

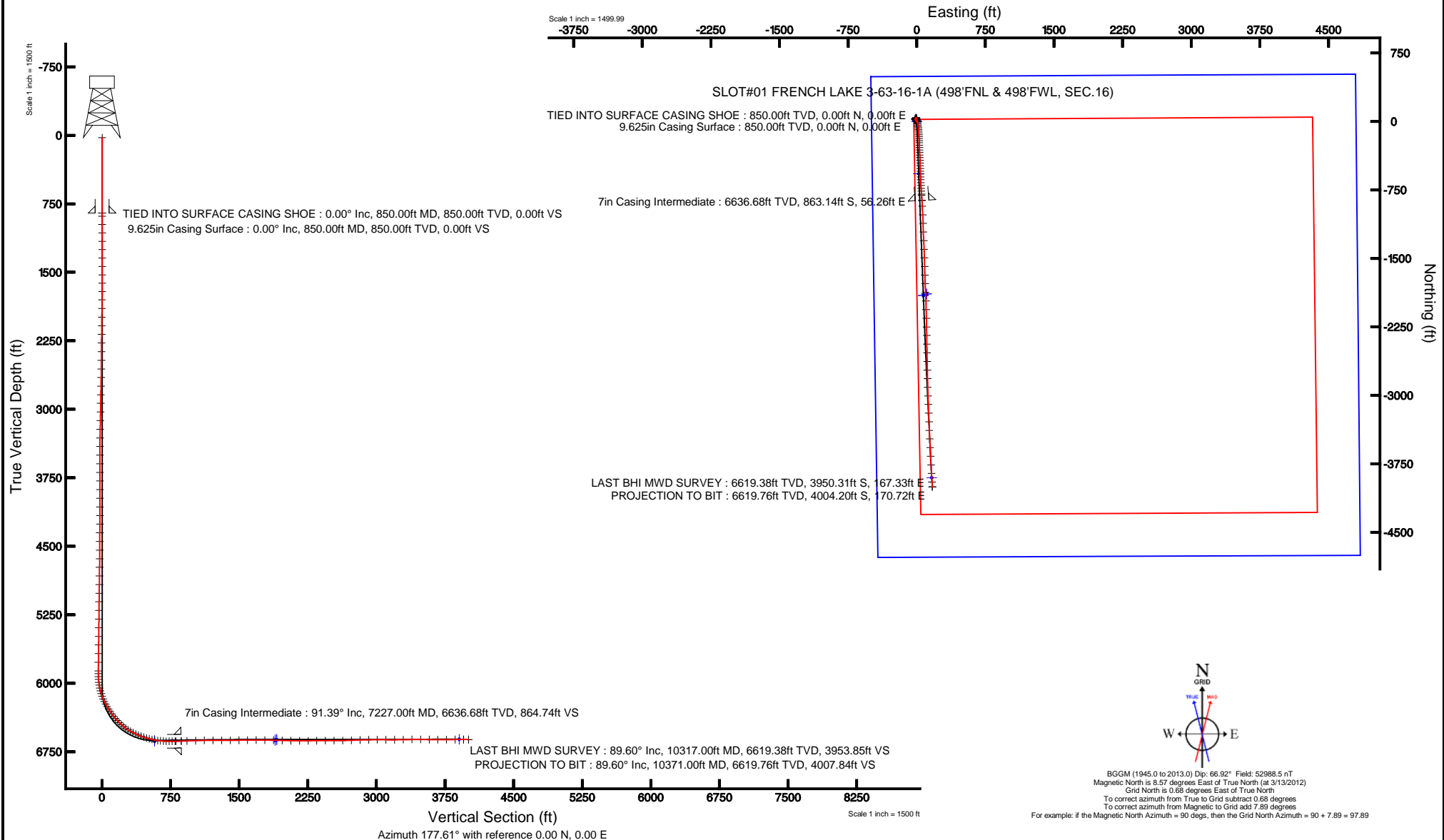


# MARATHON OIL COMPANY

Location: COLORADO Slot: SLOT#01 FRENCH LAKE 3-63-16-1A (498'FNL & 498'FWL, SEC.16)  
Field: WELD COUNTY (NAD 83, GRID NORTH) Well: FRENCH LAKE 3-63-16-1A  
Facility: SEC.16-T3N-R63W Wellbore: FRENCH LAKE 3-63-16-1A PWB



