

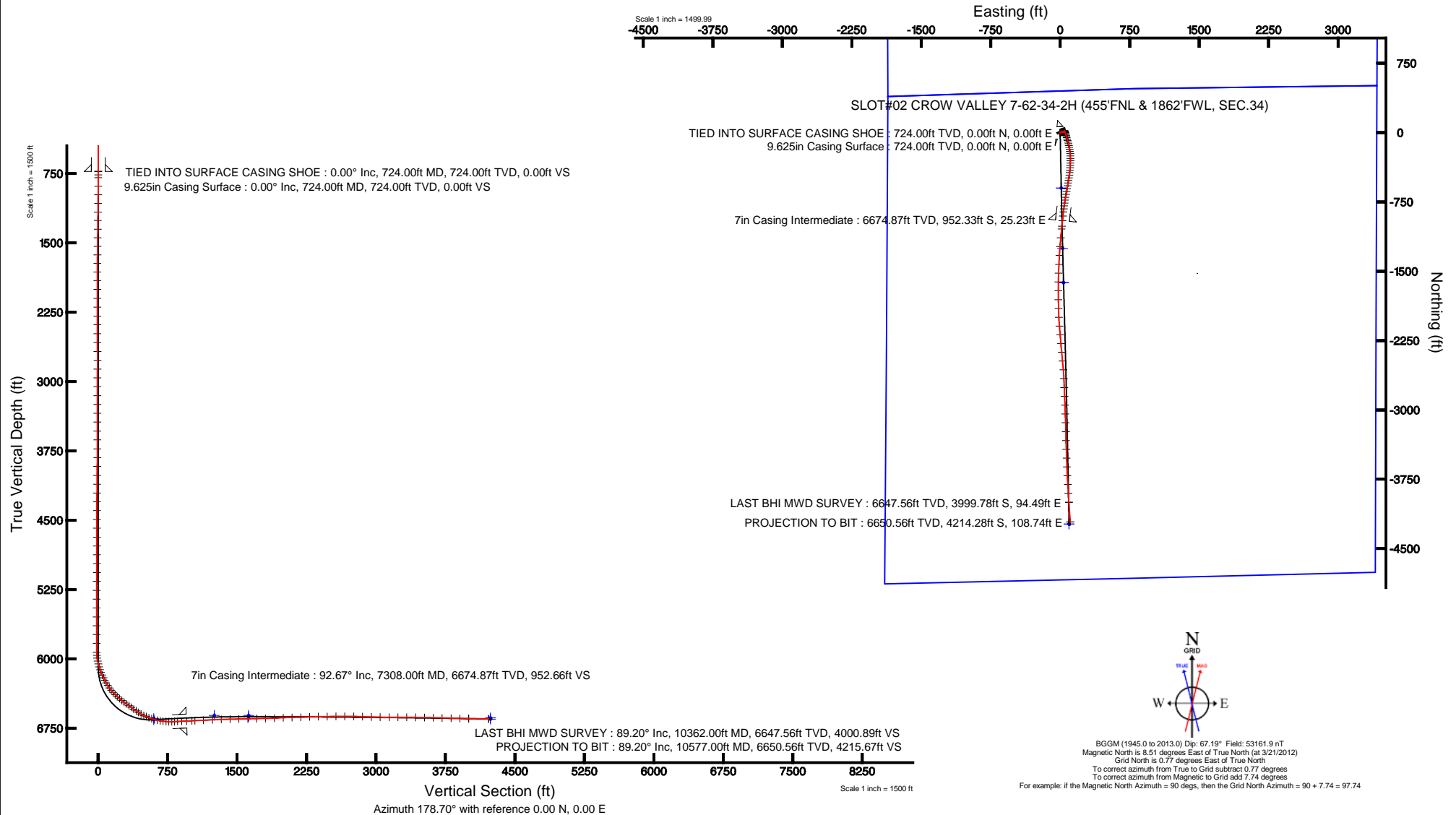


MARATHON OIL COMPANY

Location: COLORADO Slot: SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34)
Field: WELD COUNTY (NAD 83, GRID NORTH) Well: CROW VALLEY 7-62-34-2H
Facility: SEC.34-T7N-R62W Wellbore: CROW VALLEY 7-62-34-2H PWB



