

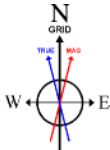


MARATHON OIL COMPANY

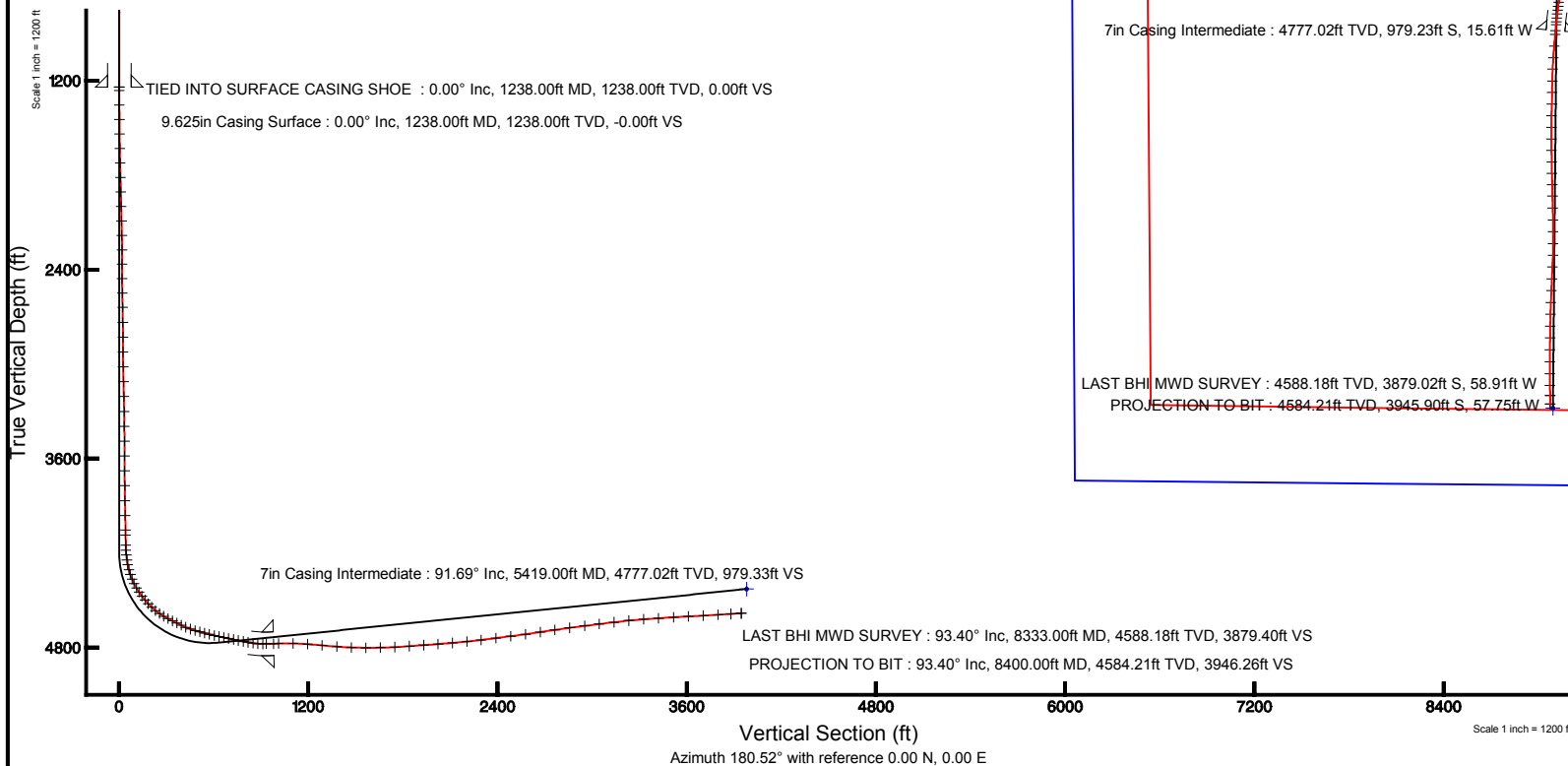
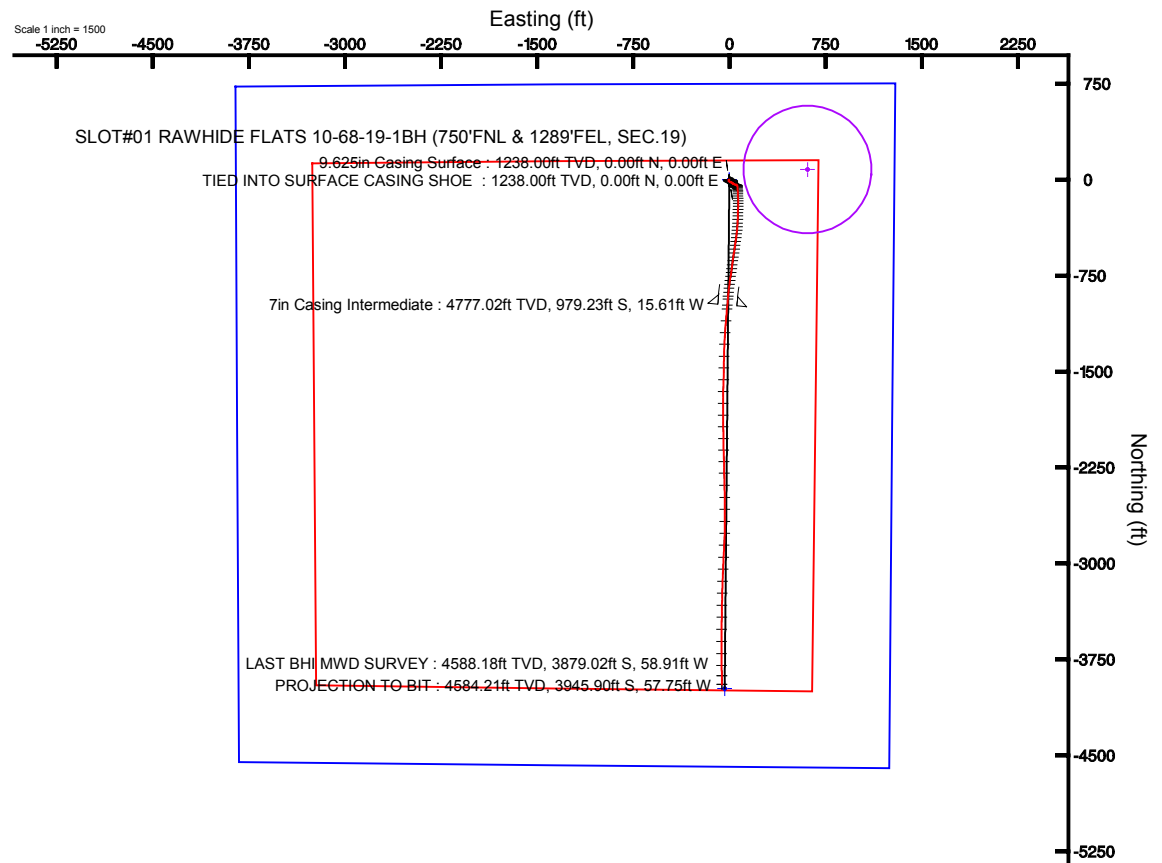
Location: COLORADO Slot: SLOT#01 RAWHIDE FLATS 10-68-19-1BH (750'FNL & 1289'FEL, SEC.19)
 Field: LARIMER COUNTY (NAD 83, GRID NORTH) Well: RAWHIDE FLATS 10-68-19-1BH
 Facility: SEC.19-T10N-R68W Wellbore: RAWHIDE FLATS 10-68-19-1BH PWB



