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Schlumberger

Oxy Corral Fly 02-01 State 36H Gyro + MWD 0-20300' MD Survey Geodetic Report (Def Survey)

30-015-44590



Report Date: September 10, 2018 - 09 02 AM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Slot: Oxy Corral Fly 02-01 State 36H / Corral Fly 02-01 State 36H
Well: Corral Fly 02-01 State 36H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Oxy Corral Fly 02-01 State 36H Gyro + MWD 0-20300' MD
Survey Date: August 23, 2018
Tort / AHD / DDH / ERD Ratio: 244.324' / 11185.965 ft / 8.728' / 1.077
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 0' 18.0064" W 103° 57' 48.6287"
Location Grid N/E V/X: N 420423.150 NUS, E 655957.500 NUS
CRS Grid Convergence Angle: 0.1971°
Grid Scale Factor: 0.99992414
Version / Patch: 2.10.740.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 04 283° (Grid North)
Vertical Section Origin: 0 000 n. 0 000 n
TVD Reference Datum: RKB=26.5'
TVD Reference Elevation: 1060.900 ft above MSL
Seasid / Ground Elevation: 1034.400 ft above MSL
Magnetic Declination: 6.974°
Total Gravity Field Strength: 998.4543mg (9 80685 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47660.421 nT
Magnetic Dip Angle: 59.901°
Declination Date: August 23, 2018
Magnetic Declination Model: HDGM 2018
North Reference: Grid North
Grid Convergence Used: 0.1971°
Total Corr Mag North-Grid: 8.7772°
Local Coord Referenced To: Well Head

NM OIL CONSERVATION ARTESIA DISTRICT

OCT 09 2018

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Comments	MD (ft)	Incl (°)	Azimuth (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (NUS)	Easting (EUS)	Latitude (N 1° 1')	Longitude (W 1° 1')
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	420423.15	655957.50	N 32° 0' 18.01" W	103° 57' 48.63"
SMH	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	420423.15	655957.50	N 32° 0' 18.01" W	103° 57' 48.63"
	68.50	0.48	51.39	66.50	0.12	0.10	0.13	1.20	420423.25	655957.72	N 32° 0' 18.01" W	103° 57' 48.63"
	97.50	0.50	57.04	97.50	0.33	0.26	0.35	0.17	420423.41	655957.94	N 32° 0' 18.01" W	103° 57' 48.62"
	158.50	0.40	35.80	158.50	0.05	0.58	0.69	0.32	420423.73	655958.28	N 32° 0' 18.01" W	103° 57' 48.62"
	189.50	0.50	44.86	189.50	0.79	0.78	0.85	0.40	420423.91	655958.44	N 32° 0' 18.01" W	103° 57' 48.62"
	276.50	0.35	78.88	270.49	1.30	1.08	1.38	0.33	420424.23	655958.97	N 32° 0' 18.02" W	103° 57' 40.61"
	339.50	0.00	333.98	339.49	1.40	1.18	1.55	0.61	420424.31	655959.14	N 32° 0' 18.02" W	103° 57' 48.61"
Last Gyro	374.50	0.24	353.37	374.49	1.43	1.26	1.53	0.45	420424.41	655959.12	N 32° 0' 18.02" W	103° 57' 48.61"
	502.00	0.29	325.65	501.99	1.18	1.79	1.32	0.11	420424.94	655959.91	N 32° 0' 18.02" W	103° 57' 48.61"
