

Schlumberger

Oxy Corral Fly 02-01 State 24H Gyro+MWD 0-18,922' Survey Geodetic Report (Def Survey)



Report Date February 19 2018 09 07 AM
Client OXY
Field NM Eddy County (NAD 83)
Structure / Slot: Oxy Corral Fly 02 01 State 24H / Oxy Corral Fly 02 01 State 24H
Well Oxy Corral Fly 02-01 State 24H
Borehole Original Borehole
UW / API# Unknown / Unknown
Survey Name Oxy Corral Fly 02 01 State 24H Gyro+MWD 0-18 922
Survey Date January 31 2018
Tort / AHD / DDI / ERD Ratio 251 966 / 11370 112 R / 6 777 / 1 254
Coordinate Reference System NAD83 New Mexico State Plane Eastern Zone US Feet
Location Lat / Long N 32° 9 19 69604 W 103 57 44 53203
Location Grid N/E Y/X N 420493 450 RUS E 656137 590 RUS
CRS Grid Convergence Angle 0 1974
Grid Scale Factor 0 99992419
Version / Patch 2 10 706 0

Survey / DLS Computation
Vertical Section Azimuth
Vertical Section Origin
TVD Reference Datum
TVD Reference Elevation
Seabed / Ground Elevation
Magnetic Declination
Total Gravity Field Strength
Gravity Model
Total Magnetic Field Strength
Magnetic Dip Angle
Declination Date
Magnetic Declination Model
North Reference
Grid Convergence Used
Total Corr Mag North->Grid
North
Local Coord Referenced To

Minimum Curvature / Lubinski
84 026 (Grid North)
0 000 ft 0 000 ft
RKB=26 5
3052 900 ft above MSL
3026 400 ft above MSL
7 031
998 4552mg (9 80665 Bessed)
GARM
48025 132 nT
59 924
January 31 2018
HDGM 2017
Grid North
0 1974
6 8333
Well Head

