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Schlumberger

Oxy Platinum MDP1 34-3 Federal Com 7H Gyro + IFR 0-20562ft MD Survey Geodetic Report (Def Survey)

30-015-45250



Report Date:	January 02, 2019 - 10:59 AM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	OXY	Vertical Section Azimuth:	181.303° (Grid North)
Field:	NM Eddy County (NAD 83)	Vertical Section Origin:	0.000 R, 0.000 R
Structure / Slot:	Oxy Platinum MDP1 34-3 Federal Com 7H / Oxy Platinum MDP1 34-3 Federal Com 7H	TVD Reference Datum:	RKB
Well:	Oxy Platinum MDP1 34-3 Federal Com 7H	TVD Reference Elevation:	3450.400 ft above MSL
Borehole:	Original Borehole	Seabed / Ground Elevation:	3423.900 ft above MSL
UWI / APH:	Unknown / Unknown	Magnetic Declination:	6.837°
Survey Name:	Oxy Platinum MDP1 34-3 Federal Com 7H Gyro + IFR 0-20562ft MD	Total Gravity Field Strength:	998.4478mgn (9.80665 Based)
Survey Date:	December 11, 2018	Gravity Model:	GARM
Tort / AHD / DDI / ERD Ratio:	235.617° / 10752.729 R / 6.704 / 1.044	Total Magnetic Field Strength:	48028.500 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Dip Angle:	59.996°
Location Lat / Long:	N 32° 16' 3.29241", W 103° 45' 56.95581"	Declination Date:	December 07, 2018
Location Grid N/E Y/X:	N 461542.890 RUS, E 716747.950 RUS	Magnetic Declination Model:	IFR1
CRS Grid Convergence Angle:	0.3030°	North Reference:	Grid North
Grid Scale Factor:	0.99994433	Grid Convergence Used:	0.3030°
Version / Patch:	2.10.753.0	Total Corr Mag North->Grid North:	6.5340°
		Local Coord Referenced To:	Well Head

