

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised Feb. 26, 2007

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to Appropriate District Office
5 Copies

X AMENDED REPORT

RECEIVED

OCT 08 2019

DISTRICT IV-ARTESIA O.C.D.

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Lime Rock Resources II-A, L.P. c/o Mike Pippin LLC, 3104 N. Sullivan Farmington, NM 87401		² OGRID Number 277558
		³ Reason for Filing Code/ Effective Date RT (Oct 2019)
⁴ API Number 30 - 015-46009	⁵ Pool Name Red Lake, Glorieta-Yeso	⁶ Pool Code 51120
⁷ Property Code 316765	⁸ Property Name LEAVITT 13	⁹ Well Number 2H

II. ¹⁰ Surface Location

Ul or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
D	18	18-S	27-E	1	495	NORTH	498	WEST	EDDY

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	13	18-S	26-E		524	NORTH	129	WEST	EDDY
¹² Lse Code P	¹³ Producing Method Code P	¹⁴ Gas Connection Date READY	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
278421	Holly Transportation, LLC 1602 W. Main, Artesia, NM 88210	O
246624	DCP Midstream, LP 370 17 th St, Suite 2775, Denver, CO 80202	G

IV. Well Completion Data

²¹ Spud Date 7/11/19	²² Ready Date 9/26/19 ✓	²³ TD MD8345'	²⁴ PBD MD8304'	²⁵ Perforations MD3277'-8161' ✓	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
12-1/4"	9-5/8" 36#	1228'	630 sx		
8-3/4" 8-3/4"	7" 29# 5-1/2" 20#	3273' 3273'-MD8345'	180 sx 50/50 poz C & 1345 sx 35/65 poz C		
	2-7/8" tubing	2984'			

V. Well Test Data

³¹ Date New Oil READY	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length 24 Hours	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil (bbls)	³⁹ Water (bbls)	Gas (MCF)		⁴¹ Test Method Pumping

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Mike Pippin

Printed name: Mike Pippin

Title: Petroleum Engineer - Agent

E-mail Address: mike@pippinllc.com

Date: 9/27/19

Phone:
505-327-4573

OIL CONSERVATION DIVISION

Approved by:

Raymond W. Polary

Title:

Geologist

Approval Date:

10-9-19

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AUG 05 2019

DISTRICT/ARTESIA/JOH

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
511 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 743-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit a copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-46009		Pool Code 51120	Pool Name RED LAKE, GLORIA-YESO
Property Code 316765	Property Name LEAVITT 13		Well Number 2H
OGRID No. 277558	Operator Name LIME ROCK RESOURCES II-A, L.P.		Elevation 3287.4

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	18	18 S	27 E		495	NORTH	498	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	13	18 S	26 E		524	NORTH	129'	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

SW CORNER SEC. 13
LAT. = 32.7551557°
LONG. = 104.343623°
MSP DIST (FT)
N = 638.67.44
E = 3388.84

SE CORNER SEC. 13
LAT. = 32.7551557°
LONG. = 104.343623°
MSP DIST (FT)
N = 638.67.44
E = 3388.84

SW CORNER SEC. 18
LAT. = 32.7551557°
LONG. = 104.343623°
MSP DIST (FT)
N = 638.67.44
E = 3388.84

SE CORNER SEC. 18
LAT. = 32.7551557°
LONG. = 104.343623°
MSP DIST (FT)
N = 638.67.44
E = 3388.84

SW CORNER SEC. 26
LAT. = 32.7551557°
LONG. = 104.343623°
MSP DIST (FT)
N = 638.67.44
E = 3388.84

SE CORNER SEC. 26
LAT. = 32.7551557°
LONG. = 104.343623°
MSP DIST (FT)
N = 638.67.44
E = 3388.84

" OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or released mineral interest in the land including the proposed bottom hole location or has a right to drill this well or this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Mike Pippin 2/30/19
Signature Date

MIKE PIPPIN
Printed Name

MIKE@PIPPINLLC.COM
E-mail Address

"SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

APRIL 19, 2019
Date of Survey

Filmon F. Jaramillo
Signature and Seal of Professional Surveyor

Certificate Number: **FILMON F. JARAMILLO, PLS 12797**
SURVEY NO. 4817C

RWP 8-6-19



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DISTRICT/ARTESIA O.C.D.