NM OIL CONSERVATION
ARTESIA DISTRICT

APR 16 2018

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Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S)	Longitude (E/W)
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	420483 45	656137 59	N 32	9 19 70 W 103 57 44 53
	100.74	0.66	181.09	100.74	0.07	-0.58	-0.01	0.66	420482 87	656137 58	N 32	9 19 69 W 103 57 44 53
	189.42	1.17	179.16	189.41	-0.22	2.00	-0.01	0.58	420481 45	656137 58	N 32	9 19 68 W 103 57 44 53
	278.24	1.59	203.19	278.20	-0.90	-4.04	-0.48	0.80	420489 41	656137 11	N 32	9 19 66 W 103 57 44 54
Last Gyro	369.65	2.60	219.46	369.55	2.99	-6.80	2.30	1.27	420486 65	656135 29	N 32	9 19 63 W 103 57 44 56
	512.00	2.70	223.20	511.75	7.83	11.74	-6.64	0.14	420481 71	656130 95	N 32	9 19 58 W 103 57 44 61
	607.00	2.11	229.36	606.66	10.96	14.51	9.50	0.68	420478 94	656128 09	N 32	9 19 55 W 103 57 44 64
	702.00	1.05	222.48	701.63	13.05	16.29	11.42	1.13	420477 16	656126 17	N 32	9 19 54 W 103 57 44 67
	797.00	0.23	150.80	796.62	13.63	17.10	11.91	1.05	420476 35	656125 68	N 32	9 19 53 W 103 57 44 67
	892.00	0.55	103.58	891.62	13.12	17.37	11.38	0.45	420476 08	656126 21	N 32	9 19 52 W 103 57 44 67
	987.00	0.48	78.20	986.61	12.30	17.40	10.54	0.25	420476 05	656127 05	N 32	9 19 52 W 103 57 44 66
	1082.00	0.78	2.89	1081.61	11.80	16.67	10.12	0.85	420476 78	656127 47	N 32	9 19 53 W 103 57 44 66
	1177.00	1.46	3.16	1176.59	11.51	14.82	10.02	0.72	420478 63	656127 57	N 32	9 19 55 W 103 57 44 65
	1272.00	1.85	7.42	1271.55	10.96	12.09	9.76	0.43	420481 36	656127 83	N 32	9 19 58 W 103 57 44 65
	1386.00	2.97	358.82	1385.45	10.29	7.31	-9.58	1.03	420486 14	656128 01	N 32	9 19 62 W 103 57 44 64
	1480.00	3.65	5.13	1479.29	9.51	1.89	9.36	0.82	420491 56	656128 23	N 32	9 19 68 W 103 57 44 64
	1575.00	4.08	6.78	1574.08	-8.18	4.47	-8.69	0.47	420497 92	656128 90	N 32	9 19 74 W 103 57 44 63
	1765.00	4.70	349.12	1763.53	7.35	18.83	9.36	0.78	420512 28	656128 23	N 32	9 19 88 W 103 57 44 64
	1860.00	4.30	342.60	1858.23	-8.39	28.05	11.16	0.68	420519 50	656126 43	N 32	9 19 95 W 103 57 44 66
	1931.00	4.01	341.36	1929.05	9.46	30.94	12.75	0.43	420524 39	656124 84	N 32	9 20 00 W 103 57 44 68
	2025.00	3.81	342.73	2022.83	10.80	37.04	14.73	0.23	420530 49	656122 86	N 32	9 20 06 W 103 57 44 70
	2120.00	3.71	340.08	2117.62	12.16	42.94	16.72	0.21	420536 39	656120 87	N 32	9 20 12 W 103 57 44 72
	2215.00	3.85	339.37	2212.42	13.71	48.82	18.89	0.15	420542 26	656118 70	N 32	9 20 18 W 103 57 44 75
	2310.00	4.30	337.13	2307.18	15.55	55.08	21.40	0.50	420548 53	656116 20	N 32	9 20 24 W 103 57 44 78
	2405.00	3.39	343.31	2401.96	17.11	61.06	23.59	1.05	420554 50	656114 00	N 32	9 20 30 W 103 57 44 80
