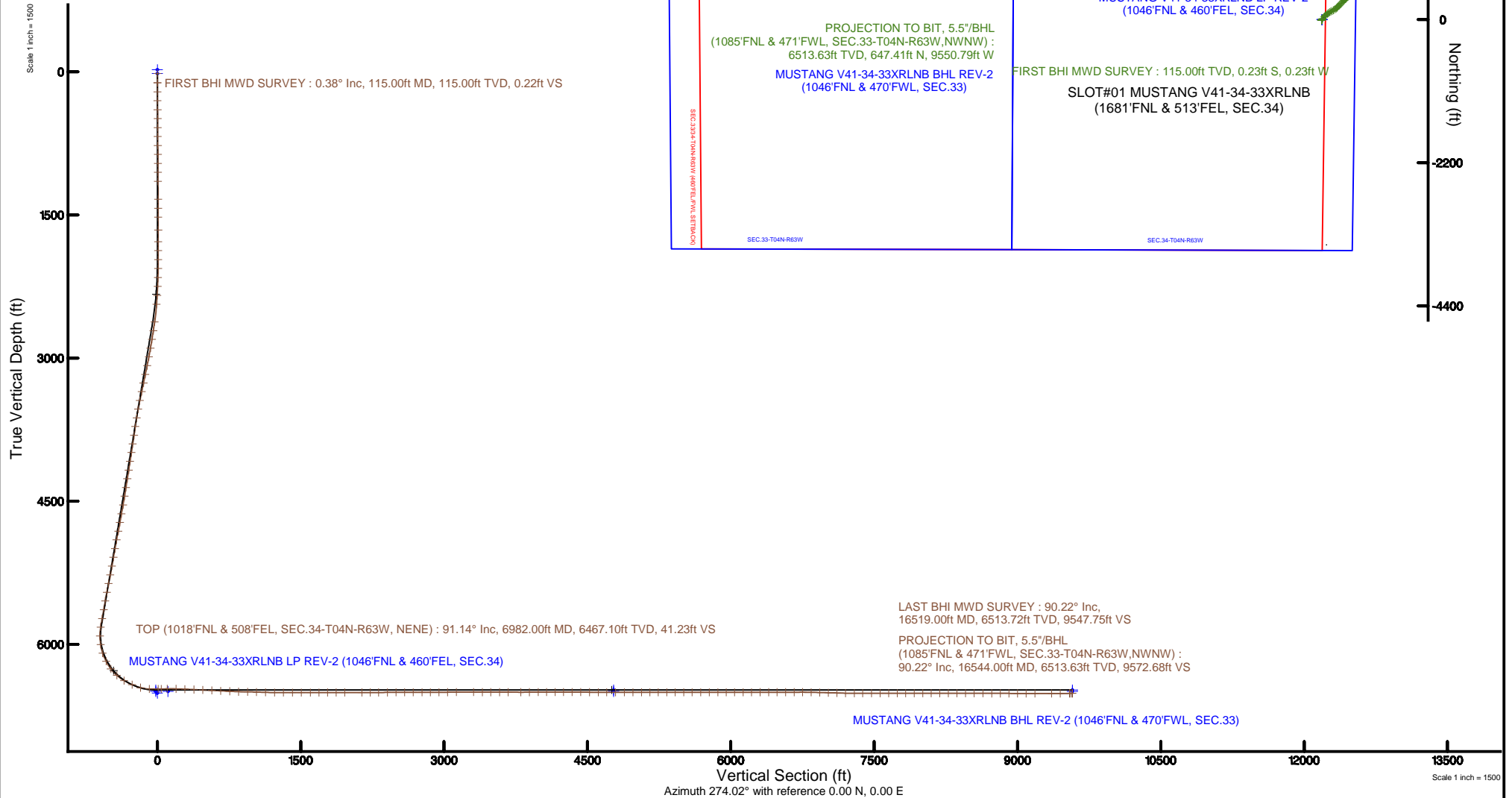


Location:	COLORADO	Slot:	SLOT#01 MUSTANG V41-34-33XRLNB (1681'FNL & 513'FEL, SEC.34)
Field:	WELD COUNTY	Well:	MUSTANG V41-34-33XRLNB
Facility:	SEC.34-T04N-R63W	Wellbore:	MUSTANG V41-34-33XRLNB PWB

Plot reference wellpath is MUSTANG V41-34-33XRLNB PWP (REV-B.0)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (17KB) (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to RIG (17KB) (RKB)	North Reference: True north
RIG (17KB) (RKB) to Mean Sea Level: 4796 feet	Scale: True distance
Mean Sea Level to Ground level (At Slot: SLOT#01 MUSTANG V41-34-33XRLNB (1681FNL & 513FEL, SEC-34)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingrijannr on 2018-01-31
	Database: Denver