NM OIL CONSERVATION
ARTESIA DISTRICT

FEB 19 2019

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Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
WRP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	481542.89	716747.95	N 32° 16' 3.29"	W 103° 45' 56.96"
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	481542.89	716747.95	N 32° 16' 3.29"	W 103° 45' 56.96"
	95.90	0.46	2.91	95.90	-0.28	0.28	0.01	0.66	481543.17	716747.96	N 32° 16' 3.30"	W 103° 45' 56.96"
	179.60	0.40	339.40	179.60	-0.89	0.89	-0.07	0.22	481543.78	716747.88	N 32° 16' 3.30"	W 103° 45' 56.96"
	238.40	0.30	327.07	238.40	-1.20	1.21	-0.23	0.21	481544.10	716747.72	N 32° 16' 3.30"	W 103° 45' 56.96"
	301.40	0.39	296.53	301.39	-1.43	1.44	-0.51	0.32	481544.33	716747.44	N 32° 16' 3.31"	W 103° 45' 56.96"
	364.40	0.40	281.26	364.39	-1.56	1.58	-0.92	0.17	481544.47	716747.03	N 32° 16' 3.31"	W 103° 45' 56.97"
	427.40	0.47	277.82	427.39	-1.63	1.66	-1.39	0.12	481544.55	716746.56	N 32° 16' 3.31"	W 103° 45' 56.97"
	491.50	0.79	261.33	491.49	-1.58	1.63	-2.09	0.57	481544.52	716745.86	N 32° 16' 3.31"	W 103° 45' 56.98"
	554.60	0.80	255.66	554.58	-1.39	1.45	-2.94	0.13	481544.34	716745.01	N 32° 16' 3.31"	W 103° 45' 56.99"
Last Gyro	589.50	0.83	256.57	589.48	-1.26	1.34	-3.42	0.09	481544.22	716744.53	N 32° 16' 3.31"	W 103° 45' 57.00"
	690.00	0.87	251.40	689.97	-0.81	0.92	-4.86	0.09	481543.81	716743.09	N 32° 16' 3.30"	W 103° 45' 57.01"
	779.00	0.79	240.22	778.96	-0.27	0.40	-6.03	0.20	481543.29	716741.92	N 32° 16' 3.30"	W 103° 45' 57.03"
	869.00	0.17	267.20	868.95	0.06	0.09	-6.70	0.71	481542.98	716741.25	N 32° 16' 3.29"	W 103° 45' 57.03"
	961.00	0.15	320.75	960.95	-0.02	0.17	-6.91	0.16	481543.06	716741.04	N 32° 16' 3.29"	W 103° 45' 57.04"
	1053.00	0.19	355.26	1052.95	-0.26	0.42	-7.00	0.12	481543.31	716740.95	N 32° 16' 3.29"	W 103° 45' 57.04"
	1144.00	0.15	106.60	1143.95	-0.38	0.54	-6.90	0.31	481543.43	716741.05	N 32° 16' 3.30"	W 103° 45' 57.04"
	1234.00	0.14	96.26	1233.95	-0.34	0.49	-6.68	0.03	481543.38	716741.27	N 32° 16' 3.30"	W 103° 45' 57.03"
	1327.00	0.15	205.99	1326.95	-0.22	0.37	-6.62	0.26	481543.26	716741.33	N 32° 16' 3.30"	W 103° 45' 57.03"
	1419.00	0.19	177.68	1418.95	0.04	0.11	-6.66	0.10	481543.00	716741.29	N 32° 16' 3.29"	W 103° 45' 57.03"
	1510.00	0.15	150.39	1509.95	0.30	-0.15	-6.60	0.10	481542.74	716741.35	N 32° 16' 3.29"	W 103° 45' 57.03"
	1605.00	0.11	146.06	1604.95	0.48	-0.33	-6.49	0.04	481542.56	716741.46	N 32° 16' 3.29"	W 103° 45' 57.03"
	1700.00	0.19	23.42	1699.95	0.41	-0.26	-6.37	0.28	481542.63	716741.58	N 32° 16' 3.29"	W 103° 45' 57.03"
	1889.00	0.19	332.84	1888.95	-0.16	0.30	-6.39	0.09	481543.19	716741.56	N 32° 16' 3.30"	W 103° 45' 57.03"
	1984.00	0.17	231.23	1983.95	-0.21	0.36	-6.57	0.29	481543.25	716741.38	N 32° 16' 3.30"	W 103° 45' 57.03"
	2172.00	0.17	302.57	2171.95	-0.17	0.33	-7.03	0.11	481543.22	716740.92	N 32° 16' 3.30"	W 103° 45' 57.04"
	2267.00	0.15	242.14	2266.95	-0.19	0.35	-7.26	0.17	481543.24	716740.70	N 32° 16' 3.30"	W 103° 45' 57.04"
	2362.00	0.11	163.91	2361.95	-0.04	0.20	-7.34	0.18	481543.09	716740.61	N 32° 16' 3.29"	W 103° 45' 57.04"
	2456.00	0.15	228.98	2455.95	0.13	0.04	-7.41	0.15	481542.93	716740.54	N 32° 16' 3.29"	W 103° 45' 57.04"
	2550.00	0.11	142.13	2549.95	0.28	-0.12	-7.45	0.19	481542.77	716740.51	N 32° 16' 3.29"	W 103° 45' 57.04"
	2740.00	0.19	5.42	2739.95	0.11	0.05	-7.30	0.15	481542.94	716740.65	N 32° 16' 3.29"	W 103° 45' 57.04"
	2834.00	0.15	177.81	2833.95	0.08	0.09	-7.28	0.36	481542.88	716740.67	N 32° 16' 3.29"	W 103° 45' 57.04"
	3023.00	0.15	176.81	3022.95	0.57	-0.41	-7.26	0.00	481542.48	716740.69	N 32° 16' 3.29"	W 103° 45' 57.04"
	3118.00	0.19	112.67	3117.95	0.75	-0.59	-7.11	0.19	481542.30	716740.84	N 32° 16' 3.29"	W 103° 45' 57.04"
	3212.00	0.15	333.84	3211.95	0.70	-0.54	-7.02	0.34	481542.35	716740.93	N 32° 16' 3.29"	W 103° 45' 57.04"
	3307.00	0.15	76.60	3306.95	0.58	-0.40	-6.95	0.25	481542.49	716741.00	N 32° 16' 3.29"	W 103° 45' 57.04"
	3401.00	0.15	267.88	3400.95	0.54	-0.38	-6.96	0.32	481542.51	716740.99	N 32° 16' 3.29"	W 103° 45' 57.04"
	3496.00	0.15	242.94	3495.95	0.60	-0.44	-7.19	0.07	481542.45	716740.76	N 32° 16' 3.29"	W 103° 45' 57.04"
	3685.00	0.94	155.16	3684.94	2.11	-1.96	-6.76	0.50	481540.93	716741.19	N 32° 16' 3.27"	W 103° 45' 57.03"
	3779.00	0.28	125.19	3778.93	2.93	-2.79	-6.25	0.76	481540.10	716741.70	N 32° 16' 3.27"	W 103° 45' 57.03"
	3968.00	0.56	177.29	3967.93	4.11	-3.98	-5.83	0.24	481538.91	716742.12	N 32° 16' 3.25"	W 103° 45' 57.02"
	4063.00	0.95	174.63	4062.92	5.36	-5.23	-5.73	0.41	481537.66	716742.22	N 32° 16' 3.24"	W 103° 45' 57.02"
	4252.00	1.02	202.26	4251.89	8.48	-8.34	-6.22	0.25	481534.55	716741.73	N 32° 16' 3.21"	W 103° 45' 57.03"
	4347.00	0.71	211.86	4346.88	9.78	-9.63	-6.85	0.36	481533.28	716741.10	N 32° 16' 3.20"	W 103° 45' 57.04"
	4371.00	0.83	193.55	4370.88	10.08	-9.92	-6.97	1.13	481532.97	716740.98	N 32° 16' 3.19"	W 103° 45' 57.04"
	4517.00	0.59	211.19	4516.87	11.76	-11.59	-7.61	0.22	481531.30	716740.34	N 32° 16' 3.18"	W 103° 45' 57.05"
	4612.00	0.46	233.32	4611.86	12.42	-12.24	-8.17	0.25	481530.65	716739.78	N 32° 16' 3.17"	W 103° 45' 57.05"
	4801.00	0.36	76.60	4800.88	12.74	-12.55	-8.20	0.43	481530.34	716739.75	N 32° 16' 3.17"	W 103° 45' 57.05"
	4895.00	0.31	39.79	4894.86	12.46	-12.28	-7.75	0.23	481530.60	716740.20	N 32° 16' 3.17"	W 103° 45' 57.05"
	4990.00	0.02	127.48	4989.88	12.27	-12.10	-7.57	0.33	481530.79	716740.38	N 32° 16' 3.17"	W 103° 45' 57.04"
5085.00	0.04	261.32	5084.86	12.29	-12.12	-7.59	0.06	481530.77	716740.36	N 32° 16' 3.17"	W 103° 45' 57.04"	
5179.00	0.26	315.60	5178.86	12.14	-11.97	-7.77	0.25	481530.92	716740.18	N 32° 16' 3.17"	W 103° 45' 57.05"	
5273.00	0.29	309.58	5272.86	11.85	-11.67	-8.11	0.04	481531.22	716739.84	N 32° 16' 3.18"	W 103° 45' 57.05"	
5463.00	0.11	318.60	5462.86	11.42	-11.22	-8.60	0.10	481531.67	716739.35	N 32° 16' 3.18"	W 103° 45' 57.06"	
5652.00	0.23	274.89	5651.86	11.26	-11.06	-9.10	0.09	481531.84	716738.86	N 32° 16' 3.18"	W 103° 45' 57.06"	
5842.00	0.16	316.74	5841.86	11.05	-10.83	-9.66	0.08	481532.06	716738.29	N 32° 16' 3.19"	W 103° 45' 57.07"	
6031.00	0.24	255.61	6030.85	10.97	-10.74	-10.22	0.11	481532.15	716737.73	N 32° 16' 3.19"	W 103° 45' 57.08"	
6219.00	0.13	291.32	6218.85	11.00	-10.76	-10.80	0.08	481532.13	716737.15	N 32° 16' 3.19"	W 103° 45' 57.08"	
6409.00	0.17	312.55	6408.85	10.74	-10.49	-11.21	0.04	481532.40	716736.74	N 32° 16' 3.19"	W 103° 45' 57.09"	
6598.00	0.26	286.46	6597.85	10.44	-10.18	-11.83	0.07	481532.71	716736.12	N 32° 16' 3.19"	W 103° 45' 57.09"	
6787.00	0.30	238.35	6786.85	10.60	-10.31	-12.66	0.12	481532.58	716735.29	N 32° 16' 3.19"	W 103° 45' 57.10"	
6882.00	0.23	236.52	6881.85	10.84	-10.55	-13.03	0.07	481532.34	716734.92	N 32° 16' 3.19"	W 103° 45' 57.11"	
6977.00	0.16	268.13	6976.85	10.91	-10.61	-13.32	0.19	481532.28	716734.64	N 32° 16' 3.19"	W 103° 45' 57.11"	
7071.00	0.18	1.69	7070.85	10.73	-10.43	-13.44	0.22	481532.47	716734.51	N 32° 16' 3.19"	W 103° 45' 57.11"	
7166.00	0.20	320.15	7165.85	10.45	-10.15	-13.54	0.14	481532.74	716734.41	N 32° 16' 3.19"	W 103° 45' 57.11"	
7261.00	0.15	225.31	7260.85	10.42	-10.11	-13.73	0.27	481532.78	716734.22	N 32° 16' 3.19"	W 103° 45' 57.12"	
7355.00	0.15	234.15	7354.85	10.58	-10.27	-13.92	0.02	481532.62	716734.03	N 32° 16' 3.19"	W 103° 45' 57.12"	
7450.00	0.14	297.94	7449.85	10.60	-10.29	-14.12	0.16	481532.60	716733.83	N 32° 16' 3.19"	W 103° 45' 57.12"	
7544.00	0.21	275.02	7543.85	10.54	-10.22	-14.40	0.10	481532.67	716733.55	N 32° 16' 3.19"	W 103° 45' 57.12"	
7639.00	0.24	199.20	7638.85	10.72	-10.39	-14.64	0.29	481532.50	716733.32	N 32° 16' 3.19"	W 103° 45' 57.13"	
7733.00	0.11	312.23	7732.85	10.85	-10.52	-14.77	0.32	481532.38	716733.18	N 32° 16' 3.19"	W 103° 45' 57.13"	
7923.00	0.29	343.19	7922.84	10.27	-9.93	-15.04	0.11	481532.98	716732.91	N 32° 16' 3.19"	W 103° 45' 57.13"	
8018.00	0.35	18.06	8017.84	9.77	-9.43	-15.02	0.21	481533.46	716732.93	N 32° 16' 3.20"	W 103° 45' 57.13"	
8112.00	0.19	346.69	8111.84	9.34	-9.00	-14.97	0.23	481533.89	716732.98	N 32° 16' 3.20"	W 103° 45' 57.13"	
8163.00	0.20	341.07	8162.84	9.17	-8.84	-15.02	0.04	481534.06	716732.94	N 32° 16' 3.21"	W 103° 45' 57.13"	
8207.00	0.21	336.69	8206.84	9.03	-8.69	-15.07	0.04	481534.20	716732.88	N 32° 16' 3.21"	W 103° 45' 57.13"	
8301.00	0.23	36.00	8300.84	8.72	-8.38	-15.02	0.24	481534.51	716732.93	N 32° 16' 3.21"	W 103° 45' 57.13"	

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 ° ° ' '')
	8396.00	0.09	314.61	8395.84	8.52	-8.18	-14.96	0.25	461534.71	716732.99	N 32 16 3.21 W 103 45 57.13	
	8490.00	0.21	60.71	8489.84	8.38	-8.04	-14.86	0.27	461534.85	716733.09	N 32 16 3.21 W 103 45 57.13	
	8585.00	2.82	347.36	8584.81	6.18	-5.84	-15.10	2.70	461537.05	716732.77	N 32 16 3.24 W 103 45 57.13	
	8680.00	5.83	344.54	8679.54	-0.55	0.83	-16.05	3.38	461543.82	716731.00	N 32 16 3.30 W 103 45 57.15	
	8775.00	7.30	342.93	8773.91	-10.90	11.35	-20.01	1.56	461554.24	716727.95	N 32 16 3.41 W 103 45 57.19	
	8869.00	8.25	339.27	8867.05	-22.82	23.37	-24.13	1.13	461568.26	716723.82	N 32 16 3.52 W 103 45 57.24	
	8964.00	8.19	337.79	8960.95	-36.10	36.78	-29.40	1.02	461579.68	716718.55	N 32 16 3.66 W 103 45 57.30	
	9058.00	8.27	336.60	9053.86	-49.12	49.93	-34.93	1.00	461592.82	716713.03	N 32 16 3.79 W 103 45 57.38	
	9152.00	7.91	334.35	9148.92	-61.03	61.87	-40.41	0.51	461604.85	716707.54	N 32 16 3.91 W 103 45 57.42	
	9247.00	8.86	324.07	9240.91	-72.68	73.78	-47.53	1.86	461616.67	716700.42	N 32 16 4.02 W 103 45 57.50	
	9342.00	9.19	321.43	9334.73	-84.33	85.64	-56.56	0.56	461628.52	716691.40	N 32 16 4.14 W 103 45 57.61	
	9436.00	8.12	322.04	9427.66	-95.23	96.74	-65.32	1.14	461639.63	716682.83	N 32 16 4.25 W 103 45 57.71	
	9531.00	7.25	323.13	9521.81	-105.14	106.83	-73.04	0.83	461649.71	716674.91	N 32 16 4.35 W 103 45 57.80	
	9600.00	6.56	319.13	9590.31	-111.48	113.29	-78.24	1.22	461656.17	716669.72	N 32 16 4.42 W 103 45 57.88	
	9790.00	12.73	280.09	9777.71	-122.75	125.19	-106.00	4.56	461668.07	716641.96	N 32 16 4.54 W 103 45 58.18	
	9885.00	27.65	256.92	9866.74	-118.84	122.01	-138.00	17.53	461664.89	716609.98	N 32 16 4.51 W 103 45 58.56	
100' FNL Crossing	9920.00	29.52	249.10	9897.49	-113.56	117.09	-153.98	11.95	461659.98	716593.98	N 32 16 4.46 W 103 45 58.74	
	9980.00	33.83	237.84	9948.64	-98.79	102.96	-181.89	11.85	461645.84	716566.07	N 32 16 4.32 W 103 45 59.07	
	10075.00	41.43	210.87	10024.43	-56.60	61.63	-220.61	18.88	461604.52	716527.38	N 32 16 3.91 W 103 45 59.52	
	10170.00	45.29	200.09	10093.58	2.80	2.85	-248.38	8.78	461545.74	716499.59	N 32 16 3.33 W 103 45 59.85	
	10206.00	47.08	198.02	10118.51	27.54	-21.70	-256.85	6.47	461521.19	716491.12	N 32 16 3.09 W 103 45 59.95	
	10265.00	50.08	194.87	10157.54	70.24	-64.13	-269.34	6.47	461478.77	716478.62	N 32 16 2.67 W 103 46 0.10	
	10360.00	59.83	185.87	10212.10	148.87	-140.48	-282.94	12.85	461402.42	716465.02	N 32 16 1.92 W 103 46 0.26	
	10455.00	76.36	183.93	10247.42	234.54	-227.99	-290.36	17.50	461314.91	716457.61	N 32 16 1.05 W 103 46 0.35	
	10550.00	88.76	180.99	10259.70	328.52	-321.91	-294.36	13.41	461220.99	716453.61	N 32 16 0.12 W 103 46 0.40	
	10625.00	89.14	179.73	10261.08	403.50	-396.90	-294.83	1.75	461146.01	716453.14	N 32 15 59.38 W 103 46 0.41	
	10718.00	88.77	180.47	10262.77	496.46	-489.88	-294.99	0.89	461053.04	716452.98	N 32 15 58.48 W 103 46 0.42	
	10905.00	88.46	180.37	10267.29	683.39	-676.82	-296.36	0.17	460866.11	716451.81	N 32 15 56.81 W 103 46 0.45	
	10998.00	89.56	182.41	10268.90	778.37	-769.77	-298.62	2.49	460773.16	716449.35	N 32 15 55.69 W 103 46 0.48	
	10992.00	88.22	182.87	10270.72	870.32	-863.65	-302.95	1.51	460679.28	716445.02	N 32 15 54.76 W 103 46 0.54	
	11278.00	89.45	181.11	10274.50	1056.26	-1049.49	-309.40	1.15	460493.46	716438.56	N 32 15 52.92 W 103 46 0.62	
	11463.00	89.52	176.20	10276.18	1242.99	-1236.38	-305.01	2.63	460306.58	716442.95	N 32 15 51.07 W 103 46 0.58	
	11558.00	89.97	175.42	10276.60	1335.56	-1329.13	-298.22	0.97	460213.84	716449.75	N 32 15 50.16 W 103 46 0.51	
	11652.00	89.39	175.38	10277.12	1429.06	-1422.82	-290.68	0.62	460120.15	716457.29	N 32 15 49.23 W 103 46 0.43	
	11745.00	88.56	177.33	10278.79	1521.70	-1515.61	-284.77	2.28	460027.36	716463.20	N 32 15 48.31 W 103 46 0.37	
	11932.00	90.14	179.29	10280.91	1708.42	-1702.51	-279.28	1.35	459840.48	716468.71	N 32 15 46.48 W 103 46 0.31	
	12025.00	89.49	177.84	10281.21	1801.31	-1795.47	-276.93	1.71	459747.52	716471.04	N 32 15 45.54 W 103 46 0.29	
	12120.00	90.49	177.70	10281.23	1896.12	-1890.40	-273.23	1.06	459652.60	716474.73	N 32 15 44.60 W 103 46 0.25	
	12310.00	89.01	180.74	10282.05	2085.97	-2080.35	-270.64	1.78	459462.68	716477.32	N 32 15 42.72 W 103 46 0.24	
	12405.00	89.66	182.53	10283.16	2180.96	-2175.30	-273.36	2.00	459367.71	716474.61	N 32 15 41.78 W 103 46 0.27	
	12500.00	90.42	182.78	10283.09	2275.93	-2270.20	-277.78	0.84	459272.82	716470.21	N 32 15 40.84 W 103 46 0.33	
	12594.00	90.66	179.88	10282.21	2369.92	-2364.16	-279.94	3.10	459178.87	716468.03	N 32 15 39.87 W 103 46 0.36	
	12689.00	90.18	178.57	10281.51	2464.85	-2459.15	-278.65	1.47	459083.88	716469.31	N 32 15 38.93 W 103 46 0.35	
	12784.00	91.55	178.15	10280.07	2559.71	-2554.09	-275.93	1.51	458988.94	716472.03	N 32 15 38.03 W 103 46 0.33	
	12974.00	88.32	177.27	10280.29	2749.31	-2743.92	-268.34	1.78	458799.13	716476.82	N 32 15 36.16 W 103 46 0.25	
	13069.00	88.59	178.36	10282.85	2844.10	-2838.81	-264.72	1.16	458704.24	716483.24	N 32 15 35.22 W 103 46 0.21	
	13259.00	89.73	178.32	10285.64	3033.82	-3028.71	-259.22	0.60	458514.36	716486.75	N 32 15 33.34 W 103 46 0.16	
	13448.00	87.84	177.36	10289.84	3222.42	-3217.52	-252.10	1.12	458325.56	716495.87	N 32 15 31.47 W 103 46 0.09	
	13638.00	90.45	178.02	10292.48	3412.00	-3407.33	-244.44	1.42	458135.76	716503.52	N 32 15 29.59 W 103 46 0.01	
Exit Target Box 1	13730.00	90.23	177.84	10291.63	3503.84	-3499.27	-241.12	0.31	458043.83	716506.85	N 32 15 28.68 W 103 45 59.98	
	13827.00	90.00	177.64	10291.74	3600.66	-3596.19	-237.29	0.31	457948.91	716510.68	N 32 15 27.72 W 103 45 59.94	
	13922.00	89.56	178.72	10292.10	3695.51	-3691.14	-234.27	1.23	457851.98	716513.69	N 32 15 26.78 W 103 45 59.91	
	14017.00	89.69	181.22	10292.72	3790.48	-3786.13	-234.22	2.64	457756.98	716513.74	N 32 15 25.84 W 103 45 59.92	
	14208.00	89.83	181.34	10293.85	3978.47	-3975.08	-238.44	0.07	457568.04	716509.52	N 32 15 23.97 W 103 45 59.98	
Enter Target Box 1	14215.00	89.68	181.34	10293.90	3988.47	-3984.08	-238.85	0.54	457559.04	716509.31	N 32 15 23.88 W 103 45 59.98	
	14301.00	90.14	181.37	10294.04	4074.47	-4070.05	-240.69	0.54	457473.07	716507.28	N 32 15 23.03 W 103 46 0.01	
	14396.00	89.32	180.63	10294.48	4169.47	-4165.03	-242.35	1.16	457378.10	716505.62	N 32 15 22.09 W 103 46 0.03	
	14586.00	89.38	180.94	10296.84	4359.45	-4355.00	-244.85	0.17	457188.14	716503.02	N 32 15 20.21 W 103 46 0.08	
	14775.00	89.73	180.89	10298.11	4548.44	-4543.97	-247.97	0.19	456999.18	716500.00	N 32 15 18.34 W 103 46 0.12	
	14965.00	89.87	180.81	10298.77	4738.43	-4733.95	-250.78	0.06	456809.21	716497.18	N 32 15 16.46 W 103 46 0.17	
	15155.00	89.28	180.16	10300.18	4928.40	-4923.94	-252.39	0.48	456619.24	716495.57	N 32 15 14.58 W 103 46 0.20	
	15250.00	89.25	180.65	10301.40	5023.38	-5018.93	-253.06	0.52	456524.25	716494.90	N 32 15 13.64 W 103 46 0.21	
	15345.00	89.56	180.58	10302.38	5118.37	-5113.92	-254.08	0.33	456429.27	716493.88	N 32 15 12.70 W 103 46 0.23	
	15534.00	90.49	181.97	10302.30	5307.37	-5302.86	-258.29	0.88	456240.33	716489.68	N 32 15 10.83 W 103 46 0.29	
	15724.00	90.31	180.22	10300.98	5497.35	-5492.82	-261.82	0.93	456050.39	716486.04	N 32 15 8.95 W 103 46 0.34	
	15914.00	90.04	180.90	10300.40	5687.33	-5682.81	-263.78	0.39	455860.41	716484.19	N 32 15 7.08 W 103 46 0.38	
	16009.00	90.69	181.01	10299.79	5878.33	-5873.79	-265.36	0.69	455765.43	716482.60	N 32 15 6.14 W 103 46 0.40	
	16104.00	89.21	180.30	10299.87	5877.32	-5872.78	-266.45	1.73	455670.45	716481.52	N 32 15 5.20 W 103 46 0.42	
	16199.00	89.69	178.85	10300.79	5972.27	-5967.77	-265.74	1.61	455575.46	716482.22	N 32 15 4.26 W 103 46 0.42	
	16294.00	91.34	178.40	10299.93	6067.16	-6062.74	-263.46	1.80	455480.50	716484.50	N 32 15 3.32 W 103 46 0.40	
	16389.00	90.97	178.24	10298.02	6162.01	-6157.68	-260.68	0.42	455385.57	716487.29	N 32 15 2.38 W 103 46 0.37	
	16579.00	89.83	178.14	10296.69	6351.72	-6347.57	-254.68	0.60	455195.68	716493.29	N 32 15 0.50 W 103 46 0.31	
	16674.00	90.62	178.94	10296.32	6446.61	-6442.54	-252.26	1.18	455100.72	716495.71	N 32 14 59.56 W 103 46 0.29	
	16863.00	91.07	178.72	10293.53	6635.41	-6631.48	-248.40	0.27	454911.79	716499.57	N 32 14 57.69 W 103 46 0.26	
	17053.00	91.10	178.19	10289.93	6825.14	-6821.38	-243.28	0.28	454721.91	716504.89	N 32 14 55.81 W 103 46 0.21	
	17148.00	91.14	178.00	10288.07	6919.98	-6916.31	-240.12	0.20	454626.98	716507.85	N 32 14 54.87 W 103 46 0.18	
	17243.00	90.38	177.43									

Comments	MD (ft)	Incl (°)	Azimuth (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	19805.00	90.11	179.38	10288.63	9575.51	-9572.47	-242.73	0.64	451970.97	716505.23	N 32 14 26.59 W 103 46 0.37	
	19900.00	90.11	180.12	10288.44	9670.48	-9687.47	-242.31	0.78	451875.98	716505.65	N 32 14 27.65 W 103 46 0.37	
	19995.00	90.21	180.20	10288.18	9765.48	-9782.48	-242.58	0.13	451780.99	716505.38	N 32 14 26.71 W 103 46 0.38	
	20090.00	90.69	179.98	10287.43	9860.43	-9857.46	-242.73	0.56	451686.00	716505.23	N 32 14 25.77 W 103 46 0.39	
	20185.00	90.52	179.94	10286.43	9955.40	-9952.46	-242.66	0.18	451591.01	716505.30	N 32 14 24.83 W 103 46 0.39	
	20280.00	90.31	179.98	10285.74	10050.37	-10047.45	-242.60	0.23	451496.02	716505.37	N 32 14 23.89 W 103 46 0.40	
	20375.00	90.90	180.17	10284.74	10145.34	-10142.45	-242.72	0.65	451401.03	716505.24	N 32 14 22.95 W 103 46 0.41	
100' FSL	20484.00	90.90	180.76	10283.03	10254.32	-10251.43	-243.61	0.54	451292.05	716504.38	N 32 14 21.87 W 103 46 0.42	
Crossing	20515.00	90.90	180.93	10282.54	10285.31	-10282.42	-244.06	0.54	451261.06	716503.90	N 32 14 21.56 W 103 46 0.43	
Final Survey	20562.00	90.90	180.93	10281.80	10332.31	-10329.41	-244.83	0.00	451214.07	716503.14	N 32 14 21.10 W 103 46 0.44	
Proj to TD												

