

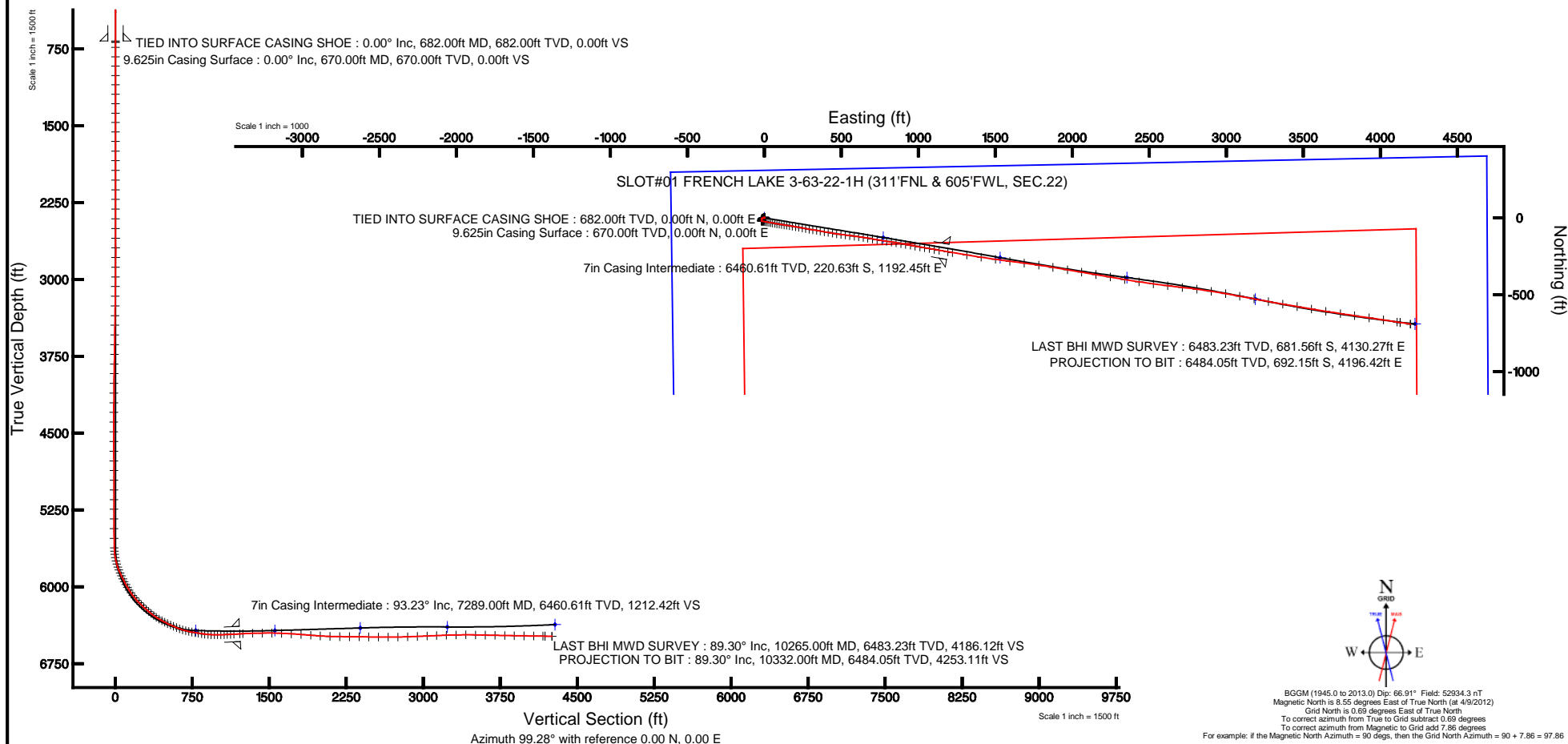


MARATHON OIL COMPANY

Location: COLORADO Slot: SLOT#01 FRENCH LAKE 3-63-22-1H (311'FNL & 605'FWL, SEC.22)
Field: WELD COUNTY (NAD 83, GRID NORTH) Well: FRENCH LAKE 3-63-22-1H
Facility: SEC.22-T3N-R63W Wellbore: FRENCH LAKE 3-63-22-1H PWB