# Actual Wellpath Report

MUSTANG V41-34-33XRLNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-34-33XRLNB (1681'FNL & 513'FEL, SEC.34)
Area	COLORADO	Well	MUSTANG V41-34-33XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-34-33XRLNB AWB
Facility	SEC.34-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	1/31/2018 at 10:27:20 AM
Convergence at slot	0.71° East	Database/Source file	Denver/MUSTANG_V41-34-33XRLNB_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	3302365.82	1343617.62	40°16'17.610"N	104°24'58.940"W
Facility Reference Pt			3302365.82	1343617.62	40°16'17.610"N	104°24'58.940"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.400"N	104°41'53.556"W

## WELLPATH DATUM

Calculation method	Minimum curvature	RIG (17'KB) (RKB) to Facility Vertical Datum	4796.00ft
Horizontal Reference Pt	Slot	RIG (17'KB) (RKB) to Mean Sea Level	4796.00ft
Vertical Reference Pt	RIG (17'KB) (RKB)	RIG (17'KB) (RKB) to Ground Level at Slot (SLOT#01 MUSTANG V41-34-33XRLNB (1681'FNL & 513'FEL, SEC.34))	4796.00ft
MD Reference Pt	RIG (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	274.02°



# Actual Wellpath Report

MUSTANG V41-34-33XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-34-33XRLNB (1681'FNL & 513'FEL, SEC.34)
Area	COLORADO	Well	MUSTANG V41-34-33XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-34-33XRLNB AWP
Facility	SEC.34-T04N-R63W		

WELLPATH DATA (177 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	225.470	0.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
17.00	0.000	225.470	17.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
115.00	0.380	225.470	115.00	0.22	-0.23	-0.23	40°16'17.608"N	104°24'58.943"W	0.39	FIRST BHI MWD SURVEY
210.00	0.570	202.300	210.00	0.57	-0.89	-0.64	40°16'17.601"N	104°24'58.948"W	0.28	
303.00	0.710	241.240	302.99	1.20	-1.59	-1.32	40°16'17.594"N	104°24'58.957"W	0.48	
398.00	0.700	220.310	397.98	2.04	-2.32	-2.21	40°16'17.587"N	104°24'58.968"W	0.27	
490.00	0.410	242.240	489.98	2.65	-2.90	-2.86	40°16'17.581"N	104°24'58.977"W	0.39	
584.00	0.550	248.570	583.98	3.35	-3.22	-3.58	40°16'17.578"N	104°24'58.986"W	0.16	
678.00	0.680	205.710	677.97	3.96	-3.89	-4.24	40°16'17.572"N	104°24'58.995"W	0.50	
772.00	0.990	207.350	771.96	4.49	-5.11	-4.86	40°16'17.559"N	104°24'59.003"W	0.33	
866.00	0.850	234.410	865.95	5.35	-6.24	-5.80	40°16'17.548"N	104°24'59.015"W	0.48	
960.00	0.390	206.640	959.94	6.01	-6.93	-6.51	40°16'17.542"N	104°24'59.024"W	0.57	
1054.00	0.380	210.980	1053.94	6.27	-7.48	-6.81	40°16'17.536"N	104°24'59.028"W	0.03	
1148.00	0.530	227.780	1147.94	6.71	-8.04	-7.29	40°16'17.531"N	104°24'59.034"W	0.21	
1336.00	0.340	246.790	1335.93	7.81	-8.85	-8.45	40°16'17.523"N	104°24'59.049"W	0.13	
1430.00	0.360	258.230	1429.93	8.34	-9.02	-9.00	40°16'17.521"N	104°24'59.056"W	0.08	
1524.00	0.620	260.380	1523.93	9.12	-9.16	-9.79	40°16'17.519"N	104°24'59.066"W	0.28	
1658.00	1.020	34.270	1657.92	9.22	-8.30	-9.83	40°16'17.528"N	104°24'59.067"W	1.13	
1780.00	0.030	209.820	1779.91	8.69	-7.43	-9.23	40°16'17.537"N	104°24'59.059"W	0.86	
1874.00	0.030	243.250	1873.91	8.72	-7.46	-9.27	40°16'17.536"N	104°24'59.060"W	0.02	
1968.00	0.030	79.610	1967.91	8.72	-7.47	-9.27	40°16'17.536"N	104°24'59.060"W	0.06	
2062.00	0.620	68.410	2061.91	8.24	-7.28	-8.77	40°16'17.538"N	104°24'59.053"W	0.63	
2155.00	2.300	57.570	2154.88	6.28	-6.09	-6.73	40°16'17.550"N	104°24'59.027"W	1.82	
2249.00	4.600	39.530	2248.71	2.58	-2.17	-2.73	40°16'17.589"N	104°24'58.975"W	2.68	
2344.00	6.410	33.660	2343.26	-2.26	5.18	2.63	40°16'17.661"N	104°24'58.906"W	1.99	
2438.00	8.500	33.630	2436.46	-8.29	15.34	9.39	40°16'17.762"N	104°24'58.819"W	2.22	
2626.00	13.390	42.260	2621.00	-28.64	43.03	31.74	40°16'18.035"N	104°24'58.531"W	2.74	
2720.00	13.570	44.220	2712.41	-42.50	58.99	46.75	40°16'18.193"N	104°24'58.337"W	0.52	
2814.00	13.450	47.260	2803.81	-57.11	74.31	62.47	40°16'18.344"N	104°24'58.134"W	0.77	
2908.00	13.420	50.930	2895.24	-72.56	88.61	78.96	40°16'18.486"N	104°24'57.921"W	0.91	



