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30-01544585

Schlumberger

OXY Corral Fly 02-01 State 31H Gyro + MWD 0-20250' MD Survey Geodetic Report (Def Survey)



NM OIL CONSERVATION
ARTESIA DISTRICT

NOV 08 2018

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Report Date: October 10, 2018 - 11:05 AM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Slot: Oxy Corral Fly 02-01 State 31H / Corral Fly 02-01 State 31H
Well: Corral Fly 02-01 State 31H
Borehole: Original Borehole
UVM / API#: Unknown / Unknown
Survey Name: OXY Corral Fly 02-01 State 31H Gyro + MWD 0-20250' MD
Survey Date: August 13, 2018
Tort / AHD / DDI / ERD Ratio: 205.665' / 10765.348' / 0.638' / 1.044
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 9' 49.82700", W 103° 57' 47.80853"
Location Grid N/E Y/X: N 423537.190 NUS, E 655838.870 NUS
CRS Grid Convergence Angle: 0.1970°
Grid Scale Factor: 0.99992411
Version / Patch: 2.10.740.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 87.087° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB+28.5'
TVD Reference Elevation: 3021.300 ft above MSL
Seabed / Ground Elevation: 2994.800 ft above MSL
Magnetic Declination: 6.974°
Total Gravity Field Strength: 998.4591 mgn (0.00665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47853.989 nT
Magnetic Dip Angle: 59.910°
Declination Date: September 25, 2018
Magnetic Declination Model: HDGM 2018
North Reference: Grid North
Grid Convergence Used: 0.1970°
Total Corr Mag North-Grid: 6.7768°
North: Well Head
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	423537.19	655838.87	N 32° 09' 49.83"	W 103° 57' 47.81"
SHL	28.50	0.00	0.00	28.50	0.00	0.00	0.00	0.00	423537.19	655838.87	N 32° 09' 49.83"	W 103° 57' 47.81"
	100.50	0.14	263.82	100.50	-0.09	0.02	-0.09	0.19	423537.21	655838.78	N 32° 09' 49.83"	W 103° 57' 47.81"
Last Gyro	188.88	0.18	193.03	188.88	-0.22	-0.07	-0.22	0.25	423537.12	655838.65	N 32° 09' 49.83"	W 103° 57' 47.81"
	272.78	0.13	133.83	272.78	-0.19	-0.26	-0.17	0.17	423536.93	655838.70	N 32° 09' 49.82"	W 103° 57' 47.81"
	368.37	0.35	178.23	368.37	-0.12	-0.62	-0.09	0.29	423536.57	655838.78	N 32° 09' 49.82"	W 103° 57' 47.81"
	519.00	0.40	170.89	519.00	-0.08	-1.60	0.00	0.05	423535.59	655838.87	N 32° 09' 49.81"	W 103° 57' 47.81"
	600.00	0.06	146.71	599.99	-0.03	-1.92	0.07	0.43	423535.27	655838.94	N 32° 09' 49.81"	W 103° 57' 47.81"
	768.00	0.02	156.02	767.99	0.03	-2.03	0.13	0.02	423535.16	655837.00	N 32° 09' 49.81"	W 103° 57' 47.81"
	853.00	0.06	68.98	852.99	0.08	-2.02	0.19	0.06	423535.17	655837.06	N 32° 09' 49.81"	W 103° 57' 47.81"
	975.00	0.06	78.40	974.99	0.18	-1.99	0.28	0.01	423535.20	655837.15	N 32° 09' 49.81"	W 103° 57' 47.81"
	1067.00	0.02	335.83	1066.99	0.22	-1.97	0.32	0.07	423535.22	655837.19	N 32° 09' 49.81"	W 103° 57' 47.80"
	1159.00	0.06	128.47	1158.99	0.25	-1.98	0.35	0.08	423535.21	655837.22	N 32° 09' 49.81"	W 103° 57' 47.80"