	2500.00	2.96	13.26	2496.82	16.82	66.13	23.83	1.78	420559 58	656113 76	N 32	9 20 35 W 103 57 44 81
	2595.00	4.08	38.99	2591.65	13.62	71.15	21.14	2.01	420564 59	656116 45	N 32	9 20 40 W 103 57 44 78
	2689.00	5.03	47.07	2685.35	7.97	76.55	16.02	1.22	420570 00	656121 57	N 32	9 20 45 W 103 57 44 72
	2784.00	5.00	59.78	2779.99	-0.86	81.47	9.39	1.17	420574 92	656128 20	N 32	9 20 50 W 103 57 44 64
	2903.00	4.16	62.72	2898.61	7.89	86.06	1.08	0.73	420579 51	656136 51	N 32	9 20 55 W 103 57 44 54
	2973.00	3.54	57.06	2968.45	12.18	88.40	2.99	1.04	420581 85	656140 58	N 32	9 20 57 W 103 57 44 49
	3068.00	2.47	31.04	3063.32	16.02	91.75	6.51	1.80	420585 19	656144 10	N 32	9 20 60 W 103 57 44 45
	3163.00	2.28	6.38	3158.24	17.66	95.38	7.78	1.09	420588 83	656145 37	N 32	9 20 64 W 103 57 44 44
	3258.00	3.23	340.88	3253.14	17.46	99.79	7.11	1.61	420593 23	656144 70	N 32	9 20 68 W 103 57 44 45
	3353.00	4.28	334.22	3347.93	15.64	105.61	4.69	1.19	420598 95	656142 28	N 32	9 20 74 W 103 57 44 47
	3448.00	5.37	328.49	3442.59	12.53	112.49	0.82	1.25	420605 93	656138 41	N 32	9 20 81 W 103 57 44 52
	3543.00	6.67	331.51	3537.07	8.50	121.13	-4.13	1.41	420614 57	656133 46	N 32	9 20 89 W 103 57 44 58
	3638.00	7.27	333.02	3631.37	4.23	131.34	9.49	0.66	420624 78	656128 10	N 32	9 21 00 W 103 57 44 64
	3733.00	8.13	333.51	3725.51	0.28	142.71	15.21	0.91	420636 15	656122 38	N 32	9 21 11 W 103 57 44 70
	3828.00	9.19	335.19	3819.42	5.08	155.61	21.39	1.15	420649 04	656116 20	N 32	9 21 24 W 103 57 44 77
	4018.00	10.29	334.09	4006.68	15.77	184.64	35.18	0.59	420678 08	656102 42	N 32	9 21 52 W 103 57 44 83
	4113.00	10.15	333.25	4100.18	21.63	199.75	-42.65	0.22	420693 18	656094 94	N 32	9 21 67 W 103 57 45 02
	4207.00	10.95	333.12	4192.59	27.75	215.11	-50.41	0.85	420708 54	656087 18	N 32	9 21 83 W 103 57 45 11
	4302.00	11.78	333.18	4285.72	34.43	231.81	58.87	0.87	420725 24	656078 72	N 32	9 21 99 W 103 57 45 21
	4397.00	12.80	333.72	4378.54	-41.93	249.90	-87.90	1.08	420743 33	656069 69	N 32	9 22 17 W 103 57 45 31
	4492.00	13.59	334.39	4471.04	-48.93	269.40	77.39	0.85	420762 83	656060 21	N 32	9 22 36 W 103 57 45 42
	4587.00	14.24	333.44	4563.25	-56.79	289.92	-87.44	0.73	420783 35	656050 16	N 32	9 22 57 W 103 57 45 54
	4682.00	13.95	333.19	4655.39	-64.97	310.59	97.83	0.31	420804 02	656039 77	N 32	9 22 77 W 103 57 45 66
	4776.00	13.54	333.39	4746.69	72.88	330.54	107.87	0.44	420823 97	656029 73	N 32	9 22 97 W 103 57 45 77
	4871.00	14.06	333.23	4838.95	-80.90	350.79	118.04	0.55	420844 21	656019 55	N 32	9 23 17 W 103 57 45 89
	4966.00	14.16	333.75	4931.09	-89.02	371.51	126.38	0.17	420864 93	656009 22	N 32	9 23 38 W 103 57 46 01
	5061.00	14.49	333.38	5023.13	97.24	392.56	138.85	0.36	420885 98	655998 75	N 32	9 23 59 W 103 57 46 13
