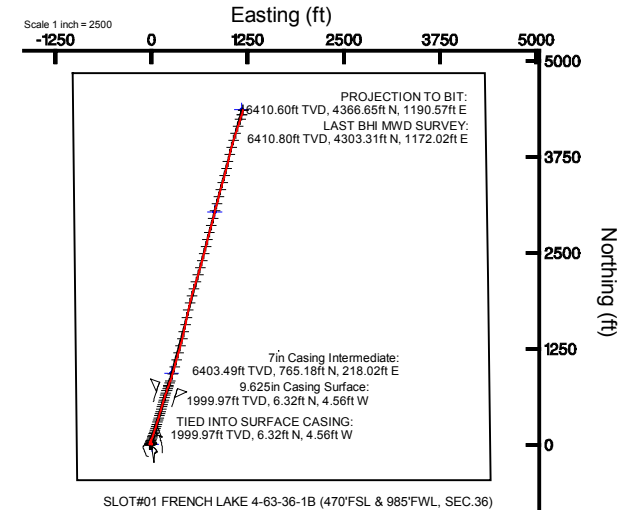
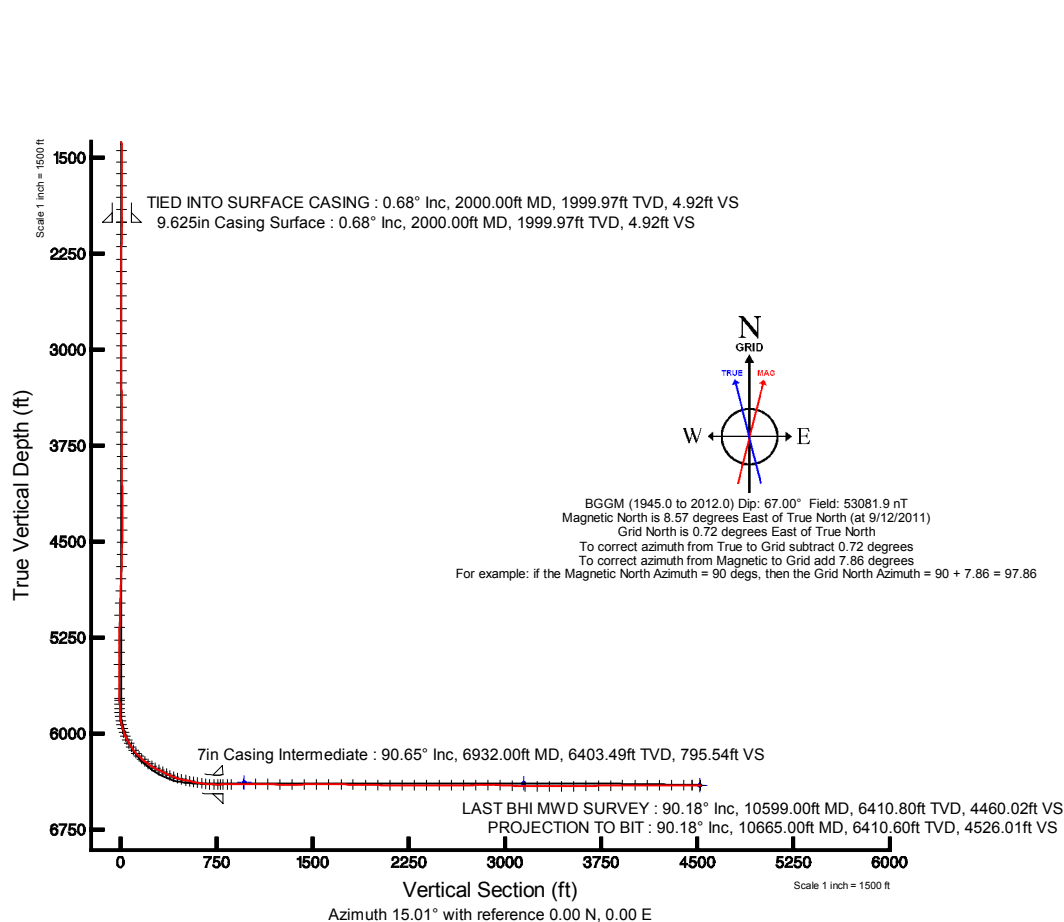


MARATHON OIL COMPANY

Location: COLORADO Slot: SLOT#01 FRENCH LAKE 4-63-36-1B (470'FSL & 985'FWL, SEC.36)
 Field: WELD COUNTY (NAD 83, GRID NORTH) Well: FRENCH LAKE 4-63-36-1B
 Facility: SEC.36-T4N-R63W Wellbore: FRENCH LAKE 4-63-36-1B PWB

