

OPERATOR MEWBOURNE OIL COMPANY
WELL/LEASE LONG DRAW 4 MP 1H
COUNTY EDDY

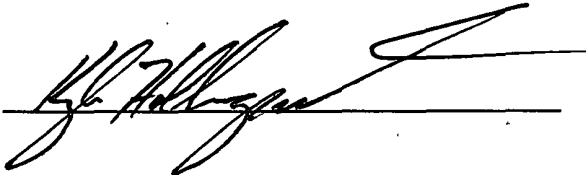
STATE OF NEW MEXICO
DEVIATION REPORT

30-015-38473

252	0.25
824	0.50
1,265	2.12

STATE OF TEXAS

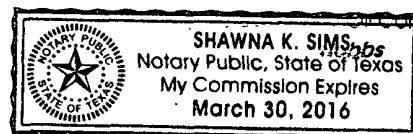
COUNTY OF MIDLAND

BY: 

The foregoing instrument was acknowledged before me on _____, by received
Kyle Hollingsworth on behalf of Patterson-UTI Drilling Company LLC.

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

MAY 15 2012





Company: Mewbourne Oil Company

Lease/Well: Long Draw 4 MP /No. 001H

Location: S4, T20s, R25e

Rig Name: Patterson #101

State/County: New Mexico/Eddy

Latitude: 32.60

GRID North is 0.09 Degrees West of True North

VS-Azi: 0.00 Degrees



Depth Reference : RKB= 18.6 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: long draw 4 mp #1h_ed.ut

Minimum Curvature Method

Report Date/Time: 4/30/2012 / 12:03

Vaughn Energy Services

Gardendale, Texas

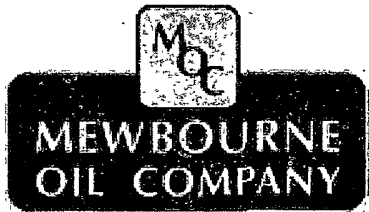
432-563-5444

Surveyor: Seth Hardin

Long Draw 4 MP No. 001H / API# 30-015-38473

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	0.41	91.70	100.00	-0.01	0.36	-0.01	0.36	91.70	0.41
200.00	0.66	92.87	199.99	-0.05	1.29	-0.05	1.29	92.23	0.26
300.00	0.57	94.15	299.99	-0.12	2.37	-0.12	2.37	92.78	0.10
400.00	0.60	130.88	399.98	-0.50	3.26	-0.50	3.30	98.66	0.37
500.00	0.56	132.97	499.98	-1.18	4.02	-1.18	4.18	106.32	0.05
600.00	0.67	133.24	599.97	-1.91	4.80	-1.91	5.17	111.70	0.11
700.00	0.45	137.72	699.97	-2.60	5.49	-2.60	6.07	115.35	0.22
800.00	0.51	141.47	799.96	-3.24	6.03	-3.24	6.84	118.24	0.07
900.00	0.46	127.79	899.96	-3.83	6.62	-3.83	7.65	120.04	0.12
1000.00	1.25	115.51	999.95	-4.54	7.92	-4.54	9.13	119.84	0.81
1100.00	1.70	113.53	1099.92	-5.60	10.26	-5.60	11.69	118.64	0.45
1200.00	2.06	115.87	1199.86	-6.98	13.23	-6.98	14.96	117.80	0.37
1300.00	1.68	115.33	1299.81	-8.39	16.17	-8.39	18.22	117.41	0.38
1400.00	2.21	121.12	1399.75	-10.01	19.15	-10.01	21.61	117.60	0.57
1500.00	1.92	127.50	1499.69	-12.03	22.13	-12.03	25.18	118.53	0.37
1600.00	2.23	129.98	1599.62	-14.30	24.95	-14.30	28.75	119.82	0.33
1700.00	1.85	121.18	1699.56	-16.39	27.82	-16.39	32.29	120.50	0.49
1800.00	2.13	129.43	1799.50	-18.40	30.64	-18.40	35.74	120.99	0.40

