



NOBLE ENERGY, INC

Location: COLORADO Slot: SLOT#05 LAPP A15-629 (880'FSL & 400'FWL, SEC.13)
Field: WELD COUNTY (NOBLE NAD 83 GRID) Well: LAPP A15-629
Facility: SEC.13-T06N-R64W Wellbore: LAPP A15-629 PWB

Plot reference wellpath is LAPP A15-629 (REV-A.0, B-MARL NIO) PWB	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to H&P 524 (30KB) (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to H&P 524 (30KB) (RKB)	North Reference: Grid north
H&P 524 (30KB) (RKB) to Mean Sea Level: 4694 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#05 LAPP A15-629 (880'FSL & 400'FWL, SEC.13)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdanm on 2016-09-23
	Database: WA_DEN_Denver_Defn

LAST BHI MWD SURVEY : 90.00° Inc, 17803.00ft MD, 6689.14ft TVD, 10382.18ft VS
PROJECTION TO BIT : 90.00° Inc, 17827.00ft MD, 6689.14ft TVD, 10406.18ft VS

Scale 1 inch = 1500

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#05 LAPP A15-629 (880'FSL & 400'FWL, SEC.13)
Area	COLORADO	Well	LAPP A15-629
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	LAPP A15-629 AWB
Facility	SEC.13-T06N-R64W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Cookdanm
Scale	0.999965	Report Generated	9/23/16 at 3:04:33 PM
Convergence at slot	0.65° East	Database/Source file	WA_DEN_Denver_Defn/LAPP_A15-629_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	149.36	-1.67	3276392.82	1419744.74	40°28'52.860"N	104°30'23.004"W
Facility Reference Pt			3276394.49	1419595.38	40°28'51.384"N	104°30'23.004"W
Field Reference Pt			3000000.00	4454105.15	48°46'34.315"N	105°30'00.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	H&P 524 (30'KB) (RKB) to Facility Vertical Datum	4694.00ft
Horizontal Reference Pt	Slot	H&P 524 (30'KB) (RKB) to Mean Sea Level	4694.00ft
Vertical Reference Pt	H&P 524 (30'KB) (RKB)	H&P 524 (30'KB) (RKB) to Mud Line at Slot (SLOT#05 LAPP A15-629 (880'FSL & 400'FWL, SEC.13))	4694.00ft
MD Reference Pt	H&P 524 (30'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	270.87°

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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	LAPP A15-629 AWB
Facility	SEC.13-T06N-R64W		

WELLPATH DATA (169 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
1904.00	0.680	235.900	1903.98	0.87	-0.21	-0.87	0.49	TIED INTO GYRODATA SURVEYS
1978.00	1.230	331.470	1977.97	1.62	0.24	-1.61	1.98	
2072.00	0.630	240.200	2071.96	2.56	0.87	-2.55	1.48	
2167.00	1.410	93.690	2166.95	1.84	0.53	-1.83	2.07	
2261.00	3.450	72.530	2260.86	-2.00	1.31	2.02	2.33	
2356.00	5.540	65.380	2355.57	-8.85	4.08	8.92	2.27	
2450.00	7.820	65.960	2448.92	-18.75	8.57	18.88	2.43	
2545.00	10.470	67.480	2542.71	-32.54	14.51	32.76	2.80	
2639.00	12.430	75.160	2634.84	-50.12	20.37	50.43	2.64	
2734.00	14.770	78.610	2727.17	-71.79	25.39	72.19	2.61	
2828.00	16.260	80.970	2817.74	-96.47	29.82	96.94	1.72	
2923.00	16.270	77.810	2908.94	-122.53	34.71	123.08	0.93	
3018.00	16.180	75.380	3000.16	-148.25	40.87	148.89	0.72	
3112.00	16.270	72.950	3090.42	-173.40	48.03	174.16	0.73	
3207.00	16.110	72.060	3181.65	-198.54	55.99	199.42	0.31	
3301.00	15.320	74.130	3272.14	-222.78	63.41	223.77	1.03	
3396.00	16.000	78.980	3363.61	-247.61	69.34	248.70	1.55	
3491.00	16.190	78.730	3454.89	-273.37	74.43	274.54	0.21	
3585.00	16.220	78.290	3545.15	-298.99	79.66	300.24	0.13	
3680.00	16.320	72.120	3636.36	-324.58	86.45	325.94	1.82	
3774.00	16.240	65.080	3726.60	-348.92	96.04	350.43	2.10	
3869.00	16.350	56.830	3817.79	-371.97	108.96	373.67	2.44	
3963.00	16.100	49.940	3908.06	-392.78	124.59	394.73	2.06	
4058.00	16.160	55.720	3999.32	-413.54	140.51	415.73	1.69	
4152.00	16.120	62.010	4089.63	-435.67	154.01	438.07	1.86	
4247.00	16.180	65.390	4180.88	-459.16	165.71	461.75	0.99	
4342.00	15.890	72.370	4272.19	-483.45	175.16	486.18	2.05	
4436.00	16.350	76.230	4362.50	-508.45	182.21	511.29	1.24	
4531.00	16.430	75.020	4453.64	-534.31	188.86	537.26	0.37	
4626.00	16.240	75.390	4544.80	-560.04	195.69	563.09	0.23	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#05 LAPP A15-629 (880'FSL & 400'FWL, SEC.13)
Area	COLORADO	Well	LAPP A15-629
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	LAPP A15-629 AWB
Facility	SEC.13-T06N-R64W		

