



December 2, 2014

3001542694

Survey Certification Report

STATE OF TEXAS

COUNTY OF Montgomery

I, Todd Estes, certify that I am employed by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C., and that I did on the day(s) of November 03, 2014 thru November 11, 2014, conduct or supervise the taking of a SEDS MWD Survey from a depth of 8,133 feet to 13,920 feet; that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil Company, for the Big Sinks 1 A2 PA Federal Com #001H well, API # **30-015-42694** in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principles as set forth by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.



Todd Estes

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

P.O. Box 1250

Montgomery, TX 77356

Office (936) 582-7296 * Fax (936)-588-4163



Job Number: M141218

Company: Mewbourne Oil Company

Lease/Well: Big Sinks 1 A2 PA Federal Com # 1HGrid: 6.91°

Location: Eddy County

Rig Name: Patterson # 36

RKB: N/A

G.L. or M.S.L.: N/A

State/Country: New Mexico / USA

Declination: 6.91° Corrected To Grid

File name: C:\WINSERVE\DOCS\M141218.SVY

Date/Time: 01-Dec-14 / 10:28

Curve Name: SES MWD SURVEY RAN ON 11-03-14

Styker Energy Directional Services, LLC.

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 359.68
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

<i>Measured Depth FT</i>	<i>Incl Angle Deg</i>	<i>Drift Direction Deg</i>	<i>True Vertical Depth</i>	<i>N-S FT</i>	<i>E-W FT</i>	<i>Vertical Section FT</i>	<i>CLOSURE Distance FT</i>	<i>Direction Deg</i>	<i>Dogleg Severity Deg/100</i>
Tie-In Data Provided by VES Gyro Survey									
8100.00	1.70	208.50	8099.20	-33.20	-36.80	-32.99	49.56	227.94	.00
8133.00	1.40	233.10	8132.19	-33.87	-37.36	-33.66	50.43	227.80	2.19
8164.00	3.00	320.40	8163.17	-33.47	-38.18	-33.26	50.77	228.75	10.48
8195.00	7.00	333.00	8194.05	-31.17	-39.55	-30.94	50.35	231.76	13.30
8227.00	11.10	332.80	8225.64	-26.69	-41.85	-26.45	49.63	237.47	12.81
8258.00	15.70	333.80	8255.79	-20.27	-45.06	-20.01	49.41	245.79	14.86
8290.00	20.40	336.70	8286.21	-11.25	-49.18	-10.98	50.45	257.11	14.95
8322.00	24.70	341.50	8315.76	.22	-53.51	.51	53.51	270.23	14.61
8356.00	27.80	348.50	8346.25	14.73	-57.35	15.05	59.21	284.40	12.87
8391.00	31.00	353.00	8376.75	31.68	-60.08	32.01	67.92	297.80	11.10
8423.00	33.50	355.20	8403.81	48.66	-61.82	49.01	78.67	308.21	8.63
8454.00	35.30	357.00	8429.39	66.13	-63.00	66.48	91.34	316.39	6.67
8486.00	37.80	.50	8455.09	85.18	-63.40	85.53	106.18	323.34	10.17
8518.00	39.30	2.10	8480.12	105.11	-62.95	105.46	122.52	329.09	5.63
8550.00	40.20	1.60	8504.72	125.56	-62.29	125.91	140.16	333.62	2.98
8581.00	41.60	.60	8528.15	145.86	-61.90	146.20	158.45	337.00	4.99
8613.00	44.00	.00	8551.63	167.60	-61.79	167.94	178.62	339.76	7.61
8645.00	46.50	359.40	8574.16	190.32	-61.91	190.66	200.14	341.98	7.93
8677.00	48.00	358.40	8595.88	213.81	-62.36	214.16	222.72	343.74	5.22
8708.00	49.00	357.70	8616.42	237.02	-63.15	237.37	245.29	345.08	3.64
8740.00	51.20	358.00	8636.95	261.55	-64.07	261.90	269.28	346.23	6.91
8772.00	53.40	359.80	8656.51	286.86	-64.55	287.21	294.03	347.32	8.19
8803.00	55.30	.90	8674.58	312.05	-64.40	312.40	318.62	348.34	6.77
8835.00	56.70	2.60	8692.48	338.56	-63.58	338.91	344.48	349.36	6.21

