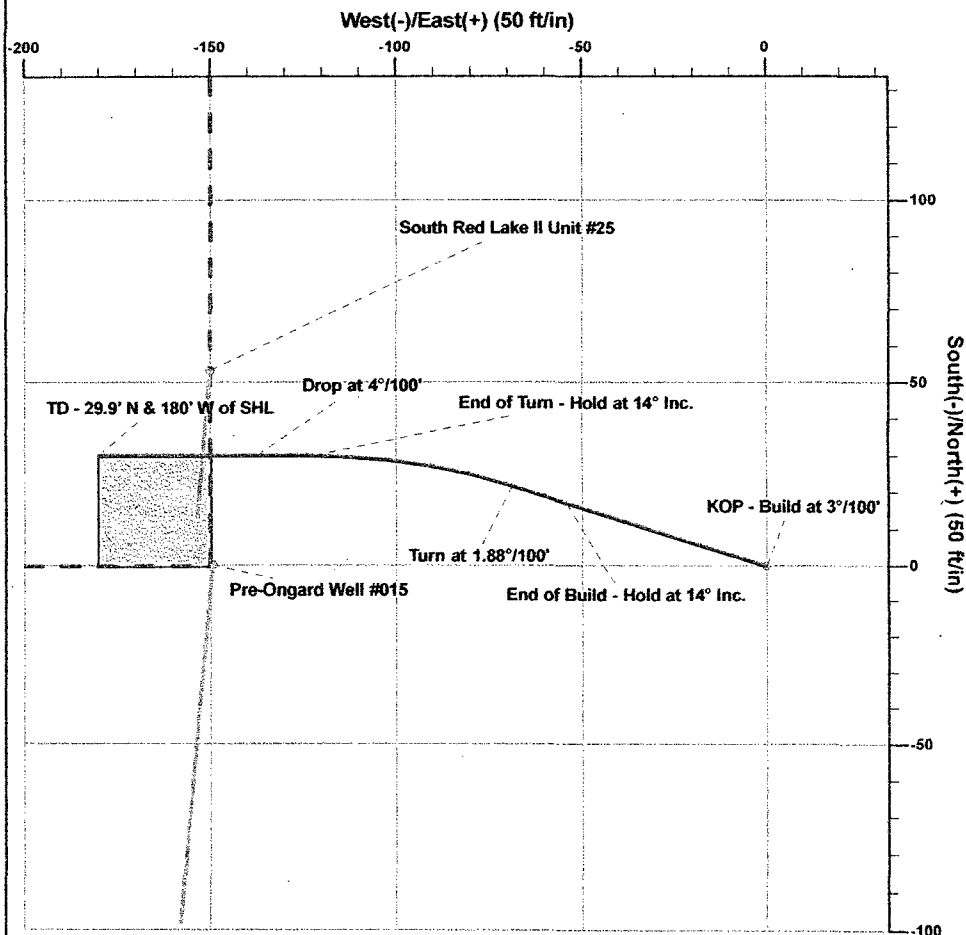
+N/-S	+E/-W	Northing	Ground Level: Easting	3625.90 Latitude	Longitude
0.00	0.00	650341.01	525807.06	32.7878463	-104.2493608

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
Logan 35K Federal #15 BHL1	3900.00	29.90	-179.98	650370.76	525627.06

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
365.00	365.00	7 Rivers
843.00	843.00	Queen
1328.00	1328.00	Grayburg
1618.00	1618.00	San Andres
2982.00	3000.23	Glorieta
3086.00	3104.47	Yeso



To convert a Magnetic Direction to a True Direction, Add 7.69° East
Magnetic North is 7.69° East of True North (Magnetic Declination)



**LIME ROCK
RESOURCES**

Childress Directional Drilling Planning Report



Database: EDM 5000.1 Single User Db
Company: Lime Rock Resources
Project: EDDY COUNTY, NM (NAD 27)
Site: Sec 35-T17S-R27E
Well: Logan 35K Federal #15
Wellbore: Wellbore #1
Design: Plan #2

Local Co-ordinate Reference: Well Logan 35K Federal #15
TVD Reference: WELL @ 3639.30ft (Original Well Elev)
MD Reference: WELL @ 3639.30ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	EDDY COUNTY, NM (NAD 27)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Sec 35-T17S-R27E		
Site Position:	Lat/Long	Northing:	652,156.75 ft
From:	Lat/Long	Easting:	527,619.12 ft
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "
		Latitude:	32.7928332
		Longitude:	-104.2434594
		Grid Convergence:	0.05 °

Well	Logan 35K Federal #15		
Well Position	+N/-S	-1,814.20 ft	Northing:
	+E/-W	-1,813.59 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	3,625.90 ft
		Latitude:	32.7878463
		Longitude:	-104.2493608
		Ground Level:	3,625.90 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	07/17/13	(°)
			7.69
			Dip Angle
			(°)
			60.54
			Field Strength
			(nT)
			48,670

Design	Plan #2		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.00	0.00	0.00
			Direction
			(°)
			279.38

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,976.28	0.00	0.00	1,976.28	0.00	0.00	0.00	0.00	0.00	0.00	
2,442.95	14.00	287.52	2,438.32	17.08	-54.10	3.00	3.00	0.00	287.52	
2,506.52	14.00	287.52	2,500.00	21.71	-68.76	0.00	0.00	0.00	0.00	
2,731.37	14.00	270.00	2,718.27	29.90	-121.92	1.88	0.00	-7.79	-98.50	
2,795.47	14.00	270.00	2,780.47	29.90	-137.43	0.00	0.00	0.00	0.00	
3,145.47	0.00	270.00	3,127.00	29.90	-179.98	4.00	-4.00	0.00	180.00	
3,918.48	0.00	270.00	3,900.00	29.90	-179.98	0.00	0.00	0.00	270.00	Logan 35K Federal #



