

30-015-44292

Schlumberger

Oxy Palladium MDP1 7-6 Federal Com 3Y Gyro+MWD 0- Survey Geodetic Report (Def Survey)



Report Date: November 07, 2017 - 04:07 PM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Slot: Oxy Palladium MDP1 7-6 Federal Com 3Y / Oxy Palladium MDP1 7-6 Federal Com 3Y
Well: Oxy Palladium MDP1 7-6 Federal Com 3Y
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Oxy Palladium MDP1 7-6 Federal Com 3Y Gyro+MWD 0-20,117'
Survey Date: October 23, 2017
Tort / AHD / DDI / ERD Ratio: 212.224' / 10618.705 ft / 6.656' / 1.061
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 13' 26.86193", W 103° 49' 6.49712"
Location Grid N/E Y/X: N 445653.150 ftUS, E 700550.020 ftUS
CRS Grid Convergence Angle: 0.2745°
Grid Scale Factor: 0.99993812
Version / Patch: 2.10.565.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 359.634° (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: 5.961°
Total Gravity Field Strength: 998.4276mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48080.745 nT
Magnetic Dip Angle: 59.991°
Declination Date: October 23, 2017
Magnetic Declination Model: HDGM 2017
North Reference: Grid North
Grid Convergence Used: 0.2745°
Total Cor Mag North-Grid North: 6.6869°
Local Coord Referenced To: Well Head