July 31, 2019

Lime Rock Resources
Well: Leavitt 13-2H
County/Parish: Eddy County, NM

LEAM MWD: (OH) from 200' MD to 8,151' MD
Projection: 8,345' MD

This Borehole Survey taken between 07/11/19 and 07/26/19 had been conducted and calculated according to the highest professional standards and complies with all known State and Federal requirements.

Reviewed and Approved:

Date: July 31, 2019



Survey Certification Form

State of New Mexico
Eddy County

I, Randy W. Rakowitz, certify that; I am employed by LEAM Drilling Services, that I did on the day(s) of 07/11/2019 through 07/26/2019, conduct or supervise the taking of MWD Survey from a depth of 200' MD to 8,345' MD; that the data is true, correct, complete and within the limitations of the tools as set forth by LEAM Drilling Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Lime Rock Resources for the Leavitt 13-2H in Eddy County, New Mexico; and that I reviewed this report and find that it conforms to the principals and procedures as set forth by LEAM Drilling Services.

A handwritten signature in black ink, appearing to read 'Randy W. Rakowitz', is written over a solid horizontal line.

Randy W. Rakowitz
MWD Operations Coordinator

LEAM Drilling Systems

Survey Report

Company:	LIME ROCK RESOURCES	Local Co-ordinate Reference:	Well 13-2H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
Site:	Leavitt	MD Reference:	GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
Well:	13-2H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	LEAM Multi_User Db

Project:	Eddy County, NM (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	Leavitt		
Site Position:		Northing:	638,004.86 usft
From:	Map	Easting:	543,939.96 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 45' 14.080 N
		Longitude:	104° 19' 29.525 W
		Grid Convergence:	0.00 °

Well:	13-2H					
Well Position	+N/-S	0.00 usft	Northing:	638,004.86 usft	Latitude:	32° 45' 14.080 N
	+E/-W	0.00 usft	Easting:	543,939.96 usft	Longitude:	104° 19' 29.525 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,287.40 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	7/11/2019	7.17	60.48	47,988.70000000

Design:	OH			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	269.55

Survey Program	Date	7/30/2019		
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
200.00	8,151.00	Survey #1 (OH)	LEAM_MWD+HDGM	LEAM MWD + HDGM
8,345.00	8,345.00	Survey #2 (OH)	Project	Projection

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.70	165.90	200.00	-1.18	0.30	-0.29	0.35	0.35	0.00
387.00	0.60	165.30	386.98	-3.24	0.82	-0.80	0.05	-0.05	-0.32
568.00	0.70	172.20	567.97	-5.25	1.21	-1.17	0.07	0.06	3.81
751.00	0.40	171.70	750.96	-6.99	1.46	-1.40	0.16	-0.16	-0.27
939.00	0.20	243.00	938.96	-7.79	1.26	-1.20	0.21	-0.11	37.93
1,127.00	0.40	311.70	1,126.96	-7.50	0.48	-0.42	0.20	0.11	36.54
1,173.00	0.40	327.20	1,172.96	-7.26	0.27	-0.21	0.23	0.00	33.70

LEAM Drilling Systems

Survey Report

Company:	LIME ROCK RESOURCES	Local Co-ordinate Reference:	Well 13-2H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
Site:	Leavitt	MD Reference:	GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
Well:	13-2H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	LEAM Multi User Db

