

30-015-44295

Schlumberger

Oxy Palladium MDP1 7-6 Federal Com 4H Gyro+MWD 0-20,283' MD Survey Geodetic Report (Def Survey)



Report Date: October 16, 2017 - 03:07 PM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Slot: Oxy Palladium MDP1 7-6 Federal Com 4H / Oxy Palladium MDP1 7-6 Federal Com 4H
Well: Oxy Palladium MDP1 7-6 Federal Com 4H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Oxy Palladium MDP1 7-6 Federal Com 4H Gyro+MWD 0-20,283' MD
Survey Date: August 30, 2017
Tort / AHD / DDI / ERD Ratio: 229.870' / 11389.563 ft / 6.723 / 1.133
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 13' 26.86195", W 103° 49' 5.79862"
Location Grid N/E Y/X: N 445653.440 NUS, E 700610.020 RUS
CRS Grid Convergence Angle: 0.2746 °
Grid Scale Factor: 0.99993814
Version / Patch: 2.10.565.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 4.437 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB=26.5'
TVD Reference Elevation: 3560.500 ft above MSL
Seabed / Ground Elevation: 3534.000 ft above MSL
Magnetic Declination: 6.966 °
Total Gravity Field Strength: 998.4276mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48087.008 nT
Magnetic Dip Angle: 59.993 °
Declination Date: October 03, 2017
Magnetic Declination Model: HDGM 2017
North Reference: Grid North
Grid Convergence Used: 0.2746 °
Total Corr Mag North→Grid North: 6.6916 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSECE (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	445653.44	700610.02	N 32 13 26.86	W 103 49 5.80
	73.50	0.13	265.28	73.50	-0.01	-0.01	-0.08	0.18	445653.43	700609.94	N 32 13 26.86	W 103 49 5.80
	163.50	0.40	74.79	163.50	0.08	0.07	0.12	0.59	445653.51	700610.14	N 32 13 26.86	W 103 49 5.80
	252.50	0.19	85.34	252.50	0.20	0.16	0.57	0.24	445653.60	700610.59	N 32 13 26.86	W 103 49 5.79
	347.50	0.38	254.25	347.50	0.12	0.09	0.42	0.60	445653.53	700610.44	N 32 13 26.86	W 103 49 5.79
	441.50	0.52	191.87	441.50	-0.41	-0.41	0.03	0.51	445653.03	700610.05	N 32 13 26.86	W 103 49 5.80
	535.50	0.32	265.28	535.49	-0.88	-0.85	-0.32	0.56	445652.59	700609.70	N 32 13 26.85	W 103 49 5.80
	603.50	0.85	251.17	603.49	-1.10	-1.03	-0.98	0.80	445652.41	700609.04	N 32 13 26.85	W 103 49 5.81
	658.00	0.75	236.24	657.98	-1.47	-1.35	-1.67	0.38	445652.09	700608.35	N 32 13 26.85	W 103 49 5.82
	764.00	0.16	231.64	763.98	-1.99	-1.81	-2.38	0.56	445651.63	700607.64	N 32 13 26.84	W 103 49 5.83
	857.00	0.00	79.93	856.98	-2.07	-1.89	-2.48	0.17	445651.55	700607.54	N 32 13 26.84	W 103 49 5.83
	949.00	0.00	43.26	948.98	-2.07	-1.89	-2.48	0.00	445651.55	700607.54	N 32 13 26.84	W 103 49 5.83
	1042.00	0.00	268.56	1041.98	-2.07	-1.89	-2.48	0.00	445651.55	700607.54	N 32 13 26.84	W 103 49 5.83
	1134.00	0.00	130.87	1133.98	-2.07	-1.89	-2.48	0.00	445651.55	700607.54	N 32 13 26.84	W 103 49 5.83
	1227.00	0.00	91.07	1226.98	-2.07	-1.89	-2.48	0.00	445651.55	700607.54	N 32 13 26.84	W 103 49 5.83
	1319.00	0.06	277.02	1318.98	-2.07	-1.88	-2.53	0.07	445651.56	700607.49	N 32 13 26.84	W 103 49 5.83
	1506.00	0.00	34.30	1505.98	-2.07	-1.87	-2.62	0.03	445651.57	700607.40	N 32 13 26.84	W 103 49 5.83
	1600.00	0.06	291.61	1599.98	-2.05	-1.85	-2.67	0.06	445651.59	700607.35	N 32 13 26.84	W 103 49 5.83
	1694.00	0.00	48.31	1693.98	-2.04	-1.83	-2.71	0.06	445651.61	700607.31	N 32 13 26.84	W 103 49 5.83
	1789.00	0.00	321.35	1788.98	-2.04	-1.83	-2.71	0.00	445651.61	700607.31	N 32 13 26.84	W 103 49 5.83