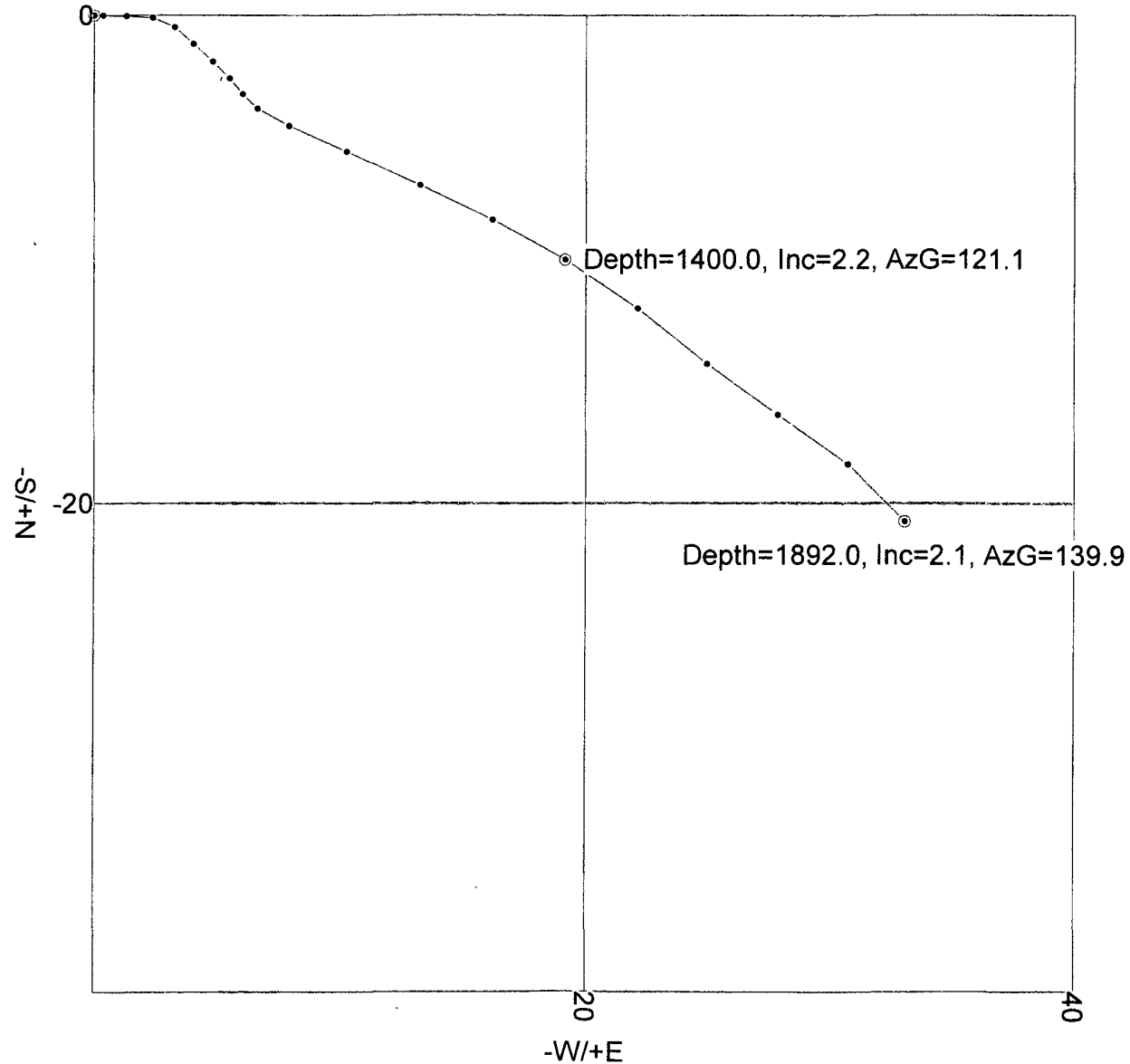
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1892.00	2.06	139.89	1891.44	-20.75	33.02	-20.75	39.00	122.14	0.42



Vaughn Energy Services
Gardendale, Texas
432-563-5444
Surveyor: Seth Hardin
Long Draw 4 MP No. 001H / API# 30-015-38473



Depth=0.0, Inc=0.0, AzG=0.0



VES Survey Date: 04/24/2012

Actual Wellpath Report

No.1H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No.1H SHL
Area	Eddy County, NM	Well	No.1H
Field	(Long) Sec 4, T20S, R25E	Wellbore	No.1H AWB
Facility	Long Draw 4 MP No.1H		

REPORT SETUP INFORMATION			
Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect@ 3.0.0
North Reference	Grid	User	Gentbry
Scale	0.999912	Report Generated	5/3/2012 at 10:06:31 AM
Convergence at slot	0.09° West	Database/Source file	WA Midland/No.1H_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	449400.28	580710.70	32°35'46.938"N	104°29'51.480"W
Facility Reference Pt			449400.28	580710.70	32°35'46.938"N	104°29'51.480"W
Field Reference Pt			452952.66	581878.03	32°35'58.542"N	104°29'09.974"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Patterson 101 (KB) to Facility Vertical Datum	19.00ft
Horizontal Reference Pt	Slot	Patterson 101 (KB) to Mean Sea Level	3509.00ft
Vertical Reference Pt	Patterson 101 (KB)	Patterson 101 (KB) to Mud Line at Slot (No.1H SHL)	19.00ft
MD Reference Pt	Patterson 101 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	90.61°

Actual Wellpath Report

No.1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No.1H SHL
Area	Eddy County, NM	Well	No.1H
Field	(Long) Sec 4, T20S, R25E	Wellbore	No.1H AWP
Facility	Long Draw 4 MP No.1H		