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 ° ' ")
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	445653.15	700550.02	N 32 13 26.86 W 103 49 6.50	
	57.69	0.56	285.89	57.69	0.08	0.08	-0.27	0.97	445653.23	700548.75	N 32 13 26.86 W 103 49 6.50	
	143.99	0.76	262.34	143.98	0.12	0.12	-1.24	0.39	445653.27	700548.78	N 32 13 26.86 W 103 49 6.51	
	233.50	1.14	264.35	233.48	-0.03	-0.05	-2.72	0.43	445653.10	700547.30	N 32 13 26.86 W 103 49 6.53	
	326.20	1.05	262.73	326.16	-0.22	-0.25	-4.52	0.10	445652.90	700545.50	N 32 13 26.86 W 103 49 6.55	
	422.93	1.00	255.28	422.88	-0.53	-0.57	-6.18	0.15	445652.58	700543.84	N 32 13 26.86 W 103 49 6.57	
	514.72	0.80	242.72	514.66	-1.02	-1.07	-7.52	0.30	445652.08	700542.50	N 32 13 26.85 W 103 49 6.58	
	612.05	0.68	235.55	611.98	-1.65	-1.71	-8.60	0.16	445651.44	700541.42	N 32 13 26.85 W 103 49 6.60	
Last Gyro	625.50	0.79	236.77	625.43	-1.75	-1.80	-8.74	0.83	445651.35	700541.28	N 32 13 26.84 W 103 49 6.60	
	753.00	0.20	258.82	752.92	-2.27	-2.33	-9.70	0.48	445650.82	700540.32	N 32 13 26.84 W 103 49 6.61	
	938.00	0.18	274.73	937.92	-2.30	-2.37	-10.30	0.03	445650.78	700539.72	N 32 13 26.84 W 103 49 6.62	
	1031.00	0.11	262.52	1030.92	-2.27	-2.34	-10.54	0.08	445650.81	700539.48	N 32 13 26.84 W 103 49 6.62	
	1123.00	0.11	38.13	1122.92	-2.18	-2.25	-10.57	0.20	445650.90	700539.45	N 32 13 26.84 W 103 49 6.62	
	1216.00	0.11	315.46	1215.92	-2.05	-2.11	-10.58	0.16	445651.04	700539.44	N 32 13 26.84 W 103 49 6.62	
	1401.00	0.11	248.07	1400.92	-1.98	-2.05	-10.87	0.07	445651.10	700539.15	N 32 13 26.84 W 103 49 6.62	
	1496.00	0.11	226.72	1495.92	-2.06	-2.15	-11.02	0.04	445651.00	700539.00	N 32 13 26.84 W 103 49 6.63	
	1686.00	0.11	137.35	1685.92	-2.34	-2.41	-11.03	0.08	445650.74	700538.99	N 32 13 26.84 W 103 49 6.63	
	1780.00	0.11	331.49	1779.92	-2.33	-2.40	-11.01	0.23	445650.75	700539.01	N 32 13 26.84 W 103 49 6.63	
	1967.00	0.11	323.08	1966.92	-2.02	-2.10	-11.20	0.01	445651.06	700538.82	N 32 13 26.84 W 103 49 6.63	
	2061.00	0.11	119.63	2060.92	-2.00	-2.07	-11.18	0.23	445651.08	700538.84	N 32 13 26.84 W 103 49 6.63	
	2156.00	0.06	185.53	2155.92	-2.09	-2.16	-11.10	0.11	445650.99	700538.92	N 32 13 26.84 W 103 49 6.63	
	2250.00	0.08	194.61	2249.92	-2.20	-2.27	-11.12	0.02	445650.88	700538.90	N 32 13 26.84 W 103 49 6.63	
	2344.00	0.06	53.02	2343.92	-2.24	-2.31	-11.10	0.14	445650.84	700538.92	N 32 13 26.84 W 103 49 6.63	
	2438.00	0.17	60.47	2437.92	-2.14	-2.21	-10.94	0.12	445650.94	700539.08	N 32 13 26.84 W 103 49 6.62	
	2533.00	0.23	26.13	2532.92	-1.90	-1.97	-10.73	0.14	445651.18	700539.29	N 32 13 26.84 W 103 49 6.62	
	2627.00	0.13	82.83	2626.92	-1.72	-1.79	-10.55	0.20	445651.36	700539.48	N 32 13 26.84 W 103 49 6.62	
	2721.00	0.17	286.87	2720.92	-1.67	-1.73	-10.57	0.31	445651.42	700539.45	N 32 13 26.85 W 103 49 6.62	
	2816.00	0.11	320.60	2815.92	-1.55	-1.62	-10.77	0.10	445651.53	700539.25	N 32 13 26.85 W 103 49 6.62	
	2910.00	0.06	256.73	2909.92	-1.49	-1.56	-10.87	0.11	445651.59	700539.15	N 32 13 26.85 W 103 49 6.62	
	3004.00	0.11	211.78	3003.92	-1.58	-1.65	-10.97	0.08	445651.50	700539.05	N 32 13 26.85 W 103 49 6.62	
	3098.00	0.11	288.80	3097.92	-1.63	-1.70	-11.10	0.15	445651.45	700538.92	N 32 13 26.85 W 103 49 6.63	
	3193.00	0.11	115.18	3192.92	-1.64	-1.71	-11.10	0.23	445651.44	700538.92	N 32 13 26.85 W 103 49 6.63	
	3287.00	0.11	279.94	3286.92	-1.66	-1.73	-11.11	0.23	445651.42	700538.91	N 32 13 26.85 W 103 49 6.63	
	3381.00	0.11	105.85	3380.92	-1.67	-1.74	-11.11	0.23	445651.41	700538.91	N 32 13 26.85 W 103 49 6.63	
	3476.00	0.11	262.75	3475.92	-1.71	-1.78	-11.12	0.23	445651.37	700538.91	N 32 13 26.84 W 103 49 6.63	
	3570.00	0.18	285.94	3569.92	-1.67	-1.75	-11.35	0.10	445651.40	700538.87	N 32 13 26.85 W 103 49 6.63	