WELLPATH DATA (169 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4720.00	16.200	73.910	4635.06	-585.25	202.63	588.41	0.44	
4815.00	16.060	72.070	4726.32	-610.36	210.35	613.65	0.56	
4909.00	16.100	73.920	4816.64	-635.14	217.97	638.54	0.55	
5004.00	16.200	74.310	4907.90	-660.44	225.20	663.96	0.16	
5098.00	16.190	73.210	4998.17	-685.50	232.53	689.13	0.33	
5193.00	15.540	78.530	5089.55	-710.55	238.89	714.28	1.68	
5287.00	15.460	84.640	5180.14	-735.30	242.56	739.09	1.74	
5382.00	16.090	86.280	5271.56	-761.01	244.60	764.84	0.81	
5477.00	16.160	83.480	5362.82	-787.25	246.95	791.11	0.82	
5572.00	16.180	79.500	5454.07	-813.33	250.87	817.26	1.17	
5667.00	16.110	75.740	5545.33	-839.03	256.53	843.05	1.10	
5761.00	15.390	70.820	5635.80	-863.34	263.84	867.47	1.61	
5856.00	10.420	55.450	5728.40	-882.20	272.86	886.47	6.31	
5951.00	5.710	27.830	5822.46	-891.35	281.92	895.76	6.29	
6046.00	5.490	312.380	5917.12	-890.09	289.17	894.61	7.21	
6140.00	8.610	273.630	6010.45	-879.69	292.65	884.26	5.87	
6235.00	12.540	271.680	6103.82	-862.26	293.40	866.85	4.15	
6330.00	17.060	277.820	6195.65	-838.11	295.60	842.72	5.03	
6424.00	21.230	280.050	6284.43	-807.60	300.45	812.28	4.50	
6519.00	26.030	275.780	6371.45	-769.83	305.55	774.58	5.36	
6614.00	35.800	269.890	6452.87	-721.15	307.60	725.93	10.76	
6708.00	45.570	269.510	6524.06	-659.96	307.26	664.73	10.40	
6803.00	55.050	269.180	6584.67	-586.97	306.41	591.71	9.98	
6898.00	64.940	269.050	6632.11	-504.84	305.14	509.56	10.41	
6951.00†	69.614	268.813	6652.58	-455.99	304.23	460.69	8.83	CROSSED 460' SETBACK
6992.00	73.230	268.640	6665.64	-417.16	303.36	421.84	8.83	
7087.00	82.530	268.200	6685.57	-324.47	300.80	329.10	9.80	
7182.00	89.940	269.230	6691.80	-229.81	298.68	234.40	7.87	
7276.00	90.000	269.530	6691.85	-135.84	297.66	140.40	0.33	
7371.00	90.340	269.860	6691.57	-40.86	297.16	45.40	0.50	

REFERENCE WELLPATH IDENTIFICATION			
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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	LAPP A15-629 AWB
Facility	SEC.13-T06N-R64W		