	1883.00	0.06	260.49	1882.98	-2.05	-1.84	-2.76	0.06	445651.60	700607.26	N 32 13 26.84	W 103 49 5.83
	1978.00	0.00	304.08	1977.98	-2.06	-1.85	-2.81	0.06	445651.59	700607.21	N 32 13 26.84	W 103 49 5.83
	2072.00	0.00	121.16	2071.98	-2.06	-1.85	-2.81	0.00	445651.59	700607.21	N 32 13 26.84	W 103 49 5.83
	2166.00	0.00	82.34	2165.98	-2.06	-1.85	-2.81	0.00	445651.59	700607.21	N 32 13 26.84	W 103 49 5.83
	2261.00	0.00	273.40	2260.98	-2.06	-1.85	-2.81	0.00	445651.59	700607.21	N 32 13 26.84	W 103 49 5.83
	2450.00	0.00	144.27	2449.98	-2.06	-1.85	-2.81	0.00	445651.59	700607.21	N 32 13 26.84	W 103 49 5.83
	2544.00	0.00	99.26	2543.98	-2.06	-1.85	-2.81	0.00	445651.59	700607.21	N 32 13 26.84	W 103 49 5.83
	2638.00	0.00	26.84	2637.98	-2.06	-1.85	-2.81	0.00	445651.59	700607.21	N 32 13 26.84	W 103 49 5.83
	2732.00	0.00	196.54	2731.98	-2.06	-1.85	-2.81	0.00	445651.59	700607.21	N 32 13 26.84	W 103 49 5.83
	2827.00	0.00	265.33	2826.98	-2.06	-1.85	-2.81	0.00	445651.59	700607.21	N 32 13 26.84	W 103 49 5.83
	2921.00	0.00	332.83	2920.98	-2.06	-1.85	-2.81	0.00	445651.59	700607.21	N 32 13 26.84	W 103 49 5.83
	3015.00	0.00	171.24	3014.98	-2.06	-1.85	-2.81	0.00	445651.59	700607.21	N 32 13 26.84	W 103 49 5.83
	3204.00	0.08	192.09	3203.98	-2.19	-1.98	-2.84	0.04	445651.46	700607.18	N 32 13 26.84	W 103 49 5.83
	3298.00	0.06	263.67	3297.98	-2.25	-2.03	-2.90	0.11	445651.41	700607.12	N 32 13 26.84	W 103 49 5.83
	3393.00	0.13	155.84	3392.98	-2.34	-2.12	-2.91	0.18	445651.32	700607.11	N 32 13 26.84	W 103 49 5.83
	3581.00	0.06	215.71	3580.98	-2.61	-2.39	-2.88	0.06	445651.05	700607.14	N 32 13 26.84	W 103 49 5.83
	3675.00	0.06	307.94	3674.98	-2.62	-2.40	-2.94	0.09	445651.04	700607.08	N 32 13 26.84	W 103 49 5.83
	3769.00	0.06	186.00	3768.98	-2.64	-2.42	-2.99	0.11	445651.02	700607.03	N 32 13 26.84	W 103 49 5.83
	3958.00	0.00	319.84	3957.98	-2.74	-2.52	-3.00	0.03	445650.92	700607.02	N 32 13 26.84	W 103 49 5.83
	4052.00	0.06	12.64	4051.98	-2.69	-2.47	-2.99	0.06	445650.97	700607.03	N 32 13 26.84	W 103 49 5.83
	4146.00	0.06	271.04	4145.98	-2.65	-2.42	-3.03	0.10	445651.02	700606.99	N 32 13 26.84	W 103 49 5.83
	4240.00	0.06	308.10	4239.98	-2.62	-2.39	-3.11	0.04	445651.05	700606.91	N 32 13 26.84	W 103 49 5.83
	4420.00	0.30	47.35	4419.98	-2.23	-2.01	-2.84	0.18	445651.43	700607.18	N 32 13 26.84	W 103 49 5.83
	4515.00	0.36	56.09	4514.98	-1.86	-1.68	-2.41	0.08	445651.76	700607.61	N 32 13 26.85	W 103 49 5.83
	4609.00	0.24	62.94	4608.98	-1.57	-1.42	-1.99	0.13	445652.02	700608.03	N 32 13 26.85	W 103 49 5.82
	4799.00	0.28	16.42	4798.97	-0.91	-0.80	-1.50	0.11	445652.64	700608.52	N 32 13 26.85	W 103 49 5.82
	4894.00	0.45	24.61	4893.97	-0.33	-0.24	-1.28	0.19	445653.20	700608.74	N 32 13 26.86	W 103 49 5.81
	5083.00	0.75	17.15	5082.96	1.57	1.62	-0.61	0.16	445655.06	700609.41	N 32 13 26.88	W 103 49 5.81
	5272.00	0.75	6.23	5271.95	4.01	4.03	-0.11	0.08	445657.47	700609.91	N 32 13 26.90	W 103 49 5.80
	5367.00	0.76	14.36	5366.94	5.25	5.26	0.11	0.11	445658.70	700610.13	N 32 13 26.91	W 103 49 5.80
	5462.00	2.27	87.12	5461.91	6.11	5.97	2.15	2.28	445659.41	700612.17	N 32 13 26.92	W 103 49 5.77
	5557.00	4.38	94.71	5556.74	6.34	5.76	7.64	2.26	445659.20	700617.66	N 32 13 26.92	W 103 49 5.71
	5652.00	6.48	98.69	5651.31	5.92	4.65	16.56	2.24	445658.09	700626.58	N 32 13 26.91	W 103 49 5.61
	5748.00	8.19	100.76	5744.54	4.79	2.60	28.38	1.84	445656.04	700638.40	N 32 13 26.89	W 103 49 5.47
	5841.00	10.29	99.85	5838.30	3.24	-0.11	43.39	2.22	445653.33	700653.41	N 32 13 26.86	W 103 49 5.29