Plot reference wellpath is FRENCH LAKE 3-63-22-1H (REV-A.1) PWP	
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: 4795 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 FRENCH LAKE 3-63-22-1H (311'FNL & 605'FWL, SEC.22)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdann on 5/23/2012





Actual Wellpath Report

FRENCH LAKE 3-63-22-1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-22-1H (311'FNL & 605'FWL, SEC.22)
Area	COLORADO	Well	FRENCH LAKE 3-63-22-1H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-22-1H AWB
Facility	SEC.22-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	5/23/2012 at 12:52:43 PM
Convergence at slot	0.69° East	Database/Source file	WA_Denver/FRENCH_LAKE_3-63-22-1H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.45	0.07	3298521.44	1323784.28	40°13'02.086"N	104°25'51.619"W
Facility Reference Pt			3298521.37	1323784.73	40°13'02.090"N	104°25'51.620"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	4795.00ft
Horizontal Reference Pt	Slot	H&P 449 (RKB) to Mean Sea Level	4795.00ft
Vertical Reference Pt	H&P 449 (RKB)	H&P 449 (RKB) to Mud Line at Slot (SLOT#01 FRENCH LAKE 3-63-22-1H (311'FNL & 605'FWL, SEC.22))	4795.00ft
MD Reference Pt	H&P 449 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	99.28°



Actual Wellpath Report

FRENCH LAKE 3-63-22-1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-22-1H (311'FNL & 605'FWL, SEC.22)
Area	COLORADO	Well	FRENCH LAKE 3-63-22-1H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-22-1H AWB
Facility	SEC.22-T3N-R63W		

