

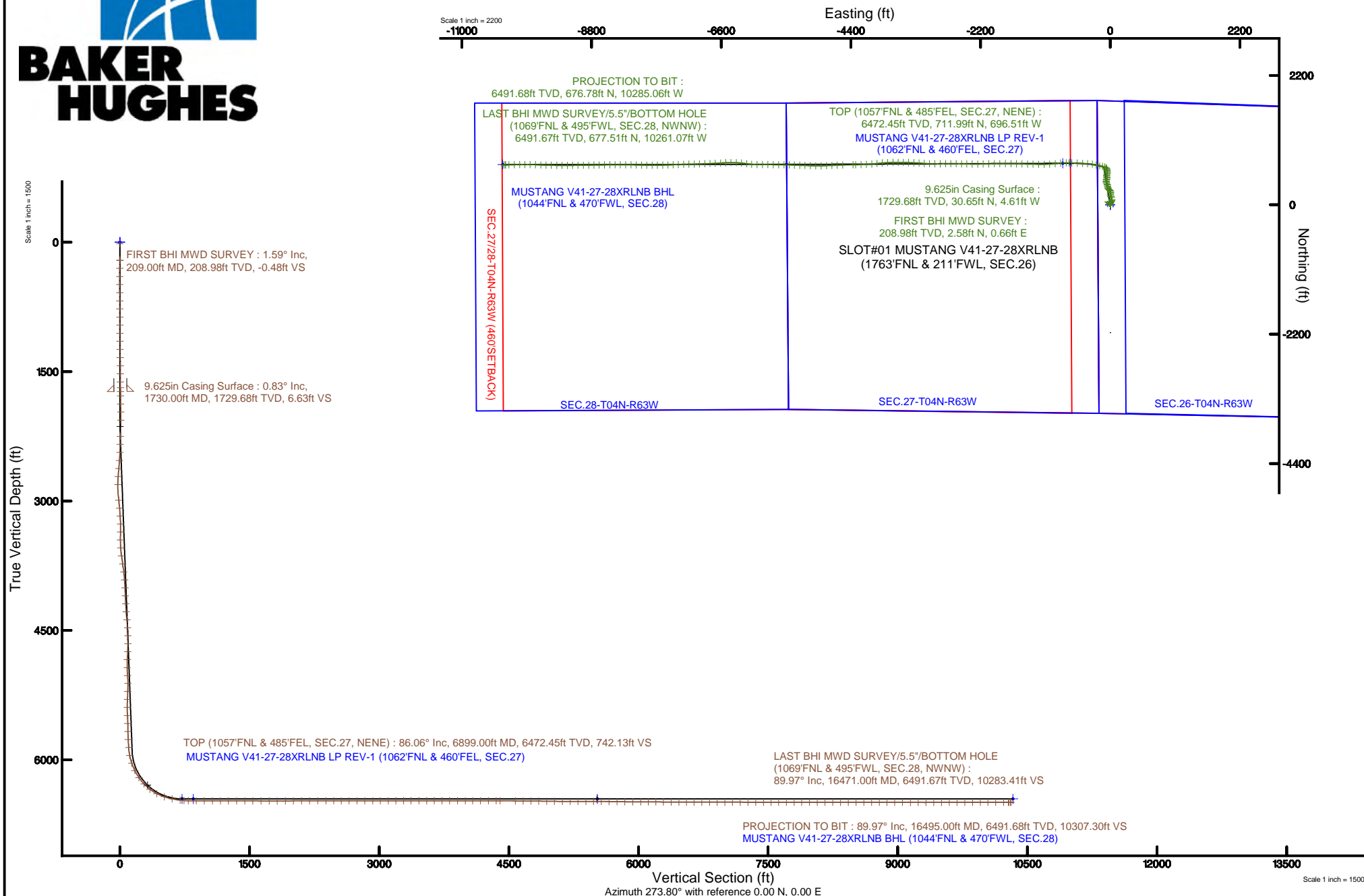
# BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#01 MUSTANG V41-27-28XRLNB (1763'FNL & 211'FWL, SEC.26)  
Field: WELD COUNTY Well: MUSTANG V41-27-28XRLNB  
Facility: SEC.26-T04N-R63W Wellbore: MUSTANG V41-27-28XRLNB PWB



# BAKER HUGHES

Plot reference wellpath is MUSTANG V41-27-28XRLNB PWB (REV-A.0)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to XTREME 19 (17KB) (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to XTREME 19 (17KB) (RKB)	North Reference: True north
XTREME 19 (17KB) (RKB) to Mean Sea Level: 4767 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 MUSTANG V41-27-28XRLNB (1763'FNL & 211'FWL, SEC.26)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingmjmr on 2018-01-16
	Database: Denver