	5936.00	11.64	99.47	5931.56	1.80	-3.14	61.20	1.42	445650.30	700671.22	N 32 13 26.83	W 103 49 5.09
	6031.00	13.67	99.57	6024.25	-0.24	-6.58	91.73	2.14	445646.86	700691.74	N 32 13 26.79	W 103 49 4.85
	6125.00	15.84	99.18	6115.15	-2.30	-10.48	105.35	2.31	445642.96	700715.36	N 32 13 26.75	W 103 49 4.57
	6220.00	18.08	98.74	6206.01	-4.48	-14.79	132.72	2.36	445638.65	700742.73	N 32 13 26.71	W 103 49 4.25
	6317.00	17.94	96.47	6298.26	-6.14	-18.76	162.44	0.74	445634.68	700772.45	N 32 13 26.67	W 103 49 3.91
	6411.00	18.18	93.35	6387.63	-6.37	-21.25	191.47	1.06	445632.20	700801.48	N 32 13 26.64	W 103 49 3.57
	6505.00	16.71	92.77	6477.30	-5.70	-22.76	219.61	1.57	445630.69	700829.61	N 32 13 26.63	W 103 49 3.24
	6599.00	16.98	93.42	6567.27	-5.06	-24.23	246.81	0.35	445629.21	700856.81	N 32 13 26.61	W 103 49 2.93
	6693.00	16.97	93.04	6657.17	-4.49	-25.77	274.21	0.12	445627.67	700884.21	N 32 13 26.59	W 103 49 2.61
	6788.00	17.27	92.84	6747.96	-3.75	-27.21	302.13	0.32	445626.23	700912.14	N 32 13 26.58	W 103 49 2.28
	6882.00	17.65	93.32	6837.63	-3.09	-28.72	330.30	0.43	445624.72	700940.30	N 32 13 26.56	W 103 49 1.96
	6977.00	17.05	91.09	6928.31	-1.99	-29.82	358.60	0.94	445623.62	700968.60	N 32 13 26.55	W 103 49 1.63
	7071.00	16.63	87.01	7018.28	0.55	-29.38	385.81	1.33	445624.06	700995.81	N 32 13 26.55	W 103 49 1.31
	7166.00	15.14	88.30	7108.65	3.63	-29.31	411.79	1.61	445625.13	701021.78	N 32 13 26.56	W 103 49 1.01
	7260.00	12.24	91.95	7200.97	5.38	-28.28	434.02	3.22	445625.16	701044.02	N 32 13 26.56	W 103 49 0.75
	7354.00	14.60	88.19	7292.40	7.10	-28.25	455.83	2.68	445625.20	701065.82	N 32 13 26.56	W 103 49 0.49
	7449.00	15.84	83.51	7384.07	10.86	-26.40	480.68	1.84	445627.04	701090.67	N 32 13 26.58	W 103 49 0.20
	7538.00	11.19	83.29	7567.79	19.30	-21.34	524.54	2.46	445632.10	701134.53	N 32 13 26.63	W 103 48 59.69
	7732.00	9.88	85.60	7660.23	22.28	-19.67	541.48	1.67	445633.77	701151.47	N 32 13 26.64	W 103 48 59.50
	7826.00	9.96	86.17	7752.85	24.66	-18.52	557.47	0.32	445634.92	701167.46	N 32 13 26.65	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northings (ft)	Easting (ft)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	8204.00	13.43	75.38	8124.33	36.71	-11.79	626.49	2.88	445641.65	701236.47	N 32 13 26.72	W 103 48 58.51
	8298.00	14.24	72.01	8215.61	44.68	-5.46	648.05	1.22	445647.98	701258.02	N 32 13 26.78	W 103 48 58.26
	8393.00	13.98	66.17	8307.75	54.58	2.78	669.66	1.52	445656.22	701279.63	N 32 13 26.86	W 103 48 58.00
	8487.00	13.68	63.52	8399.02	65.66	12.33	689.99	0.75	445665.76	701299.97	N 32 13 26.95	W 103 48 57.77
	8582.00	12.65	60.81	8491.52	77.20	22.41	709.13	1.26	445675.85	701319.10	N 32 13 27.05	W 103 48 57.54
	8676.00	12.24	62.20	8583.32	88.21	32.08	729.93	0.54	445685.51	701336.90	N 32 13 27.14	W 103 48 57.33
	8770.00	12.08	63.65	8675.21	98.56	41.06	744.56	0.37	445694.53	701354.53	N 32 13 27.23	W 103 48 57.13
	8865.00	12.86	62.75	8767.96	109.20	50.34	762.86	0.85	445703.78	701372.94	N 32 13 27.32	W 103 48 56.92
	8959.00	12.88	63.46	8859.60	120.09	59.81	781.54	0.17	445713.25	701391.51	N 32 13 27.42	W 103 48 56.70
	9053.00	13.14	64.38	8951.19	130.83	69.11	800.54	0.35	445722.55	701410.51	N 32 13 27.51	W 103 48 56.48
	9148.00	16.29	65.57	9043.06	142.66	79.30	822.42	3.33	445732.73	701432.38	N 32 13 27.61	W 103 48 56.22
	9242.00	16.81	54.66	9133.19	157.74	92.61	845.51	3.35	445746.05	701455.48	N 32 13 27.74	W 103 48 55.95