	622.00	0.07	75.41	621.99	1.06	2.06	1.21	0.27	420425.21	655958.80	N 32° 0' 18.03" W	103° 57' 48.61"
	687.00	0.04	149.49	686.99	1.11	2.05	1.25	0.11	420425.20	655958.83	N 32° 0' 18.03" W	103° 57' 48.61"
	868.00	0.02	41.37	867.99	1.18	2.02	1.32	0.03	420425.17	655958.91	N 32° 0' 18.03" W	103° 57' 48.61"
	959.00	0.04	60.32	958.99	1.20	2.05	1.38	0.02	420425.20	655958.95	N 32° 0' 18.03" W	103° 57' 48.61"
	1051.00	0.05	270.38	1050.99	1.18	2.06	1.34	0.11	420425.21	655958.93	N 32° 0' 18.03" W	103° 57' 40.61"
	1229.00	0.11	97.44	1228.99	1.26	2.04	1.41	0.10	420425.18	655958.00	N 32° 0' 18.03" W	103° 57' 48.61"
	1410.00	0.02	67.89	1409.99	1.40	2.03	1.61	0.05	420425.18	655959.20	N 32° 0' 18.03" W	103° 57' 48.61"
	1600.00	0.11	323.28	1599.99	1.37	2.19	1.54	0.00	420425.34	655959.12	N 32° 0' 18.03" W	103° 57' 48.61"
	1695.00	0.04	209.02	1694.99	1.29	2.23	1.48	0.14	420425.38	655959.03	N 32° 0' 18.03" W	103° 57' 48.61"
	1884.00	0.14	348.55	1883.99	1.20	2.40	1.39	0.09	420425.55	655958.98	N 32° 0' 18.03" W	103° 57' 48.61"
	1980.00	0.06	280.53	1979.99	1.12	2.53	1.31	0.14	420425.68	655958.90	N 32° 0' 18.03" W	103° 57' 48.61"
	2169.00	0.05	127.49	2168.99	1.09	2.50	1.28	0.08	420425.65	655958.87	N 32° 0' 18.03" W	103° 57' 48.61"
	2359.00	0.06	149.18	2358.99	1.22	2.36	1.40	0.01	420425.51	655958.99	N 32° 0' 18.03" W	103° 57' 48.61"
	2454.00	0.02	172.10	2453.99	1.25	2.30	1.43	0.04	420425.45	655959.02	N 32° 0' 18.03" W	103° 57' 48.61"
	2643.00	0.04	287.47	2642.99	1.19	2.29	1.37	0.03	420425.44	655958.96	N 32° 0' 18.03" W	103° 57' 48.61"
	2738.00	0.11	230.87	2737.99	1.09	2.24	1.28	0.10	420425.39	655958.85	N 32° 0' 18.03" W	103° 57' 48.61"
	2833.00	0.04	283.63	2832.99	1.00	2.19	1.18	0.10	420425.34	655958.75	N 32° 0' 18.03" W	103° 57' 48.62"
	3023.00	0.08	49.21	3022.99	1.00	2.27	1.17	0.05	420425.42	655958.76	N 32° 0' 18.03" W	103° 57' 48.62"
	3118.00	0.06	179.65	3117.99	1.04	2.25	1.21	0.11	420425.40	655958.80	N 32° 0' 18.03" W	103° 57' 48.61"
	3308.00	0.06	27.60	3307.99	1.09	2.24	1.26	0.08	420425.39	655958.85	N 32° 0' 18.03" W	103° 57' 48.61"
	3498.00	0.06	162.14	3497.99	1.16	2.24	1.33	0.06	420425.39	655958.92	N 32° 0' 18.03" W	103° 57' 48.61"
	3592.00	0.06	29.92	3591.99	1.20	2.23	1.37	0.12	420425.38	655958.90	N 32° 0' 18.03" W	103° 57' 48.61"
	3687.00	0.06	207.41	3686.99	1.20	2.23	1.37	0.13	420425.38	655958.96	N 32° 0' 18.03" W	103° 57' 48.61"
	3782.00	0.06	14.18	3781.99	1.19	2.24	1.36	0.13	420425.39	655958.93	N 32° 0' 18.03" W	103° 57' 48.61"
	3971.00	0.06	206.73	3970.99	1.17	2.24	1.34	0.08	420425.39	655958.93	N 32° 0' 18.03" W	103° 57' 48.61"
	4066.00	0.06	333.67	4065.99	1.12	2.24	1.30	0.11	420425.38	655958.89	N 32° 0' 18.03" W	103° 57' 48.61"
	4181.00	0.05	194.90	4180.99	1.09	2.25	1.28	0.11	420425.40	655958.85	N 32° 0' 18.03" W	103° 57' 48.61"
