



Actual Wellpath Report

CROW VALLEY 7-62-30-2H AWP

Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#02 CROW VALLEY 7-62-30-2H (437'FSL & 2137'FWL, SEC. 30)
Area	COLORADO	Well	CROW VALLEY 7-62-30-2H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-30-2H AWB
Facility	SEC.30-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	5/23/2012 at 11:49:07 AM
Convergence at slot	0.73° East	Database/Source file	WA_Denver/CROW_VALLEY_7-62-30-2H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	29.52	-5.34	3314851.57	1441130.48	40°32'19.618"N	104°22'01.797"W
Facility Reference Pt			3314856.91	1441100.96	40°32'19.325"N	104°22'01.733"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	4842.00ft
Horizontal Reference Pt	Slot	H&P 321 (RKB) to Mean Sea Level	4842.00ft
Vertical Reference Pt	H&P 321 (RKB)	H&P 321 (RKB) to Mud Line at Slot (SLOT#02 CROW VALLEY 7-62-30-2H (437'FSL & 2137'FWL, SEC. 30))	4842.00ft
MD Reference Pt	H&P 321 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	356.96°



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Page 2 of 6



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Area	COLORADO	Well	CROW VALLEY 7-62-30-2H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-30-2H AWB
Facility	SEC.30-T7N-R62W		