# Actual Wellpath Report

MUSTANG V41-34-33XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-34-33XRLNB (1681'FNL & 513'FEL, SEC.34)
Area	COLORADO	Well	MUSTANG V41-34-33XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-34-33XRLNB AWP
Facility	SEC.34-T04N-R63W		

WELLPATH DATA (177 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3002.00	13.870	54.170	2986.59	-89.18	102.08	96.57	40°16'18.619"N	104°24'57.694"W	0.94	
3097.00	13.550	61.520	3078.89	-107.31	114.05	115.58	40°16'18.737"N	104°24'57.449"W	1.86	
3191.00	13.710	62.560	3170.24	-126.10	124.44	135.15	40°16'18.840"N	104°24'57.196"W	0.31	
3285.00	13.820	62.470	3261.54	-145.17	134.76	154.99	40°16'18.942"N	104°24'56.940"W	0.12	
3378.00	13.760	62.090	3351.86	-164.02	145.07	174.61	40°16'19.044"N	104°24'56.687"W	0.12	
3472.00	13.850	62.030	3443.15	-183.05	155.58	194.43	40°16'19.147"N	104°24'56.432"W	0.10	
3566.00	13.820	54.280	3534.43	-201.23	167.41	213.48	40°16'19.264"N	104°24'56.186"W	1.97	
3660.00	13.900	43.280	3625.71	-217.01	182.19	230.34	40°16'19.410"N	104°24'55.968"W	2.80	
3754.00	13.730	41.130	3716.99	-230.89	198.81	245.42	40°16'19.575"N	104°24'55.774"W	0.58	
3848.00	13.890	42.460	3808.27	-244.64	215.54	260.37	40°16'19.740"N	104°24'55.581"W	0.38	
3941.00	13.500	42.830	3898.63	-258.38	231.74	275.29	40°16'19.900"N	104°24'55.388"W	0.43	
4035.00	13.620	42.300	3990.01	-272.11	247.97	290.20	40°16'20.060"N	104°24'55.196"W	0.18	
4129.00	13.370	42.430	4081.41	-285.72	264.18	304.98	40°16'20.221"N	104°24'55.005"W	0.27	
4223.00	13.360	46.880	4172.87	-299.86	279.62	320.24	40°16'20.373"N	104°24'54.809"W	1.09	
4317.00	13.670	47.230	4264.26	-314.86	294.59	336.32	40°16'20.521"N	104°24'54.601"W	0.34	
4412.00	13.490	43.460	4356.61	-329.58	310.25	352.18	40°16'20.676"N	104°24'54.396"W	0.95	
4505.00	13.660	43.700	4447.01	-343.49	326.07	367.23	40°16'20.832"N	104°24'54.202"W	0.19	
4600.00	13.330	53.520	4539.40	-358.98	340.69	383.79	40°16'20.977"N	104°24'53.989"W	2.43	
4694.00	13.680	54.050	4630.80	-375.74	353.66	401.50	40°16'21.105"N	104°24'53.760"W	0.39	
4788.00	13.620	50.710	4722.15	-392.31	367.19	419.07	40°16'21.239"N	104°24'53.534"W	0.84	
4882.00	13.600	58.570	4813.52	-409.37	379.96	437.06	40°16'21.365"N	104°24'53.301"W	1.97	
4976.00	13.830	55.320	4904.84	-427.14	392.12	455.73	40°16'21.485"N	104°24'53.061"W	0.86	
5070.00	13.480	50.170	4996.18	-443.81	405.53	473.39	40°16'21.617"N	104°24'52.833"W	1.35	
5164.00	13.520	48.940	5087.59	-459.47	419.77	490.08	40°16'21.758"N	104°24'52.617"W	0.31	
5259.00	12.580	56.550	5180.14	-475.53	432.76	507.09	40°16'21.886"N	104°24'52.398"W	2.06	
5353.00	13.540	58.420	5271.71	-492.60	444.17	525.01	40°16'21.999"N	104°24'52.167"W	1.12	
5447.00	13.500	57.190	5363.10	-510.33	455.88	543.60	40°16'22.115"N	104°24'51.927"W	0.31	
5541.00	13.770	56.320	5454.45	-527.97	468.03	562.13	40°16'22.235"N	104°24'51.688"W	0.36	
5635.00	13.670	52.770	5545.77	-545.17	480.95	580.29	40°16'22.363"N	104°24'51.454"W	0.90	
5729.00	12.290	54.880	5637.37	-561.28	493.43	597.32	40°16'22.486"N	104°24'51.234"W	1.55	