	4256.00	1.33	207.33	4255.88	0.65	1.23	0.75	1.35	420424.38	655958.34	N 32° 0' 18.02" W	103° 57' 48.62"
	4351.00	3.15	205.16	4350.90	-0.71	-2.11	-0.87	1.92	420421.04	655956.72	N 32° 0' 18.99" W	103° 57' 48.64"
	4446.00	4.84	207.99	4445.07	-3.25	-8.01	-3.88	1.79	420415.14	655953.73	N 32° 0' 18.93" W	103° 57' 48.67"
	4541.00	6.29	209.71	4540.22	-7.10	-18.07	-8.32	1.54	420407.08	655949.27	N 32° 0' 18.85" W	103° 57' 48.73"
	4638.00	7.17	209.39	4634.58	-11.85	-25.76	-13.81	0.93	420397.39	655943.78	N 32° 0' 18.75" W	103° 57' 48.79"
	4731.00	7.93	209.33	4728.74	-17.14	-36.84	-19.93	0.80	420386.51	655937.68	N 32° 0' 18.84" W	103° 57' 48.88"
	4826.00	9.32	208.53	4822.86	-23.07	-49.11	-26.81	1.47	420374.04	655930.78	N 32° 0' 18.52" W	103° 57' 48.94"
	4921.00	10.70	208.55	4918.21	-29.88	-63.82	-34.70	1.45	420359.54	655922.89	N 32° 0' 18.38" W	103° 57' 47.03"
	5110.00	10.52	204.12	5101.99	-42.93	-94.78	-50.14	0.44	420328.38	655907.43	N 32° 0' 18.07" W	103° 57' 47.22"
	5205.00	10.58	203.07	5193.38	-48.68	-110.72	-57.10	0.21	420312.44	655900.49	N 32° 0' 17.91" W	103° 57' 47.30"
	5299.00	10.59	201.56	5287.78	-54.02	-126.69	-63.68	0.30	420298.47	655893.04	N 32° 0' 17.76" W	103° 57' 47.37"
	5419.00	10.48	199.72	5474.58	-63.81	-159.19	-75.90	0.19	420283.67	655881.69	N 32° 0' 17.43" W	103° 57' 47.52"
	5583.00	10.48	197.78	5567.01	-68.08	-175.38	-81.40	0.38	420247.78	655870.20	N 32° 0' 17.27" W	103° 57' 47.58"
	5773.00	10.09	190.85	5753.07	-74.02	-208.18	-88.81	0.68	420214.98	655867.79	N 32° 0' 16.95" W	103° 57' 47.68"
	5868.00	10.41	188.81	5847.45	-79.65	-224.84	-92.69	0.51	420198.33	655864.91	N 32° 0' 16.78" W	103° 57' 47.72"
	5963.00	10.36	187.05	5949.89	-78.74	-241.80	-95.05	0.34	420181.37	655862.54	N 32° 0' 16.62" W	103° 57' 47.74"
	6058.00	10.34	187.00	6034.35	-77.56	-258.74	-97.14	0.02	420164.43	655860.48	N 32° 0' 16.45" W	103° 57' 47.77"
	6152.00	10.37	185.69	6126.82	-78.17	-275.53	-99.01	0.25	420147.84	655858.59	N 32° 0' 16.28" W	103° 57' 47.79"
	6248.00	10.54	185.02	6221.22	-78.83	-292.86	-100.77	0.18	420130.31	655856.83	N 32° 0' 16.11" W	103° 57' 47.81"
	6342.00	10.59	184.81	6313.63	-78.93	-310.02	-102.35	0.26	420113.19	655853.25	N 32° 0' 15.94" W	103° 57' 47.83"
	6437.00	10.32	180.33	6407.05	-79.28	-327.18	-103.89	0.43	420096.00	655853.61	N 32° 0' 15.77" W	103° 57' 47.85"
	6627.00	10.43	191.19	6593.95	-81.96	-360.97	-109.20	0.46	420062.21	655848.39	N 32° 0' 15.44" W	103° 57' 47.91"
	6722.00	10.32	192.69	6687.40	-84.24	-377.70	-112.74	0.31	420045.48	655844.68	N 32° 0' 15.27" W	103° 57' 47.96"
	6912.00	9.85	195.16	6874.48	-89.80	-409.39	-120.73	0.34	420013.19	655838.87	N 32° 0' 14.95" W	103° 57' 48.05"