WELLPATH DATA (133 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
725.00	0.000	348.900	725.00	0.00	0.00	0.00	3314851.57	1441130.48	40°32'19.618"N	104°22'01.797"W	0.00	TIED INTO SURFACE CASING SHOE
798.00	0.300	348.900	798.00	0.19	0.19	-0.04	3314851.53	1441130.67	40°32'19.620"N	104°22'01.798"W	0.41	
889.00	0.300	340.800	889.00	0.65	0.65	-0.16	3314851.41	1441131.13	40°32'19.624"N	104°22'01.799"W	0.05	
980.00	0.400	311.400	980.00	1.11	1.08	-0.48	3314851.09	1441131.56	40°32'19.628"N	104°22'01.803"W	0.22	
1072.00	0.400	321.600	1071.99	1.59	1.55	-0.92	3314850.65	1441132.03	40°32'19.633"N	104°22'01.809"W	0.08	
1167.00	0.400	301.800	1166.99	2.05	1.98	-1.41	3314850.16	1441132.46	40°32'19.637"N	104°22'01.815"W	0.14	
1261.00	0.100	325.500	1260.99	2.31	2.22	-1.73	3314849.84	1441132.70	40°32'19.640"N	104°22'01.819"W	0.33	
1352.00	0.100	29.000	1351.99	2.44	2.36	-1.74	3314849.83	1441132.84	40°32'19.641"N	104°22'01.819"W	0.12	
1445.00	0.300	43.100	1444.99	2.68	2.60	-1.53	3314850.04	1441133.08	40°32'19.644"N	104°22'01.817"W	0.22	
1538.00	0.300	115.900	1537.99	2.73	2.68	-1.15	3314850.42	1441133.16	40°32'19.644"N	104°22'01.812"W	0.38	
1632.00	0.300	140.900	1631.99	2.41	2.38	-0.77	3314850.80	1441132.86	40°32'19.641"N	104°22'01.807"W	0.14	
1723.00	1.000	314.700	1722.98	2.81	2.75	-1.18	3314850.39	1441133.23	40°32'19.645"N	104°22'01.812"W	1.43	
1816.00	0.300	7.500	1815.98	3.65	3.56	-1.73	3314849.84	1441134.04	40°32'19.653"N	104°22'01.819"W	0.92	
1912.00	0.700	3.300	1911.97	4.48	4.40	-1.66	3314849.91	1441134.88	40°32'19.661"N	104°22'01.818"W	0.42	
2008.00	0.700	359.500	2007.97	5.65	5.57	-1.63	3314849.94	1441136.05	40°32'19.673"N	104°22'01.817"W	0.05	
2104.00	0.800	346.500	2103.96	6.89	6.81	-1.80	3314849.77	1441137.29	40°32'19.685"N	104°22'01.819"W	0.20	
2200.00	1.100	15.100	2199.95	8.43	8.35	-1.71	3314849.86	1441138.83	40°32'19.700"N	104°22'01.818"W	0.58	
2296.00	1.100	23.700	2295.93	10.13	10.08	-1.10	3314850.47	1441140.56	40°32'19.717"N	104°22'01.810"W	0.17	
2392.00	1.100	19.800	2391.91	11.80	11.79	-0.42	3314851.15	1441142.27	40°32'19.734"N	104°22'01.801"W	0.08	
2488.00	1.000	28.800	2487.90	13.36	13.39	0.30	3314851.87	1441143.87	40°32'19.750"N	104°22'01.791"W	0.20	
2584.00	0.900	26.600	2583.88	14.73	14.80	1.04	3314852.61	1441145.28	40°32'19.764"N	104°22'01.781"W	0.11	
2680.00	1.100	35.400	2679.87	16.10	16.23	1.91	3314853.48	1441146.71	40°32'19.778"N	104°22'01.770"W	0.26	
2776.00	1.000	43.000	2775.85	17.41	17.59	3.01	3314854.58	1441148.07	40°32'19.791"N	104°22'01.755"W	0.18	
2871.00	1.200	54.700	2870.83	18.51	18.77	4.39	3314855.96	1441149.25	40°32'19.803"N	104°22'01.737"W	0.32	
2967.00	1.100	59.000	2966.81	19.48	19.83	6.00	3314857.57	1441150.31	40°32'19.813"N	104°22'01.716"W	0.14	
3063.00	0.900	45.200	3062.80	20.42	20.83	7.33	3314858.90	1441151.31	40°32'19.823"N	104°22'01.699"W	0.32	
3160.00	1.100	46.700	3159.79	21.53	22.01	8.54	3314860.11	1441152.49	40°32'19.834"N	104°22'01.683"W	0.21	
3256.00	0.700	46.900	3255.77	22.50	23.04	9.64	3314861.21	1441153.52	40°32'19.844"N	104°22'01.668"W	0.42	
3352.00	0.800	51.700	3351.77	23.26	23.86	10.60	3314862.17	1441154.34	40°32'19.852"N	104°22'01.656"W	0.12	
3448.00	0.400	56.100	3447.76	23.82	24.46	11.40	3314862.97	1441154.94	40°32'19.858"N	104°22'01.645"W	0.42	
3544.00	0.300	170.200	3543.76	23.74	24.40	11.72	3314863.29	1441154.88	40°32'19.857"N	104°22'01.641"W	0.61	
3640.00	0.400	135.000	3639.76	23.24	23.91	12.00	3314863.57	1441154.39	40°32'19.853"N	104°22'01.638"W	0.24	
3736.00	1.200	0.500	3735.75	24.00	24.68	12.25	3314863.82	1441155.16	40°32'19.860"N	104°22'01.634"W	1.57	
3832.00	1.300	352.700	3831.73	26.09	26.77	12.12	3314863.69	1441157.25	40°32'19.881"N	104°22'01.636"W	0.21	
3927.00	1.200	352.300	3926.71	28.15	28.82	11.85	3314863.42	1441159.30	40°32'19.901"N	104°22'01.639"W	0.11	
4025.00	1.100	352.200	4024.69	30.11	30.77	11.58	3314863.15	1441161.25	40°32'19.920"N	104°22'01.642"W	0.10	
4120.00	0.900	347.100	4119.67	31.76	32.40	11.29	3314862.86	1441162.88	40°32'19.936"N	104°22'01.646"W	0.23	
4216.00	1.100	341.000	4215.66	33.39	34.01	10.82	3314862.39	1441164.49	40°32'19.952"N	104°22'01.651"W	0.24	
4312.00	0.700	308.300	4311.65	34.66	35.24	10.06	3314861.63	1441165.72	40°32'19.965"N	104°22'01.661"W	0.66	
4408.00	0.700	298.700	4407.64	35.36	35.89	9.09	3314860.66	1441166.37	40°32'19.971"N	104°22'01.674"W	0.12	
4504.00	0.500	279.600	4503.63	35.76	36.24	8.16	3314859.73	1441166.72	40°32'19.975"N	104°22'01.685"W	0.29	
4599.00	0.400	337.200	4598.63	36.16	36.62	7.63	3314859.20	1441167.09	40°32'19.979"N	104°22'01.692"W	0.47	
4694.00	0.300	18.600	4693.63	36.70	37.16	7.58	3314859.15	1441167.64	40°32'19.984"N	104°22'01.693"W	0.28	
4790.00	0.600	56.800	4789.63	37.19	37.67	8.08	3314859.65	1441168.15	40°32'19.989"N	104°22'01.686"W	0.43	
4885.00	0.400	42.500	4884.62	37.67	38.19	8.72	3314860.29	1441168.67	40°32'19.994"N	104°22'01.678"W	0.25	