WELLPATH DATA (169 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
7466.00	90.340	269.100	6691.00	54.11	296.29	-49.59	0.80	
7560.00	90.280	269.890	6690.49	148.08	295.47	-143.58	0.84	
7655.00	90.250	270.340	6690.05	243.07	295.66	-238.58	0.47	
7749.00	90.180	270.310	6689.70	337.06	296.19	-332.58	0.08	
7844.00	90.220	270.800	6689.37	432.06	297.11	-427.58	0.52	
7938.00	89.970	270.440	6689.21	526.06	298.13	-521.57	0.47	
8033.00	89.940	269.220	6689.29	621.04	297.84	-616.57	1.28	
8128.00	90.030	268.540	6689.31	715.98	295.99	-711.55	0.72	
8222.00	90.060	267.850	6689.24	809.88	293.03	-805.50	0.73	
8317.00	89.940	267.140	6689.24	904.72	288.88	-900.41	0.76	
8412.00	90.060	267.580	6689.24	999.54	284.50	-995.31	0.48	
8506.00	89.970	268.250	6689.22	1093.41	281.08	-1089.25	0.72	
8601.00	89.970	268.020	6689.27	1188.30	277.99	-1184.20	0.24	
8696.00	90.060	268.190	6689.24	1283.19	274.85	-1279.14	0.20	
8790.00	89.970	268.030	6689.22	1377.08	271.75	-1373.09	0.20	
8885.00	90.000	269.220	6689.24	1472.01	269.47	-1468.06	1.25	
8979.00	90.000	270.250	6689.24	1565.99	269.03	-1562.06	1.10	
9074.00	89.940	270.690	6689.29	1660.98	269.81	-1657.06	0.47	
9263.00	90.060	271.140	6689.29	1849.98	272.83	-1846.03	0.25	
9358.00	90.090	272.780	6689.17	1944.96	276.08	-1940.97	1.73	
9452.00	90.000	272.480	6689.09	2038.92	280.39	-2034.87	0.33	
9547.00	90.030	269.730	6689.07	2133.91	282.22	-2129.85	2.89	
9641.00	90.280	270.320	6688.81	2227.90	282.26	-2223.85	0.68	
9736.00	90.120	273.010	6688.48	2322.88	285.02	-2318.80	2.84	
9830.00	89.970	274.250	6688.41	2416.77	290.98	-2412.61	1.33	
9925.00	89.940	273.700	6688.48	2511.63	297.56	-2507.38	0.58	
10020.00	90.000	271.600	6688.53	2606.58	301.95	-2602.27	2.21	
10115.00	89.910	269.780	6688.61	2701.57	303.10	-2697.26	1.92	
10209.00	90.060	268.090	6688.63	2795.52	301.35	-2791.24	1.80	
10304.00	90.030	266.980	6688.56	2890.35	297.26	-2886.15	1.17	

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#05 LAPP A15-629 (880'FSL & 400'FWL, SEC.13)
Area	COLORADO	Well	LAPP A15-629
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	LAPP A15-629 AWB
Facility	SEC.13-T06N-R64W		

WELLPATH DATA (169 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
10398.00	90.000	265.620	6688.53	2984.05	291.20	-2979.95	1.45	
10493.00	90.120	266.150	6688.43	3078.69	284.38	-3074.71	0.57	
10588.00	89.940	266.110	6688.38	3173.37	277.97	-3169.49	0.19	
10682.00	90.060	265.260	6688.38	3266.98	270.90	-3263.22	0.91	
10777.00	90.090	264.700	6688.26	3361.48	262.58	-3357.86	0.59	
10872.00	89.970	267.260	6688.21	3456.12	255.92	-3452.62	2.70	
10967.00	89.940	269.220	6688.28	3551.02	253.01	-3547.57	2.06	
11061.00	89.940	271.480	6688.38	3645.01	253.58	-3641.56	2.40	
11156.00	89.940	270.900	6688.48	3740.01	255.55	-3736.54	0.61	
11250.00	90.000	270.410	6688.53	3834.00	256.63	-3830.53	0.53	
11345.00	90.060	269.820	6688.48	3929.00	256.82	-3925.53	0.62	
11439.00	90.000	268.810	6688.43	4022.96	255.70	-4019.52	1.08	
11534.00	89.970	268.730	6688.46	4117.90	253.66	-4114.50	0.09	
11629.00	90.120	267.840	6688.38	4212.80	250.81	-4209.46	0.95	
11723.00	89.940	267.750	6688.33	4306.66	247.20	-4303.39	0.21	
11818.00	89.910	267.910	6688.46	4401.53	243.60	-4398.32	0.17	
11913.00	90.030	267.990	6688.51	4496.40	240.20	-4493.26	0.15	
12007.00	89.880	268.640	6688.58	4590.31	237.44	-4587.22	0.71	
12102.00	89.780	266.940	6688.86	4685.17	233.77	-4682.14	1.79	
12197.00	89.970	267.400	6689.07	4779.97	229.08	-4777.03	0.52	
12291.00	89.820	269.290	6689.24	4873.87	226.37	-4870.98	2.02	
12386.00	89.940	268.010	6689.44	4968.80	224.13	-4965.96	1.35	
12481.00	90.000	267.620	6689.49	5063.66	220.51	-5060.89	0.42	
12575.00	89.880	267.510	6689.59	5157.51	216.52	-5154.80	0.17	
12670.00	90.150	267.880	6689.56	5252.36	212.69	-5249.72	0.48	
12765.00	90.030	269.010	6689.41	5347.27	210.12	-5344.69	1.20	
12859.00	90.280	269.600	6689.16	5441.24	208.98	-5438.68	0.68	
12954.00	90.090	271.340	6688.85	5536.23	209.76	-5533.67	1.84	
13048.00	89.850	272.250	6688.90	5630.22	212.70	-5627.63	1.00	
13143.00	89.940	272.750	6689.08	5725.18	216.84	-5722.53	0.53	