	7007.00	10.39	199.61	6967.98	-93.59	-425.91	-125.73	1.00	419997.28	655831.87	N 32° 0' 14.80" W	103° 57' 48.11"
	7101.00	10.02	197.34	7060.50	-97.88	-441.70	-131.01	0.58	419981.49	655826.59	N 32° 0' 14.64" W	103° 57' 48.17"
	7196.00	9.70	188.08	7154.10	-100.08	-457.51	-134.80	1.70	419965.88	655823.00	N 32° 0' 14.48" W	103° 57' 48.21"
	7292.00	9.66	178.66	7246.74	-98.83	-473.57	-133.55	0.85	419949.82	655822.05	N 32° 0' 14.33" W	103° 57' 48.22"
	7387.00	9.69	173.11	7342.39	-97.50	-489.48	-134.40	0.98	419933.71	655821.20	N 32° 0' 14.17" W	103° 57' 48.21"
	7482.00	10.13	160.91	7435.98	-95.48	-505.77	-133.58	1.46	419917.42	655820.02	N 32° 0' 14.01" W	103° 57' 48.20"
	7577.00	7.92	195.81	7529.81	-98.28	-520.42	-135.49	3.37	419902.77	655822.11	N 32° 0' 13.85" W	103° 57' 48.23"
	7672.00	6.45	213.12	7624.07	-100.16	-531.19	-140.19	2.74	419887.02	655817.41	N 32° 0' 13.78" W	103° 57' 48.28"
	7767.00	6.78	221.21	7718.44	-108.09	-539.87	-146.79	1.03	419873.33	655810.81	N 32° 0' 13.67" W	103° 57' 48.36"
	7862.00	8.60	211.78	7812.80	-111.97	-548.71	-153.35	1.17	419874.48	655804.25	N 32° 0' 13.58" W	103° 57' 48.43"
	7957.00	8.71	201.42	7906.95	-118.82	-560.05	-158.60	1.08	419865.14	655801.85	N 32° 0' 13.47" W	103° 57' 48.47"
	8052.00	9.06	188.09	8000.82	-119.23	-574.10	-162.54	2.19	419849.04	655795.07	N 32° 0' 13.33" W	103° 57' 48.54"
	8147.00	9.29	190.28	8094.61	-120.53	-589.11	-164.96	0.44	419834.09	6557		

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	VSEC (m)	NS (m)	EW (m)	DLS (°/100m)	Northing (mUS)	Easting (mUS)	Latitude (N/S ° °')	Longitude (E/W ° °')
	8715.00	7.97	195.82	8555.56	-124.45	-878.96	-175.46	1.12	418748.24	655782.14	N 32° 9' 12.31" W 103° 57' 48.70"	
	8810.00	9.12	198.41	8749.51	-127.60	-890.45	-179.83	1.28	418732.76	655777.97	N 32° 9' 12.18" W 103° 57' 48.75"	
	8904.00	9.55	204.32	8942.28	-132.09	-904.62	-185.20	1.12	418718.50	655772.41	N 32° 9' 12.04" W 103° 57' 48.81"	
	8999.00	9.38	205.09	8935.97	-137.55	-918.81	-191.73	0.22	418704.39	655765.88	N 32° 9' 11.90" W 103° 57' 48.89"	
	9094.00	9.07	191.25	9029.75	-141.20	-933.17	-196.47	2.35	418690.04	655761.14	N 32° 9' 11.76" W 103° 57' 48.94"	
	9189.00	9.08	171.53	9123.59	-140.48	-947.93	-196.83	3.26	418675.28	655760.78	N 32° 9' 11.61" W 103° 57' 48.95"	
	9284.00	7.24	151.72	9217.84	-135.58	-960.62	-192.89	3.51	418662.59	655764.72	N 32° 9' 11.49" W 103° 57' 48.90"	
	9379.00	8.12	142.50	9311.79	-127.89	-971.22	-185.96	1.50	418651.99	655771.64	N 32° 9' 11.38" W 103° 57' 48.82"	
	9474.00	8.64	140.25	9405.78	-118.48	-982.03	-177.32	0.85	418641.19	655780.29	N 32° 9' 11.27" W 103° 57' 48.72"	
	9569.00	9.09	132.50	9499.64	-107.91	-992.59	-167.23	1.33	418630.62	655790.38	N 32° 9' 11.17" W 103° 57' 48.54"	
	9617.00	8.82	127.38	9547.01	-101.27	-1001.27	-161.25	2.07	418620.16	655803.93	N 32° 9' 11.07" W 103° 57' 48.10"	