	9338.00	17.54	42.69	9223.03	177.57	110.89	866.21	3.83	445764.33	701476.18	N 32 13 27.92	W 103 48 55.71
	9430.00	17.66	30.51	9312.66	201.51	133.60	883.06	3.91	445787.03	701493.02	N 32 13 28.14	W 103 48 55.51
	9524.00	16.77	19.24	9402.47	227.43	158.69	894.77	3.67	445812.12	701504.73	N 32 13 28.39	W 103 48 55.37
	9619.00	15.94	9.37	9493.64	253.68	184.51	901.41	3.05	445837.94	701511.38	N 32 13 28.64	W 103 48 55.30
	9745.00	15.49	0.18	9584.95	287.71	218.41	904.28	2.01	445871.84	701514.25	N 32 13 28.96	W 103 48 55.26
	9839.00	22.27	350.36	9703.87	317.54	248.56	901.34	7.94	445901.99	701511.30	N 32 13 29.28	W 103 48 55.29
	9919.00	27.07	347.06	9776.55	349.64	281.27	894.72	6.24	445934.69	701504.68	N 32 13 29.60	W 103 48 55.37
	10028.00	40.64	352.35	9866.87	406.31	340.92	884.39	12.73	445994.33	701494.35	N 32 13 30.19	W 103 48 55.48
	10122.00	53.42	358.65	9930.85	476.11	409.31	879.40	14.44	446062.72	701489.36	N 32 13 30.87	W 103 48 55.54
	10216.00	66.94	359.17	9977.48	557.09	490.66	877.88	14.39	446144.06	701487.84	N 32 13 31.68	W 103 48 55.55
	10310.00	82.06	356.21	10002.53	646.77	580.89	874.15	16.37	446234.29	701484.12	N 32 13 32.57	W 103 48 55.59
	10359.00	89.76	354.06	10006.03	694.96	629.55	870.01	16.31	446282.95	701479.97	N 32 13 33.05	W 103 48 55.64
	10405.00	90.76	354.21	10005.82	740.22	675.30	865.31	2.20	446326.70	701475.27	N 32 13 33.50	W 103 48 55.69
	10460.00	90.31	353.99	10005.30	794.32	730.01	859.65	0.91	446383.40	701469.62	N 32 13 34.04	W 103 48 55.75
	10554.00	90.34	355.53	10004.77	886.98	823.61	851.07	1.64	446477.00	701461.03	N 32 13 34.97	W 103 48 55.85
	10646.00	90.21	355.09	10004.32	980.78	918.29	843.30	0.48	446571.67	701453.27	N 32 13 35.81	W 103 48 55.98
	10743.00	90.72	355.64	10003.55	1073.60	1011.98	835.70	0.80	446665.36	701445.67	N 32 13 36.84	W 103 48 56.01
	10838.00	90.38	357.29	10002.64	1167.67	1106.79	829.85	1.77	446760.16	701439.81	N 32 13 37.77	W 103 48 56.08
	11026.00	90.31	358.26	10001.51	1354.40	1294.65	822.55	0.52	446948.00	701432.52	N 32 13 39.63	W 103 48 56.15
	11120.00	90.45	357.59	10000.89	1447.79	1388.58	819.15	0.73	447041.93	701429.11	N 32 13 40.56	W 103 48 56.19
	11214.00	90.31	357.47	10000.26	1541.10	1482.49	815.09	0.20	447135.84	701425.06	N 32 13 41.48	W 103 48 56.23
	11309.00	90.28	360.00	9999.77	1635.62	1577.46	813.00	2.88	447230.90	701422.97	N 32 13 42.43	W 103 48 56.25
	11403.00	90.38	359.23	9999.23	1729.33	1671.46	812.95	0.26	447324.79	701422.82	N 32 13 43.36	W 103 48 56.24
	11497.00	90.31	358.89	9998.67	1823.03	1765.46	812.61	0.11	447418.78	701422.58	N 32 13 44.29	W 103 48 56.24
	11591.00	90.45	0.47	9997.41	2011.50	1954.45	813.21	0.32	447507.77	701423.17	N 32 13 45.16	W 103 48 56.22
	11686.00	90.41	0.08	9996.71	2105.25	2048.45	813.66	0.42	447601.76	701423.62	N 32 13 47.09	W 103 48 56.21
	11780.00	90.28	359.64	9996.14	2198.95	2142.44	813.43	0.49	447795.75	701423.39	N 32 13 48.02	W 103 48 56.21
	11874.00	90.31	359.59	9995.65	2293.61	2237.44	812.79	0.06	447890.74	701422.76	N 32 13 48.96	W 103 48 56.21
	11968.00	90.31	0.49	9995.13	2389.33	2333.44	812.86	0.94	447986.73	701422.82	N 32 13 49.91	W 103 48 56.21
	12065.00	89.72	359.50	9995.10	2482.01	2436.44	812.85	1.12	448089.72	701422.81	N 32 13 50.93	W 103 48 56.20
	12168.00	89.76	359.24	9995.50	2577.68	2522.43	811.90	0.31	448175.71	701421.87	N 32 13 51.78	W 103 48 56.21
	12254.00	89.93	359.02	9995.75	2672.27	2617.42	810.46	0.29	448270.69	701420.43	N 32 13 52.72	W 103 48 56.22