WELLPATH DATA (139 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
682.00	0.000	0.000	682.00	0.00	0.00	0.00	3298521.44	1323784.28	40°13'02.086"N	104°25'51.619"W	0.00	TIED INTO SURFACE CASING SHOE
732.00	0.100	3.300	732.00	0.00	0.04	0.00	3298521.44	1323784.32	40°13'02.086"N	104°25'51.619"W	0.20	
824.00	0.300	352.300	824.00	-0.08	0.36	-0.03	3298521.41	1323784.64	40°13'02.089"N	104°25'51.619"W	0.22	
915.00	0.100	12.700	915.00	-0.15	0.68	-0.04	3298521.40	1323784.96	40°13'02.092"N	104°25'51.620"W	0.23	
1007.00	0.200	89.800	1007.00	0.02	0.75	0.14	3298521.58	1323785.03	40°13'02.093"N	104°25'51.617"W	0.22	
1099.00	0.100	2.000	1099.00	0.16	0.84	0.30	3298521.74	1323785.12	40°13'02.094"N	104°25'51.615"W	0.24	
1191.00	0.100	80.200	1191.00	0.23	0.93	0.38	3298521.82	1323785.21	40°13'02.095"N	104°25'51.614"W	0.14	
1283.00	0.200	127.000	1283.00	0.45	0.85	0.59	3298522.03	1323785.13	40°13'02.094"N	104°25'51.611"W	0.16	
1375.00	0.200	190.200	1375.00	0.59	0.59	0.69	3298522.13	1323784.87	40°13'02.091"N	104°25'51.610"W	0.23	
1467.00	0.200	168.300	1467.00	0.64	0.28	0.70	3298522.14	1323784.56	40°13'02.088"N	104°25'51.610"W	0.08	
1559.00	0.300	246.800	1559.00	0.50	0.02	0.51	3298521.95	1323784.30	40°13'02.086"N	104°25'51.613"W	0.35	
1651.00	0.200	328.200	1651.00	0.19	0.07	0.20	3298521.64	1323784.35	40°13'02.086"N	104°25'51.617"W	0.36	
1745.00	0.100	295.300	1745.00	0.00	0.24	0.04	3298521.48	1323784.52	40°13'02.088"N	104°25'51.619"W	0.14	
1840.00	0.100	252.900	1840.00	-0.15	0.25	-0.11	3298521.33	1323784.53	40°13'02.088"N	104°25'51.621"W	0.08	
1934.00	0.100	170.500	1934.00	-0.20	0.15	-0.18	3298521.26	1323784.43	40°13'02.087"N	104°25'51.621"W	0.14	
2029.00	0.200	99.300	2028.99	-0.01	0.04	0.00	3298521.44	1323784.32	40°13'02.086"N	104°25'51.619"W	0.20	
2123.00	0.200	24.600	2122.99	0.20	0.16	0.23	3298521.67	1323784.44	40°13'02.087"N	104°25'51.616"W	0.26	
2218.00	0.500	7.200	2217.99	0.23	0.72	0.35	3298521.79	1323785.00	40°13'02.093"N	104°25'51.615"W	0.33	
2313.00	0.600	21.100	2312.99	0.31	1.60	0.58	3298522.02	1323785.88	40°13'02.101"N	104°25'51.611"W	0.17	
2407.00	0.700	27.200	2406.98	0.59	2.57	1.02	3298522.46	1323786.85	40°13'02.111"N	104°25'51.606"W	0.13	
2502.00	0.900	33.600	2501.97	1.08	3.71	1.70	3298523.14	1323787.99	40°13'02.122"N	104°25'51.597"W	0.23	
2596.00	0.300	48.800	2595.97	1.54	4.48	2.29	3298523.73	1323788.76	40°13'02.130"N	104°25'51.589"W	0.65	
2691.00	0.400	57.700	2690.97	1.95	4.82	2.76	3298524.20	1323789.10	40°13'02.133"N	104°25'51.583"W	0.12	
2785.00	0.700	240.000	2784.96	1.75	4.71	2.54	3298523.98	1323788.99	40°13'02.132"N	104°25'51.586"W	1.17	
2880.00	0.700	219.600	2879.96	1.00	3.97	1.67	3298523.11	1323788.25	40°13'02.125"N	104°25'51.597"W	0.26	
2974.00	0.900	225.400	2973.95	0.28	3.01	0.78	3298522.22	1323787.29	40°13'02.115"N	104°25'51.609"W	0.23	
3069.00	0.600	239.200	3068.94	-0.54	2.24	-0.18	3298521.26	1323786.51	40°13'02.108"N	104°25'51.621"W	0.37	
3164.00	0.800	267.600	3163.93	-1.57	1.95	-1.27	3298520.17	1323786.23	40°13'02.105"N	104°25'51.635"W	0.42	
3258.00	0.900	258.800	3257.92	-2.91	1.78	-2.65	3298518.79	1323786.06	40°13'02.103"N	104°25'51.653"W	0.17	
3353.00	0.700	260.900	3352.91	-4.16	1.55	-3.96	3298517.48	1323785.82	40°13'02.101"N	104°25'51.670"W	0.21	
3447.00	0.900	269.800	3446.90	-5.43	1.45	-5.26	3298516.18	1323785.73	40°13'02.100"N	104°25'51.687"W	0.25	
3542.00	0.900	242.800	3541.89	-6.76	1.11	-6.67	3298514.77	1323785.39	40°13'02.097"N	104°25'51.705"W	0.44	
3637.00	1.000	249.300	3636.88	-8.08	0.47	-8.11	3298513.33	1323784.75	40°13'02.091"N	104°25'51.724"W	0.15	
3731.00	1.100	247.000	3730.86	-9.56	-0.17	-9.71	3298511.73	1323784.11	40°13'02.085"N	104°25'51.744"W	0.12	
3826.00	1.200	249.100	3825.84	-11.19	-0.88	-11.48	3298509.96	1323783.40	40°13'02.078"N	104°25'51.767"W	0.11	
3920.00	1.100	243.300	3919.83	-12.77	-1.64	-13.20	3298508.24	1323782.64	40°13'02.071"N	104°25'51.790"W	0.16	
4015.00	1.200	243.500	4014.81	-14.31	-2.49	-14.91	3298506.53	1323781.79	40°13'02.063"N	104°25'51.812"W	0.11	
4109.00	1.300	202.700	4108.79	-15.36	-3.91	-16.20	3298505.24	1323780.37	40°13'02.049"N	104°25'51.829"W	0.93	
4204.00	1.100	191.500	4203.77	-15.64	-5.80	-16.80	3298504.64	1323778.48	40°13'02.030"N	104°25'51.837"W	0.32	
4298.00	1.100	194.100	4297.75	-15.75	-7.56	-17.20	3298504.24	1323776.72	40°13'02.013"N	104°25'51.842"W	0.05	
4393.00	1.200	202.800	4392.73	-16.06	-9.36	-17.81	3298503.63	1323774.92	40°13'01.995"N	104°25'51.850"W	0.21	
4488.00	1.100	172.200	4487.71	-16.03	-11.18	-18.07	3298503.37	1323773.10	40°13'01.977"N	104°25'51.854"W	0.65	
4582.00	1.100	191.300	4581.69	-15.80	-12.96	-18.12	3298503.32	1323771.32	40°13'01.960"N	104°25'51.855"W	0.39	
4677.00	1.400	190.200	4676.67	-15.85	-15.00	-18.51	3298502.93	1323769.28	40°13'01.940"N	104°25'51.860"W	0.32	
4772.00	0.900	164.600	4771.65	-15.55	-16.86	-18.51	3298502.93	1323767.42	40°13'01.921"N	104°25'51.860"W	0.74	