# Actual Wellpath Report

MUSTANG V41-27-28XRLNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1763'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB AWB
Facility	SEC.26-T04N-R63W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Ingmjmr
Scale	0.999957	Report Generated	1/16/2018 at 12:51:46 PM
Convergence at slot	0.71° East	Database/Source file	Denver/MUSTANG_V41-27-28XRLNB_AWP.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	3303028.08	1348847.58	40°17'09.210"N	104°24'49.570"W
Facility Reference Pt			3303028.08	1348847.58	40°17'09.210"N	104°24'49.570"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.400"N	104°41'53.556"W

## WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 19 (17'KB) (RKB) to Facility Vertical Datum	4767.00ft
Horizontal Reference Pt	Slot	XTREME 19 (17'KB) (RKB) to Mean Sea Level	4767.00ft
Vertical Reference Pt	XTREME 19 (17'KB) (RKB)	XTREME 19 (17'KB) (RKB) to Mud Line at Slot (SLOT#01 MUSTANG V41-27-28XRLNB (1763'FNL & 211'FWL, SEC.26))	4767.00ft
MD Reference Pt	XTREME 19 (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	273.80°



# Actual Wellpath Report

MUSTANG V41-27-28XRLNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1763'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB AWP
Facility	SEC.26-T04N-R63W		

## WELLPATH DATA (180 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	14.240	0.00	0.00	0.00	0.00	40°17'09.210°N	104°24'49.570°W	0.00	
17.00	0.000	14.240	17.00	0.00	0.00	0.00	40°17'09.210°N	104°24'49.570°W	0.00	
209.00	1.590	14.240	208.98	-0.48	2.58	0.66	40°17'09.236°N	104°24'49.562°W	0.83	FIRST BHI MWD SURVEY
303.00	1.400	27.070	302.94	-1.17	4.87	1.50	40°17'09.258°N	104°24'49.551°W	0.41	
397.00	1.300	4.190	396.92	-1.63	6.95	2.10	40°17'09.279°N	104°24'49.543°W	0.58	
491.00	1.400	352.750	490.89	-1.42	9.16	2.03	40°17'09.300°N	104°24'49.544°W	0.31	
585.00	0.830	350.440	584.87	-1.04	10.97	1.77	40°17'09.318°N	104°24'49.547°W	0.61	
679.00	1.220	0.800	678.86	-0.83	12.64	1.68	40°17'09.335°N	104°24'49.548°W	0.46	
773.00	1.220	1.090	772.84	-0.73	14.64	1.71	40°17'09.355°N	104°24'49.548°W	0.01	
867.00	0.960	1.920	866.82	-0.66	16.43	1.75	40°17'09.372°N	104°24'49.547°W	0.28	
961.00	1.170	330.720	960.80	-0.11	18.05	1.31	40°17'09.388°N	104°24'49.553°W	0.65	
1055.00	1.020	327.080	1054.79	0.91	19.59	0.39	40°17'09.404°N	104°24'49.565°W	0.18	
1149.00	1.020	342.110	1148.77	1.72	21.09	-0.33	40°17'09.418°N	104°24'49.574°W	0.28	
1244.00	1.350	335.060	1243.75	2.57	22.91	-1.06	40°17'09.436°N	104°24'49.584°W	0.38	
1338.00	1.140	323.580	1337.73	3.71	24.67	-2.08	40°17'09.454°N	104°24'49.597°W	0.35	
1432.00	1.100	345.850	1431.71	4.59	26.29	-2.85	40°17'09.470°N	104°24'49.607°W	0.46	
1526.00	0.930	341.130	1525.70	5.16	27.89	-3.32	40°17'09.486°N	104°24'49.613°W	0.20	
1620.00	0.810	329.990	1619.69	5.83	29.19	-3.90	40°17'09.498°N	104°24'49.620°W	0.22	
1687.00	0.880	335.680	1686.68	6.33	30.07	-4.35	40°17'09.507°N	104°24'49.626°W	0.16	
1781.00	0.760	336.540	1780.67	6.96	31.30	-4.90	40°17'09.519°N	104°24'49.633°W	0.13	
1875.00	1.130	285.030	1874.66	8.15	32.11	-6.04	40°17'09.527°N	104°24'49.648°W	0.94	
1969.00	1.340	233.900	1968.64	9.90	31.70	-7.82	40°17'09.523°N	104°24'49.671°W	1.15	
2063.00	1.570	156.130	2062.62	10.15	29.88	-8.19	40°17'09.505°N	104°24'49.676°W	1.95	
2250.00	2.230	72.710	2249.54	5.56	28.61	-3.68	40°17'09.493°N	104°24'49.617°W	1.38	
2345.00	2.000	26.740	2344.48	3.19	30.64	-1.17	40°17'09.513°N	104°24'49.585°W	1.75	
2437.00	4.050	39.580	2436.35	0.67	34.58	1.63	40°17'09.552°N	104°24'49.549°W	2.33	
2531.00	6.510	43.020	2529.95	-4.64	41.04	7.38	40°17'09.616°N	104°24'49.475°W	2.64	
2625.00	8.970	40.310	2623.08	-12.37	50.52	15.75	40°17'09.709°N	104°24'49.367°W	2.64	
2719.00	11.620	24.370	2715.58	-20.06	64.74	24.40	40°17'09.850°N	104°24'49.255°W	4.11	
2813.00	13.730	6.920	2807.32	-24.00	84.45	29.66	40°17'10.044°N	104°24'49.187°W	4.63	