	1344.00	0.23	88.83	1343.99	0.69	-2.02	0.80	0.10	423535.17	655837.87	N 32° 09' 49.81"	W 103° 57' 47.80"
	1436.00	0.02	338.01	1435.99	0.87	-1.99	0.98	0.26	423535.20	655837.85	N 32° 09' 49.81"	W 103° 57' 47.80"
	1529.00	0.02	338.60	1528.99	0.88	-1.98	0.98	0.00	423535.23	655837.83	N 32° 09' 49.81"	W 103° 57' 47.80"
	1623.00	0.02	175.24	1622.99	0.88	-1.96	0.96	0.04	423535.23	655837.83	N 32° 09' 49.81"	W 103° 57' 47.80"
	1717.00	0.02	318.42	1716.99	0.85	-1.97	0.95	0.04	423535.22	655837.82	N 32° 09' 49.81"	W 103° 57' 47.80"
	1812.00	0.03	354.87	1811.99	0.84	-1.93	0.84	0.02	423535.26	655837.81	N 32° 09' 49.81"	W 103° 57' 47.80"
	1906.00	0.06	7.19	1905.99	0.84	-1.88	0.84	0.04	423535.33	655837.81	N 32° 09' 49.81"	W 103° 57' 47.80"
	2095.00	0.03	98.84	2094.99	0.91	-1.77	1.00	0.03	423535.42	655837.87	N 32° 09' 49.81"	W 103° 57' 47.80"
	2284.00	0.02	188.85	2283.99	0.95	-1.60	1.05	0.02	423535.38	655837.82	N 32° 09' 49.81"	W 103° 57' 47.80"
	2378.00	0.02	284.01	2377.99	0.93	-1.82	1.03	0.03	423535.37	655837.90	N 32° 09' 49.81"	W 103° 57' 47.80"
2472.00	0.02	128.99	2471.99	0.93	-1.82	1.02	0.04	423535.37	655837.92	N 32° 09' 49.81"	W 103° 57' 47.80"	
2567.00	0.02	48.53	2566.99	0.96	-1.82	1.05	0.03	423535.37	655837.89	N 32° 09' 49.81"	W 103° 57' 47.80"	
2661.00	0.02	31.74	2660.99	0.99	-1.80	1.07	0.01	423535.37	655837.82	N 32° 09' 49.81"	W 103° 57' 47.80"	
2755.00	0.03	160.73	2754.99	0.99	-1.80	1.07	0.01	423535.38	655837.94	N 32° 09' 49.81"	W 103° 57' 47.80"	
2849.00	0.02	0.80	2848.99	1.01	-1.81	1.09	0.03	423535.38	655837.90	N 32° 09' 49.81"	W 103° 57' 47.80"	
3038.00	0.02	299.44	3037.99	0.98	-1.77	1.07	0.01	423535.42	655837.97	N 32° 09' 49.81"	W 103° 57' 47.80"	
3132.00	0.06	77.65	3131.99	1.02	-1.75	1.11	0.08	423535.44	655837.98	N 32° 09' 49.81"	W 103° 57' 47.80"	
3226.00	0.02	91.05	3225.99	1.08	-1.74	1.17	0.04	423535.45	655838.04	N 32° 09' 49.81"	W 103° 57' 47.80"	
3415.00	0.02	124.33	3414.99	1.14	-1.70	1.23	0.01	423535.43	655838.10	N 32° 09' 49.81"	W 103° 57' 47.80"	
3510.00	0.02	327.18	3509.99	1.15	-1.75	1.24	0.04	423535.44	655838.11	N 32° 09' 49.81"	W 103° 57' 47.80"	
3604.00	0.02	157.57	3603.99	1.14	-1.78	1.23	0.04	423535.43	655838.10	N 32° 09' 49.81"	W 103° 57' 47.80"	
3698.00	0.02	10.63	3697.99	1.15	-1.75	1.24	0.04	423535.44	655838.11	N 32° 09' 49.81"	W 103° 57' 47.80"	
3792.00	0.02	333.35	3791.99	1.15	-1.72	1.24	0.01	423535.47	655838.11	N 32° 09' 49.81"	W 103° 57' 47.80"	
3881.00	1.00	47.81	3880.98	2.41	-0.59	2.45	0.53	423536.60	655839.32	N 32° 09' 49.82"	W 103° 57' 47.80"	
4078.00	1.95	42.20	4077.95	4.18	1.15	4.13	1.82	423538.34	655841.00	N 32° 09' 49.84"	W 103° 57' 47.80"	
4170.00	3.31	41.41	4169.85	7.24	4.40	7.03	1.43	423541.59	655843.90	N 32° 09' 49.87"	W 103° 57' 47.80"	
4264.00	4.59	42.03	4263.82	11.60	9.23	11.34	1.38	423546.42	655848.21	N 32° 09' 49.92"	W 103° 57' 47.80"	