Actual Wellpath Report

FRENCH LAKE 3-63-22-1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-22-1H (311'FNL & 605'FWL, SEC.22)
Area	COLORADO	Well	FRENCH LAKE 3-63-22-1H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-22-1H AWB
Facility	SEC.22-T3N-R63W		

WELLPATH DATA (139 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
4866.00	0.300	178.200	4865.65	-15.20	-17.82	-18.31	3298503.13	1323766.46	40°13'01.912"N	104°25'51.858"W	0.65	
4961.00	0.400	190.700	4960.64	-15.16	-18.39	-18.36	3298503.08	1323765.89	40°13'01.906"N	104°25'51.859"W	0.13	
5055.00	0.400	182.900	5054.64	-15.13	-19.04	-18.44	3298503.00	1323765.24	40°13'01.900"N	104°25'51.860"W	0.06	
5150.00	0.200	172.300	5149.64	-15.04	-19.54	-18.44	3298503.00	1323764.74	40°13'01.895"N	104°25'51.860"W	0.22	
5244.00	0.400	150.600	5243.64	-14.79	-19.98	-18.25	3298503.19	1323764.30	40°13'01.890"N	104°25'51.858"W	0.24	
5339.00	0.300	111.500	5338.64	-14.34	-20.36	-17.86	3298503.58	1323763.92	40°13'01.886"N	104°25'51.853"W	0.27	
5433.00	0.400	119.700	5432.64	-13.79	-20.62	-17.34	3298504.10	1323763.66	40°13'01.884"N	104°25'51.846"W	0.12	
5528.00	0.500	91.000	5527.63	-13.07	-20.79	-16.64	3298504.80	1323763.49	40°13'01.882"N	104°25'51.837"W	0.26	
5622.00	1.500	101.200	5621.62	-11.44	-21.04	-15.03	3298506.42	1323763.25	40°13'01.879"N	104°25'51.816"W	1.08	
5654.00	4.400	100.800	5653.57	-9.79	-21.35	-13.41	3298508.03	1323762.93	40°13'01.876"N	104°25'51.795"W	9.06	
5685.00	7.300	100.200	5684.41	-6.63	-21.92	-10.30	3298511.14	1323762.36	40°13'01.870"N	104°25'51.755"W	9.36	
5717.00	10.100	99.800	5716.04	-1.79	-22.76	-5.53	3298515.91	1323761.53	40°13'01.861"N	104°25'51.694"W	8.75	
5749.00	13.200	99.700	5747.37	4.67	-23.85	0.83	3298522.27	1323760.43	40°13'01.850"N	104°25'51.612"W	9.69	
5780.00	16.300	99.600	5777.35	12.56	-25.17	8.61	3298530.05	1323759.11	40°13'01.836"N	104°25'51.512"W	10.00	
5812.00	19.200	99.200	5807.82	22.31	-26.76	18.24	3298539.68	1323757.52	40°13'01.819"N	104°25'51.388"W	9.07	
5843.00	21.800	99.400	5836.86	33.17	-28.52	28.95	3298550.39	1323755.76	40°13'01.800"N	104°25'51.250"W	8.39	
5875.00	23.000	100.800	5866.44	45.36	-30.66	40.95	3298562.39	1323753.62	40°13'01.778"N	104°25'51.096"W	4.10	
5906.00	25.100	100.900	5894.75	57.99	-33.04	53.36	3298574.80	1323751.24	40°13'01.753"N	104°25'50.936"W	6.78	
5938.00	27.100	100.300	5923.48	72.06	-35.62	67.20	3298588.63	1323748.66	40°13'01.725"N	104°25'50.759"W	6.30	
5969.00	28.000	99.800	5950.97	86.40	-38.13	81.32	3298602.75	1323746.16	40°13'01.699"N	104°25'50.577"W	3.00	
6001.00	28.800	98.900	5979.12	101.62	-40.60	96.33	3298617.77	1323743.68	40°13'01.673"N	104°25'50.384"W	2.84	