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Page 3 of 6



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Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-30-2H AWB
Facility	SEC.30-T7N-R62W		

WELLPATH DATA (133 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
4980.00	0.500	49.800	4979.62	38.15	38.70	9.26	3314860.83	1441169.18	40°32'19.999"N	104°22'01.671"W	0.12	
5077.00	0.400	63.200	5076.62	38.55	39.12	9.88	3314861.45	1441169.60	40°32'20.003"N	104°22'01.663"W	0.15	
5172.00	0.800	62.000	5171.61	38.96	39.59	10.76	3314862.33	1441170.06	40°32'20.008"N	104°22'01.651"W	0.42	
5268.00	0.900	90.500	5267.60	39.20	39.89	12.11	3314863.68	1441170.37	40°32'20.010"N	104°22'01.634"W	0.45	
5364.00	0.800	92.300	5363.59	39.09	39.86	13.53	3314865.10	1441170.34	40°32'20.010"N	104°22'01.615"W	0.11	
5460.00	0.400	101.700	5459.58	38.94	39.77	14.53	3314866.10	1441170.24	40°32'20.009"N	104°22'01.602"W	0.43	
5556.00	0.200	23.800	5555.58	39.00	39.85	14.93	3314866.50	1441170.33	40°32'20.010"N	104°22'01.597"W	0.42	
5653.00	0.500	207.100	5652.58	38.79	39.63	14.80	3314866.37	1441170.11	40°32'20.007"N	104°22'01.599"W	0.72	
5749.00	0.600	230.100	5748.58	38.12	38.93	14.23	3314865.80	1441169.41	40°32'20.001"N	104°22'01.607"W	0.25	
5846.00	0.800	236.200	5845.57	37.47	38.23	13.27	3314864.84	1441168.71	40°32'19.994"N	104°22'01.619"W	0.22	
5941.00	0.500	245.500	5940.56	36.98	37.69	12.35	3314863.92	1441168.17	40°32'19.989"N	104°22'01.631"W	0.33	
5973.00	2.400	349.100	5972.56	37.60	38.29	12.09	3314863.66	1441168.77	40°32'19.995"N	104°22'01.634"W	8.01	
6005.00	5.200	355.300	6004.48	39.71	40.39	11.85	3314863.42	1441170.87	40°32'20.015"N	104°22'01.637"W	8.83	
6037.00	8.100	357.100	6036.26	43.41	44.09	11.61	3314863.18	1441174.57	40°32'20.052"N	104°22'01.639"W	9.08	
6069.00	11.400	357.900	6067.80	48.83	49.50	11.38	3314862.95	1441179.98	40°32'20.105"N	104°22'01.642"W	10.32	
6101.00	14.500	358.500	6098.98	56.00	56.67	11.16	3314862.73	1441187.15	40°32'20.176"N	104°22'01.643"W	9.70	
6133.00	17.400	359.100	6129.74	64.79	65.46	10.98	3314862.55	1441195.94	40°32'20.263"N	104°22'01.644"W	9.08	
6165.00	20.900	0.000	6159.97	75.27	75.96	10.91	3314862.48	1441206.44	40°32'20.367"N	104°22'01.643"W	10.98	
6197.00	23.900	359.000	6189.55	87.45	88.15	10.79	3314862.36	1441218.63	40°32'20.487"N	104°22'01.643"W	9.45	
6228.00	26.800	358.200	6217.56	100.72	101.42	10.47	3314862.03	1441231.89	40°32'20.618"N	104°22'01.645"W	9.42	
6260.00	29.300	357.900	6245.80	115.76	116.45	9.95	3314861.52	1441246.93	40°32'20.767"N	104°22'01.649"W	7.82	