	5250.00	14.23	334.12	5206.23	113.49	434.60	158.58	0.17	420928 01	655978 02	N 32	9 24 00 W 103 57 46 37
	5441.00	13.78	333.10	5391.55	129.60	476.00	180.12	0.27	420969 42	655957 48	N 32	9 24 41 W 103 57 46 61
5535.00	14.29	333.48	5482.74	137.67	496.37	190.36	0.55	420989 78	655947 24	N 32	9 24 61 W 103 57 46 73	
5630.00	13.67	332.83	5574.93	145.85	516.85	200.73	0.67	421010 26	655936 88	N 32	9 24 82 W 103 57 46 85	
5725.00	13.47	333.43	5667.28	153.80	536.73	210.80	0.26	421030 14	655926 81	N 32	9 25 01 W 103 57 46 96	
5915.00	13.89	336.11	5851.89	168.60	577.37	228.93	0.40	421070 78	655907 67	N 32	9 25 42 W 103 57 47 18	
6010.00	13.91	334.68	5944.11	175.89	598.12	239.44	0.36	421091 53	655898 17	N 32	9 25 62 W 103 57 47 29	
6105.00	13.90	335.44	6036.32	183.31	618.82	249.06	0.19	421112 22	655888 55	N 32	9 25 83 W 103 57 47 40	
6295.00	13.98	335.93	6220.73	197.71	660.53	267.91	0.08	421153 93	655869 70	N 32	9 26 24 W 103 57 47 62	
6390.00	13.97	336.92	6312.91	204.65	681.56	277.08	0.25	421174 96	655860 53	N 32	9 26 45 W 103 57 47 73	
6579.00	13.54	340.11	6496.50	216.68	723.35	293.56	0.46	421216 75	655844 06	N 32	9 26 86 W 103 57 47 92	
6674.00	13.94	342.03	6588.78	221.74	744.70	-300.87	0.64	421238 09	655836 74	N 32	9 27 08 W 103 57 48 00	
6769.00	13.31	343.68	6681.11	226.08	766.08	-307.47	0.78	421259 47	655830 14	N 32	9 27 29 W 103 57 48 08	
6960.00	12.15	343.37	6867.41	233.74	806.44	319.40	0.61	421299 82	655818 21	N 32	9 27 69 W 103 57 48 22	
7054.00	12.09	339.53	6959.31	238.04	825.14	325.68	0.86	421318 52	655811 94	N 32	9 27 87 W 103 57 48 29	
7149.00	9.71	327.35	7052.61	244.13	841.21	333.48	3.47	421334 59	655804 14	N 32	9 28 03 W 103 57 48 38	
7244.00	7.24	322.91	7146.56	250.82	852.73	341.41	2.69	421346 11	655796 20	N 32	9 28 15 W 103 57 48 47	
7307.00	6.35	330.52	7209.12	254.26	858.93	345.52	2.01	421352 31	655792 09	N 32	9 28 21 W 103 57 48 52	
7339.00	6.17	338.98	7240.93	255.41	862.08	347.01	2.93	421355 46	655790 61	N 32	9 28 24 W 103 57 48 53	
7433.00	5.12	0.76	7334.48	256.23	870.99	348.77	2.52	421364 37	655788 85	N 32	9 28 33 W 103 57 48 55	
7528.00	4.68	18.49	7428.14	254.13	878.90	347.48	1.65	421372 28	655790 13	N 32	9 28 40 W 103 57 48 54	
7623.00	4.18	27.05	7523.66	250.64	885.66	344.68	0.87	421379 04	655792 94	N 32	9 28 47 W 103 57 48 51	
7718.00	4.74	29.71	7618.57	246.46	892.15	341.16	0.63	421385 53	655796 46	N 32	9 28 54 W 103 57 48 46	
7813.00	4.70	31.43	7713.25	241.81	898.88	337.19	0.15	421392 26	655800 43	N 32	9 28 60 W 103 57 48 42	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S)	Longitude (E/W)
	8098.00	6.65	78.12	7998.89	217.66	912.83	314.36	1.45	421406.21	655823.25	N 32	9 28 74 W 103 57 48.15