Plot reference wellpath is CROW VALLEY 7-62-34-2H (REV-H.0) PWP (VERT TO KOP)	
True vertical depths are referenced to Rig on SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34) (RKB)	North Reference: Grid north
Rig on SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34) (RKB) to Mean Sea Level: 4946 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdann on 4/18/2012





Actual Wellpath Report

CROW VALLEY 7-62-34-2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34)
Area	COLORADO	Well	CROW VALLEY 7-62-34-2H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-34-2H AWB
Facility	SEC.34-T7N-R62W		

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	0.999969	Report Generated	4/18/2012 at 5:06:45 PM
Convergence at slot	0.77° East	Database/Source file	WA_Denver/CROW_VALLEY_7-62-34-2H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	14.01	26.53	3330470.39	1440583.54	40°32'12.193"N	104°18'39.609"W
Facility Reference Pt			3330443.86	1440569.53	40°32'12.058"N	104°18'39.955"W
Field Reference Pt			3476081.76	1512960.14	40°43'43.704"N	103°46'55.829"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34) (RKB) to Facility Vertical Datum
Horizontal Reference Pt	Slot	Rig on SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34) (RKB) to Mean Sea Level
Vertical Reference Pt	Rig on SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34) (RKB)	Rig on SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34) (RKB) to Mud Line at Slot (SLOT#
MD Reference Pt	Rig on SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34) (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth



Actual Wellpath Report

CROW VALLEY 7-62-34-2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#02 CROW VALLEY 7-62-34-2H (455°FNL & 1862°FWL, SEC.34)
Area	COLORADO	Well	CROW VALLEY 7-62-34-2H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-34-2H AWB
Facility	SEC.34-T7N-R62W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station