# Actual Wellpath Report

MUSTANG V41-27-28XRLNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1763'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB AWB
Facility	SEC.26-T04N-R63W		

## WELLPATH DATA (180 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3001.00	12.240	326.030	2990.88	-12.99	123.20	21.19	40°17'10.427"N	104°24'49.297"W	4.85	
3095.00	11.980	343.540	3082.82	-3.50	140.83	12.86	40°17'10.602"N	104°24'49.404"W	3.90	
3189.00	12.070	343.220	3174.76	3.33	159.60	7.26	40°17'10.787"N	104°24'49.476"W	0.12	
3283.00	10.590	355.570	3266.94	8.02	177.62	3.75	40°17'10.965"N	104°24'49.522"W	3.01	
3377.00	10.910	13.810	3359.32	7.71	194.88	5.21	40°17'11.136"N	104°24'49.503"W	3.62	
3471.00	10.230	3.330	3451.73	6.23	211.85	7.82	40°17'11.303"N	104°24'49.469"W	2.17	
3565.00	10.360	342.640	3544.25	9.35	228.25	5.78	40°17'11.466"N	104°24'49.495"W	3.92	
3659.00	11.310	318.040	3636.62	19.01	243.18	-2.91	40°17'11.613"N	104°24'49.608"W	4.98	
3753.00	10.000	305.720	3729.01	32.54	254.81	-15.70	40°17'11.728"N	104°24'49.773"W	2.79	
3847.00	9.830	318.420	3821.62	45.18	265.57	-27.66	40°17'11.834"N	104°24'49.927"W	2.33	
3941.00	9.680	341.640	3914.29	53.88	279.08	-35.47	40°17'11.968"N	104°24'50.028"W	4.16	
4035.00	10.830	350.390	4006.80	58.91	295.29	-39.44	40°17'12.128"N	104°24'50.079"W	2.06	
4129.00	10.730	350.070	4099.14	63.03	312.62	-42.42	40°17'12.299"N	104°24'50.117"W	0.12	
4223.00	10.720	349.120	4191.49	67.32	329.82	-45.58	40°17'12.469"N	104°24'50.158"W	0.19	
4317.00	10.840	339.470	4283.84	73.18	346.69	-50.33	40°17'12.636"N	104°24'50.219"W	1.92	
4411.00	10.710	327.160	4376.20	82.03	362.31	-58.17	40°17'12.790"N	104°24'50.321"W	2.45	
4505.00	9.720	342.150	4468.72	90.17	377.20	-65.34	40°17'12.937"N	104°24'50.413"W	3.01	
4599.00	10.310	6.000	4561.33	92.78	393.13	-66.89	40°17'13.095"N	104°24'50.433"W	4.42	
4693.00	10.270	4.400	4653.82	92.37	409.85	-65.37	40°17'13.260"N	104°24'50.414"W	0.31	
4787.00	10.220	16.730	4746.33	90.41	426.19	-62.33	40°17'13.422"N	104°24'50.374"W	2.33	
4881.00	10.490	20.870	4838.80	86.03	442.17	-56.88	40°17'13.579"N	104°24'50.304"W	0.84	
4975.00	10.500	355.340	4931.28	84.78	458.71	-54.52	40°17'13.743"N	104°24'50.274"W	4.91	
5069.00	10.360	342.070	5023.74	89.17	475.29	-57.82	40°17'13.907"N	104°24'50.316"W	2.55	
5162.00	10.300	2.680	5115.26	92.43	491.56	-60.01	40°17'14.068"N	104°24'50.344"W	3.95	
5256.00	10.300	13.790	5207.76	91.13	508.12	-57.61	40°17'14.231"N	104°24'50.313"W	2.11	
5350.00	10.430	17.940	5300.23	87.60	524.37	-52.99	40°17'14.392"N	104°24'50.254"W	0.81	
5444.00	10.520	6.060	5392.67	85.18	541.00	-49.46	40°17'14.556"N	104°24'50.208"W	2.30	
5539.00	9.990	342.390	5486.19	87.84	557.49	-51.04	40°17'14.719"N	104°24'50.229"W	4.44	
5633.00	8.970	357.320	5578.92	91.65	572.58	-53.85	40°17'14.868"N	104°24'50.265"W	2.82	
5727.00	9.330	356.370	5671.73	93.46	587.51	-54.67	40°17'15.016"N	104°24'50.275"W	0.42	



