

Company: **Mewbourne**Field: **(Long) Sec 4, T20S, R25E**County: **Eddy NM**Job Number: **4649485**Magnetic Decl: **8.01**Grid Corr: **0.08**Proposed Azimuth: **181.23**Target Inclination: **89.82**TVD: **2531.00****INTEQ**Well Name: **Long Draw 9 AP Fed #1H**Rig: **Patterson #101**Total Survey Corr: **8.09**Date Printed: **27-May-12**BRN From Survey: **-0.10**

Offset		50'	Must Enter**												
No.	Tool Type	Survey Depth (ft)	Incl (°)	Azimuth (°)	Quadrant	Course Lgth(ft)	TVD (ft)	VS (ft)	Coordinates		Closure		DLS (%/100')	Bld Rate (%/100')	Wlk Rate (%/100')
0	Tie	1685	2.68	100.04			1683.91	6.31	6.54 S	51.28 E			0.00		
1	MWD	1922	2.80	108.50	S 71.50 E	237	1920.64	8.00	9.34 S	62.23 E	62.92	98.54	0.18	0.05	3.57
2	MWD	1929	2.60	106.40	S 73.60 E	7	1927.63	8.10	9.44 S	62.54 E	63.25	98.59	3.19	-2.86	-30.00
3	MWD	1961	2.50	113.60	S 66.40 E	32	1959.60	8.55	9.93 S	63.88 E	64.64	98.83	1.05	-0.31	22.50
4	MWD	1993	5.50	161.40	S 18.60 E	32	1991.53	10.26	11.66 S	65.01 E	66.04	100.17	13.26	9.38	149.38
5	MWD	2024	10.40	172.20	S 7.80 E	31	2022.22	14.43	15.84 S	65.86 E	67.74	103.53	16.46	15.81	34.84
6	MWD	2056	15.40	173.90	S 6.10 E	32	2053.40	21.50	22.93 S	66.70 E	70.54	108.97	15.67	15.63	5.31
7	MWD	2087	19.60	174.50	S 5.50 E	31	2082.96	30.75	32.21 S	67.64 E	74.92	115.46	13.56	13.55	1.94
8	MWD	2119	23.00	176.40	S 3.60 E	32	2112.77	42.31	43.79 S	68.55 E	81.34	122.57	10.84	10.63	5.94
9	MWD	2151	26.60	178.30	S 1.70 E	32	2141.82	55.70	57.20 S	69.15 E	89.74	129.59	11.52	11.25	5.94
10	MWD	2182	30.00	179.20	S 0.80 E	31	2169.11	70.38	71.89 S	69.47 E	99.97	135.98	11.05	10.97	2.90
11	MWD	2214	30.10	179.00	S 1.00 E	32	2196.81	86.39	87.91 S	69.72 E	112.20	141.58	0.44	0.31	-0.62
12	MWD	2246	32.30	178.90	S 1.10 E	32	2224.18	102.96	104.48 S	70.02 E	125.78	146.17	6.88	6.87	-0.31
13	MWD	2278	35.00	178.80	S 1.20 E	32	2250.81	120.67	122.21 S	70.38 E	141.03	150.06	8.44	8.44	-0.31
14	MWD	2309	35.10	179.20	S 0.80 E	31	2276.19	138.46	140.01 S	70.69 E	156.84	153.21	0.81	0.32	1.29
15	MWD	2341	37.30	179.70	S 0.30 E	32	2302.01	157.35	158.91 S	70.87 E	173.99	155.96	6.94	6.87	1.56
16	MWD	2373	40.20	180.30	S 0.30 W	32	2326.96	177.37	178.93 S	70.86 E	192.46	158.39	9.14	9.06	1.88
17	MWD	2405	43.20	180.30	S 0.30 W	32	2350.85	198.65	200.22 S	70.75 E	212.35	160.54	9.38	9.38	0.00
18	MWD	2436	46.20	180.00	S 0.00 W	31	2372.89	220.45	222.02 S	70.70 E	233.01	162.34	9.70	9.68	-0.97
19	MWD	2469	48.60	179.70	S 0.30 E	33	2395.22	244.73	246.31 S	70.76 E	256.27	163.97	7.30	7.27	-0.91
20	MWD	2500	52.00	179.40	S 0.60 E	31	2415.02	268.57	270.16 S	70.95 E	279.32	165.28	10.99	10.97	-0.97
21	MWD	2531	55.90	178.20	S 1.80 E	31	2433.26	293.61	295.21 S	71.48 E	303.74	166.39	12.96	12.58	-3.87
22	MWD	2563	58.70	177.40	S 2.60 E	32	2450.55	320.48	322.12 S	72.52 E	330.18	167.31	9.00	8.75	-2.50
23	MWD	2595	60.60	177.50	S 2.50 E	32	2466.72	348.04	349.70 S	73.75 E	357.39	168.09	5.94	5.94	0.31
24	MWD	2627	63.30	178.30	S 1.70 E	32	2481.76	376.23	377.92 S	74.78 E	385.25	168.81	8.72	8.44	2.50
25	MWD	2659	67.70	179.20	S 0.80 E	32	2495.03	405.31	407.02 S	75.41 E	413.95	169.50	13.99	13.75	2.81
26	MWD	2690	72.70	178.30	S 1.70 E	31	2505.53	434.44	436.18 S	76.05 E	442.76	170.11	16.36	16.13	-2.90
27	MWD	2722	76.80	178.70	S 1.30 E	32	2513.94	465.27	467.03 S	76.86 E	473.31	170.65	12.87	12.81	1.25
28	MWD	2754	77.80	179.20	S 0.80 E	32	2520.98	496.47	498.24 S	77.43 E	504.22	171.17	3.48	3.13	1.56
29	MWD	2786	79.40	179.40	S 0.60 E	32	2527.30	527.82	529.61 S	77.81 E	535.29	171.64	5.04	5.00	0.63
30	MWD	2818	80.00	180.30	S 0.30 W	32	2533.02	559.29	561.09 S	77.89 E	566.47	172.10	3.34	1.87	2.81
31	MWD	2850	81.30	180.10	S 0.10 W	32	2538.22	590.86	592.67 S	77.78 E	597.75	172.52	4.11	4.06	-0.63
32	MWD	2881	83.80	180.00	S 0.00 W	31	2542.24	621.59	623.40 S	77.76 E	628.23	172.89	8.07	8.06	-0.32
33	MWD	2913	85.40	179.80	S 0.20 E	32	2545.25	653.44	655.26 S	77.81 E	659.86	173.23	5.04	5.00	-0.62
34	MWD	2945	86.00	179.70	S 0.30 E	32	2547.65	685.34	687.17 S	77.95 E	691.58	173.53	1.90	1.87	-0.31
35	MWD	2977	87.40	180.80	S 0.80 W	32	2549.49	717.28	719.11 S	77.81 E	723.31	173.82	5.56	4.38	3.44
36	MWD	3040	89.00	181.00	S 1.00 W	63	2551.47	780.24	782.07 S	76.82 E	785.84	174.39	2.56	2.54	0.32
37	MWD	3104	89.20	181.00	S 1.00 W	64	2552.48	844.23	846.05 S	75.71 E	849.44	174.89	0.31	0.31	0.00
38	MWD	3167	90.30	180.90	S 0.90 W	63	2552.75	907.23	909.04 S	74.66 E	912.11	175.30	1.75	1.75	-0.16
39	MWD	3230	91.20	181.30	S 1.30 W	63	2551.93	970.23	972.03 S	73.45 E	974.80	175.68	1.56	1.43	0.63