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
1,305.00	0.50	316.70	1,304.95	-6.45	-0.37	0.42	0.10	0.08	-7.95
1,494.00	0.40	317.20	1,493.95	-5.37	-1.39	1.43	0.05	-0.05	0.26
1,682.00	0.40	290.70	1,681.94	-4.66	-2.45	2.48	0.10	0.00	-14.10
1,870.00	0.40	290.50	1,869.94	-4.19	-3.67	3.71	0.00	0.00	-0.11
2,058.00	1.30	291.00	2,057.92	-3.20	-6.28	6.31	0.48	0.48	0.27
2,090.00	3.60	282.70	2,089.88	-2.85	-7.60	7.62	7.25	7.19	-25.94
2,121.00	5.40	281.70	2,120.79	-2.34	-9.98	10.00	5.81	5.81	-3.23
2,153.00	6.00	280.80	2,152.63	-1.72	-13.09	13.11	1.80	1.88	-2.81
2,184.00	6.00	281.70	2,183.46	-1.09	-16.27	16.28	0.30	0.00	2.90
2,216.00	5.80	284.20	2,215.29	-0.35	-19.48	19.48	1.02	-0.83	7.81
2,247.00	6.60	282.20	2,246.11	0.41	-22.74	22.73	2.67	2.58	-6.45
2,279.00	9.10	278.00	2,277.81	1.15	-27.04	27.03	8.01	7.81	-13.13
2,310.00	12.10	273.60	2,308.27	1.69	-32.71	32.70	10.02	9.68	-14.19
2,341.00	15.10	271.10	2,338.40	1.98	-40.00	39.98	9.86	9.68	-8.06
2,373.00	17.90	268.00	2,369.08	1.88	-49.08	49.06	9.17	8.75	-9.69
2,405.00	21.40	265.30	2,399.21	1.23	-59.82	59.80	11.30	10.94	-8.44
2,436.00	24.80	264.50	2,427.72	0.15	-71.93	71.92	11.01	10.97	-2.58
2,468.00	27.90	265.50	2,456.40	-1.08	-86.08	86.08	9.79	9.69	3.13
2,500.00	29.10	265.50	2,484.52	-2.28	-101.30	101.31	3.75	3.75	0.00
2,531.00	30.30	266.00	2,511.45	-3.42	-116.61	116.64	3.95	3.87	1.61
2,562.00	31.60	267.30	2,538.03	-4.35	-132.53	132.56	4.72	4.19	4.19
2,594.00	33.90	270.10	2,564.94	-4.73	-149.83	149.86	8.60	7.19	8.75
2,625.00	36.80	271.80	2,590.23	-4.42	-167.76	167.79	9.88	9.35	5.48
2,657.00	40.40	272.70	2,615.23	-3.63	-187.70	187.73	11.39	11.25	2.81
2,688.00	43.10	272.10	2,638.36	-2.77	-208.33	208.34	8.80	8.71	-1.94
2,720.00	44.20	273.30	2,661.51	-1.73	-230.39	230.40	4.30	3.44	3.75
2,751.00	46.10	272.50	2,683.37	-0.62	-252.34	252.33	6.40	6.13	-2.58
2,782.00	48.00	271.80	2,704.49	0.23	-275.01	275.00	6.35	6.13	-2.28
2,814.00	49.90	270.80	2,725.51	0.78	-299.13	299.12	6.39	5.94	-3.13
2,845.00	52.80	269.90	2,744.87	0.92	-323.34	323.32	9.63	9.35	-2.90
2,877.00	55.00	269.90	2,763.72	0.88	-349.20	349.18	6.88	6.88	0.00
2,909.00	55.20	269.90	2,782.03	0.83	-375.44	375.42	0.63	0.63	0.00
2,940.00	55.10	270.10	2,799.74	0.83	-400.88	400.86	0.62	-0.32	0.65
2,971.00	55.10	270.40	2,817.48	0.94	-426.31	426.28	0.79	0.00	0.97
3,003.00	55.00	270.40	2,835.81	1.12	-452.53	452.51	0.31	-0.31	0.00
3,035.00	55.20	270.40	2,854.12	1.31	-478.78	478.75	0.63	0.63	0.00
3,061.30	55.20	270.57	2,869.13	1.49	-500.37	500.35	0.53	0.00	0.65
East Lease Line Crossing									
3,066.00	55.20	270.60	2,871.81	1.53	-504.23	504.20	0.53	0.00	0.65
3,097.00	57.60	270.30	2,888.97	1.73	-530.05	530.02	7.78	7.74	-0.97
3,129.00	60.30	269.90	2,905.47	1.78	-557.46	557.43	8.51	8.44	-1.25
3,160.00	63.50	269.90	2,920.07	1.73	-584.80	584.77	10.32	10.32	0.00