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
							Distance FT	Direction Deg	
8867.00	58.90	4.20	8709.53	365.59	-61.97	365.93	370.80	350.38	8.07
8899.00	62.60	3.00	8725.16	393.45	-60.23	393.78	398.03	351.30	12.02
8931.00	65.30	.40	8739.22	422.18	-59.38	422.50	426.33	351.99	11.16
8963.00	67.90	359.10	8751.92	451.54	-59.51	451.87	455.45	352.49	8.94
8994.00	70.70	359.20	8762.88	480.53	-59.94	480.86	484.26	352.89	9.04
9026.00	74.20	359.50	8772.53	511.04	-60.29	511.37	514.58	353.27	10.97
9058.00	77.00	359.60	8780.49	542.03	-60.53	542.36	545.40	353.63	8.76
9089.00	79.10	.30	8786.90	572.36	-60.56	572.68	575.55	353.96	7.13
9121.00	81.10	1.10	8792.41	603.87	-60.17	604.20	606.87	354.31	6.72
9153.00	82.60	1.20	8796.94	635.54	-59.54	635.87	638.33	354.65	4.70
9182.00	83.10	1.40	8800.55	664.31	-58.88	664.63	666.92	354.93	1.85
9213.00	84.80	1.20	8803.82	695.13	-58.18	695.44	697.56	355.22	5.52
9245.00	85.70	.80	8806.47	727.01	-57.63	727.32	729.29	355.47	3.08
9309.00	88.50	.20	8809.71	790.92	-57.07	791.23	792.98	355.87	4.47
9373.00	90.50	.20	8810.26	854.92	-56.85	855.22	856.81	356.20	3.12
9436.00	87.60	.80	8811.31	917.90	-56.30	918.20	919.62	356.49	4.70
9499.00	87.30	.70	8814.11	980.83	-55.47	981.13	982.40	356.76	.50
9563.00	87.30	.70	8817.13	1044.76	-54.69	1045.04	1046.19	357.00	.00
9626.00	88.70	359.90	8819.33	1107.71	-54.36	1108.00	1109.05	357.19	2.56
9690.00	90.10	.10	8820.00	1171.71	-54.36	1171.99	1172.97	357.34	2.21
9753.00	89.90	359.20	8820.00	1234.71	-54.75	1234.99	1235.92	357.46	1.46
9848.00	88.60	359.70	8821.24	1329.69	-55.66	1329.98	1330.86	357.60	1.47
9943.00	89.30	.10	8822.98	1424.68	-55.82	1424.97	1425.77	357.76	.85
10038.00	88.00	.00	8825.22	1519.65	-55.74	1519.93	1520.67	357.90	1.37
10134.00	88.50	359.80	8828.15	1615.60	-55.91	1615.89	1616.57	358.02	.56
10229.00	89.90	359.90	8829.48	1710.59	-56.16	1710.88	1711.51	358.12	1.48
10325.00	90.10	359.90	8829.48	1806.59	-56.33	1806.88	1807.47	358.21	.21
10420.00	90.90	358.80	8828.65	1901.58	-57.40	1901.87	1902.44	358.27	1.43
10515.00	89.80	359.40	8828.07	1996.56	-58.90	1996.86	1997.43	358.31	1.32
10611.00	88.80	.10	8829.24	2092.55	-59.31	2092.85	2093.39	358.38	1.27
10706.00	88.80	359.50	8831.23	2187.53	-59.65	2187.83	2188.34	358.44	.63
10801.00	89.70	359.20	8832.47	2282.52	-60.72	2282.82	2283.32	358.48	1.00
10896.00	90.60	359.30	8832.22	2377.51	-61.97	2377.81	2378.31	358.51	.95
10991.00	88.20	359.50	8833.22	2472.49	-62.96	2472.80	2473.29	358.54	2.54
11087.00	89.60	359.90	8835.06	2568.47	-63.46	2568.78	2569.25	358.58	1.52
11182.00	90.40	.00	8835.06	2663.47	-63.55	2663.78	2664.22	358.63	.85
11277.00	89.00	.90	8835.56	2758.46	-62.80	2758.77	2759.17	358.70	1.75
11372.00	90.10	1.20	8836.30	2853.44	-61.06	2853.73	2854.09	358.77	1.20
11467.00	90.50	.30	8835.81	2948.43	-59.82	2948.72	2949.03	358.84	1.04
11562.00	90.90	359.90	8834.65	3043.42	-59.65	3043.71	3044.00	358.88	.60
11657.00	90.50	359.80	8833.49	3138.41	-59.90	3138.70	3138.98	358.91	.43
11752.00	86.80	358.80	8835.72	3233.36	-61.06	3233.65	3233.94	358.92	4.03
11848.00	89.10	.20	8839.16	3329.29	-61.90	3329.58	3329.86	358.93	2.80
11943.00	88.50	359.00	8841.15	3424.26	-62.56	3424.56	3424.83	358.95	1.41
12038.00	90.10	1.10	8842.31	3519.25	-62.47	3519.54	3519.80	358.98	2.78

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	
12133.00	92.30	2.00	8840.32	3614.18	-59.91	3614.46	3614.68	359.05	2.50
12228.00	91.80	2.50	8836.92	3709.05	-56.18	3709.31	3709.47	359.13	.74
12324.00	90.70	1.40	8834.83	3804.97	-52.91	3805.20	3805.34	359.20	1.62
12419.00	89.10	1.50	8834.99	3899.93	-50.51	3900.16	3900.26	359.26	1.69
12513.00	90.30	1.30	8835.48	3993.90	-48.21	3994.11	3994.19	359.31	1.29
12608.00	90.20	1.80	8835.07	4088.87	-45.64	4089.06	4089.12	359.36	.54
12704.00	86.90	359.50	8837.50	4184.81	-44.55	4184.99	4185.05	359.39	4.19
12799.00	88.10	359.10	8841.64	4279.71	-45.71	4279.90	4279.96	359.39	1.33
12894.00	90.80	359.70	8842.55	4374.69	-46.71	4374.88	4374.94	359.39	2.91
12989.00	91.60	358.60	8840.57	4469.66	-48.12	4469.86	4469.92	359.38	1.43
13084.00	91.00	357.80	8838.41	4564.59	-51.10	4564.80	4564.87	359.36	1.05
13179.00	89.70	359.50	8837.83	4659.55	-53.34	4659.78	4659.86	359.34	2.25
13275.00	89.50	359.80	8838.50	4755.55	-53.92	4755.78	4755.85	359.35	.38
13370.00	88.10	359.80	8840.49	4850.52	-54.26	4850.75	4850.83	359.36	1.47
13465.00	89.50	359.80	8842.48	4945.50	-54.59	4945.73	4945.80	359.37	1.47
13560.00	91.10	359.40	8841.98	5040.49	-55.25	5040.72	5040.80	359.37	1.74
13655.00	91.80	358.60	8839.58	5135.45	-56.91	5135.69	5135.76	359.37	1.12
13750.00	90.60	.10	8837.59	5230.42	-57.98	5230.66	5230.74	359.36	2.02
13845.00	90.00	2.30	8837.09	5325.39	-56.00	5325.62	5325.68	359.40	2.40
13920.00	88.70	2.30	8837.94	5400.32	-52.99	5400.53	5400.58	359.44	1.73

Projection to Bit

13965.00	88.70	2.30	8838.96	5445.27	-51.18	5445.47	5445.51	359.46	.00
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COMPANY: Mewbourne Oil Company
 WELL: Big Sinks 1 A2 PA Fed Corn #1H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson #36