Plot reference wellpath is FRENCH LAKE 4-63-36-1B (REV-C.0) PWP

True vertical depths are referenced to H&P 321 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to H&P 321 (RKB)	North Reference: Grid north
H&P 321 (RKB) to Mean Sea Level: 4740 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 FRENCH LAKE 4-63-36-1B (470'FSL & 985'FWL, SEC.36)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: doddanna on 10/27/2011





Actual Wellpath Report

FRENCH LAKE 4-63-36-1B AWP

Page 1 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 4-63-36-1B (470'FSL & 985'FWL, SEC.36)
Area	COLORADO	Well	FRENCH LAKE 4-63-36-1B
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 4-63-36-1B AWB
Facility	SEC.36-T4N-R63W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.0
North Reference	Grid	User	Doddanna
Scale	0.999957	Report Generated	10/27/2011 at 11:06:45 AM
Convergence at slot	0.72° East	Database/Source file	WA_Denver/FRENCH_LAKE_4-63-36-1B_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.20	-0.16	3309190.85	1340404.11	40°15'45.022"N	104°23'31.412"W
Facility Reference Pt			3309191.01	1340403.91	40°15'45.020"N	104°23'31.410"W
Field Reference Pt			3476081.76	1512960.14	40°43'43.704"N	103°46'55.829"W

WELLPATH DATUM

Calculation method	Minimum curvature	H&P 321 (RKB) to Facility Vertical Datum	4740.00ft
Horizontal Reference Pt	Slot	H&P 321 (RKB) to Mean Sea Level	4740.00ft
Vertical Reference Pt	H&P 321 (RKB)	H&P 321 (RKB) to Mud Line at Slot (SLOT#01 FRENCH LAKE 4-63-36-1B (470'FSL & 985'FWL, SEC.36))	4740.00ft
MD Reference Pt	H&P 321 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	15.01°



Actual Wellpath Report

FRENCH LAKE 4-63-36-1B AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 4-63-36-1B (470'FSL & 985'FWL, SEC.36)
Area	COLORADO	Well	FRENCH LAKE 4-63-36-1B
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 4-63-36-1B AWB
Facility	SEC.36-T4N-R63W		

WELLPATH DATA (136 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	338.630	0.00	0.00	0.00	0.00	0.00	
30.00	0.000	338.630	30.00	0.00	0.00	0.00	0.00	
695.00	0.190	338.630	695.00	0.89	1.03	-0.40	0.03	
794.00	0.540	318.170	794.00	1.27	1.53	-0.77	0.37	
888.00	0.410	334.090	887.99	1.77	2.16	-1.22	0.20	
982.00	0.470	0.440	981.99	2.40	2.85	-1.36	0.22	
1074.00	0.400	315.820	1073.99	2.93	3.46	-1.58	0.37	
1165.00	0.400	346.290	1164.99	3.37	3.99	-1.88	0.23	
1258.00	0.360	338.040	1257.98	3.89	4.58	-2.06	0.07	
1350.00	0.250	344.760	1349.98	4.29	5.04	-2.22	0.13	
1442.00	0.340	21.660	1441.98	4.74	5.49	-2.18	0.22	
1531.00	0.260	20.000	1530.98	5.20	5.92	-2.01	0.09	
1623.00	0.280	264.390	1622.98	5.33	6.10	-2.16	0.50	
1715.00	0.370	291.810	1714.98	5.28	6.19	-2.66	0.19	
1808.00	0.240	284.080	1807.98	5.32	6.34	-3.13	0.15	
1901.00	0.390	265.250	1900.98	5.21	6.37	-3.63	0.19	
1999.00	0.680	268.290	1998.97	4.93	6.32	-4.55	0.30	
2000.00†	0.677	268.304	1999.97	4.92	6.32	-4.56	0.29	TIED INTO SURFACE CASING
2097.00	0.400	270.560	2096.97	4.67	6.31	-5.47	0.29	
2194.00	0.610	261.400	2193.96	4.38	6.23	-6.32	0.23	
2291.00	0.520	264.420	2290.96	4.02	6.11	-7.27	0.10	
2387.00	0.330	255.960	2386.96	3.73	6.00	-7.97	0.21	
2482.00	0.190	234.020	2481.95	3.48	5.84	-8.36	0.18	
2580.00	0.320	254.560	2579.95	3.21	5.68	-8.76	0.16	
2678.00	0.210	315.290	2677.95	3.16	5.73	-9.15	0.29	
2774.00	0.250	251.980	2773.95	3.14	5.79	-9.47	0.25	
2872.00	0.260	266.040	2871.95	2.95	5.71	-9.90	0.06	
2968.00	0.440	288.870	2967.95	2.90	5.81	-10.46	0.23	
3066.00	0.490	317.990	3065.95	3.16	6.25	-11.10	0.24	
3162.00	0.360	313.830	3161.94	3.53	6.76	-11.59	0.14	
3259.00	0.440	333.290	3258.94	3.95	7.30	-11.98	0.16	
3355.00	0.690	38.200	3354.94	4.76	8.09	-11.79	0.67	
3452.00	0.740	66.380	3451.93	5.69	8.80	-10.85	0.36	
3549.00	0.880	83.260	3548.92	6.35	9.14	-9.54	0.28	
3644.00	0.740	94.140	3643.91	6.74	9.18	-8.20	0.22	
3740.00	0.810	75.050	3739.90	7.20	9.31	-6.93	0.28	
3838.00	0.790	65.870	3837.89	7.97	9.76	-5.64	0.13	
3933.00	0.400	48.980	3932.89	8.66	10.25	-4.79	0.45	
4028.00	0.480	50.980	4027.89	9.25	10.72	-4.23	0.09	
4124.00	0.140	37.790	4123.88	9.69	11.06	-3.85	0.36	
4221.00	0.440	316.220	4220.88	9.99	11.42	-4.04	0.46	
4317.00	0.450	286.440	4316.88	10.19	11.80	-4.65	0.24	
4412.00	0.390	271.130	4411.88	10.12	11.91	-5.33	0.13	
4508.00	0.790	231.830	4507.87	9.51	11.51	-6.18	0.57	
4602.00	1.460	221.970	4601.85	7.93	10.22	-7.49	0.74	