	8193.00	7.96	76.66	8091.12	205.66	915.48	302.58	1.39	421408.86	655835.03	N 32	9 28 77 W 103 57 48.02
	8301.00	7.80	75.23	8198.10	191.00	919.07	288.22	0.23	421412.45	655849.40	N 32	9 28 80 W 103 57 47.85
	8501.00	21.06	73.62	8391.38	142.03	932.73	240.40	6.63	421426.11	655897.20	N 32	9 28 93 W 103 57 47.29
	8599.00	36.64	68.53	8476.95	96.24	948.50	196.02	16.08	421441.87	655941.59	N 32	9 29 09 W 103 57 46.77
	8694.00	40.49	71.49	8551.22	38.79	968.67	140.36	4.49	421462.05	655997.24	N 32	9 29 29 W 103 57 46.13
	8789.00	37.57	82.89	8625.11	20.36	982.07	-82.29	8.15	421475.44	656055.31	N 32	9 29 42 W 103 57 45.45
	8884.00	46.03	89.36	8695.89	83.50	986.05	19.22	9.99	421479.42	656118.37	N 32	9 29 45 W 103 57 44.72
	8979.00	58.13	90.31	8755.50	156.93	986.22	54.59	10.66	421479.59	656192.18	N 32	9 29 45 W 103 57 43.86
	9073.00	68.40	90.31	8799.16	239.47	985.77	137.63	13.05	421479.14	656275.21	N 32	9 29 45 W 103 57 42.89
	9168.00	84.11	88.12	8821.67	331.09	987.09	229.61	16.69	421480.46	656367.18	N 32	9 29 46 W 103 57 41.82
	9222.00	84.28	88.64	8827.13	384.65	988.60	283.31	1.01	421481.98	656420.88	N 32	9 29 45 W 103 57 41.20
	9301.00	83.83	87.00	8835.31	463.05	991.59	361.82	2.14	421484.97	656499.39	N 32	9 29 50 W 103 57 40.28
	9395.00	82.41	87.39	8846.57	556.23	996.16	455.03	1.57	421489.53	656592.59	N 32	9 29 54 W 103 57 39.20
	9488.00	81.82	88.54	8859.33	648.13	999.43	547.09	1.38	421492.80	656684.64	N 32	9 29 57 W 103 57 38.13
	9581.00	81.86	91.60	8872.53	739.67	999.32	639.14	3.26	421492.69	656776.68	N 32	9 29 56 W 103 57 37.06
	9675.00	83.66	92.69	8884.38	831.98	995.83	732.32	2.23	421489.20	656869.85	N 32	9 29 52 W 103 57 35.97
	9768.00	86.59	94.30	8892.28	923.37	990.18	824.80	3.59	421483.55	656962.32	N 32	9 29 47 W 103 57 34.90
	9861.00	88.38	94.41	8896.36	1014.77	983.12	917.44	1.93	421476.50	657054.96	N 32	9 29 39 W 103 57 33.82
	9954.00	89.07	94.26	8898.43	1106.24	978.09	1010.15	0.76	421469.47	657147.66	N 32	9 29 32 W 103 57 32.74
	10048.00	89.07	92.13	8899.98	1199.03	970.86	1103.98	2.27	421464.23	657241.49	N 32	9 29 27 W 103 57 31.65
	10141.00	88.18	91.01	8902.19	1291.19	968.31	1196.92	1.54	421461.68	657334.42	N 32	9 29 24 W 103 57 30.57
	10234.00	89.28	91.65	8904.25	1383.41	968.15	1289.87	1.37	421459.53	657427.36	N 32	9 29 21 W 103 57 29.49
	10328.00	89.28	91.42	8905.43	1476.60	963.63	1383.83	0.24	421457.01	657521.31	N 32	9 29 18 W 103 57 28.40
	10421.00	89.21	91.43	8906.66	1568.82	961.32	1476.79	0.08	421454.70	657614.27	N 32	9 29 16 W 103 57 27.32
	10514.00	89.10	91.37	8908.03	1661.04	959.05	1569.75	0.13	421452.42	657707.22	N 32	9 29 13 W 103 57 26.23