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7855 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	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 Platinum MDP1 34-3 Federal Com 7H Gyro + IFR 0-20562ft MD
	1	26.500	26.500	Act Strs	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Platinum MDP1 34-3 Federal Com 7H Gyro + IFR 0-20562ft MD
	1	26.500	589.500	Act Strs	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Platinum MDP1 34-3 Federal Com 7H Gyro
	1	589.500	20562.000	Act Strs	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Platinum MDP1 34-3 Federal Com 7H Gyro

...Original Borehole\Oxy Platinum MDP1 34-3 Federal Com 7H Gyro + IFR 0-20562ft MD

Schlumberger-Private

Schlumberger

OXY



Borehole: Original Borehole Well: Oxy Platinum MDP1 34-3 Federal Com 7H Field: NM Eddy County (NAD 83) Structure: Oxy Platinum MDP1 34-3 Federal Com 7H

Gravity & Magnetic Parameters

Model: IFR1 Dip: 68.984° Date: 07-Dec-2018
MagDec: 6.837° FS: 48028.8mT Gravity FS: 988.448mgn (8.90688 Based)

Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet

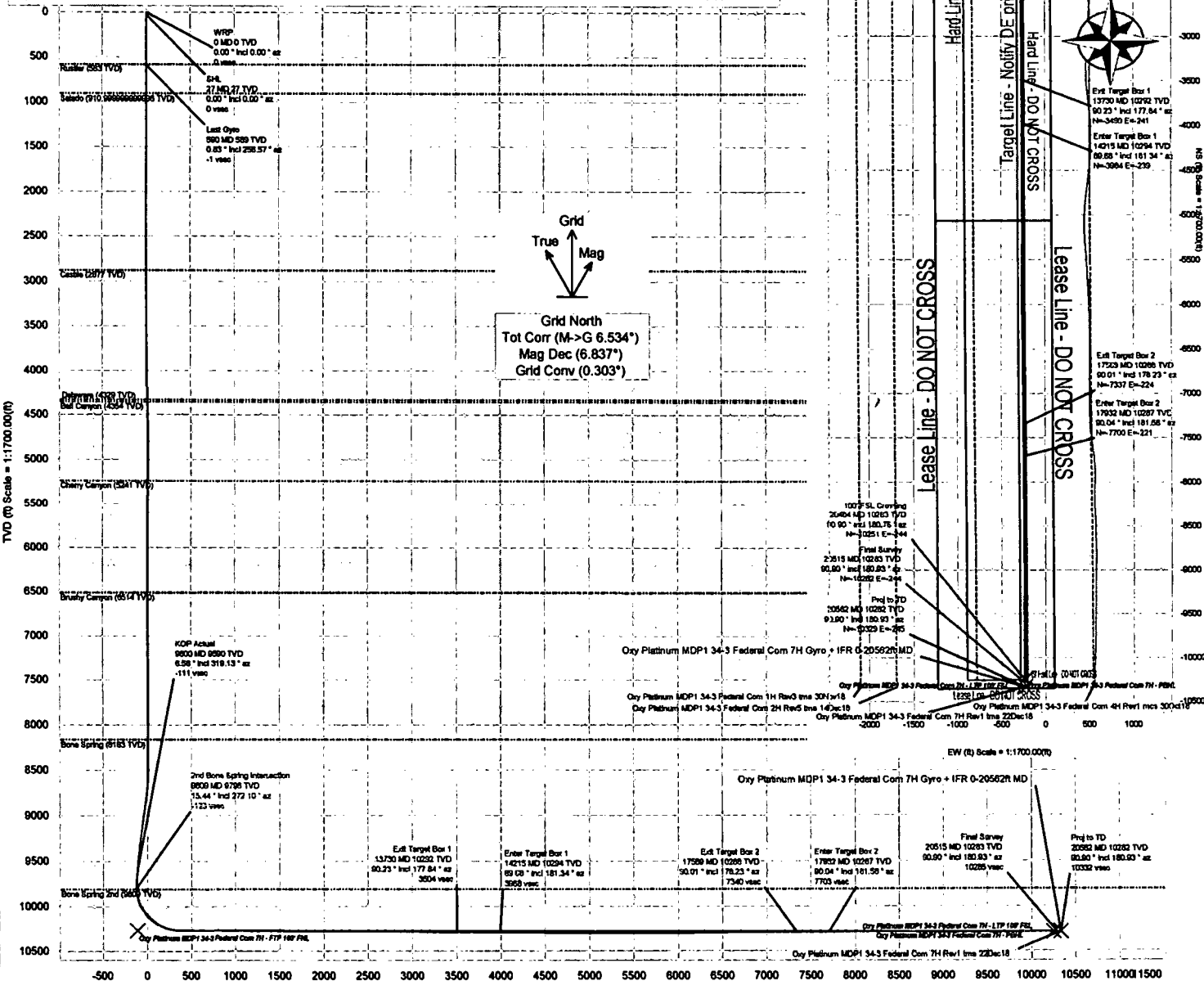
Lat: N 32 16 3.29 Northing: 481842.890US Grid Conv: 0.303°
Lon: W 103 48 58.98 Easting: 716747.860US Scale Fact: 0.98884433

Miscellaneous

Oxy Platinum MDP1 34-3
TVD Ref: RKB(3450.42' above MSL)
Plan: Oxy Platinum MDP1 34-3 Federal Com 7H Gyro + IFR 0-20562R MD

Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
WRP	0.00	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	589.50	0.83	256.57	589.48	-1.26	1.34	-3.42	0.09
KOP Actual	9600.00	6.56	319.13	9590.31	-111.48	113.29	-78.24	1.22
2nd Bone Spring Intersection	9809.00	15.44	272.10	9796.14	-123.10	125.65	-110.59	17.53
100' FNL Crossing	9920.00	29.52	249.10	9897.49	-113.56	117.09	-153.98	11.95
Exit Target Box 1	13730.00	90.23	177.84	10291.93	3503.84	-3499.27	-241.12	0.31
Enter Target Box 1	14215.00	89.68	181.34	10293.90	3988.47	-3984.08	-238.65	0.54
Exit Target Box 2	17569.00	90.01	178.23	10287.99	7340.16	-7336.97	-223.66	1.65
Enter Target Box 2	17932.00	90.04	181.56	10287.04	7702.90	-7699.88	-220.55	0.72
100' FSL Crossing	20484.00	90.90	180.76	10283.03	10254.32	-10251.43	-243.61	0.54
Final Survey	20515.00	90.90	180.93	10282.54	10285.31	-10282.42	-244.06	0.54
Proj to TD	20562.00	90.90	180.93	10281.80	10332.31	-10329.41	-244.83	0.00



Vertical Section (ft) Azim = 181.30° Scale = 1:1700.00(ft) Origin = 0N/S, 0E/W