Plot reference wellpath is FRENCH LAKE 3-63-16-1A (REV-H.O) PWP, 1.0 SF	
True vertical depths are referenced to H&P 449 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to H&P 449 (RKB)	North Reference: Grid north
H&P 449 (RKB) to Mean Sea Level: 4909 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 FRENCH LAKE 3-63-16-1A (498'FNL & 498'FWL, SEC.16)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdanm on 4/18/2012





# Actual Wellpath Report

FRENCH LAKE 3-63-16-1A AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-16-1A (498'FNL & 498'FWL, SEC.16)
Area	COLORADO	Well	FRENCH LAKE 3-63-16-1A
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-16-1A AWB
Facility	SEC.16-T3N-R63W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	Grid	User	Cookdanm
Scale	0.999957	Report Generated	4/18/2012 at 6:02:51 PM
Convergence at slot	0.68° East	Database/Source file	WA_Denver/FRENCH_LAKE_3-63-16-1A_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	3293066.44	1328834.79	40°13'52.637"N	104°27'01.165"W
Facility Reference Pt			3293066.44	1328834.79	40°13'52.637"N	104°27'01.165"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 449 (RKB) to Facility Vertical Datum	4909.00ft
Horizontal Reference Pt	Slot	H&P 449 (RKB) to Mean Sea Level	4909.00ft
Vertical Reference Pt	H&P 449 (RKB)	H&P 449 (RKB) to Mud Line at Slot (SLOT#01 FRENCH LAKE 3-63-16-1A (498'FNL & 498'FWL, SEC.16))	4909.00ft
MD Reference Pt	H&P 449 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	177.61°



# Actual Wellpath Report

FRENCH LAKE 3-63-16-1A AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-16-1A (498'FNL & 498'FWL, SEC.16)
Area	COLORADO	Well	FRENCH LAKE 3-63-16-1A
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-16-1A AWB
Facility	SEC.16-T3N-R63W		