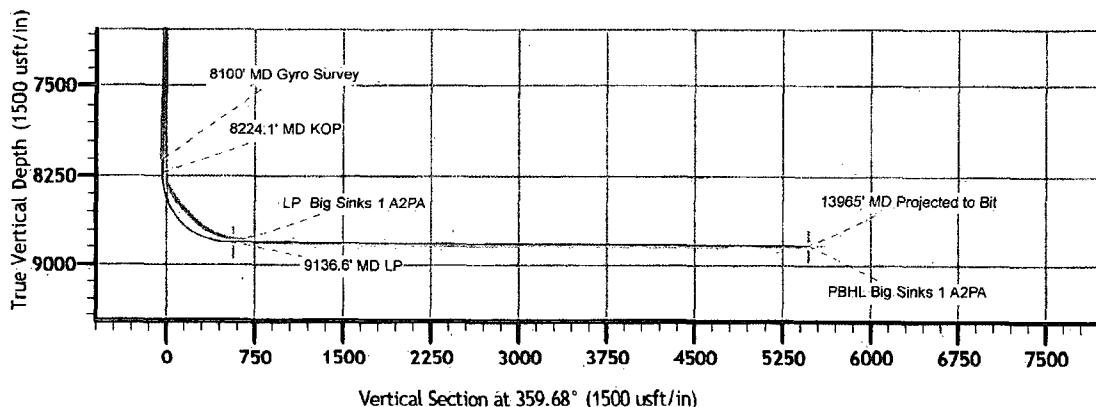
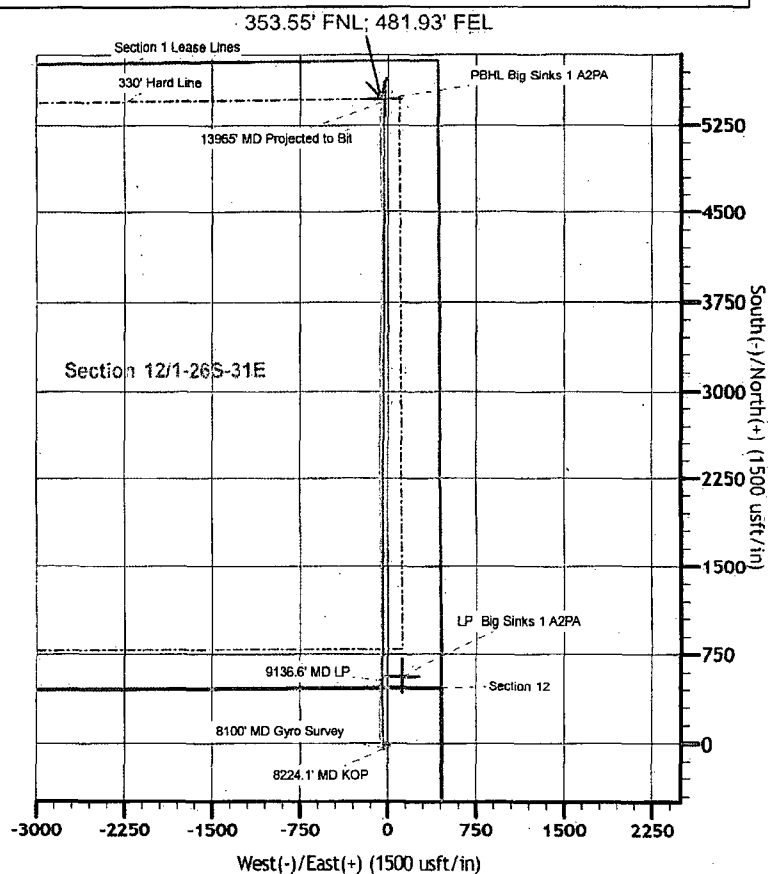
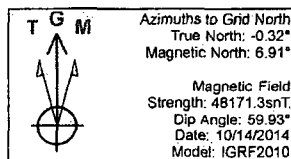


GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.91°

OFFICE: 936.582.7296

GEODETTIC ZONE: New Mexico East 3001							
3261 + 20 @ 3281.0usft (Patterson #36)							
GROUND ELEVATION: 3261.0							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
0.0	0.0	387348.80	688736.50	32° 3' 48.502 N	103° 43' 26.690 W		

PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	VSeet	Target
1	8100.0	1.69	208.54	8099.2	-33.2	-36.8	0.00	0.00	-33.0	
2	8224.1	1.69	208.54	8223.2	-36.4	-38.5	0.00	0.00	-36.2	
3	9136.6	89.77	0.17	8811.0	534.0	-45.0	10.00	151.82	534.3	
4	14072.4	89.77	0.17	8831.0	5469.7	-30.2	0.00	0.00	5489.8	PBHL Big Sinks 1 A2PA





Job Number: SVMO-141478
 Company: Mewbourne Oil & Gas
 Lease/Well: Big Sinks 1 A2 PA Fed Com 1H
 Location: Eddy County, NM
 Rig Name: Patterson #36
 RKB: 20'
 G.L. or M.S.L.: 20'

State/Country: New Mexico/USA
 Declination: 7.30°
 Grid: East To Grid North
 File name: Y:\WINSER~1\2014SU~1\MEWBOU~1\MO\BIGSIN~1\1H.SVY
 Date/Time: 04-Nov-14 / 09:35
 Curve Name: Surface - 8100' M.D. (Rate Gyro)

MS Survey

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane .00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
 Surface MD to 8100' MD is, to the best of
 our knowledge a true and accurate account of
 the well bore.
 Curtis Ringman 11/4/14
 MS Energy Services Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.19	193.82	100.00	-.16	-.04	-.16	.17	193.82	.19
200.00	.17	209.22	200.00	-.45	-.15	-.45	.48	198.56	.05
300.00	.36	252.21	300.00	-.68	-.52	-.68	.86	217.70	.26
400.00	.29	221.31	400.00	-.96	-.99	-.96	1.38	225.77	.19
500.00	.27	220.48	500.00	-1.33	-1.31	-1.33	1.87	224.50	.02
600.00	.65	193.18	599.99	-2.06	-1.59	-2.06	2.61	217.64	.43
700.00	1.08	157.44	699.98	-3.49	-1.36	-3.49	3.74	201.30	.67
800.00	1.58	122.56	799.96	-5.10	.16	-5.10	5.10	178.16	.93
900.00	1.55	124.25	899.92	-6.60	2.44	-6.60	7.04	159.69	.06