Plot reference wellpath is RAWHIDE FLATS 10-68-19-1BH (REV.A.0) PWP	
True vertical depths are referenced to Rig on SLOT#01 RAWHIDE FLATS 10-68-191BH (750'FNL & 1289'FEL, SEC.19) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#01 RAWHIDE FLATS 10-68-191BH (750'FNL & 1289'FEL, SEC.19) (RKB)	North Reference: Grid north
Rig on SLOT#01 RAWHIDE FLATS 10-68-191BH (750'FNL & 1289'FEL, SEC.19) (RKB) to Mean Sea Level: 5617 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 RAWHIDE FLATS 10-68-19-1BH (750'FNL & 1289'FEL, SEC.19)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdam on 5/23/2012



BGGM (1945.0 to 2013.0) Dip: 67.31° Field: 53252.6 nT
 Magnetic North is 8.94 degrees East of True North (at 2/23/2012)
 Grid North is 0.30 degrees East of True North
 To correct azimuth from True to Grid subtract 0.30 degrees
 To correct azimuth from Magnetic to Grid add 8.65 degrees
 For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 8.65 = 98.65





Actual Wellpath Report

RAWHIDE FLATS 10-68-19-1BH AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 RAWHIDE FLATS 10-68-19-1BH (750'FNL & 1289'FEL, SEC.19)
Area	COLORADO	Well	RAWHIDE FLATS 10-68-19-1BH
Field	LARIMER COUNTY (NAD 83, GRID NORTH)	Wellbore	RAWHIDE FLATS 10-68-19-1BH AWB
Facility	SEC.19-T10N-R68W		

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	1.00001	Report Generated	5/23/2012 at 1:19:09 PM
Convergence at slot	0.30° East	Database/Source file	WA_Denver/RAWHIDE_FLATS_10-68-19-1BH_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.12	0.23	3126427.94	1543711.61	40°49'29.909"N	105°02'35.487"W
Facility Reference Pt			3126427.71	1543711.73	40°49'29.910"N	105°02'35.490"W
Field Reference Pt			3136142.77	1547088.37	40°50'02.760"N	105°00'28.880"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on SLOT#01 RAWHIDE FLATS 10-68-191BH (750'FNL & 1289'FEL, SEC.19) (RKB) to Facility Vertical Da
Horizontal Reference Pt	Slot	Rig on SLOT#01 RAWHIDE FLATS 10-68-191BH (750'FNL & 1289'FEL, SEC.19) (RKB) to Mean Sea Level
Vertical Reference Pt	Rig on SLOT#01 RAWHIDE FLATS 10-68-191BH (750'FNL & 1289'FEL, SEC.19) (RKB)	Rig on SLOT#01 RAWHIDE FLATS 10-68-191BH (750'FNL & 1289'FEL, SEC.19) (RKB) to Mud Line at Slot (S
MD Reference Pt	Rig on SLOT#01 RAWHIDE FLATS 10-68-191BH (750'FNL & 1289'FEL, SEC.19) (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth



Actual Wellpath Report

RAWHIDE FLATS 10-68-19-1BH AWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 RAWHIDE FLATS 10-68-19-1BH (750'FNL & 1289'FEL, SEC.19)
Area	COLORADO	Well	RAWHIDE FLATS 10-68-19-1BH
Field	LARIMER COUNTY (NAD 83, GRID NORTH)	Wellbore	RAWHIDE FLATS 10-68-19-1BH AWB
Facility	SEC.19-T10N-R68W		