Actual Wellpath Report

FRENCH LAKE 4-63-36-1B AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 4-63-36-1B (470'FSL & 985'FWL, SEC.36)
Area	COLORADO	Well	FRENCH LAKE 4-63-36-1B
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 4-63-36-1B AWB
Facility	SEC.36-T4N-R63W		

WELLPATH DATA (136 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4698.00	2.360	227.570	4697.80	5.17	7.97	-9.77	0.96	
4794.00	2.500	218.820	4793.71	1.59	5.01	-12.54	0.41	
4890.00	2.520	218.860	4889.62	-2.26	1.73	-15.17	0.02	
4985.00	2.110	220.850	4984.54	-5.74	-1.22	-17.63	0.44	
5080.00	1.640	216.940	5079.49	-8.58	-3.63	-19.59	0.51	
5176.00	1.100	225.080	5175.46	-10.65	-5.37	-21.07	0.60	
5272.00	0.830	235.730	5271.45	-11.97	-6.42	-22.30	0.34	
5368.00	0.620	266.680	5367.44	-12.66	-6.84	-23.39	0.45	
5463.00	0.650	279.740	5462.44	-12.87	-6.78	-24.43	0.16	
5559.00	0.720	332.530	5558.43	-12.48	-6.15	-25.25	0.64	
5654.00	0.790	334.650	5653.42	-11.54	-5.03	-25.80	0.08	
5728.00	0.770	315.800	5727.42	-10.90	-4.21	-26.37	0.35	
5744.00	1.000	316.120	5743.42	-10.77	-4.03	-26.54	1.44	
5776.00	1.160	320.050	5775.41	-10.44	-3.58	-26.94	0.55	
5808.00	1.530	327.890	5807.40	-9.96	-2.97	-27.38	1.29	
5840.00	2.960	352.150	5839.38	-8.91	-1.79	-27.72	5.27	
5872.00	6.680	8.440	5871.26	-6.30	0.87	-27.56	12.27	
5904.00	10.170	14.170	5902.91	-1.62	5.45	-26.59	11.20	
5936.00	13.250	18.130	5934.24	4.86	11.68	-24.76	9.94	
5968.00	16.950	20.160	5965.13	13.17	19.54	-22.01	11.68	
6000.00	19.980	21.070	5995.48	23.26	29.03	-18.43	9.51	
6032.00	22.830	21.830	6025.27	34.86	39.89	-14.16	8.95	
6064.00	26.680	23.700	6054.32	48.13	52.24	-8.96	12.28	
6095.00	30.200	22.410	6081.58	62.75	65.82	-3.19	11.53	
6127.00	33.400	20.810	6108.77	79.50	81.50	3.01	10.34	
6159.00	37.380	20.210	6134.85	97.94	98.86	9.50	12.48	
6191.00	41.560	20.250	6159.55	118.19	117.94	16.53	13.06	
6223.00	44.810	18.360	6182.88	140.03	138.61	23.76	10.93	
6255.00	48.860	17.380	6204.77	163.33	160.82	30.91	12.85	
6287.00	53.430	16.980	6224.84	188.23	184.62	38.27	14.31	
6318.00	57.020	16.710	6242.52	213.68	208.99	45.64	11.60	
6350.00	59.170	17.420	6259.43	240.82	234.95	53.62	6.98	
6382.00	61.410	17.230	6275.29	268.59	261.48	61.89	7.02	
6415.00	62.350	17.330	6290.84	297.67	289.28	70.54	2.86	
6447.00	63.200	17.310	6305.48	326.10	316.44	79.01	2.66	
6479.00	63.810	17.240	6319.75	354.72	343.79	87.51	1.92	
6511.00	66.040	16.750	6333.32	383.69	371.50	95.98	7.11	
6542.00	69.700	16.480	6344.99	412.39	399.02	104.19	11.83	
6574.00	73.910	16.610	6354.98	442.77	428.15	112.85	13.16	
6606.00	75.630	16.440	6363.39	473.63	457.75	121.63	5.40	
6639.00	77.180	15.910	6371.14	505.70	488.56	130.56	4.95	
6671.00	77.860	15.950	6378.06	536.94	518.60	139.14	2.13	
6702.00	78.250	16.140	6384.48	567.26	547.75	147.52	1.39	
6734.00	80.070	16.750	6390.49	598.68	577.89	156.42	5.99	
6766.00	81.930	17.030	6395.50	630.27	608.13	165.60	5.88	