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	
1000.00	1.75	125.05	999.88	-8.24	4.81	-8.24	9.54	149.72	.20
1100.00	.75	99.33	1099.85	-9.22	6.71	-9.22	11.40	143.97	1.12
1200.00	.19	338.53	1199.85	-9.17	7.29	-9.17	11.72	141.52	.86
1300.00	.12	239.09	1299.85	-9.07	7.14	-9.07	11.55	141.79	.24
1400.00	.32	165.92	1399.85	-9.40	7.12	-9.40	11.79	142.85	.31
1500.00	.44	171.55	1499.85	-10.05	7.24	-10.05	12.39	144.21	.13
1600.00	.05	90.09	1599.85	-10.43	7.34	-10.43	12.76	144.84	.44
1700.00	.19	157.33	1699.85	-10.58	7.45	-10.58	12.94	144.85	.18
1800.00	.19	17.53	1799.85	-10.58	7.57	-10.58	13.01	144.42	.36
1900.00	.36	307.35	1899.84	-10.23	7.37	-10.23	12.61	144.24	.35
2000.00	.44	245.15	1999.84	-10.20	6.77	-10.20	12.24	146.43	.42
2100.00	.15	204.21	2099.84	-10.48	6.37	-10.48	12.26	148.72	.34
2200.00	.12	342.46	2199.84	-10.50	6.28	-10.50	12.24	149.11	.25
2300.00	.15	345.94	2299.84	-10.27	6.22	-10.27	12.01	148.82	.03
2400.00	.28	190.52	2399.84	-10.39	6.14	-10.39	12.07	149.40	.42
2500.00	.33	173.75	2499.84	-10.91	6.13	-10.91	12.52	150.68	.10
2600.00	.29	134.90	2599.84	-11.38	6.34	-11.38	13.02	150.88	.21
2700.00	.32	348.90	2699.84	-11.28	6.46	-11.28	13.00	150.19	.58
2800.00	.19	329.01	2799.84	-10.87	6.32	-10.87	12.57	149.80	.16
2900.00	.19	223.74	2899.84	-10.84	6.12	-10.84	12.45	150.54	.30
3000.00	.25	112.52	2999.84	-11.05	6.21	-11.05	12.67	150.65	.36
3100.00	.54	37.10	3099.83	-10.75	6.70	-10.75	12.67	148.09	.53
3200.00	.37	351.88	3199.83	-10.06	6.94	-10.06	12.22	145.41	.38
3300.00	.47	280.30	3299.83	-9.67	6.49	-9.67	11.64	146.13	.50
3400.00	.97	151.36	3399.82	-10.34	6.49	-10.34	12.20	147.88	1.32
3500.00	1.16	91.02	3499.81	-11.10	7.91	-11.10	13.63	144.53	1.08
3600.00	.69	48.40	3599.80	-10.72	9.37	-10.72	14.23	138.83	.80
3700.00	.51	66.16	3699.79	-10.14	10.23	-10.14	14.40	134.74	.26
3800.00	.30	77.48	3799.79	-9.90	10.89	-9.90	14.72	132.27	.22

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	
3900.00	.36	68.94	3899.79	-9.73	11.44	-9.73	15.02	130.38	.08
4000.00	.63	97.63	3999.78	-9.69	12.28	-9.69	15.64	128.28	.36
4100.00	.87	48.25	4099.78	-9.26	13.39	-9.26	16.28	124.66	.66
4200.00	.58	7.71	4199.77	-8.25	14.02	-8.25	16.27	120.47	.57
4300.00	.96	293.50	4299.76	-7.41	13.32	-7.41	15.25	119.10	.98
4400.00	.92	284.54	4399.75	-6.88	11.78	-6.88	13.64	120.29	.15
4500.00	.96	293.77	4499.73	-6.34	10.23	-6.34	12.04	121.78	.16
4600.00	.91	279.58	4599.72	-5.87	8.68	-5.87	10.48	124.06	.24
4700.00	.78	274.14	4699.71	-5.69	7.22	-5.69	9.19	128.23	.15
4800.00	.86	280.73	4799.70	-5.50	5.80	-5.50	8.00	133.45	.12
4900.00	.99	267.99	4899.69	-5.39	4.20	-5.39	6.84	142.05	.24
5000.00	.94	289.63	4999.67	-5.14	2.57	-5.14	5.75	153.47	.37
5100.00	.76	290.82	5099.66	-4.63	1.18	-4.63	4.78	165.76	.18
5200.00	.66	281.72	5199.65	-4.28	-.01	-4.28	4.28	180.11	.15
5300.00	.86	278.91	5299.65	-4.05	-1.31	-4.05	4.26	197.98	.20
5400.00	.73	290.86	5399.64	-3.70	-2.65	-3.70	4.55	215.58	.21
5500.00	.79	276.13	5499.63	-3.40	-3.93	-3.40	5.20	229.11	.20
5600.00	.90	285.93	5599.62	-3.11	-5.37	-3.11	6.21	239.89	.18
5700.00	.83	281.29	5699.61	-2.76	-6.84	-2.76	7.37	248.04	.10
5800.00	.96	257.55	5799.59	-2.80	-8.37	-2.80	8.82	251.52	.39
5900.00	1.05	261.06	5899.58	-3.12	-10.09	-3.12	10.56	252.82	.11
6000.00	.91	262.33	5999.56	-3.37	-11.78	-3.37	12.25	254.05	.14
6100.00	1.02	249.24	6099.55	-3.79	-13.40	-3.79	13.93	254.21	.25
6200.00	.91	241.10	6199.54	-4.49	-14.93	-4.49	15.59	253.27	.18
6300.00	.88	234.45	6299.52	-5.32	-16.25	-5.32	17.10	251.87	.11
6400.00	.90	217.74	6399.51	-6.39	-17.35	-6.39	18.49	249.80	.26
6500.00	.99	225.78	6499.50	-7.61	-18.45	-7.61	19.96	247.59	.16
6600.00	.84	223.85	6599.48	-8.74	-19.58	-8.74	21.44	245.94	.15
6700.00	.78	211.08	6699.47	-9.85	-20.44	-9.85	22.69	244.26	.19

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	
6800.00	.68	216.57	6799.47	-10.91	-21.14	-10.91	23.79	242.70	.12
6900.00	.90	202.22	6899.46	-12.12	-21.79	-12.12	24.94	240.93	.29
7000.00	.88	214.80	6999.45	-13.47	-22.53	-13.47	26.25	239.12	.20
7100.00	1.07	225.98	7099.43	-14.75	-23.64	-14.75	27.86	238.03	.27
7200.00	1.04	216.48	7199.41	-16.13	-24.85	-16.13	29.63	237.01	.18
7300.00	1.12	216.84	7299.40	-17.64	-25.98	-17.64	31.40	235.82	.08
7400.00	1.38	220.47	7399.37	-19.34	-27.34	-19.34	33.49	234.73	.27
7500.00	1.30	220.08	7499.35	-21.12	-28.86	-21.12	35.76	233.79	.08
7600.00	1.24	218.35	7599.32	-22.84	-30.26	-22.84	37.91	232.95	.07
7700.00	1.18	212.59	7699.30	-24.56	-31.48	-24.56	39.93	232.04	.14
7800.00	1.50	212.42	7799.27	-26.53	-32.74	-26.53	42.14	230.98	.32
7900.00	1.50	209.46	7899.24	-28.77	-34.08	-28.77	44.61	229.83	.08
8000.00	1.39	213.41	7999.20	-30.93	-35.40	-30.93	47.00	228.86	.15
Last Survey Depth Recorded									
8100.00	1.69	208.54	8099.17	-33.23	-36.77	-33.23	49.56	227.89	.33

Mewbourne Oil Company .