4358.00	4.99	38.10	4357.30	17.14	15.24	16.38	0.85	423552.43	655853.25	N 32° 09' 49.98"	W 103° 57' 47.82"	
4452.00	4.92	35.92	4450.94	22.35	21.73	21.27	0.21	423558.91	655858.14	N 32° 09' 50.04"	W 103° 57' 47.86"	
4641.00	4.72	32.46	4639.28	31.63	34.85	30.20	0.19	423572.04	655867.07	N 32° 09' 50.17"	W 103° 57' 47.86"	
4735.00	4.83	30.64	4732.95	36.37	41.53	34.30	0.21	423578.72	655871.17	N 32° 09' 50.24"	W 103° 57' 47.86"	
4924.00	2.72	25.10	4921.53	42.89	52.47	40.27	1.14	423589.65	655877.14	N 32° 09' 50.34"	W 103° 57' 47.84"	
5112.00	0.06	227.27	5109.48	44.91	58.44	42.09	1.48	423593.83	655878.90	N 32° 09' 50.38"	W 103° 57' 47.82"	
5206.00	0.06	219.91	5203.48	44.84	58.37	42.03	0.01	423593.56	655878.89	N 32° 09' 50.38"	W 103° 57' 47.82"	
5301.00	0.03	170.89	5298.48	44.81	56.31	42.00	0.05	423593.49	655878.87	N 32° 09' 50.38"	W 103° 57' 47.82"	
5395.00	0.02	358.30	5392.48	44.81	56.30	42.00	0.05	423593.49	655878.87	N 32° 09' 50.38"	W 103° 57' 47.82"	
5489.00	0.02	137.05	5488.48	44.82	56.31	42.01	0.04	423593.49	655878.88	N 32° 09' 50.38"	W 103° 57' 47.82"	
5584.00	0.02	175.27	5581.48	44.83	56.28	42.03	0.01	423593.48	655878.89	N 32° 09' 50.38"	W 103° 57' 47.82"	
5678.00	0.00	102.31	5675.48	44.88	56.25	42.08	0.08	423593.44	655878.94	N 32° 09' 50.38"	W 103° 57' 47.82"	
5772.00	0.02	198.83	5769.48	44.82	56.22	42.12	0.07	423593.41	655878.98	N 32° 09' 50.38"	W 103° 57' 47.82"	
5866.00	0.06	221.38	5863.48	44.88	56.17	42.08	0.06	423593.30	655878.92	N 32° 09' 50.38"	W 103° 57' 47.82"	
5961.00	0.02	181.23	5958.48	44.88	56.12	42.06	0.04	423593.30	655878.94	N 32° 09' 50.38"	W 103° 57' 47.82"	
6055.00	0.02	359.83	6052.48	44.88	56.12	42.06	0.04	423593.30	655878.94	N 32° 09' 50.38"	W 103° 57' 47.82"	
6149.00	0.14	88.19	6148.48	44.87	56.12	42.17	0.15	423593.30	655878.94	N 32° 09' 50.38"	W 103° 57' 47.82"	
6243.00	0.06	278.04	6240.48	45.03	56.11	42.24	0.21	423593.28	655878.90	N 32° 09' 50.38"	W 103° 57' 47.81"	
6337.00	0.06	342.81	6334.48	44.87	56.16	42.17	0.07	423593.35	655878.94	N 32° 09' 50.38"	W 103° 57' 47.82"	
6431.00	0.02	292.31	6428.48	44.95	56.21	42.14	0.05	423593.40	655879.01	N 32° 09' 50.38"	W 103° 57' 47.82"	
6525.00	0.06	289.05	6522.48	44.88	56.22	42.08	0.05	423593.40	655878.95	N 32° 09' 50.38"	W 103° 57' 47.82"	
6620.00	0.12	188.26	6617.48	44.85	56.12	42.05	0.15	423593.31	655878.92	N 32° 09' 50.38"	W 103° 57' 47.82"	
6714.00	0.01	137.42	6711.48	44.87	56.02	42.07	0.12	423593.20	655878.94	N 32° 09' 50.38"	W 103° 57' 47.82"	
6808.00	0.05	138.52	6805.48	44.90	55.98	42.11	0.04	423593.17	655878.97	N 32° 09' 50.38"	W 103° 57' 47.82"	
6902.00	0.12	221.55	6899.48	44.85	55.88	42.07	0.13	423593.00	655878.94	N 32° 09' 50.38"	W 103° 57' 47.82"	
6996.00	0.06	227.43	6893.48	44.75	55.77	41.97	0.06	423592.96	655878.93	N 32° 09' 50.38"	W 103° 57' 47.82"	
7184.00	0.11	238.87	7181.48	44.51	55.61	41.74	0.03	423592.80	655878.81	N 32° 09' 50.38"	W 103° 57' 47.82"	