	12349.00	89.93	0.57	9995.87	2766.95	2712.42	810.12	1.63	448365.68	701420.09	N 32 13 53.66	W 103 48 56.22
	12444.00	89.62	1.78	9996.24	2860.80	2806.39	812.05	1.33	448459.65	701422.01	N 32 13 54.59	W 103 48 56.19
	12538.00	89.45	1.87	9997.01	2955.70	2901.34	815.07	0.20	448554.60	701425.04	N 32 13 55.53	W 103 48 56.15
	12633.00	89.59	2.03	9997.80	3050.61	2996.28	818.30	0.22	448649.53	701428.27	N 32 13 56.47	W 103 48 56.11
	12728.00	89.55	3.09	9998.52	3145.55	3091.18	822.55	1.12	448744.43	701432.51	N 32 13 57.41	W 103 48 56.05
	12823.00	89.45	2.63	9999.34	3239.51	3185.06	827.24	0.50	448838.30	701437.20	N 32 13 58.34	W 103 48 55.99
	12917.00	89.45	2.49	10001.14	3327.40	3272.87	835.63	0.07	448926.09	701445.60	N 32 14 0.20	W 103 48 55.88
	13015.00	89.17	1.80	10002.29	3422.32	3367.79	839.19	0.78	449012.01	701449.16	N 32 14 1.14	W 103 48 55.84
	13105.00	89.35	2.35	10003.50	3516.23	3461.72	842.59	0.62	449104.94	701452.56	N 32 14 2.07	W 103 48 55.79
	13200.00	89.38	1.50	10004.55	3611.13	3556.66	845.78	0.90	449199.87	701455.75	N 32 14 3.00	W 103 48 55.75
	13294.00	89.28	2.89	10005.65	3705.05	3651.59	849.38	1.48	449293.79	701459.35	N 32 14 3.93	W 103 48 55.70
	13389.00	89.76	1.10	10006.44	3809.96	3746.52	852.86	1.97	449387.72	701462.62	N 32 14 4.86	W 103 48 55.66
	13483.00	89.35	359.45	10007.20	3906.69	3842.51	853.13	1.73	449481.65	701463.09	N 32 14 5.83	W 103 48 55.65
	13577.00	89.28	0.56	10008.34	4001.40	3937.50	853.13	1.17	449575.57	701463.10	N 32 14 6.77	W 103 48 55.64
	13675.00	89.48	0.50	10009.36	4106.17	4032.50	854.01	0.22	449669.49	701463.98	N 32 14 7.71	W 103 48 55.63
	13770.00	89.45	359.99	10011.13	4211.66	4127.48	854.82	0.27	449763.41	701464.78	N 32 14 8.58	W 103 48 55.61
	13865.00	89.38	0.86	10012.10	4316.48	4218.48	855.36	0.71	449857.33	701465.32	N 32 14 9.52	W 103 48 55.59
	13959.00	89.31	359.83	10014.25	4421.12	4313.47	855.38	1.37	449951.25	701465.34	N 32 14 11.46	W 103 48 55.59
	14053.00	89.48	0.37	10015.25	4525.51	4408.46	854.79	0.61	450045.17	701464.78	N 32 14 12.39	W 103 48 55.59
	14148.00	89.38	0.21	10016.20	4629.26	4503.45	855.04	0.50	450139.09	701465.01	N 32 14 13.33	W 103 48 55.58
	14242.00	89.48	0.01	10017.07	4732.41	4606.44	855.88	0.12	450233.01	701465.49	N 32 14 14.27	W 103 48 55.57
	14338.00	89.62	0.87	10018.82	4835.46	4709.43	856.61	0.92	450326.93	701466.58	N 32 14 15.13	W 103 48 55.56
	14433.00	89.62	359.76	10019.44	4938.23	4812.43	857.13	1.18	450420.85	701467.10	N 32 14 16.00	W 103 48 55.53
	14528.00	89.90	358.67	10019.83	5041.11	4915.42	858.09	0.89	450514.77	701468.05	N 32 14 16.93	W 103 48 55.54
	14623.00	90.14	0.10	10019.80	5144.01	5018.42	858.32	1.22	450608.69	701468.28	N 32 14 17.87	W 103 48 55.54
	14718.00	89.97	359.88	10019.71	5246.95	5121.43	858.30	0.30	450702.61	701468.75	N 32 14 18.80	W 103 48 55.54
	14813.00	90.03	0.16	10019.71	5349.88	5224.43	858.33	0.30	450796.53	701469.22	N 32 14 19.73	W 103 48 55.53
	14908.00	90.31	0.38	10019.43	5452.81	5327.44	858.76	0.37	450890.45	701469.75	N 32 14 20.66	W 103 48 55.52
	15003.00	89.79	359.59	10019.35	5555.74	5430.45	858.76	1.01	450984.37	701470.27	N 32 14 21.59	W 103 48 55.52
	15098.00	90.72	359.82	10019.93	5658.67	5533.46	858.76	1.02	451078.29	701470.79	N 32 14 22.52	W 103 48 55.52
	15193.00	89.72	358.83	10018.56	5761.60	5636.47	858.76	1.48	451172.21	701471.31	N 32 14 23.45	W 103 48 55.52
	15288.00	89.97	359.25	10018.83	5864.53	5739.48	858.76	0.49	451266.13	701471		