Eddy County, New Mexico

Section 12/1-26S-31E Big Sinks 1 A2 PA Fed Com #1H

Big Sinks 1 A2 PA Fed Com #1H

Original Hole

Design: Original Hole

Standard Survey Report

02 December, 2014

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Big Sinks 1 A2 PA Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	3261 + 20 @ 3281.0usft (Patterson #36)
Site:	Section 12/1-26S-31E Big Sinks 1 A2 PA Fed Com #1H	MD Reference:	3261 + 20 @ 3281.0usft (Patterson #36)
Well:	Big Sinks 1 A2 PA Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker EDM

Project:	Eddy County, New Mexico		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Section 12/1-26S-31E Big Sinks 1 A2 PA Fed Com #1H				
Site Position:		Northing:	387,348.80 usft	Latitude:	32° 3' 48.502 N
From:	Map	Easting:	688,736.50 usft	Longitude:	103° 43' 26.690 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.32 °

Well:	Big Sinks 1 A2 PA Fed Com #1H				
Well Position	+N/-S	0.0 usft	Northing:	387,348.80 usft	Latitude: 32° 3' 48.502 N
	+E/-W	0.0 usft	Easting:	688,736.50 usft	Longitude: 103° 43' 26.690 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level: 3,261.0 usft

Wellbore:	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/14/2014	7.24	59.93	48,171

Design:	Original Hole				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	359.68	

Survey Program	Date 12/2/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	8,100.0	MS Gyro Survey #1 (Original Hole)	NSG-CT_WL	Continuous north-seeking gyro on wireline
8,133.0	13,965.0	MWD Survey #2 (Original Hole)	MWD	MWD v3:standard declination

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.19	193.82	100.0	-0.2	0.0	-0.2	0.19	0.19	0.00	
200.0	0.17	209.22	200.0	-0.5	-0.2	-0.5	0.05	-0.02	15.40	
300.0	0.36	252.21	300.0	-0.7	-0.5	-0.7	0.26	0.19	42.99	
400.0	0.29	221.31	400.0	-1.0	-1.0	-1.0	0.19	-0.07	-30.90	
500.0	0.27	220.48	500.0	-1.3	-1.3	-1.3	0.02	-0.02	-0.83	
600.0	0.65	193.18	600.0	-2.1	-1.6	-2.1	0.43	0.38	-27.30	
700.0	1.08	157.44	700.0	-3.5	-1.4	-3.5	0.67	0.43	-35.74	
800.0	1.58	122.56	800.0	-5.1	0.2	-5.1	0.93	0.50	-34.88	

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Big Sinks 1 A2 PA Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	3261 + 20 @ 3281.0usft (Patterson #36)
Site:	Section 12/1-26S-31E Big Sinks 1 A2 PA Fed Com #1H	MD Reference:	3261 + 20 @ 3281.0usft (Patterson #36)
Well:	Big Sinks 1 A2 PA Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
900.0	1.55	124.25	899.9	-6.6	2.4	-6.6	0.06	-0.03	1.69
1,000.0	1.75	125.05	999.9	-8.2	4.8	-8.3	0.20	0.20	0.80
1,100.0	0.75	99.33	1,099.9	-9.2	6.7	-9.3	1.12	-1.00	-25.72
1,200.0	0.19	338.53	1,199.8	-9.2	7.3	-9.2	0.86	-0.56	-120.80
1,300.0	0.12	239.09	1,299.8	-9.1	7.1	-9.1	0.24	-0.07	-99.44
1,400.0	0.32	165.92	1,399.8	-9.4	7.1	-9.4	0.31	0.20	-73.17
1,500.0	0.44	171.55	1,499.8	-10.0	7.2	-10.1	0.13	0.12	5.63
1,600.0	0.05	90.09	1,599.8	-10.4	7.3	-10.5	0.44	-0.39	-81.46
1,700.0	0.19	157.33	1,699.8	-10.6	7.5	-10.6	0.18	0.14	67.24
1,800.0	0.19	17.53	1,799.8	-10.6	7.6	-10.6	0.36	0.00	-139.80
1,900.0	0.36	307.35	1,899.8	-10.2	7.4	-10.3	0.35	0.17	-70.18
2,000.0	0.44	245.15	1,999.8	-10.2	6.8	-10.2	0.42	0.08	-62.20
2,100.0	0.15	204.21	2,099.8	-10.5	6.4	-10.5	0.34	-0.29	-40.94
2,200.0	0.12	342.46	2,199.8	-10.5	6.3	-10.5	0.25	-0.03	138.25
2,300.0	0.15	345.94	2,299.8	-10.3	6.2	-10.3	0.03	0.03	3.48
2,400.0	0.28	190.52	2,399.8	-10.4	6.1	-10.4	0.42	0.13	-155.42
2,500.0	0.33	173.75	2,499.8	-10.9	6.1	-10.9	0.10	0.05	-16.77
2,600.0	0.29	134.90	2,599.8	-11.4	6.3	-11.4	0.21	-0.04	-38.85
2,700.0	0.32	348.90	2,699.8	-11.3	6.5	-11.3	0.58	0.03	-146.00
2,800.0	0.19	329.01	2,799.8	-10.9	6.3	-10.9	0.16	-0.13	-19.89
2,900.0	0.19	223.74	2,899.8	-10.8	6.1	-10.9	0.30	0.00	-105.27
3,000.0	0.25	112.52	2,999.8	-11.0	6.2	-11.1	0.36	0.06	-111.22
3,100.0	0.54	37.10	3,099.8	-10.8	6.7	-10.8	0.53	0.29	-75.42
3,200.0	0.37	351.88	3,199.8	-10.1	6.9	-10.1	0.38	-0.17	-45.22
3,300.0	0.47	280.30	3,299.8	-9.7	6.5	-9.7	0.50	0.10	-71.58
3,400.0	0.97	151.36	3,399.8	-10.3	6.5	-10.4	1.32	0.50	-128.94
3,500.0	1.16	91.02	3,499.8	-11.1	7.9	-11.1	1.08	0.19	-60.34
3,600.0	0.69	48.40	3,599.8	-10.7	9.4	-10.8	0.80	-0.47	-42.62
3,700.0	0.51	66.16	3,699.8	-10.1	10.2	-10.2	0.26	-0.18	17.76
3,800.0	0.30	77.48	3,799.8	-9.9	10.9	-10.0	0.22	-0.21	11.32
3,900.0	0.36	68.94	3,899.8	-9.7	11.4	-9.8	0.08	0.06	-8.54
4,000.0	0.63	97.63	3,999.8	-9.7	12.3	-9.8	0.36	0.27	28.69
4,100.0	0.87	48.25	4,099.8	-9.3	13.4	-9.3	0.66	0.24	-49.38
4,200.0	0.58	7.71	4,199.8	-8.2	14.0	-8.3	0.57	-0.29	-40.54
4,300.0	0.96	293.50	4,299.8	-7.4	13.3	-7.5	0.98	0.38	-74.21
4,400.0	0.92	284.54	4,399.7	-6.9	11.8	-6.9	0.15	-0.04	-8.96
4,500.0	0.96	293.77	4,499.7	-6.3	10.2	-6.4	0.16	0.04	9.23
4,600.0	0.91	279.58	4,599.7	-5.9	8.7	-5.9	0.24	-0.05	-14.19
4,700.0	0.78	274.14	4,699.7	-5.7	7.2	-5.7	0.15	-0.13	-5.44
4,800.0	0.86	280.73	4,799.7	-5.5	5.8	-5.5	0.12	0.08	6.59
4,900.0	0.99	267.99	4,899.7	-5.4	4.2	-5.4	0.24	0.13	-12.74
5,000.0	0.94	289.63	4,999.7	-5.1	2.6	-5.2	0.37	-0.05	21.64

