

30-015-~~43847~~
43180

RECEIVED



AUG 01 2019

DISTRICT II-ARTESIA O.C.D.

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

Name & Title of Supervisor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
Will Romberg		0' - 5148'	07/09/19 - 07/15/19	MWD

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

A handwritten signature in black ink, appearing to read "Jerry Howard".

Jerry Howard
Well Planner
jhoward@vectrtech.com
832-995-8855

A handwritten signature in black ink, appearing to read "Will Romberg".

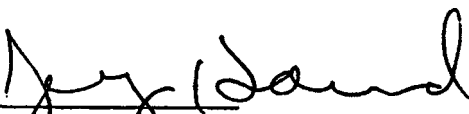
Will Romberg
Operations Manager
wromberg@vectrtech.com
405-808-8596



15-43180

State of New Mexico
Eddy County

I, Will Romberg, certify that; I am employed by Accel Directional; that I did on the day(s) of 07/09/2019 through 07/15/2019 conduct or supervise the taking of MWD survey(s) from a depth of 0' feet to a depth of 5148' 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 Eagle 35A Fed #30, 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.



Jerry Howard
Well Planner



Will Romberg
Operations Manager

15-43180



SURVEY CALCULATION PROGRAM

Minimum Curvature

File:

OPERATOR: Lime Rock Resources	Target Information	VS Referenced to Offset from Surface
WELL: Eagle 35 A Fed #30	TARGET KBTVD: 0.00	NORTH/SOUTH: 0.00
LOCATION: Eddy Co NM	TARGET INCL: 7.75	EAST/WEST: 0.00
RIG: United 33	TARGET AZM: 89.18	(Enter 0° N and 0° E for Surface)
JOB NUMBER: TX-19-046		
SURVEY COMPANY	DIRECTIONAL COMPANY	PROPOSED DIRECTION: 89.18
Vectr Tech	Vectr Tech	Dec / Total Corr.(+/-): 7.04
Directional Drillers	COORDINATORS	COMMENTS:
Mark Woods	Bryan McKinney	
Kevin Dowdell	Will Romberg	
Lime Rock Resources	Eagle 35 A Fed #30	

