

FEB 05 2020

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

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) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6175 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

WELL LOCATION AND ACREAGE DEDICATION PLAT

WELL LOCATION AND ACREAGE DESCRIPTION		Pool Name	
¹ API Number	² Pool Code	RED LAKE, GLORIA TA -YESO	
30-015-46009	51120		
⁴ Property Code	³ Property Name		⁵ Well Number
316765	LEAVITT 13		2H
⁶ OGRID No.	⁷ Operator Name		⁸ Elevation
277558	LIME ROCK RESOURCES II-A, L.P.		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. D	Section 13	Township 18 S	Range 26 E	Lot Idn	Feet from the 524	North/South line NORTH	Feet from the 129'	East/West line WEST	County 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.

NW CORNER SEC. 13 LAT. = 32.755547N LONG. = 104.335576W RASP DIST (FT) N = 63845.43 E = 54079.42		W/4 CORNER SEC. 13 LAT. = 32.755547N LONG. = 104.335576W RASP DIST (FT) N = 63845.43 E = 54079.42		SW CORNER SEC. 13 LAT. = 32.755547N LONG. = 104.335576W RASP DIST (FT) N = 63845.43 E = 54079.42		S/4 CORNER SEC. 13 LAT. = 32.755547N LONG. = 104.335576W RASP DIST (FT) N = 63845.43 E = 54079.42	
N29°27'33"E 2694.35 FT N29°27'30"E 2690.35 FT S29°01'57"E 2692.30 FT S29°01'57"E 2692.30 FT 524' 129' BOTTOM OF HOLE FIRST TAKE POINT 500' FUL, 100' FEI LAT. = 32.7539172N LONG. = 104.3268130W RASP DIST (FT) N = 638007.24 E = 543342.00 LOT 1 LEASTY TO EN LAT. = 32.7539172N (RADOS) LONG. = 104.3268130W RASP DIST (FT) N = 638007.24 E = 543342.00 LOT 2 NOTE: ALL LINES AND LOCATIONS SHOWN ARE BASED UPON THE DATA PROVIDED BY THE SURVEYOR. THE SURVEYOR HAS NO KNOWLEDGE OR BELIEF AS TO THE ACCURACY OF THE DATA PROVIDED BY THE SURVEYOR. THE SURVEYOR HAS NO KNOWLEDGE OR BELIEF AS TO THE ACCURACY OF THE DATA PROVIDED BY THE SURVEYOR.				NE CORNER SEC. 18 LAT. = 32.755547N LONG. = 104.335576W RASP DIST (FT) N = 63845.43 E = 54079.42 SE CORNER SEC. 18 LAT. = 32.755547N LONG. = 104.335576W RASP DIST (FT) N = 63845.43 E = 54079.42 SW CORNER SEC. 18 LAT. = 32.755547N LONG. = 104.335576W RASP DIST (FT) N = 63845.43 E = 54079.42 S/4 CORNER SEC. 18 LAT. = 32.755547N LONG. = 104.335576W RASP DIST (FT) N = 63845.43 E = 54079.42			

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 retained mineral interest in the land including the proposed bottom hole location or has a right to drill this well at 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 placed 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 _____

[Signature]

Signature and Seal of Professional Surveyor _____

Certificate Number: FILMON F. JARAMILLO, PLS 12797

SURVEY NO. 4817C



RECEIVED

FEB 05 2020

EMNRD-OCD ARTESIA

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', written over a 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
	+E/-W	0.00 usft	Easting: 543,939.96 usft
Position Uncertainty:	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 45' 14.080 N
		Longitude:	104° 19' 29.525 W
		Ground Level:	3,287.40 usft

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

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

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

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)
	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
Project: Eddy County, NM (NAD 83)
Site: Leavitt
Well: 13-2H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well 13-2H
TVD Reference: GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
MD Reference: GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
North Reference: True
Survey Calculation Method: Minimum Curvature
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)
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	1.90	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	-0.63	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	-2.26
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
Project: Eddy County, NM (NAD 83)
Site: Leavitt
Well: 13-2H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well 13-2H
TVD Reference: GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
MD Reference: GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
North Reference: True
Survey Calculation Method: Minimum Curvature
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	0.65
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	0.16
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
Project: Eddy County, NM (NAD 83)
Site: Leavitt
Well: 13-2H
Wellbore: OH
Design: OH

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

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well 13-2H
 GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
 GE 3287.4' + KB 16.6' @ 3304.00usft (Trinidad 436)
 True
 Minimum Curvature
 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									