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Company: **Mewbourne**Field: **(Long) Sec 4, T20S, R25E**County: **Eddy NM**Job Number: **4649485**Magnetic Decl: **8.01**Grid Corr: **0.08**Proposed Azimuth: **181.23**Target Inclination: **89.82**TVD: **2531.00****INTEQ**Well Name: **Long Draw 9 AP Fed #1H**Rig: **Patterson #101**Total Survey Corr: **8.09**Date Printed: **27-May-12**BRN From Survey: **-0.10**

Offset		50'	Must Enter**														
	Tool	Survey	Incl	Azimuth	Quadrant	Course	TVD	VS	Coordinates		Closure		DLS	Bld Rate	Wlk Rate		
No.	Type	Depth (ft)	(°)	(°)		Lgth(ft)	(ft)	(ft)	N/S (ft)	E/W (ft)	Dist (ft)	Ang (°)	(%100')	(%100')	(%100')		
40	MWD	3294	90.70	180.80	S 0.80 W	64	2550.87	1034.22	1036.01 S	72.28 E	1038.53	176.01	1.10	-0.78	-0.78		
41	MWD	3358	89.90	180.50	S 0.50 W	64	2550.53	1098.21	1100.00 S	71.55 E	1102.33	176.28	1.33	-1.25	-0.47		
42	MWD	3422	89.60	181.60	S 1.60 W	64	2550.81	1162.21	1163.99 S	70.38 E	1166.11	176.54	1.78	-0.47	1.72		
43	MWD	3485	89.60	182.20	S 2.20 W	63	2551.25	1225.20	1226.95 S	68.29 E	1228.85	176.81	0.95	0.00	0.95		
44	MWD	3548	91.00	182.40	S 2.40 W	63	2550.92	1288.19	1289.90 S	65.77 E	1291.57	177.08	2.24	2.22	0.32		
45	MWD	3612	91.20	182.40	S 2.40 W	64	2549.69	1352.17	1353.83 S	63.09 E	1355.30	177.33	0.31	0.31	0.00		
46	MWD	3675	90.90	182.10	S 2.10 W	63	2548.54	1415.14	1416.77 S	60.61 E	1418.07	177.55	0.67	-0.48	-0.48		
47	MWD	3739	90.70	182.30	S 2.30 W	64	2547.65	1479.13	1480.72 S	58.16 E	1481.86	177.75	0.44	-0.31	0.31		
48	MWD	3802	90.10	182.00	S 2.00 W	63	2547.21	1542.12	1543.67 S	55.79 E	1544.68	177.93	1.06	-0.95	-0.48		
49	MWD	3866	89.60	182.10	S 2.10 W	64	2547.37	1606.11	1607.63 S	53.50 E	1608.52	178.09	0.80	-0.78	0.16		
50	MWD	3929	89.30	181.90	S 1.90 W	63	2547.98	1669.10	1670.59 S	51.30 E	1671.38	178.24	0.57	-0.48	-0.32		
51	MWD	3993	89.20	182.00	S 2.00 W	64	2548.82	1733.09	1734.55 S	49.13 E	1735.24	178.38	0.22	-0.16	0.16		
52	MWD	4056	88.50	181.00	S 1.00 W	63	2550.08	1796.08	1797.51 S	47.48 E	1798.14	178.49	1.94	-1.11	-1.59		
53	MWD	4119	88.90	180.40	S 0.40 W	63	2551.51	1859.06	1860.49 S	46.71 E	1861.08	178.56	1.14	0.63	-0.95		
54	MWD	4183	89.90	180.00	S 0.00 W	64	2552.18	1923.04	1924.49 S	46.49 E	1925.05	178.62	1.68	1.56	-0.63		
55	MWD	4246	89.90	180.40	S 0.40 W	63	2552.29	1986.03	1987.48 S	46.27 E	1988.02	178.67	0.63	0.00	0.63		
56	MWD	4310	90.90	179.60	S 0.40 E	64	2551.84	2050.02	2051.48 S	46.27 E	2052.00	178.71	2.00	1.56	-1.25		