LIME ROCK RESOURCES

Childress Directional Drilling Planning Report



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Project: EDDY COUNTY, NM (NAD 27)
Site: Sec 35-T17S-R27E
Well: Logan 35K Federal #15
Wellbore: Wellbore #1
Design: Plan #2

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Well Logan 35K Federal #15
WELL @ 3639.30ft (Original Well Elev)
WELL @ 3639.30ft (Original Well Elev)
True
Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,976.28	0.00	0.00	1,976.28	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build at 3°/100'									
2,000.00	0.71	287.52	2,000.00	0.04	-0.14	0.15	3.00	3.00	0.00
2,100.00	3.71	287.52	2,099.91	1.21	-3.82	3.97	3.00	3.00	0.00
2,200.00	6.71	287.52	2,199.49	3.94	-12.48	12.96	3.00	3.00	0.00
2,300.00	9.71	287.52	2,298.45	8.24	-26.10	27.09	3.00	3.00	0.00
2,400.00	12.71	287.52	2,396.53	14.09	-44.64	46.34	3.00	3.00	0.00
2,442.95	14.00	287.52	2,438.32	17.08	-54.10	56.16	3.00	3.00	0.00
End of Build - Hold at 14° Inc.									
2,500.00	14.00	287.52	2,493.68	21.24	-67.26	69.82	0.00	0.00	0.00
2,506.52	14.00	287.52	2,500.00	21.71	-68.76	71.38	0.00	0.00	0.00
Turn at 1.88°/100'									
2,600.00	13.85	280.25	2,590.74	27.11	-90.56	93.76	1.88	-0.16	-7.78
2,700.00	13.92	272.42	2,687.83	29.74	-114.36	117.68	1.88	0.08	-7.83
2,731.37	14.00	270.00	2,718.27	29.90	-121.92	125.17	1.88	0.24	-7.72
End of Turn - Hold at 14° Inc.									
2,795.47	14.00	270.00	2,780.47	29.90	-137.43	140.47	0.00	0.00	0.00
Drop at 4°/100'									
2,800.00	13.82	270.00	2,784.86	29.90	-138.52	141.54	4.00	-4.00	0.00
2,900.00	9.82	270.00	2,882.72	29.90	-159.00	161.74	4.00	-4.00	0.00
3,000.00	5.82	270.00	2,981.78	29.90	-172.60	175.16	4.00	-4.00	0.00
3,100.00	1.82	270.00	3,081.53	29.90	-179.26	181.73	4.00	-4.00	0.00
3,145.47	0.00	270.00	3,127.00	29.90	-179.98	182.45	4.00	-4.00	0.00
End of Drop - Hold Vert									
3,200.00	0.00	270.00	3,181.53	29.90	-179.98	182.45	0.00	0.00	0.00
3,300.00	0.00	270.00	3,281.53	29.90	-179.98	182.45	0.00	0.00	0.00
3,400.00	0.00	270.00	3,381.53	29.90	-179.98	182.45	0.00	0.00	0.00
3,500.00	0.00	270.00	3,481.53	29.90	-179.98	182.45	0.00	0.00	0.00
3,600.00	0.00	270.00	3,581.53	29.90	-179.98	182.45	0.00	0.00	0.00
3,700.00	0.00	270.00	3,681.53	29.90	-179.98	182.45	0.00	0.00	0.00
3,800.00	0.00	270.00	3,781.53	29.90	-179.98	182.45	0.00	0.00	0.00
3,900.00	0.00	270.00	3,881.53	29.90	-179.98	182.45	0.00	0.00	0.00
3,918.48	0.00	270.00	3,900.00	29.90	-179.98	182.45	0.00	0.00	0.00

Database: EDM 5000.1 Single User Db
 Company: Lime Rock Resources
 Project: EDDY COUNTY, NM (NAD 27)
 Site: Sec 35-T17S-R27E
 Well: Logan 35K Federal #15
 Wellbore: Wellbore #1
 Design: Plan #2

Local Co-ordinate Reference: Well Logan 35K Federal #15
 TVD Reference: WELL @ 3639.30ft (Original Well Elev)
 MD Reference: WELL @ 3639.30ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
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TD - 3918' MD, 3900' TVD, 29.9° N & 180° W of SHL

Design Targets
Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
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Logan 35K Federal #15	0.00	0.00	3,900.00	29.90	-179.98	650,370.76	525,627.06	32.7879285	-104.2499464
- plan misses target center by 0.01ft at 3918.48ft MD (3900.00 TVD, 29.90 N, -179.98 E) - Rectangle (sides W30.00 H30.00 D0.00)									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
365.00	365.00	7 Rivers		0.00	
843.00	843.00	Queen		0.00	
1,328.00	1,328.00	Grayburg		0.00	
1,618.00	1,618.00	San Andres		0.00	
3,000.23	2,982.00	Glorieta		0.00	
3,104.47	3,086.00	Yeso		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,976.28	1,976.28	0.00	0.00	KOP - Build at 3°/100'
2,442.95	2,438.32	17.08	-54.10	End of Build - Hold at 14° Inc.
2,506.52	2,500.00	21.71	-68.76	Turn at 1.88°/100'
2,731.37	2,718.27	29.90	-121.92	End of Turn - Hold at 14° Inc.
2,795.47	2,780.47	29.90	-137.43	Drop at 4°/100'
3,145.47	3,127.00	29.90	-179.98	End of Drop - Hold Vert
3,918.48	3,900.00	29.90	-179.98	TD - 3918' MD, 3900' TVD, 29.9° N & 180° W of SHL