

30015 41955



Job Number: M141078
 Company: Mewbourne Oil Company
 Lease/Well: Henry 8 PM Federal Com # 1 H
 Location: Eddy County
 Rig Name: Patterson # 41
 RKB: N/A
 G.L. or M.S.L.: N/A

State/Country: New Mexico / USA
 Declination: 7.38° Corrected to Grid
 Grid: 7.38°
 File name: C:\WINSERVE\DOCS\M141078.SVY
 Date/Time: 11-May-14 / 14:22
 Curve Name: SES MWD SURVEY RAN ON 4-16-14

Stryker Energy Directional Services, LLC.

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 271.35
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
Tie-In Data Provided by VES Gyro Survey									
7170.00	1.20	346.30	7167.70	91.30	-10.10	12.25	91.86	353.69	.00
7223.00	1.10	347.70	7220.69	92.34	-10.34	12.51	92.91	353.61	.20
7252.00	2.40	285.10	7249.68	92.77	-10.99	13.17	93.41	353.25	7.35
7284.00	7.50	270.20	7281.55	92.95	-13.72	15.91	93.96	351.60	16.30
7316.00	13.20	271.60	7313.01	93.06	-19.47	21.65	95.07	348.18	17.83
7347.00	16.20	273.50	7343.00	93.42	-27.32	29.52	97.33	343.70	9.80
7379.00	17.70	275.40	7373.61	94.15	-36.62	38.83	101.02	338.74	5.00
7411.00	19.90	274.90	7403.90	95.07	-46.89	49.12	106.01	333.75	6.89
7443.00	23.30	271.40	7433.65	95.69	-58.65	60.89	112.24	328.50	11.36
7475.00	26.80	269.50	7462.63	95.79	-72.20	74.43	119.95	322.99	11.22
7506.00	29.60	269.30	7489.95	95.63	-86.84	89.07	129.18	317.76	9.04
7538.00	31.50	269.60	7517.51	95.48	-103.11	105.33	140.52	312.80	5.96
7570.00	33.50	269.30	7544.49	95.31	-120.30	122.51	153.48	308.39	6.27
7602.00	37.20	269.30	7570.59	95.08	-138.81	141.01	168.25	304.41	11.56
7634.00	40.40	270.30	7595.53	95.02	-158.86	161.05	185.11	300.89	10.19
7665.00	42.50	272.10	7618.76	95.46	-179.37	181.57	203.19	298.02	7.79
7697.00	44.80	273.00	7641.91	96.44	-201.43	203.65	223.33	295.58	7.44
7730.00	49.00	272.80	7664.46	97.66	-225.49	227.73	245.73	293.42	12.73
7761.00	51.80	272.60	7684.22	98.78	-249.35	251.61	268.20	291.61	9.05
7793.00	54.50	273.20	7703.40	100.08	-274.92	277.20	292.57	290.00	8.57
7825.00	57.40	273.00	7721.32	101.51	-301.39	303.70	318.03	288.61	9.08
7857.00	60.50	272.50	7737.82	102.83	-328.77	331.10	344.48	287.37	9.78
7889.00	63.70	271.20	7752.80	103.74	-357.03	359.38	371.80	286.20	10.62
7920.00	67.00	270.30	7765.72	104.10	-385.20	387.55	399.02	285.12	10.97