57	MWD	4373	90.40	179.70	S 0.30 E	63	2551.13	2112.99	2114.48 S	46.65 E	2114.99	178.74	0.81	-0.79	0.16		
58	MWD	4437	91.00	180.60	S 0.60 W	64	2550.35	2176.97	2178.47 S	46.48 E	2178.97	178.78	1.69	0.94	1.41		
59	MWD	4501	90.60	180.60	S 0.60 W	64	2549.45	2240.96	2242.46 S	45.81 E	2242.93	178.83	0.63	-0.63	0.00		
60	MWD	4564	89.60	179.80	S 0.20 E	63	2549.34	2303.95	2305.46 S	45.59 E	2305.91	178.87	2.03	-1.59	-1.27		
61	MWD	4628	90.60	181.20	S 1.20 W	64	2549.23	2367.94	2369.45 S	45.03 E	2369.88	178.91	2.69	1.56	2.19		
62	MWD	4692	90.50	181.20	S 1.20 W	64	2548.62	2431.94	2433.44 S	43.69 E	2433.83	178.97	0.16	-0.16	0.00		
63	MWD	4779	89.70	181.10	S 1.10 W	87	2548.46	2518.94	2520.42 S	41.95 E	2520.77	179.05	0.93	-0.92	-0.11		
64	MWD	4842	89.30	180.60	S 0.60 W	63	2549.01	2581.93	2583.41 S	41.01 E	2583.73	179.09	1.02	-0.63	-0.79		
65	MWD	4905	88.80	180.70	S 0.70 W	63	2550.06	2644.92	2646.40 S	40.30 E	2646.70	179.13	0.81	-0.79	0.16		
66	MWD	4969	88.30	180.40	S 0.40 W	64	2551.68	2708.90	2710.37 S	39.68 E	2710.66	179.16	0.91	-0.78	-0.47		
67	MWD	5032	89.80	180.90	S 0.90 W	63	2552.72	2771.88	2773.36 S	38.97 E	2773.63	179.19	2.51	2.38	0.79		
68	MWD	5095	91.30	182.00	S 2.00 W	63	2552.12	2834.88	2836.33 S	37.38 E	2836.58	179.25	2.95	2.38	1.75		
69	MWD	5159	91.20	182.40	S 2.40 W	64	2550.72	2898.85	2900.27 S	34.92 E	2900.48	179.31	0.64	-0.16	0.63		
70	MWD	5222	90.50	182.60	S 2.60 W	63	2549.79	2961.83	2963.20 S	32.17 E	2963.38	179.38	1.16	-1.11	0.32		
71	MWD	5286	89.70	182.10	S 2.10 W	64	2549.68	3025.82	3027.15 S	29.55 E	3027.29	179.44	1.47	-1.25	-0.78		
72	MWD	5349	89.10	182.30	S 2.30 W	63	2550.34	3088.80	3090.10 S	27.13 E	3090.22	179.50	1.00	-0.95	0.32		
73	MWD	5413	90.30	182.20	S 2.20 W	64	2550.67	3152.79	3154.05 S	24.62 E	3154.14	179.55	1.88	1.88	-0.16		
74	MWD	5474	90.80	182.60	S 2.60 W	61	2550.08	3213.77	3214.99 S	22.06 E	3215.06	179.61	1.05	0.82	0.66		
75	MWD	5535	90.00	182.70	S 2.70 W	61	2549.66	3274.75	3275.92 S	19.24 E	3275.98	179.66	1.32	-1.31	0.16		
76	MWD	5596	89.40	183.00	S 3.00 W	61	2549.98	3335.73	3336.84 S	16.21 E	3336.88	179.72	1.10	-0.98	0.49		
77	MWD	5658	90.30	180.80	S 0.80 W	62	2550.14	3397.72	3398.81 S	14.15 E	3398.84	179.76	3.83	1.45	-3.55		
78	MWD	5717	90.10	179.90	S 0.10 E	59	2549.93	3456.71	3457.80 S	13.79 E	3457.83	179.77	1.56	-0.34	-1.53		
79	MWD	5779	90.10	178.70	S 1.30 E	62	2549.83	3518.67	3519.80 S	14.55 E	3519.83	179.76	1.94	0.00	-1.94		