## WELLPATH DATA (132 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
850.00	0.000	0.000	850.00	0.00	0.00	0.00	3293066.44	1328834.79	40°13'52.637"N	104°27'01.165"W	0.00	TIED INTO SURFACE CASING SHOE
885.00	0.200	178.800	885.00	0.06	-0.06	0.00	3293066.44	1328834.73	40°13'52.636"N	104°27'01.165"W	0.57	
976.00	0.300	91.100	976.00	0.23	-0.22	0.24	3293066.68	1328834.57	40°13'52.635"N	104°27'01.162"W	0.39	
1068.00	0.100	107.200	1068.00	0.33	-0.30	0.71	3293067.15	1328834.49	40°13'52.634"N	104°27'01.156"W	0.09	
1159.00	0.200	162.500	1159.00	0.56	-0.52	0.99	3293067.43	1328834.27	40°13'52.632"N	104°27'01.152"W	0.27	
1251.00	0.200	114.100	1251.00	0.79	-0.74	1.18	3293067.62	1328834.05	40°13'52.630"N	104°27'01.150"W	0.18	
1343.00	0.300	127.300	1343.00	1.02	-0.95	1.52	3293067.96	1328833.84	40°13'52.627"N	104°27'01.145"W	0.12	
1436.00	0.100	285.000	1436.00	1.15	-1.08	1.64	3293068.08	1328833.71	40°13'52.626"N	104°27'01.144"W	0.42	
1528.00	0.400	78.600	1527.99	1.07	-0.99	1.87	3293068.31	1328833.80	40°13'52.627"N	104°27'01.141"W	0.53	
1618.00	0.400	47.700	1617.99	0.82	-0.72	2.41	3293068.85	1328834.07	40°13'52.630"N	104°27'01.134"W	0.24	
1710.00	0.600	51.900	1709.99	0.33	-0.21	3.03	3293069.47	1328834.58	40°13'52.635"N	104°27'01.126"W	0.22	
1802.00	0.800	32.400	1801.98	-0.47	0.63	3.75	3293070.19	1328835.42	40°13'52.643"N	104°27'01.116"W	0.34	
1896.00	0.800	12.300	1895.97	-1.65	1.83	4.25	3293070.69	1328836.62	40°13'52.655"N	104°27'01.110"W	0.30	
1991.00	0.800	357.600	1990.96	-2.95	3.14	4.36	3293070.80	1328837.93	40°13'52.668"N	104°27'01.108"W	0.22	
2085.00	0.600	3.000	2084.96	-4.10	4.28	4.36	3293070.80	1328839.07	40°13'52.679"N	104°27'01.108"W	0.22	
2180.00	0.500	310.000	2179.95	-4.87	5.05	4.07	3293070.51	1328839.84	40°13'52.686"N	104°27'01.112"W	0.53	
2275.00	0.900	303.300	2274.95	-5.59	5.72	3.13	3293069.57	1328840.51	40°13'52.693"N	104°27'01.124"W	0.43	
2369.00	0.600	319.500	2368.94	-6.41	6.50	2.19	3293068.63	1328841.29	40°13'52.701"N	104°27'01.136"W	0.39	
2464.00	0.900	315.900	2463.93	-7.35	7.42	1.35	3293067.79	1328842.21	40°13'52.710"N	104°27'01.146"W	0.32	
2558.00	1.100	308.400	2557.92	-8.50	8.51	0.13	3293066.57	1328843.30	40°13'52.721"N	104°27'01.162"W	0.25	
2652.00	1.600	307.700	2651.89	-9.93	9.87	-1.62	3293064.82	1328844.66	40°13'52.735"N	104°27'01.184"W	0.53	
2747.00	1.600	304.500	2746.85	-11.58	11.43	-3.76	3293062.68	1328846.22	40°13'52.750"N	104°27'01.212"W	0.09	