6292.00	30.600	358.300	6273.53	131.73	132.42	9.42	3314860.99	1441262.90	40°32'20.925"N	104°22'01.653"W	4.11	
6324.00	33.100	358.300	6300.71	148.62	149.30	8.92	3314860.49	1441279.77	40°32'21.092"N	104°22'01.657"W	7.81	
6356.00	36.000	357.800	6327.06	166.76	167.43	8.30	3314859.87	1441297.91	40°32'21.271"N	104°22'01.662"W	9.11	
6388.00	37.700	357.400	6352.67	185.95	186.61	7.50	3314859.07	1441317.08	40°32'21.461"N	104°22'01.669"W	5.37	
6421.00	40.800	358.000	6378.22	206.82	207.47	6.66	3314858.23	1441337.94	40°32'21.667"N	104°22'01.677"W	9.46	
6452.00	44.100	357.800	6401.09	227.74	228.37	5.89	3314857.46	1441358.85	40°32'21.873"N	104°22'01.683"W	10.65	
6485.00	46.900	358.300	6424.22	251.27	251.89	5.10	3314856.67	1441382.37	40°32'22.106"N	104°22'01.690"W	8.55	
6517.00	49.900	358.900	6445.46	275.19	275.81	4.51	3314856.08	1441406.28	40°32'22.342"N	104°22'01.693"W	9.48	
6549.00	52.500	0.000	6465.51	300.10	300.75	4.28	3314855.85	1441431.22	40°32'22.589"N	104°22'01.692"W	8.56	
6581.00	54.400	0.700	6484.57	325.76	326.45	4.44	3314856.01	1441456.92	40°32'22.843"N	104°22'01.686"W	6.19	
6612.00	57.600	1.700	6501.90	351.38	352.14	4.98	3314856.55	1441482.61	40°32'23.097"N	104°22'01.674"W	10.66	
6644.00	59.600	0.800	6518.57	378.62	379.45	5.57	3314857.14	1441509.92	40°32'23.366"N	104°22'01.662"W	6.70	
6676.00	61.300	0.300	6534.35	406.40	407.28	5.84	3314857.41	1441537.75	40°32'23.641"N	104°22'01.654"W	5.48	
6707.00	62.900	358.900	6548.86	433.77	434.68	5.65	3314857.22	1441565.14	40°32'23.912"N	104°22'01.652"W	6.52	
6739.00	64.100	358.100	6563.14	462.39	463.31	4.90	3314856.47	1441593.77	40°32'24.195"N	104°22'01.657"W	4.37	
6771.00	67.500	357.600	6576.25	491.57	492.47	3.80	3314855.37	1441622.93	40°32'24.483"N	104°22'01.666"W	10.72	
6803.00	70.100	356.400	6587.82	521.41	522.26	2.24	3314853.81	1441652.72	40°32'24.778"N	104°22'01.682"W	8.85	
6834.00	71.500	356.500	6598.02	550.68	551.48	0.42	3314851.99	1441681.94	40°32'25.067"N	104°22'01.700"W	4.53	
6866.00	71.900	356.600	6608.07	581.06	581.80	-1.40	3314850.17	1441712.27	40°32'25.366"N	104°22'01.719"W	1.28	
6898.00	72.900	356.300	6617.74	611.56	612.25	-3.29	3314848.28	1441742.71	40°32'25.668"N	104°22'01.739"W	3.25	
6930.00	76.400	356.500	6626.21	642.41	643.04	-5.23	3314846.34	1441773.50	40°32'25.972"N	104°22'01.759"W	10.95	
6961.00	79.800	356.600	6632.60	672.74	673.31	-7.06	3314844.51	1441803.77	40°32'26.271"N	104°22'01.777"W	10.97	
6993.00	83.100	357.000	6637.36	704.38	704.91	-8.82	3314842.75	1441835.36	40°32'26.584"N	104°22'01.795"W	10.39	
7025.00	87.000	357.300	6640.12	736.26	736.74	-10.41	3314841.16	1441867.20	40°32'26.898"N	104°22'01.810"W	12.22	