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Offset		50'		Must Enter**												
No.	Tool Type	Survey Depth (ft)	Incl (°)	Azimuth (°)	Quadrant	Course	Lgth(ft)	TVD (ft)	VS (ft)	Coordinates		Closure		DLS (%100')	Bld Rate (%100')	Wlk Rate (%100')
										N/S (ft)	E/W (ft)	Dist (ft)	Ang (°)			
80	MWD	5841	89.60	179.00	S	1.00 E	62	2549.99	3580.62	3581.79 S	15.80 E	3581.82	179.75	0.94	-0.81	0.48
81	MWD	5903	89.00	179.50	S	0.50 E	62	2550.75	3642.58	3643.77 S	16.61 E	3643.81	179.74	1.26	-0.97	0.81
82	MWD	5964	88.90	179.90	S	0.10 E	61	2551.86	3703.55	3704.76 S	16.93 E	3704.80	179.74	0.68	-0.16	0.66
83	MWD	6025	90.30	180.00	S	0.00 W	61	2552.29	3764.53	3765.76 S	16.98 E	3765.80	179.74	2.30	2.30	0.16
84	MWD	6088	91.90	180.80	S	0.80 W	63	2551.08	3827.51	3828.74 S	16.54 E	3828.78	179.75	2.84	2.54	1.27
85	MWD	6152	91.60	181.20	S	1.20 W	64	2549.13	3891.48	3892.71 S	15.42 E	3892.74	179.77	0.78	-0.47	0.62
86	MWD	6215	91.10	181.10	S	1.10 W	63	2547.64	3954.46	3955.67 S	14.16 E	3955.70	179.79	0.81	-0.79	-0.16
87	MWD	6279	91.10	181.70	S	1.70 W	64	2546.41	4018.45	4019.64 S	12.60 E	4019.66	179.82	0.94	0.00	0.94
88	MWD	6342	89.50	180.60	S	0.60 W	63	2546.08	4081.44	4082.63 S	11.33 E	4082.64	179.84	3.08	-2.54	-1.75
89	MWD	6405	88.60	180.40	S	0.40 W	63	2547.13	4144.43	4145.62 S	10.78 E	4145.63	179.85	1.46	-1.43	-0.32
90	MWD	6469	88.50	180.80	S	0.80 W	64	2548.75	4208.40	4209.59 S	10.11 E	4209.60	179.86	0.64	-0.16	0.63
91	MWD	6533	88.00	181.30	S	1.30 W	64	2550.70	4272.37	4273.55 S	8.94 E	4273.56	179.88	1.10	-0.78	0.78
92	MWD	6595	87.60	181.60	S	1.60 W	62	2553.08	4334.33	4335.48 S	7.37 E	4335.49	179.90	0.81	-0.65	0.48
93	MWD	6659	88.60	181.20	S	1.20 W	64	2555.20	4398.29	4399.43 S	5.81 E	4399.43	179.92	1.68	1.56	-0.63
94	MWD	6723	89.20	180.60	S	0.60 W	64	2556.43	4462.28	4463.41 S	4.80 E	4463.41	179.94	1.33	0.94	-0.94
95	MWD	6786	91.00	181.00	S	1.00 W	63	2556.32	4525.27	4526.40 S	3.93 E	4526.40	179.95	2.93	2.86	0.63
96	MWD	6849	91.90	181.30	S	1.30 W	63	2554.73	4588.25	4589.37 S	2.66 E	4589.37	179.97	1.51	1.43	0.48
97	MWD	6913	91.10	181.20	S	1.20 W	64	2553.05	4652.23	4653.33 S	1.27 E	4653.33	179.98	1.26	-1.25	-0.16
98	MWD	6977	90.60	181.40	S	1.40 W	64	2552.10	4716.22	4717.30 S	0.19 W	4717.30	180.00	0.84	-0.78	0.31
99	MWD	7040	90.10	182.10	S	2.10 W	63	2551.72	4779.22	4780.27 S	2.11 W	4780.27	180.03	1.37	-0.79	1.11
100	MWD	7103	88.70	183.30	S	3.30 W	63	2552.38	4842.19	4843.20 S	5.08 W	4843.20	180.06	2.93	-2.22	1.90
101	MWD	7167	88.40	183.30	S	3.30 W	64	2554.00	4906.13	4907.07 S	8.76 W	4907.08	180.10	0.47	-0.47	0.00
102	MWD	7230	87.90	183.30	S	3.30 W	63	2556.03	4969.05	4969.93 S	12.39 W	4969.95	180.14	0.79	-0.79	0.00
103	MWD	7294	88.10	182.20	S	2.20 W	64	2558.27	5032.99	5033.82 S	15.45 W	5033.84	180.18	1.75	0.31	-1.72
104	MWD	7357	88.30	181.90	S	1.90 W	63	2560.24	5095.95	5096.75 S	17.71 W	5096.78	180.20	0.57	0.32	-0.48
105	MWD	7420	90.40	182.00	S	2.00 W	63	2560.96	5158.94	5159.70 S	19.85 W	5159.74	180.22	3.34	3.33	0.16
106	MWD	7480	91.80	181.80	S	1.80 W	60	2559.81	5218.92	5219.66 S	21.84 W	5219.70	180.24	2.36	2.33	-0.33
107	TD	7530	91.80	181.80	S	1.80 W	50	2558.24	5268.90	5269.61 S	23.41 W	5269.66	180.25	0.00	0.00	0.00