2841.00	1.300	323.000	2840.82	-13.25	13.03	-5.49	3293060.95	1328847.82	40°13'52.766"N	104°27'01.234"W	0.59	
2936.00	1.400	324.800	2935.80	-15.11	14.84	-6.80	3293059.64	1328849.63	40°13'52.784"N	104°27'01.250"W	0.11	
3031.00	1.500	313.200	3030.77	-16.97	16.64	-8.38	3293058.06	1328851.43	40°13'52.802"N	104°27'01.270"W	0.33	
3125.00	1.800	308.500	3124.73	-18.82	18.40	-10.43	3293056.01	1328853.19	40°13'52.820"N	104°27'01.297"W	0.35	
3220.00	1.700	302.600	3219.68	-20.60	20.09	-12.79	3293053.66	1328854.88	40°13'52.837"N	104°27'01.327"W	0.22	
3315.00	1.900	305.600	3314.64	-22.38	21.76	-15.25	3293051.19	1328856.55	40°13'52.854"N	104°27'01.358"W	0.23	
3409.00	0.800	290.800	3408.61	-23.60	22.90	-17.13	3293049.31	1328857.69	40°13'52.865"N	104°27'01.382"W	1.22	
3503.00	0.500	97.000	3502.61	-23.79	23.09	-17.34	3293049.10	1328857.87	40°13'52.867"N	104°27'01.385"W	1.37	
3598.00	0.600	63.500	3597.60	-23.92	23.26	-16.48	3293049.96	1328858.05	40°13'52.869"N	104°27'01.374"W	0.35	
3693.00	0.200	38.200	3692.60	-24.25	23.61	-15.94	3293050.50	1328858.40	40°13'52.872"N	104°27'01.367"W	0.45	
3787.00	0.100	47.600	3786.60	-24.43	23.79	-15.77	3293050.67	1328858.58	40°13'52.874"N	104°27'01.365"W	0.11	
3882.00	0.200	153.200	3881.60	-24.33	23.70	-15.64	3293050.80	1328858.49	40°13'52.873"N	104°27'01.363"W	0.26	
3976.00	0.200	62.900	3975.60	-24.25	23.63	-15.42	3293051.02	1328858.42	40°13'52.872"N	104°27'01.360"W	0.30	
4071.00	0.100	346.000	4070.60	-24.40	23.79	-15.29	3293051.15	1328858.57	40°13'52.874"N	104°27'01.358"W	0.21	
4165.00	0.200	83.400	4164.60	-24.50	23.88	-15.15	3293051.29	1328858.67	40°13'52.875"N	104°27'01.356"W	0.25	
4260.00	0.200	21.900	4259.60	-24.66	24.06	-14.92	3293051.52	1328858.85	40°13'52.876"N	104°27'01.354"W	0.22	
4354.00	0.300	346.900	4353.60	-25.05	24.45	-14.92	3293051.53	1328859.24	40°13'52.880"N	104°27'01.353"W	0.19	
4449.00	0.400	316.900	4448.60	-25.55	24.93	-15.20	3293051.24	1328859.72	40°13'52.885"N	104°27'01.357"W	0.22	
4543.00	0.400	321.800	4542.59	-26.06	25.43	-15.63	3293050.82	1328860.22	40°13'52.890"N	104°27'01.362"W	0.04	
4638.00	0.600	325.100	4637.59	-26.75	26.10	-16.11	3293050.33	1328860.89	40°13'52.897"N	104°27'01.369"W	0.21	
4732.00	0.600	324.900	4731.58	-27.58	26.91	-16.68	3293049.76	1328861.69	40°13'52.905"N	104°27'01.376"W	0.00	
4827.00	0.700	9.300	4826.58	-28.56	27.88	-16.87	3293049.57	1328862.67	40°13'52.915"N	104°27'01.378"W	0.53	
4922.00	0.900	29.900	4921.57	-29.76	29.10	-16.41	3293050.03	1328863.89	40°13'52.927"N	104°27'01.372"W	0.37	