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
0.00†	0.000	247.500	0.00	0.00	0.00	0.00	3330470.39	1440583.54	40°32'12.193"N	104°18'39.609"W	0.00	
31.00	0.000	247.500	31.00	0.00	0.00	0.00	3330470.39	1440583.54	40°32'12.193"N	104°18'39.609"W	0.00	
724.00	0.000	0.000	724.00	0.00	0.00	0.00	3330470.39	1440583.54	40°32'12.193"N	104°18'39.609"W	0.00	TIED INTO SURFACE CASING SHOE
762.00	0.100	247.500	762.00	0.01	-0.01	-0.03	3330470.36	1440583.53	40°32'12.193"N	104°18'39.609"W	0.26	
793.00	0.100	85.200	793.00	0.02	-0.02	-0.03	3330470.36	1440583.52	40°32'12.193"N	104°18'39.609"W	0.64	
885.00	1.600	61.100	884.99	-0.58	0.61	1.18	3330471.57	1440584.15	40°32'12.199"N	104°18'39.593"W	1.64	
978.00	1.500	58.900	977.95	-1.79	1.86	3.35	3330473.74	1440585.40	40°32'12.211"N	104°18'39.565"W	0.13	
1071.00	1.400	62.000	1070.92	-2.90	3.03	5.40	3330475.79	1440586.56	40°32'12.222"N	104°18'39.538"W	0.14	
1164.00	1.600	67.200	1163.89	-3.89	4.06	7.60	3330477.99	1440587.60	40°32'12.232"N	104°18'39.510"W	0.26	
1256.00	1.800	63.900	1255.85	-4.96	5.19	10.08	3330480.47	1440588.73	40°32'12.243"N	104°18'39.477"W	0.24	
1350.00	1.700	65.600	1349.81	-6.13	6.42	12.68	3330483.07	1440589.96	40°32'12.255"N	104°18'39.443"W	0.12	
1443.00	1.800	67.900	1442.76	-7.19	7.54	15.29	3330485.68	1440591.08	40°32'12.265"N	104°18'39.409"W	0.13	
1535.00	1.700	70.700	1534.72	-8.12	8.53	17.91	3330488.30	1440592.07	40°32'12.275"N	104°18'39.375"W	0.14	
1629.00	1.800	68.300	1628.68	-9.07	9.54	20.60	3330490.99	1440593.08	40°32'12.284"N	104°18'39.340"W	0.13	
1722.00	1.800	70.400	1721.63	-10.04	10.57	23.33	3330493.72	1440594.11	40°32'12.294"N	104°18'39.305"W	0.07	
1814.00	1.500	69.500	1813.59	-10.89	11.48	25.82	3330496.21	1440595.02	40°32'12.303"N	104°18'39.272"W	0.33	
1906.00	1.300	86.700	1905.57	-11.32	11.96	27.99	3330498.38	1440595.50	40°32'12.307"N	104°18'39.244"W	0.50	
2002.00	1.300	110.200	2001.54	-10.96	11.65	30.10	3330500.49	1440595.19	40°32'12.304"N	104°18'39.217"W	0.55	
2099.00	1.500	114.600	2098.51	-10.00	10.74	32.29	3330502.68	1440594.28	40°32'12.295"N	104°18'39.189"W	0.23	
2194.00	1.900	73.300	2193.47	-9.88	10.67	34.93	3330505.32	1440594.21	40°32'12.294"N	104°18'39.155"W	1.32	
2291.00	1.400	77.900	2290.43	-10.52	11.38	37.63	3330508.02	1440594.92	40°32'12.300"N	104°18'39.119"W	0.53	
2385.00	0.900	69.100	2384.41	-10.99	11.89	39.44	3330509.83	1440595.43	40°32'12.305"N	104°18'39.096"W	0.56	
2482.00	0.700	116.100	2481.41	-10.97	11.90	40.68	3330511.07	1440595.44	40°32'12.305"N	104°18'39.080"W	0.68	
2578.00	1.200	112.200	2577.39	-10.30	11.26	42.14	3330512.53	1440594.80	40°32'12.299"N	104°18'39.061"W	0.52	
2674.00	1.100	128.200	2673.37	-9.31	10.31	43.80	3330514.18	1440593.85	40°32'12.289"N	104°18'39.040"W	0.35	
2770.00	0.200	326.300	2769.37	-8.87	9.88	44.43	3330514.82	1440593.42	40°32'12.285"N	104°18'39.032"W	1.35	
2865.00	0.400	306.000	2864.37	-9.21	10.21	44.07	3330514.46	1440593.75	40°32'12.288"N	104°18'39.036"W	0.24	
2960.00	0.400	329.800	2959.36	-9.70	10.69	43.63	3330514.02	1440594.23	40°32'12.293"N	104°18'39.042"W	0.17	
3056.00	0.200	302.900	3055.36	-10.09	11.08	43.32	3330513.71	1440594.61	40°32'12.297"N	104°18'39.046"W	0.25	
3152.00	0.300	329.300	3151.36	-10.40	11.38	43.05	3330513.44	1440594.92	40°32'12.300"N	104°18'39.049"W	0.16	
3247.00	0.400	256.300	3246.36	-10.55	11.52	42.60	3330512.99	1440595.06	40°32'12.301"N	104°18'39.055"W	0.45	
3343.00	0.300	231.500	3342.36	-10.32	11.28	42.08	3330512.47	1440594.82	40°32'12.299"N	104°18'39.062"W	0.19	
3438.00	0.100	271.800	3437.36	-10.18	11.13	41.80	3330512.19	1440594.67	40°32'12.297"N	104°18'39.065"W	0.25	
3535.00	0.400	22.100	3534.36	-10.49	11.45	41.85	3330512.24	1440594.99	40°32'12.300"N	104°18'39.065"W	0.46	
3632.00	0.300	24.500	3631.36	-11.03	11.99	42.08	3330512.47	1440595.53	40°32'12.306"N	104°18'39.062"W	0.10	
3728.00	0.100	149.800	3727.36	-11.18	12.15	42.23	3330512.61	1440595.69	40°32'12.307"N	104°18'39.060"W	0.38	
3824.00	0.300	24.300	3823.36	-11.34	12.30	42.37	3330512.76	1440595.84	40°32'12.309"N	104°18'39.058"W	0.38	
3919.00	0.500	34.300	3918.35	-11.90	12.87	42.71	3330513.10	1440596.41	40°32'12.314"N	104°18'39.053"W	0.22	
4016.00	0.400	45.200	4015.35	-12.48	13.46	43.19	3330513.58	1440597.00	40°32'12.320"N	104°18'39.047"W	0.14	
4112.00	0.700	43.800	4111.35	-13.12	14.12	43.83	3330514.22	1440597.66	40°32'12.327"N	104°18'39.039"W	0.31	
4207.00	1.000	35.400	4206.34	-14.19	15.21	44.71	3330515.10	1440598.75	40°32'12.337"N	104°18'39.027"W	0.34	
4302.00	0.200	326.700	4301.33	-15.00	16.03	45.10	3330515.49	1440599.57	40°32'12.345"N	104°18'39.022"W	1.00	
4397.00	0.500	357.700	4396.33	-15.55	16.58	44.99	3330515.38	1440600.12	40°32'12.351"N	104°18'39.023"W	0.36	
4493.00	0.300	260.800	4492.33	-15.94	16.96	44.73	3330515.12	1440600.50	40°32'12.355"N	104°18'39.027"W	0.64	
4587.00	0.100	266.700	4586.33	-15.90	16.92	44.40	3330514.79	1440600.46	40°32'12.354"N	104°18'39.031"W	0.21	