	3664.00	0.11	358.47	3663.92	-1.54	-1.62	-11.49	0.19	445651.53	700538.53	N 32 13 26.85 W 103 49 6.63	
	3853.00	0.11	351.91	3852.92	-1.18	-1.26	-11.52	0.01	445651.89	700538.50	N 32 13 26.85 W 103 49 6.63	
	3947.00	0.11	263.23	3946.92	-1.10	-1.18	-11.62	0.16	445651.97	700538.40	N 32 13 26.85 W 103 49 6.63	
	4041.00	0.11	8.44	4040.92	-1.02	-1.10	-11.70	0.19	445652.05	700538.32	N 32 13 26.85 W 103 49 6.63	
	4136.00	0.11	96.58	4135.92	-0.95	-1.02	-11.80	0.16	445652.13	700538.42	N 32 13 26.85 W 103 49 6.63	
	4244.00	0.11	261.46	4243.92	-0.94	-1.02	-11.60	0.20	445652.13	700538.43	N 32 13 26.85 W 103 49 6.63	
	4441.00	0.06	246.79	4440.92	-0.94	-1.02	-11.88	0.04	445652.13	700538.15	N 32 13 26.85 W 103 49 6.64	
	4536.00	0.00	270.13	4535.92	-0.96	-1.04	-11.92	0.06	445652.11	700538.10	N 32 13 26.85 W 103 49 6.64	
	4630.00	0.00	248.60	4629.92	-0.96	-1.04	-11.92	0.00	445652.11	700538.10	N 32 13 26.85 W 103 49 6.64	
	4724.00	0.00	191.91	4723.92	-0.96	-1.04	-11.92	0.00	445652.11	700538.10	N 32 13 26.85 W 103 49 6.64	
	4818.00	0.00	302.96	4817.92	-0.96	-1.04	-11.92	0.00	445652.11	700538.10	N 32 13 26.85 W 103 49 6.64	
	4913.00	0.00	223.79	4912.92	-0.96	-1.04	-11.92	0.00	445652.11	700538.10	N 32 13 26.85 W 103 49 6.64	
	5007.00	0.00	134.51	5006.92	-0.96	-1.04	-11.92	0.00	445652.11	700538.10	N 32 13 26.85 W 103 49 6.64	
	5102.00	0.00	90.72	5101.92	-0.96	-1.04	-11.92	0.00	445652.11	700538.10	N 32 13 26.85 W 103 49 6.64	
	5196.00	0.00	275.26	5195.92	-0.96	-1.04	-11.92	0.00	445652.11	700538.10	N 32 13 26.85 W 103 49 6.64	
	5290.00	0.00	118.17	5289.92	-0.96	-1.04	-11.92	0.00	445652.11	700538.10	N 32 13 26.85 W 103 49 6.64	
	5385.00	0.06	331.69	5384.92	-0.92	-1.00	-11.94	0.06	445652.15	700538.06	N 32 13 26.85 W 103 49 6.64	
	5479.00	0.00	47.84	5478.92	-0.88	-0.95	-11.97	0.06	445652.20	700538.05	N 32 13 26.85 W 103 49 6.64	
	5574.00	0.00	218.96	5573.92	-0.88	-0.95	-11.97	0.00	445652.20	700538.05	N 32 13 26.85 W 103 49 6.64	
	5668.00	0.00	66.49	5667.92	-0.88	-0.95	-11.97	0.00	445652.20	700538.05	N 32 13 26.85 W 103 49 6.64	
	5763.00	0.00	85.25	5762.92	-0.88	-0.95	-11.97	0.00	445652.20	700538.05	N 32 13 26.85 W 103 49 6.64	
	5857.00	0.06	263.28	5856.92	-0.88	-0.96	-12.02	0.06	445652.19	700538.00	N 32 13 26.85 W 103 49 6.64	
	5951.00	0.00	66.12	5950.92	-0.89	-0.96	-12.07	0.06	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	6043.00	0.00	276.69	6042.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	6140.00	0.00	112.02	6139.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	6234.00	0.00	112.29	6233.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	6329.00	0.00	128.19	6328.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	6423.00	0.00	27.68	6422.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	6518.00	0.00	94.70	6517.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	6612.00	0.00	337.03	6611.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	6706.00	0.00	177.04	6705.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	6801.00	0.00	266.61	6800.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	6990.00	0.00	2.39	6989.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	7179.00	0.00	211.22	7178.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	7273.00	0.00	36.29	7272.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	7366.00	0.00	168.83	7365.92	-0.89	-0.96	-12.07	0.00	445652.19	700537.95	N 32 13 26.85 W 103 49 6.64	
	7432.00	1.17	26.00	7431.91	-0.28	-0.36	-11.77	1.77	445652.79	700538.25	N 32 13 26.86 W 103 49 6.63	
	7461.00	1.93	25.27	7460.90	0.42	0.35	-11.43	2.62	445653.50	700538.59	N 32 13 26.87 W 103 49 6.63	
	7555.00	5.12	18.25	7554.71	5.83	5.77	-9.44	3.42	445658.92	700540.58	N 32 13 27.02 W 103 49 6.61	
	7649.00	7.39	10.82	764								