# Actual Wellpath Report

FRENCH LAKE 3-63-16-1A AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-16-1A (498'FNL & 498'FWL, SEC.16)
Area	COLORADO	Well	FRENCH LAKE 3-63-16-1A
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-16-1A AWB
Facility	SEC.16-T3N-R63W		

## WELLPATH DATA (132 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5016.00	1.000	29.800	5015.56	-31.08	30.46	-15.63	3293050.81	1328865.24	40°13'52.940"N	104°27'01.362"W	0.11	
5111.00	1.200	39.600	5110.54	-32.52	31.94	-14.58	3293051.86	1328866.73	40°13'52.954"N	104°27'01.348"W	0.29	
5205.00	0.800	49.800	5204.52	-33.66	33.12	-13.46	3293052.98	1328867.91	40°13'52.966"N	104°27'01.333"W	0.46	
5300.00	0.900	30.200	5299.51	-34.69	34.20	-12.57	3293053.87	1328868.99	40°13'52.976"N	104°27'01.322"W	0.32	
5394.00	0.800	51.400	5393.50	-35.70	35.24	-11.69	3293054.75	1328870.03	40°13'52.987"N	104°27'01.310"W	0.35	
5489.00	0.700	12.200	5488.50	-36.65	36.23	-11.05	3293055.39	1328871.01	40°13'52.996"N	104°27'01.302"W	0.54	
5583.00	1.100	45.600	5582.49	-37.81	37.42	-10.28	3293056.16	1328872.21	40°13'53.008"N	104°27'01.292"W	0.68	
5678.00	1.000	45.700	5677.47	-38.98	38.63	-9.04	3293057.40	1328873.42	40°13'53.020"N	104°27'01.275"W	0.11	
5772.00	0.800	61.800	5771.46	-39.81	39.52	-7.87	3293058.57	1328874.31	40°13'53.028"N	104°27'01.260"W	0.34	
5867.00	0.800	44.100	5866.45	-40.56	40.31	-6.83	3293059.61	1328875.10	40°13'53.036"N	104°27'01.247"W	0.26	
5898.00	0.700	57.300	5897.45	-40.80	40.57	-6.52	3293059.92	1328875.35	40°13'53.039"N	104°27'01.243"W	0.64	
5930.00	1.500	142.100	5929.44	-40.56	40.34	-6.09	3293060.35	1328875.13	40°13'53.036"N	104°27'01.237"W	4.99	
5961.00	4.100	158.600	5960.40	-39.18	38.99	-5.44	3293061.00	1328873.78	40°13'53.023"N	104°27'01.229"W	8.70	
5993.00	7.200	161.100	5992.24	-36.18	36.02	-4.37	3293062.07	1328870.81	40°13'52.994"N	104°27'01.216"W	9.72	
6024.00	10.000	161.300	6022.89	-31.73	31.64	-2.88	3293063.56	1328866.43	40°13'52.950"N	104°27'01.197"W	9.03	
6056.00	12.600	161.400	6054.27	-25.71	25.70	-0.88	3293065.56	1328860.48	40°13'52.891"N	104°27'01.172"W	8.13	
6087.00	15.100	161.700	6084.36	-18.58	18.66	1.47	3293067.91	1328853.45	40°13'52.821"N	104°27'01.143"W	8.07	
6119.00	17.300	165.400	6115.09	-9.92	10.09	3.98	3293070.42	1328844.88	40°13'52.736"N	104°27'01.112"W	7.59	
6150.00	19.700	168.400	6144.49	-0.25	0.51	6.19	3293072.63	1328835.30	40°13'52.641"N	104°27'01.085"W	8.33	
6182.00	22.800	170.600	6174.31	11.23	-10.89	8.29	3293074.73	1328823.90	40°13'52.528"N	104°27'01.060"W	10.00	
6213.00	25.700	170.900	6202.57	23.87	-23.46	10.33	3293076.77	1328811.34	40°13'52.404"N	104°27'01.035"W	9.36	