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Big Sinks 1 A2 PA Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	3261 + 20 @ 3281.0usft (Patterson #36)
Site:	Section 12/1-26S-31E Big Sinks 1 A2 PA Fed Com #1H	MD Reference:	3261 + 20 @ 3281.0usft (Patterson #36)
Well:	Big Sinks 1 A2 PA Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.0	0.76	290.82	5,099.7	-4.6	1.2	-4.6	0.18	-0.18	1.19
5,200.0	0.66	281.72	5,199.7	-4.3	0.0	-4.3	0.15	-0.10	-9.10
5,300.0	0.86	278.91	5,299.6	-4.0	-1.3	-4.0	0.20	0.20	-2.81
5,400.0	0.73	290.86	5,399.6	-3.7	-2.7	-3.7	0.21	-0.13	11.95
5,500.0	0.79	276.13	5,499.6	-3.4	-3.9	-3.4	0.20	0.06	-14.73
5,600.0	0.90	285.93	5,599.6	-3.1	-5.4	-3.1	0.18	0.11	9.80
5,700.0	0.83	281.29	5,699.6	-2.8	-6.8	-2.7	0.10	-0.07	-4.64
5,800.0	0.96	257.55	5,799.6	-2.8	-8.4	-2.7	0.39	0.13	-23.74
5,900.0	1.05	261.06	5,899.6	-3.1	-10.1	-3.1	0.11	0.09	3.51
6,000.0	0.91	262.33	5,999.6	-3.4	-11.8	-3.3	0.14	-0.14	1.27
6,100.0	1.02	249.24	6,099.5	-3.8	-13.4	-3.7	0.25	0.11	-13.09
6,200.0	0.91	241.10	6,199.5	-4.5	-14.9	-4.4	0.18	-0.11	-8.14
6,300.0	0.88	234.45	6,299.5	-5.3	-16.2	-5.2	0.11	-0.03	-6.65
6,400.0	0.90	217.74	6,399.5	-6.4	-17.4	-6.3	0.26	0.02	-16.71
6,500.0	0.99	225.78	6,499.5	-7.6	-18.5	-7.5	0.16	0.09	8.04
6,600.0	0.84	223.85	6,599.5	-8.7	-19.6	-8.6	0.15	-0.15	-1.93
6,700.0	0.78	211.08	6,699.5	-9.9	-20.4	-9.7	0.19	-0.06	-12.77
6,800.0	0.68	216.57	6,799.5	-10.9	-21.1	-10.8	0.12	-0.10	5.49
6,900.0	0.90	202.22	6,899.5	-12.1	-21.8	-12.0	0.29	0.22	-14.35
7,000.0	0.88	214.80	6,999.4	-13.5	-22.5	-13.3	0.20	-0.02	12.58
7,100.0	1.07	225.98	7,099.4	-14.8	-23.6	-14.6	0.27	0.19	11.18
7,200.0	1.04	216.48	7,199.4	-16.1	-24.9	-16.0	0.18	-0.03	-9.50
7,300.0	1.12	216.84	7,299.4	-17.6	-26.0	-17.5	0.08	0.08	0.36
7,400.0	1.38	220.47	7,399.4	-19.3	-27.3	-19.2	0.27	0.26	3.63
7,500.0	1.30	220.08	7,499.3	-21.1	-28.9	-21.0	0.08	-0.08	-0.39
7,600.0	1.24	218.35	7,599.3	-22.8	-30.3	-22.7	0.07	-0.06	-1.73
7,700.0	1.18	212.59	7,699.3	-24.6	-31.5	-24.4	0.14	-0.06	-5.76
7,800.0	1.50	212.42	7,799.3	-26.5	-32.7	-26.3	0.32	0.32	-0.17
7,900.0	1.50	209.46	7,899.2	-28.8	-34.1	-28.6	0.08	0.00	-2.96
8,000.0	1.39	213.41	7,999.2	-30.9	-35.4	-30.7	0.15	-0.11	3.95
8,100.0	1.69	208.54	8,099.2	-33.2	-36.8	-33.0	0.33	0.30	-4.87
8100' MD Gyro Survey									
8,133.0	1.40	233.10	8,132.2	-33.9	-37.3	-33.7	2.17	-0.88	74.42
8,164.0	3.00	320.40	8,163.1	-33.5	-38.1	-33.3	10.48	5.16	281.61
8,195.0	7.00	333.00	8,194.0	-31.2	-39.5	-31.0	13.30	12.90	40.65
8,227.0	11.10	332.80	8,225.6	-26.7	-41.8	-26.5	12.81	12.81	-0.63
8,258.0	15.70	333.80	8,255.8	-20.3	-45.0	-20.0	14.86	14.84	3.23
8,290.0	20.40	336.70	8,286.2	-11.3	-49.2	-11.0	14.95	14.69	9.06
8,322.0	24.70	341.50	8,315.7	0.2	-53.5	0.5	14.61	13.44	15.00
8,356.0	27.80	348.50	8,346.2	14.7	-57.3	15.0	12.87	9.12	20.59
8,391.0	31.00	353.00	8,376.7	31.6	-60.0	32.0	11.10	9.14	12.86
8,423.0	33.50	355.20	8,403.8	48.6	-61.8	49.0	8.63	7.81	6.88
8,454.0	35.30	357.00	8,429.4	66.1	-63.0	66.5	6.67	5.81	5.81

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Big Sinks 1 A2 PA Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	3261 + 20 @ 3281.0usft (Patterson #36)
Site:	Section 12/1-26S-31E Big Sinks 1 A2 PA Fed Com #1H	MD Reference:	3261 + 20 @ 3281.0usft (Patterson #36)
Well:	Big Sinks 1 A2 PA Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker EDM