7278.00	0.16	308.17	7276.48	44.33	55.64	41.56	0.17	423592.83	655878.42	N 32° 09' 50.38"	W 103° 57' 47.82"	
7373.00	1.35	300.14	7370.45	43.31	56.28	40.50	1.27	423593.47	655877.36	N 32° 09' 50.38"	W 103° 57' 47.84"	
7467.00	3.91	317.50	7464.38	40.88	58.80	37.93	1.78	423595.78	655874.79	N 32° 09' 50.41"	W 103° 57' 47.86"	
7561.00	4.30	310.29	7558.19	37.18	63.03	34.02	1.49	423600.21	655870.88	N 32° 09' 50.43"	W 103° 57' 47.91"	
7656.00	4.82	332.18	7555.98	32.94	68.01	29.47	1.78	423606.23	655866.34	N 32° 09' 50.51"	W 103° 57' 47.96"	
7750.00	5.48	323.47	7746.51	28.44	75.92	24.61	1.73	423613.10	655861.48	N 32° 09' 50.58"	W 103° 57' 47.82"	
7844.00	7.39	332.38	7839.92	23.44	84.87	19.15	1.26	423620.87	655855.87	N 32° 09' 50.78"	W 103° 57' 47.88"	
7938.00	8.49	335.38	7933.02	18.34	96.93	13.45	1.28	423631.72	655850.32	N 32° 09' 50.78"	W 103° 57' 47.91"	
8033.00	9.29	335.16	8028.88	12.88	109.87	7.31	0.84	423647.05	655844.18	N 32° 09' 50.91"		

Comments	MD (ft)	Incl (°)	Azimuth (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	8409.00	9.09	343.89	8397.80	-7.01	168.25	-15.58	1.37	423709.43	655421.29	N 32° 01.49' W	103° 57' 48.08"
	8503.00	9.71	358.38	8490.35	-8.52	183.32	-17.85	2.58	423720.49	655810.02	N 32° 01.84' W	103° 57' 48.11"
	8598.00	10.12	5.01	8583.93	-7.18	189.64	-17.35	1.28	423738.82	655810.52	N 32° 01.80' W	103° 57' 48.10"
	8692.00	11.24	3.32	8678.30	-5.05	217.01	-16.10	1.24	423754.19	655820.77	N 32° 01.97' W	103° 57' 48.09"
	8788.00	11.03	359.25	8768.54	-3.72	235.15	-15.69	0.87	423772.32	655821.18	N 32° 02.15' W	103° 57' 48.08"
	8880.00	12.80	358.43	8860.51	-3.13	254.55	-18.09	1.89	423791.72	655820.78	N 32° 02.35' W	103° 57' 48.09"
	8975.00	13.08	354.49	8953.10	-3.37	275.77	-17.41	0.97	423812.84	655819.46	N 32° 02.56' W	103° 57' 48.10"
	9069.00	13.87	355.69	9044.51	-4.13	297.80	-18.28	0.89	423834.78	655817.59	N 32° 02.77' W	103° 57' 48.12"
	9163.00	13.78	353.54	9135.80	-5.10	319.82	-21.38	0.57	423857.08	655815.49	N 32° 02.99' W	103° 57' 48.14"
	9257.00	12.18	0.09	9227.41	-5.11	340.90	-22.47	2.43	423878.07	655814.41	N 32° 03.20' W	103° 57' 48.16"
	9351.00	11.85	12.28	9316.37	-1.91	360.23	-20.24	2.52	423897.40	655816.83	N 32° 03.39' W	103° 57' 48.13"
	9446.00	11.01	18.70	9412.49	4.15	379.31	-18.18	1.49	423915.46	655821.78	N 32° 03.57' W	103° 57' 48.07"
	9526.00	10.84	28.04	9491.03	10.77	398.20	-15.09	1.80	423929.47	655827.70	N 32° 03.71' W	103° 57' 48.00"
	9611.00	18.68	49.73	9710.52	50.16	425.24	28.08	4.28	423947.45	655864.95	N 32° 04.13' W	103° 57' 47.36"
	9697.00	24.29	61.22	9798.00	79.55	454.29	50.53	7.45	423961.45	655865.29	N 32° 04.32' W	103° 57' 47.23"
	9783.00	31.38	77.89	9881.19	121.32	488.78	97.52	11.14	424005.93	655868.78	N 32° 04.51' W	103° 57' 48.12"
	9869.00	30.18	90.42	9958.79	175.73	473.78	151.87	11.17	424010.91	656054.93	N 32° 04.49' W	103° 57' 45.33"
