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Schlumberger

Oxy Cedar Canyon 20 Federal Com 25H Gyro+MWD(IFR1) 0-16,200' MD Survey Geodetic Report (Def Survey)



30-015-44519

Report Date: July 30, 2018 - 08:20 AM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Blot: Oxy Cedar Canyon 20 Federal Com 25H / Oxy Cedar Canyon 20 Federal Com 25H
Well: Oxy Cedar Canyon 20 Federal Com 25H
Borehole: Original Borehole
UWI / API#: Unknown / 30-015-44519
Survey Name: Oxy Cedar Canyon 20 Federal Com 25H Gyro+MWD(IFR1) 0-16,200' MD
Survey Date: June 20, 2018
Tort / AMD / ODI / ERD Ratio: 163.720' / 8050.095' / 8.396 / 0.928
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 11' 43.42784", W 104° 0' 9.23133"
Location Grid N/E Y/X: N 434977.040 RUS, E 643654.170 RUS
CRS Grid Convergence Angle: 0.1782°
Grid Scale Factor: 0.9992108
Version / Patch: 2.10.740.0

Survey / DLB Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 359.995° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB=26.5'
TVD Reference Elevation: 2980.000 ft above MSL
Seabed / Ground Elevation: 2954.400 ft above MSL
Magnetic Declination: 7.082°
Total Gravity Field Strength: 998.4840mg (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47993.141 nT
Magnetic Dip Angle: 59.959°
Declination Date: June 20, 2018
Magnetic Declination Model: HDGM 2018
North Reference: Grid North
Grid Convergence Used: 0.1782°
Total Corr Mag North-Grid North: 6.9081°
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azin Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLB (ft/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00		434977.04	643654.17	N 32° 11' 43.43" W 104° 0' 9.23"	
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00		434977.04	643654.17	N 32° 11' 43.43" W 104° 0' 9.23"	
	102.50	0.27	53.32	102.50	0.11	0.11	0.14	0.38	434977.15	643654.31	N 32° 11' 43.43" W 104° 0' 9.23"	
	181.50	0.30	83.04	181.50	0.21	0.21	0.41	0.25	434977.25	643654.58	N 32° 11' 43.43" W 104° 0' 9.23"	
	222.50	0.28	51.48	222.50	0.32	0.32	0.88	0.26	434977.36	643654.85	N 32° 11' 43.43" W 104° 0' 9.22"	
	285.50	0.29	27.08	285.50	0.56	0.56	0.88	0.19	434977.60	643655.05	N 32° 11' 43.43" W 104° 0' 9.22"	
	348.50	0.30	30.21	348.50	0.84	0.84	1.03	0.03	434977.88	643655.20	N 32° 11' 43.44" W 104° 0' 9.22"	
Last Gyro	411.50	1.88	2.91	411.48	2.02	2.02	1.17	2.57	434978.06	643655.34	N 32° 11' 43.45" W 104° 0' 9.22"	
	506.00	0.52	5.90	505.96	3.99	3.99	1.29	1.44	434981.03	643655.46	N 32° 11' 43.47" W 104° 0' 9.22"	
	597.00	0.13	228.61	596.96	4.34	4.34	1.25	0.68	434981.38	643655.42	N 32° 11' 43.47" W 104° 0' 9.22"	
	777.00	0.23	5.38	776.96	4.56	4.56	1.13	0.19	434981.60	643655.30	N 32° 11' 43.47" W 104° 0' 9.22"	
	982.00	0.11	161.09	981.96	4.77	4.77	1.22	0.18	434981.81	643655.39	N 32° 11' 43.47" W 104° 0' 9.22"	
	1054.00	0.18	282.69	1053.96	4.74	4.74	1.12	0.29	434981.78	643655.29	N 32° 11' 43.47" W 104° 0' 9.22"	
	1239.00	0.17	121.02	1238.96	4.71	4.71	1.09	0.19	434981.75	643655.26	N 32° 11' 43.47" W 104° 0' 9.22"	
	1331.00	2.55	329.99	1330.93	6.41	6.41	0.18	2.93	434983.45	643654.35	N 32° 11' 43.48" W 104° 0' 9.23"	
	1423.00	0.18	75.90	1422.90	8.22	8.22	-0.70	2.83	434985.26	643653.47	N 32° 11' 43.51" W 104° 0' 9.24"	