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (NUS)	Easting (EUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	7933.00	9.04	355.64	7928.75	59.30	59.27	-5.15	0.64	445712.41	700544.87	N 32 13 27.45 W 103 49	6.55
	8027.00	9.08	352.59	8021.57	74.03	73.99	-6.67	0.51	445727.13	700543.35	N 32 13 27.59 W 103 49	6.57
	8122.00	8.75	348.83	8115.43	88.56	88.51	-9.04	0.70	445741.65	700540.96	N 32 13 27.74 W 103 49	6.60
	8218.00	8.82	344.93	8208.33	102.56	102.48	-12.30	0.84	445755.63	700537.72	N 32 13 27.88 W 103 49	6.63
	8310.00	8.53	341.74	8301.25	116.16	116.06	-16.35	0.80	445769.20	700533.67	N 32 13 28.01 W 103 49	6.68
	8404.00	8.95	338.78	8394.16	129.63	129.50	-21.19	0.65	445782.64	700528.84	N 32 13 28.14 W 103 49	6.74
	8498.00	8.48	330.00	8487.08	142.49	142.32	-27.30	1.50	445795.46	700522.72	N 32 13 28.27 W 103 49	6.81
	8587.00	8.07	320.29	8574.12	164.86	164.59	-42.74	0.77	445817.73	700507.28	N 32 13 28.49 W 103 49	6.99
	8781.00	8.42	324.56	8767.15	175.60	175.27	-50.95	0.75	445829.41	700499.07	N 32 13 28.60 W 103 49	7.08
	8875.00	8.10	327.51	8860.17	186.84	186.47	-58.50	0.56	445839.61	700481.53	N 32 13 28.71 W 103 49	7.17
	8970.00	8.05	327.16	8954.23	198.12	197.70	-65.70	0.07	445850.84	700484.33	N 32 13 28.82 W 103 49	7.25
	9064.00	8.32	345.72	9047.29	210.27	209.82	-70.95	2.81	445862.96	700479.08	N 32 13 28.94 W 103 49	7.31
	9159.00	7.01	16.30	9141.48	222.50	222.06	-71.01	4.45	445875.19	700479.01	N 32 13 29.06 W 103 49	7.31
	9253.00	6.36	60.56	9234.90	230.53	230.12	-64.87	5.39	445883.26	700485.16	N 32 13 29.14 W 103 49	7.24
	9382.00	4.90	102.38	9363.32	232.79	232.46	-53.26	3.29	445895.59	700496.77	N 32 13 29.16 W 103 49	7.10
	9476.00	5.45	43.66	9457.00	235.12	234.83	-46.25	5.42	445887.96	700503.77	N 32 13 29.19 W 103 49	7.02
	9571.00	11.26	13.60	9550.99	247.38	247.12	-40.95	7.46	445900.26	700509.07	N 32 13 29.31 W 103 49	6.96
	9665.00	19.41	10.02	9641.57	271.69	271.46	-36.06	8.72	445924.60	700513.96	N 32 13 29.55 W 103 49	6.90
	9759.00	29.98	10.86	9726.85	310.20	310.02	-28.90	11.25	445963.15	700521.12	N 32 13 29.93 W 103 49	6.82
	9853.00	37.91	6.77	9804.78	361.98	361.85	-21.06	8.77	446014.98	700528.96	N 32 13 30.44 W 103 49	6.72
	9947.00	45.92	4.92	9874.68	424.36	424.27	-14.75	8.62	446077.39	700535.27	N 32 13 31.06 W 103 49	6.65
	9978.00	50.36	4.52	9895.36	447.35	447.27	-12.85	14.35	446100.40	700537.17	N 32 13 31.29 W 103 49	6.62
	10042.00	58.55	2.74	9902.53	499.25	499.20	-9.60	12.99	446152.32	700540.42	N 32 13 31.80 W 103 49	6.58
	10136.00	72.09	0.45	9971.70	584.41	584.38	-7.32	14.57	446237.49	700542.70	N 32 13 32.48 W 103 49	6.55
	10230.00	82.07	353.74	9992.71	675.76	675.70	-12.06	12.69	446328.81	700537.96	N 32 13 33.55 W 103 49	6.60
	10325.00	94.58	348.60	9995.48	769.47	769.31	-26.62	14.23	446422.42	700523.40	N 32 13 34.48 W 103 49	6.76