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Page 4 of 6



REFERENCE WELLPATH IDENTIFICATION

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Area	COLORADO	Well	CROW VALLEY 7-62-30-2H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-30-2H AWB
Facility	SEC.30-T7N-R62W		

WELLPATH DATA (133 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
7057.00	89.500	357.200	6641.10	768.24	768.69	-11.94	3314839.63	1441899.14	40°32'27.214"N	104°22'01.825"W	7.82	
7089.00	89.700	357.100	6641.32	800.24	800.65	-13.53	3314838.04	1441931.10	40°32'27.530"N	104°22'01.840"W	0.70	
7121.00	89.800	357.100	6641.46	832.24	832.60	-15.15	3314836.42	1441963.06	40°32'27.846"N	104°22'01.856"W	0.31	
7165.00	90.100	356.600	6641.50	876.24	876.54	-17.57	3314834.00	1442006.99	40°32'28.281"N	104°22'01.880"W	1.33	
7244.00	90.200	356.500	6641.29	955.23	955.39	-22.32	3314829.25	1442085.84	40°32'29.060"N	104°22'01.928"W	0.18	
7306.00	90.400	356.700	6640.97	1017.23	1017.28	-26.00	3314825.57	1442147.73	40°32'29.672"N	104°22'01.966"W	0.46	
7402.00	89.800	355.700	6640.80	1113.22	1113.07	-32.36	3314819.21	1442243.52	40°32'30.620"N	104°22'02.032"W	1.21	
7498.00	90.200	356.500	6640.80	1209.21	1208.85	-38.89	3314812.68	1442339.29	40°32'31.567"N	104°22'02.101"W	0.93	
7594.00	91.000	356.200	6639.79	1305.20	1304.65	-45.00	3314806.57	1442435.08	40°32'32.514"N	104°22'02.164"W	0.89	
7691.00	92.400	356.200	6636.92	1402.14	1401.39	-51.43	3314800.14	1442531.82	40°32'33.471"N	104°22'02.231"W	1.44	
7786.00	92.000	356.200	6633.27	1497.06	1496.07	-58.30	3314793.27	1442626.50	40°32'34.407"N	104°22'02.300"W	0.85	
7882.00	90.000	355.300	6631.60	1593.00	1591.74	-65.99	3314785.58	1442722.17	40°32'35.353"N	104°22'02.389"W	2.09	
7978.00	89.200	354.300	6632.27	1688.93	1687.34	-74.70	3314776.88	1442817.77	40°32'36.299"N	104°22'02.485"W	1.33	
8074.00	88.600	355.400	6634.11	1784.84	1782.93	-83.31	3314768.26	1442913.36	40°32'37.245"N	104°22'02.581"W	1.31	
8171.00	88.800	356.000	6636.31	1881.79	1879.64	-90.58	3314760.99	1443010.05	40°32'38.201"N	104°22'02.659"W	0.65	
8268.00	90.300	356.300	6637.07	1978.78	1976.41	-97.09	3314754.48	1443106.83	40°32'39.158"N	104°22'02.728"W	1.58	
8363.00	90.300	356.900	6636.57	2073.78	2071.24	-102.73	3314748.85	1443201.65	40°32'40.096"N	104°22'02.785"W	0.63	
8457.00	91.100	357.500	6635.42	2167.77	2165.12	-107.32	3314744.25	1443295.53	40°32'41.024"N	104°22'02.829"W	1.06	
8554.00	91.100	357.300	6633.56	2264.75	2262.00	-111.72	3314739.85	1443392.41	40°32'41.982"N	104°22'02.870"W	0.21	
8649.00	91.400	357.200	6631.49	2359.72	2356.87	-116.28	3314735.30	1443487.27	40°32'42.920"N	104°22'02.913"W	0.33	
8746.00	89.200	357.500	6630.98	2456.71	2453.76	-120.76	3314730.81	1443584.16	40°32'43.878"N	104°22'02.955"W	2.29	
8841.00	89.700	358.200	6631.89	2551.70	2548.69	-124.32	3314727.25	1443679.09	40°32'44.816"N	104°22'02.986"W	0.91	