	9955.00	50.62	92.49	10025.26	241.78	471.96	218.08	12.27	424008.11	656054.93	N 32° 04.49' W	103° 57' 45.33"
	10041.00	50.78	92.39	10092.53	243.32	471.89	219.62	9.09	424009.04	656054.93	N 32° 04.49' W	103° 57' 45.33"
	10127.00	58.41	89.19	10169.80	318.12	471.64	204.53	9.08	424008.80	656131.38	N 32° 04.46' W	103° 57' 44.48"
	10213.00	61.70	91.16	10246.73	389.46	472.07	375.95	4.44	424009.22	656212.78	N 32° 04.46' W	103° 57' 43.52"
	10299.00	68.91	91.88	10323.00	459.43	470.19	448.11	9.37	424007.35	656282.95	N 32° 04.46' W	103° 57' 42.70"
	10385.00	70.47	92.03	10409.00	485.04	469.60	481.77	9.37	424008.81	656288.80	N 32° 04.46' W	103° 57' 42.52"
	10471.00	88.89	91.45	10493.35	576.57	468.88	553.55	17.27	424004.04	656380.38	N 32° 04.43' W	103° 57' 41.45"
	10557.00	89.65	89.55	10578.38	671.33	468.06	648.49	3.70	424003.21	656485.31	N 32° 04.42' W	103° 57' 40.35"
	10643.00	88.77	89.28	10663.48	751.26	468.87	728.47	1.15	424004.03	656595.29	N 32° 04.42' W	103° 57' 39.42"
	10729.00	89.97	89.03	10743.31	845.10	469.73	822.42	0.17	424008.89	656709.21	N 32° 04.44' W	103° 57' 37.16"
	10815.00	89.17	10193.02	10823.02	931.02	471.21	918.39	0.15	424008.38	656825.18	N 32° 04.45' W	103° 57' 36.07"
	10901.00	89.00	10194.76	10903.02	1021.85	472.71	1110.36	0.18	424009.85	656947.14	N 32° 04.47' W	103° 57' 34.97"
	10987.00	89.08	10196.46	10988.02	1112.88	474.30	1205.33	0.11	424012.06	657062.11	N 32° 04.48' W	103° 57' 33.87"
	11073.00	89.01	89.08	11068.02	1203.88	475.81	1300.31	0.25	424012.06	657177.08	N 32° 04.49' W	103° 57' 32.78"
	11159.00	89.25	89.08	11158.02	1294.86	477.24	1394.29	0.20	424014.39	657291.05	N 32° 04.50' W	103° 57' 31.67"
	11245.00	89.07	89.18	11245.02	1385.82	477.24	1488.28	0.33	424016.02	657405.02	N 32° 04.51' W	103° 57' 30.58"
	11331.00	89.08	88.85	11331.02	1476.80	480.56	1583.23	0.28	424017.71	657519.98	N 32° 04.53' W	103° 57' 29.47"
	11417.00	89.06	88.85	11417.02	1567.80	482.10	1678.21	0.09	424019.25	657634.95	N 32° 04.56' W	103° 57' 28.37"
	11503.00	89.01	89.11	11503.02	1658.81	483.43	1773.17	0.65	424020.58	657749.92	N 32° 04.58' W	103° 57' 27.26"
	11589.00	88.97	89.03	11589.02	1749.84	484.68	1868.14	0.47	424021.81	657864.89	N 32° 04.58' W	103° 57' 26.17"
	11675.00	88.48	89.37	11675.02	1840.85	488.43	1963.10	0.49	424023.54	657979.87	N 32° 04.57' W	103° 57' 25.08"
	11761.00	88.83	89.13	11761.02	1931.88	488.38	2058.07	0.24	424025.54	658094.84	N 32° 04.59' W	103° 57' 23.97"
	11847.00	89.01	88.71	11847.02	2022.91	490.19	2153.04	0.08	424027.34	658209.81	N 32° 04.60' W	103° 57' 22.88"
	11933.00	89.08	88.93	11933.02	2113.94	492.07	2248.01	0.07	424029.22	658324.78	N 32° 04.62' W	103° 57' 21.77"
	12019.00	89.04	88.87	12019.02	2204.97	493.88	2343.96	0.11	424031.03	658439.75	N 32° 04.63' W	103° 57' 20.68"
	12105.00	89.11	88.86	12105.02	2295.94	495.75	2438.91	0.40	424032.90	658554.72	N 32° 04.65' W	103° 57' 19.59"
