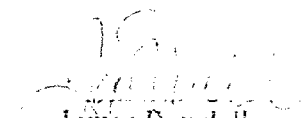




30-015-44430

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 10/02/2017 through 10/09/2017 conduct or supervise the taking of MWD survey(s) from a depth of 122' feet to a depth of 4361' 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 Terry 14E No. 4 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

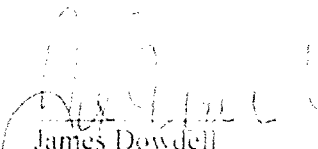

Chris Shipp
President

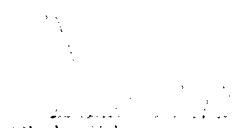


Enclosed, please find the original and one copy of the survey performed on the referenced well by Accel Directional, (Operator No. 501287) supervised by James Dowdell. Other information required by your office is as follows:

Name & Title of Supervisor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
James Dowdell		122' - 4361'	10-02-17 - 10-09-17	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: Limerock Resources		Target Information		VS Referenced to Offset from Surface	
WELL: Terry 14E No. 4		TARGET KBTVD:	4400.00	NORTH/SOUTH:	531.45
LOCATION: Artesia		TARGET INCL:	0.00	EAST/WEST:	-261.93
RIG: United 33		TARGET AZM:	0.00	(Enter 0° N and 0° E for Surface)	
JOB NUMBER: TX-17056					
SURVEY COMPANY		DIRECTIONAL COMPANY		PROPOSED DIRECTION:	333.78
Accel Directional		Accel Directional		COMMENTS:	Dec / Total Corr. (+/-): 7.34
Directional Drifters		COORDINATORS		API # 30-015-43297	
		Chris Shipp			
Limerock Resources		Terry 14E No. 4			