8938.00	90.200	358.200	6631.98	2648.67	2645.64	-127.37	3314724.20	1443776.03	40°32'45.774"N	104°22'03.009"W	0.52	
9034.00	89.600	358.000	6632.15	2744.65	2741.59	-130.55	3314721.02	1443871.98	40°32'46.723"N	104°22'03.035"W	0.66	
9130.00	87.800	357.600	6634.32	2840.61	2837.49	-134.24	3314717.34	1443967.87	40°32'47.671"N	104°22'03.066"W	1.92	
9225.00	87.000	357.600	6638.63	2935.51	2932.31	-138.21	3314713.36	1444062.69	40°32'48.608"N	104°22'03.102"W	0.84	
9321.00	87.900	356.900	6642.91	3031.41	3028.10	-142.81	3314708.76	1444158.48	40°32'49.555"N	104°22'03.146"W	1.19	
9418.00	89.000	355.900	6645.53	3128.37	3124.87	-148.90	3314702.67	1444255.25	40°32'50.512"N	104°22'03.209"W	1.53	
9514.00	91.200	356.200	6645.36	3224.35	3220.63	-155.51	3314696.06	1444351.01	40°32'51.459"N	104°22'03.279"W	2.31	
9610.00	90.500	355.600	6643.94	3320.32	3316.38	-162.38	3314689.20	1444446.75	40°32'52.406"N	104°22'03.352"W	0.96	
9705.00	91.400	356.300	6642.36	3415.29	3411.13	-169.09	3314682.49	1444541.49	40°32'53.343"N	104°22'03.423"W	1.20	
9802.00	91.000	356.500	6640.33	3512.27	3507.91	-175.18	3314676.40	1444638.28	40°32'54.300"N	104°22'03.486"W	0.46	
9898.00	90.800	357.700	6638.82	3608.25	3603.78	-180.03	3314671.54	1444734.14	40°32'55.248"N	104°22'03.533"W	1.27	
9994.00	90.300	357.000	6637.90	3704.24	3699.67	-184.47	3314667.11	1444830.03	40°32'56.196"N	104°22'03.574"W	0.90	
10090.00	90.100	357.500	6637.57	3800.24	3795.56	-189.08	3314662.50	1444925.91	40°32'57.144"N	104°22'03.618"W	0.56	
10185.00	91.100	357.500	6636.57	3895.23	3890.46	-193.22	3314658.36	1445020.81	40°32'58.082"N	104°22'03.656"W	1.05	
10281.00	89.600	358.000	6635.99	3991.22	3986.38	-196.99	3314654.59	1445116.73	40°32'59.030"N	104°22'03.689"W	1.65	
10377.00	89.900	357.400	6636.40	4087.21	4082.30	-200.84	3314650.74	1445212.65	40°32'59.979"N	104°22'03.723"W	0.70	
10472.00	89.500	357.300	6636.90	4182.20	4177.20	-205.23	3314646.34	1445307.54	40°33'00.917"N	104°22'03.764"W	0.43	
10568.00	89.100	357.700	6638.07	4278.19	4273.10	-209.42	3314642.16	1445403.44	40°33'01.865"N	104°22'03.803"W	0.59	
10664.00	88.800	357.200	6639.83	4374.17	4368.99	-213.69	3314637.89	1445499.33	40°33'02.813"N	104°22'03.842"W	0.61	
10715.00	88.600	357.400	6640.99	4425.16	4419.92	-216.09	3314635.48	1445550.25	40°33'03.316"N	104°22'03.865"W	0.55	LAST BHI MWD SURVEY
10780.00	88.600	357.400	6642.58	4490.14	4484.83	-219.04	3314632.54	1445615.17	40°33'03.958"N	104°22'03.892"W	0.00	PROJECTION TO BIT



Actual Wellpath Report

CROW VALLEY 7-62-30-2H AWP

Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	MARATHON OIL COMPANY	Slot	SLOT#02 CROW VALLEY 7-62-30-2H (437'FSL & 2137'FWL, SEC. 30)
Area	COLORADO	Well	CROW VALLEY 7-62-30-2H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-30-2H AWB
Facility	SEC.30-T7N-R62W		