WELLPATH DATA (106 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
1238.00	0.000	0.000	1238.00	0.00	0.00	0.00	3126427.94	1543711.61	40°49'29.909"N	105°02'35.487"W	0.00	TIED INTO SURFACE CASING SHOE
1261.00	1.800	260.700	1261.00	0.06	-0.06	-0.36	3126427.58	1543711.55	40°49'29.908"N	105°02'35.492"W	7.83	
1353.00	2.100	261.500	1352.94	0.57	-0.54	-3.45	3126424.49	1543711.07	40°49'29.904"N	105°02'35.532"W	0.33	
1446.00	0.900	249.300	1445.91	1.10	-1.05	-5.82	3126422.12	1543710.56	40°49'29.899"N	105°02'35.563"W	1.33	
1538.00	0.800	190.500	1537.90	2.00	-1.94	-6.61	3126421.33	1543709.67	40°49'29.890"N	105°02'35.573"W	0.91	
1630.00	1.200	169.500	1629.89	3.58	-3.52	-6.55	3126421.39	1543708.09	40°49'29.874"N	105°02'35.572"W	0.58	
1721.00	1.500	158.100	1720.86	5.61	-5.56	-5.93	3126422.01	1543706.05	40°49'29.854"N	105°02'35.565"W	0.44	
1814.00	1.700	158.000	1813.83	8.01	-7.97	-4.96	3126422.98	1543703.64	40°49'29.830"N	105°02'35.552"W	0.22	
1906.00	1.600	149.500	1905.79	10.37	-10.34	-3.80	3126424.14	1543701.27	40°49'29.807"N	105°02'35.537"W	0.29	
1999.00	1.800	135.000	1998.75	12.51	-12.49	-2.11	3126425.83	1543699.12	40°49'29.785"N	105°02'35.515"W	0.51	
2091.00	2.300	131.700	2090.69	14.74	-14.74	0.29	3126428.23	1543696.87	40°49'29.763"N	105°02'35.484"W	0.56	
2182.00	2.200	111.900	2181.62	16.58	-16.61	3.28	3126431.22	1543695.00	40°49'29.745"N	105°02'35.446"W	0.86	
2274.00	1.500	91.700	2273.57	17.24	-17.30	6.12	3126434.06	1543694.31	40°49'29.738"N	105°02'35.409"W	1.03	
2365.00	1.400	96.700	2364.54	17.39	-17.47	8.41	3126436.35	1543694.14	40°49'29.736"N	105°02'35.379"W	0.18	
2457.00	2.100	108.700	2456.50	18.04	-18.14	11.12	3126439.06	1543693.47	40°49'29.729"N	105°02'35.344"W	0.85	
2549.00	2.300	123.800	2548.43	19.57	-19.71	14.26	3126442.20	1543691.90	40°49'29.713"N	105°02'35.303"W	0.66	
2640.00	1.900	128.100	2639.37	21.50	-21.65	16.96	3126444.90	1543689.96	40°49'29.694"N	105°02'35.268"W	0.47	
2735.00	0.900	115.900	2734.34	22.78	-22.95	18.87	3126446.81	1543688.66	40°49'29.681"N	105°02'35.243"W	1.09	
2829.00	1.600	111.600	2828.32	23.57	-23.75	20.75	3126448.69	1543687.85	40°49'29.673"N	105°02'35.219"W	0.75	
2924.00	1.600	96.600	2923.28	24.18	-24.40	23.31	3126451.25	1543687.21	40°49'29.667"N	105°02'35.185"W	0.44	
3018.00	1.400	123.600	3017.25	24.95	-25.18	25.57	3126453.51	1543686.43	40°49'29.659"N	105°02'35.156"W	0.77	
3113.00	1.700	160.100	3112.22	26.90	-27.15	27.01	3126454.95	1543684.46	40°49'29.639"N	105°02'35.137"W	1.06	