# Actual Wellpath Report

MUSTANG V41-27-28XRLNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1763'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB AWP
Facility	SEC.26-T04N-R63W		

## WELLPATH DATA (180 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5821.00	9.320	347.140	5764.49	96.63	602.53	-56.85	40°17'15.164"N	104°24'50.304"W	1.59	
5915.00	9.280	340.190	5857.26	101.84	617.09	-61.11	40°17'15.308"N	104°24'50.359"W	1.19	
6009.00	12.260	302.880	5949.70	113.62	629.65	-72.08	40°17'15.432"N	104°24'50.500"W	7.89	
6103.00	19.800	293.860	6039.99	137.33	641.53	-95.06	40°17'15.549"N	104°24'50.797"W	8.42	
6196.00	27.100	280.090	6125.32	173.26	651.63	-130.39	40°17'15.649"N	104°24'51.253"W	9.77	
6290.00	34.180	280.990	6206.14	220.80	660.43	-177.45	40°17'15.736"N	104°24'51.860"W	7.55	
6384.00	44.050	285.790	6279.00	279.12	674.39	-234.97	40°17'15.874"N	104°24'52.602"W	10.98	
6478.00	52.590	279.820	6341.48	348.37	689.69	-303.36	40°17'16.025"N	104°24'53.485"W	10.24	
6572.00	62.700	272.220	6391.77	427.53	697.70	-382.17	40°17'16.105"N	104°24'54.501"W	12.73	
6666.00	71.170	273.200	6428.57	513.92	701.81	-468.48	40°17'16.145"N	104°24'55.615"W	9.06	
6760.00	79.070	273.320	6452.69	604.70	706.98	-559.11	40°17'16.196"N	104°24'56.785"W	8.41	
6854.00	82.310	271.730	6467.89	697.42	711.06	-651.76	40°17'16.236"N	104°24'57.980"W	3.83	
6899.00†	86.062	270.672	6472.45	742.13	711.99	-696.51	40°17'16.246"N	104°24'58.558"W	8.66	TOP (1057'FNL & 485'FEL, SEC.27, NENE)
6948.00	90.150	269.530	6474.07	790.99	712.08	-745.47	40°17'16.247"N	104°24'59.190"W	8.66	
7042.00	89.750	264.660	6474.15	884.32	707.32	-839.32	40°17'16.199"N	104°25'00.401"W	5.20	
7136.00	89.690	264.430	6474.61	977.10	698.38	-932.90	40°17'16.111"N	104°25'01.608"W	0.25	
7230.00	89.690	266.700	6475.12	1070.12	691.11	-1026.61	40°17'16.039"N	104°25'02.817"W	2.41	
7324.00	89.600	269.260	6475.70	1163.63	687.80	-1120.54	40°17'16.006"N	104°25'04.029"W	2.73	
7417.00	89.910	271.130	6476.10	1256.44	688.11	-1213.54	40°17'16.010"N	104°25'05.229"W	2.04	
7512.00	90.090	270.850	6476.10	1351.33	689.76	-1308.52	40°17'16.026"N	104°25'06.455"W	0.35	
7606.00	89.970	271.190	6476.05	1445.22	691.43	-1402.51	40°17'16.042"N	104°25'07.668"W	0.38	
7700.00	89.940	271.600	6476.13	1539.13	693.72	-1496.48	40°17'16.065"N	104°25'08.881"W	0.44	
7794.00	89.820	271.790	6476.32	1633.07	696.50	-1590.44	40°17'16.092"N	104°25'10.093"W	0.24	
7888.00	89.880	271.060	6476.57	1726.99	698.84	-1684.41	40°17'16.115"N	104°25'11.306"W	0.78	
7982.00	89.940	269.840	6476.72	1820.83	699.57	-1778.40	40°17'16.122"N	104°25'12.518"W	1.30	
8076.00	90.250	269.430	6476.56	1914.58	698.98	-1872.40	40°17'16.116"N	104°25'13.731"W	0.55	
8170.00	90.250	269.250	6476.15	2008.29	697.89	-1966.39	40°17'16.106"N	104°25'14.944"W	0.19	
8264.00	90.250	268.540	6475.74	2101.95	696.08	-2060.37	40°17'16.088"N	104°25'16.157"W	0.76	
8358.00	90.060	268.270	6475.49	2195.53	693.46	-2154.34	40°17'16.062"N	104°25'17.369"W	0.35	
8452.00	90.090	269.870	6475.36	2289.21	691.94	-2248.32	40°17'16.047"N	104°25'18.582"W	1.70	