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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	LAPP A15-629 AWB
Facility	SEC.13-T06N-R64W		

WELLPATH DATA (169 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
13238.00	89.970	271.300	6689.15	5820.16	220.20	-5817.47	1.53	
13427.00	90.000	270.510	6689.20	6009.15	223.19	-6006.45	0.42	
13522.00	90.090	271.840	6689.13	6104.15	225.13	-6101.43	1.40	
13638.00	90.120	271.510	6688.91	6220.14	228.52	-6217.38	0.29	
13711.00	90.120	270.700	6688.76	6293.14	229.93	-6290.36	1.11	
13806.00	89.850	269.100	6688.79	6388.12	229.77	-6385.36	1.71	
13900.00	89.690	268.330	6689.16	6482.05	227.66	-6479.33	0.84	
14005.00	90.060	268.490	6689.39	6586.96	224.75	-6584.29	0.38	
14200.00	90.000	266.750	6689.29	6781.63	216.65	-6779.12	0.89	
14279.00	89.940	267.210	6689.33	6860.45	212.49	-6858.01	0.59	
14374.00	89.940	267.420	6689.43	6955.27	208.04	-6952.90	0.22	
14469.00	90.060	268.110	6689.43	7050.13	204.33	-7047.83	0.74	
14564.00	89.940	268.240	6689.43	7145.02	201.31	-7142.78	0.19	
14658.00	89.940	268.420	6689.53	7238.93	198.57	-7236.74	0.19	
14753.00	89.970	269.070	6689.60	7333.86	196.48	-7331.72	0.68	
14848.00	89.970	271.100	6689.65	7428.85	196.63	-7426.71	2.14	
14942.00	90.000	271.580	6689.68	7522.85	198.82	-7520.69	0.51	
15037.00	90.000	270.780	6689.68	7617.84	200.78	-7615.67	0.84	
15132.00	90.090	270.220	6689.60	7712.84	201.61	-7710.66	0.60	
15226.00	90.090	269.750	6689.46	7806.83	201.58	-7804.66	0.50	
15321.00	90.060	269.130	6689.33	7901.80	200.66	-7899.66	0.65	
15416.00	90.120	269.640	6689.18	7996.77	199.64	-7994.65	0.54	
15511.00	90.090	268.880	6689.01	8091.73	198.41	-8089.64	0.80	
15605.00	90.090	267.870	6688.86	8185.64	195.74	-8183.60	1.07	
15700.00	90.030	267.350	6688.76	8280.48	191.78	-8278.52	0.55	
15795.00	90.090	267.150	6688.66	8375.29	187.22	-8373.41	0.22	
15890.00	90.060	267.450	6688.54	8470.11	182.75	-8468.30	0.32	
15984.00	90.120	267.190	6688.39	8563.93	178.35	-8562.20	0.28	
16079.00	90.090	267.050	6688.22	8658.72	173.58	-8657.08	0.15	
16174.00	89.910	267.340	6688.22	8753.53	168.93	-8751.97	0.36	

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Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	LAPP A15-629 AWB
Facility	SEC.13-T06N-R64W		