HOLE & CASING SECTIONS - Ref Wellbore: CROW VALLEY 7-62-30-2H AWB Ref Wellpath: CROW VALLEY 7-62-30-2H 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	725.00	726.00	1.00	725.00	726.00	0.00	0.00	0.00	0.00
8.75in Open Hole	726.00	7225.00	6499.00	726.00	6641.35	0.00	0.00	936.43	-21.17
7in Casing Intermediate	725.00	7196.00	6471.00	725.00	6641.43	0.00	0.00	907.48	-19.42
6in Open Hole	7225.00	10780.00	3555.00	6641.35	6642.58	936.43	-21.17	4484.83	-219.04

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
CROW VALLEY 31-2H/30-2H SECTION LINES		0.00	-29.52	5.34	3314856.91	1441100.96	40°32'19.325"N	104°22'01.733"W	polygon
CROW VALLEY 7-62-30-2H HARDLINES (460' SETBACKS)		6620.00	-29.52	5.34	3314856.91	1441100.96	40°32'19.325"N	104°22'01.733"W	polygon
CROW VALLEY 7-62-31-2H HARDLINES (460' SETBACKS)		6620.00	-29.52	5.34	3314856.91	1441100.96	40°32'19.325"N	104°22'01.733"W	polygon
CROW VALLEY 7-62-30-2H LANDING (REV-1)		6664.00	713.72	-38.00	3314813.57	1441844.18	40°32'26.675"N	104°22'02.171"W	point
CROW VALLEY 7-62-30-2H PT#2 (REV-1)		6664.00	2055.87	-108.53	3314743.04	1443186.28	40°32'39.945"N	104°22'02.863"W	point
CROW VALLEY 7-62-30-2H PT#3 (REV-1)		6670.00	2533.90	-135.21	3314716.36	1443664.30	40°32'44.671"N	104°22'03.129"W	point
CROW VALLEY 7-62-30-2H BHL ON PLAT (470'FNL & 1925'FWL, SEC.30, REV-1)		6676.00	4494.59	-238.62	3314612.96	1445624.92	40°33'04.057"N	104°22'04.144"W	point
CROW VALLEY 7-62-30-2H BHL ON PLAT (470'FNL & 1925'FWL, SEC.30, REV-2)		6689.00	4494.59	-238.62	3314612.96	1445624.92	40°33'04.057"N	104°22'04.144"W	point
CROW VALLEY 7-62-30-2H PT#4 (REV-1)		6689.00	3506.01	-185.66	3314665.92	1444636.38	40°32'54.283"N	104°22'03.622"W	point

WELLPATH COMPOSITION - Ref Wellbore: CROW VALLEY 7-62-30-2H AWB Ref Wellpath: CROW VALLEY 7-62-30-2H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
725.00	7165.00	NaviTrak (Standard)	BHI/NAVITRAK MWD - 8.75" HOLE <798-7165>	CROW VALLEY 7-62-30-2H AWB
7165.00	10715.00	NaviTrak (Standard)	BHI/NAVITRAK MWD - 6" HOLE <7244-10715>	CROW VALLEY 7-62-30-2H AWB
10715.00	10780.00	Blind Drilling (std)	Projection to bit	CROW VALLEY 7-62-30-2H AWB

**Actual Wellpath Report****CROW VALLEY 7-62-30-2H AWP**

Page 6 of 6

**REFERENCE WELLPATH IDENTIFICATION**

Operator	MARATHON OIL COMPANY	Slot	SLOT#02 CROW VALLEY 7-62-30-2H (437'FSL & 2137'FWL, SEC. 30)
Area	COLORADO	Well	CROW VALLEY 7-62-30-2H
Field	WELD COUNTY (NAD 83, GRID NORTH)	Wellbore	CROW VALLEY 7-62-30-2H AWB
Facility	SEC.30-T7N-R62W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
725.00	0.000	348.900	725.00	TIED INTO SURFACE CASING SHOE
10715.00	88.600	357.400	6640.99	LAST BHI MWD SURVEY
10780.00	88.600	357.400	6642.58	PROJECTION TO BIT