6032.00	30.200	98.000	6006.10	116.88	-42.84	111.43	3298632.87	1323741.44	40°13'01.649"N	104°25'50.189"W	4.74	
6064.00	31.800	98.500	6033.53	133.36	-45.20	127.74	3298649.18	1323739.08	40°13'01.624"N	104°25'49.980"W	5.06	
6095.00	33.900	98.800	6059.57	150.17	-47.73	144.37	3298665.80	1323736.55	40°13'01.597"N	104°25'49.766"W	6.79	
6127.00	36.900	99.200	6085.65	168.71	-50.64	162.67	3298684.10	1323733.65	40°13'01.566"N	104°25'49.530"W	9.40	
6158.00	39.700	99.300	6109.97	187.92	-53.72	181.63	3298703.07	1323730.56	40°13'01.533"N	104°25'49.286"W	9.03	
6190.00	42.000	99.800	6134.18	208.85	-57.20	202.27	3298723.70	1323727.08	40°13'01.496"N	104°25'49.021"W	7.26	
6221.00	44.000	100.500	6156.85	229.99	-60.93	223.08	3298744.51	1323723.36	40°13'01.457"N	104°25'48.753"W	6.63	
6253.00	46.600	100.500	6179.36	252.73	-65.07	245.44	3298766.87	1323719.21	40°13'01.413"N	104°25'48.466"W	8.12	
6284.00	47.700	100.700	6200.44	275.45	-69.25	267.78	3298789.21	1323715.03	40°13'01.369"N	104°25'48.178"W	3.58	
6316.00	48.600	99.500	6221.79	299.28	-73.43	291.25	3298812.68	1323710.85	40°13'01.325"N	104°25'47.876"W	3.96	
6347.00	50.400	98.900	6241.92	322.85	-77.20	314.52	3298835.94	1323707.09	40°13'01.285"N	104°25'47.577"W	5.99	
6379.00	51.500	100.300	6262.08	347.70	-81.34	339.02	3298860.44	1323702.94	40°13'01.241"N	104°25'47.262"W	4.83	
6410.00	54.100	99.500	6280.82	372.39	-85.59	363.34	3298884.77	1323698.70	40°13'01.197"N	104°25'46.949"W	8.64	
6442.00	56.500	100.000	6299.04	398.69	-90.04	389.27	3298910.69	1323694.24	40°13'01.149"N	104°25'46.616"W	7.61	
6473.00	58.600	100.500	6315.67	424.85	-94.70	415.01	3298936.43	1323689.59	40°13'01.100"N	104°25'46.285"W	6.91	
6505.00	61.100	99.200	6331.74	452.51	-99.43	442.27	3298963.69	1323684.86	40°13'01.050"N	104°25'45.934"W	8.57	
6536.00	63.000	97.900	6346.27	479.89	-103.50	469.35	3298990.77	1323680.79	40°13'01.007"N	104°25'45.586"W	7.16	
6568.00	63.400	97.800	6360.70	508.45	-107.40	497.64	3299019.06	1323676.89	40°13'00.965"N	104°25'45.221"W	1.28	
6600.00	65.300	97.600	6374.55	537.28	-111.26	526.23	3299047.64	1323673.02	40°13'00.923"N	104°25'44.854"W	5.96	
6631.00	66.700	97.000	6387.16	565.58	-114.86	554.32	3299075.73	1323669.43	40°13'00.884"N	104°25'44.492"W	4.85	
6663.00	67.200	97.100	6399.69	595.01	-118.47	583.54	3299104.95	1323665.81	40°13'00.845"N	104°25'44.116"W	1.59	
6694.00	69.600	98.200	6411.10	623.82	-122.31	612.10	3299133.52	1323661.97	40°13'00.804"N	104°25'43.748"W	8.42	
6726.00	72.900	98.800	6421.38	654.11	-126.79	642.07	3299163.48	1323657.49	40°13'00.756"N	104°25'43.363"W	10.46	
6757.00	75.300	99.700	6429.88	683.92	-131.59	671.49	3299192.90	1323652.70	40°13'00.705"N	104°25'42.984"W	8.23	