WELLPATH DATA (169 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
16268.00	90.000	267.970	6688.29	8847.38	165.09	-8845.89	0.68	
16363.00	89.970	268.720	6688.31	8942.28	162.34	-8940.85	0.79	
16458.00	89.970	269.680	6688.36	9037.24	161.02	-9035.84	1.01	
16552.00	89.970	270.110	6688.41	9131.23	160.84	-9129.84	0.46	
16646.00	89.940	270.280	6688.49	9225.22	161.16	-9223.84	0.18	
16741.00	89.970	271.240	6688.56	9320.22	162.42	-9318.83	1.01	
16835.00	89.970	271.490	6688.61	9414.22	164.66	-9412.80	0.27	
16930.00	89.970	271.440	6688.66	9509.21	167.09	-9507.77	0.05	
17024.00	89.940	271.530	6688.73	9603.21	169.53	-9601.74	0.10	
17118.00	89.970	271.190	6688.81	9697.20	171.76	-9695.71	0.36	
17212.00	90.000	271.130	6688.83	9791.20	173.66	-9789.69	0.07	
17307.00	89.940	271.300	6688.88	9886.20	175.68	-9884.67	0.19	
17401.00	90.060	271.610	6688.88	9980.19	178.06	-9978.64	0.35	
17496.00	89.940	271.580	6688.88	10075.19	180.71	-10073.60	0.13	
17590.00	89.970	271.180	6688.96	10169.18	182.97	-10167.57	0.43	
17685.00	89.940	271.010	6689.03	10264.18	184.79	-10262.56	0.18	
17779.00	89.940	270.500	6689.13	10358.18	186.03	-10356.55	0.54	
17803.00	90.000	270.530	6689.14	10382.18	186.24	-10380.55	0.28	LAST BHI MWD SURVEY
17827.00	90.000	270.530	6689.14	10406.18	186.46	-10404.55	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: LAPP A15-629 AWB Ref Wellpath: LAPP A15-629 AWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	0.00	1911.00	1911.00	0.00	1910.98	0.00	0.00	-0.25	-0.94
8.5in Open Hole	1911.00	17827.00	15916.00	1910.98	6689.14	-0.25	-0.94	186.46	-10404.55

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#05 LAPP A15-629 (880'FSL & 400'FWL, SEC.13)
Area	COLORADO	Well	LAPP A15-629
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	LAPP A15-629 AWB
Facility	SEC.13-T06N-R64W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.13-T06N-R64W	-3.00	-149.36	1.67	3276394.49	1419595.38	40°28'51.384"N	104°30'23.004"W	polygon
SEC.14-T06N-R64W	-3.00	-149.36	1.67	3276394.49	1419595.38	40°28'51.384"N	104°30'23.004"W	polygon
SEC.15-T06N-R64W	-3.00	-149.36	1.67	3276394.49	1419595.38	40°28'51.384"N	104°30'23.004"W	polygon
LAPP A15-629 TOP OF NIO (1185'FSL & 1019'FWL, SEC.13) 6741.57'MD	6539.00	305.16	619.23	3277012.03	1420049.88	40°28'55.807"N	104°30'14.947"W	point
LAPP A15-629 CROSS 460' SETBACK (1183'FSL & 861'FWL, SEC.13) 6931'MD	6642.20	303.07	461.36	3276854.16	1420047.79	40°28'55.803"N	104°30'16.990"W	point
LAPP A15-629 BHL ON PLAT REV-1 (1235'FSL & 535'FWL, SEC.15)	6691.00	158.87	-10403.71	3265989.49	1419903.60	40°28'55.560"N	104°32'37.608"W	point
LAPP A15-629 LANDING POINT (1180'FSL & 630'FWL, SEC.13) 7169.19'MD	6691.00	300.00	230.00	3276622.81	1420044.72	40°28'55.799"N	104°30'19.984"W	point
LAPP A15-625 UNIT BOUNDARY	6772.00	-36.43	0.41	3276393.23	1419708.31	40°28'52.500"N	104°30'23.004"W	polygon
LAPP A15-625 UNIT BOUNDARY HARDLINES (460'SETBACKS)	6772.00	-36.43	0.41	3276393.23	1419708.31	40°28'52.500"N	104°30'23.004"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: LAPP A15-629 AWB				Ref Wellpath: LAPP A15-629 AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore
0.00	1904.00	Approximation of GYD GC+DROP+OH	13.5" GYRODATA SURFACE SURVEYS <0 - 1904>		LAPP A15-629 AWB
1904.00	17803.00	OWSG MWD rev2 + IFR1 + Multi-Station Correction	8 1/2" BHI MWD AUTOTRAK CURVE MONOBORE (MSA CORRECTED) <1904 - 17803>		LAPP A15-629 AWB
17803.00	17827.00	Blind Drilling (std)	Projection to bit		LAPP A15-629 AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	NOBLE ENERGY, INC	Slot	SLOT#05 LAPP A15-629 (880'FSL & 400'FWL, SEC.13)
Area	COLORADO	Well	LAPP A15-629
Field	WELD COUNTY (NOBLE NAD 83 GRID)	Wellbore	LAPP A15-629 AWB
Facility	SEC.13-T06N-R64W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
1904.00	0.680	235.900	1903.98	TIED INTO GYRODATA SURVEYS	
6951.00	69.614	268.813	6652.58	CROSSED 460' SETBACK	
17803.00	90.000	270.530	6689.14	LAST BHI MWD SURVEY	
17827.00	90.000	270.530	6689.14	PROJECTION TO BIT	