	10607.00	89.00	91.21	8909.57	1753.28	956.85	1662.72	0.20	421450.33	657800.18	N 32	9 29 11 W 103 57 25.15
	10702.00	89.14	91.23	8911.11	1847.52	954.93	1757.68	0.15	421448.31	657895.14	N 32	9 29 08 W 103 57 24.05
	10797.00	89.14	91.23	8912.34	1941.94	954.49	1847.66	2.05	421447.87	657990.12	N 32	9 29 08 W 103 57 22.94
	10892.00	89.34	89.37	8913.40	2036.53	955.60	1947.66	0.08	421446.97	658085.10	N 32	9 29 08 W 103 57 21.84
	10987.00	89.80	89.46	8914.86	2131.10	956.57	2042.64	0.47	421446.94	658180.07	N 32	9 29 09 W 103 57 20.73
	11082.00	89.49	88.83	8917.02	2225.69	957.98	2137.61	0.78	421451.36	658275.03	N 32	9 29 10 W 103 57 19.63
	11177.00	89.14	89.30	8918.99	2320.31	959.63	2232.57	0.84	421452.91	658369.99	N 32	9 29 11 W 103 57 18.52
	11272.00	90.48	89.74	8919.30	2414.87	960.33	2327.57	1.48	421453.70	658464.97	N 32	9 29 12 W 103 57 17.42
	11366.00	89.59	89.21	8919.25	2508.44	961.19	2421.56	1.10	421454.56	658558.96	N 32	9 29 12 W 103 57 16.33
	11461.00	89.35	89.03	8920.13	2603.06	962.65	2518.54	0.32	421456.02	658653.94	N 32	9 29 13 W 103 57 15.22
	11556.00	89.24	89.10	8921.29	2697.69	964.20	2611.52	0.14	421457.57	658748.91	N 32	9 29 15 W 103 57 14.12
	11651.00	88.76	89.13	8922.95	2792.30	965.67	2706.50	0.51	421459.04	658843.88	N 32	9 29 16 W 103 57 13.01
	11746.00	89.04	89.47	8924.78	2886.88	966.83	2801.47	0.46	421460.20	658938.85	N 32	9 29 17 W 103 57 11.91
	11841.00	89.41	89.74	8926.06	2981.42	967.48	2896.46	0.48	421460.86	659033.83	N 32	9 29 17 W 103 57 10.80
	11936.00	89.24	90.54	8927.18	3075.87	967.25	2991.45	0.88	421460.62	659128.81	N 32	9 29 16 W 103 57 9.70
	12031.00	88.55	89.03	8929.01	3170.37	967.60	3086.43	1.75	421460.98	659223.78	N 32	9 29 16 W 103 57 8.59
	12126.00	90.00	90.68	8930.21	3264.87	967.84	3181.42	2.31	421461.22	659318.76	N 32	9 29 16 W 103 57 7.49
	12220.00	88.52	89.82	8931.43	3358.30	967.43	3275.41	1.82	421460.81	659412.74	N 32	9 29 16 W 103 57 6.39
	12315.00	87.90	89.05	8934.40	3452.83	968.37	3370.36	1.04	421461.75	659507.68	N 32	9 29 16 W 103 57 5.29
	12410.00	88.24	89.47	8937.60	3547.38	969.60	3465.29	0.57	421462.97	659602.61	N 32	9 29 17 W 103 57 4.18
	12504.00	88.24	89.36	8940.48	3640.92	970.56	3559.24	0.12	421463.93	659696.56	N 32	9 29 18 W 103 57 3.09
	12599.00	88.52	89.53	8943.17	3735.46	971.48	3654.20	0.34	421464.85	659791.51	N 32	9 29 18 W 103 57 1.99
	12694.00	88.55	89.47	8945.60	3830.00	972.31	3749.17	0.07	421465.68	659886.46	N 32	9 29 19 W 103 57 0.88
	12789.00	88.93	90.54	8947.69	3924.45	972.30	3844.14	1.19	421465.67	659981.43	N 32	9 29 18 W 103 56 59.78
	12884.00	88.25	90.00	8950.02	4018.86	971.85	3939.11	0.91	421465.22	660076.39	N 32	9 29 18 W 103 56 58.67
	12979.00	88.11	88.71	8953.04	4113.40	972.92	4034.06	1.37	421466.29	660171.33	N 32	9 29 18 W 103 56 57.57