LEAM Drilling Systems

Survey Report

Company:	LIME ROCK RESOURCES	Local Co-ordinate Reference:	Well 13-2H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
Site:	Leavitt	MD Reference:	GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
Well:	13-2H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	LEAM Multi User Db

Survey	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	3,191.00	66.20	269.90	2,933.24	1.68	-612.86	612.83	8.71	8.71	0.00
	3,218.00	69.60	270.10	2,943.40	1.68	-637.88	637.84	12.61	12.59	0.74
	3,249.00	72.00	270.40	2,953.59	1.81	-667.15	667.11	7.80	7.74	0.97
	3,286.00	75.80	270.80	2,963.85	2.18	-702.69	702.65	10.32	10.27	1.08
	3,317.00	77.60	271.00	2,970.98	2.66	-732.85	732.81	5.84	5.81	0.85
	3,349.00	81.00	270.80	2,976.93	3.15	-764.29	764.24	10.64	10.63	-0.63
	3,380.00	84.20	270.40	2,980.92	3.47	-795.02	794.97	10.40	10.32	-1.29
	3,411.00	87.50	270.40	2,983.16	3.69	-825.94	825.88	10.65	10.65	0.00
	3,443.00	90.80	270.60	2,983.64	3.97	-857.93	857.87	10.33	10.31	0.63
	3,474.00	93.50	271.00	2,982.47	4.40	-888.90	888.84	8.80	8.71	1.29
	3,506.00	93.70	271.50	2,980.46	5.10	-920.83	920.76	1.68	0.63	1.56
	3,568.00	93.60	271.30	2,976.52	6.61	-982.69	982.60	0.36	-0.16	-0.32
	3,631.00	93.60	271.50	2,972.56	8.14	-1,045.54	1,045.45	0.32	0.00	0.32
	3,694.00	93.20	271.70	2,968.82	9.90	-1,108.41	1,108.30	0.71	-0.63	0.32
	3,756.00	93.10	271.70	2,965.42	11.74	-1,170.29	1,170.16	0.16	-0.16	0.00
	3,819.00	93.90	271.10	2,961.57	13.27	-1,233.15	1,233.01	1.59	1.27	-0.95
	3,882.00	93.90	272.80	2,957.29	15.41	-1,295.96	1,295.80	2.69	0.00	2.70
	3,945.00	94.30	273.20	2,952.78	18.70	-1,358.72	1,358.53	0.90	0.63	0.63
	4,007.00	94.80	270.60	2,947.86	20.75	-1,420.48	1,420.28	4.26	0.81	-4.19
	4,070.00	95.90	271.90	2,941.99	22.12	-1,483.19	1,482.97	2.70	1.75	2.06
	4,133.00	95.80	272.90	2,935.57	24.74	-1,545.81	1,545.56	1.59	-0.16	1.59
	4,195.00	95.80	271.50	2,929.30	27.11	-1,607.44	1,607.18	2.25	0.00	-2.26
	4,258.00	94.30	269.60	2,923.75	27.71	-1,670.19	1,669.92	3.83	-2.38	-3.02
	4,320.00	94.70	269.70	2,918.89	27.33	-1,732.00	1,731.73	0.66	0.65	0.18
	4,383.00	94.10	268.70	2,914.06	26.46	-1,794.80	1,794.54	1.85	-0.95	-1.59
	4,445.00	93.90	268.70	2,909.73	25.05	-1,856.64	1,856.38	0.32	-0.32	0.00
	4,508.00	92.90	269.00	2,906.00	23.79	-1,919.51	1,919.27	1.66	-1.59	0.48
	4,566.00	93.30	270.10	2,902.86	23.34	-1,977.43	1,977.18	2.02	0.69	1.90
	4,629.00	91.80	268.70	2,900.06	22.68	-2,040.36	2,040.12	3.26	-2.38	-2.22
	4,692.00	91.40	268.20	2,898.30	20.97	-2,103.31	2,103.08	1.02	-0.63	-0.79
	4,755.00	91.40	267.50	2,896.76	18.61	-2,166.24	2,166.03	1.11	0.00	-1.11
	4,818.00	91.50	268.30	2,895.16	16.30	-2,229.18	2,228.98	1.28	0.16	1.27
	4,878.00	90.50	268.20	2,894.12	14.47	-2,289.14	2,288.96	1.67	-1.67	-0.17
	4,940.00	90.90	269.70	2,893.36	13.33	-2,351.13	2,350.95	2.50	0.65	2.42
	5,001.00	89.50	269.90	2,893.15	13.12	-2,412.12	2,411.95	2.32	-2.30	0.33
	5,061.00	89.70	269.90	2,893.56	13.02	-2,472.12	2,471.94	0.33	0.33	0.00
	5,122.00	89.70	270.30	2,893.88	13.12	-2,533.12	2,532.94	0.66	0.00	0.66
	5,182.00	89.80	270.60	2,894.15	13.59	-2,593.12	2,592.93	0.53	0.17	0.50
	5,243.00	90.40	270.30	2,894.04	14.07	-2,654.12	2,653.92	1.10	0.98	-0.49
	5,305.00	90.60	271.00	2,893.50	14.78	-2,716.11	2,715.91	1.17	0.32	1.13
	5,365.00	90.50	270.80	2,892.92	15.72	-2,776.10	2,775.89	0.37	-0.17	-0.33
	5,423.00	90.70	268.30	2,892.31	15.26	-2,834.09	2,833.88	4.32	0.34	-4.31