SVY	MD	INC	TRUE AZM	TEMP °F	API Gamma	Course Length	TVD	N-S	E-W	Surface Vert Sect	CLOSURE		DLB/ 100'	BUR/ 100'	Target Calculations		
											DIST	DIR			TVD AT 0°	ABOVE (+)	RIGHT(+)
															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	0.3	302.0			122	122.00	0.17	-0.27	0.27	0.32	302.00	0.25	0.25	#DIV/0!	#DIV/0!	261.66
2	152	0.3	275.8			30	152.00	0.22	-0.42	0.38	0.47	297.77	0.45	0.00	#DIV/0!	#DIV/0!	261.51
3	182	0.5	294.0			30	182.00	0.28	-0.61	0.52	0.67	294.54	0.78	0.67	#DIV/0!	#DIV/0!	261.32
4	213	0.4	290.0			31	213.00	0.37	-0.84	0.70	0.92	293.92	0.34	-0.32	#DIV/0!	#DIV/0!	261.09
5	244	0.4	289.3			31	244.00	0.44	-1.04	0.86	1.13	293.11	0.02	0.00	#DIV/0!	#DIV/0!	260.89
6	273	0.6	307.3			29	273.00	0.57	-1.26	1.07	1.38	294.37	0.87	0.69	#DIV/0!	#DIV/0!	260.67
7	304	0.7	293.7			31	303.99	0.74	-1.56	1.36	1.73	295.50	0.59	0.32	#DIV/0!	#DIV/0!	260.37
8	334	0.7	304.6			30	333.99	0.92	-1.88	1.66	2.09	296.14	0.44	0.00	#DIV/0!	#DIV/0!	260.05
9	363	0.7	279.7			29	362.99	1.05	-2.20	1.92	2.44	295.57	1.04	0.00	#DIV/0!	#DIV/0!	259.73
10	394	0.9	299.0			31	393.99	1.20	-2.60	2.23	2.86	294.83	1.07	0.65	#DIV/0!	#DIV/0!	259.33
11	425	1.2	320.3			31	424.98	1.57	-3.02	2.74	3.40	297.48	1.57	0.97	#DIV/0!	#DIV/0!	258.91
12	458	1.6	324.9			33	457.97	2.21	-3.51	3.54	4.15	302.27	1.26	1.21	#DIV/0!	#DIV/0!	258.42
13	490	2.2	326.6			32	489.95	3.09	-4.10	4.59	5.14	307.01	1.88	1.88	#DIV/0!	#DIV/0!	257.83
14	522	2.7	333.1			32	521.92	4.28	-4.78	5.95	6.41	311.82	1.79	1.56	#DIV/0!	#DIV/0!	257.15
15	554	3.2	335.3			32	553.88	5.76	-5.49	7.60	7.96	316.35	1.60	1.56	#DIV/0!	#DIV/0!	256.44
16	586	4.0	334.3			32	585.82	7.58	-6.35	9.60	9.89	320.03	2.51	2.50	#DIV/0!	#DIV/0!	255.58
17	617	5.1	332.1			31	616.72	9.77	-7.47	12.06	12.30	322.62	3.59	3.55	#DIV/0!	#DIV/0!	254.46
18	650	6.7	333.5			33	649.54	12.79	-9.01	15.45	15.64	324.83	4.87	4.85	#DIV/0!	#DIV/0!	252.92
19	682	8.0	333.0			32	681.28	16.44	-10.85	19.55	19.70	326.57	4.07	4.06	#DIV/0!	#DIV/0!	251.08
20	713	9.5	332.6			31	711.92	20.64	-13.01	24.26	24.40	327.77	4.84	4.84	#DIV/0!	#DIV/0!	248.92
21	745	11.3	332.6			32	743.39	25.77	-15.67	30.04	30.16	328.69	5.63	5.63	#DIV/0!	#DIV/0!	246.26
22	777	13.3	332.8			32	774.66	31.82	-18.80	36.85	36.96	329.43	6.25	6.25	#DIV/0!	#DIV/0!	243.13
23	809	14.9	333.4			32	805.69	38.78	-22.32	44.65	44.74	330.07	5.02	5.00	#DIV/0!	#DIV/0!	239.61
24	841	16.4	334.6			32	836.50	46.54	-26.10	53.28	53.36	330.71	4.80	4.69	#DIV/0!	#DIV/0!	235.83
25	873	18.0	335.0			32	867.07	55.10	-30.13	62.74	62.80	331.33	5.01	5.00	#DIV/0!	#DIV/0!	231.80
26	905	19.6	336.3			32	897.36	64.49	-34.37	73.05	73.08	331.94	5.17	5.00	#DIV/0!	#DIV/0!	227.56
27	937	21.4	336.6			32	927.34	74.77	-38.85	84.24	84.26	332.54	5.63	5.62	#DIV/0!	#DIV/0!	223.08