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 ° ' '')
	19255.00	90.52	0.37	10032.72	9556.92	9521.73	823.81	0.52	455174.56	701433.77	N 32 15 1.04	W 103 48 55.67
	19349.00	90.00	0.16	10032.29	9650.67	9615.72	824.24	0.60	455268.55	701434.21	N 32 15 1.97	W 103 48 55.66
	19443.00	89.86	0.49	10032.41	9744.43	9709.72	824.77	0.38	455362.54	701434.74	N 32 15 2.90	W 103 48 55.65
	19538.00	90.14	0.19	10032.41	9839.19	9804.72	825.34	0.43	455457.54	701435.31	N 32 15 3.84	W 103 48 55.64
	19632.00	89.83	0.01	10032.35	9932.92	9888.72	825.50	0.29	455551.53	701435.47	N 32 15 4.77	W 103 48 55.63
	19726.00	89.97	359.47	10032.43	10026.60	9992.72	825.06	0.58	455645.52	701435.04	N 32 15 5.70	W 103 48 55.63
	19821.00	89.83	0.63	10032.51	10121.32	10067.72	825.16	1.22	455740.51	701435.13	N 32 15 6.64	W 103 48 55.63
	19915.00	90.00	0.19	10032.57	10215.09	10161.72	825.83	0.47	455834.51	701435.80	N 32 15 7.57	W 103 48 55.61
	20010.00	89.69	359.16	10032.83	10309.76	10276.71	825.29	1.13	455929.50	701435.26	N 32 15 8.51	W 103 48 55.61
	20104.00	89.90	359.37	10033.16	10403.38	10370.70	824.09	0.32	456023.48	701434.05	N 32 15 9.44	W 103 48 55.62
	20198.00	89.79	358.80	10033.42	10496.97	10464.69	822.59	0.62	456117.46	701432.55	N 32 15 10.37	W 103 48 55.64
Last Survey	20243.00	89.97	359.42	10033.51	10541.77	10509.69	821.89	1.43	456162.45	701431.85	N 32 15 10.82	W 103 48 55.64
Proj to TD	20283.00	89.97	359.42	10033.53	10581.62	10549.68	821.48	0.00	456202.45	701431.45	N 32 15 11.21	W 103 48 55.64