Company: Mewbourne Oil Company
Lease/Well: Long Draw 9 AP Fedcom/#1H
Location: Sec 004 T-20S R-25E
Rig Name: Patterson 101
State/County: New Mexico /Eddy
Latitude: 32.60, Longitude: -104.48
GRID North is 0.08 Degrees West of True North
VS-Azi: 180.25 Degrees



Depth Reference : RKB 17.5 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ... draw 9 ap fedcom #1_ed_ed.ut

Minimum Curvature Method

Report Date/Time: 5/17/2012 / 03:23

Vaughn Energy Services

Shreveport, LA

318-549-3860

Surveyor: Billy James

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.38	77.05	100.00	0.07	0.32	-0.08	0.33	77.05	0.38
200.00	0.42	89.98	200.00	0.15	1.01	-0.15	1.03	81.67	0.10
300.00	1.24	64.91	299.99	0.61	2.36	-0.62	2.44	75.60	0.87
400.00	1.33	61.47	399.96	1.62	4.36	-1.64	4.65	69.63	0.12
500.00	0.88	82.87	499.94	2.27	6.14	-2.29	6.55	69.73	0.60
600.00	1.52	72.49	599.92	2.76	8.17	-2.80	8.62	71.32	0.67
700.00	1.66	83.43	699.88	3.33	10.87	-3.37	11.37	72.98	0.33
800.00	1.42	84.32	799.85	3.61	13.53	-3.67	14.01	75.04	0.24
900.00	1.17	97.60	899.82	3.60	15.77	-3.67	16.18	77.14	0.39
1000.00	2.03	93.50	999.78	3.36	18.55	-3.44	18.86	79.74	0.87
1100.00	2.36	100.02	1099.71	2.89	22.35	-2.99	22.54	82.63	0.42
1200.00	3.82	113.24	1199.56	1.22	27.44	-1.34	27.47	87.46	1.62
1300.00	2.91	109.97	1299.39	-0.96	32.89	0.82	32.91	91.68	0.93
1400.00	3.03	102.67	1399.25	-2.41	37.86	2.25	37.94	93.64	0.40
1500.00	2.85	111.42	1499.12	-3.90	42.75	3.71	42.93	95.21	0.48
1600.00	2.77	108.11	1599.00	-5.56	47.36	5.35	47.69	96.69	0.18
1685.00	2.68	100.04	1683.91	-6.54	51.27	6.32	51.69	97.27	0.46

HORIZONTAL DISPLACEMENT IS
51.69 FEET AT 97.27 DEGREES



Company: Mewbourne Oil Company
Lease/Well: Long Draw 9 AP Federal Com/No. 001H
Location: Sec 004 T-20S R-25E
Rig Name: Patterson 101
State/County: New Mexico /Eddy
Latitude: 32.60
GRID North is 0.08 Degrees West of True North
VS-Azi: 180.25 Degrees



Depth Reference : RKB 17.5 F'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ... draw 9 ap fedcom #1_ed_ed.ut

Minimum Curvature Method

Report Date/Time: 5/24/2012 / 11:20

Vaughn Energy Services

Shreveport, LA

318-549-3860

Surveyor: Billy James

Long Draw 9 AP Federal Com No. 001H / API 30-015-38310

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.38	77.05	100.00	0.07	0.32	-0.08	0.33	77.05	0.38
200.00	0.42	89.98	200.00	0.15	1.01	-0.15	1.03	81.67	0.10
300.00	1.24	64.91	299.99	0.61	2.36	-0.62	2.44	75.60	0.87
400.00	1.33	61.47	399.96	1.62	4.36	-1.64	4.65	69.63	0.12
500.00	0.88	82.87	499.94	2.27	6.14	-2.29	6.55	69.73	0.60
600.00	1.52	72.49	599.92	2.76	8.17	-2.80	8.62	71.32	0.67
700.00	1.66	83.43	699.88	3.33	10.87	-3.37	11.37	72.98	0.33
800.00	1.42	84.32	799.85	3.61	13.53	-3.67	14.01	75.04	0.24
900.00	1.17	97.60	899.82	3.60	15.77	-3.67	16.18	77.14	0.39
1000.00	2.03	93.50	999.78	3.36	18.55	-3.44	18.86	79.74	0.87
1100.00	2.36	100.02	1099.71	2.89	22.35	-2.99	22.54	82.63	0.42
1200.00	3.82	113.24	1199.56	1.22	27.44	-1.34	27.47	87.46	1.62
1300.00	2.91	109.97	1299.39	-0.96	32.89	0.82	32.91	91.68	0.93
1400.00	3.03	102.67	1399.25	-2.41	37.86	2.25	37.94	93.64	0.40
1500.00	2.85	111.42	1499.12	-3.90	42.75	3.71	42.93	95.21	0.48
1600.00	2.77	108.11	1599.00	-5.56	47.36	5.35	47.69	96.69	0.18
1685.00	2.68	100.04	1683.91	-6.54	51.27	6.32	51.69	97.27	0.46

Prepared for Mr. Mickey Young	Company Mewbourne Oil Company	Date 24-May-12
Well Name Long Draw 9 AP Fed Com #1H	Type of Installation 18-Stage 4 1/2" StackFRAC®HD	Location Eddy County, NM