Actual Wellpath Report

FRENCH LAKE 3-63-22-1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-22-1H (311'FNL & 605'FWL, SEC.22)
Area	COLORADO	Well	FRENCH LAKE 3-63-22-1H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-22-1H AWB
Facility	SEC.22-T3N-R63W		

WELLPATH DATA (139 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
6789.00	77.900	99.600	6437.29	715.05	-136.80	702.18	3299223.59	1323647.48	40°13'00.650"N	104°25'42.590"W	8.13	
6820.00	80.500	99.300	6443.10	745.50	-141.80	732.21	3299253.62	1323642.48	40°13'00.597"N	104°25'42.203"W	8.44	
6852.00	80.700	99.400	6448.33	777.07	-146.93	763.36	3299284.77	1323637.36	40°13'00.543"N	104°25'41.803"W	0.70	
6883.00	80.700	98.900	6453.34	807.66	-151.80	793.57	3299314.97	1323632.49	40°13'00.491"N	104°25'41.414"W	1.59	
6915.00	80.700	99.300	6458.51	839.24	-156.79	824.75	3299346.15	1323627.50	40°13'00.438"N	104°25'41.013"W	1.23	
6946.00	82.500	99.600	6463.04	869.90	-161.83	855.00	3299376.40	1323622.46	40°13'00.384"N	104°25'40.624"W	5.88	
6978.00	85.700	99.800	6466.32	901.73	-167.19	886.37	3299407.77	1323617.10	40°13'00.328"N	104°25'40.220"W	10.02	
7009.00	88.100	100.100	6468.00	932.68	-172.54	916.86	3299438.25	1323611.75	40°13'00.271"N	104°25'39.828"W	7.80	
7041.00	88.400	99.800	6468.98	964.66	-178.06	948.36	3299469.76	1323606.23	40°13'00.213"N	104°25'39.423"W	1.33	
7072.00	89.200	99.800	6469.63	995.65	-183.34	978.90	3299500.30	1323600.95	40°13'00.157"N	104°25'39.030"W	2.58	
7104.00	91.600	99.700	6469.40	1027.65	-188.76	1010.44	3299531.83	1323595.53	40°13'00.100"N	104°25'38.624"W	7.51	
7135.00	92.400	100.200	6468.32	1058.63	-194.11	1040.95	3299562.34	1323590.18	40°13'00.043"N	104°25'38.232"W	3.04	
7167.00	92.700	100.200	6466.90	1090.59	-199.77	1072.41	3299593.80	1323584.52	40°12'59.984"N	104°25'37.827"W	0.94	
7198.00	92.900	99.900	6465.38	1121.55	-205.17	1102.90	3299624.29	1323579.11	40°12'59.927"N	104°25'37.435"W	1.16	
7230.00	92.900	99.900	6463.77	1153.51	-210.67	1134.38	3299655.77	1323573.62	40°12'59.868"N	104°25'37.030"W	0.00	
7319.00	93.400	99.400	6458.87	1242.37	-225.57	1221.99	3299743.38	1323558.72	40°12'59.711"N	104°25'35.903"W	0.79	
7414.00	91.700	99.400	6454.65	1337.27	-241.07	1315.62	3299837.00	1323543.23	40°12'59.546"N	104°25'34.699"W	1.79	
7508.00	90.300	98.900	6453.01	1431.26	-256.01	1408.41	3299929.78	1323528.28	40°12'59.388"N	104°25'33.505"W	1.58	
7602.00	89.800	98.100	6452.93	1525.25	-269.90	1501.37	3300022.75	1323514.39	40°12'59.239"N	104°25'32.309"W	1.00	
7697.00	87.500	97.200	6455.16	1620.18	-282.55	1595.49	3300116.86	1323501.75	40°12'59.103"N	104°25'31.098"W	2.60	
7791.00	86.300	97.700	6460.25	1713.99	-294.72	1688.56	3300209.93	1323489.58	40°12'58.972"N	104°25'29.900"W	1.38	