	12191.00	89.18	88.93	12191.02	2386.91	497.70	2533.86	0.20	424034.86	658669.69	N 32° 04.66' W	103° 57' 18.49"
	12277.00	88.83	88.79	12277.02	2477.88	499.70	2628.81	0.58	424036.84	658784.66	N 32° 04.68' W	103° 57' 17.40"
	12363.00	89.01	88.83	12363.02	2568.85	501.57	2723.85	0.92	424038.82	658899.63	N 32° 04.70' W	103° 57' 16.32"
	12449.00	89.52	88.87	12449.02	2659.82	503.42	2818.82	0.25	424040.79	659014.60	N 32° 04.72' W	103° 57' 15.23"
	12535.00	89.04	88.78	12535.02	2750.79	505.27	2913.79	0.23	424042.77	659129.57	N 32° 04.74' W	103° 57' 14.14"
	12621.00	89.04	88.78	12621.02	2841.76	507.12	3008.76	0.45	424044.75	659244.54	N 32° 04.76' W	103° 57' 13.05"
	12707.00	89.32	88.88	12707.02	2932.73	508.97	3103.73	0.29	424046.73	659359.51	N 32° 04.78' W	103° 57' 11.96"
	12793.00	89.07	88.88	12793.02	3023.70	510.82	3198.70	0.56	424048.71	659474.48	N 32° 04.80' W	103° 57' 10.87"
	12879.00	89.04	88.13	12879.02	3114.67	512.67	3293.67	0.80	424050.69	659589.45	N 32° 04.82' W	103° 57' 9.74"
	12965.00	89.70	88.13	12965.02	3205.64	514.52	3388.64	0.99	424052.67	659704.42	N 32° 04.84' W	103° 57' 8.65"
	13051.00	89.52	88.01	13051.02	3296.61	516.37	3483.61	0.51	424054.65	659819.39	N 32° 04.86' W	103° 57' 7.56"
	13137.00	89.14	88.32	13137.02	3387.58	518.22	3578.58	0.67	424056.63	659934.36	N 32° 04.88' W	103° 57' 6.47"
	13223.00	89.83	88.09	13223.02	3478.55	519.97	3673.55	0.87	424058.61	660049.33	N 32° 04.90' W	103° 57' 5.38"
	13309.00	89.80	88.04	13309.02	3569.52	521.72	3768.52	2.70	424060.59	660164.30	N 32° 04.92' W	103° 57' 4.29"
	13395.00	89.42	88.02	13395.02	3660.49	523.57	3863.49	0.42	424062.57	660279.27	N 32° 04.94' W	103° 57' 3.20"
	13481.00	89.32	88.02	13481.02	3751.46	525.42	3958.46	0.50	424064.55	660394.24	N 32° 04.96' W	103° 57' 2.11"
	13567.00	89.86	88.05	13567.02	3842.43	527.27	4053.43	0.58	424066.53	660509.21	N 32° 04.98' W	103° 57' 1.02"
	13653.00	89.42	88.05	13653.02	3933.40	529.12	4148.40	0.30	424068.51	660624.18	N 32° 05.00' W	103° 57' 0.93"
	13739.00	89.86	88.09	13739.02	4024.37	530.97	4243.37	0.30	424070.49	660739.15	N 32° 05.02' W	103° 56' 59.85"
	13825.00	89.86	88.09	13825.02	4115.34	532.82	4338.34	0.58	424072.47	660854.12	N 32° 05.04' W	103° 56' 58.76"
	13911.00	89.42	88.09	13911.02	4206.31	534.67	4433.31	0.30	424074.45	660969.09	N 32° 05.06' W	103° 56' 57.67"
	13997.00	89.86	88.09	13997.02	4297.28	536.52	4528.28	0.57	424076.43	661084.06	N 32° 05.08' W	103° 56' 56.58"
	14083.00	89.86	88.09	14083.02	4388.25	538.37	4623.25	0.41	424078.41	661199.03	N 32° 05.10' W	103° 56' 55.49"
	14169.00	89.86	88.09	14169.02	4479.22	540.22	4718.22	0.55	424080.39	661314.00	N 32° 05.12' W	103° 56' 54.40"
	14255.00	89.86	88.09	14255.02	4570.19	542.07	4813.19	0.35	424082.37	661428.97	N 32° 05.14' W	103° 56' 53.31"
	14341.00	89.86	88.09	14341.02	4661.16	543.92	4908.16	0.28	424084.35	661543.94	N 32° 05.16' W	103° 56' 52.22"