	9661.00	16.42	103.52	9726.29	-82.65	-1013.03	-123.67	4.84	418610.16	655817.54	N 32° 9' 10.90" W 103° 57' 47.68"	
	9696.00	31.16	97.03	9812.99	-24.03	-1016.21	-86.01	15.74	418604.00	655826.33	N 32° 9' 10.84" W 103° 57' 47.03"	
	9991.00	36.85	96.27	9890.28	30.44	-1025.58	-31.26	9.16	418597.66	655836.22	N 32° 9' 10.79" W 103° 57' 46.29"	
	10086.00	43.41	92.89	9961.26	83.52	-1030.41	-31.63	4.51	418592.80	655846.11	N 32° 9' 10.74" W 103° 57' 45.51"	
	10181.00	47.50	92.18	10027.89	161.17	-1033.28	-90.28	4.12	418589.94	655856.05	N 32° 9' 10.70" W 103° 57' 45.09"	
	10183.00	47.63	92.19	10029.24	162.85	-1033.34	-100.74	6.84	418589.68	655865.92	N 32° 9' 10.70" W 103° 57' 45.09"	
	10278.00	53.79	92.74	10088.10	234.56	-1038.45	-172.81	6.64	418586.77	655875.80	N 32° 9' 10.72" W 103° 57' 44.63"	
	10371.00	60.19	93.04	10139.83	314.17	-1041.91	-252.04	7.04	418581.31	655885.69	N 32° 9' 10.67" W 103° 57' 43.73"	
	10468.00	71.89	89.94	10178.28	400.78	-1045.49	-338.82	13.35	418577.72	655895.58	N 32° 9' 10.63" W 103° 57' 42.72"	
	10478.00	72.07	89.31	10181.80	412.18	-1045.42	-350.07	9.63	418577.80	655905.47	N 32° 9' 10.63" W 103° 57' 42.59"	
	10561.00	79.83	85.08	10201.41	492.17	-1041.43	-430.57	9.83	418581.79	655915.36	N 32° 9' 10.67" W 103° 57' 41.85"	
	10650.00	83.10	85.21	10215.51	564.91	-1033.48	-524.17	3.44	418589.74	655925.25	N 32° 9' 10.74" W 103° 57' 40.57"	
	10751.00	87.73	84.75	10223.10	678.34	-1025.18	-618.48	4.90	418598.02	655935.14	N 32° 9' 10.82" W 103° 57' 39.47"	
	10788.00	88.45	82.63	10224.67	724.52	-1020.11	-685.17	4.36	418603.10	655945.03	N 32° 9' 10.87" W 103° 57' 38.92"	
	10893.00	88.62	84.39	10227.10	817.85	-1009.54	-759.35	1.85	418613.87	655954.92	N 32° 9' 10.97" W 103° 57' 37.83"	
	10988.00	88.76	84.84	10229.27	911.47	-1000.63	-844.81	1.66	418624.20	655964.81	N 32° 9' 11.07" W 103° 57' 36.73"	
	11083.00	89.35	86.30	10230.84	1005.36	-993.29	-944.81	1.50	418634.53	655974.70	N 32° 9' 11.17" W 103° 57' 35.63"	
	11178.00	89.24	88.53	10232.01	1099.87	-986.01	-1043.70	2.35	418644.86	655984.59	N 32° 9' 11.27" W 103° 57' 34.53"	
	11273.00	89.21	90.58	10233.20	1194.33	-978.27	-1138.68	2.16	418655.19	655994.48	N 32° 9' 11.37" W 103° 57' 33.43"	
	11368.00	89.00	90.38	10234.77	1289.11	-969.85	-1233.66	0.32	418665.52	656004.37	N 32° 9' 11.47" W 103° 57' 32.33"	
	11463.00	88.90	90.32	10236.52	1383.87	-959.61	-1328.65	0.11	418675.85	656014.26	N 32° 9' 11.57" W 103° 57' 31.23"	
	11558.00	88.90	89.85	10238.34	1478.60	-948.78	-1423.63	0.49	418686.18	656024.15	N 32° 9' 11.67" W 103° 57' 30.13"	
	11653.00	89.14	89.29	10239.96	1573.36	-938.29	-1518.61	1.02	418696.51	656034.04	N 32° 9' 11.77" W 103° 57' 29.03"	