WELLPATH DATA (123 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	91.700	0.00	0.00	0.00	0.00	449400.28	580710.70	32°35'46.938"N	104°29'51.480"W	0.00	
100.00	0.410	91.700	100.00	0.36	-0.01	0.36	449400.64	580710.69	32°35'46.938"N	104°29'51.475"W	0.41	
200.00	0.660	92.870	199.99	1.29	-0.05	1.29	449401.57	580710.65	32°35'46.937"N	104°29'51.465"W	0.25	
300.00	0.570	94.150	299.99	2.36	-0.11	2.36	449402.64	580710.59	32°35'46.937"N	104°29'51.452"W	0.09	
400.00	0.600	130.880	399.98	3.26	-0.49	3.25	449403.54	580710.21	32°35'46.933"N	104°29'51.442"W	0.37	
500.00	0.560	132.970	499.98	4.02	-1.17	4.01	449404.29	580709.53	32°35'46.926"N	104°29'51.433"W	0.05	
600.00	0.670	133.240	599.97	4.81	-1.90	4.79	449405.07	580708.80	32°35'46.919"N	104°29'51.424"W	0.11	
700.00	0.450	137.720	699.97	5.51	-2.59	5.48	449405.76	580708.11	32°35'46.912"N	104°29'51.416"W	0.22	
800.00	0.510	141.470	799.96	6.06	-3.23	6.02	449406.30	580707.47	32°35'46.906"N	104°29'51.409"W	0.07	
900.00	0.460	127.790	899.96	6.66	-3.83	6.62	449406.90	580706.87	32°35'46.900"N	104°29'51.402"W	0.13	
1000.00	1.250	115.510	999.95	7.97	-4.54	7.92	449408.20	580706.16	32°35'46.893"N	104°29'51.387"W	0.81	
1100.00	1.700	113.530	1099.92	10.32	-5.60	10.26	449410.54	580705.10	32°35'46.883"N	104°29'51.360"W	0.45	
1200.00	2.060	115.870	1199.86	13.31	-6.98	13.24	449413.52	580703.72	32°35'46.869"N	104°29'51.325"W	0.37	
1300.00	1.680	115.330	1299.81	16.27	-8.39	16.18	449416.46	580702.31	32°35'46.855"N	104°29'51.290"W	0.38	
1400.00	2.210	121.120	1399.75	19.26	-10.02	19.16	449419.44	580700.69	32°35'46.839"N	104°29'51.256"W	0.56	
1500.00	1.920	127.500	1499.69	22.26	-12.03	22.14	449422.42	580698.67	32°35'46.819"N	104°29'51.221"W	0.37	
1600.00	2.230	129.980	1599.62	25.11	-14.30	24.96	449425.24	580696.40	32°35'46.797"N	104°29'51.188"W	0.32	
1700.00	1.850	121.180	1699.56	28.00	-16.39	27.83	449428.11	580694.31	32°35'46.776"N	104°29'51.154"W	0.49	
1800.00	2.130	129.430	1799.50	30.84	-18.40	30.65	449430.92	580692.30	32°35'46.756"N	104°29'51.121"W	0.40	
1892.00	2.060	139.890	1891.44	33.25	-20.75	33.03	449433.31	580689.95	32°35'46.733"N	104°29'51.093"W	0.42	
1958.00	1.900	131.900	1957.40	34.85	-22.39	34.61	449434.89	580688.31	32°35'46.717"N	104°29'51.075"W	0.48	
1988.00	2.000	126.000	1987.38	35.65	-23.03	35.40	449435.68	580687.67	32°35'46.710"N	104°29'51.065"W	0.75	
2020.00	3.800	113.000	2019.34	37.08	-23.77	36.83	449437.11	580686.93	32°35'46.703"N	104°29'51.049"W	5.95	
2051.00	7.900	105.800	2050.17	40.09	-24.76	39.83	449440.11	580685.95	32°35'46.693"N	104°29'51.014"W	13.41	
2082.00	12.800	102.700	2080.66	45.51	-26.09	45.23	449445.51	580684.61	32°35'46.680"N	104°29'50.950"W	15.90	
2114.00	17.800	99.100	2111.51	53.82	-27.65	53.52	449453.80	580683.06	32°35'46.665"N	104°29'50.854"W	15.90	
2145.00	21.300	96.900	2140.72	64.10	-29.07	63.80	449464.07	580681.63	32°35'46.651"N	104°29'50.733"W	11.54	
2176.00	24.200	95.900	2169.31	76.03	-30.40	75.71	449475.98	580680.30	32°35'46.638"N	104°29'50.594"W	9.44	
2207.00	27.500	94.300	2197.20	89.50	-31.59	89.17	449489.44	580679.11	32°35'46.627"N	104°29'50.437"W	10.88	
2238.00	31.200	92.500	2224.22	104.68	-32.48	104.33	449504.61	580678.22	32°35'46.618"N	104°29'50.260"W	12.27	
2269.00	35.000	90.900	2250.18	121.60	-32.97	121.25	449521.52	580677.73	32°35'46.613"N	104°29'50.062"W	12.58	
2300.00	38.100	89.600	2275.08	140.05	-33.04	139.71	449539.98	580677.66	32°35'46.613"N	104°29'49.846"W	10.31	
2332.00	40.900	89.400	2299.77	160.40	-32.86	160.06	449560.33	580677.84	32°35'46.615"N	104°29'49.608"W	8.76	
2363.00	43.000	89.700	2322.83	181.12	-32.70	180.78	449581.05	580678.00	32°35'46.617"N	104°29'49.366"W	6.80	
2394.00	44.700	89.700	2345.18	202.59	-32.59	202.26	449602.52	580678.11	32°35'46.618"N	104°29'49.115"W	5.48	
2426.00	46.600	88.700	2367.55	225.47	-32.27	225.14	449625.40	580678.44	32°35'46.622"N	104°29'48.848"W	6.34	
2457.00	48.700	87.600	2388.43	248.35	-31.52	248.03	449648.29	580679.18	32°35'46.630"N	104°29'48.580"W	7.26	
2488.00	51.100	87.700	2408.40	272.03	-30.55	271.72	449671.98	580680.15	32°35'46.640"N	104°29'48.303"W	7.75	
2519.00	54.300	88.600	2427.18	296.67	-29.76	296.37	449696.62	580680.94	32°35'46.648"N	104°29'48.015"W	10.58	
2550.00	57.800	89.800	2444.49	322.37	-29.41	322.07	449722.33	580681.30	32°35'46.652"N	104°29'47.715"W	11.74	
2581.00	60.700	90.600	2460.34	349.01	-29.50	348.71	449748.96	580681.20	32°35'46.651"N	104°29'47.403"W	9.61	
2613.00	65.100	91.000	2474.92	377.49	-29.90	377.19	449777.44	580680.80	32°35'46.648"N	104°29'47.070"W	13.79	
2644.00	69.100	91.500	2486.98	406.04	-30.53	405.73	449805.98	580680.18	32°35'46.642"N	104°29'46.737"W	12.99	
2675.00	71.900	91.700	2497.32	435.25	-31.34	434.94	449835.18	580679.36	32°35'46.634"N	104°29'46.395"W	9.05	
2706.00	75.400	91.500	2506.05	464.99	-32.17	464.67	449864.91	580678.53	32°35'46.627"N	104°29'46.048"W	11.31	