Depth	Drawing	Description	OD(in)	D(in)	Length
REV_					
KOP 1903'					
TOL 1691.94' 64.8 bbls		***Drillable FracPORT's to be shipped without handling pups*** Latched Seal Assembly 7" 23-32 ppf x 3.875" Lower Bore x 4.75" Upper Bore SF Liner Hanger Packer PN: 108425-000004 (Shear Pins: 2 @ 482 plus 1 @ 241 : 1,205 psi setting pressure) SF Bottom Guide 3' x 4-1/2" 11 60# L-80 BTC X LTC Pup Joint 7" 26# L-80 LT&C Casing	5.875"	4.750	2 83
7" Shoe 1903'					
2215.25'		4-1/2" 11.60# J-55 LTC LINER JOINTS: 12 6' x 4-1/2" 11 60# L-80 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 SN: EA3019437 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l 3' x 4-1/2" 11 60# L-80 LTC Pup Joint	4.500"	4.000	507.97
			4.500"	4.000	5 97
			5.750"	3.750	5 25
			4.500"	4.000	3 04
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 19	4.500"	4.000	808.83
3038.39'		6' x 4-1/2" 11 60# L-80 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 SN: EA3019415 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l 3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4.500"	4.000	6 02
			5.750"	3.750	5 25
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4.500"	4.000	3 03
			4.500"	4.000	85.24
		Packers Plus 4-1/2" Drillable FracPORT™ with 3.625" Seat for 3.750" High Pressure Ball PN: 121332-000024 SN: EA1022043 (5 shear pins at 315 psi each: 1,575 psi opening pressure)	5.630"	3.625	2 65
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4.500"	4.000	127.90
			4.500"	4.000	6.03
			5.750"	3.750	5.25
3268.49'		6' x 4-1/2" 11.60# L-80 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 SN: EA3019431 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l 3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4.500"	4.000	3.03
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4.500"	4.000	85.30
			5.630"	3.500	2 65
		Packers Plus 4-1/2" Drillable FracPORT™ with 3.500" Seat for 3.625" High Pressure Ball PN: 121332-000023-000019 SN: EA1024443 (5 shear pins at 315 psi each: 1,575 psi opening pressure)		3.720	
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4.500"	4.000	128.02
			4.500"	4.000	6.01
			5.750"	3.750	5.25
3498.75'		6' x 4-1/2" 11.60# L-80 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 SN: EA3019430 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l 3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4.500"	4.000	3 02
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4.500"	4.000	85.30
			5.630"	3.375	2.65
		Packers Plus 4-1/2" Drillable FracPORT™ with 3.375" Seat for 3.500" High Pressure Ball PN: 108481-000020 SN: EM0040542 (5 shear pins at 315 psi each: 1,575 psi opening pressure)		3.720	
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4.500"	4.000	85.28
			4.500"	4.000	6.02
			5.750"	3.750	5.25
3592.32'		6' x 4-1/2" 11 60# L-80 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 SN: EA2010481 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l 3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4.500"	4.000	3.02
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4.500"	4.000	127.67
3686.27'					

Page 1 of 3

Service Center Telephone Contact
Midland, TX 432-563-8024 Scott Mabry

Telephone
Chad Williams 405-255-3223



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outside Mewbourne Oil Company