	13074.00	88.21	88.25	8956.09	4208.07	975.44	4128.97	0.50	421468.81	660266.24	N 32	9 29 20 W 103 56 56.46
	13169.00	89.04	89.59	8958.37	4302.69	977.23	4223.93	1.66	421470.60	660361.19	N 32	9 29 22 W 103 56 55.36
	13264.00	88.11	88.59	8960.73	4397.29	978.73	4318.88	1.44	421472.11	660456.14	N 32	9 29 23 W 103 56 54.25
	13359.00	88.21	88.67	8963.78	4491.93	981.00	4413.81	0.13	421474.38	660551.05	N 32	9 29 25 W 103 56 53.15
	13454.00	89.35	90.34	8965.81	4586.47	981.82	4508.78	2.13	421475.20	660646.01	N 32	9 29 25 W 103 56 52.05
	13549.00	88.69	89.93	8967.43	4680.92	981.60	4603.76	0.82	421474.97	660740.99	N 32	9 29 25 W 103 56 50.94
	13644.00	88.45	88.55	8969.80	4775.49	982.86	4698.72	1.47	421476.23	660835.94	N 32	9 29 26 W 103 56 49.84
	13739.00	88.31	88.68	8972.49	4870.15	985.16	4793.65	0.20	421478.53	660930.87	N 32	9 29 28 W 103 56 48.73
	13834.00	88.35	87.81	8975.28	4964.85	988.06	4888.57	0.92	421481.44	661025.78	N 32	9 29 30 W 103 56 47.63
	13929.00	88.90	88.80	8977.54	5059.56	990.87	4983.50	1.19	421484.25	661120.70	N 32	9 29 33 W 103 56 46.52
	14024.00	88.66	88.30	8979.56	5154.24	993.28	5078.45	0.58	421486.65	661215.64	N 32	9 29 35 W 103 56 45.42
	14119.00	88.59	88.19	8981.84	5248.96	996.19	5173.37	0.14	421489.58	661310.56	N 32	9 29 37 W 103 56 44.31
	14213.00	89.62	89.77	8983.31	5342.59	997.86	5267.34	2.01	421491.23	661404.52	N 32	9 29 39 W 103 56 43.22
	14308.00	89.31	88.93	8984.19	5437.17	998.94	5362.33	0.94	421492.31	661499.50	N 32	9 29 39 W 103 56 42.12
	14403.00	89.55	88.85	8985.14	5531.83	1000.78	5457.31	0.27	421494.15	661594.47	N 32	9 29 41 W 103 56 41.01
	14498.00	89.52	88.87	8985.91	5626.49	1002.67	5552.29	0.04	421496.04	661689.45	N 32	9 29 42 W 103 56 39.91
	14592.00	89.38	88.67	8986.81	5720.16	1004.68	5646.26	0.26	421498.06	661783.41	N 32	9 29 44 W 103 56 38.81
	14687.00	89.45	88.68	8987.78	5814.84	1006.90	5741.23	0.07	421500.27	661878.37	N 32	9 29 46 W 103 56 37.71
	14782.00	88.24	88.43	8988.87	5909.54	1009.31	5836.19	0.33	421502.68	661973.33	N 32	9 29 48 W 103 56 36.60
	14877.00	89.28	88.54	8990.10	6004.25	1011.82	5931.15	0.12	421505.08	662068.28	N 32	9 29 50 W 103 56 35.50
	14972.00	89.38	88.61	8991.21	6098.94	1014.18	6026.12	0.13	421507.55	662163.24	N 32	9 29 52 W 103 56 34.39
	15067.00	88.66	88.51	8992.67	6193.63	1016.57	6121.08	0.56	421509.94	662258.19	N 32	9 29 54 W 103 56 33.29
	15162.00	89.21	88.60	8994.26	6288.32	1018.97	6216.03	0.38	421512.34	662353.14	N 32	9 29 56 W 103 56 32.18
	15257.00	89.21	88.84	8995.57	6382.99	1021.09	6311.00	0.25	421514.46	662448.10	N 32	9 29 58 W 103 56 31.08
	15352.00	88.56	88.47	8997.42	6477.67	1023.32	6405.95	0.79	421516.69	66254		