# Actual Wellpath Report

MUSTANG V41-27-28XRLNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1763'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB AWB
Facility	SEC.26-T04N-R63W		

## WELLPATH DATA (180 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8546.00	90.120	270.350	6475.19	2383.01	692.12	-2342.32	40°17'16.048"N	104°25'19.795"W	0.51	
8636.00	90.060	271.490	6475.05	2472.90	693.56	-2432.31	40°17'16.062"N	104°25'20.956"W	1.27	
8725.00	90.120	270.990	6474.91	2561.81	695.49	-2521.29	40°17'16.081"N	104°25'22.105"W	0.57	
8815.00	90.030	271.020	6474.79	2651.70	697.07	-2611.27	40°17'16.097"N	104°25'23.266"W	0.11	
8907.00	90.150	269.770	6474.65	2743.54	697.70	-2703.27	40°17'16.103"N	104°25'24.453"W	1.36	
8997.00	90.060	269.230	6474.48	2833.28	696.92	-2793.26	40°17'16.095"N	104°25'25.614"W	0.61	
9089.00	90.060	269.580	6474.39	2925.01	695.96	-2885.26	40°17'16.086"N	104°25'26.801"W	0.38	
9178.00	90.000	270.700	6474.34	3013.83	696.18	-2974.26	40°17'16.088"N	104°25'27.950"W	1.26	
9269.00	90.120	272.050	6474.24	3104.75	698.36	-3065.23	40°17'16.109"N	104°25'29.124"W	1.49	
9358.00	90.060	273.980	6474.10	3193.73	703.04	-3154.10	40°17'16.155"N	104°25'30.270"W	2.17	
9447.00	90.120	274.130	6473.96	3282.73	709.34	-3242.88	40°17'16.217"N	104°25'31.416"W	0.18	
9533.00	90.030	272.630	6473.85	3368.73	714.41	-3328.73	40°17'16.267"N	104°25'32.524"W	1.75	
9625.00	89.940	271.770	6473.88	3460.69	717.94	-3420.66	40°17'16.302"N	104°25'33.710"W	0.94	
9715.00	89.970	270.650	6473.95	3550.60	719.84	-3510.64	40°17'16.321"N	104°25'34.871"W	1.24	
9803.00	90.000	269.900	6473.97	3638.43	720.26	-3598.63	40°17'16.325"N	104°25'36.007"W	0.85	
9891.00	90.000	268.970	6473.97	3726.18	719.39	-3686.63	40°17'16.316"N	104°25'37.142"W	1.06	
9980.00	90.000	267.070	6473.97	3814.72	716.32	-3775.57	40°17'16.286"N	104°25'38.290"W	2.13	
10072.00	89.910	265.870	6474.04	3905.97	710.65	-3867.40	40°17'16.230"N	104°25'39.475"W	1.31	
10163.00	90.000	263.800	6474.11	3995.85	702.46	-3958.02	40°17'16.148"N	104°25'40.644"W	2.28	
10251.00	89.720	263.860	6474.33	4082.52	693.00	-4045.51	40°17'16.055"N	104°25'41.773"W	0.33	
10341.00	89.910	266.960	6474.62	4171.55	685.80	-4135.21	40°17'15.984"N	104°25'42.931"W	3.45	
10433.00	90.030	268.480	6474.67	4263.03	682.14	-4227.14	40°17'15.947"N	104°25'44.117"W	1.66	
10525.00	89.850	269.090	6474.76	4354.68	680.19	-4319.11	40°17'15.928"N	104°25'45.304"W	0.69	
10569.00	89.820	269.660	6474.89	4398.55	679.71	-4363.11	40°17'15.923"N	104°25'45.871"W	1.30	
10746.00	89.290	268.340	6476.27	4574.92	676.62	-4540.07	40°17'15.892"N	104°25'48.155"W	0.80	
10838.00	89.200	267.130	6477.48	4666.39	672.99	-4631.99	40°17'15.856"N	104°25'49.341"W	1.32	
10927.00	90.000	268.400	6478.10	4754.89	669.52	-4720.92	40°17'15.822"N	104°25'50.489"W	1.69	
11018.00	89.570	266.810	6478.44	4845.36	665.72	-4811.84	40°17'15.784"N	104°25'51.662"W	1.81	
11110.00	89.080	267.500	6479.52	4936.74	661.15	-4903.72	40°17'15.739"N	104°25'52.847"W	0.92	
11202.00	89.200	271.190	6480.91	5028.43	660.10	-4995.68	40°17'15.728"N	104°25'54.034"W	4.01	