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,486.0	37.80	0.50	8,455.1	85.1	-63.4	85.5	10.17	7.81	10.94
8,518.0	39.30	2.10	8,480.1	105.1	-62.9	105.4	5.63	4.69	5.00
8,550.0	40.20	1.60	8,504.7	125.5	-62.3	125.9	2.98	2.81	-1.56
8,581.0	41.60	0.60	8,528.1	145.8	-61.9	146.2	4.99	4.52	-3.23
8,613.0	44.00	0.00	8,551.6	167.6	-61.8	167.9	7.61	7.50	-1.88
8,645.0	46.50	359.40	8,574.1	190.3	-61.9	190.6	7.93	7.81	-1.88
8,677.0	48.00	358.40	8,595.8	213.8	-62.3	214.1	5.22	4.69	-3.13
8,708.0	49.00	357.70	8,616.4	237.0	-63.1	237.3	3.64	3.23	-2.26
8,740.0	51.20	358.00	8,636.9	261.5	-64.0	261.9	6.91	6.88	0.94
8,772.0	53.40	359.80	8,656.5	286.8	-64.5	287.2	8.19	6.88	5.63
8,803.0	55.30	0.90	8,674.6	312.0	-64.4	312.4	6.77	6.13	3.55
8,835.0	56.70	2.60	8,692.4	338.5	-63.6	338.9	6.21	4.38	5.31
8,867.0	58.90	4.20	8,709.5	365.6	-61.9	365.9	8.07	6.88	5.00
8,899.0	62.60	3.00	8,725.1	393.4	-60.2	393.7	12.02	11.56	-3.75
8,931.0	65.30	0.40	8,739.2	422.1	-59.3	422.5	11.16	8.44	-8.13
8,963.0	67.90	359.10	8,751.9	451.5	-59.5	451.8	8.94	8.13	-4.06
8,994.0	70.70	359.20	8,762.8	480.5	-59.9	480.8	9.04	9.03	0.32
9,026.0	74.20	359.50	8,772.5	511.0	-60.3	511.3	10.97	10.94	0.94
9,058.0	77.00	359.00	8,780.5	542.0	-60.7	542.3	8.88	8.75	-1.56
9,089.0	79.10	0.30	8,786.9	572.3	-60.8	572.7	7.92	6.77	4.19
9,121.0	81.10	1.10	8,792.4	603.8	-60.5	604.2	6.72	6.25	2.50
9,153.0	82.60	1.20	8,796.9	635.5	-59.8	635.8	4.70	4.69	0.31
9,182.0	83.10	1.20	8,800.5	664.3	-59.2	664.6	1.72	1.72	0.00
9,213.0	84.80	1.20	8,803.8	695.1	-58.6	695.4	5.48	5.48	0.00
9,245.0	85.70	0.80	8,806.4	727.0	-58.0	727.3	3.08	2.81	-1.25
9,309.0	88.50	0.20	8,809.7	790.9	-57.5	791.2	4.47	4.38	-0.94
9,373.0	90.50	0.20	8,810.2	854.9	-57.2	855.2	3.13	3.13	0.00
9,436.0	87.60	0.80	8,811.3	917.9	-56.7	918.2	4.70	-4.60	0.95
9,499.0	87.30	0.70	8,814.1	980.8	-55.9	981.1	0.50	-0.48	-0.16
9,563.0	87.30	0.70	8,817.1	1,044.7	-55.1	1,045.0	0.00	0.00	0.00
9,626.0	88.70	359.90	8,819.3	1,107.7	-54.8	1,108.0	2.56	2.22	-1.27
9,690.0	90.10	0.10	8,820.0	1,171.7	-54.8	1,172.0	2.21	2.19	0.31
9,753.0	89.90	359.20	8,820.0	1,234.7	-55.1	1,235.0	1.46	-0.32	-1.43
9,848.0	88.60	359.70	8,821.2	1,329.7	-56.1	1,330.0	1.47	-1.37	0.53
9,943.0	89.30	0.10	8,822.9	1,424.6	-56.2	1,424.9	0.85	0.74	0.42
10,038.0	88.40	0.00	8,824.9	1,519.6	-56.1	1,519.9	0.95	-0.95	-0.11
10,134.0	88.50	359.80	8,827.5	1,615.6	-56.3	1,615.9	0.23	0.10	-0.21
10,229.0	89.90	359.90	8,828.8	1,710.6	-56.6	1,710.9	1.48	1.47	0.11
10,325.0	90.10	359.90	8,828.8	1,806.6	-56.7	1,806.9	0.21	0.21	0.00
10,420.0	90.90	358.80	8,827.9	1,901.6	-57.8	1,901.9	1.43	0.84	-1.16
10,515.0	89.80	359.40	8,827.4	1,996.5	-59.3	1,996.8	1.32	-1.16	0.63
10,611.0	88.80	0.10	8,828.5	2,092.5	-59.7	2,092.8	1.27	-1.04	0.73

Stryker Directional Survey Report

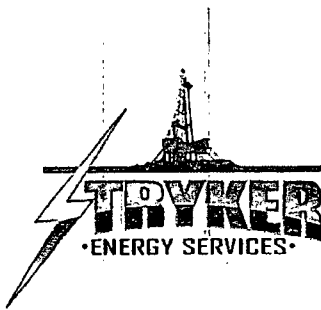
Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Big Sinks 1 A2 PA Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	3261 + 20 @ 3281.0usft (Patterson #36)
Site:	Section 12/1-26S-31E Big Sinks 1 A2 PA Fed Com #1H	MD Reference:	3261 + 20 @ 3281.0usft (Patterson #36)
Well:	Big Sinks 1 A2 PA Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,706.0	88.80	359.50	8,830.5	2,187.5	-60.0	2,187.8	0.63	0.00	-0.63
10,801.0	89.70	359.20	8,831.8	2,282.5	-61.1	2,282.8	1.00	0.95	-0.32
10,896.0	90.60	359.30	8,831.5	2,377.5	-62.4	2,377.8	0.95	0.95	0.11
10,991.0	88.20	359.50	8,832.5	2,472.5	-63.4	2,472.8	2.54	-2.53	0.21
11,087.0	89.60	359.90	8,834.4	2,568.5	-63.9	2,568.8	1.52	1.46	0.42
11,182.0	90.40	0.00	8,834.4	2,663.5	-63.9	2,663.8	0.85	0.84	0.11
11,277.0	89.00	0.90	8,834.9	2,758.4	-63.2	2,758.8	1.75	-1.47	0.95
11,372.0	90.10	1.20	8,835.6	2,853.4	-61.5	2,853.7	1.20	1.16	0.32
11,467.0	90.50	0.30	8,835.1	2,948.4	-60.2	2,948.7	1.04	0.42	-0.95
11,562.0	90.90	359.90	8,833.9	3,043.4	-60.0	3,043.7	0.60	0.42	-0.42
11,657.0	90.50	359.80	8,832.8	3,138.4	-60.3	3,138.7	0.43	-0.42	-0.11
11,752.0	86.80	358.80	8,835.0	3,233.3	-61.5	3,233.6	4.03	-3.89	-1.05
11,848.0	89.10	0.20	8,838.5	3,329.3	-62.3	3,329.6	2.80	2.40	1.46
11,943.0	88.50	359.00	8,840.4	3,424.2	-63.0	3,424.5	1.41	-0.63	-1.26
12,038.0	90.10	1.10	8,841.6	3,519.2	-62.9	3,519.5	2.78	1.68	2.21
12,133.0	92.30	2.00	8,839.6	3,614.2	-60.3	3,614.5	2.50	2.32	0.95
12,228.0	91.80	2.50	8,836.2	3,709.0	-56.6	3,709.3	0.74	-0.53	0.53
12,324.0	90.70	1.40	8,834.1	3,805.0	-53.3	3,805.2	1.62	-1.15	-1.15
12,419.0	89.10	1.50	8,834.3	3,899.9	-50.9	3,900.1	1.69	-1.68	0.11
12,513.0	90.30	1.30	8,834.8	3,993.9	-48.6	3,994.1	1.29	1.28	-0.21
12,608.0	90.20	1.80	8,834.4	4,088.9	-46.0	4,089.0	0.54	-0.11	0.53
12,704.0	86.90	359.50	8,836.8	4,184.8	-44.9	4,185.0	4.19	-3.44	-2.40
12,799.0	88.10	359.10	8,840.9	4,279.7	-46.1	4,279.9	1.33	1.26	-0.42
12,894.0	90.80	359.70	8,841.9	4,374.7	-47.1	4,374.9	2.91	2.84	0.63
12,989.0	91.60	358.60	8,839.9	4,469.6	-48.5	4,469.8	1.43	0.84	-1.16
13,084.0	91.00	357.80	8,837.7	4,564.6	-51.5	4,564.8	1.05	-0.63	-0.84
13,179.0	89.70	359.50	8,837.1	4,659.5	-53.7	4,659.8	2.25	-1.37	1.79
13,275.0	89.50	359.80	8,837.8	4,755.5	-54.3	4,755.8	0.38	-0.21	0.31
13,370.0	88.10	359.80	8,839.8	4,850.5	-54.6	4,850.7	1.47	-1.47	0.00
13,465.0	89.50	359.80	8,841.8	4,945.5	-55.0	4,945.7	1.47	1.47	0.00
13,560.0	91.10	359.40	8,841.3	5,040.5	-55.6	5,040.7	1.74	1.68	-0.42
13,655.0	91.80	358.60	8,838.9	5,135.4	-57.3	5,135.7	1.12	0.74	-0.84
13,750.0	90.60	0.10	8,836.9	5,230.4	-58.4	5,230.6	2.02	-1.26	1.58
13,845.0	90.00	2.30	8,836.4	5,325.4	-56.4	5,325.6	2.40	-0.63	2.32
13,920.0	88.70	2.30	8,837.2	5,400.3	-53.4	5,400.5	1.73	-1.73	0.00
13,965.0	88.70	2.30	8,838.3	5,445.3	-51.6	5,445.5	0.00	0.00	0.00
13965' MD Projected to Bit									

Stryker Directional Survey Report

Company:	Mewbourne Oil Company .	Local Co-ordinate Reference:	Well Big Sinks 1 A2 PA Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	3261 + 20 @ 3281.0usft (Patterson #36)
Site:	Section 12/1-26S-31E Big Sinks 1 A2 PA Fed Com #1H	MD Reference:	3261 + 20 @ 3281.0usft (Patterson #36)
Well:	Big Sinks 1 A2 PA Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
8,100.0	8,099.2	-33.2	-36.8	8100' MD Gyro Survey	
13,965.0	8,838.3	5,445.3	-51.6	13965' MD Projected to Bit	



December 2, 2014

New Mexico Energy, Minerals and Natural Resources Department

Attn: Oil Conservation Division

1220 South St. Francis Drive

Santa Fe, NM 87505

Attn: Jackie Lathan

Re: Mewbourne Oil Company

Big Sinks 1 A2 PA Federal Com#001H

Jennings; Bone Spring, West

Eddy County, New Mexico

API# 30-015-42694

Enclosed please find the original and one (1) copy of the survey performed on the reference well by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C. Other information required by your office is as follows:

<u>Name & Title</u>	<u>Drainhole No.</u>	<u>Survey Depths</u>	<u>Dates Performed</u>	<u>Type Survey</u>
Paul Niewiowski	Original Hole	8,133 ft. to 13,920 ft.	11-03-14 to 11-11-14	MWD Survey

A certified plat on which the bottom-hole location is oriented to both surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Todd Estes

Enclosures

CC:

Mewbourne Oil Company

Attn: Frosty Lathan

P.O. Box 5720

Hobbs, NM 88241

Mewbourne Oil Company

Attn: Robin Terrell

P.O. Box 5720

Hobbs, NM 88241

NMEMaNRD\Mewbourne Oil Company\Big Sinks 1 A2PA Fed Com #1H\M141218

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

P.O. Box 1250

Montgomery, TX 77356

Office (936) 582-7296 * Fax (936)-588-4163



COMPANY: Mewbourne Oil Company
 WELL: Big Sinks 1 A2 PA Fed Com #1H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)



GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.91°

OFFICE: 936.582.7296

GEODETTIC ZONE: New Mexico East 3001							
3261 + 20 @ 3281.0usft (Patterson #36)							
GROUND ELEVATION: 3261.0							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude		Slot
0.0	0.0	387348.80	688736.50	32° 3' 48.502 N	103° 43' 26.690 W		

PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	8100.0	1.69	208.54	8099.2	-33.2	-36.8	0.00	0.00	-33.0	
2	8224.1	1.69	208.54	8223.2	-36.4	-38.5	0.00	0.00	-36.2	
3	9136.6	89.77	0.17	8811.0	534.0	-45.0	10.00	151.62	534.3	
4	14072.4	89.77	0.17	8831.0	5469.7	-30.2	0.00	0.00	5469.8	PBHL Big Sinks 1 A2PA

353.55' FNL; 481.93' FEL