	11748.00	89.97	89.79	10241.53	1668.21	-927.42	-1613.57	1.07	418706.84	656043.93	N 32° 9' 11.87" W 103° 57' 27.93"	
	11843.00	88.69	90.55	10243.47	1763.05	-916.34	-1708.53	1.34	418717.17	656053.82	N 32° 9' 11.97" W 103° 57' 26.83"	
	11938.00	89.31	90.72	10245.13	1857.64	-905.42	-1803.51	0.88	418727.50	656063.71	N 32° 9' 12.07" W 103° 57' 25.73"	
	12033.00	89.11	90.21	10246.44	1952.82	-894.19	-1898.50	0.58	418737.83	656073.60	N 32° 9' 12.17" W 103° 57' 24.63"	
	12128.00	89.59	90.94	10247.52	2047.42	-883.10	-1993.49	0.92	418748.16	656083.49	N 32° 9' 12.27" W 103° 57' 23.53"	
	12223.00	89.42	90.48	10248.34	2142.23	-872.00	-2088.48	0.54	418758.49	656093.38	N 32° 9' 12.37" W 103° 57' 22.43"	
	12318.00	89.21	90.22	10249.47	2237.00	-860.87	-2183.47	0.34	418768.82	656103.27	N 32° 9' 12.47" W 103° 57' 21.33"	
	12413.00	89.35	90.22	10250.87	2331.75	-849.73	-2278.46	0.15	418779.15	656113.16	N 32° 9' 12.57" W 103° 57' 20.23"	
	12508.00	89.72	90.82	10251.44	2426.54	-838.60	-2373.45	0.74	418789.48	656123.05	N 32° 9' 12.67" W 103° 57' 19.13"	
	12603.00	89.52	90.52	10252.07	2521.35	-827.47	-2468.44	0.38	418800.00	656132.94	N 32° 9' 12.77" W 103° 57' 18.03"	
	12698.00	89.42	90.35	10252.70	2616.14	-816.34	-2563.43	0.21	418810.53	656142.83	N 32° 9' 12.87" W 103° 57' 16.93"	
	12793.00	89.52	90.08	10253.33	2710.93	-805.21	-2658.42	0.16	418821.06	656152.72	N 32° 9' 12.97" W 103° 57' 15.83"	
	12888.00	89.86	90.04	10254.05	2805.72	-794.08	-2753.41	0.81	418831.59	656162.61	N 32° 9' 13.07" W 103° 57' 14.73"	
	12983.00	89.11	90.77	10255.73	2900.51	-782.95	-2848.40	0.52	418842.12	656172.50	N 32° 9' 13.17" W 103° 57' 13.63"	
	13078.00	89.48	90.44	10256.46	3005.30	-771.82	-2943.39	0.38	418852.65	656182.39	N 32° 9' 13.27" W 103° 57' 12.53"	
	13173.00	89.45	90.08	10257.19	3100.09	-760.69	-3038.38	0.48	418863.18	656192.28	N 32° 9' 13.37" W 103° 57' 11.43"	
	13268.00	89.04	89.88	10257.92	3194.79	-749.56	-3133.37	0.37	418873.71	656202.17	N 32° 9' 13.47" W 103° 57' 10.33"	
	13363.00	88.76	89.67	10258.65	3289.49	-738.43	-3228.36	0.58	418884.24	656212.06	N 32° 9' 13.57" W 103° 57' 9.23"	
	13458.00	88.83	90.22	10259.38	3384.18	-727.30	-3323.35	0.74	418894.77	656221.95	N 32° 9' 13.67" W 103° 57' 8.13"	
	13553.00	89.52	90.33	10260.11	3478.88	-716.17	-3418.34	0.58	418905.30	656231.84	N 32° 9' 13.77" W 103° 57' 7.03"	
	13648.00	88.28	88.85	10260.84	3573.57	-705.04	-3513.33	0.74	418915.83	656241.73	N 32° 9' 13.87" W 103° 57' 5.93"	
	13743.00	89.42	90.12	10261.57	3668.26	-693.91	-3608.32	2.03	418926.36	656251.62	N 32° 9' 13.97" W 103° 57' 4.83"	
	13838.00	88.59	90.18	10262.30	3762.95	-682.78	-3703.31	1.80	418936.89	656261.51	N 32° 9' 14.07" W 103° 57' 3.73"	
	14123.00	88.76	90.08	10263.03	3857.64	-671.65	-3798.30	0.87	418947.42	656271.40	N 32° 9' 14.17" W 103° 57' 2.63"	