LEAM Drilling Systems

Survey Report

Company:	LIME ROCK RESOURCES	Local Co-ordinate Reference:	Well 13-2H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
Site:	Leavitt	MD Reference:	GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
Well:	13-2H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	LEAM-Multi User Db

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,484.00	91.10	269.70	2,891.36	14.20	-2,895.07	2,894.87	2.39	0.66	2.30
5,545.00	91.40	269.60	2,890.03	13.83	-2,956.06	2,955.86	0.52	0.49	-0.16
5,606.00	92.00	269.70	2,888.22	13.45	-3,017.03	3,016.83	1.00	0.98	0.16
5,669.00	92.40	269.70	2,885.80	13.12	-3,079.98	3,079.78	0.63	0.63	0.00
5,730.00	92.90	270.80	2,882.98	13.39	-3,140.91	3,140.71	1.98	0.82	1.80
5,792.00	92.70	268.70	2,879.95	13.12	-3,202.84	3,202.63	3.40	-0.32	-3.39
5,883.00	90.70	265.90	2,877.25	8.84	-3,293.68	3,293.51	3.78	-2.20	-3.08
5,913.00	90.80	265.20	2,876.86	6.51	-3,323.59	3,323.43	2.36	0.33	-2.33
5,976.00	91.10	266.10	2,875.81	1.73	-3,386.40	3,386.28	1.51	0.48	1.43
6,037.00	91.50	263.80	2,874.43	-3.64	-3,447.14	3,447.06	3.83	0.66	-3.77
6,100.00	90.60	265.20	2,873.27	-9.67	-3,509.84	3,509.81	2.64	-1.43	2.22
6,163.00	89.30	266.40	2,873.33	-14.29	-3,572.67	3,572.67	2.81	-2.06	1.90
6,226.00	89.80	266.40	2,873.82	-18.24	-3,635.54	3,635.57	0.79	0.79	0.00
6,288.00	90.00	267.80	2,873.93	-21.38	-3,697.46	3,697.51	2.28	0.32	2.26
6,350.00	90.50	268.50	2,873.66	-23.38	-3,759.42	3,759.49	1.39	0.81	1.13
6,411.00	91.00	269.90	2,872.86	-24.23	-3,820.41	3,820.48	2.44	0.82	2.30
6,473.00	91.30	269.90	2,871.62	-24.34	-3,882.40	3,882.47	0.48	0.48	0.00
6,537.00	91.40	270.40	2,870.11	-24.17	-3,946.38	3,946.45	0.80	0.16	0.78
6,600.00	89.80	270.40	2,869.45	-23.74	-4,009.37	4,009.44	2.54	-2.54	0.00
6,663.00	89.90	270.40	2,869.61	-23.30	-4,072.37	4,072.43	0.16	0.16	0.00
6,725.00	88.50	270.10	2,870.48	-23.02	-4,134.36	4,134.42	2.31	-2.26	-0.48
6,788.00	89.00	270.30	2,871.85	-22.80	-4,197.35	4,197.40	0.85	0.79	0.32
6,850.00	89.60	270.30	2,872.61	-22.48	-4,259.34	4,259.39	0.97	0.97	0.00