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S °)	Longitude (E/W °)
	18487 00	88 45	88 35	9055 64	9596 12	1041 58	9539 52	1 50	421534 95	665676 37	N 32 9 29 66	W 103 55 53 52
	18582 00	88 66	88 68	9058 04	9690 79	1044 04	9634 46	0 41	421537 41	665771 30	N 32 9 29 88	W 103 55 52 42
	18677 00	89 21	89 00	9059 80	9785 44	1045 96	9729 42	0 67	421539 33	665866 25	N 32 9 29 70	W 103 55 51 32
	18772 00	88 76	88 50	9061 49	9880 10	1048 04	9824 38	0 71	421541 40	665961 21	N 32 9 29 72	W 103 55 50 21
Final MWD Survey	18867 00	89 00	88 43	9063 34	9974 80	1050 58	9919 33	0 26	421543 95	666056 15	N 32 9 29 74	W 103 55 49 11
Proj to Bit	18922 00	89 00	88 43	9064 30	10029 63	1052 09	9974 30	0 00	421545 45	666111 11	N 32 9 29 75	W 103 55 48 47

Survey Type Def Survey

Survey Error Model ISCWSA Rev 0 ** 3-D 95 000% Confidence 2 7955 sigma

Survey Program

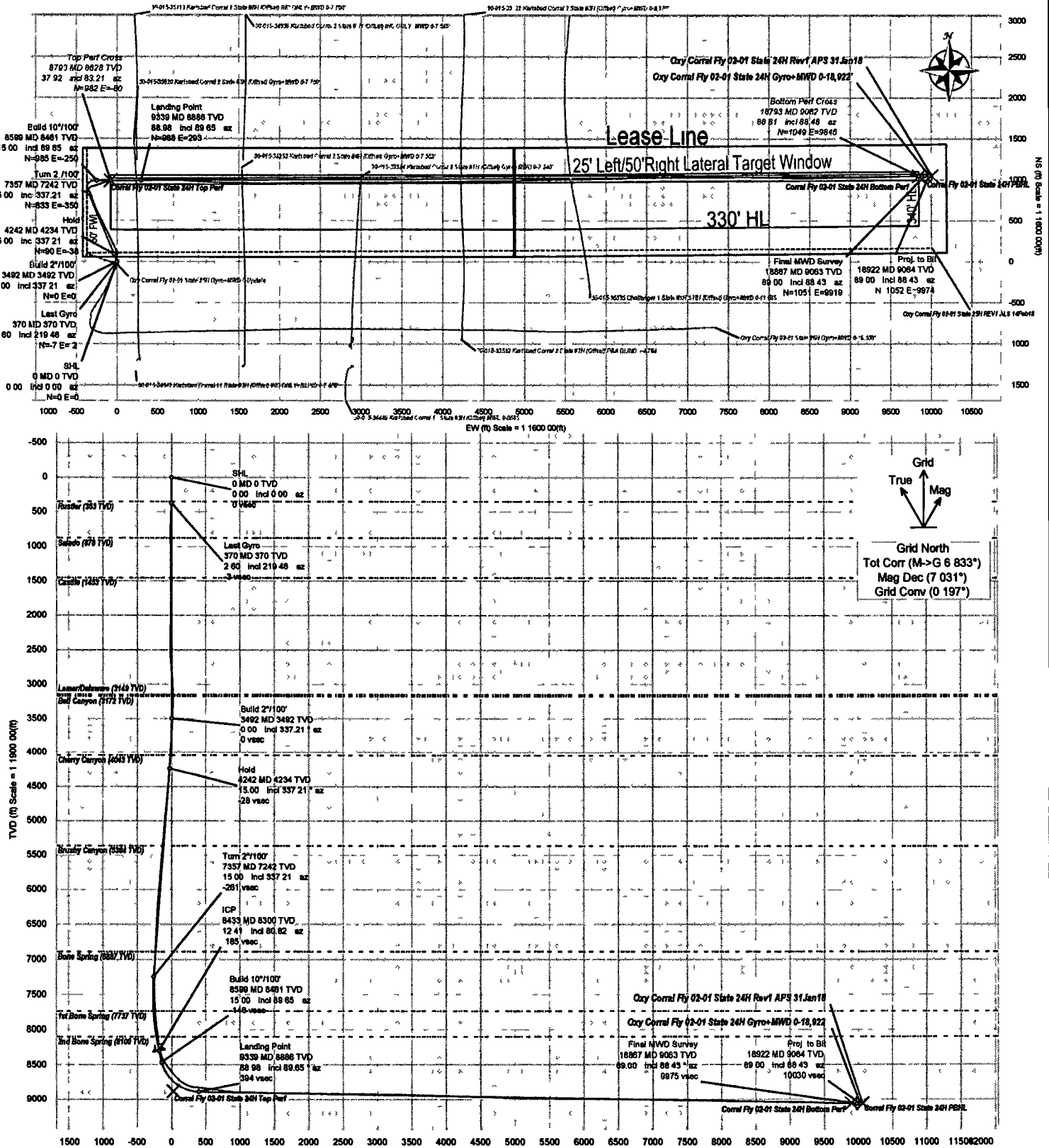
Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0 000	26 500	1/98 425	30 000	30 000	NAL_NSG+MSHOT Depth Only	Original Borehole / Oxy Corral Fly 02-01 State 24H Gyro+MWD 0- 18 922
	1	26 500	26 500	Act Stns	30 000	30 000	NAL_NSG+MSHOT Depth Only	Original Borehole / Oxy Corral Fly 02-01 State 24H Gyro+MWD 0- 18 922
	1	26 500	369 650	Act Stns	30 000	30 000	NAL_NSG+MSHOT	Original Borehole / Oxy Corral Fly 02-01 State 24H Gyro+MWD 0- 18 922
	1	369 650	9222 000	Act Stns	30 000	30 000	NAL_MWD_PLUS_0 5_DEG	Original Borehole / Oxy Corral Fly 02-01 State 24H Gyro+MWD 0- 18 922
	1	9222 000	18922 000	Act Stns	30 000	30 000	NAL_MWD_HDGM+MS	Original Borehole / Oxy Corral Fly 02-01 State 24H Gyro+MWD 0- 18 922

Schlumberger

OXY



Borehole	Well	Field	Structure
Original Borehole	Oxy Corral Fly 02-01 State 24H	NM Eddy County (NAD 83)	Oxy Corral Fly 02-01 State 24H
Gravity & Magnetic Parameters			
Model: HDOM 2017	Dip: 68.934°	Date: 31-Jan-2018	Surface Location: NAD83 New Mexico State Plane, Eastern Zone, US Feet
MagDec: 7.031	FS: 42025.132mT	Gravity FS: 988.458m/s² (19.0886 Based)	Let: N 32 8 18 70 Northing: 420483.461US Grid Conv: 0.1974°
			Lon: W 103 67 44.83 Easting: 658137.581US Scale Fact: 0.8992419
			Miscellaneous: Oxy Corral Fly 02-01 State 24H Rev1 APS 31 Jan 18
			Block: Oxy Corral Fly 02-01 State 24H Rev1 APS 31 Jan 18
			Plan: Oxy Corral Fly 02-01 State 24H Rev1 APS 31 Jan 18



Vertical Section (N) Azim = 84.03 Scale = 1 1900 00/(ft) Origin = ON-S 0E/W