Actual Wellpath Report

No.1H AWP

Page 3 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No.1H SHL
Area	Eddy County, NM	Well	No.1H
Field	(Long) Sec 4, T20S, R25E	Wellbore	No.1H AWB
Facility	Long Draw 4 MP No.1H		

WELLPATH DATA (123 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2738.00	78.900	91.600	2513.16	496.18	-33.02	495.85	449896.09	580677.69	32°35'46.619"N	104°29'45.683"W	10.94	
2769.00	81.400	92.100	2518.47	526.71	-34.00	526.38	449926.61	580676.70	32°35'46.609"N	104°29'45.327"W	8.22	
2800.00	84.400	90.600	2522.30	557.47	-34.73	557.13	449957.36	580675.98	32°35'46.603"N	104°29'44.967"W	10.80	
2885.00	86.600	87.300	2528.97	642.15	-33.17	641.83	450042.06	580677.53	32°35'46.619"N	104°29'43.977"W	4.66	
2916.00	89.900	87.900	2529.92	673.09	-31.87	672.79	450073.01	580678.83	32°35'46.633"N	104°29'43.615"W	10.82	
2949.00	91.900	87.900	2529.40	706.05	-30.66	705.76	450105.98	580680.04	32°35'46.645"N	104°29'43.230"W	6.06	
2980.00	92.000	87.700	2528.34	736.99	-29.48	736.72	450136.94	580681.23	32°35'46.657"N	104°29'42.868"W	0.72	
3012.00	90.500	88.200	2527.64	768.95	-28.33	768.69	450168.90	580682.37	32°35'46.669"N	104°29'42.494"W	4.94	
3044.00	90.200	88.200	2527.45	800.92	-27.33	800.67	450200.88	580683.38	32°35'46.680"N	104°29'42.121"W	0.94	
3075.00	89.100	88.800	2527.64	831.90	-26.51	831.66	450231.87	580684.19	32°35'46.688"N	104°29'41.758"W	4.04	
3107.00	88.700	88.900	2528.25	863.88	-25.87	863.65	450263.85	580684.83	32°35'46.695"N	104°29'41.385"W	1.29	
3139.00	88.600	88.700	2529.01	895.85	-25.20	895.63	450295.84	580685.50	32°35'46.702"N	104°29'41.011"W	0.70	
3170.00	88.400	88.100	2529.82	926.82	-24.34	926.61	450326.81	580686.37	32°35'46.711"N	104°29'40.649"W	2.04	
3202.00	89.200	89.700	2530.49	958.80	-23.72	958.60	450358.79	580686.98	32°35'46.718"N	104°29'40.275"W	5.59	
3234.00	90.600	89.900	2530.54	990.79	-23.61	990.60	450390.79	580687.09	32°35'46.719"N	104°29'39.901"W	4.42	
3266.00	90.900	89.400	2530.13	1022.78	-23.42	1022.59	450422.78	580687.29	32°35'46.722"N	104°29'39.527"W	1.82	
3298.00	91.000	90.000	2529.59	1054.78	-23.25	1054.59	450454.77	580687.45	32°35'46.724"N	104°29'39.153"W	1.90	
3330.00	91.000	91.300	2529.04	1086.77	-23.61	1086.58	450486.76	580687.09	32°35'46.721"N	104°29'38.779"W	4.06	
3394.00	91.100	91.000	2527.86	1150.76	-24.90	1150.56	450550.73	580685.81	32°35'46.709"N	104°29'38.031"W	0.49	
3457.00	90.100	91.600	2527.20	1213.75	-26.32	1213.54	450613.71	580684.38	32°35'46.696"N	104°29'37.295"W	1.85	
3520.00	89.000	91.900	2527.70	1276.73	-28.25	1276.50	450676.67	580682.46	32°35'46.678"N	104°29'36.559"W	1.81	