Completion
Final

Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 24-May-12	
Well Name Long Draw 9 AP Fed Com #1H		Type of Installation 18-Stage 4 1/2" StackFRAC®HD		Location Eddy County, NM	
Depth	Drawing	Description	OD(in)	ID(in)	Length
REV_					
Stage 15			Page 2 of 3		
3822.21'		Packers Plus 4-1/2" Drillable FracPORT™ with 3.250" Seat for 3.375" High Pressure Ball	5 630"	3.250	2.65
97.8 bbls		PN: 108481-000019 SN: EM0040800 (5 shear pins at 315 psi each: 1,575 psi opening pressure)		3.720	
		4-1/2" 11.60# J-55 LTC LINER	4 500"	4 000	42.67
		JOINTS: 1	4 500"	4 000	6 04
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	5 750"	3.750	5 25
3873.57'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer			
		PN: 104485-000001 SN: EA3024454 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l			
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4.000	3 04
		4-1/2" 11.60# J-55 LTC LINER	4 500"	4.000	85.01
		JOINTS: 2	5.630"	3.125	2 65
Stage 14		Packers Plus 4-1/2" Drillable FracPORT™ with 3.125" Seat for 3.250" High Pressure Ball		3.720	
3966.87'		PN: 108481-000018 SN: EM0043430 (5 shear pins at 315 psi each: 1,575 psi opening pressure)	4.500"	4.000	213 29
100.1 bbls		4-1/2" 11.60# J-55 LTC LINER	4.500"	4 000	5 99
		JOINTS: 5	5.750"	3.750	5 25
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint			
4188.80'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	4 500"	4 000	3 00
		PN: 104485-000001 SN: EA2010489 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4.500"	4.000	255.82
		3' x 4-1/2" 11 60# L-80 LTC Pup Joint	5.630"	3.000	2 65
		4-1/2" 11.60# J-55 LTC LINER		3.720	
Stage 13		Packers Plus 4-1/2" Drillable FracPORT™ with 3.000" Seat for 3.125" High Pressure Ball	4.500"	4.000	84.53
4452.87'		PN: 108481-000017 SN: EM0040530 (5 shear pins at 315 psi each: 1,575 psi opening pressure)	4.500"	4.000	6 02
107.6 bbls		4-1/2" 11.60# J-55 LTC LINER	5 750"	3.750	5 25
		JOINTS: 2			
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4.500"	4 000	3 05
4546.07'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	4.500"	4.000	84 64
		PN: 104485-000001 SN: EA3024455 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	5.630"	2.875	2 65
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint		3.720	
		4-1/2" 11.60# J-55 LTC LINER	4 500"	4 000	85 32
Stage 12		Packers Plus 4-1/2" Drillable FracPORT™ with 2.875" Seat for 3.000" High Pressure Ball	4 500"	4.000	6 01
4639.01'		PN: 108481-000016 SN: EM0043421 (5 shear pins at 315 psi each: 1,575 psi opening pressure)	5.750"	3.750	5 25
110.5 bbls		4-1/2" 11.60# J-55 LTC LINER			
		JOINTS: 2	4.500"	4 000	3 04
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4.500"	4.000	84 57
4732.99'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5.630"	2.750	2 65
		PN: 104485-000001 SN: EA2010438 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l		3.720	
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4.500"	4 000	42 68
		4-1/2" 11.60# J-55 LTC LINER	4.500"	4 000	6 00
Stage 11		Packers Plus 4-1/2" Drillable FracPORT™ with 2.750" Seat for 2.875" High Pressure Ball	5 750"	3.750	5 25
4825.85'		PN: 108481-000015 SN: EM0040500 (5 shear pins at 315 psi each: 1,575 psi opening pressure)			
113.4 bbls		4-1/2" 11.60# J-55 LTC LINER	4.500"	4 000	3 03
		JOINTS: 1	4.500"	4.000	85 34
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	5.630"	2.625	2 65
4877.18'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer		3.720	
		PN: 104485-000001 SN: EA3019433 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4.500"	4 000	42 68
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4.500"	4 000	6 00
		4-1/2" 11.60# J-55 LTC LINER	5 750"	3.750	5 25
Stage 10		Packers Plus 4-1/2" Drillable FracPORT™ with 2.625" Seat for 2.750" High Pressure Ball			
4970.80'		PN: 108481-000014 SN: EM0054925 (5 shear pins at 315 psi each: 1,575 psi opening pressure)	4.500"	4 000	3 03
115.6 bbls		4-1/2" 11.60# J-55 LTC LINER	4.500"	4.000	85 34
		JOINTS: 2	5.630"	2.625	2 65
		6' x 4-1/2" 11.60# L-80 LTC Pup Joint		3.720	
5064.85'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	4.500"	4 000	85 37
		PN: 104485-000001 SN: EA3019436 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4.500"	4.000	6 03
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	5 750"	3.750	5 25
		4-1/2" 11.60# J-55 LTC LINER			
Stage 9		Packers Plus 4-1/2" Drillable FracPORT™ with 2.500" Seat for 2.625" High Pressure Ball	4.500"	4.000	85 36
5158.49'		PN: 108481-000013 SN: EM0052931 (5 shear pins at 315 psi each: 1,575 psi opening pressure)	5.630"	2.500	2 65
118.5 bbls		4-1/2" 11.60# J-55 LTC LINER		3.720	
		JOINTS: 2	4.500"	4.000	84 36
		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4 000	6 02
5251.52'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	5 750"	3.750	5 25
		PN: 104485-000001 SN: EA2010479 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l			
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4.500"	4.000	3 04
		4-1/2" 11.60# J-55 LTC LINER	4.500"	4.000	84 49
Stage 8		Packers Plus 4-1/2" Drillable FracPORT™ with 2.375" Seat for 2.500" High Pressure Ball	5.630"	2.375	2 65
5344.30'		PN: 108481-000012 SN: EM0054921 (5 shear pins at 315 psi each: 1,575 psi opening pressure)		3.720	
121.4 bbls		4-1/2" 11.60# J-55 LTC LINER	4.500"	4.000	254 41
		JOINTS: 6			
Service Center Midland, TX		Telephone 432-563-8024	Contact Scott Mabry		
			Telephone Chad Williams 405-255-3223		



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outside Mewbourne Oil Company