7886.00	85.800	98.300	6466.79	1808.74	-307.91	1782.41	3300303.77	1323476.39	40°12'58.830"N	104°25'28.693"W	0.82	
7980.00	85.600	99.500	6473.84	1902.47	-322.41	1875.02	3300396.37	1323461.89	40°12'58.676"N	104°25'27.501"W	1.29	
8075.00	86.300	99.500	6480.55	1997.23	-338.05	1968.48	3300489.83	1323446.25	40°12'58.510"N	104°25'26.299"W	0.74	
8169.00	87.600	99.600	6485.55	2091.10	-353.62	2061.05	3300582.39	1323430.67	40°12'58.345"N	104°25'25.108"W	1.39	
8264.00	89.600	99.300	6487.87	2186.06	-369.21	2154.72	3300676.07	1323415.08	40°12'58.180"N	104°25'23.903"W	2.13	
8358.00	89.900	100.200	6488.28	2280.06	-385.13	2247.36	3300768.70	1323399.17	40°12'58.011"N	104°25'22.712"W	1.01	
8453.00	89.200	99.700	6489.03	2375.05	-401.55	2340.93	3300862.27	1323382.75	40°12'57.838"N	104°25'21.508"W	0.91	
8547.00	88.800	98.300	6490.67	2469.03	-416.25	2433.76	3300955.09	1323368.05	40°12'57.681"N	104°25'20.314"W	1.55	
8642.00	90.000	98.000	6491.66	2564.00	-429.72	2527.79	3301049.12	1323354.58	40°12'57.537"N	104°25'19.104"W	1.30	
8736.00	89.500	96.800	6492.07	2657.95	-441.82	2621.00	3301142.33	1323342.48	40°12'57.406"N	104°25'17.905"W	1.38	
8831.00	91.100	96.500	6491.58	2752.84	-452.82	2715.36	3301236.68	1323331.48	40°12'57.286"N	104°25'16.690"W	1.71	
8926.00	92.000	97.500	6489.01	2847.73	-464.40	2809.62	3301330.93	1323319.91	40°12'57.160"N	104°25'15.477"W	1.42	
9020.00	92.400	99.500	6485.40	2941.65	-478.28	2902.51	3301423.82	1323306.02	40°12'57.012"N	104°25'14.282"W	2.17	
9115.00	92.600	99.600	6481.25	3036.56	-494.02	2996.10	3301517.41	1323290.28	40°12'56.845"N	104°25'13.078"W	0.24	
9209.00	92.400	100.400	6477.15	3130.46	-510.33	3088.59	3301609.89	1323273.97	40°12'56.673"N	104°25'11.889"W	0.88	
9304.00	92.100	100.600	6473.42	3225.37	-527.63	3181.92	3301703.22	1323256.67	40°12'56.491"N	104°25'10.688"W	0.38	
9399.00	90.700	100.300	6471.10	3320.31	-544.86	3275.32	3301796.61	1323239.45	40°12'56.309"N	104°25'09.487"W	1.51	
9493.00	90.600	100.300	6470.04	3414.29	-561.66	3367.80	3301889.09	1323222.64	40°12'56.132"N	104°25'08.298"W	0.11	
9588.00	88.400	99.600	6470.87	3509.28	-578.08	3461.36	3301982.64	1323206.23	40°12'55.959"N	104°25'07.094"W	2.43	
9682.00	89.300	99.500	6472.75	3603.26	-593.67	3554.04	3302075.32	1323190.64	40°12'55.793"N	104°25'05.902"W	0.96	
9777.00	88.600	98.900	6474.49	3698.24	-608.85	3647.80	3302169.07	1323175.45	40°12'55.632"N	104°25'04.696"W	0.97	
9872.00	89.100	98.600	6476.40	3793.22	-623.30	3741.67	3302262.94	1323161.01	40°12'55.478"N	104°25'03.488"W	0.61	
9966.00	88.500	98.600	6478.37	3887.19	-637.36	3834.60	3302355.86	1323146.95	40°12'55.328"N	104°25'02.293"W	0.64	
10061.00	89.300	98.200	6480.19	3982.16	-651.23	3928.56	3302449.82	1323133.08	40°12'55.179"N	104°25'01.084"W	0.94	