# Actual Wellpath Report

MUSTANG V41-27-28XRLNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1763'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB AWP
Facility	SEC.26-T04N-R63W		

## WELLPATH DATA (180 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11293.00	89.690	273.650	6481.79	5119.39	663.94	-5086.59	40°17'15.766"N	104°25'55.207"W	2.76	
11384.00	90.150	272.080	6481.91	5210.38	668.49	-5177.47	40°17'15.811"N	104°25'56.380"W	1.80	
11473.00	89.750	270.580	6481.99	5299.29	670.55	-5266.45	40°17'15.831"N	104°25'57.528"W	1.74	
11565.00	89.820	273.380	6482.34	5391.24	673.73	-5358.38	40°17'15.862"N	104°25'58.714"W	3.04	
11654.00	90.220	272.560	6482.31	5480.23	678.34	-5447.26	40°17'15.907"N	104°25'59.861"W	1.03	
11743.00	89.320	269.870	6482.66	5569.13	680.23	-5536.23	40°17'15.926"N	104°26'01.009"W	3.19	
11834.00	89.140	270.250	6483.89	5659.92	680.33	-5627.22	40°17'15.927"N	104°26'02.184"W	0.46	
11926.00	89.200	271.110	6485.22	5751.78	681.42	-5719.21	40°17'15.937"N	104°26'03.370"W	0.94	
12016.00	89.540	270.230	6486.21	5841.64	682.47	-5809.19	40°17'15.947"N	104°26'04.532"W	1.05	
12108.00	89.630	269.720	6486.87	5933.43	682.43	-5901.19	40°17'15.947"N	104°26'05.719"W	0.56	
12200.00	89.910	270.710	6487.24	6025.25	682.77	-5993.19	40°17'15.950"N	104°26'06.906"W	1.12	
12289.00	89.750	275.640	6487.51	6114.22	687.70	-6082.02	40°17'15.998"N	104°26'08.052"W	5.54	
12377.00	89.510	277.780	6488.08	6202.09	697.98	-6169.41	40°17'16.100"N	104°26'09.180"W	2.45	
12463.00	89.420	276.220	6488.88	6287.95	708.46	-6254.77	40°17'16.203"N	104°26'10.281"W	1.82	
12553.00	89.420	272.960	6489.79	6377.93	715.66	-6344.46	40°17'16.274"N	104°26'11.439"W	3.62	
12642.00	89.480	269.270	6490.65	6466.81	717.40	-6433.43	40°17'16.291"N	104°26'12.587"W	4.15	
12731.00	89.880	267.480	6491.14	6555.41	714.87	-6522.38	40°17'16.266"N	104°26'13.735"W	2.06	
12820.00	90.000	266.310	6491.24	6643.76	710.05	-6611.25	40°17'16.218"N	104°26'14.881"W	1.32	
12910.00	90.090	266.720	6491.17	6733.04	704.58	-6701.09	40°17'16.164"N	104°26'16.041"W	0.47	
12999.00	90.000	267.880	6491.10	6821.46	700.39	-6789.99	40°17'16.122"N	104°26'17.188"W	1.31	
13088.00	89.910	268.120	6491.17	6910.01	697.28	-6878.93	40°17'16.091"N	104°26'18.336"W	0.29	
13178.00	90.060	268.320	6491.19	6999.58	694.49	-6968.89	40°17'16.063"N	104°26'19.496"W	0.28	
13267.00	90.000	268.260	6491.14	7088.17	691.83	-7057.85	40°17'16.037"N	104°26'20.644"W	0.10	
13357.00	89.940	268.670	6491.19	7177.78	689.42	-7147.82	40°17'16.013"N	104°26'21.805"W	0.46	
13447.00	89.720	268.320	6491.46	7267.39	687.06	-7237.78	40°17'15.989"N	104°26'22.966"W	0.46	
13536.00	89.820	267.980	6491.81	7355.96	684.18	-7326.74	40°17'15.960"N	104°26'24.114"W	0.40	
13626.00	90.000	267.370	6491.96	7445.45	680.53	-7416.66	40°17'15.924"N	104°26'25.274"W	0.71	
13715.00	89.780	267.760	6492.13	7533.92	676.75	-7505.58	40°17'15.886"N	104°26'26.422"W	0.50	
13803.00	89.940	268.660	6492.34	7621.50	674.00	-7593.54	40°17'15.859"N	104°26'27.557"W	1.04	
13892.00	90.090	269.280	6492.32	7710.19	672.40	-7682.52	40°17'15.843"N	104°26'28.705"W	0.72	