3207.00	1.500	159.900	3206.18	29.36	-29.62	27.91	3126455.85	1543681.99	40°49'29.615"N	105°02'35.126"W	0.21	
3302.00	1.600	115.300	3301.15	31.08	-31.35	29.54	3126457.48	1543680.26	40°49'29.598"N	105°02'35.105"W	1.24	
3396.00	1.800	118.700	3395.11	32.33	-32.62	32.02	3126459.96	1543678.99	40°49'29.585"N	105°02'35.073"W	0.24	
3491.00	1.100	123.800	3490.08	33.53	-33.84	34.08	3126462.02	1543677.77	40°49'29.573"N	105°02'35.046"W	0.75	
3585.00	0.900	104.600	3584.06	34.21	-34.53	35.55	3126463.49	1543677.08	40°49'29.566"N	105°02'35.027"W	0.41	
3680.00	2.000	93.900	3679.03	34.49	-34.83	37.92	3126465.86	1543676.78	40°49'29.563"N	105°02'34.996"W	1.19	
3774.00	2.900	102.500	3772.95	35.08	-35.46	41.88	3126469.82	1543676.15	40°49'29.556"N	105°02'34.945"W	1.03	
3869.00	2.700	109.700	3867.83	36.31	-36.73	46.33	3126474.27	1543674.88	40°49'29.543"N	105°02'34.887"W	0.43	
3963.00	2.900	114.900	3961.72	38.02	-38.48	50.58	3126478.52	1543673.13	40°49'29.526"N	105°02'34.832"W	0.34	
4057.00	2.700	115.900	4055.61	39.95	-40.45	54.72	3126482.66	1543671.16	40°49'29.506"N	105°02'34.778"W	0.22	
4088.00	2.500	111.200	4086.58	40.50	-41.01	56.01	3126483.95	1543670.60	40°49'29.501"N	105°02'34.761"W	0.94	
4152.00	3.000	106.600	4150.50	41.46	-42.00	58.92	3126486.86	1543669.61	40°49'29.491"N	105°02'34.723"W	0.85	
4184.00	4.100	137.800	4182.44	42.53	-43.08	60.49	3126488.43	1543668.53	40°49'29.480"N	105°02'34.703"W	6.82	
4215.00	6.100	159.900	4213.32	44.89	-45.45	61.80	3126489.74	1543666.16	40°49'29.457"N	105°02'34.686"W	8.93	
4247.00	8.700	169.700	4245.05	48.86	-49.43	62.82	3126490.76	1543662.18	40°49'29.417"N	105°02'34.673"W	9.00	
4278.00	11.800	173.700	4275.56	54.31	-54.89	63.58	3126491.52	1543656.72	40°49'29.363"N	105°02'34.664"W	10.25	
4310.00	15.000	175.700	4306.68	61.69	-62.27	64.25	3126492.19	1543649.34	40°49'29.290"N	105°02'34.655"W	10.10	
4341.00	18.400	177.100	4336.37	70.57	-71.16	64.80	3126492.74	1543640.45	40°49'29.202"N	105°02'34.649"W	11.04	
4373.00	22.200	177.200	4366.38	81.65	-82.25	65.35	3126493.29	1543629.36	40°49'29.093"N	105°02'34.642"W	11.88	
4404.00	25.900	177.300	4394.68	94.26	-94.86	65.96	3126493.90	1543616.75	40°49'28.968"N	105°02'34.635"W	11.94	
4436.00	29.900	177.400	4422.95	109.21	-109.82	66.65	3126494.59	1543601.79	40°49'28.820"N	105°02'34.627"W	12.50	
4467.00	34.200	177.500	4449.22	125.63	-126.25	67.38	3126495.32	1543585.36	40°49'28.658"N	105°02'34.619"W	13.87	
4499.00	37.400	178.400	4475.17	144.33	-144.95	68.04	3126495.98	1543566.66	40°49'28.473"N	105°02'34.612"W	10.13	