Actual Wellpath Report

FRENCH LAKE 4-63-36-1B AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 4-63-36-1B (470'FSL & 985'FWL, SEC.36)
Area	COLORADO	Well	FRENCH LAKE 4-63-36-1B
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 4-63-36-1B AWB
Facility	SEC.36-T4N-R63W		

WELLPATH DATA (136 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
6798.00	83.760	17.120	6399.48	662.00	638.48	174.92	5.73	
6830.00	86.180	18.130	6402.29	693.84	668.86	184.58	8.19	
6862.00	89.160	19.030	6403.59	725.75	699.16	194.76	9.73	
6893.00	90.120	19.500	6403.79	756.66	728.42	204.99	3.45	
6915.00	90.520	19.430	6403.66	778.59	749.17	212.32	1.85	
6968.00	90.930	20.470	6402.99	831.39	798.98	230.40	2.11	
6999.00	90.970	20.330	6402.48	862.25	828.03	241.21	0.47	
7093.00	91.010	15.970	6400.85	956.07	917.32	270.48	4.64	
7188.00	90.090	14.990	6399.94	1051.06	1008.87	295.83	1.41	
7283.00	88.260	15.550	6401.31	1146.05	1100.50	320.85	2.01	
7379.00	88.450	15.740	6404.06	1242.00	1192.91	346.73	0.28	
7474.00	90.670	14.690	6404.79	1336.99	1284.57	371.66	2.58	
7570.00	90.970	14.560	6403.42	1432.98	1377.45	395.89	0.34	
7665.00	90.520	12.360	6402.19	1527.93	1469.82	418.00	2.36	
7761.00	89.200	12.530	6402.42	1623.83	1563.56	438.69	1.39	
7857.00	89.660	9.640	6403.37	1719.59	1657.76	457.14	3.05	
7952.00	88.980	12.830	6404.50	1814.37	1750.92	475.65	3.43	
8048.00	88.530	14.290	6406.59	1910.31	1844.22	498.15	1.59	
8143.00	89.070	14.220	6408.58	2005.28	1936.27	521.54	0.57	
8239.00	89.720	16.360	6409.59	2101.27	2028.86	546.85	2.33	
8335.00	89.740	17.720	6410.04	2197.20	2120.65	574.98	1.42	
8430.00	90.300	16.890	6410.01	2292.13	2211.34	603.24	1.05	
8526.00	90.300	15.500	6409.51	2388.10	2303.53	630.01	1.45	
8623.00	89.710	15.820	6409.50	2485.10	2396.93	656.20	0.69	
8719.00	89.090	14.380	6410.51	2581.09	2489.61	681.20	1.63	
8815.00	91.040	14.070	6410.40	2677.07	2582.66	704.79	2.06	
8909.00	91.360	13.490	6408.43	2771.03	2673.93	727.18	0.70	
9005.00	90.120	14.720	6407.19	2867.01	2767.03	750.57	1.82	
9101.00	87.740	15.580	6408.98	2962.98	2859.67	775.65	2.64	
9197.00	87.170	14.740	6413.24	3058.89	2952.23	800.73	1.06	
9294.00	88.670	13.070	6416.76	3155.80	3046.32	824.03	2.31	
9390.00	90.270	15.260	6417.65	3251.77	3139.39	847.52	2.83	
9485.00	89.840	13.890	6417.56	3346.77	3231.33	871.42	1.51	
9582.00	89.620	14.980	6418.02	3443.76	3325.27	895.60	1.15	
9677.00	90.910	16.600	6417.58	3538.75	3416.68	921.45	2.18	
9772.00	91.560	14.260	6415.53	3633.71	3508.22	946.72	2.56	
9868.00	90.730	15.430	6413.61	3729.69	3601.00	971.31	1.49	
9963.00	90.890	11.920	6412.27	3824.64	3693.28	993.76	3.70	
10058.00	90.830	14.230	6410.84	3919.57	3785.80	1015.25	2.43	
10154.00	90.270	13.460	6409.92	4015.55	3879.01	1038.22	0.99	
10249.00	89.810	17.790	6409.86	4110.52	3970.48	1063.80	4.58	
10345.00	89.810	18.570	6410.17	4206.37	4061.68	1093.75	0.81	
10440.00	89.690	18.240	6410.59	4301.20	4151.82	1123.75	0.37	
10536.00	89.960	17.870	6410.88	4397.07	4243.09	1153.50	0.48	
10599.00	90.180	16.320	6410.80	4460.02	4303.31	1172.02	2.48	LAST BHI MWD SURVEY