3584.00	88.100	92.700	2529.32	1340.68	-30.82	1340.43	450740.59	580679.89	32°35'46.653"N	104°29'35.812"W	1.88	
3648.00	88.400	93.400	2531.27	1404.59	-34.22	1404.31	450804.46	580676.48	32°35'46.620"N	104°29'35.065"W	1.19	
3711.00	89.200	93.100	2532.59	1467.51	-37.79	1467.19	450867.34	580672.91	32°35'46.586"N	104°29'34.330"W	1.36	
3775.00	88.500	90.700	2533.88	1531.48	-39.91	1531.14	450931.28	580670.79	32°35'46.566"N	104°29'33.583"W	3.91	
3838.00	88.200	90.600	2535.69	1594.45	-40.63	1594.11	450994.25	580670.08	32°35'46.560"N	104°29'32.846"W	0.50	
3902.00	89.200	89.400	2537.14	1658.43	-40.63	1658.09	451058.22	580670.08	32°35'46.561"N	104°29'32.099"W	2.44	
3966.00	90.200	88.200	2537.48	1722.40	-39.29	1722.07	451122.20	580671.42	32°35'46.575"N	104°29'31.351"W	2.44	
4030.00	89.800	87.600	2537.48	1786.32	-36.94	1786.03	451186.15	580673.76	32°35'46.599"N	104°29'30.603"W	1.13	
4094.00	89.900	88.500	2537.65	1850.26	-34.76	1849.99	451250.11	580675.94	32°35'46.622"N	104°29'29.856"W	1.41	
4157.00	89.900	90.000	2537.76	1913.24	-33.94	1912.99	451313.10	580676.77	32°35'46.631"N	104°29'29.119"W	2.38	
4221.00	89.000	90.900	2538.37	1977.23	-34.44	1976.98	451377.08	580676.26	32°35'46.627"N	104°29'28.372"W	1.99	
4284.00	88.400	90.800	2539.80	2040.22	-35.38	2039.96	451440.05	580675.33	32°35'46.618"N	104°29'27.635"W	0.97	
4348.00	88.000	89.900	2541.81	2104.18	-35.77	2103.92	451504.01	580674.94	32°35'46.615"N	104°29'26.888"W	1.54	
4412.00	88.700	90.700	2543.65	2168.16	-36.10	2167.89	451567.98	580674.60	32°35'46.613"N	104°29'26.140"W	1.66	
4475.00	90.900	91.100	2543.87	2231.15	-37.09	2230.88	451630.96	580673.61	32°35'46.604"N	104°29'25.404"W	3.55	
4538.00	91.400	90.500	2542.61	2294.14	-37.97	2293.86	451693.94	580672.73	32°35'46.596"N	104°29'24.668"W	1.24	
4602.00	90.000	90.700	2541.83	2358.13	-38.64	2357.85	451757.92	580672.06	32°35'46.591"N	104°29'23.920"W	2.21	
4665.00	89.600	91.600	2542.05	2421.13	-39.90	2420.84	451820.90	580670.80	32°35'46.579"N	104°29'23.183"W	1.56	
4729.00	89.100	91.800	2542.77	2485.11	-41.80	2484.81	451884.86	580668.90	32°35'46.561"N	104°29'22.436"W	0.84	
4792.00	88.600	91.700	2544.04	2548.09	-43.73	2547.76	451947.82	580666.98	32°35'46.543"N	104°29'21.700"W	0.81	
4856.00	89.300	90.400	2545.21	2612.07	-44.90	2611.74	452011.79	580665.81	32°35'46.532"N	104°29'20.952"W	2.31	
4920.00	88.900	90.300	2546.21	2676.06	-45.29	2675.73	452075.77	580665.41	32°35'46.529"N	104°29'20.204"W	0.64	
4983.00	90.100	90.600	2546.76	2739.06	-45.78	2738.73	452138.76	580664.92	32°35'46.525"N	104°29'19.468"W	1.96	
5047.00	89.900	90.400	2546.76	2803.06	-46.34	2802.72	452202.75	580664.36	32°35'46.521"N	104°29'18.720"W	0.44	