# Actual Wellpath Report

MUSTANG V41-27-28XRLNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1763'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB AWP
Facility	SEC.26-T04N-R63W		

## WELLPATH DATA (180 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13982.00	90.120	270.240	6492.15	7799.96	672.03	-7772.52	40°17'15.839"N	104°26'29.866"W	1.07	
14071.00	90.090	270.890	6491.99	7888.82	672.90	-7861.52	40°17'15.847"N	104°26'31.015"W	0.73	
14161.00	89.970	271.320	6491.94	7978.72	674.64	-7951.50	40°17'15.864"N	104°26'32.176"W	0.50	
14251.00	89.910	271.480	6492.04	8068.64	676.84	-8041.47	40°17'15.885"N	104°26'33.337"W	0.19	
14340.00	90.030	270.980	6492.08	8157.55	678.75	-8130.45	40°17'15.904"N	104°26'34.485"W	0.58	
14431.00	89.880	270.360	6492.15	8248.42	679.81	-8221.44	40°17'15.914"N	104°26'35.659"W	0.70	
14521.00	89.910	269.980	6492.32	8338.24	680.08	-8311.44	40°17'15.917"N	104°26'36.821"W	0.42	
14611.00	89.950	269.650	6492.43	8428.02	679.79	-8401.44	40°17'15.913"N	104°26'37.982"W	0.37	
14700.00	90.150	269.280	6492.35	8516.76	678.96	-8490.44	40°17'15.905"N	104°26'39.130"W	0.47	
14790.00	89.880	269.100	6492.33	8606.47	677.69	-8580.43	40°17'15.892"N	104°26'40.292"W	0.36	
14880.00	89.940	268.840	6492.47	8696.15	676.07	-8670.41	40°17'15.876"N	104°26'41.453"W	0.30	
14970.00	90.000	269.050	6492.52	8785.83	674.41	-8760.40	40°17'15.859"N	104°26'42.614"W	0.24	
15059.00	89.910	269.160	6492.59	8874.53	673.02	-8849.39	40°17'15.845"N	104°26'43.762"W	0.16	
15149.00	89.880	269.580	6492.75	8964.26	672.03	-8939.38	40°17'15.835"N	104°26'44.923"W	0.47	
15239.00	89.750	269.300	6493.04	9054.00	671.15	-9029.38	40°17'15.826"N	104°26'46.085"W	0.34	
15331.00	89.780	269.740	6493.42	9145.75	670.38	-9121.37	40°17'15.818"N	104°26'47.272"W	0.48	
15421.00	89.880	269.570	6493.69	9235.51	669.84	-9211.37	40°17'15.812"N	104°26'48.433"W	0.22	
15512.00	90.030	270.110	6493.76	9326.29	669.58	-9302.37	40°17'15.809"N	104°26'49.607"W	0.62	
15601.00	90.030	270.740	6493.71	9415.14	670.24	-9391.37	40°17'15.816"N	104°26'50.756"W	0.71	
15693.00	90.340	271.170	6493.41	9507.02	671.78	-9483.35	40°17'15.830"N	104°26'51.943"W	0.58	
15781.00	90.250	271.490	6492.96	9594.94	673.82	-9571.33	40°17'15.850"N	104°26'53.078"W	0.38	
15871.00	90.220	272.670	6492.59	9684.90	677.09	-9661.27	40°17'15.882"N	104°26'54.239"W	1.31	
15961.00	90.250	272.440	6492.22	9774.88	681.10	-9751.18	40°17'15.922"N	104°26'55.399"W	0.26	
16052.00	89.970	270.730	6492.05	9865.80	683.62	-9842.14	40°17'15.946"N	104°26'56.573"W	1.90	
16142.00	90.120	269.760	6491.98	9955.63	684.00	-9932.14	40°17'15.949"N	104°26'57.734"W	1.09	
16230.00	90.000	268.750	6491.89	10043.35	682.86	-10020.13	40°17'15.938"N	104°26'58.869"W	1.16	
16320.00	90.120	269.060	6491.79	10133.03	681.14	-10110.11	40°17'15.920"N	104°27'00.031"W	0.37	
16412.00	90.030	268.500	6491.67	10224.67	679.18	-10202.09	40°17'15.901"N	104°27'01.217"W	0.62	
16471.00	89.970	268.260	6491.67	10283.41	677.51	-10261.07	40°17'15.884"N	104°27'01.978"W	0.42	LAST BHI MWD SURVEY/5.5'/BOTTOM HOLE (1069'FNL & 495'FWL, SEC.28, NWNW)
16495.00	89.970	268.260	6491.68	10307.30	676.78	-10285.06	40°17'15.877"N	104°27'02.288"W	0.00	PROJECTION TO BIT