Actual Wellpath Report
RAWHIDE FLATS 10-68-19-1BH AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	MARATHON OIL COMPANY	Slot	SLOT#01 RAWHIDE FLATS 10-68-19-1BH (750'FNL & 1289'FEL, SEC.19)
Area	COLORADO	Well	RAWHIDE FLATS 10-68-19-1BH
Field	LARIMER COUNTY (NAD 83, GRID NORTH)	Wellbore	RAWHIDE FLATS 10-68-19-1BH AWB
Facility	SEC.19-T10N-R68W		

WELLPATH DATA (106 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
4530.00	39.100	179.300	4499.52	163.51	-164.14	68.43	3126496.37	1543547.47	40°49'28.283"N	105°02'34.608"W	5.77	
4562.00	42.500	180.200	4523.74	184.42	-185.05	68.51	3126496.45	1543526.56	40°49'28.077"N	105°02'34.608"W	10.78	
4593.00	46.700	180.900	4545.81	206.18	-206.81	68.30	3126496.24	1543504.80	40°49'27.862"N	105°02'34.612"W	13.64	
4625.00	51.000	181.400	4566.86	230.27	-230.89	67.81	3126495.75	1543480.72	40°49'27.624"N	105°02'34.620"W	13.49	
4656.00	55.600	181.500	4585.38	255.11	-255.73	67.18	3126495.12	1543455.88	40°49'27.379"N	105°02'34.630"W	14.84	
4688.00	59.500	181.700	4602.55	282.10	-282.72	66.43	3126494.37	1543428.89	40°49'27.112"N	105°02'34.642"W	12.20	
4719.00	61.700	182.100	4617.76	309.10	-309.71	65.53	3126493.47	1543401.90	40°49'26.845"N	105°02'34.655"W	7.19	
4751.00	63.600	183.000	4632.47	337.51	-338.10	64.26	3126492.20	1543373.50	40°49'26.565"N	105°02'34.674"W	6.44	
4782.00	64.300	183.900	4646.08	365.32	-365.90	62.59	3126490.53	1543345.71	40°49'26.290"N	105°02'34.697"W	3.45	
4814.00	64.500	185.000	4659.91	394.11	-394.67	60.35	3126488.29	1543316.93	40°49'26.006"N	105°02'34.728"W	3.16	
4845.00	66.800	186.500	4672.69	422.23	-422.77	57.52	3126485.46	1543288.84	40°49'25.729"N	105°02'34.767"W	8.63	
4877.00	70.700	187.600	4684.28	451.86	-452.36	53.85	3126481.79	1543259.24	40°49'25.436"N	105°02'34.817"W	12.60	
4909.00	74.300	188.600	4693.91	482.10	-482.57	49.55	3126477.49	1543229.04	40°49'25.138"N	105°02'34.875"W	11.64	
4940.00	75.900	189.000	4701.88	511.75	-512.18	44.97	3126472.91	1543199.43	40°49'24.846"N	105°02'34.936"W	5.31	
4971.00	76.000	188.700	4709.40	541.50	-541.89	40.34	3126468.28	1543169.72	40°49'24.552"N	105°02'34.999"W	0.99	
5003.00	76.000	188.900	4717.14	572.23	-572.57	35.59	3126463.53	1543139.03	40°49'24.250"N	105°02'35.062"W	0.61	
5035.00	75.900	188.600	4724.91	602.95	-603.26	30.87	3126458.81	1543108.35	40°49'23.947"N	105°02'35.126"W	0.96	
5066.00	77.900	187.900	4731.94	632.87	-633.13	26.54	3126454.48	1543078.47	40°49'23.652"N	105°02'35.184"W	6.82	
5098.00	78.600	188.000	4738.45	663.93	-664.16	22.20	3126450.14	1543047.44	40°49'23.345"N	105°02'35.243"W	2.21	
5129.00	78.700	188.000	4744.56	694.07	-694.26	17.97	3126445.91	1543017.35	40°49'23.048"N	105°02'35.300"W	0.32	
5161.00	78.900	187.700	4750.77	725.20	-725.36	13.69	3126441.63	1542986.25	40°49'22.741"N	105°02'35.358"W	1.11	