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	1/96.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Palladium MDP1 7-6 Federal Com 4H Gyro+MWD 0-20,283' MD
	1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Palladium MDP1 7-6 Federal Com 4H Gyro+MWD 0-20,283' MD
	1	26.500	603.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Palladium MDP1 7-6 Federal Com 4H
	1	603.500	20283.000	Act Stns	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Palladium MDP1 7-6 Federal Com 4H

Schlumberger**OXY**

Borehole:

Well:

Field:

Structure:

Original Borehole

Oxy Palladium MDP1 7-6 Federal Com 4H

NM Eddy County (NAD 83)

Oxy Palladium MDP1 7-6 Federal Com 4H

Gravity & Magnetic Parameters

Model: HDGM 2017
MagDec: 8.966°

Date: 03-Dec-2017

Gravity FB: 988.426m/s² (R.20000 Secs)

Surface Location

Lat: N 32 13 26.86
Lon: W 103 49 5.80

H&P New Mexico State Plane, Eastern Zone, US Feet

Northing: 445653.44
Easting: 700810.02

Grid Conv: 0.2746°

Scale Fact: 0.99999916

Monument: Oxy Palladium

Spot: MDP1 7-6 Federal
Plan: Oxy Palladium MDP1 7-6 Federal Com 4H REVI LBN 030c17

TVD Ref: RKB=26.5 (2660.21 above MSL)

Plan: Oxy Palladium MDP1 7-6 Federal Com 4H REVI LBN 030c17

North: 445653.44 Easting: 700810.02 Latitude: N 32 13 26.86 Longitude: W 103 49 5.80 VSec Azimuth: 4.44

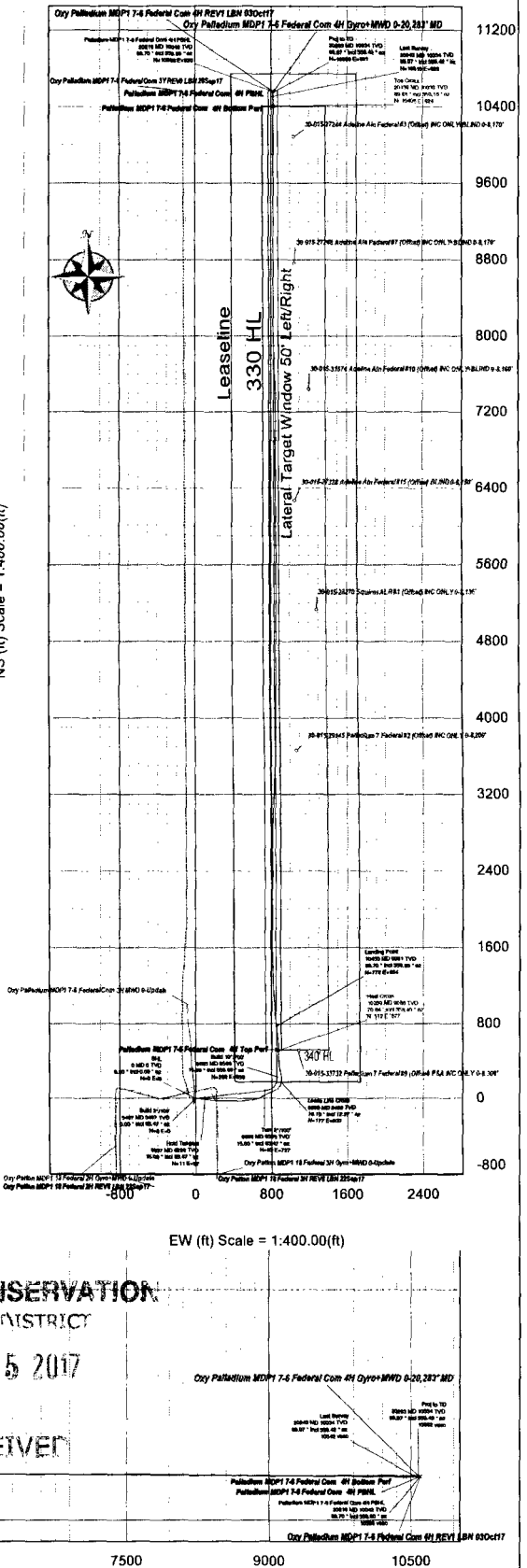
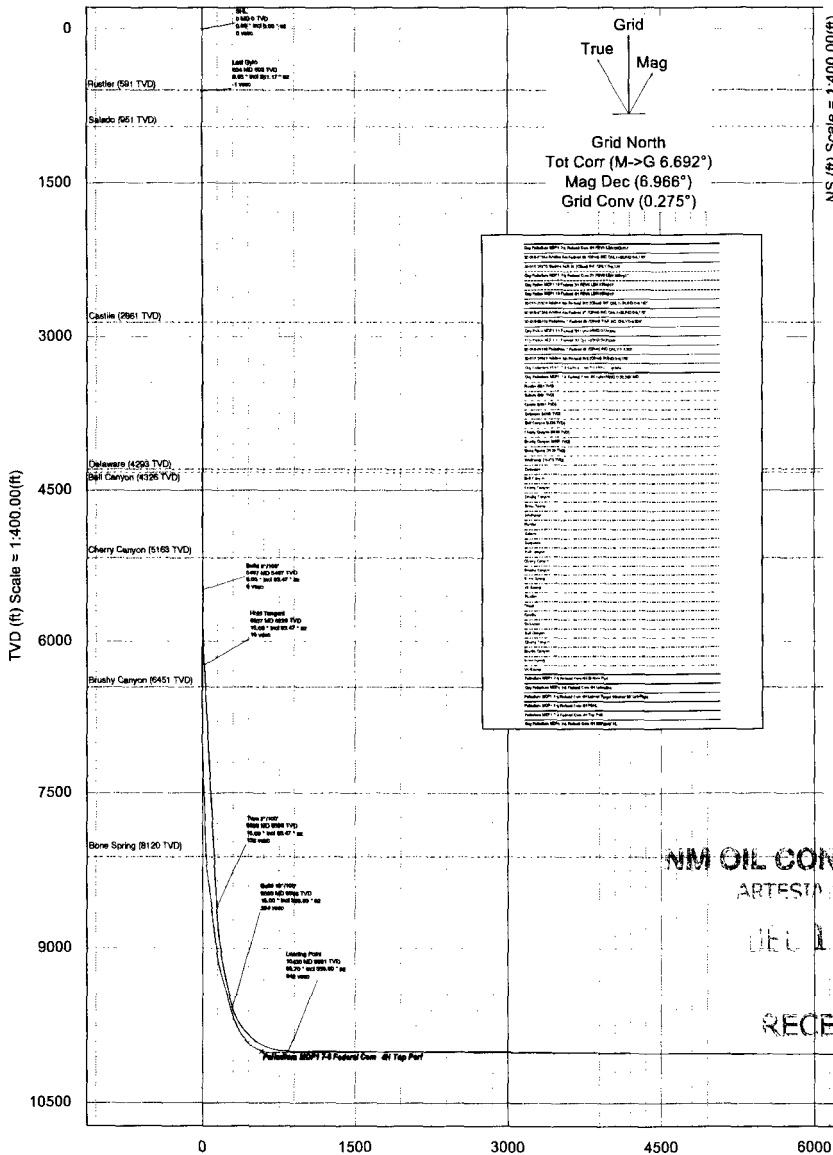
Target Description