	10519.00	88.69	351.18	9989.95	960.49	960.13	-60.63	3.31	446613.21	700489.39	N 32 13 36.37 W 103 49	7.15
	10653.00	88.87	351.34	9992.80	1093.03	1092.54	-80.99	0.18	446745.62	700469.03	N 32 13 37.68 W 103 49	7.38
	10842.00	89.97	352.25	9994.72	1280.25	1279.59	-107.96	0.76	446932.86	700442.07	N 32 13 39.53 W 103 49	7.68
	11032.00	91.58	3.84	9992.14	1469.83	1469.13	-114.44	6.16	447122.19	700435.59	N 32 13 41.40 W 103 49	7.75
	11127.00	91.07	7.91	9989.94	1584.22	1583.59	-104.72	4.32	447216.84	700445.31	N 32 13 42.34 W 103 49	7.63
	11222.00	90.76	8.89	9988.42	1658.10	1657.56	-90.84	1.08	447310.80	700459.19	N 32 13 43.27 W 103 49	7.46
	11316.00	89.52	8.94	9988.19	1750.87	1750.42	-76.27	1.32	447403.46	700473.75	N 32 13 44.19 W 103 49	7.29
	11411.00	89.35	8.89	9988.13	1844.62	1844.27	-61.55	0.19	447487.30	700488.47	N 32 13 45.11 W 103 49	7.11
	11506.00	89.38	5.72	9990.18	1938.75	1938.48	-49.47	3.34	447591.50	700500.55	N 32 13 46.05 W 103 49	6.96
	11601.00	89.35	3.99	9991.24	2033.13	2032.19	-41.43	1.82	447686.15	700506.59	N 32 13 46.98 W 103 49	6.87
	11696.00	88.24	3.84	9992.40	2128.06	2127.90	-34.95	0.20	447780.91	700515.92	N 32 13 47.92 W 103 49	6.79
	11790.00	89.38	4.57	9993.54	2221.83	2221.69	-28.88	0.32	447874.70	700521.15	N 32 13 48.85 W 103 49	6.71
	11885.00	89.31	4.10	9994.62	2316.57	2316.47	-22.52	0.56	447969.46	700527.50	N 32 13 49.78 W 103 49	6.63
	11980.00	89.45	3.66	9995.65	2411.30	2411.25	-16.09	0.49	448064.25	700533.93	N 32 13 50.72 W 103 49	6.55
	12074.00	89.24	3.72	9996.72	2505.06	2505.05	-10.04	0.23	448158.04	700539.98	N 32 13 51.65 W 103 49	6.47
	12169.00	89.41	1.51	9997.84	2599.92	2599.94	-5.71	2.33	448252.92	700544.31	N 32 13 52.59 W 103 49	6.42
	12264.00	89.41	359.48	9998.82	2694.90	2694.92	-4.89	2.14	448347.90	700545.13	N 32 13 53.53 W 103 49	6.40
	12359.00	89.45	359.25	9999.77	2789.90	2789.91	-5.94	0.25	448442.89	700544.08	N 32 13 54.47 W 103 49	6.41
	12454.00	89.42	359.49	10000.70	2884.89	2884.90	-6.99	0.25	448537.67	700543.03	N 32 13 55.41 W 103 49	6.42
	12548.00	89.52	359.29	10001.57	2978.88	2978.89	-7.99	0.24	448631.85	700542.03	N 32 13 56.34 W 103 49	6.42
	12643.00	89.38	359.54	10002.49	3073.88	3073.89	-8.96	0.30	448726.84	700541.06	N 32 13 57.28 W 103 49	6.43
	12738.00	89.38	359.73	10003.51	3168.87	3168.88	-9.56	0.20	448821.83	700540.46	N 32 13 58.22 W 103 49	6.43
	12833.00	89.11	359.74	10004.77	3263.87	3263.87	-10.00	0.28	448916.81	700540.02	N 32 13 59.16 W 103 49	6.43
	12927.00	89.38	359.74	10006.00	3357.86	3357.86	-10.43	0.29	449010.79	700539.59	N 32 14 00.09 W 103 49	6.43
	13022.00	89.31	359.74	10007.09	3452.85	3452.85	-10.86	0.07	449105.78	700539.16	N 32 14 01.03 W 103 49	6.43
	13117.00	89.86	359.33	10007.78	3547.85	3547.85	-11.63	0.72	449200.77	700538.39	N 32 14 01.97 W 103 49	6.43