Actual Wellpath Report

No.1H AWP

Page 4 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No.1H SHL
Area	Eddy County, NM	Well	No.1H
Field	(Long) Sec 4, T20S, R25E	Wellbore	No.1H AWB
Facility	Long Draw 4 MP No.1H		

WELLPATH DATA (123 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5110.00	89.700	90.100	2546.98	2866.06	-46.62	2865.72	452265.75	580664.09	32°35'46.519"N	104°29'17.983"W	0.57	
5174.00	88.600	89.800	2547.93	2930.04	-46.56	2929.71	452329.73	580664.14	32°35'46.521"N	104°29'17.235"W	1.78	
5237.00	88.300	89.700	2549.64	2993.01	-46.29	2992.69	452392.70	580664.42	32°35'46.524"N	104°29'16.499"W	0.50	
5301.00	89.800	90.200	2550.70	3057.00	-46.23	3056.68	452456.69	580664.47	32°35'46.526"N	104°29'15.751"W	2.47	
5361.00	90.100	90.200	2550.75	3117.00	-46.44	3116.68	452516.68	580664.26	32°35'46.524"N	104°29'15.050"W	0.50	
5423.00	89.600	90.400	2550.91	3179.00	-46.77	3178.68	452578.67	580663.94	32°35'46.522"N	104°29'14.326"W	0.87	
5485.00	89.600	90.200	2551.35	3240.99	-47.09	3240.68	452640.67	580663.61	32°35'46.520"N	104°29'13.601"W	0.32	
5546.00	89.400	90.200	2551.88	3301.99	-47.30	3301.67	452701.66	580663.40	32°35'46.519"N	104°29'12.888"W	0.33	
5607.00	89.500	90.700	2552.46	3362.99	-47.78	3362.67	452762.65	580662.92	32°35'46.515"N	104°29'12.175"W	0.84	
5667.00	89.100	90.300	2553.20	3422.98	-48.31	3422.66	452822.63	580662.40	32°35'46.510"N	104°29'11.474"W	0.94	
5728.00	88.800	90.200	2554.31	3483.97	-48.57	3483.65	452883.62	580662.13	32°35'46.509"N	104°29'10.761"W	0.52	
5788.00	90.000	89.800	2554.94	3543.96	-48.57	3543.65	452943.61	580662.13	32°35'46.509"N	104°29'10.060"W	2.11	
5848.00	90.600	89.800	2554.63	3603.95	-48.36	3603.64	453003.60	580662.34	32°35'46.512"N	104°29'09.358"W	1.00	
5910.00	89.000	89.700	2554.85	3665.95	-48.09	3665.64	453065.59	580662.61	32°35'46.516"N	104°29'08.634"W	2.59	
5974.00	87.800	88.400	2556.63	3729.89	-47.03	3729.60	453129.55	580663.67	32°35'46.527"N	104°29'07.886"W	2.76	
6038.00	87.900	89.200	2559.03	3793.82	-45.69	3793.54	453193.49	580665.01	32°35'46.541"N	104°29'07.139"W	1.26	
6101.00	89.500	90.000	2560.46	3856.79	-45.25	3856.52	453256.46	580665.45	32°35'46.547"N	104°29'06.403"W	2.84	
6165.00	89.000	89.800	2561.30	3920.78	-45.14	3920.52	453320.45	580665.56	32°35'46.549"N	104°29'05.655"W	0.84	
6228.00	88.900	89.200	2562.45	3983.75	-44.59	3983.51	453383.43	580666.11	32°35'46.555"N	104°29'04.918"W	0.97	
6292.00	89.100	89.500	2563.57	4047.73	-43.87	4047.49	453447.41	580666.84	32°35'46.563"N	104°29'04.171"W	0.56	
6355.00	88.700	89.600	2564.78	4110.71	-43.37	4110.48	453510.39	580667.33	32°35'46.569"N	104°29'03.434"W	0.65	
6417.00	89.800	89.400	2565.59	4172.69	-42.83	4172.47	453572.38	580667.87	32°35'46.575"N	104°29'02.710"W	1.80	
6481.00	89.700	89.400	2565.87	4236.67	-42.16	4236.47	453636.37	580668.55	32°35'46.583"N	104°29'01.962"W	0.16	
6544.00	88.500	88.500	2566.86	4299.64	-41.01	4299.45	453699.34	580669.70	32°35'46.595"N	104°29'01.226"W	2.38	
6608.00	87.800	89.000	2568.93	4363.57	-39.61	4363.40	453763.29	580671.09	32°35'46.610"N	104°29'00.478"W	1.34	
6671.00	89.600	90.200	2570.36	4426.54	-39.17	4426.37	453826.26	580671.53	32°35'46.615"N	104°28'59.742"W	3.43	
6735.00	89.800	90.700	2570.69	4490.54	-39.67	4490.37	453890.25	580671.03	32°35'46.611"N	104°28'58.994"W	0.84	
6799.00	88.700	90.400	2571.53	4554.53	-40.29	4554.36	453954.23	580670.42	32°35'46.606"N	104°28'58.246"W	1.78	
6863.00	89.200	89.700	2572.70	4618.52	-40.34	4618.35	454018.22	580670.36	32°35'46.606"N	104°28'57.498"W	1.34	
6926.00	90.200	89.300	2573.03	4681.50	-39.79	4681.35	454081.21	580670.91	32°35'46.612"N	104°28'56.762"W	1.71	
6990.00	90.800	88.300	2572.47	4745.47	-38.45	4745.33	454145.18	580672.25	32°35'46.626"N	104°28'56.014"W	1.82	
7053.00	90.500	88.200	2571.76	4808.41	-36.53	4808.30	454208.14	580674.17	32°35'46.646"N	104°28'55.278"W	0.50	
7105.00	90.000	88.300	2571.53	4860.37	-34.94	4860.27	454260.11	580675.76	32°35'46.663"N	104°28'54.671"W	0.98	Proj. to Bit

Actual Wellpath Report

No.1H AWP

Page 5 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No.1H SHL
Area	Eddy County, NM	Well	No.1H
Field	(Long) Sec 4, T20S, R25E	Wellbore	No.1H AWB
Facility	Long Draw 4 MP No.1H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Long Draw 4 MP No.1H (Rev-0)		2573.00	-52.06	4869.47	454269.31	580658.65	32°35'46.494"N	104°28'54.563"W	point

WELLPATH COMPOSITION - Ref Wellbore: No.1H AWB Ref Wellpath: No.1H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	1892.00	Generic gyro - northseeking (Standard)	VES Gyro <100-1892>	No.1H AWB
1892.00	7053.00	NaviTrak (Standard)	BHI / Navitrak MWD 8-3/4" - <1958-7053>	No.1H AWB
7053.00	7105.00	Blind Drilling (std)	Projection to bit	No.1H AWB



