



NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 20 2016

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State of New Mexico
County of Eddy

I, Donald Leone, certify that; I am employed by Accel Directional; that I did on the day(s) of October 5, 2016 through October 11, 2016 conduct or supervise the taking of MWD survey(s) from a depth of 466' feet to a depth of 4101' 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 Lime Rock Resources for the Simpson 15B, Well No. #5, API No. 30-015-43833 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.

Donnie Leone

Donnie Leone
MWD Technician

Job Number: TX-16-004
 Company: Lime Rock
 Lease/Well: Simpson 15B
 Location: Eddy County
 Rig Name: united 33
 RKB: ☐
 G.L. or M.S.L.: ☐

State/Country: New Mexico
 Declination: ☐
 Grid: ☐
 File name: E:\WELLPL~1\4H.SVY
 Date/Time: 12-Oct-16 / 04:48
 Curve Name: Survey

MS Energy Services

WINSERVE PROPOSAL REPORT
 Minimum Curvature Method
 Vertical Section Plane 224.78
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100	BUILD RATE Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
466.00	1.20	179.10	465.97	-4.88	.08	3.41	4.88	179.10	.26	.26
498.00	1.20	243.60	497.96	-5.36	-.22	3.96	5.37	182.33	4.00	.00
530.00	1.50	186.90	529.95	-5.93	-.57	4.61	5.96	185.48	4.09	.94
562.00	2.80	204.50	561.93	-7.06	-.94	5.67	7.12	187.61	4.51	4.06
593.00	4.10	208.90	592.87	-8.71	-1.79	7.45	8.90	191.62	4.28	4.19
625.00	6.20	212.90	624.74	-11.17	-3.28	10.24	11.64	196.39	6.65	6.56
657.00	8.80	216.00	656.47	-14.60	-5.66	14.35	15.66	201.20	8.22	8.13
722.00	13.20	222.90	720.26	-24.06	-13.64	26.69	27.66	209.55	7.05	6.77
754.00	13.70	223.90	751.38	-29.47	-18.76	34.13	34.93	212.47	1.72	1.56
786.00	15.80	225.20	782.32	-35.27	-24.48	42.28	42.93	214.76	6.64	6.56
818.00	19.00	225.90	812.86	-41.97	-31.31	51.84	52.36	216.72	10.02	10.00
850.00	22.30	226.50	842.80	-49.77	-39.46	63.12	63.52	218.40	10.33	10.31
882.00	23.50	227.00	872.27	-58.30	-48.53	75.57	75.86	219.77	3.80	3.75
914.00	22.80	227.10	901.70	-66.88	-57.73	88.14	88.35	220.80	2.19	-2.19
1010.00	22.60	227.00	990.26	-92.12	-84.85	125.15	125.24	222.65	.21	-.21
1106.00	22.80	227.60	1078.82	-117.24	-112.08	162.17	162.19	223.71	.32	.21
1203.00	22.70	229.50	1168.28	-142.07	-140.19	199.59	199.59	224.62	.76	-.10
1299.00	21.80	229.90	1257.13	-165.58	-167.91	235.81	235.82	225.40	.95	-.94
1395.00	21.50	227.40	1346.36	-188.97	-194.50	271.14	271.18	225.83	1.01	-.31
1491.00	20.90	221.90	1435.87	-213.63	-218.88	305.82	305.85	225.70	2.16	-.63
1588.00	21.20	221.50	1526.40	-239.64	-242.06	340.61	340.62	225.29	.34	.31
1683.00	21.30	221.40	1614.94	-265.45	-264.85	374.98	374.98	224.94	.11	.11
1779.00	21.50	221.20	1704.32	-291.77	-287.97	409.94	409.94	224.62	.22	.21
1875.00	21.70	220.70	1793.58	-318.46	-311.13	445.20	445.22	224.33	.28	.21

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100	BUILD RATE Deg/100
1971.00	21.10	221.10	1882.96	-344.93	-334.06	480.15	480.19	224.08	.64	-.62
2003.00	18.90	221.70	1913.03	-353.15	-341.30	491.07	491.12	224.02	6.90	-6.88
2035.00	17.20	223.20	1943.45	-360.46	-347.99	500.98	501.03	223.99	5.51	-5.31
2067.00	15.50	226.00	1974.16	-366.88	-354.30	509.99	510.03	224.00	5.85	-5.31
2098.00	13.30	226.90	2004.18	-372.20	-359.89	517.69	517.73	224.04	7.13	-7.10
2131.00	11.20	229.60	2036.43	-376.87	-365.10	524.68	524.72	224.09	6.59	-6.36
2163.00	9.20	228.70	2067.92	-380.57	-369.39	530.33	530.36	224.15	6.27	-6.25
2194.00	7.40	225.30	2098.60	-383.61	-372.67	534.80	534.83	224.17	6.02	-5.81
2226.00	5.80	212.90	2130.38	-386.42	-375.01	538.44	538.47	224.14	6.67	-5.00
2258.00	5.20	198.20	2162.24	-389.16	-376.34	541.32	541.36	224.04	4.77	-1.87
2360.00	4.20	220.30	2263.90	-396.40	-380.20	549.18	549.26	223.81	2.01	-.98
2392.00	4.20	224.90	2295.82	-398.12	-381.79	551.52	551.60	223.80	1.05	.00
2424.00	4.00	225.10	2327.73	-399.74	-383.41	553.81	553.89	223.81	.63	-.63
2456.00	3.10	225.00	2359.67	-401.14	-384.81	555.79	555.87	223.81	2.81	-2.81
2553.00	4.00	229.60	2456.49	-405.18	-389.24	561.78	561.86	223.85	.97	.93
2648.00	4.00	229.60	2551.25	-409.48	-394.29	568.38	568.45	223.92	.00	.00
2744.00	1.90	243.00	2647.12	-412.37	-398.25	573.23	573.29	224.00	2.29	-2.19
2840.00	.90	319.20	2743.10	-412.52	-400.16	574.69	574.72	224.13	1.98	-1.04
2936.00	.90	295.70	2839.09	-411.63	-401.34	574.88	574.90	224.27	.38	.00
3032.00	.90	298.40	2935.08	-410.94	-402.68	575.33	575.35	224.42	.04	.00
3129.00	1.20	302.10	3032.06	-410.04	-404.21	575.77	575.78	224.59	.32	.31
3225.00	1.10	308.10	3128.04	-408.94	-405.79	576.10	576.10	224.78	.16	-.10
3320.00	.40	268.80	3223.03	-408.38	-406.84	576.44	576.45	224.89	.87	-.74
3417.00	.40	317.40	3320.03	-408.14	-407.40	576.67	576.68	224.95	.34	.00
3513.00	.60	272.50	3416.03	-407.87	-408.13	577.00	577.00	225.02	.44	.21
3608.00	.70	250.40	3511.02	-408.04	-409.18	577.85	577.86	225.08	.28	.11
3704.00	.40	274.90	3607.02	-408.21	-410.06	578.60	578.61	225.13	.39	-.31
3800.00	.70	276.70	3703.01	-408.11	-410.98	579.17	579.19	225.20	.31	.31
3896.00	.70	281.00	3799.00	-407.93	-412.14	579.86	579.88	225.29	.05	.00
3991.00	.70	297.10	3894.00	-407.56	-413.22	580.36	580.39	225.40	.21	.00
4037.00	.90	276.90	3939.99	-407.39	-413.83	580.67	580.71	225.45	.75	.43
PTB										
4101.00	.90	276.90	4003.99	-407.27	-414.83	581.28	581.33	225.53	.00	.00