	14427.00	89.86	88.09	14427.02	4752.13	545.77	5003.13	0.21	424086.33	661658.91	N 32° 05.18' W	103° 56' 51.13"
	14513.00	89.86	88.09	14513.02	4843.10	547.62	5098.10	0.18	424088.31	661773.88	N 32° 05.20' W	103° 56' 50.04"
	14599.00	89.86	88.09	14599.02	4934.07	549.47	5193.07	0.15	424090.29	661888.85	N 32° 05.22' W	103° 56' 48.95"
	14685.00	89.86	88.09	14685.02	5025.04	551.32	5288.04	0.12	424092.27	662003.82	N 32° 05.24' W	103° 56' 47.86"
	14771.00	89.86	88.09	14771.02	5116.01	553.17	5383.01	0.08	424094.25	662118.79	N 32° 05.26' W	103° 56' 46.77"
	14857.00	89.86	88.09	14857.02	5206.98	555.02	5478.98	0.16	424096.23	662233.76	N 32° 05.28' W	103° 56' 45.68"
	14943.00	89.86	88.09	14943.02	5297.95	556.87	5573.95	0.18	424098.21	6		

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ftUS)	Eastng (ftUS)	Latitude (N/S ° ° °)	Longitude (E/W ° ° °)
	18890.00	89.66	89.50	10307.51	8949.82	511.26	8933.18	2.43	424048.41	664771.35	N 32	9 54.57 W 103 56 3.94
	18895.00	89.73	88.80	10308.36	8944.55	512.87	8930.16	0.74	424049.82	664886.33	N 32	9 54.58 W 103 56 2.84
	18930.00	89.86	88.70	10305.73	8989.52	513.65	8973.15	0.36	424050.80	664911.31	N 32	9 54.59 W 103 56 2.32
	19079.00	89.11	89.08	10305.75	9138.50	514.81	9124.14	3.65	424051.76	664980.30	N 32	9 54.60 W 103 56 1.75
	19125.00	89.93	89.07	10308.13	9184.47	515.36	9170.13	1.78	424052.51	665008.28	N 32	9 54.60 W 103 56 1.21
	19174.00	90.86	89.32	10305.79	9233.43	518.05	9219.12	1.97	424053.20	665055.27	N 32	9 54.61 W 103 56 0.64
	19218.00	91.34	89.94	10304.83	9278.38	518.34	9264.11	1.74	424053.49	665100.28	N 32	9 54.61 W 103 56 0.12
	19268.00	90.11	88.29	10304.51	9372.34	518.55	9313.10	4.20	424054.25	665149.24	N 32	9 54.61 W 103 55 59.55
	19313.00	90.52	88.61	10304.06	9421.32	520.03	9359.08	1.10	424055.70	665194.22	N 32	9 54.63 W 103 55 59.02
	19362.00	89.49	88.53	10304.06	9421.32	520.03	9359.08	2.35	424057.18	665243.19	N 32	9 54.64 W 103 55 58.45
	19532.00	92.27	88.89	10301.14	9611.21	524.30	9506.96	1.48	424061.45	665433.09	N 32	9 54.67 W 103 55 58.25
	19646.00	91.52	89.06	10298.03	9705.10	525.98	9600.90	0.82	424063.13	665527.01	N 32	9 54.68 W 103 55 55.15
	19740.00	91.53	89.02	10295.51	9799.02	527.58	9784.85	0.05	424064.71	665620.96	N 32	9 54.70 W 103 55 54.06
	19834.00	91.27	89.00	10293.20	9882.93	529.18	9878.81	0.30	424066.33	665714.91	N 32	9 54.71 W 103 55 52.97
	19879.00	91.45	89.06	10292.13	9937.90	529.94	9923.78	0.42	424067.09	665759.88	N 32	9 54.72 W 103 55 52.44
	19929.00	91.55	88.87	10290.82	9987.85	530.85	9973.78	0.43	424068.00	665809.85	N 32	9 54.73 W 103 55 51.88
	19974.00	91.31	88.83	10289.70	10032.81	531.71	10018.74	0.55	424068.86	665854.83	N 32	9 54.73 W 103 55 51.34
	20023.00	90.48	89.09	10288.94	10081.78	532.56	10067.73	1.73	424069.71	665903.81	N 32	9 54.74 W 103 55 50.77
	20068.00	88.18	89.18	10289.48	10126.75	533.24	10112.71	5.12	424070.38	665948.80	N 32	9 54.74 W 103 55 50.25