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Completion
Final

Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 24-Apr-12	
Well Name Long Draw 4 MP 1H		Type of Installation 19-Stage 4-1/2" StackFRAC® HD		Location Eddy County, NM	
Depth	Drawing	Description	OD(in)	ID(in)	Length
REV_					Page 1 of 3
TD 7105'					
TVD 2571'					
KOP 1958'					
TOL 2640.61'		***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	5.875"	4.750	2 52
		PN: 108425-000004 (Shear Pins: 2 @ 482 plus 1 @ 241 : 1,205 psi setting pressure)		3.875	
		SF Bottom Guide	5.850"	3.850	0 94
					3 09
7" Shoe 2858'		7" 26# L-80 LT&C Casing			
		4-1/2" 11.60# L-80 LTC LINER	4 500"	4.000	255 5
		JOINTS: 6			
Stage 19 2902.66'		Packers Plus 4-1/2" Drillable FracPORT™ with 3.625" Seat for 3.750" High Pressure Ball	5 630"	3.635	2.65
		PN: 121332-000024 (5 shear pins at 314 psi each: 1,570 psi opening pressure) S# EA1024437		3.840	
		4-1/2" 11.60# J-55 LTC LINER	4 500"	4 000	85 02
		JOINTS: 2	4 500"	4 000	6 07
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	5 750"	3.750	5 25
2996.40'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	4 500"	4 000	3 03
		PN: 104485-000001 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4.500"	4.000	126 95
		3' x 4-1/2" 11 60# L-80 LTC Pup Joint	5 630"	3.500	2 65
		S# EA3019455		3.840	
Stage 18 3131.63'		4-1/2" 11.60# J-55 LTC LINER	4.500"	4.000	85 31
		JOINTS: 3	4.500"	4.000	6 1
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	5.750"	3.750	5 25
3225.69'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	4 500"	4 000	3 04
		PN: 104485-000001 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4 500"	4 000	128 01
		3' x 4-1/2" 11 60# L-80 LTC Pup Joint	5 630"	3.375	2 65
		S# EA3019445		3.720	
Stage 17 3361.99'		4-1/2" 11.60# J-55 LTC LINER	4 500"	4 000	85 21
		JOINTS: 2	4 500"	4 000	6 06
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	5 750"	3.750	5 25
3455.91'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	4 500"	4 000	3 07
		PN: 104485-000001 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4 500"	4 000	127 87
		3' x 4-1/2" 11 60# L-80 LTC Pup Joint	5 630"	3.250	2 65
		S# EA3019452		3.720	
Stage 16 3592.10'		4-1/2" 11.60# J-55 LTC LINER	4 500"	4 000	85 2
		JOINTS: 2	4.500"	4.000	6.05
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	5 750"	3.750	5 25
3686.00'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer	4 500"	4 000	3 05
		PN: 104485-000001 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4 500"	4.000	127.06
		3' x 4-1/2" 11 60# L-80 LTC Pup Joint			
		S# EA3019413			
		4-1/2" 11.60# J-55 LTC LINER			
		JOINTS: 3			
Service Center Midland, TX		Telephone 432-563-8024	Contact Scott Mabry		
		Telephone	Chad Williams 405-255-3223		



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Completion
Final

Prepared for		Company	Date		
Mr. Mickey Young		Mewbourne Oil Company	24-Apr-12		
Well Name		Type of Installation	Location		
Long Draw 4 MP 1H		19-Stage 4-1/2" StackFRAC® HD	Eddy County, NM		
Depth	Drawing	Description	OD(in)	ID(in)	Length
Page 2 of 3					
REV_					
Stage 15 3821.36'		Packers Plus 4-1/2" Drillable FracPORT™ with 3.125" Seat for 3.250" High Pressure Ball PN: 108481-000018 (5 shear pins at 315 psi each: 1,575 psi opening pressure) S# EM0020718 4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	5 630"	3.125	2 65
		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4 000	125 47
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4 500"	4 000	6
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint S# EA3019404	5 750"	3.750	5 25
3955.48'		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4.000	3 08
Stage 14 4091.60'		Packers Plus 4-1/2" Drillable FracPORT™ with 3.000" Seat for 3.125" High Pressure Ball PN: 108481-000017 (5 shear pins at 315 psi each: 1,575 psi opening pressure) S# EM0040795 4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4.000	127 79
		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	5 630"	3.000	2 65
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4 500"	4.000	85 19
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint S# EA3019407	4 500"	4.000	6 03
4185.47'		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	5 750"	3.750	5 25
Stage 13 4321.69'		Packers Plus 4-1/2" Drillable FracPORT™ with 2.875" Seat for 3.000" High Pressure Ball PN: 108481-000016 (5 shear pins at 315 psi each: 1,575 psi opening pressure) S# EM0040791 4-1/2" 11.60# J-55 LTC LINER JOINTS: 4	4 500"	4.000	3 05
		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4.000	127 92
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (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 S# EA3019405	4 500"	4.000	170.27
4500.64'		4-1/2" 11.60# J-55 LTC LINER JOINTS: 4	4 500"	4.000	6 03
Stage 12 4677.82'		Packers Plus 4-1/2" Drillable FracPORT™ with 2.750" Seat for 2.875" High Pressure Ball PN: 108481-000015 (5 shear pins at 315 psi each: 1,575 psi opening pressure) S# EM0052937 4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	5 750"	3.750	5 25
		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4.000	85 17
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (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 S# EA3019406	5 750"	3.750	5 25
4771.67'		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4.000	3 05
Stage 11 4865.23'		Packers Plus 4-1/2" Drillable FracPORT™ with 2.625" Seat for 2.750" High Pressure Ball PN: 108481-000014 (5 shear pins at 315 psi each: 1,575 psi opening pressure) S# EM0043409 4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4.000	85 26
		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	5 630"	2.625	2 65
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4 500"	4.000	85 18
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint S# EA3019412	4 500"	4.000	6 02
4959.08'		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	5 750"	3.750	5 25
Stage 10 5052.58'		Packers Plus 4-1/2" Drillable FracPORT™ with 2.500" Seat for 2.625" High Pressure Ball PN: 108481-000013 (5 shear pins at 315 psi each: 1,575 psi opening pressure) S# EM0043176 4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4.000	3 05
		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4.000	85 2
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	5 630"	2.500	2 65
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint S# EA3019414	4 500"	4.000	127 85
5189.14'		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4.000	6 06
Stage 9 5282.63'		Packers Plus 4-1/2" Drillable FracPORT™ with 2.375" Seat for 2.500" High Pressure Ball PN: 108481-000012 (5 shear pins at 315 psi each: 1,575 psi opening pressure) S# EM0040516 4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	5 750"	3.750	5 25
		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4.000	85 23
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (6 shear pins at 324 psi each: 1,944 psi setting pressure) L-80 Mat'l	4 500"	4.000	6 02
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint S# EA3019403	5 750"	3.750	5 25
5376.53'		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4.000	3 08
Stage 8 5469.39'		Packers Plus 4-1/2" Drillable FracPORT™ with 2.250" Seat for 2.375" High Pressure Ball PN: 108481-000011 (5 shear pins at 315 psi each: 1,575 psi opening pressure) S# EM0040784 4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4.000	84 53
			5 630"	2.250	2 65
			4 500"	3.720	
			4 500"	4 000	85 3
Service Center		Telephone	Contact		
Midland, TX		432-563-8024	Scott Mabry		
			Telephone		
			Chad Williams 405-255-3223		