28	969	23.0	337.1			32	956.96	85.89	-43.60	96.31	96.32	333.08	5.03	5.00	#DIV/0!	#DIV/0!	218.33
29	1,001	24.6	337.4			32	986.24	97.79	-48.60	109.20	109.20	333.58	5.01	5.00	#DIV/0!	#DIV/0!	213.33
30	1,033	25.5	337.4			32	1015.23	110.30	-53.80	122.72	122.72	334.00	2.81	2.81	#DIV/0!	#DIV/0!	208.13
31	1,065	26.1	337.2			32	1044.04	123.15	-59.18	136.62	136.63	334.33	1.89	1.88	#DIV/0!	#DIV/0!	202.75
32	1,097	26.5	337.0			32	1072.73	136.21	-64.69	150.78	150.79	334.59	1.28	1.25	#DIV/0!	#DIV/0!	197.24
33	1,129	27.0	336.1			32	1101.30	149.42	-70.43	165.16	165.19	334.76	2.01	1.56	#DIV/0!	#DIV/0!	191.50
34	1,161	27.2	335.9			32	1129.79	162.74	-76.36	179.73	179.76	334.86	0.69	0.62	#DIV/0!	#DIV/0!	185.57
35	1,195	26.2	334.9			34	1160.16	176.63	-82.71	195.00	195.04	334.91	3.22	-2.94	#DIV/0!	#DIV/0!	179.22
36	1,258	26.3	334.3			63	1216.67	201.80	-94.66	222.86	222.90	334.87	0.45	0.16	#DIV/0!	#DIV/0!	167.27
37	1,289	26.4	333.5			31	1244.45	214.16	-100.72	236.62	236.66	334.81	1.19	0.32	#DIV/0!	#DIV/0!	161.21
38	1,321	26.4	333.8			32	1273.11	226.91	-107.03	250.85	250.89	334.75	0.42	0.00	#DIV/0!	#DIV/0!	154.90
39	1,353	26.5	334.1			32	1301.76	239.71	-113.29	265.10	265.14	334.70	0.52	0.31	#DIV/0!	#DIV/0!	148.64
40	1,416	25.4	331.9			63	1358.41	264.28	-125.80	292.66	292.69	334.55	2.32	-1.75	#DIV/0!	#DIV/0!	136.13
41	1,481	23.8	332.6			65	1417.51	288.22	-138.40	319.71	319.73	334.35	2.50	-2.46	#DIV/0!	#DIV/0!	123.53
42	1,545	23.8	332.9			64	1476.06	311.18	-150.22	345.53	345.54	334.23	0.19	0.00	#DIV/0!	#DIV/0!	111.71
43	1,608	23.6	332.6			63	1533.75	333.69	-161.82	370.85	370.86	334.13	0.37	-0.32	#DIV/0!	#DIV/0!	100.11
44	1,672	23.3	333.2			64	1592.47	356.37	-173.42	396.32	396.32	334.05	0.60	-0.47	#DIV/0!	#DIV/0!	88.51
45	1,736	23.2	333.0			64	1651.27	378.90	-184.85	421.58	421.58	333.99	0.20	-0.16	#DIV/0!	#DIV/0!	77.08
46	1,800	22.7	333.9			64	1710.20	401.22	-196.01	446.53	446.54	333.96	0.95	-0.78	#DIV/0!	#DIV/0!	65.92
47	1,864	19.6	334.9			64	1769.88	422.03	-206.00	469.62	469.62	333.98	4.88	-4.84	#DIV/0!	#DIV/0!	55.93
48	1,933	17.9	331.8			69	1835.22	441.86	-215.92	491.79	491.79	333.96	2.86	-2.46	#DIV/0!	#DIV/0!	46.01
49	1,997	16.8	331.7			64	1896.31	458.67	-224.95	510.86	510.86	333.87	1.72	-1.72	#DIV/0!	#DIV/0!	36.98
50	2,061	14.3	335.9			64	1957.96	474.03	-232.56	528.01	528.01	333.87	4.28	-3.91	#DIV/0!	#DIV/0!	29.37
51	2,124	11.3	335.4			63	2019.39	486.75	-238.31	541.96	541.96	333.91	4.77	-4.76	#DIV/0!	#DIV/0!	23.62
52	2,189	9.5	333.9			65	2083.32	497.36	-243.32	553.69	553.69	333.93	2.80	-2.77	#DIV/0!	#DIV/0!	18.61
53	2,253	7.6	335.5			64	2146.61	505.95	-247.40	563.20	563.20	333.94	2.99	-2.97	#DIV/0!	#DIV/0!	14.53
54	2,317	7.2	321.8			64	2210.08	512.96	-251.64	571.35	571.36	333.87	2.82	-0.62	#DIV/0!	#DIV/0!	10.29