Completion
Final

Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 24-May-12	
Well Name Long Draw 9 AP Fed Com #1H		Type of Installation 18-Stage 4 1/2" StackFRAC®HD		Location Eddy County, NM	
Depth	Drawing	Description	OD(in)	ID(in)	Length
Page 3 of 3					
REV_			4 500"	4.000	6 03
5607.39'		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	5 750"	3.750	5.25
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 SN: EA2010478 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l			
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4.000	3 03
		4-1/2" 11.60# J-55 LTC LINER	4.500"	4.000	297.93
		JOINTS: 7	5 630"	2.250	2 65
Stage 7		Packers Plus 4-1/2" Drillable FracPORT™ with 2.250" Seat for 2.375" High Pressure Ball			
5913.60'		PN: 104481-000011 SN: EM0045706 (5 shear pins at 315 psi each: 1,575 psi opening pressure)	4.500"	4.000	85.28
130.2 bbls		4-1/2" 11.60# J-55 LTC LINER	4.500"	4 000	6 04
		JOINTS: 2	5 750"	3.750	5.25
6007.57'		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4.500"	4.000	3.05
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 SN: EA3019439 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4.500"	4.000	85.37
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	5.630"	2.125	2 65
		4-1/2" 11.60# J-55 LTC LINER	3.720		
		JOINTS: 2	4.500"	4.000	168.56
Stage 6		Packers Plus 4-1/2" Drillable FracPORT™ with 2.125" Seat for 2.250" High Pressure Ball	4 500"	4.000	6.03
6101.24'		PN: 108481-000010 SN: EM0054910 (5 shear pins at 315 psi each: 1,575 psi opening pressure)	4 500"	4.000	5.25
133.1 bbls		4-1/2" 11.60# J-55 LTC LINER	5 750"	3.875	
		JOINTS: 4	4 500"	4.000	3.02
6278.48'		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4.000	213.41
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 SN: EA3019438 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	5 630"	2.000	2 65
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	3.720		
		4-1/2" 11.60# J-55 LTC LINER	4.500"	4.000	168.48
		JOINTS: 5	4 500"	4.000	6.04
Stage 5		Packers Plus 4-1/2" Drillable FracPORT™ with 2.000" Seat for 2.125" High Pressure Ball	5 750"	3.750	5 25
6500.16'		PN: 108481-000009 SN: EM0046406 (5 shear pins at 315 psi each: 1,575 psi opening pressure)	4 500"	4.000	3.02
139.3 bbls		4-1/2" 11.60# J-55 LTC LINER	4.500"	4.000	213.41
		JOINTS: 4	5 630"	2.000	2 65
6677.33'		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	3.720		
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 SN: EA3019435 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4.500"	4.000	168.48
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4.000	6.04
		4-1/2" 11.60# J-55 LTC LINER	5 750"	3.750	5 25
		JOINTS: 5	4 500"	4.000	3.04
Stage 4		Packers Plus 4-1/2" Drillable FracPORT™ with 1.875" Seat for 2.000" High Pressure Ball	4.500"	4.000	213 27
6898.89'		PN: 108481-000008 SN: EM0043165 (5 shear pins at 315 psi each: 1,575 psi opening pressure)	5.630"	1.875	2 65
145.5 bbls		4-1/2" 11.60# J-55 LTC LINER	3.720		
		JOINTS: 2	4.500"	4.000	85.20
6992.74'		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4.500"	4.000	6 00
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 SN: EA3019434 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	5.750"	3.750	5 25
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4.500"	4 000	3 00
		4-1/2" 11.60# J-55 LTC LINER	4.500"	4.000	85 11
		JOINTS: 2	5.630"	1.750	2 65
Stage 3		Packers Plus 4-1/2" Drillable FracPORT™ with 1.750" Seat for 1.875" High Pressure Ball			
7086.10'		PN: 108481-000007 EA: EM0057669 (5 shear pins at 315 psi each: 1,575 psi opening pressure)	3.720		
148.4 bbls		4-1/2" 11.60# J-55 LTC LINER	4.500"	4.000	127.11
		JOINTS: 3	4.500"	4.000	6 05
7221.91'		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	5 750"	3.750	5.25
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 SN: EA3024457 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4.500"	4.000	3.08
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4.500"	4.000	84.59
		4-1/2" 11.60# J-55 LTC LINER	5.630"	1.625	2 65
		JOINTS: 2	3.720		
Stage 2		Packers Plus 4-1/2" Drillable FracPORT™ with 1.625" Seat for 1.750" High Pressure Ball	4.500"	4.000	84.89
7314.83'		PN: 108481-000006 SN: EM0034468 (5 shear pins at 315 psi each: 1,575 psi opening pressure)	4 500"	4.000	6.03
151.9 bbls		4-1/2" 11.60# J-55 LTC LINER	5 750"	3.750	5.25
		JOINTS: 2	4.500"	4.000	3.02
7408.40'		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4.500"	4.000	85.33
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 SN: EA2010480 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l			
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4.500"	4 000	3 02
		4-1/2" 11.60# J-55 LTC LINER	4.500"	4.000	85.33
		JOINTS: 2			
Stage 1		Customer 4-1/2" Pump Off Sub (Pinned above 4000 PSI)	4.500"	1 000	3.00
7502.00'					
154.8 bbls					
EOT					
7505' MD					
TMD					
7530' MD					
TVD					
2552'					
Service Center Midland, TX		Telephone 432-563-8024	Contact Scott Mabry	Telephone Chad Williams 405-255-3223	

OPERATOR MEWBOURNE OIL COMPANY
WELL/LEASE LONG DRAW 9 AP FED COM 1H
COUNTY EDDY

101-0106

STATE OF NEW MEXICO
DEVIATION REPORT

390	1.14
885	1.41
1,140	3.75
1,552	2.00

STATE OF TEXAS

COUNTY OF MIDLAND

BY: Kyle Hollingsworth

Received

The foregoing instrument was acknowledged before me on 6/4/12, by Kyle Hollingsworth on behalf of Patterson-UTI Drilling Company LLC.

Mewbourne Oil Company
Hobbs

Shawna K. Sims
Notary Public for Midland County, Texas
My Commission Expires:

