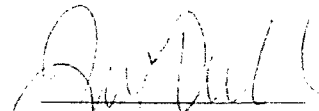


API # 30-015-44188

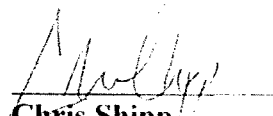


State of New Mexico
Eddy County

I, **James Dowdell**, certify that: I am employed by Accel Directional; that I did on the day(s) of **12/16/2017** through **12/22/2017** conduct or supervise the taking of MWD survey(s) from a depth of **122'** feet to a depth of **4298'** feet; that the data is true, correct, complete and within the limitations of the tool set forth by Accel Directional; that I am authorized and qualified to make this report; that this report was conducted at the request of **Limerock Resources** for the **Leavitt 14A No. 2**, in **Eddy County, New Mexico**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Accel Directional.



James Dowdell
Supervisor



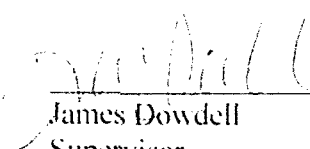
Chris Shipp
President

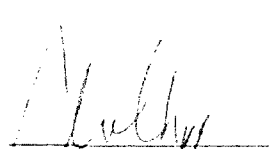


Enclosed, please find the original and one copy of the survey performed on the referenced well by Accel Directional. (Operator No. 301287) supervised by James Dowdell. Other information required by your office is as follows:

Name & Title of Supervisor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
James Dowdell		122' – 4298'	12/16/17 – 12/22/17	MWD

If any other information is required, please contact the undersigned.


James Dowdell
Supervisor
jdowdell@acceldirectional.com
832-401-3400


Chris Shipp
President
Cshipp@acceldirectional.com
936-900-6204



SURVEY CALCULATION PROGRAM

Minimum Curvature

File:

OPERATOR:		Lime Rock Resources								Target Information				VS Referenced to Offset from Surface			
WELL:		Leavitt 14A No. 2								TARGET KBTVD:		4300.00		NORTH/SOUTH:		0.00	
LOCATION:		Eddy County, New Mexico								TARGET INCL:		0.00		EAST/WEST:		0.00	
RIG:		United 33								TARGET AZM:		357.08		(Enter 0° N and 0° E for Surface)			
JOB NUMBER:		Tx-17-073															
SURVEY COMPANY				DIRECTIONAL COMPANY				PROPOSED DIRECTION:		357.08		Dec / Total Corr.(+/-):					
Accel Directional				Accel Directional				COMMENTS:									
Directional Drillers				COORDINATORS													
				Chris Shipp													
Lime Rock Resources				Leavitt 14A No. 2								Target Calculations					
		TRUE	TEMP	API	Course	Surface		CLOSURE		DLS/	BUR/	TVD AT 0°	ABOVE (+)	RIGHT(+)			
SVY	MD	INC	AZM	°F	Gamma	Length	TVD	N-S	E-W	Vert Sect	DIST	DIR	100	100'	V. SEC.	BELOW (-)	LEFT(-)
Tie-In	0	0.0	0.0			N/A	0.00	0.00	0.00		0.00	0.00	N/A	N/A			
1	122	0.5	133.6			122	122.00	-0.37	0.39	-0.39	0.53	133.60	0.41	0.41	#DIV/0!	#DIV/0!	0.37
2	335	0.7	198.8			213	334.99	-2.24	0.64	-2.27	2.33	164.07	0.31	0.09	#DIV/0!	#DIV/0!	0.52
3	522	1.2	218.2			187	521.96	-4.86	-0.94	-4.81	4.95	190.95	0.31	0.27	#DIV/0!	#DIV/0!	-1.19
4	586	0.6	206.6			64	585.95	-5.69	-1.50	-5.60	5.88	194.82	0.98	-0.94	#DIV/0!	#DIV/0!	-1.79
5	682	0.9	75.7			96	681.95	-5.95	-1.00	-5.89	6.03	189.53	1.43	0.31	#DIV/0!	#DIV/0!	-1.30
6	714	1.4	44.9			32	713.94	-5.61	-0.48	-5.58	5.63	184.88	2.43	1.56	#DIV/0!	#DIV/0!	-0.76
7	746	2.1	30.4			32	745.93	-4.83	0.09	-4.83	4.83	178.89	2.57	2.19	#DIV/0!	#DIV/0!	-0.15
8	777	2.9	21.8			31	776.90	-3.61	0.67	-3.64	3.67	169.45	2.84	2.58	#DIV/0!	#DIV/0!	0.49
9	809	3.9	17.6			32	808.84	-1.82	1.30	-1.88	2.24	144.44	3.22	3.13	#DIV/0!	#DIV/0!	1.21
10	841	4.9	14.3			32	840.75	0.54	1.97	0.44	2.04	74.64	3.22	3.13	#DIV/0!	#DIV/0!	1.99
11	873	6.2	12.0			32	872.60	3.56	2.67	3.42	4.44	36.85	4.12	4.06	#DIV/0!	#DIV/0!	2.84
12	905	7.4	8.5			32	904.37	7.28	3.33	7.10	8.01	24.56	3.97	3.75	#DIV/0!	#DIV/0!	3.70
13	937	8.9	6.1			32	936.05	11.78	3.90	11.57	12.41	18.30	4.81	4.69	#DIV/0!	#DIV/0!	4.49
14	969	10.2	4.1			32	967.60	17.07	4.36	16.83	17.62	14.33	4.19	4.06	#DIV/0!	#DIV/0!	5.23
15	1,001	11.0	1.8			32	999.06	22.95	4.66	22.68	23.42	11.48	2.83	2.50	#DIV/0!	#DIV/0!	5.82
16	1,033	11.8	1.3			32	1030.43	29.27	4.83	28.99	29.67	9.37	2.52	2.50	#DIV/0!	#DIV/0!	6.32
17	1,065	12.3	1.2			32	1061.72	35.95	4.98	35.65	36.29	7.88	1.56	1.56	#DIV/0!	#DIV/0!	6.80
18	1,096	12.6	1.5			31	1091.99	42.63	5.13	42.32	42.94	6.87	0.99	0.97	#DIV/0!	#DIV/0!	7.30
19	1,217	13.5	3.7			121	1209.87	69.92	6.39	69.50	70.21	5.22	0.85	0.74	#DIV/0!	#DIV/0!	9.94
20	1,288	13.9	1.7			71	1278.85	86.71	7.18	86.24	87.01	4.73	0.87	0.56	#DIV/0!	#DIV/0!	11.59
21	1,320	14.2	1.7			32	1309.89	94.48	7.41	93.98	94.77	4.48	0.94	0.94	#DIV/0!	#DIV/0!	12.21
22	1,352	14.4	357.2			32	1340.90	102.38	7.33	101.87	102.64	4.10	3.53	0.63	#DIV/0!	#DIV/0!	12.54
23	1,384	14.9	351.8			32	1371.86	110.42	6.55	109.95	110.62	3.39	4.54	1.56	#DIV/0!	#DIV/0!	12.17
24	1,416	15.3	350.1			32	1402.76	118.66	5.24	118.23	118.77	2.53	1.86	1.25	#DIV/0!	#DIV/0!	11.28
25	1,448	15.8	349.5			32	1433.58	127.10	3.72	126.74	127.15	1.68	1.64	1.56	#DIV/0!	#DIV/0!	10.19
26	1,510	15.1	352.3			62	1493.34	143.40	1.10	143.16	143.40	0.44	1.65	-1.13	#DIV/0!	#DIV/0!	8.40
27	1,542	15.1	352.6			32	1524.24	151.66	0.00	151.47	151.66	0.00	0.24	0.00	#DIV/0!	#DIV/0!	7.73
28	1,637	15.7	352.3			95	1615.83	176.67	-3.31	176.61	176.70	358.93	0.64	0.63	#DIV/0!	#DIV/0!	5.69
29	1,733	16.2	354.2			96	1708.13	202.87	-6.41	202.93	202.97	358.19	0.75	0.52	#DIV/0!	#DIV/0!	3.94
30	1,829	15.5	351.0			96	1800.48	228.86	-9.77	229.06	229.07	357.56	1.17	-0.73	#DIV/0!	#DIV/0!	1.90
31	1,861	15.8	351.1			32	1831.30	237.39	-11.11	237.65	237.65	357.32	0.94	0.94	#DIV/0!	#DIV/0!	1.00
32	1,893	14.9	353.1			32	1862.16	245.78	-12.28	246.08	246.08	357.14	3.26	-2.81	#DIV/0!	#DIV/0!	0.26
33	1,925	14.0	353.6			32	1893.14	253.71	-13.20	254.05	254.05	357.02	2.84	-2.81	#DIV/0!	#DIV/0!	-0.26
34	1,957	12.9	356.4			32	1924.27	261.12	-13.86	261.49	261.49	356.96	3.99	-3.44	#DIV/0!	#DIV/0!	-0.54
35	1,989	11.7	356.6			32	1955.53	267.92	-14.28	268.30	268.30	356.95	3.75	-3.75	#DIV/0!	#DIV/0!	-0.61
36	2,021	10.7	355.4			32	1986.92	274.12	-14.71	274.52	274.52	356.93	3.21	-3.13	#DIV/0!	#DIV/0!	-0.72
37	2,053	10.5	355.1			32	2018.37	279.99	-15.19	280.40	280.40	356.89	0.65	-0.62	#DIV/0!	#DIV/0!	-0.91
38	2,085	10.6	355.1			32	2049.83	285.83	-15.70	286.26	286.26	356.86	0.31	0.31	#DIV/0!	#DIV/0!	-1.11
39	2,117	10.5	355.4			32	2081.29	291.67	-16.18	292.11	292.12	356.82	0.36	-0.31	#DIV/0!	#DIV/0!	-1.30
40	2,149	10.0	358.6			32	2112.78	297.35	-16.48	297.80	297.81	356.83	2.37	-1.56	#DIV/0!	#DIV/0!	-1.31
41	2,180	9.1	359.7			31	2143.35	302.49	-16.56	302.94	302.95	356.87	2.96	-2.90	#DIV/0!	#DIV/0!	-1.13
42	2,212	8.2	0.4			32	2174.99	307.31	-16.56	307.75	307.75	356.92	2.83	-2.81	#DIV/0!	#DIV/0!	-0.88
43	2,244	7.7	0.7			32	2206.68	311.73	-16.52	312.17	312.17	356.97	1.57	-1.56	#DIV/0!	#DIV/0!	-0.61
44	2,276	7.4	2.7			32	2238.40	315.93	-16.39	316.36	316.36	357.03	1.25	-0.94	#DIV/0!	#DIV/0!	-0.28
45	2,307	6.2	359.8			31	2269.18	319.60	-16.30	320.02	320.02	357.08	4.03	-3.87	#DIV/0!	#DIV/0!	0.00
46	2,340	5.1	356.3			33	2302.02	322.85	-16.41	323.26	323.26	357.09	3.49	-3.33	#DIV/0!	#DIV/0!	0.06
47	2,371	4.1	356.0			31	2332.92	325.33	-16.57	325.75	325.75	357.08	3.23	-3.23	#DIV/0!	#DIV/0!	0.02
48	2,403	2.8	1.0			32	2364.86	327.25	-16.64	327.67	327.67	357.09	4.17	-4.06	#DIV/0!	#DIV/0!	0.05
49	2,435	1.7	10.1			32	2396.84	328.50	-16.54	328.92	328.92	357.12	3.60	-3.44	#DIV/0!	#DIV/0!	0.21
50	2,467	0.6	2.2			32	2428.83	329.13	-16.45	329.55	329.55	357.14	3.46	-3.44	#DIV/0!	#DIV/0!	0.34
51	2,563	0.4	17.9			96	2524.83	329.96	-16.33	330.36	330.36	357.17	0.25	-0.21	#DIV/0!	#DIV/0!	0.50
52	2,666	0.8	21.5			103	2627.82	330.97	-15.95	331.35	331.35	357.24	0.39	0.39	#DIV/0!	#DIV/0!	0.93



SURVEY CALCULATION PROGRAM

Minimum Curvature

File:

OPERATOR:		Lime Rock Resources								Target Information					VS Referenced to Offset from Surface			
WELL:		Leavitt 14A No. 2								TARGET KBTVD:		4300.00			NORTH/SOUTH:		0.00	
LOCATION:		Eddy County, New Mexico								TARGET INCL:		0.00			EAST/WEST:		0.00	
RIG:		United 33								TARGET AZM:		357.08			(Enter 0° N and 0° E for Surface)			
JOB NUMBER:		Tx-17-073																
SURVEY COMPANY				DIRECTIONAL COMPANY				PROPOSED DIRECTION:				357.08		Dec / Total Corr.(+/-):				
Accel Directional				Accel Directional				COMMENTS:										
Directional Drillers				COORDINATORS														
				Chris Shipp														
Lime Rock Resources				Leavitt 14A No. 2									Target Calculations					
		TRUE	TEMP	API	Course			Surface		CLOSURE		DLS/	BUR/	TVD AT 0°	ABOVE (+)	RIGHT(+)		
SVY	MD	INC	AZM	°F	Gamma	Length	TVD	N-S	E-W	Vert Sect	DIST	DIR	100	100'	V. SEC.	BELOW (-)	LEFT(-)	
53	2,762	1.0	38.1			96	2723.81	332.25	-15.19	332.59	332.60	357.38	0.34	0.21	#DIV/0!	#DIV/0!	1.75	
54	2,857	1.1	48.7			95	2818.80	333.50	-14.00	333.78	333.80	357.60	0.23	0.11	#DIV/0!	#DIV/0!	3.01	
55	2,953	0.2	296.2			96	2914.79	334.19	-13.45	334.44	334.46	357.69	1.24	-0.94	#DIV/0!	#DIV/0!	3.59	
56	3,049	0.7	243.6			96	3010.79	334.00	-14.13	334.29	334.30	357.58	0.62	0.52	#DIV/0!	#DIV/0!	2.90	
57	3,145	0.5	238.4			96	3106.78	333.52	-15.01	333.85	333.86	357.42	0.22	-0.21	#DIV/0!	#DIV/0!	2.00	
58	3,241	0.4	261.3			96	3202.78	333.25	-15.70	333.62	333.62	357.30	0.21	-0.10	#DIV/0!	#DIV/0!	1.30	
59	3,338	0.4	280.1			97	3299.78	333.26	-16.37	333.66	333.66	357.19	0.13	0.00	#DIV/0!	#DIV/0!	0.63	
60	3,433	0.8	292.1			95	3394.77	333.56	-17.31	334.01	334.01	357.03	0.44	0.42	#DIV/0!	#DIV/0!	-0.29	
61	3,529	1.6	227.9			96	3490.75	332.92	-18.92	333.45	333.46	356.75	1.50	0.83	#DIV/0!	#DIV/0!	-1.94	
62	3,625	0.6	215.6			96	3586.73	331.61	-20.21	332.21	332.23	356.51	1.06	-1.04	#DIV/0!	#DIV/0!	-3.29	
63	3,721	0.4	170.7			96	3682.73	330.87	-20.45	331.48	331.50	356.46	0.44	-0.21	#DIV/0!	#DIV/0!	-3.57	
64	3,816	0.7	175.4			95	3777.73	329.97	-20.35	330.57	330.59	356.47	0.32	0.32	#DIV/0!	#DIV/0!	-3.51	
65	3,913	0.4	157.0			97	3874.72	329.06	-20.17	329.66	329.68	356.49	0.36	-0.31	#DIV/0!	#DIV/0!	-3.38	
66	4,009	0.6	134.0			96	3970.72	328.41	-19.68	328.98	329.00	356.57	0.29	0.21	#DIV/0!	#DIV/0!	-2.92	
67	4,105	0.3	142.3			96	4066.71	327.86	-19.16	328.41	328.42	356.66	0.32	-0.31	#DIV/0!	#DIV/0!	-2.44	
68	4,232	0.6	187.9			127	4193.71	326.94	-19.05	327.48	327.49	356.67	0.35	0.24	#DIV/0!	#DIV/0!	-2.37	
69	4,298	0.7	169.6			66	4259.71	326.20	-19.02	326.74	326.75	356.66	0.35	0.15	#DIV/0!	#DIV/0!	-2.38	
PTB	4,345	0.7	169.6			47	4306.70	325.63	-18.92	326.17	326.18	356.67	0.00	0.00	#DIV/0!	#DIV/0!	-2.31	