	14218.00	89.11	90.22	10263.76	3952.33	-660.52	-3893.29	0.38	418957.95	656281.29	N 32° 9' 14.27" W 103° 57' 1.53"	
	14313.00	89.59	90.22	10264.49	4047.02	-649.39	-3988.28	1.98	418968.48	656291.18	N 32° 9' 14.37" W 103° 57' 0.43"	
	14408.00	89.83	89.85	10265.22	4141.71	-638.26	-4083.27	1.25	418979.01	656301.07	N 32° 9' 14.47" W 103° 56' 59.33"	
	14503.00	89.24	89.27	10265.95	4236.40	-627.13	-4178.26	0.54	418989.54	656310.96	N 32° 9' 14.57" W 103° 56' 58.23"	
	14598.00	89.45	89.04	10266.68	4331.09	-616.00	-4273.25	0.84	418999.07	656320.85	N 32° 9' 14.67" W 103° 56' 57.13"	
	14693.00	89.07	89.34	10267.41	4425.78	-604.87	-4368.24	0.55	419009.60	656330.74	N 32° 9' 14.77" W 103° 56' 56.03"	
	14788.00	89.89	90.32	10268.14	4520.47	-593.74	-4463.23	0.84	419020.13	656340.63	N 32° 9' 14.87" W 103° 56' 54.93"	
	14883.00	89.62	89.62	10268.87	4615.16	-582.61	-4558.22	1.22	419030.66	656350.52	N 32° 9' 14.97" W 103° 56' 53.83"	
	14978.00	89.38	90.72	10269.60	4709.85	-571.48	-4653.21	0.75	419041.19	656360.41	N 32° 9' 15.07" W 103° 56' 52.73"	
	15073.00	89.21	90.45	10270.33	4804.54	-560.35	-4748.20	1.19	419051.72	656370.30	N 32° 9' 15.17" W 103° 56' 51.63"	
	15168.00	89.24	90.17	10271.06	4899.23	-549.22	-4843.19	0.34	419062.25	656380.19	N 32° 9' 15.27" W 103° 56' 50.53"	
	15263.00	89.28	89.67	10271.79	4993.92	-538.09	-4938.18	0.30	419072.78	656390.08	N 32° 9' 15.37" W 103° 56' 49.43"	
	15358.00	89.14	89.55	10272.52	5088.61	-526.96	-5033.17	0.53	419083.31	656400.00	N 32° 9' 15.47" W 103° 56' 48.33"	
	15453.00	89.55	89.87	10273.25	5183.30	-515.83	-5128.16	0.18	419093.84	656410.00	N 32° 9' 15.57" W 103° 56' 47.23"	
	15548.00	89.21	89.91	10273.98	5277.99	-504.70	-5223.15	0.55	419104.37	656420.00	N 32° 9' 15.67" W 103° 56' 46.13"	
	15643.00	89.97	90.31	10274.71	5372.68	-493.57	-5318.14	0.36	419114.90	656430.00	N 32° 9' 15.77" W 103° 56' 45.03"	

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 ° ' ")
	19156.00	89.11	82.50	10360.97	9050.15	-788.29	9016.48	1.02	410634.92	664973.35	N 32 9 10.89 W 103 56 1.78	
	19251.00	89.93	81.56	10381.78	9145.07	-791.65	9111.40	1.31	410631.58	665068.26	N 32 9 10.85 W 103 56 0.08	
	19346.00	88.80	86.85	10382.82	9239.82	-791.99	9206.38	3.09	410631.22	665163.26	N 32 9 10.84 W 103 55 59.58	
	19441.00	87.42	87.77	10385.95	9334.24	-789.18	9301.29	1.84	410634.02	665258.15	N 32 9 10.87 W 103 55 58.47	
	19537.00	87.14	88.09	10379.50	9429.55	-785.73	9397.11	0.44	410637.48	665353.97	N 32 9 10.90 W 103 55 57.36	
	19632.00	87.87	88.54	10374.56	9523.95	-782.04	9491.99	0.99	410640.27	665448.84	N 32 9 10.92 W 103 55 56.25	
	19727.00	88.43	87.79	10377.32	9618.38	-779.90	9586.89	0.94	410643.31	665543.73	N 32 9 10.95 W 103 55 55.15	
	19822.00	89.04	88.42	10379.81	9712.78	-776.76	9681.81	0.91	410646.45	665638.85	N 32 9 10.98 W 103 55 54.05	
	19917.00	89.18	88.29	10381.08	9807.27	-774.03	9776.76	0.20	410649.18	665733.59	N 32 9 11.00 W 103 55 52.94	
	20012.00	88.97	87.58	10382.81	9901.67	-770.61	9871.69	0.78	410652.60	665828.51	N 32 9 11.03 W 103 55 51.84	
	20107.00	88.49	88.20	10383.89	9996.07	-767.11	9966.62	0.85	410656.10	665923.43	N 32 9 11.06 W 103 55 50.73	
LTP Cross	20175.00	88.72	87.83	10384.95	10090.60	-764.75	10064.57	1.25	410658.46	666018.34	N 32 9 11.08 W 103 55 49.64	
	20202.00	88.42	87.68	10385.62	10090.47	-763.70	10061.54	1.25	410659.51	666018.34	N 32 9 11.08 W 103 55 49.63	
Final MWD	20237.00	88.93	88.12	10388.90	10145.12	-761.68	10116.48	1.22	410661.53	666073.29	N 32 9 11.11 W 103 55 48.99	
Proj to Bit	20300.00	88.93	88.12	10387.70	10187.88	-760.27	10159.45	0.00	410662.94	666118.25	N 32 9 11.12 W 103 55 48.49	

Survey Type: Def Survey

Survey Error Model: ISCW5A 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 Correl Fly 02-01 State 36H Gyro + MWD 0- 20300' MD
	1	26.500	26.500	Act Sens	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Correl Fly 02-01 State 36H Gyro + MWD 0- 20300' MD
	1	26.500	374.500	Act Sens	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Correl Fly 02-01 State 36H Gyro + MWD 0- Original Borehole / Oxy Correl Fly
	1	374.500	20300.000	Act Sens	30.000	30.000	NAL_MWD_IFR1+MS	02-01 State 36H Gyro + MWD 0-

...Coral Fly 02-01 State 36H\Original Borehole\Oxy Coral Fly 02-01 State 36H Gyro + MWD 0-20300' MD

Schlumberger

OXY



Borehole:		Well:		Field:		Structure:		
Original Borehole		Corral Fly 02-01 State 36H		NM Eddy County (NAD 83)		Oxy Corral Fly 02-01 State 36H		
Gravity & Magnetic Parameters				Surface Location		Miscellaneous		
Model: HGSB 2019	Day: 02/01/19	Date: 23-Aug-2019	NAD83 New Mexico State Plane, Eastern Zone, US Feet		Stat: Corral Fly 02-01 State 36H	TVD Ref: RKB=26.5 (10000 ft above MSL)		
MagDec: 6.974°	FS: 47982.421m	Gravity FS: 208.45m/s² (IGMS Based)	Lat: N 32 0 19.91	Longitude: 10207.4463	Grid Conv: 0.9971°	Plan: Oxy Corral Fly 02-01 State 36H Gyro = MWD 0-20257 M		
Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLB
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	374.50	0.24	353.37	374.49	1.43	1.26	1.53	0.45
KOP Actual	9817.00	9.82	127.38	9547.01	-101.27	-797.59	-181.25	2.07
FTP Cross	10183.00	47.63	92.19	10029.24	182.65	-833.34	100.74	6.64
Wolfcamp Intersection	10478.00	72.97	89.31	10181.90	412.18	-845.42	350.07	9.83
LTP Cross	20175.00	88.72	87.83	10384.95	10063.66	-764.75	10034.57	1.25
Final MWD Surveys	20257.00	88.93	88.12	10388.90	10145.12	-761.68	10116.48	1.22
Proj to Bt	20300.00	88.93	88.12	10387.70	10187.86	-760.27	10159.45	0.00