5192.00	78.900	187.700	4756.74	755.38	-755.50	9.61	3126437.55	1542956.10	40°49'22.443"N	105°02'35.413"W	0.00	
5224.00	79.300	187.900	4762.79	786.55	-786.63	5.35	3126433.29	1542924.97	40°49'22.136"N	105°02'35.470"W	1.39	
5255.00	79.400	187.800	4768.52	816.77	-816.82	1.18	3126429.12	1542894.79	40°49'21.838"N	105°02'35.526"W	0.45	
5287.00	81.400	187.400	4773.86	848.08	-848.09	-2.99	3126424.95	1542863.52	40°49'21.529"N	105°02'35.583"W	6.37	
5318.00	85.900	186.400	4777.28	878.69	-878.67	-6.69	3126421.25	1542832.94	40°49'21.227"N	105°02'35.633"W	14.87	
5350.00	90.100	185.100	4778.40	910.53	-910.48	-9.89	3126418.05	1542801.13	40°49'20.913"N	105°02'35.677"W	13.74	
5372.00	91.100	184.500	4778.17	932.47	-932.40	-11.73	3126416.21	1542779.21	40°49'20.697"N	105°02'35.702"W	5.30	
5451.00	92.100	185.300	4775.96	1011.21	-1011.08	-18.48	3126409.46	1542700.53	40°49'19.919"N	105°02'35.795"W	1.62	
5543.00	88.600	185.000	4775.40	1102.89	-1102.69	-26.73	3126401.21	1542608.91	40°49'19.015"N	105°02'35.909"W	3.82	
5635.00	85.300	183.500	4780.30	1194.55	-1194.29	-33.54	3126394.40	1542517.31	40°49'18.110"N	105°02'36.003"W	3.94	
5727.00	85.000	182.600	4788.07	1286.13	-1285.83	-38.42	3126389.52	1542425.77	40°49'17.206"N	105°02'36.073"W	1.03	
5821.00	85.600	181.200	4795.78	1379.78	-1379.46	-41.52	3126386.42	1542332.14	40°49'16.281"N	105°02'36.120"W	1.62	
5913.00	87.900	180.500	4800.99	1471.63	-1471.30	-42.89	3126385.05	1542240.30	40°49'15.373"N	105°02'36.143"W	2.61	
6006.00	89.600	181.800	4803.02	1564.59	-1564.25	-44.75	3126383.19	1542147.35	40°49'14.455"N	105°02'36.174"W	2.30	
6098.00	91.200	181.600	4802.38	1656.57	-1656.21	-47.48	3126380.46	1542055.40	40°49'13.547"N	105°02'36.216"W	1.75	
6190.00	93.200	180.200	4798.85	1748.49	-1748.12	-48.93	3126379.01	1541963.48	40°49'12.639"N	105°02'36.240"W	2.65	
6282.00	94.300	179.300	4792.83	1840.28	-1839.92	-48.53	3126379.41	1541871.68	40°49'11.731"N	105°02'36.241"W	1.54	
6373.00	93.700	179.300	4786.48	1931.04	-1930.69	-47.42	3126380.52	1541780.91	40°49'10.834"N	105°02'36.233"W	0.66	
6465.00	94.700	179.500	4779.75	2022.78	-2022.44	-46.46	3126381.48	1541689.16	40°49'09.928"N	105°02'36.227"W	1.11	
6556.00	94.500	178.100	4772.45	2113.44	-2113.12	-44.56	3126383.38	1541598.48	40°49'09.032"N	105°02'36.208"W	1.55	
6648.00	95.900	178.600	4764.11	2204.99	-2204.70	-41.92	3126386.02	1541506.90	40°49'08.127"N	105°02'36.180"W	1.62	
6739.00	97.100	178.700	4753.81	2295.36	-2295.09	-39.79	3126388.15	1541416.51	40°49'07.234"N	105°02'36.158"W	1.32	
6834.00	97.500	178.900	4741.74	2389.54	-2389.30	-37.81	3126390.13	1541322.30	40°49'06.303"N	105°02'36.139"W	0.47	
6929.00	97.500	179.200	4729.34	2483.70	-2483.47	-36.25	3126391.69	1541228.12	40°49'05.372"N	105°02'36.125"W	0.31	