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.25-T04N-R63W	0.00	0.00	0.00	3303028.08	1348847.58	40°17'09.210"N	104°24'49.570"W	polygon
SEC.26-T04N-R63W	0.00	0.00	0.00	3303028.08	1348847.58	40°17'09.210"N	104°24'49.570"W	polygon
SEC.27-T04N-R63W	0.00	0.00	0.00	3303028.08	1348847.58	40°17'09.210"N	104°24'49.570"W	polygon
SEC.28-T04N-R63W	0.00	0.00	0.00	3303028.08	1348847.58	40°17'09.210"N	104°24'49.570"W	polygon
MUSTANG V41-27-28XRLNB BHL (1044'FNL & 470'FWL, SEC.28)	6453.00	684.21	-10309.23	3292711.70	1349405.43	40°17'15.950"N	104°27'02.600"W	point
MUSTANG V41-27-28XRLNB LP (1062'FNL & 589'FEL, SEC.27)	6453.00	705.35	-803.63	3302215.91	1349543.00	40°17'16.180"N	104°24'59.940"W	point
MUSTANG V41-27-28XRLNB LP REV-1 (1062'FNL & 460'FEL, SEC.27)	6453.00	705.35	-674.63	3302344.89	1349544.58	40°17'16.180"N	104°24'58.275"W	point
MUSTANG V41-27-28XRLNB MID-LATERAL TARGET (1044'FNL & 0'FWL, SEC.27)	6453.00	685.70	-5490.56	3297529.78	1349465.95	40°17'15.980"N	104°26'00.420"W	point
SEC.25/26-T04N-R63W (460'SETBACK)	6467.00	0.00	0.00	3303028.08	1348847.58	40°17'09.210"N	104°24'49.570"W	polygon
SEC.27/28-T04N-R63W (460'SETBACK)	6467.00	0.00	0.00	3303028.08	1348847.58	40°17'09.210"N	104°24'49.570"W	polygon





# Actual Wellpath Report

MUSTANG V41-27-28XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1763'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB AWB
Facility	SEC.26-T04N-R63W		

WELLPATH COMPOSITION - Ref Wellbore: MUSTANG V41-27-28XRLNB AWB      Ref Wellpath: MUSTANG V41-27-28XRLNB AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1687.00	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)	BHI NAVITRAK (SR+ROCKIES) <209-1687>	MUSTANG V41-27-28XRLNB AWB
1687.00	16471.00	Custom BHI AutoTrak Curve (Short) (Rockies 0.03Gt model)	BHI MWD ATCURVE +SHORT+ROCKIES <1781-16471>	MUSTANG V41-27-28XRLNB AWB
16471.00	16495.00	Blind Drilling (std)	Projection to bit	MUSTANG V41-27-28XRLNB AWB



# Actual Wellpath Report

MUSTANG V41-27-28XRLNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1763'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB AWP
Facility	SEC.26-T04N-R63W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
209.00	1.590	14.240	208.98	FIRST BHI MWD SURVEY
6899.00	86.062	270.672	6472.45	TOP (1057'FNL & 485'FWL, SEC.27, NENE)
16471.00	89.970	268.260	6491.67	LAST BHI MWD SURVEY/5.5"BOTTOM HOLE (1069'FNL & 495'FWL, SEC.28, NWNW)
16495.00	89.970	268.260	6491.68	PROJECTION TO BIT