Actual Wellpath Report

FRENCH LAKE 4-63-36-1B AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 4-63-36-1B (470'FSL & 985'FWL, SEC.36)
Area	COLORADO	Well	FRENCH LAKE 4-63-36-1B
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 4-63-36-1B AWB
Facility	SEC.36-T4N-R63W		

WELLPATH DATA (136 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
10665.00	90.180	16.320	6410.60	4526.01	4366.65	1190.57	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: FRENCH LAKE 4-63-36-1B AWB Ref Wellpath: FRENCH LAKE 4-63-36-1B 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	30.00	2000.00	1970.00	30.00	1999.97	0.00	0.00	6.32	-4.56
8.75in Open Hole	2000.00	6965.00	4965.00	1999.97	6403.04	6.32	-4.56	796.17	229.36
7in Casing Intermediate	30.00	6932.00	6902.00	30.00	6403.49	0.00	0.00	765.18	218.02
6in Open Hole	6932.00	10665.00	3733.00	6403.49	6410.60	765.18	218.02	4366.65	1190.57

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
FRENCH LAKE 4-63-36-1B HEEL		6388.00	929.35	257.61	3309448.44	1341333.41	40°15'54.173"N	104°23'27.939"W	point
FRENCH LAKE 4-63-36-1B PT#2		6394.00	3037.36	817.85	3310008.66	1343441.33	40°16'14.933"N	104°23'20.372"W	point
FRENCH LAKE 4-63-36-1B SECTION LINES		6409.00	0.00	0.00	3309190.85	1340404.11	40°15'45.022"N	104°23'31.412"W	polygon
FRENCH LAKE 4-63-36-1B BHL ON PLAT (480'FNL & 2204'FWL,REV-1)		6409.00	4368.03	1171.58	3310362.38	1344771.94	40°16'28.038"N	104°23'15.594"W	point

WELLPATH COMPOSITION - Ref Wellbore: FRENCH LAKE 4-63-36-1B AWB Ref Wellpath: FRENCH LAKE 4-63-36-1B AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	6915.00	NaviTrak (Standard)	BHI MWD NAVITRAK 8.75 <695-6915>	FRENCH LAKE 4-63-36-1B AWB
6915.00	10599.00	NaviTrak (Standard)	BHI MWD NAVITRAK 6 <6968-10599>	FRENCH LAKE 4-63-36-1B AWB
10599.00	10665.00	Blind Drilling (std)	Projection to bit	FRENCH LAKE 4-63-36-1B AWB