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
7952.00	70.70	270.00	7777.27	104.18	-415.04	417.38	427.92	284.09	11.60
7984.00	73.10	270.30	7787.21	104.26	-445.46	447.79	457.49	283.17	7.55
8016.00	74.50	270.30	7796.14	104.42	-476.18	478.51	487.50	282.37	4.37
8048.00	77.30	270.20	7803.93	104.56	-507.22	509.54	517.88	281.65	8.76
8079.00	80.80	270.70	7809.82	104.80	-537.65	539.97	547.76	281.03	11.40
8111.00	84.20	271.60	7813.99	105.43	-569.36	571.69	579.04	280.49	10.98
8145.00	87.40	271.90	7816.48	106.47	-603.25	605.59	612.57	280.01	9.45
8217.00	90.70	271.60	7817.68	108.67	-675.20	677.57	683.88	279.14	4.60
8248.00	90.70	270.50	7817.30	109.23	-706.19	708.57	714.59	278.79	3.55
8312.00	89.30	269.60	7817.30	109.29	-770.19	772.55	777.90	278.08	2.60
8375.00	88.50	269.10	7818.51	108.58	-833.17	835.50	840.21	277.42	1.50
8438.00	89.40	267.90	7819.66	106.93	-896.14	898.41	902.49	276.80	2.38
8501.00	90.10	265.60	7819.94	103.36	-959.03	961.20	964.58	276.15	3.82
8564.00	90.60	265.80	7819.55	98.63	-1021.85	1023.89	1026.60	275.51	.85
8627.00	91.70	270.30	7818.29	96.49	-1084.78	1086.76	1089.07	275.08	7.35
8691.00	93.20	270.70	7815.55	97.05	-1148.72	1150.69	1152.81	274.83	2.43
8752.00	93.80	271.40	7811.83	98.16	-1209.60	1211.57	1213.57	274.64	1.51
8817.00	91.90	271.10	7808.60	99.58	-1274.50	1276.49	1278.38	274.47	2.96
8880.00	91.10	270.30	7806.95	100.35	-1337.47	1339.46	1341.23	274.29	1.80
8975.00	89.50	268.80	7806.45	99.60	-1432.46	1434.41	1435.92	273.98	2.31
9038.00	88.60	267.70	7807.49	97.68	-1495.42	1497.31	1498.61	273.74	2.26
9102.00	90.70	267.90	7807.89	95.22	-1559.37	1561.18	1562.27	273.49	3.30
9165.00	92.00	267.90	7806.40	92.91	-1622.31	1624.05	1624.97	273.28	2.06
9229.00	92.90	271.10	7803.66	92.35	-1686.24	1687.94	1688.76	273.13	5.19
9292.00	92.10	272.80	7800.92	94.50	-1749.14	1750.88	1751.69	273.09	2.98
9356.00	90.70	271.80	7799.35	97.06	-1813.06	1814.85	1815.66	273.06	2.69
9419.00	89.60	270.70	7799.19	98.44	-1876.05	1877.85	1878.63	273.00	2.47
9482.00	91.00	270.90	7798.86	99.32	-1939.04	1940.84	1941.58	272.93	2.24
9546.00	92.20	270.90	7797.07	100.32	-2003.00	2004.81	2005.52	272.87	1.87
9609.00	92.60	270.50	7794.43	101.09	-2065.94	2067.75	2068.42	272.80	.90
9672.00	90.70	269.50	7792.62	101.09	-2128.91	2130.71	2131.31	272.72	3.41
9736.00	89.50	268.40	7792.51	99.92	-2192.90	2194.65	2195.18	272.61	2.54
9799.00	91.00	269.30	7792.23	98.65	-2255.89	2257.58	2258.04	272.50	2.78
9862.00	92.70	270.20	7790.20	98.38	-2318.85	2320.52	2320.94	272.43	3.05
9925.00	91.80	270.50	7787.73	98.76	-2381.80	2383.47	2383.85	272.37	1.51
9989.00	90.80	270.20	7786.27	99.15	-2445.78	2447.44	2447.79	272.32	1.63
10052.00	90.50	269.80	7785.56	99.15	-2508.78	2510.42	2510.74	272.26	.79
10115.00	90.70	270.00	7784.90	99.04	-2571.77	2573.39	2573.68	272.21	.45
10178.00	91.40	270.00	7783.74	99.04	-2634.76	2636.36	2636.62	272.15	1.11
10241.00	90.90	270.20	7782.48	99.15	-2697.75	2699.34	2699.57	272.10	.85
10305.00	90.10	269.60	7781.92	99.04	-2761.75	2763.31	2763.52	272.05	1.56
10368.00	90.70	270.50	7781.48	99.10	-2824.74	2826.29	2826.48	272.01	1.72
10431.00	93.10	270.70	7779.39	99.76	-2887.70	2889.25	2889.42	271.98	3.82
10494.00	93.40	270.90	7775.82	100.64	-2950.59	2952.14	2952.31	271.95	.57
10558.00	92.70	270.90	7772.42	101.64	-3014.49	3016.05	3016.21	271.93	1.09