Actual Wellpath Report

CROW VALLEY 7-62-34-2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#02 CROW VALLEY 7-62-34-2H (455°FNL & 1862°FWL, SEC.34)
Area	COLORADO	Well	CROW VALLEY 7-62-34-2H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-34-2H AWB
Facility	SEC.34-T7N-R62W		

WELLPATH DATA (134 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
4684.00	0.100	65.300	4683.33	-15.93	16.95	44.40	3330514.78	1440600.49	40°32'12.355"N	104°18'39.031"W	0.20	
4780.00	0.700	126.300	4779.32	-15.61	16.63	44.95	3330515.33	1440600.17	40°32'12.351"N	104°18'39.024"W	0.68	
4875.00	0.800	264.300	4874.32	-15.20	16.23	44.75	3330515.14	1440599.76	40°32'12.347"N	104°18'39.026"W	1.47	
4971.00	0.600	295.000	4970.31	-15.37	16.37	43.63	3330514.02	1440599.91	40°32'12.349"N	104°18'39.041"W	0.44	
5068.00	0.600	303.300	5067.31	-15.89	16.86	42.75	3330513.13	1440600.40	40°32'12.354"N	104°18'39.052"W	0.09	
5163.00	0.700	332.900	5162.30	-16.69	17.65	42.07	3330512.45	1440601.19	40°32'12.362"N	104°18'39.061"W	0.36	
5260.00	0.400	299.400	5259.30	-17.40	18.35	41.50	3330511.89	1440601.89	40°32'12.369"N	104°18'39.068"W	0.44	
5356.00	0.500	334.100	5355.29	-17.95	18.89	41.03	3330511.41	1440602.43	40°32'12.374"N	104°18'39.074"W	0.30	
5451.00	0.400	89.600	5450.29	-18.32	19.26	41.18	3330511.56	1440602.80	40°32'12.378"N	104°18'39.072"W	0.80	
5547.00	0.500	66.800	5546.29	-18.47	19.43	41.90	3330512.28	1440602.97	40°32'12.379"N	104°18'39.063"W	0.21	
5643.00	0.800	97.900	5642.28	-18.52	19.50	42.95	3330513.33	1440603.04	40°32'12.380"N	104°18'39.049"W	0.47	
5738.00	1.000	76.000	5737.27	-18.60	19.61	44.41	3330514.79	1440603.15	40°32'12.381"N	104°18'39.030"W	0.42	
5834.00	1.400	86.600	5833.25	-18.83	19.89	46.39	3330516.78	1440603.43	40°32'12.383"N	104°18'39.005"W	0.47	
5931.00	2.200	141.400	5930.21	-17.39	18.50	48.73	3330519.12	1440602.04	40°32'12.369"N	104°18'38.974"W	1.86	
5963.00	5.400	158.500	5962.14	-15.49	16.62	49.67	3330520.06	1440600.16	40°32'12.351"N	104°18'38.963"W	10.50	
5995.00	8.600	162.900	5993.89	-11.77	12.93	50.93	3330521.31	1440596.47	40°32'12.314"N	104°18'38.947"W	10.13	
6027.00	11.400	162.900	6025.40	-6.42	7.62	52.56	3330522.95	1440591.16	40°32'12.261"N	104°18'38.927"W	8.75	
6059.00	14.600	161.600	6056.58	0.48	0.77	54.76	3330525.15	1440584.31	40°32'12.193"N	104°18'38.899"W	10.04	
6091.00	17.600	160.700	6087.32	8.93	-7.63	57.64	3330528.02	1440575.91	40°32'12.110"N	104°18'38.864"W	9.41	
6123.00	19.800	162.000	6117.63	18.73	-17.35	60.91	3330531.30	1440566.19	40°32'12.013"N	104°18'38.823"W	7.00	
6155.00	22.300	165.500	6147.49	29.83	-28.38	64.11	3330534.49	1440555.16	40°32'11.904"N	104°18'38.783"W	8.74	