	1516.00	0.06	188.73	1515.90	8.21	8.21	-0.57	0.23	434985.24	643653.60	N 32° 11' 43.51" W 104° 0' 9.24"	
	1610.00	0.08	33.30	1609.90	8.21	8.21	-0.54	0.15	434985.25	643653.63	N 32° 11' 43.51" W 104° 0' 9.24"	
	1704.00	0.18	101.06	1703.90	8.24	8.24	-0.36	0.18	434985.28	643653.61	N 32° 11' 43.51" W 104° 0' 9.24"	
	1799.00	0.13	44.03	1798.90	8.29	8.29	-0.14	0.16	434985.33	643654.03	N 32° 11' 43.51" W 104° 0' 9.23"	
	1893.00	0.06	130.73	1892.90	8.33	8.33	-0.03	0.15	434985.37	643654.14	N 32° 11' 43.51" W 104° 0' 9.23"	
	1987.00	0.16	29.01	1986.90	8.41	8.41	0.07	0.19	434985.45	643654.24	N 32° 11' 43.51" W 104° 0' 9.23"	
	2081.00	0.16	128.34	2080.90	8.45	8.45	0.24	0.28	434985.49	643654.41	N 32° 11' 43.51" W 104° 0' 9.23"	
	2178.00	0.16	74.67	2175.90	8.40	8.40	0.47	0.15	434985.44	643654.64	N 32° 11' 43.51" W 104° 0' 9.23"	
	2270.00	0.08	131.48	2269.90	8.39	8.39	0.65	0.14	434985.43	643654.82	N 32° 11' 43.51" W 104° 0' 9.22"	
	2364.00	0.08	24.64	2363.90	8.41	8.41	0.72	0.14	434985.45	643654.89	N 32° 11' 43.51" W 104° 0' 9.22"	
	2459.00	0.18	143.58	2458.90	8.35	8.35	0.84	0.24	434985.39	643655.01	N 32° 11' 43.51" W 104° 0' 9.22"	
2553.00	0.06	83.01	2552.90	8.24	8.24	0.98	0.17	434985.27	643655.15	N 32° 11' 43.51" W 104° 0' 9.22"		
2647.00	0.17	159.69	2646.90	8.11	8.11	1.07	0.18	434985.15	643655.24	N 32° 11' 43.51" W 104° 0' 9.22"		
2742.00	0.11	257.28	2741.90	7.98	7.98	1.03	0.23	434985.00	643655.20	N 32° 11' 43.51" W 104° 0' 9.22"		
2836.00	0.08	46.56	2835.90	7.97	7.97	0.98	0.17	434985.01	643655.15	N 32° 11' 43.51" W 104° 0' 9.22"		
2931.00	0.13	342.02	2930.90	8.11	8.11	0.98	0.12	434985.15	643655.15	N 32° 11' 43.51" W 104° 0' 9.22"		
3025.00	0.11	122.74	3024.90	8.16	8.16	1.03	0.24	434985.20	643655.20	N 32° 11' 43.51" W 104° 0' 9.22"		
3120.00	0.11	203.05	3119.90	8.03	8.03	1.07	0.15	434985.07	643655.24	N 32° 11' 43.51" W 104° 0' 9.22"		
3214.00	0.11	125.88	3213.90	7.89	7.89	1.11	0.15	434984.93	643655.28	N 32° 11' 43.51" W 104° 0' 9.22"		
3309.00	0.13	328.99	3304.00	7.93	7.93	1.12	0.26	434984.97	643655.29	N 32° 11' 43.51" W 104° 0' 9.22"		
3407.00	0.11	91.25	3406.90	8.11	8.11	1.20	0.11	434985.15	643655.37	N 32° 11' 43.51" W 104° 0' 9.22"		
3591.00	0.11	235.96	3590.90	8.06	8.06	1.21	0.22	434985.10	643655.38	N 32° 11' 43.51" W 104° 0' 9.22"		
3688.00	0.13	144.52	3689.90	7.92	7.92	1.20	0.18	434984.96	643655.37	N 32° 11' 43.51" W 104° 0' 9.22"		
3785.00	0.06	88.43	3784.90	7.78	7.78	1.42	0.07	434984.82	643655.59	N 32° 11' 43.50" W 104° 0' 9.21"		
3869.00	0.06	84.94	3868.90	7.81	7.81	1.51	0.02	434984.84	643655.68	N 32° 11' 43.51" W 104° 0' 9.21"		
3959.00	0.06	80.31	3958.90	7.81	7.81	1.71	0.00	434984.85	643655.88	N 32° 11' 43.51" W 104° 0' 9.21"		
4052.00	0.13	234.43	4051.90	7.75	7.75	1.67	0.19	434984.79	643655.84	N 32° 11' 43.50" W 104° 0' 9.21"		
4147.00	0.06	78.08	4146.90	7.70	7.70	1.63	0.20	434984.74	643655.80	N 32° 11' 43.50" W 104° 0' 9.21"		
4242.00	0.06	57.23	4241.90	7.74	7.74	1.72	0.02	434984.77	643655.89	N 32° 11' 43.50" W 104° 0' 9.21"		
4337.00	0.13	150.23	4336.90	7.60	7.60	1.91	0.08	434984.64	643655.88	N 32° 11' 43.50" W 104° 0' 9.21"		
4432.00	0.11	255.27	4431.90	7.49	7.49	1.88	0.20	434984.53	643656.05	N 32° 11' 43.50" W 104° 0' 9.21"		
4527.00	0.11	215.29	4526.90	7.39	7.39	1.74	0.08	434984.43	643656.08	N 32° 11' 43.50" W 104° 0' 9.21"		
4622.00	0.11	349.80	4621.90	7.40	7.41	1.87	0.22	434984.44	643656.05	N 32° 11' 43.50" W 104° 0' 9.21"		
4717.00	0.08	358.48	4716.90	7.54	7.54	1.65	0.05	434984.58	643656.02	N 32° 11' 43.50" W 104° 0' 9.21"		
4812.00	0.13	218.74	4811.90	7.51	7.51	1.58	0.19	434984.55	643656.05	N 32° 11' 43.50" W 104° 0' 9.21"		
4907.00	0.08	334.82	4906.90	7.47	7.47	1.49	0.18	434984.51	643656.08	N 32° 11' 43.50" W 104° 0' 9.21"		
5002.00	0.11	242.18	5001.90	7.47	7.47	1.39	0.13	434984.51	643656.08	N 32° 11' 43.50" W 104° 0' 9.21"		
5097.00	0.11	265.28	5096.90	7.37	7.37	1.05	0.02	434984.41	643656.22	N 32° 11' 43.50" W 104° 0' 9.22"		
5192.00	0.13	159.83	5191.90	7.27	7.27	1.00	0.20	434984.31	643656.17	N 32° 11' 43.50" W 104° 0' 9.22"		
5287.00	0.08	57.29	5286.90	7.20	7.20	1.09	0.18	434984.24	643656.26	N 32° 11' 43.50" W 104° 0' 9.22"		
5382.00	0.08	185.18	5381.90	7.17	7.17	1.19	0.07	434984.21	643656.36	N 32° 11' 43.50" W 104° 0' 9.22"		
5477.00	0.11	238.44	5476.90	6.98	6.98	1.03	0.05	434984.02	643656.50	N 32° 11' 43.50" W 104° 0' 9.22"		
5572.00	0.06	244.22	5571.90	6.83	6.83	0.79	0.03	434983.87	643656.66	N 32° 11' 43.50" W 104° 0' 9.22"		
5667.00	1.32	16.87	5666.90	8.87	8.87	1.34	0.72	434983.91	643656.50	N 32° 11' 43.52" W 104° 0' 9.22"		
5762.00	3.41	17.97	5761.79	12.61	12.61	2.52	2.20	434983.65	643656.69	N 32° 11' 43.55" W 104° 0' 9.20"		
5857.00	5.11	13.27	5856.53	19.27	19.27	4.33	1.86	434983.31	643656.50	N 32° 11' 43.62" W 104° 0' 9.18"		
5952.00	8.05	8.23	5950.08	28.34	28.34	6.02	1.11	435005.38	643660.19	N 32° 11' 43.71" W 104° 0' 9.16"		
6047.00	8.96	0.52	6046.48	38.94	38.94	6.78	1.34	435015.98	643660.95	N 32° 11' 43.81" W 104° 0' 9.15"		
6142.00	8.93	354.00	6141.78	50.40	50.40	6.23	0.83	435027.43	643660.40	N 32° 11' 43.93" W 104° 0' 9.16"		
6237.00	5.02	347.11	6236.73	69.70	69.70	3.21	1.08	435048.73	643657.38	N 32° 11' 44.12" W 104° 0' 9.19"		
6332.00	4.50	334.74	6331.73	77.12	77.12	0.69	1.21	435054.15	643654.06	N 32° 11' 44.18" W 104° 0' 9.22"		
6427.00	4.61	337.55	6426.13	83.95	83.95	-2.32	0.26	435060.98	643651.85	N 32° 11' 44.26" W 104° 0' 9.26"		
6522.00	5.30	330.61	6521.78	91.22	91.22	-5.90	0.97	435068.25	643648.27	N 32° 11' 44.33" W 104° 0' 9.30"		
6617.00	8.78	340.88	6616.75	100.33	100.33	-9.88	1.81	435077.36	643644.29	N 32° 11' 44.42" W 104° 0' 9.34"		
6712.00	8.40	340.72	6711.78	112.31	112.31	-12.92	2.14	435089.34	643641.25	N 32° 11' 44.54" W 104° 0' 9.38"		
6807.00	10.42	355.61	6806.77	127.85	127.85	-14.80	2.38	435104.57	643639.37	N 32° 11' 44.69" W 104° 0' 9.40"		
6902.00	10.26	354.09	6901.72	144.52	144.52	-16.32	0.34	435121.55	643637.85	N 32° 11' 44.86" W 104° 0' 9.42"		
7000.00	8.53	345.20	7000.37	159.58	159.58	-18.87	2.39	435138.60	643635.21	N 32° 11' 45.01" W 104° 0' 9.45"		
7094.00	7.81	348.08	7093.72	168.42	168.42	-21.08	1.29	435145.45	643633.09	N 32° 11' 45.10" W 104° 0' 9.47"		
8004.00	8.26	358.94	8003.15	180.55	180.55	-23.54	0.99	435167.58	643630.64	N 32° 11' 45.31" W 104° 0' 9.50"		
8158.00	13.96</											

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLG (ft/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S - ° - ' - ")	Longitude (E/W - ° - ' - ")
	8233.00	25.63	12.88	8233.61	238.54	238.54	-13.38	12.30	435218.98	843640.78	N 32 11 45.80 W 104 0 8.38	
	8347.00	34.19	8.05	8319.02	285.60	285.60	-5.14	9.45	435282.82	843645.03	N 32 11 46.25 W 104 0 9.28	
	8442.00	42.31	6.84	8389.57	343.88	343.88	2.42	8.58	435320.89	843658.59	N 32 11 48.83 W 104 0 9.19	
	8538.00	49.78	3.60	8455.37	410.54	410.54	9.88	8.04	435387.87	843683.85	N 32 11 47.49 W 104 0 9.10	
	8631.00	55.53	0.97	8513.64	485.30	485.30	13.87	8.10	435452.36	843688.04	N 32 11 48.23 W 104 0 9.05	
	8726.00	62.55	359.21	8562.48	568.77	568.77	13.95	7.58	435543.77	843688.12	N 32 11 49.04 W 104 0 9.05	
	8820.00	70.60	1.87	8595.21	654.83	654.83	14.88	15.18	435631.81	843669.05	N 32 11 49.91 W 104 0 9.03	
	8914.00	85.99	2.74	8609.49	747.35	747.35	18.82	9.94	435724.33	843672.79	N 32 11 50.82 W 104 0 8.99	
	9008.00	96.11	2.28	8616.04	841.03	841.03	22.73	0.83	435818.01	843676.00	N 32 11 51.75 W 104 0 8.94	
	9102.00	85.52	1.71	8622.90	934.73	934.73	26.00	0.88	435911.69	843680.17	N 32 11 52.68 W 104 0 8.90	
	9198.00	66.94	1.15	8629.08	1028.49	1028.49	28.34	1.62	436005.45	843682.51	N 32 11 53.60 W 104 0 8.86	
	9291.00	87.08	0.03	8634.04	1123.35	1123.35	29.82	0.57	436100.30	843683.99	N 32 11 54.54 W 104 0 8.84	
	9386.00	86.83	0.01	8639.08	1218.21	1218.21	30.35	0.70	436195.16	843684.52	N 32 11 55.48 W 104 0 8.83	
	9481.00	86.83	358.86	8644.34	1313.08	1313.08	29.41	1.21	436290.00	843684.52	N 32 11 56.42 W 104 0 8.84	
	9575.00	87.25	358.90	8649.19	1408.92	1408.92	27.58	0.45	436383.85	843681.75	N 32 11 57.35 W 104 0 8.88	
	9670.00	88.18	358.74	8652.98	1501.82	1501.82	25.62	0.99	436478.74	843679.79	N 32 11 58.29 W 104 0 8.88	
	9764.00	89.45	358.47	8654.92	1595.77	1595.77	23.33	1.38	436572.68	843677.50	N 32 11 59.22 W 104 0 8.90	
	9859.00	89.24	358.48	8656.01	1690.73	1690.73	20.81	0.22	436667.84	843674.98	N 32 12 0.16 W 104 0 8.93	
	9953.00	89.38	358.35	8657.14	1784.89	1784.89	18.21	0.20	436761.59	843672.38	N 32 12 1.09 W 104 0 8.98	
	10047.00	89.45	358.01	8658.10	1878.64	1878.64	15.22	0.37	436855.53	843669.89	N 32 12 2.02 W 104 0 8.99	
	10142.00	89.62	358.07	8658.87	1973.58	1973.58	11.87	0.19	436950.46	843666.14	N 32 12 2.98 W 104 0 9.02	
	10231.00	89.78	358.14	8660.92	2162.48	2162.48	5.72	0.26	437139.33	843659.89	N 32 12 4.83 W 104 0 9.09	
	10326.00	89.78	358.14	8661.83	2257.42	2257.42	3.10	0.88	437234.28	843657.27	N 32 12 5.77 W 104 0 9.11	
	10426.00	89.68	358.47	8662.31	2352.38	2352.38	0.76	0.28	437329.24	843654.93	N 32 12 6.71 W 104 0 9.14	
	10521.00	89.68	358.14	8663.35	2446.37	2446.37	-1.20	0.95	437423.21	843652.97	N 32 12 7.64 W 104 0 9.18	
	10615.00	89.07	358.14	8663.35	2541.34	2541.34	-2.78	0.41	437518.18	843651.41	N 32 12 8.57 W 104 0 9.17	
	10710.00	89.42	358.98	8664.60	2635.31	2635.31	-4.91	0.81	437612.14	843649.26	N 32 12 9.50 W 104 0 9.19	
	10804.00	88.93	358.40	8665.96	2730.27	2730.27	-7.23	0.89	437707.09	843646.94	N 32 12 10.44 W 104 0 9.22	
	10899.00	89.45	358.80	8667.30	2825.19	2825.19	-12.67	0.59	437802.04	843644.50	N 32 12 11.32 W 104 0 9.27	
	10993.00	89.69	357.92	8668.73	2920.19	2920.19	-18.87	0.21	437896.89	843641.30	N 32 12 12.22 W 104 0 9.34	
	11087.00	89.70	358.30	8669.87	3015.08	3015.08	-21.59	0.35	437991.82	843638.59	N 32 12 13.12 W 104 0 9.37	
	11182.00	90.10	358.42	8671.01	3110.04	3110.04	-23.24	1.26	438086.78	843635.93	N 32 12 14.02 W 104 0 9.38	
	11277.00	90.38	359.58	8672.27	3205.03	3205.03	-24.04	0.21	438181.73	843633.21	N 32 12 14.93 W 104 0 9.39	
	11372.00	90.38	359.94	8673.33	3300.00	3300.00	-25.36	0.37	438276.75	843630.50	N 32 12 15.84 W 104 0 9.40	
	11467.00	90.48	359.62	8674.61	3395.00	3395.00	-26.88	0.39	438371.74	843627.89	N 32 12 16.75 W 104 0 9.40	
	11562.00	90.31	359.97	8675.30	3490.00	3490.00	-28.66	0.20	438466.75	843625.21	N 32 12 17.66 W 104 0 9.40	
	11657.00	90.41	358.06	8676.31	3585.00	3585.00	-29.53	0.64	438561.71	843622.64	N 32 12 18.57 W 104 0 9.39	
	11752.00	90.38	1.02	8677.06	3680.00	3680.00	-30.40	0.49	438656.72	843620.05	N 32 12 19.48 W 104 0 9.38	
	11847.00	90.31	1.83	8678.06	3775.00	3775.00	-31.27	0.64	438751.73	843617.45	N 32 12 20.39 W 104 0 9.35	
	11942.00	89.93	1.48	8679.02	3870.00	3870.00	-32.14	0.18	438846.74	843614.80	N 32 12 21.30 W 104 0 9.31	
	12037.00	89.83	1.78	8680.02	3965.00	3965.00	-33.01	0.53	438941.75	843612.14	N 32 12 22.21 W 104 0 9.28	
	12132.00	89.83	1.68	8681.02	4060.00	4060.00	-33.88	0.13	439036.76	843609.49	N 32 12 23.12 W 104 0 9.24	
	12227.00	89.93	1.83	8682.02	4155.00	4155.00	-34.75	0.11	439131.77	843606.79	N 32 12 24.03 W 104 0 9.21	
	12322.00	89.99	1.94	8683.01	4250.00	4250.00	-35.62	0.22	439226.78	843604.08	N 32 12 24.94 W 104 0 9.17	
	12417.00	89.86	1.25	8684.08	4345.00	4345.00	-36.49	1.19	439321.79	843601.37	N 32 12 25.85 W 104 0 9.14	
	12512.00	89.72	0.80	8685.09	4440.00	4440.00	-37.36	0.50	439416.80	843598.66	N 32 12 26.76 W 104 0 9.12	
	12607.00	89.66	0.17	8686.17	4535.00	4535.00	-38.23	0.48	439511.81	843595.95	N 32 12 27.67 W 104 0 9.10	
	12702.00	89.97	0.99	8687.10	4630.00	4630.00	-39.10	1.32	439606.82	843593.24	N 32 12 28.58 W 104 0 9.08	
	12797.00	89.72	1.34	8688.02	4725.00	4725.00	-40.00	0.41	439701.83	843590.53	N 32 12 29.49 W 104 0 9.07	
	12892.00	89.45	1.00	8689.00	4820.00	4820.00	-40.87	0.46	439796.84	843587.82	N 32 12 30.40 W 104 0 9.05	
	12987.00	89.48	0.27	8690.08	4915.00	4915.00	-41.74	0.78	439891.85	843585.11	N 32 12 31.31 W 104 0 9.00	
	13082.00	89.86	0.80	8691.03	5010.00	5010.00	-42.61	0.89	439986.86	843582.40	N 32 12 32.22 W 104 0 8.99	
	13177.00	89.38	1.11	8692.08	5105.00	5105.00	-43.48	0.80	440081.87	843579.69	N 32 12 33.13 W 104 0 8.97	
	13272.00	89.31	1.05	8693.13	5200.00	5200.00	-44.35	0.10	440176.88	843576.98	N 32 12 34.04 W 104 0 8.94	
	13367.00	89.79	1.37	8694.18	5295.00	5295.00	-45.22	0.81	440271.89	843574.27	N 32 12 34.95 W 104 0 8.92	
	13462.00	89.97	1.34	8695.23	5390.00	5390.00	-46.09	0.19	440366.90	843571.56	N 32 12 35.86 W 104 0 8.89	
	13557.00	89.66	0.86	8696.28	5485.00	5485.00	-46.96	0.79	440461.91	843568.85	N 32 12 36.77 W 104 0 8.88	
	13652.00	89.66	0.35	8697.33	5580.00	5580.00	-47.83	0.33	440556.92	843566.14	N 32 12 37.68 W 104 0 8.85	
	13747.00	89.88	0.25	8698.38	5675.00	5675.00	-48.70	0.68	440651.93	843563.43	N 32 12 38.59 W 104 0 8.85	
	13842.00	89.85	359.71	8699.43	5770.00	5770.00	-49.57	0.14	440746.94	843560.72	N 32 12 39.50 W 104 0 8.85	
	13937.00	89.55	359.60	8700.48	5865.00	5865.00	-50.44	1.15	440841.95	843558.01	N 32 12 40.41 W 104 0 8.83	
	14032.00	90.10	0.53	8701.53	5960.00	5960.00	-51.31	0.42	440936.96	843555.30	N 32 12 41.32 W 104 0 8.81	
	14127.00	89.83	0.83	8702.58	6055.00	6055.00	-52.18	0.37	441031.97	843552.59	N 32 12 42.23 W 104 0 8.78	
	14222.00	89.88	1.18	8703.63	6150.00	6150.00	-53.05	1.09	441126.98	843549.88	N 32 12 43.14 W 104 0 8.77	
	14317.00	90.21	0.22	8704.68	6245.00	6245.00	-53.92	0.10	441221.99	843547.17	N 32 12 44.05 W 104 0 8.76	
	14412.00	90.34	0.38	8705.73	6340.00	6340.00	-54.79	2.11	441316.99	843544.46	N 32 12 44.96 W 104 0 8.74	
	14507.00	89.88	358.44	8706.78	6435.00	6435.00	-55.66	2.68	441411.99	843541.75	N 32 12 45.87 W 104 0 8.73	
	14602.00	90.24	0.94	8707.83	6530.00	6530.00	-56.53	0.27	441506.99	843539.04	N 32 12 46.78 W 104 0 8.73	
	14697.00	90.45	1.17	8708.88	6625.00	6625.00	-57.40	0.87	441601.99	843536.33	N 32 12 47.69 W 104 0 8.73	
	14792.00	89.45	1.41	8709.93	6720.00	6720.00	-58.27	0.74	441696.99	843533.62	N 32 12 48.60 W 104 0 8.69	
	14887.00	90.45	2.12	8710.98	6815.00	6815.00	-59.14	0.89	441791.99	843530.91	N 32 12 49.51 W 104 0 8.65	
	14982.00	89.79	1.89	8712.03	6910.00	6910.00	-60.01	0.74	441886.99	843528.20	N 32 12 50.42 W 104 0 8.61	
	15077.00	90.41	2.47	8713.08	7005.00	7005.00	-60.88	0.89	441981.99	843525.49	N 32 12 51.33 W 104 0 8.53	
	15172.00	90.10	1.06	8714.13	7100.00	7100.00	-61.75	0.05	442076.99	843522.78	N 32 12 52.24 W 104 0 8.51	
	15267.00	90.14	1.04	8715.18	7195.00	7195.00	-62.62	0.29	442171.99	843520.07	N 32 12 53.15 W 104 0 8.48	
	15362.00	90.41	1.03	8716.23	7290.00	7290.00	-63.49	2.12	442266.99	843517.36	N 32 12 54.06 W 104 0 8.48	
	15457.00	90.24	1.17	8717.28	7385.00	7385.00	-64.36	0.27	442361.99	843514.65	N 32 12 54.97 W 104 0 8.48	
	15552.00	89.45	1.41	8718.33	7480.00	7480.00	-65.23	0.87	442456.99	84		



OXY



Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Cedar Canyon 20 Federal Com 25H	NM Eddy County (NAD 83)	Oxy Cedar Canyon 20 Federal Com 25H

Grainy & Magnetic Parameters

Model: HCC08 7918 Dig: 50 998 Date: 20-Jul-2018
MagDec: 7 075 PS: 47065 12187 Grassy PS: 000 436mgs (5 50645) Binned

Surface Location

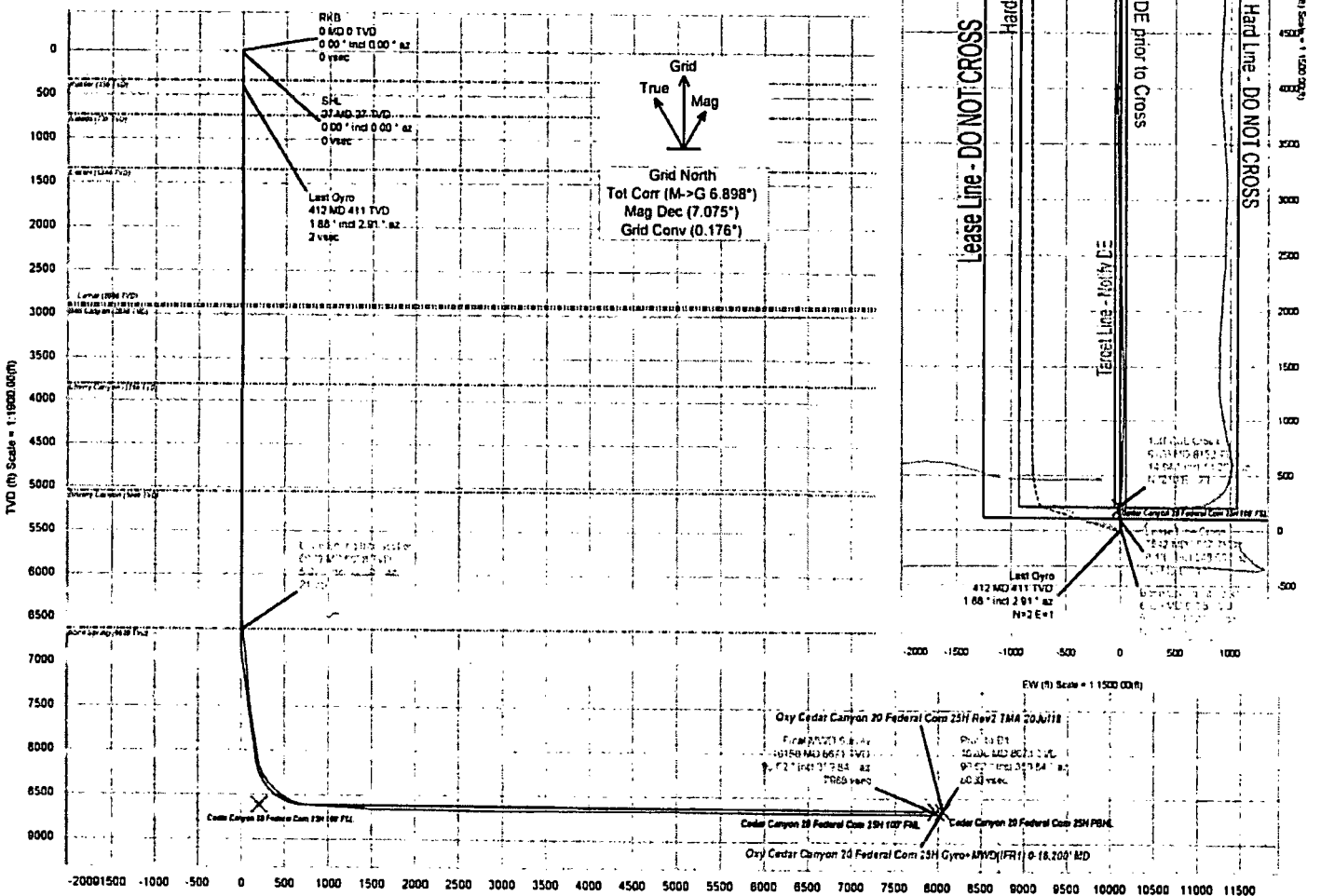
Lat:	N 22 51 43.63	Starting:	434977.807113	Grid Conv:	0.1762'
Lon:	W 184 0 8 23	Ending:	643956.177113	Scale Fact:	0.99927100

Mineralogy

Stat: Dry Cedar Canyon 75 Federal Com TYP Ref: RT@22 2 (1993 07 above 100L)
[34]
Plan: Dry Cedar Canyon 75 Federal Com 75- Rev2 TMA 75nd18

Critical Points

Critical Point	MD	INCL	AZIM	TYD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
Rustler	336.00	0 00	0 00	336.00	0 00	0 00	0 00	0 00
Salado	731.00	0 00	0 00	731 00	0 00	0 00	0 00	0 00
Castile	1344.00	0 00	0 00	1344 00	0 00	0 00	0 00	0 00
Lamar	2888.00	0 00	0 00	2888.00	0 00	0 00	0 00	0 00
Bell Canyon	2918.00	0 00	0 00	2918 00	0 00	0 00	0 00	0 00
Cherry Canyon	3799.00	0 00	0 00	3799.00	0 00	0 00	0 00	0 00
Brushy Canyon	5048.00	0 00	0 00	5048 00	0 00	0 00	0 00	0 00
Bone Spring	6628.00	0 00	0 00	6628 00	0 00	0 00	0 00	0 00
Budd 2"/100'	6641.70	0 00	0 00	6641.70	0 00	0 00	0 00	0 00
Hold Tangent	7041.70	8.00	0 00	7040.40	27.88	27.88	0 00	2 00
Budd 10"/100'	8134.73	8.00	0 00	8122.79	180.00	180.00	0 00	0 00
Landing Point	8852.61	89.79	359.99	8816.00	745.26	745.26	-0.05	10.00
Cedar Canyon 20 Federal Com 25H PBHL	16250.39	89.79	359.99	8643.00	8051.00	8051.00	-0.75	0 00
Wolfcamp	NaN			9845.00				



Vertical Section (ft) Azm = 359.99° Scale = 1:1800 00(ft) Origin = 0N/-S, 0E/-W