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
							Distance FT	Direction Deg	
10620.00	92.50	271.20	7769.60	102.77	-3076.42	3077.99	3078.14	271.91	.58
10684.00	90.70	271.20	7767.82	104.11	-3140.38	3141.96	3142.10	271.90	2.81
10747.00	89.90	270.90	7767.49	105.27	-3203.37	3204.96	3205.10	271.88	1.36
10810.00	91.00	270.70	7766.99	106.15	-3266.36	3267.95	3268.08	271.86	1.77
10874.00	90.20	270.40	7766.32	106.76	-3330.35	3331.94	3332.06	271.84	1.34
10937.00	91.50	269.30	7765.39	106.60	-3393.34	3394.91	3395.01	271.80	2.70
11000.00	92.40	268.20	7763.24	105.22	-3456.29	3457.81	3457.89	271.74	2.26
11064.00	93.00	266.50	7760.23	102.27	-3520.15	3521.58	3521.63	271.66	2.81
11127.00	91.90	266.50	7757.54	98.43	-3582.97	3584.29	3584.32	271.57	1.75
11190.00	91.50	267.00	7755.67	94.86	-3645.84	3647.06	3647.07	271.49	1.02
11253.00	91.10	269.10	7754.24	92.71	-3708.78	3709.94	3709.94	271.43	3.39
11317.00	90.50	269.10	7753.34	91.71	-3772.77	3773.88	3773.88	271.39	.94
11380.00	91.20	269.10	7752.41	90.72	-3835.75	3836.83	3836.83	271.35	1.11
11444.00	92.50	270.70	7750.34	90.61	-3899.72	3900.77	3900.77	271.33	3.22
11507.00	93.20	270.20	7747.21	91.10	-3962.64	3963.68	3963.68	271.32	1.36
11570.00	94.00	271.20	7743.25	91.87	-4025.51	4026.55	4026.55	271.31	2.03
11633.00	91.70	271.90	7740.12	93.57	-4088.40	4089.47	4089.47	271.31	3.82
11696.00	89.80	272.10	7739.30	95.77	-4151.35	4152.46	4152.46	271.32	3.03
11760.00	90.90	271.80	7738.91	97.95	-4215.31	4216.45	4216.45	271.33	1.78
11823.00	91.70	271.40	7737.48	99.71	-4278.27	4279.43	4279.44	271.34	1.42
11886.00	91.20	270.90	7735.88	100.97	-4341.24	4342.41	4342.41	271.33	1.12
11949.00	91.00	270.30	7734.67	101.63	-4404.22	4405.40	4405.40	271.32	1.00
12013.00	90.90	270.90	7733.61	102.30	-4468.21	4469.38	4469.38	271.31	.95
12076.00	90.80	270.30	7732.68	102.96	-4531.20	4532.37	4532.37	271.30	.97
12139.00	90.70	270.30	7731.85	103.29	-4594.20	4595.35	4595.36	271.29	.16
12203.00	90.50	270.00	7731.18	103.46	-4658.19	4659.34	4659.34	271.27	.56
12299.00	90.50	270.30	7730.35	103.71	-4754.19	4755.31	4755.32	271.25	.31
Projection to Bit									
12350.00	90.50	270.30	7729.90	103.98	-4805.18	4806.30	4806.31	271.24	.00



COMPANY: Mewbourne Oil Company
 WELL: Henry 8 PM Federal #1H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson #160
 GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.38°

GEODETTIC ZONE: New Mexico East 3001 GL 3273 + 20 @ 3293.0usft (Patterson #160) GROUND ELEVATION: 3273.0						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	575573.30	575383.70	32° 34' 55.628 N	104° 5' 18.951 W	

PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
1	7170.0	1.15	346.28	7167.7	91.3	-10.1	0.00	0.00	12.2	
2	7350.4	1.15	346.28	7348.1	94.8	-10.9	0.00	0.00	13.2	
3	8110.3	91.46	270.11	7823.0	105.3	-500.6	12.00	-76.14	502.9	
4	12421.3	91.46	270.11	7713.0	113.5	-4810.1	0.00	0.00	4811.5	PBHL Henry 8 PM Fed #1H