SURVEY CALCULATION PROGRAM

Minimum Curvature										File:							
OPERATOR: Limerock Resources										Target Information		VS Referenced to Offset from Surface					
WELL: Terry 14E No. 4										TARGET KBTVD: 4400.00		NORTHSOUTH: 531.48					
LOCATION: Artesia										TARGET INCL: 0.00		EASTWEST: -281.93					
RIG: United 33										TARGET AZM: 0.00		(Enter 0° N and 0° E for Surface)					
JOB NUMBER: TX-17056																	
SURVEY COMPANY					DIRECTIONAL COMPANY					PROPOSED DIRECTION: 333.78		Dec / Total Corr. (+/-): 7.34					
Accel Directional					Accel Directional					COMMENTS:							
Directional Drillers					COORDINATORS					API # 30-015-43287							
					Chris Shipp												
Limerock Resources					Terry 14E No. 4												
										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(-)
55	2,381	4.6	325.5			64	2273.73	518.23	-255.57	577.82	577.82	333.75	4.10	-4.06	#DIV/0!	#DIV/0!	6.36
56	2,445	2.5	4.0			64	2337.61	521.73	-256.93	581.57	581.57	333.78	4.79	-3.28	#DIV/0!	#DIV/0!	5.00
57	2,508	1.9	51.4			63	2400.57	523.76	-256.02	582.98	582.98	333.95	2.94	-0.95	#DIV/0!	#DIV/0!	5.91
58	2,572	0.8	96.2			64	2464.56	524.37	-254.74	582.96	582.97	334.09	2.26	-1.72	#DIV/0!	#DIV/0!	7.19
59	2,635	0.7	139.7			63	2527.55	524.03	-254.06	582.35	582.37	334.14	0.89	-0.16	#DIV/0!	#DIV/0!	7.87
60	2,699	0.6	146.3			64	2591.55	523.45	-253.62	581.64	581.66	334.15	0.19	-0.16	#DIV/0!	#DIV/0!	8.31
61	2,763	0.7	126.2			64	2655.54	522.94	-253.12	580.96	580.98	334.17	0.39	0.16	#DIV/0!	#DIV/0!	8.81
62	2,827	0.8	149.2			64	2719.54	522.33	-252.57	580.17	580.19	334.19	0.49	0.16	#DIV/0!	#DIV/0!	9.36
63	2,892	0.5	245.3			65	2784.53	521.82	-252.60	579.73	579.74	334.17	1.52	-0.46	#DIV/0!	#DIV/0!	9.33
64	2,955	0.7	271.5			63	2847.53	521.71	-253.23	579.91	579.92	334.11	0.53	0.32	#DIV/0!	#DIV/0!	8.70
65	3,020	0.6	250.9			65	2912.53	521.61	-253.95	580.14	580.15	334.04	0.39	-0.15	#DIV/0!	#DIV/0!	7.98
66	3,084	0.7	250.3			64	2976.52	521.37	-254.64	580.23	580.23	333.97	0.16	0.16	#DIV/0!	#DIV/0!	7.29
67	3,148	0.8	257.8			64	3040.52	521.15	-255.44	580.38	580.38	333.89	0.22	0.16	#DIV/0!	#DIV/0!	6.49
68	3,217	0.9	256.4			69	3109.51	520.92	-256.44	580.62	580.62	333.79	0.15	0.14	#DIV/0!	#DIV/0!	5.49
69	3,243	1.0	263.8			26	3135.51	520.84	-256.86	580.74	580.74	333.75	0.61	0.38	#DIV/0!	#DIV/0!	5.07
70	3,306	0.6	37.9			63	3198.50	521.04	-257.21	581.07	581.07	333.73	2.35	-0.63	#DIV/0!	#DIV/0!	4.72
71	3,370	0.9	33.1			64	3262.50	521.73	-256.73	581.47	581.47	333.80	0.48	0.47	#DIV/0!	#DIV/0!	5.20
72	3,435	0.1	182.8			65	3327.50	522.10	-256.45	581.68	581.68	333.84	1.52	-1.23	#DIV/0!	#DIV/0!	5.48
73	3,499	0.5	210.5			64	3391.49	521.81	-256.59	581.48	581.48	333.81	0.65	0.63	#DIV/0!	#DIV/0!	5.34
74	3,563	0.															