6,914.00	90.70	269.40	2,872.44	-22.65	-4,323.34	4,323.38	2.22	1.72	-1.41
6,976.00	91.40	269.70	2,871.31	-23.13	-4,385.33	4,385.37	1.23	1.13	0.48
7,039.00	91.70	269.90	2,869.60	-23.35	-4,448.30	4,448.35	0.57	0.48	0.32
7,102.00	92.00	270.10	2,867.57	-23.35	-4,511.27	4,511.32	0.57	0.48	0.32
7,163.00	90.40	269.60	2,866.29	-23.51	-4,572.26	4,572.30	2.75	-2.62	-0.82
7,226.00	91.10	269.70	2,865.47	-23.90	-4,635.25	4,635.29	1.12	1.11	0.16
7,289.00	91.00	270.10	2,864.31	-24.01	-4,698.24	4,698.28	0.65	-0.16	0.63
7,352.00	89.60	270.10	2,863.98	-23.90	-4,761.24	4,761.28	2.22	-2.22	0.00
7,415.00	89.90	270.10	2,864.26	-23.79	-4,824.23	4,824.27	0.48	0.48	0.00
7,478.00	90.10	270.10	2,864.26	-23.68	-4,887.23	4,887.27	0.32	0.32	0.00
7,540.00	89.40	269.70	2,864.53	-23.79	-4,949.23	4,949.27	1.30	-1.13	-0.65
7,603.00	90.00	269.70	2,864.86	-24.12	-5,012.23	5,012.27	0.95	0.95	0.00
7,665.00	90.00	269.60	2,864.86	-24.50	-5,074.23	5,074.27	0.16	0.00	-0.16
7,729.00	89.30	269.20	2,865.25	-25.17	-5,138.22	5,138.26	1.26	-1.09	-0.63
7,792.00	89.60	268.90	2,865.86	-26.21	-5,201.21	5,201.26	0.67	0.48	-0.48
7,855.00	90.10	269.20	2,866.02	-27.26	-5,264.20	5,264.26	0.93	0.79	0.48
7,901.00	90.40	269.40	2,865.82	-27.82	-5,310.20	5,310.25	0.78	0.65	0.43
7,963.00	90.70	269.20	2,865.22	-28.57	-5,372.19	5,372.25	0.58	0.48	-0.32
8,026.00	90.80	269.70	2,864.40	-29.18	-5,435.18	5,435.25	0.81	0.16	0.79

LEAM Drilling Systems

Survey Report

Company:	LIME ROCK RESOURCES	Local Co-ordinate Reference:	Well 13-2H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	GE 3287.4' + KB 18.6' @ 3304.00usft (Trinidad 436)
Site:	Leavitt	MD Reference:	GE 3287.4' + KB 18.6' @ 3304.00usft (Trinidad 436)
Well:	13-2H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	LEAM Multi_User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,089.00	91.10	269.70	2,863.35	-29.51	-5,498.17	5,498.24	0.48	0.48	0.00	
8,151.00	91.10	270.10	2,862.16	-29.62	-5,560.16	5,560.22	0.65	0.00	0.65	
8,345.00	91.10	270.10	2,858.44	-29.28	-5,754.13	5,754.18	0.00	0.00	0.00	
Projection										