	13211.00	89.86	359.87	10008.01	3641.85	3641.84	-12.29	0.57	449294.76	700537.73	N 32 14 02.90 W 103 49	6.44
	13306.00	89.83	359.06	10008.26	3736.85	3736.84	-13.16	0.83	449389.75	700536.86	N 32 14 03.84 W 103 49	6.44
	13401.00	89.76	359.41	10008.60	3831.84	3831.83	-14.41	0.36	449484.73	700535.61	N 32 14 04.78 W 103 49	6.45
	13495.00	90.07	359.59	10008.74	3925.84	3925.82	-15.23	0.38	449578.72	700534.79	N 32 14 05.71 W 103 49	6.46
	13590.00	89.83	359.68	10008.83	4020.84	4020.82	-15.84	0.27	449673.72	700534.19	N 32 14 06.65 W 103 49	6.46
	13684.00	89.76	359.74	10009.16	4114.84	4114.82	-16.31	0.10	449767.71	700533.71	N 32 14 07.58 W 103 49	6.46
	13779.00	89.90	359.49	10009.45	4209.84	4209.82	-16.95	0.30	449862.70	700533.07	N 32 14 08.52 W 103 49	6.46
	13873.00	89.90	359.52	10009.61	4303.84	4303.81	-17.76	0.03	449956.69	700532.26	N 32 14 09.45 W 103 49	6.46
	13968.00	89.90	359.39	10009.78	4398.84	4398.81	-18.87	0.14	450051.68	700531.36	N 32 14 10.39 W 103 49	6.47
	14161.00	89.79	359.55	10010.30	4591.84	4591.80	-20.45	0.10	450144.66	700529.57	N 32 14 12.30 W 103 49	6.48
	14255.00	89.79	359.50	10010.64	4685.84	4685.80	-21.23	0.05	450238.55	700528.79	N 32 14 13.23 W 103 49	6.48
	14350.00	89.87	359.17	10010.84	4780.84	4780.79	-22.33	0.40	450333.64	700527.69	N 32 14 14.17 W 103 49	6.49
	14444.00	89.83	359.71	10010.92	4874.83	4874.79	-23.25	0.58	450427.62	700526.77	N 32 14 15.10 W 103 49	6.50
	14538.00	89.83	359.97	10011.04	4968.83	4968.79	-23.51	0.28	450521.62	700526.51	N 32 14 16.03 W 103 49	6.49
	14633.00	90.17	359.28	10010.95	5063.83	5063.78	-24.14	0.77	450615.61	700525.89	N 32 14 16.97 W 103 49	6.50
	14727.00	90.38	359.70	10010.50	5157.83	5157.78	-24.97	0.50	450710.60	700525.05	N 32 14 17.90 W 103 49	6.50
	14821.00	90.52	0.08	10009.77	5251.83	5251.77	-25.15	0.43	450804.59	700524.87	N 32 14 18.83 W 103 49	6.50
	14916.00	90.58	359.90	10008.85	5346.82	5346.77	-25.17	0.20	450899.58	700524.85	N 32 14 19.77 W 103 49	6.49
	15010.00	90.41	359.84	10008.04	5440.82	5440.77	-25.38	0.19	450993.57	700524.64	N 32 14 20.70 W 103 49	6.49
	15104.00	90.65	0.64	10007.17	5534.81	5534.76	-24.99	0.89	451087.56	700525.03	N 32 14 21.63 W 103 49	6.48
	15293.00	90.52	359.57	10005.24	5723.79	5723.75	-24.64	0.57	451176.53	700525.38	N 32 14 23.50 W 103 49	6.46
	15387.00	90.34	359.33	10004.54	5817.78	5817.74	-25.54	0.32	451265.52	700524.48	N 32 14 24.43 W 103 49	6.47
	15482.00	90.24	359.61	10004.06	5912.78	5912.73	-26.42	0.31	451354.51	700523.60	N 32 14 25.37 W 103 49	6.47
	15576.00	90.34	359.31	10003.58	6006.78	6006.73	-27.31	0.34	451443.50	700522.71	N 32 14 26.30 W 103 49	6.48
	15670.00	90.34	359.87	10003.02	6100.78	6100.72	-27.98	0.60	451532.49	700522.04	N 32 14 27.23 W 103 49	6.48