6245.00	28.300	171.600	6231.08	38.30	-37.81	12.54	3293078.98	1328796.98	40°13'52.262"N	104°27'01.009"W	8.19	
6276.00	31.000	172.100	6258.02	53.56	-52.99	14.71	3293081.15	1328781.80	40°13'52.112"N	104°27'00.983"W	8.75	
6308.00	32.300	173.800	6285.26	70.30	-69.66	16.77	3293083.21	1328765.14	40°13'51.947"N	104°27'00.959"W	4.93	
6339.00	33.500	174.600	6311.29	87.10	-86.41	18.47	3293084.91	1328748.39	40°13'51.781"N	104°27'00.940"W	4.12	
6371.00	35.500	175.000	6337.66	105.21	-104.46	20.11	3293086.55	1328730.34	40°13'51.603"N	104°27'00.922"W	6.29	
6402.00	38.100	175.400	6362.48	123.76	-122.96	21.66	3293088.10	1328711.84	40°13'51.419"N	104°27'00.904"W	8.42	
6434.00	40.500	176.400	6387.24	144.01	-143.18	23.10	3293089.54	1328691.62	40°13'51.220"N	104°27'00.889"W	7.76	
6466.00	43.000	176.600	6411.11	165.32	-164.44	24.40	3293090.84	1328670.36	40°13'51.009"N	104°27'00.875"W	7.82	
6497.00	45.300	178.200	6433.36	186.91	-186.01	25.38	3293091.82	1328648.79	40°13'50.796"N	104°27'00.866"W	8.24	
6529.00	47.900	178.200	6455.34	210.15	-209.25	26.11	3293092.55	1328625.55	40°13'50.566"N	104°27'00.860"W	8.13	
6560.00	51.200	178.700	6475.45	233.74	-232.82	26.74	3293093.18	1328601.98	40°13'50.333"N	104°27'00.856"W	10.72	
6592.00	53.700	178.400	6494.95	259.10	-258.19	27.39	3293093.82	1328576.62	40°13'50.083"N	104°27'00.851"W	7.85	
6623.00	56.300	177.300	6512.73	284.49	-283.56	28.34	3293094.78	1328551.24	40°13'49.832"N	104°27'00.843"W	8.88	
6655.00	59.700	176.900	6529.69	311.63	-310.66	29.72	3293096.15	1328524.15	40°13'49.564"N	104°27'00.829"W	10.68	
6686.00	62.500	176.600	6544.67	338.76	-337.75	31.26	3293097.69	1328497.06	40°13'49.296"N	104°27'00.813"W	9.07	
6718.00	65.200	176.700	6558.77	367.48	-366.42	32.93	3293099.37	1328468.38	40°13'49.012"N	104°27'00.796"W	8.44	
6749.00	67.400	177.300	6571.23	395.86	-394.77	34.42	3293100.86	1328440.04	40°13'48.732"N	104°27'00.781"W	7.31	
6781.00	69.100	177.700	6583.09	425.58	-424.46	35.71	3293102.15	1328410.35	40°13'48.439"N	104°27'00.769"W	5.44	
6812.00	71.400	178.100	6593.56	454.75	-453.61	36.78	3293103.22	1328381.20	40°13'48.150"N	104°27'00.760"W	7.52	
6844.00	73.100	178.500	6603.32	485.23	-484.08	37.69	3293104.12	1328350.74	40°13'47.849"N	104°27'00.753"W	5.44	
6875.00	75.400	178.700	6611.73	515.06	-513.90	38.41	3293104.85	1328320.91	40°13'47.555"N	104°27'00.748"W	7.45	
6907.00	77.600	178.200	6619.20	546.17	-545.00	39.26	3293105.69	1328289.81	40°13'47.247"N	104°27'00.742"W	7.04	
6938.00	79.800	178.100	6625.27	576.56	-575.39	40.24	3293106.68	1328259.43	40°13'46.947"N	104°27'00.734"W	7.10	
6970.00	82.300	177.700	6630.25	608.17	-606.97	41.40	3293107.83	1328227.85	40°13'46.635"N	104°27'00.724"W	7.91	