6187.00	24.800	165.800	6176.83	42.29	-40.77	67.27	3330537.66	1440542.77	40°32'11.781"N	104°18'38.745"W	7.82	
6219.00	26.700	164.000	6205.65	55.78	-54.19	70.90	3330541.29	1440529.36	40°32'11.648"N	104°18'38.700"W	6.42	
6251.00	29.100	162.100	6233.93	70.20	-68.50	75.27	3330545.66	1440515.04	40°32'11.506"N	104°18'38.646"W	8.00	
6282.00	31.500	162.000	6260.69	85.18	-83.38	80.09	3330550.48	1440500.16	40°32'11.358"N	104°18'38.586"W	7.74	
6314.00	33.700	163.900	6287.65	101.77	-99.86	85.14	3330555.53	1440483.68	40°32'11.195"N	104°18'38.523"W	7.58	
6347.00	36.500	166.800	6314.65	120.23	-118.22	89.92	3330560.31	1440465.32	40°32'11.013"N	104°18'38.465"W	9.87	
6379.00	38.700	168.700	6340.00	139.40	-137.30	94.06	3330564.44	1440446.25	40°32'10.824"N	104°18'38.415"W	7.77	
6411.00	41.300	169.100	6364.51	159.67	-157.48	98.01	3330568.40	1440426.06	40°32'10.624"N	104°18'38.367"W	8.16	
6443.00	45.200	169.800	6387.81	181.31	-179.03	102.02	3330572.41	1440404.51	40°32'10.410"N	104°18'38.319"W	12.28	
6475.00	48.000	171.700	6409.80	204.33	-201.98	105.75	3330576.14	1440381.57	40°32'10.183"N	104°18'38.274"W	9.75	
6507.00	50.200	173.700	6430.75	228.38	-225.97	108.82	3330579.20	1440357.58	40°32'09.946"N	104°18'38.239"W	8.34	
6540.00	52.900	177.000	6451.27	254.18	-251.72	110.90	3330581.28	1440331.83	40°32'09.691"N	104°18'38.216"W	11.32	
6572.00	54.400	179.800	6470.24	279.94	-277.48	111.61	3330582.00	1440306.07	40°32'09.437"N	104°18'38.212"W	8.46	
6603.00	53.700	182.300	6488.44	305.01	-302.56	111.15	3330581.54	1440280.99	40°32'09.189"N	104°18'38.222"W	6.91	
6635.00	53.600	183.100	6507.41	330.72	-328.31	109.94	3330580.33	1440255.24	40°32'08.935"N	104°18'38.242"W	2.04	
6667.00	53.200	182.500	6526.49	356.35	-353.97	108.68	3330579.07	1440229.58	40°32'08.681"N	104°18'38.263"W	1.96	
6699.00	53.500	183.000	6545.59	381.96	-379.61	107.45	3330577.84	1440203.94	40°32'08.428"N	104°18'38.283"W	1.57	
6732.00	55.700	185.100	6564.71	408.73	-406.44	105.55	3330575.93	1440177.11	40°32'08.163"N	104°18'38.312"W	8.45	
6763.00	58.200	186.200	6581.61	434.52	-432.29	102.98	3330573.37	1440151.26	40°32'07.908"N	104°18'38.350"W	8.60	
6795.00	60.400	187.700	6597.95	461.75	-459.60	99.65	3330570.04	1440123.95	40°32'07.639"N	104°18'38.398"W	7.97	
6828.00	63.100	190.100	6613.57	490.35	-488.32	95.15	3330565.53	1440095.24	40°32'07.356"N	104°18'38.461"W	10.39	
6859.00	66.200	190.400	6626.84	517.80	-515.88	90.16	3330560.55	1440067.68	40°32'07.084"N	104°18'38.531"W	10.04	
6891.00	69.000	190.100	6639.03	546.78	-544.99	84.90	3330555.29	1440038.57	40°32'06.797"N	104°18'38.604"W	8.79	
6923.00	72.500	190.400	6649.58	576.37	-574.72	79.52	3330549.91	1440008.84	40°32'06.504"N	104°18'38.679"W	10.97	



Actual Wellpath Report

CROW VALLEY 7-62-34-2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34)
Area	COLORADO	Well	CROW VALLEY 7-62-34-2H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-34-2H AWB
Facility	SEC.34-T7N-R62W		

WELLPATH DATA (134 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
6956.00	75.300	189.600	6658.73	607.46	-605.94	74.02	3330544.41	1439977.62	40°32'06.196"N	104°18'38.755"W	8.80	
6987.00	77.600	189.800	6666.00	637.04	-635.64	68.94	3330539.33	1439947.92	40°32'05.903"N	104°18'38.826"W	7.45	
7019.00	81.400	189.400	6671.83	667.93	-666.66	63.70	3330534.08	1439916.90	40°32'05.598"N	104°18'38.900"W	11.94	
7051.00	83.200	189.500	6676.11	699.09	-697.94	58.49	3330528.88	1439885.62	40°32'05.289"N	104°18'38.972"W	5.63	
7083.00	84.900	189.600	6679.43	730.34	-729.32	53.21	3330523.60	1439854.24	40°32'04.980"N	104°18'39.046"W	5.32	
7115.00	88.300	189.100	6681.33	761.73	-760.84	48.02	3330518.41	1439822.73	40°32'04.669"N	104°18'39.119"W	10.74	
7147.00	91.600	187.500	6681.36	793.28	-792.50	43.40	3330513.79	1439791.07	40°32'04.357"N	104°18'39.184"W	11.46	
7179.00	92.300	187.200	6680.27	824.90	-824.22	39.31	3330509.70	1439759.35	40°32'04.044"N	104°18'39.243"W	2.38	
7211.00	92.500	186.700	6678.93	856.54	-855.95	35.44	3330505.83	1439727.62	40°32'03.731"N	104°18'39.298"W	1.68	
7256.00	92.200	185.800	6677.08	901.11	-900.65	30.55	3330500.94	1439682.92	40°32'03.290"N	104°18'39.370"W	2.11	
7367.00	93.200	186.100	6671.85	1011.10	-1010.92	19.05	3330489.44	1439572.65	40°32'02.202"N	104°18'39.538"W	0.94	
7399.00	93.700	186.200	6669.93	1042.77	-1042.68	15.63	3330486.02	1439540.89	40°32'01.889"N	104°18'39.587"W	1.59	
7494.00	91.700	184.800	6665.45	1136.99	-1137.13	6.54	3330476.93	1439446.44	40°32'00.957"N	104°18'39.722"W	2.57	
7590.00	93.400	184.500	6661.18	1232.37	-1232.72	-1.24	3330469.15	1439350.86	40°32'00.013"N	104°18'39.839"W	1.80	
7686.00	91.700	183.300	6656.91	1327.88	-1328.40	-7.76	3330462.63	1439255.19	40°31'59.069"N	104°18'39.940"W	2.17	
7782.00	91.500	182.900	6654.23	1423.56	-1424.22	-12.95	3330457.44	1439159.37	40°31'58.123"N	104°18'40.024"W	0.47	
7877.00	91.000	182.300	6652.16	1518.31	-1519.10	-17.26	3330453.13	1439064.49	40°31'57.186"N	104°18'40.096"W	0.82	
7974.00	91.100	180.300	6650.38	1615.19	-1616.05	-19.46	3330450.93	1438967.54	40°31'56.228"N	104°18'40.141"W	2.06	
8069.00	92.100	180.200	6647.73	1710.12	-1711.01	-19.87	3330450.52	1438872.58	40°31'55.290"N	104°18'40.163"W	1.06	
8165.00	90.600	178.900	6645.46	1806.08	-1806.98	-19.12	3330451.27	1438776.62	40°31'54.342"N	104°18'40.170"W	2.07	
8261.00	92.400	178.500	6642.95	1902.04	-1902.92	-16.94	3330453.45	1438680.69	40°31'53.393"N	104°18'40.159"W	1.92	