Bottom Perf Cross	20088.00	87.04	89.12	10290.30	10148.72	533.53	10132.69	5.70	424070.68	665988.78	N 32	9 54.75 W 103 55 50.01
	20117.00	85.39	89.04	10292.21	10175.83	534.00	10181.83	5.70	424071.14	665997.70	N 32	9 54.75 W 103 55 49.88
Final MWD Survey	20182.00	84.11	89.99	10296.33	10220.40	534.38	10208.43	3.54	424071.52	666042.51	N 32	9 54.75 W 103 55 49.15
Proj to TD	20205.00	86.84	91.34	10299.72	10283.18	533.88	10249.29	7.08	424071.03	666085.38	N 32	9 54.75 W 103 55 48.88
	20250.00	86.84	91.34	10302.20	10307.90	532.83	10294.21	0.00	424069.98	666130.28	N 32	9 54.75 W 103 55 48.13

Survey Type: Del Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7935 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EDU Freq (Hz)	Mole Size	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	29.500	1/96.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / OXY Corral Fly 02-01 State 31H Gyro + MWD 0-20250MD
	1	29.500	29.500	Act Sns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / OXY Corral Fly 02-01 State 31H Gyro + MWD 0-20250MD
	1	29.500	368.370	Act Sns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / OXY Corral Fly 02-01 State 31H Gyro + MWD
	1	368.370	20250.000	Act Sns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / OXY Corral Fly 02-01 State 31H Gyro + MWD

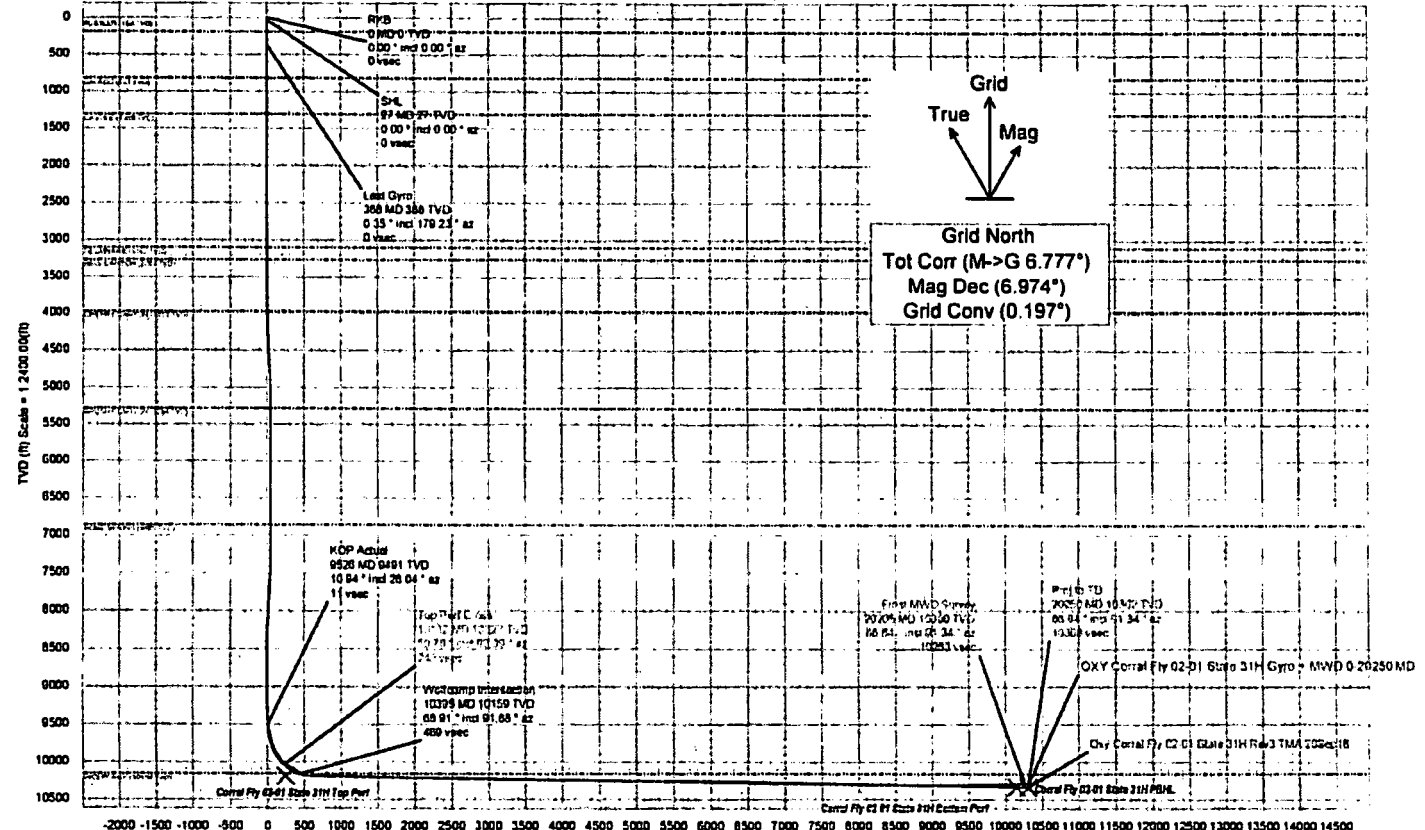
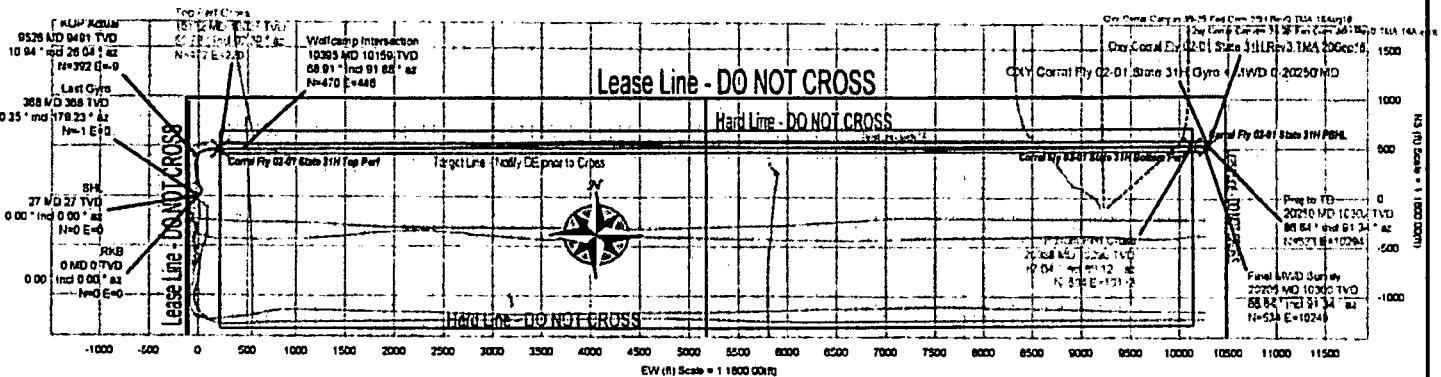
...Corral Fly 02-01 State 31H\Original Borehole\OXY Corral Fly 02-01 State 31H Gyro + MWD 0-20250MD

Schlumberger

OXY



Borehole:		Well:		Field:		Structure:		
Original Borehole		Corral Fly 02-01 State 31H		NM Eddy County (NAD 83)		Oxy Corral Fly 02-01 State 31H		
Gravity & Magnetic Parameters						Miscellaneous		
Model:	MOG 2018	Dir:	58.91°	Date:	25-Sep-2018	Surface Location:	NADES New Mexico State Plane, Eastern Zone, US Feet	
MagDec:	6.674°	FB:	47983 9801	Gravity FB:	980 433mg (0.0045 Speed)	Lat:	N 33 8 43.83	
						Long:	W 103 07 47.91	
						Northing:	43357 11810	
						Easting:	63236 97805	
						Grid Corr:	0.197°	
						Scale Fact:	0.9992211	
						Blk:	Corral Fly 02-01	
						TVD Ref:	RKB=26.5 (MD 31H above SHL)	
						Plan:	Oxy Corral Fly 02-01 State 31H Gyro + MWD 8-20250MD	
Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00
Last Gyro	368.37	0.35	179.23	368.37	-0.12	-0.82	-0.09	0.29
KOP Actual	9526.00	10.94	26.04	9491.03	10.77	392.31	-9.16	1.49
Top Perf Cross	10132.00	50.78	92.39	10026.53	243.32	471.89	219.62	9.08
Wellcamp Intersection	10395.30	68.91	91.88	10159.00	489.43	470.19	448.11	9.37
Bottom Perf Cross	20088.00	87.04	89.12	10290.30	10146.72	533.53	10132.88	5.70
Final MWD Survey	20205.00	86.84	91.34	10299.72	10263.18	533.88	10249.29	7.08
Proj to TD	20250.00	86.84	91.34	10302.20	10307.99	532.83	10294.21	0.00



Vertical Section (R Azim = 87.09° Scale = 1.2400 00(r) Origin = 0N-0, DE/W