# Actual Wellpath Report

FRENCH LAKE 3-63-16-1A AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-16-1A (498'FNL & 498'FWL, SEC.16)
Area	COLORADO	Well	FRENCH LAKE 3-63-16-1A
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-16-1A AWB
Facility	SEC.16-T3N-R63W		

## WELLPATH DATA (132 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7001.00	84.000	177.600	6633.95	638.95	-637.72	42.66	3293109.10	1328197.10	40°13'46.331"N	104°27'00.712"W	5.49	
7033.00	86.300	177.100	6636.65	670.83	-669.57	44.13	3293110.57	1328165.25	40°13'46.016"N	104°27'00.698"W	7.35	
7064.00	88.700	176.400	6638.01	701.80	-700.49	45.89	3293112.33	1328134.33	40°13'45.710"N	104°27'00.680"W	8.06	
7096.00	89.900	176.300	6638.40	733.79	-732.42	47.93	3293114.36	1328102.40	40°13'45.394"N	104°27'00.659"W	3.76	
7127.00	90.500	176.200	6638.29	764.78	-763.36	49.95	3293116.39	1328071.47	40°13'45.088"N	104°27'00.637"W	1.96	
7159.00	90.800	176.300	6637.93	796.77	-795.29	52.05	3293118.48	1328039.54	40°13'44.773"N	104°27'00.615"W	0.99	
7170.00	90.800	176.100	6637.77	807.76	-806.26	52.77	3293119.21	1328028.57	40°13'44.664"N	104°27'00.608"W	1.82	
7228.00	91.400	176.900	6636.66	865.74	-864.14	56.31	3293122.75	1327970.69	40°13'44.092"N	104°27'00.571"W	1.72	
7291.00	91.800	176.300	6634.90	928.70	-927.01	60.05	3293126.49	1327907.83	40°13'43.470"N	104°27'00.532"W	1.14	
7386.00	91.800	176.900	6631.92	1023.64	-1021.79	65.68	3293132.12	1327813.05	40°13'42.533"N	104°27'00.474"W	0.63	
7480.00	92.000	179.000	6628.80	1117.58	-1115.67	69.04	3293135.48	1327719.17	40°13'41.605"N	104°27'00.445"W	2.24	
7575.00	89.200	178.100	6627.80	1212.55	-1210.63	71.45	3293137.88	1327624.22	40°13'40.666"N	104°27'00.429"W	3.10	
7669.00	89.700	176.500	6628.71	1306.55	-1304.52	75.87	3293142.31	1327530.33	40°13'39.738"N	104°27'00.386"W	1.78	
7764.00	90.600	177.900	6628.46	1401.54	-1399.40	80.51	3293146.95	1327435.45	40°13'38.800"N	104°27'00.340"W	1.75	
7859.00	91.400	178.500	6626.80	1496.52	-1494.34	83.50	3293149.93	1327340.52	40°13'37.861"N	104°27'00.316"W	1.05	
7953.00	90.400	178.000	6625.32	1590.50	-1588.28	86.37	3293152.80	1327246.58	40°13'36.933"N	104°27'00.294"W	1.19	
8048.00	90.100	179.300	6624.91	1685.48	-1683.25	88.61	3293155.04	1327151.62	40°13'35.994"N	104°27'00.279"W	1.40	
8142.00	89.100	177.000	6625.56	1779.47	-1777.19	91.64	3293158.08	1327057.68	40°13'35.065"N	104°27'00.255"W	2.67	
8237.00	88.900	176.700	6627.22	1874.44	-1872.03	96.86	3293163.29	1326962.84	40°13'34.128"N	104°27'00.202"W	0.38	
8331.00	88.400	178.500	6629.44	1968.41	-1965.92	100.79	3293167.23	1326868.96	40°13'33.200"N	104°27'00.165"W	1.99	
8426.00	88.700	178.600	6631.84	2063.37	-2060.86	103.20	3293169.63	1326774.02	40°13'32.261"N	104°27'00.149"W	0.33	
8521.00	89.700	178.400	6633.17	2158.35	-2155.82	105.68	3293172.12	1326679.07	40°13'31.323"N	104°27'00.131"W	1.07	
8616.00	90.900	179.300	6632.67	2253.32	-2250.79	107.59	3293174.03	1326584.10	40°13'30.384"N	104°27'00.121"W	1.58	
8710.00	90.000	179.200	6631.93	2347.28	-2344.78	108.82	3293175.26	1326490.11	40°13'29.455"N	104°27'00.120"W	0.96	
8805.00	90.300	179.000	6631.68	2442.25	-2439.77	110.31	3293176.75	1326395.13	40°13'28.516"N	104°27'00.115"W	0.38	
8899.00	90.700	178.900	6630.86	2536.22	-2533.75	112.04	3293178.47	1326301.16	40°13'27.587"N	104°27'00.107"W	0.44	
8994.00	90.200	179.100	6630.12	2631.19	-2628.73	113.69	3293180.13	1326206.18	40°13'26.649"N	104°27'00.100"W	0.57	
9089.00	92.500	178.200	6627.88	2726.14	-2723.67	115.93	3293182.37	1326111.24	40°13'25.710"N	104°27'00.086"W	2.60	
9183.00	91.900	179.100	6624.27	2820.05	-2817.57	118.14	3293184.58	1326017.34	40°13'24.782"N	104°27'00.072"W	1.15	
9278.00	90.600	178.300	6622.20	2915.01	-2912.52	120.30	3293186.73	1325922.40	40°13'23.844"N	104°27'00.059"W	1.61	
9372.00	90.400	177.700	6621.38	3009.00	-3006.46	123.58	3293190.01	1325828.46	40°13'22.915"N	104°27'00.031"W	0.67	
9467.00	88.900	177.500	6621.96	3104.00	-3101.38	127.56	3293193.99	1325733.55	40°13'21.977"N	104°26'59.994"W	1.59	
9561.00	90.700	178.400	6622.29	3197.99	-3195.31	130.92	3293197.35	1325639.62	40°13'21.048"N	104°26'59.965"W	2.14	
9656.00	91.000	177.200	6620.88	3292.98	-3290.23	134.57	3293201.00	1325544.71	40°13'20.110"N	104°26'59.932"W	1.30	
9751.00	91.100	179.200	6619.14	3387.95	-3385.16	137.55	3293203.98	1325449.78	40°13'19.171"N	104°26'59.908"W	2.11	
9845.00	89.300	176.400	6618.81	3481.94	-3479.08	141.16	3293207.59	1325355.87	40°13'18.243"N	104°26'59.876"W	3.54	
9940.00	89.400	176.500	6619.89	3576.91	-3573.89	147.04	3293213.47	1325261.06	40°13'17.305"N	104°26'59.815"W	0.15	
10034.00	89.100	177.300	6621.12	3670.90	-3667.74	152.12	3293218.55	1325167.21	40°13'16.377"N	104°26'59.764"W	0.91	
10129.00	91.100	177.300	6620.95	3765.89	-3762.63	156.60	3293223.03	1325072.33	40°13'15.439"N	104°26'59.720"W	2.11	
10224.00	90.600	176.600	6619.54	3860.87	-3857.49	161.65	3293228.08	1324977.48	40°13'14.501"N	104°26'59.670"W	0.91	
10317.00	89.600	176.400	6619.38	3953.85	-3950.31	167.33	3293233.76	1324884.66	40°13'13.583"N	104°26'59.611"W	1.10	LAST BHI MWD SURVEY
10371.00	89.600	176.400	6619.76	4007.84	-4004.20	170.72	3293237.15	1324830.77	40°13'13.051"N	104°26'59.575"W	0.00	PROJECTION TO BIT