SVY	MD	INC	TRUE AZM	TEMP °F	API Gamma	Course			Surface			CLOSURE		DLS/ 100'	BUR/ 100'	Target Calculations		
						Length	TVD	N-S	E-W	Vert Sect	DIST	DIR				TVD AT 0'	ABOVE (+) BELOW (-)	RIGHT(+) LEFT(-)
1	0	0.00	0.00			0.00	0.00	0.00	0.00		0.00	0.00	N/A	N/A				
2	394	0.60	131.10	95		394	393.99	-1.36	1.55	1.54	2.06	131.10	0.15	0.15		382.71	-382.71	1.38
3	457	0.60	128.00	95		63	456.99	-1.78	2.06	2.04	2.72	130.72	0.05	0.00		442.02	-442.02	1.81
4	553	7.30	96.60	95		96	552.71	-2.79	8.53	8.48	8.97	108.11	7.08	6.98		490.37	-490.37	2.91
5	649	7.30	96.60	95		96	647.93	-4.19	20.64	20.58	21.06	101.47	0.00	0.00		496.71	-496.71	4.48
6	745	7.10	97.40	102		96	743.17	-5.65	32.58	32.50	33.07	99.85	0.23	-0.21		504.36	-504.36	6.12
7	839	6.90	97.90	102		94	836.47	-7.18	43.94	43.83	44.52	99.28	0.22	-0.21		514.41	-514.41	7.81
8	936	6.60	98.40	102		97	932.80	-8.79	55.22	55.09	55.92	99.05	0.32	-0.31		527.98	-527.98	9.58
9	1,031	8.10	72.00	102		95	1027.04	-7.52	66.99	66.88	67.42	96.41	3.85	1.58		535.62	-535.62	8.48
10	1,128	7.90	71.50	102		97	1123.10	-3.30	79.82	79.76	79.88	92.36	0.22	-0.21		537.03	-537.03	4.44
11	1,223	7.40	82.00	102		95	1217.26	-0.37	92.07	92.05	92.07	90.23	1.56	-0.53		540.88	-540.88	1.69
12	1,319	7.30	84.10	102		96	1312.47	1.11	104.25	104.26	104.26	89.39	0.30	-0.10		546.38	-546.38	0.38
13	1,415	6.90	85.30	95		96	1407.73	2.21	116.07	116.09	116.09	88.91	0.44	-0.42		554.73	-554.73	-0.55
14	1,511	6.50	85.40	95		96	1503.08	3.12	127.23	127.26	127.27	88.59	0.42	-0.42		567.96	-567.96	-1.30
15	1,606	6.20	83.30	95		95	1597.50	4.15	137.69	137.73	137.75	88.27	0.40	-0.32		585.46	-585.46	-2.18
16	1,702	6.00	81.90	102		96	1692.95	5.46	147.80	147.87	147.90	87.88	0.26	-0.21		606.45	-606.45	-3.35
17	1,798	7.70	89.30	95		96	1788.27	6.25	159.20	159.28	159.32	87.75	1.99	1.77		617.93	-617.93	-3.97
18	1,894	7.60	89.20	95		96	1883.41	6.42	171.98	172.05	172.10	87.86	0.11	-0.10		619.18	-619.18	-3.95
19	1,990	7.40	88.30	95		96	1978.59	6.69	184.51	184.58	184.63	87.92	0.24	-0.21		622.29	-622.29	-4.05
20	2,086	7.10	88.80	95		96	2073.82	7.00	196.62	196.70	196.74	87.96	0.32	-0.31		628.51	-628.51	-4.18
21	2,182	7.00	87.60	95		96	2169.10	7.37	208.40	208.48	208.53	87.98	0.19	-0.10		637.22	-637.22	-4.38
22	2,278	6.80	86.80	95		96	2264.40	7.93	219.91	220.01	220.06	87.94	0.23	-0.21		647.83	-647.83	-4.78
23	2,380	6.60	86.20	95		102	2365.70	8.65	231.79	231.89	231.95	87.86	0.21	-0.20		661.79	-661.79	-5.33
24	2,476	7.40	104.50	95		96	2461.00	7.47	243.28	243.37	243.40	88.24	2.46	0.83		672.78	-672.78	-3.99
25	2,572	7.70	96.30	95		96	2556.17	5.22	255.66	255.71	255.72	88.83	1.16	0.31		677.24	-677.24	-1.56
26	2,667	7.80	94.20	95		95	2650.30	4.05	268.42	268.45	268.45	89.14	0.32	0.11		677.79	-677.79	-0.20
27	2,763	7.60	96.30	95		96	2745.44	2.87	281.22	281.24	281.24	89.41	0.36	-0.21		678.95	-678.95	1.15
28	2,859	7.50	95.90	95		96	2840.61	1.53	293.77	293.76	293.77	89.70	0.12	-0.10		682.11	-682.11	2.67
29	2,954	4.70	91.90	95		95	2935.06	0.77	303.83	303.81	303.83	89.86	2.98	-2.95		702.74	-702.74	3.58
30	3,050	1.40	61.40	95		96	3030.91	1.20	308.79	308.77	308.79	89.78	3.71	-3.44		762.09	-762.09	3.22
31	3,146	1.40	57.30	95		96	3126.88	2.39	310.80	310.81	310.81	89.56	0.10	0.00		843.12	-843.12	2.06
32	3,242	1.30	55.80	95		96	3222.86	3.64	312.69	312.71	312.71	89.33	0.11	-0.10		925.10	-925.10	0.84
33	3,338	1.30	58.40	95		96	3318.83	4.82	314.52	314.56	314.56	89.12	0.06	0.00		1007.52	-1007.52	-0.32
34	3,434	0.20	113.30	95		96	3414.82	5.32	315.60	315.65	315.65	89.03	1.25	-1.15		1095.51	-1095.51	-0.81
35	3,530	0.30	176.30	95		96	3510.82	5.01	315.77	315.81	315.81	89.09	0.29	0.10		1190.29	-1190.29	-0.49
36	3,627	0.40	163.70	95		97	3607.82	4.43	315.88	315.91	315.91	89.20	0.13	0.10		1286.53	-1286.53	0.09
37	3,723	0.50	161.50	95		96	3703.82	3.71	316.11	316.13	316.13	89.33	0.11	0.10		1380.94	-1380.94	0.81
38	3,819	0.50	163.60	95		96	3799.82	2.91	316.36	316.37	316.37	89.47	0.02	0.00		1475.17	-1475.17	1.62
39	3,915	0.40	152.40	95		96	3895.81	2.21	316.63	316.63	316.64	89.60	0.14	-0.10		1569.23	-1569.23	2.32
40	4,010	0.40	157.70	95		95	3990.81	1.61	316.91	316.90	316.92	89.71	0.04	0.00		1662.24	-1662.24	2.92
41	4,106	0.30	154.30	95		96	4086.81	1.07	317.15	317.13	317.15	89.81	0.11	-0.10		1756.56	-1756.56	3.46
42	4,202	0.01	204.70	95		96	4182.81	0.84	317.26	317.24	317.26	89.85	0.31	-0.30		1851.81	-1851.81	3.70
43	4,298	0.01	88.90	95		96	4278.81	0.83	317.26	317.24	317.26	89.85	0.02	0.00		1947.77	-1947.77	3.71
44	4,393	0.01	160.10	95		95	4373.81	0.83	317.27	317.25	317.27	89.85	0.01	0.00		2042.69	-2042.69	3.71
45	4,489	0.10	227.40	95		96	4469.81	0.76	317.21	317.19	317.21	89.86	0.10	0.09		2139.13	-2139.13	3.78
46	4,585	0.20	164.00	95		96	4565.81	0.54	317.20	317.17	317.20	89.90	0.19	0.10		2235.27	-2235.27	4.00
47	4,681	0.50	187.70	95		96	4661.81	-0.03	317.19	317.15	317.19	90.01	0.34	0.31		2331.40	-2331.40	4.57
48	4,777	0.30	195.90	95		96	4757.80	-0.69	317.06	317.02	317.06	90.12	0.22	-0.21		2428.38	-2428.38	5.23
49	4,873	0.40	228.30	95		96	4853.80	-1.15	316.74	316.69	316.75	90.21	0.23	0.10		2526.78	-2526.78	5.69
50	4,968	0.60	223.70	102		95	4948.80	-1.73	316.15	316.09	316.16	90.31	0.21	0.21		2626.18	-2626.18	6.26
51	5,064	0.50	223.10	102		96	5044.79	-2.40	315.52	315.45	315.53	90.44	0.10	-0.10		2726.90	-2726.90	6.92
52	5,104	0.50	236.20	102		40	5084.79	-2.63	315.25	315.18	315.27	90.48	0.29	0.00		2768.86	-2768.86	7.14
PTB	5,148	0.50	236.20	102		44	5128.79	-2.84	314.94	314.86	314.95	90.52	0.00	0.00		2815.23	-2815.23	7.35