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Completion
Final

Prepared for		Company	Date		
Mr. Mickey Young		Mewbourne Oil Company	24-Apr-12		
Well Name		Type of Installation	Location		
Long Draw 4 MP 1H		19-Stage 4-1/2" StackFRAC® HD	Eddy County, NM		
Depth	Drawing	Description	OD(in)	ID(in)	Length
Page 3 of 3					
REV_		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4 000	6 03
5563.37'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (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 S# EA3019408	4 500"	4 000	3 05
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4 000	127 48
Stage 7		Packers Plus 4-1/2" Drillable FracPORT™ with 2.125" Seat for 2.250" High Pressure Ball	5 630"	2.125	2 65
5699.15'		PN: 108481-000009 (5 shear pins at 315 psi each; 1,575 psi opening pressure) S# EM0034480		3.720	
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4.500"	4 000	127 77
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4 000	6 02
5835.59'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (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 S# EA3019410	4 500"	4 000	3 03
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4.000	125 55
Stage 6		Packers Plus 4-1/2" Drillable FracPORT™ with 2.000" Seat for 2.000" High Pressure Ball	5 630"	2.000	2 65
5969.42'		PN: 108481-000009 (5 shear pins at 315 psi each; 1,575 psi opening pressure) S# EM0036932		3.720	
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4 000	127 94
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4 000	6
6106.01'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (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 S# EA3019411	4 500"	4 000	3 05
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	85 33
Stage 5		Packers Plus 4-1/2" Drillable FracPORT™ with 1.875" Seat for 2.000" High Pressure Ball	5 630"	1.875	2 65
6199.64'		PN: 108481-000008 (5 shear pins at 315 psi each; 1,575 psi opening pressure) S# EM0054901		3.720	
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	85 06
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4 000	6 02
6293.37'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (6 shear pins at 324 psi each; 1,944 psi setting pressure) L-80 Mat'l	5 750"	3.875	5 25
		3' x 4-1/2" 11 60# L-80 LTC Pup Joint S# EA3019402	4.500"	4.000	3.05
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4 000	127 03
Stage 4		Packers Plus 4-1/2" Drillable FracPORT™ with 1.750" Seat for 1.875" High Pressure Ball	5 630"	1.750	2 65
6428.70'		PN: 108481-000007 (5 shear pins at 315 psi each; 1,575 psi opening pressure) S# EM0043164		3.720	
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4.000	84 8
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4.000	6 02
6522.17'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (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 S# EA3019401	4 500"	4.000	3 03
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4 000	127 65
Stage 3		Packers Plus 4-1/2" Drillable FracPORT™ with 1.625" Seat for 1.750" High Pressure Ball	5 630"	1.625	2 65
6658.10'		PN: 108481-000006 (5 shear pins at 315 psi each; 1,575 psi opening pressure) S# EM0031545		3.720	
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	85 23
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4 000	5 75
6751.73'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (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 S# EA3019400	4.500"	4 000	3 03
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4.500"	4 000	127 56
Stage 2		Packers Plus 4-1/2" Drillable FracPORT™ with 1.500" Seat for 1.625" High Pressure Ball	5 630"	1.500	2 65
6887.57'		PN: 108481-000005 (5 shear pins at 315 psi each; 1,575 psi opening pressure) S# EM0034464		3.720	
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4.500"	4.000	85 26
		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4.000	6 04
6981.52'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 104485-000001 (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 S# EA3024453	4 500"	4 000	3 05
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	85.18
Stage 1		Customer 4-1/2" Pump Off Sub (Pinned above 4000 PSI)	4.500"	1 000	3
7075.00'					
EOT					
7078					
TMD					
7105'					
Service Center		Telephone	Contact	Telephone	
Midland, TX		432-563-8024	Scott Mabry	Chad Williams 405-255-3223	