# Actual Wellpath Report

FRENCH LAKE 3-63-16-1A AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-16-1A (498'FNL & 498'FWL, SEC.16)
Area	COLORADO	Well	FRENCH LAKE 3-63-16-1A
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-16-1A AWB
Facility	SEC.16-T3N-R63W		

## HOLE & CASING SECTIONS - Ref Wellbore: FRENCH LAKE 3-63-16-1A AWB Ref Wellpath: FRENCH LAKE 3-63-16-1A 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	25.00	850.00	825.00	25.00	850.00	0.00	0.00	0.00	0.00
8.75in Open Hole	850.00	7230.00	6380.00	850.00	6636.61	0.00	0.00	-866.14	56.42
7in Casing Intermediate	25.00	7227.00	7202.00	25.00	6636.68	0.00	0.00	-863.14	56.26
6in Open Hole	7230.00	10371.00	3141.00	6636.61	6619.76	-866.14	56.42	-4004.20	170.72

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
FRENCH LAKE 3-63-16-1A BHL ON PLAT (470'FSL & 600'FWL, REV-1)		6614.00	-4302.74	163.02	3293229.45	1324532.24	40°13'10.101"N	104°26'59.720"W	point
FRENCH LAKE 3-63-16-1A BHL ADJUSTED FOR OFFSET (870'FSL & 600'FWL, REV-4)		6617.00	-3902.74	163.02	3293229.45	1324932.23	40°13'14.054"N	104°26'59.659"W	point
FRENCH LAKE 3-63-16-1A BHL ON PLAT (470'FSL & 600'FWL, REV-3)		6617.00	-4302.74	163.02	3293229.45	1324532.24	40°13'10.101"N	104°26'59.720"W	point
FRENCH LAKE 3-63-16-1A PT#2 (REV-4)		6618.00	-1907.37	72.12	3293138.56	1326927.51	40°13'33.781"N	104°27'00.526"W	point
FRENCH LAKE 3-63-16-1A PT#2 (REV-2)		6623.00	-1889.17	106.28	3293172.72	1326945.71	40°13'33.957"N	104°27'00.083"W	point
FRENCH LAKE 3-63-16-1A PT#2 (REV-3)		6623.00	-1907.37	72.12	3293138.56	1326927.51	40°13'33.781"N	104°27'00.526"W	point
FRENCH LAKE 3-63-16-1A BHL ON PLAT (470'FSL & 600'FWL, REV-2)		6626.00	-4302.74	163.02	3293229.45	1324532.24	40°13'10.101"N	104°26'59.720"W	point
FRENCH LAKE 3-63-16-1A LANDING (REV-3)		6630.00	-572.12	21.59	3293088.03	1328262.69	40°13'46.981"N	104°27'00.974"W	point
FRENCH LAKE 3-63-16-1A PT#2 (REV-1)		6630.00	-1889.17	106.28	3293172.72	1326945.71	40°13'33.957"N	104°27'00.083"W	point
FRENCH LAKE 3-63-16-1A HARDLINES 470' SETBACKS		6637.00	0.00	0.00	3293066.44	1328834.79	40°13'52.637"N	104°27'01.165"W	polygon
FRENCH LAKE 3-63-16-1A LANDING (REV-1)		6637.00	-572.13	21.58	3293088.02	1328262.69	40°13'46.981"N	104°27'00.974"W	point
FRENCH LAKE 3-63-16-1A LANDING (REV-2)		6637.00	-572.13	21.58	3293088.02	1328262.69	40°13'46.981"N	104°27'00.974"W	point
FRENCH LAKE 3-63-16-1A SECTION LINES		6637.00	0.00	0.00	3293066.44	1328834.79	40°13'52.637"N	104°27'01.165"W	polygon
SLOT#02 EX. GO&G STATE #16-13 (660'FSL & 660'FWL, SEC.16,VERT,TD@7336)		7336.00	-4136.16	220.32	3293286.75	1324698.81	40°13'11.741"N	104°26'58.956"W	circle



# Actual Wellpath Report

FRENCH LAKE 3-63-16-1A AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-16-1A (498'FNL & 498'FWL, SEC.16)
Area	COLORADO	Well	FRENCH LAKE 3-63-16-1A
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-16-1A AWB
Facility	SEC.16-T3N-R63W		

## WELLPATH COMPOSITION - Ref Wellbore: FRENCH LAKE 3-63-16-1A AWB Ref Wellpath: FRENCH LAKE 3-63-16-1A AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	850.00	Drift Indicator (Standard)	ASSUMED VERTICAL TO CASING SHOE <850>	FRENCH LAKE 3-63-16-1A AWB
850.00	7228.00	NaviTrak (Standard)	BHI/NAVITRAK MWD 8.75" - <850-7228>	FRENCH LAKE 3-63-16-1A AWB
7228.00	10317.00	NaviTrak (Standard)	BHI/NAVITRAK MWD 8.75" - <7291-10317>	FRENCH LAKE 3-63-16-1A AWB
10317.00	10371.00	Blind Drilling (std)	Projection to bit	FRENCH LAKE 3-63-16-1A AWB

**Actual Wellpath Report****FRENCH LAKE 3-63-16-1A AWP**

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**REFERENCE WELLPATH IDENTIFICATION**

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-16-1A (498'FNL & 498'FWL, SEC.16)
Area	COLORADO	Well	FRENCH LAKE 3-63-16-1A
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-16-1A AWB
Facility	SEC.16-T3N-R63W		

**WELLPATH COMMENTS**

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
850.00	0.000	0.000	850.00	TIED INTO SURFACE CASING SHOE
10317.00	89.600	176.400	6619.38	LAST BHI MWD SURVEY
10371.00	89.600	176.400	6619.76	PROJECTION TO BIT