Actual Wellpath Report

RAWHIDE FLATS 10-68-19-1BH AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 RAWHIDE FLATS 10-68-19-1BH (750'FNL & 1289'FEL, SEC.19)
Area	COLORADO	Well	RAWHIDE FLATS 10-68-19-1BH
Field	LARIMER COUNTY (NAD 83, GRID NORTH)	Wellbore	RAWHIDE FLATS 10-68-19-1BH AWB
Facility	SEC.19-T10N-R68W		

WELLPATH DATA (106 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
7023.00	97.700	179.600	4716.90	2576.86	-2576.64	-35.28	3126392.66	1541134.95	40°49'04.451"N	105°02'36.118"W	0.47	
7118.00	98.700	180.100	4703.35	2670.88	-2670.67	-35.03	3126392.91	1541040.93	40°49'03.522"N	105°02'36.122"W	1.17	
7212.00	98.100	181.800	4689.62	2763.86	-2763.64	-36.57	3126391.37	1540947.95	40°49'02.604"N	105°02'36.148"W	1.90	
7307.00	97.900	182.600	4676.40	2857.90	-2857.65	-40.18	3126387.76	1540853.95	40°49'01.675"N	105°02'36.201"W	0.86	
7402.00	97.200	182.800	4663.92	2952.00	-2951.72	-44.62	3126383.32	1540759.87	40°49'00.746"N	105°02'36.265"W	0.77	
7496.00	97.200	182.300	4652.14	3045.20	-3044.89	-48.77	3126379.17	1540666.71	40°48'59.825"N	105°02'36.325"W	0.53	
7591.00	96.700	182.300	4640.64	3139.46	-3139.11	-52.55	3126375.38	1540572.48	40°48'58.895"N	105°02'36.381"W	0.53	
7685.00	95.800	181.500	4630.41	3232.87	-3232.50	-55.65	3126372.29	1540479.09	40°48'57.972"N	105°02'36.427"W	1.28	
7780.00	94.300	180.900	4622.05	3327.49	-3327.11	-57.63	3126370.31	1540384.48	40°48'57.037"N	105°02'36.459"W	1.70	
7874.00	93.900	181.000	4615.32	3421.25	-3420.85	-59.19	3126368.75	1540290.74	40°48'56.111"N	105°02'36.486"W	0.44	
7969.00	93.500	180.600	4609.19	3516.05	-3515.65	-60.51	3126367.43	1540195.95	40°48'55.174"N	105°02'36.510"W	0.59	
8063.00	92.800	179.900	4604.03	3609.91	-3609.50	-60.92	3126367.02	1540102.09	40°48'54.247"N	105°02'36.521"W	1.05	
8158.00	93.600	180.000	4598.73	3704.75	-3704.35	-60.84	3126367.10	1540007.24	40°48'53.310"N	105°02'36.526"W	0.85	
8252.00	93.400	179.200	4592.99	3798.57	-3798.18	-60.18	3126367.76	1539913.42	40°48'52.383"N	105°02'36.524"W	0.88	
8333.00	93.400	179.000	4588.18	3879.40	-3879.02	-58.91	3126369.03	1539832.57	40°48'51.584"N	105°02'36.513"W	0.25	LAST BHI MWD SURVEY
8400.00	93.400	179.000	4584.21	3946.26	-3945.90	-57.75	3126370.19	1539765.70	40°48'50.923"N	105°02'36.502"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: RAWHIDE FLATS 10-68-19-1BH AWB Ref Wellpath: RAWHIDE FLATS 10-68-19-1BH 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	1238.00	1213.00	25.00	1238.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1238.00	5425.00	4187.00	1238.00	4776.84	0.00	0.00	-985.20	-16.13
7in Casing Intermediate	25.00	5419.00	5394.00	25.00	4777.02	0.00	0.00	-979.23	-15.61
6in Open Hole	5425.00	8400.00	2975.00	4776.84	4584.21	-985.20	-16.13	-3945.90	-57.75