Actual Wellpath Report

FRENCH LAKE 3-63-22-1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-22-1H (311'FNL & 605'FWL, SEC.22)
Area	COLORADO	Well	FRENCH LAKE 3-63-22-1H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-22-1H AWB
Facility	SEC.22-T3N-R63W		

WELLPATH DATA (139 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
10155.00	88.900	98.400	6481.67	4076.13	-664.80	4021.56	3302542.82	1323119.51	40°12'55.034"N	104°24'59.887"W	0.48	
10245.00	89.400	99.000	6483.00	4166.12	-678.41	4110.52	3302631.77	1323105.90	40°12'54.889"N	104°24'58.743"W	0.87	
10265.00	89.300	99.100	6483.23	4186.12	-681.56	4130.27	3302651.52	1323102.75	40°12'54.855"N	104°24'58.489"W	0.71	LAST BHI MWD SURVEY
10332.00	89.300	99.100	6484.05	4253.11	-692.15	4196.42	3302717.67	1323092.16	40°12'54.743"N	104°24'57.638"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: FRENCH LAKE 3-63-22-1H AWB Ref Wellpath: FRENCH LAKE 3-63-22-1H 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	670.00	645.00	25.00	670.00	0.00	0.00	0.00	0.00
8.75in Open Hole	670.00	7296.00	6626.00	670.00	6460.21	0.00	0.00	-221.79	1199.34
7in Casing Intermediate	25.00	7289.00	7264.00	25.00	6460.61	0.00	0.00	-220.63	1192.45
6in Open Hole	7296.00	10332.00	3036.00	6460.21	6484.05	-221.79	1199.34	-692.15	4196.42

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
FRENCH LAKE 3-63-22-1H SECTION LINES		0.00	0.00	0.00	3298521.44	1323784.28	40°13'02.086"N	104°25'51.619"W	polygon
FRENCH LAKE 3-63-22-1H BHL ON PLAT (1085'FNL & 470'FEL, REV-1)		6370.00	-690.80	4227.58	3302748.83	1323093.51	40°12'54.752"N	104°24'57.236"W	point
FRENCH LAKE 3-63-22-1H HARDLINES (460' SETBACKS)		6370.00	0.00	0.00	3298521.44	1323784.28	40°13'02.086"N	104°25'51.619"W	polygon
FRENCH LAKE 3-63-22-1H FAULT 2 (REV-1)		6393.00	-528.80	3190.14	3301711.44	1323255.50	40°12'56.478"N	104°25'10.582"W	point
FRENCH LAKE 3-63-22-1H PT3 (REV-1)		6403.00	-388.46	2354.79	3300876.12	1323395.84	40°12'57.965"N	104°25'21.328"W	point
FRENCH LAKE 3-63-22-1H FAULT 1 (REV-1)		6428.00	-259.04	1531.85	3300053.22	1323525.25	40°12'59.343"N	104°25'31.915"W	point
FRENCH LAKE 3-63-22-1H LANDING PT (REV-1)		6428.00	-127.27	772.81	3299294.22	1323657.02	40°13'00.736"N	104°25'41.678"W	point



Actual Wellpath Report

FRENCH LAKE 3-63-22-1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-22-1H (311'FNL & 605'FWL, SEC.22)
Area	COLORADO	Well	FRENCH LAKE 3-63-22-1H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-22-1H AWB
Facility	SEC.22-T3N-R63W		

WELLPATH COMPOSITION - Ref Wellbore: FRENCH LAKE 3-63-22-1H AWB Ref Wellpath: FRENCH LAKE 3-63-22-1H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	682.00	Drift Indicator (Standard)	ASSUMED VERTICAL TO CASING SHOE <0-682>	FRENCH LAKE 3-63-22-1H AWB
682.00	7230.00	NaviTrak (Standard)	BHI NAVITRAK MWD 8.75"HOLE <732-7230>	FRENCH LAKE 3-63-22-1H AWB
7230.00	10265.00	NaviTrak (Standard)	BHI NAVITRAK MWD 6"HOLE <7319-10265>	FRENCH LAKE 3-63-22-1H AWB
10265.00	10332.00	Blind Drilling (std)	Projection to bit	FRENCH LAKE 3-63-22-1H AWB

**Actual Wellpath Report****FRENCH LAKE 3-63-22-1H AWP**

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**REFERENCE WELLPATH IDENTIFICATION**

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 FRENCH LAKE 3-63-22-1H (311'FNL & 605'FWL, SEC.22)
Area	COLORADO	Well	FRENCH LAKE 3-63-22-1H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	FRENCH LAKE 3-63-22-1H AWB
Facility	SEC.22-T3N-R63W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
682.00	0.000	0.000	682.00	TIED INTO SURFACE CASING SHOE
10265.00	89.300	99.100	6483.23	LAST BHI MWD SURVEY
10332.00	89.300	99.100	6484.05	PROJECTION TO BIT