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 ° ' ")
	19820.00	90.28	0.85	10001.34	10250.09	10249.83	-73.68	0.23	455902.32	700476.34	N 32 15 6.29 W 103 49 6.76	
	20009.00	89.97	0.59	10000.93	10439.06	10438.81	-71.31	0.21	456091.30	700478.72	N 32 15 10.16 W 103 49 6.74	
Last Survey	20073.00	90.79	0.74	10000.51	10503.04	10502.81	-70.56	1.30	456155.29	700479.46	N 32 15 10.79 W 103 49 6.73	
Proj. to TD	20117.00	90.79	0.74	9999.90	10547.03	10546.80	-70.00	0.00	456199.28	700480.03	N 32 15 11.23 W 103 49 6.72	

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	1/98.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Palladium MDP1 7-6 Federal Com 3Y Gyro+MWD 0-20,117'
	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 3Y Gyro+MWD 0-20,117'
	1	26.500	625.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Palladium MDP1 7-6 Federal Com 3Y
	1	625.500	20117.000	Act Stns	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Palladium MDP1 7-6 Federal Com 3Y



Oxy Palladium MDP1 7-6 Federal Com 3Y

2. RCB=24, 5'3000.BR above 400 L.

[illegible]

EW (ft) Scale = 1:400,00(ft)

CONSERVATION
ESTIA DISTRICT

015 2017

RECEIVED

Dry Palletium MDPI 7-6 Federal Com 3Y Gyro-MWD 0-30, 117'

LAST SURVEY
10075' and 10020' TWC
50.79' 100.74' 10'
10000' west

Pigeon on TD
50.17' 100.70' TWC
50.79' 100.74' 10'
10000' west

Palletium MDPI 7-6 Federal One 3Y Beldian Pearl

Palletium MDPI 7-6 Federal One 3Y F806

Palletium MDPI 7-6 Federal One 3Y F806

30-60' 100' 10000' TWC
50-60' 100-60' 10'
10000' west

Dry Palletium MDPI 7-6 Federal One 3Y Beldian Pearl

6000 7500 9000 10500

RECEIVED

Vertical Section (ft) Azim = 359.62° Scale = 1:400.00(ft) Origin = 0N/-S, 0E/-W