8356.00	92.500	177.600	6638.89	1996.95	-1997.77	-13.71	3330456.68	1438585.83	40°31'52.456"N	104°18'40.133"W	0.95	
8452.00	91.200	175.100	6635.79	2092.80	-2093.52	-7.60	3330462.79	1438490.09	40°31'51.509"N	104°18'40.071"W	2.93	
8547.00	92.200	175.200	6632.97	2187.58	-2188.14	0.43	3330470.82	1438395.48	40°31'50.573"N	104°18'39.983"W	1.06	
8641.00	92.100	174.700	6629.45	2281.31	-2281.70	8.69	3330479.08	1438301.91	40°31'49.647"N	104°18'39.892"W	0.54	
8736.00	90.900	175.300	6626.96	2376.08	-2376.31	16.97	3330487.36	1438207.31	40°31'48.712"N	104°18'39.802"W	1.41	
8832.00	91.000	174.300	6625.37	2471.84	-2471.90	25.67	3330496.06	1438111.72	40°31'47.766"N	104°18'39.706"W	1.05	
8928.00	90.300	175.000	6624.28	2567.60	-2567.47	34.62	3330505.01	1438016.15	40°31'46.820"N	104°18'39.606"W	1.03	
9023.00	90.700	177.800	6623.45	2662.51	-2662.27	40.59	3330510.97	1437921.35	40°31'45.883"N	104°18'39.545"W	2.98	
9120.00	88.500	178.000	6624.13	2759.49	-2759.20	44.14	3330514.53	1437824.43	40°31'44.925"N	104°18'39.516"W	2.28	
9215.00	88.000	176.700	6627.03	2854.42	-2854.05	48.53	3330518.92	1437729.58	40°31'43.987"N	104°18'39.476"W	1.47	
9311.00	88.300	178.700	6630.13	2950.35	-2949.92	52.38	3330522.77	1437633.72	40°31'43.039"N	104°18'39.443"W	2.11	
9406.00	89.200	178.300	6632.20	3045.32	-3044.86	54.87	3330525.25	1437538.78	40°31'42.101"N	104°18'39.427"W	1.04	
9502.00	89.600	177.300	6633.21	3141.30	-3140.79	58.55	3330528.94	1437442.86	40°31'41.153"N	104°18'39.396"W	1.12	
9598.00	89.500	179.300	6633.96	3237.29	-3236.74	61.40	3330531.79	1437346.91	40°31'40.204"N	104°18'39.376"W	2.09	
9693.00	90.100	178.400	6634.29	3332.29	-3331.71	63.31	3330533.69	1437251.93	40°31'39.265"N	104°18'39.368"W	1.14	
9788.00	89.100	177.900	6634.95	3427.28	-3426.66	66.37	3330536.76	1437156.99	40°31'38.327"N	104°18'39.344"W	1.18	
9884.00	89.400	178.000	6636.21	3523.27	-3522.59	69.81	3330540.19	1437061.06	40°31'37.379"N	104°18'39.316"W	0.33	
9979.00	88.600	178.300	6637.87	3618.25	-3617.53	72.87	3330543.26	1436966.13	40°31'36.440"N	104°18'39.293"W	0.90	
10075.00	88.300	176.600	6640.47	3714.19	-3713.39	77.14	3330547.53	1436870.27	40°31'35.492"N	104°18'39.255"W	1.80	
10171.00	88.800	176.600	6642.89	3810.09	-3809.19	82.83	3330553.22	1436774.47	40°31'34.545"N	104°18'39.198"W	0.52	
10267.00	88.200	176.600	6645.41	3905.99	-3904.99	88.52	3330558.91	1436678.68	40°31'33.598"N	104°18'39.140"W	0.62	
10362.00	89.200	176.200	6647.56	4000.89	-3999.78	94.49	3330564.88	1436583.89	40°31'32.661"N	104°18'39.080"W	1.13	LAST BHI MWD SURVEY
10577.00	89.200	176.200	6650.56	4215.67	-4214.28	108.74	3330579.12	1436369.39	40°31'30.539"N	104°18'38.933"W	0.00	PROJECTION TO BIT



Actual Wellpath Report

CROW VALLEY 7-62-34-2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34)
Area	COLORADO	Well	CROW VALLEY 7-62-34-2H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-34-2H AWB
Facility	SEC.34-T7N-R62W		

HOLE & CASING SECTIONS - Ref Wellbore: CROW VALLEY 7-62-34-2H AWB Ref Wellpath: CROW VALLEY 7-62-34-2H 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	31.00	724.00	693.00	31.00	724.00	0.00	0.00	0.00	0.00
8.75in Open Hole	724.00	7320.00	6596.00	724.00	6674.30	0.00	0.00	-964.25	23.99
7in Casing Intermediate	31.00	7308.00	7277.00	31.00	6674.87	0.00	0.00	-952.33	25.23
6in Open Hole	7308.00	10577.00	3269.00	6674.87	6650.56	-952.33	25.23	-4214.28	108.74

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
CROW VALLEY SECTION 27		109.00	187.48	5257.05	3335727.27	1440771.01	40°32'13.343"N	104°17'31.495"W	polygon
CROW VALLEY SECTION 34		109.00	187.48	5257.05	3335727.27	1440771.01	40°32'13.343"N	104°17'31.495"W	polygon
CROW VALLEY 7-62-34-2H PT#2 (REV-1)		6613.00	-1252.50	26.60	3330496.99	1439331.08	40°31'59.814"N	104°18'39.482"W	point
CROW VALLEY 7-62-34-2H PT#2 (REV-2)		6614.00	-1623.58	36.68	3330507.07	1438960.01	40°31'56.146"N	104°18'39.416"W	point
CROW VALLEY 7-62-34-2H PT#2 (REV-3)		6627.00	-1623.58	36.68	3330507.07	1438960.01	40°31'56.146"N	104°18'39.416"W	point
CROW VALLEY 7-62-34-2H BHL ON PLAT (470'FSL & 1987'FWL, REV-2)		6640.00	-4365.41	95.46	3330565.85	1436218.27	40°31'29.048"N	104°18'39.131"W	point
CROW VALLEY 7-62-34-2H BHL ON PLAT (600'FSL & 1987'FWL, REV-3)		6640.00	-4235.36	96.32	3330566.71	1436348.32	40°31'30.333"N	104°18'39.097"W	point
CROW VALLEY 7-62-34-2H BHL ON PLAT (470'FSL & 1987'FWL, REV-1)		6645.00	-4365.41	95.46	3330565.85	1436218.27	40°31'29.048"N	104°18'39.131"W	point
CROW VALLEY 7-62-34-2H LANDING FROM EXCEL (REV-1)		6647.00	-598.32	11.95	3330482.34	1439985.24	40°32'06.280"N	104°18'39.558"W	point
CROW VALLEY 7-62-34-2H BHL ON PLAT (600'FSL & 1987'FWL, REV-4)		6653.00	-4235.36	96.32	3330566.71	1436348.32	40°31'30.333"N	104°18'39.097"W	point
CROW VALLEY 7-62-34-2H LANDING FROM EXCEL (REV-2)		6660.00	-598.32	11.95	3330482.34	1439985.24	40°32'06.280"N	104°18'39.558"W	point

**Actual Wellpath Report**

CROW VALLEY 7-62-34-2H AWP

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**REFERENCE WELLPATH IDENTIFICATION**

Operator	MARATHON OIL COMPANY	Slot	SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34)
Area	COLORADO	Well	CROW VALLEY 7-62-34-2H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-34-2H AWB
Facility	SEC.34-T7N-R62W		

WELLPATH COMPOSITION - Ref Wellbore: CROW VALLEY 7-62-34-2H AWB Ref Wellpath: CROW VALLEY 7-62-34-2H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
31.00	724.00	Drift Indicator (Standard)	ASSUMED VERTICAL TO SURFACE CASING <724>	CROW VALLEY 7-62-34-2H AWB
724.00	7256.00	NaviTrak (Standard)	BHI/NAVITRAK MWD 8.75" - <724-7320>	CROW VALLEY 7-62-34-2H AWB
7256.00	10362.00	OnTrak (Standard)	BHI/ONTRAK MWD 6" - <7367-10362>	CROW VALLEY 7-62-34-2H AWB
10362.00	10577.00	Blind Drilling (std)	Projection to bit	CROW VALLEY 7-62-34-2H AWB



Actual Wellpath Report

CROW VALLEY 7-62-34-2H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	MARATHON OIL COMPANY	Slot	SLOT#02 CROW VALLEY 7-62-34-2H (455'FNL & 1862'FWL, SEC.34)
Area	COLORADO	Well	CROW VALLEY 7-62-34-2H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-34-2H AWB
Facility	SEC.34-T7N-R62W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
724.00	0.000	0.000	724.00	TIED INTO SURFACE CASING SHOE
10362.00	89.200	176.200	6647.56	LAST BHI MWD SURVEY
10577.00	89.200	176.200	6650.56	PROJECTION TO BIT