Actual Wellpath Report

RAWHIDE FLATS 10-68-19-1BH AWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 RAWHIDE FLATS 10-68-19-1BH (750'FNL & 1289'FEL, SEC.19)
Area	COLORADO	Well	RAWHIDE FLATS 10-68-19-1BH
Field	LARIMER COUNTY (NAD 83, GRID NORTH)	Wellbore	RAWHIDE FLATS 10-68-19-1BH AWB
Facility	SEC.19-T10N-R68W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
RAWHIDE FLATS 10-68-19-1BH BHL ON PLAT (610'FSL & 1289'FEL, REV-1)		4430.00	-3979.41	-36.16	3126391.78	1539732.18	40°48'50.591"N	105°02'36.224"W	point
RAWHIDE FLATS 10-68-19-1BH HARDLINES (600' SETBACKS)		5617.00	0.00	0.00	3126427.94	1543711.61	40°49'29.909"N	105°02'35.487"W	polygon
RAWHIDE FLATS 10-68-19-1BH SECTION LINES		5617.00	0.00	0.00	3126427.94	1543711.61	40°49'29.909"N	105°02'35.487"W	polygon
SLOT#01 ACKERMAN #1 (664'FNL & 663'FEL)		5745.00	80.90	610.39	3127038.33	1543792.51	40°49'30.677"N	105°02'27.542"W	circle

WELLPATH COMPOSITION - Ref Wellbore: RAWHIDE FLATS 10-68-19-1BH AWB Ref Wellpath: RAWHIDE FLATS 10-68-19-1BH AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	1238.00	Drift Indicator (Standard)	ASSUMED VERTICAL TO SURFACE CASING SHOE<0-1238>	RAWHIDE FLATS 10-68-19-1BH AWB
1238.00	5372.00	NaviTrak (Standard)	BHI NAVITAK MWD 8.75" HOLE <1261-5372>	RAWHIDE FLATS 10-68-19-1BH AWB
5372.00	8333.00	NaviTrak (Standard)	BHI NAVITRAK MWD 6"HOLE <5451-8333>	RAWHIDE FLATS 10-68-19-1BH AWB
8333.00	8400.00	Blind Drilling (std)	Projection to bit	RAWHIDE FLATS 10-68-19-1BH AWB



Actual Wellpath Report
RAWHIDE FLATS 10-68-19-1BH AWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#01 RAWHIDE FLATS 10-68-19-1BH (750'FNL & 1289'FEL, SEC.19)
Area	COLORADO	Well	RAWHIDE FLATS 10-68-19-1BH
Field	LARIMER COUNTY (NAD 83, GRID NORTH)	Wellbore	RAWHIDE FLATS 10-68-19-1BH AWB
Facility	SEC.19-T10N-R68W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1238.00	0.000	0.000	1238.00	TIED INTO SURFACE CASING SHOE
8333.00	93.400	179.000	4588.18	LAST BHI MWD SURVEY
8400.00	93.400	179.000	4584.21	PROJECTION TO BIT