Grid Coord

Target Name	Shape	Dimension	Latitude	Longitude	Northing	Easting	TVD	VSec
Palladium MDP1 7-6 Federal Com 4H Lateral	Rectangle	10053.58 x 100.00	N 32 14 21.84	W 103 49 55.74	451192.70	701447.58	-1000.00	5997.81
Target Window 50' Left/Right								
Oxy Palladium MDP1 7-6 Federal Com 4H Lateral	Polyline	N/A	N 32 13 26.86	W 103 49 5.80	445653.44	700810.02	3560.50	0.00
Oxy Palladium MDP1 7-6 Federal Com 4H Top Part	Polyline	N/A	N 32 13 26.86	W 103 49 5.80	445653.44	700810.02	3560.50	0.00
Palladium MDP1 7-6 Federal Com 4H Top Part	Point	N/A	N 32 13 26.86	W 103 49 55.81	448198.28	701455.38	9991.00	577.49
Palladium MDP1 7-6 Federal Com 4H Bottom Part	Point	N/A	N 32 15 6.70	W 103 49 55.86	450082.14	701430.36	10042.00	10436.84
Palladium MDP1 7-6 Federal Com 4H FB/L	Point	N/A	N 32 15 11.36	W 103 49 55.86	450219.14	701426.79	10042.00	10596.13

Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	W(+)/S(-)	E(+)/W(-)	DLS
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plaster	521.00	0.00	83.47	591.00	0.00	0.00	0.00	0.00
Salado	561.00	0.00	83.47	561.00	0.00	0.00	0.00	0.00
Castle	2951.00	0.00	83.47	2951.00	0.00	0.00	0.00	0.00
Dataview	4260.00	0.00	83.47	4260.00	0.00	0.00	0.00	0.00
Ball Canyon	4326.00	0.00	83.47	4326.00	0.00	0.00	0.00	0.00
Cherry Canyon	5163.00	0.00	83.47	5163.00	0.00	0.00	0.00	0.00
Build 271007	5487.00	0.00	83.47	5487.00	0.00	0.00	0.00	0.00
Hold Tangent	6237.00	15.00	83.47	6236.46	18.57	11.10	98.06	2.00
Brushy Canyon	6487.36	15.00	83.47	6451.00	20.92	17.90	156.22	0.00
Bone Spring	8195.25	15.00	83.47	8120.00	115.00	86.75	600.53	0.00
Turn 271007	8988.47	15.00	83.47	8566.40	139.26	83.27	727.35	0.00
Build 1071007	9992.53	15.00	359.80	9996.34	205.53	226.00	898.00	2.00
Landing Point	10439.54	80.70	359.80	9991.00	842.18	778.45	854.07	10.00
Palladium MDP1 7-6 Federal Com 4H FB/L	20217.67	80.70	359.80	10042.00	10568.13	10568.37	819.82	0.00
Workcamp	NAN			11472.00				



NM OIL CONSERVATION

ARTESIA DISTRICT

JUL 15 2017

RECEIVED

Vertical Section (ft) Azim = 4.44° Scale = 1:400.00(f) Origin = ON/S, 0E/W