# Actual Wellpath Report

## MUSTANG V41-34-33XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-34-33XRLNB (1681'FNL & 513'FEL, SEC.34)
Area	COLORADO	Well	MUSTANG V41-34-33XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-34-33XRLNB AWP
Facility	SEC.34-T04N-R63W		

WELLPATH DATA (177 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5823.00	13.670	55.400	5728.97	-577.72	505.49	614.64	40°16'22.605"N	104°24'51.010"W	1.47	
5917.00	13.160	47.690	5820.41	-593.79	519.00	631.70	40°16'22.739"N	104°24'50.790"W	1.98	
6011.00	12.860	0.480	5912.24	-600.55	536.71	639.72	40°16'22.914"N	104°24'50.687"W	11.01	
6105.00	17.610	337.820	6002.99	-593.62	560.37	634.44	40°16'23.147"N	104°24'50.755"W	8.01	
6199.00	21.360	305.830	6091.84	-572.73	583.64	615.13	40°16'23.377"N	104°24'51.004"W	11.86	
6293.00	27.570	284.850	6177.52	-536.71	599.28	580.12	40°16'23.532"N	104°24'51.456"W	11.27	
6387.00	37.350	281.650	6256.75	-486.96	610.64	531.05	40°16'23.644"N	104°24'52.089"W	10.56	
6481.00	48.510	281.890	6325.46	-423.63	623.69	468.47	40°16'23.773"N	104°24'52.896"W	11.87	
6575.00	60.070	281.200	6380.24	-348.08	638.91	393.81	40°16'23.924"N	104°24'53.859"W	12.31	
6669.00	66.010	277.590	6422.85	-264.72	652.51	311.19	40°16'24.058"N	104°24'54.925"W	7.19	
6763.00	75.160	271.960	6454.08	-176.21	659.75	222.97	40°16'24.130"N	104°24'56.063"W	11.25	
6857.00	88.460	271.330	6467.44	-83.45	662.41	130.18	40°16'24.156"N	104°24'57.261"W	14.16	
6950.00	91.170	269.630	6467.74	9.36	663.19	37.19	40°16'24.164"N	104°24'58.460"W	3.44	
6982.00†	91.140	268.479	6467.10	41.23	662.66	5.21	40°16'24.158"N	104°24'58.873"W	3.60	TOP (1018'FNL & 508'FEL, SEC.34-T04N-R63W, NENE)
7044.00	91.080	266.250	6465.90	102.80	659.81	-56.71	40°16'24.130"N	104°24'59.672"W	3.60	
7138.00	88.150	265.990	6466.53	195.89	653.45	-150.48	40°16'24.067"N	104°25'00.881"W	3.13	
7232.00	87.570	266.930	6470.04	289.01	647.65	-244.24	40°16'24.010"N	104°25'02.091"W	1.17	
7326.00	87.470	268.410	6474.11	382.34	643.83	-338.07	40°16'23.972"N	104°25'03.302"W	1.58	
7420.00	87.350	270.070	6478.35	475.92	642.59	-431.96	40°16'23.960"N	104°25'04.513"W	1.77	
7514.00	87.380	271.040	6482.67	569.65	643.50	-525.86	40°16'23.969"N	104°25'05.724"W	1.03	
7608.00	87.260	270.970	6487.07	663.41	645.14	-619.74	40°16'23.985"N	104°25'06.935"W	0.15	
7702.00	87.230	270.660	6491.59	757.16	646.48	-713.62	40°16'23.998"N	104°25'08.147"W	0.33	
7795.00	87.380	270.460	6495.96	849.89	647.39	-806.51	40°16'24.007"N	104°25'09.345"W	0.27	
7889.00	90.060	272.140	6498.06	943.75	649.52	-900.46	40°16'24.028"N	104°25'10.557"W	3.36	
7983.00	87.970	272.570	6499.68	1037.69	653.38	-994.36	40°16'24.066"N	104°25'11.768"W	2.27	
8077.00	87.880	272.660	6503.08	1131.60	657.67	-1088.20	40°16'24.109"N	104°25'12.979"W	0.14	
8171.00	89.780	272.460	6505.00	1225.54	661.86	-1182.08	40°16'24.150"N	104°25'14.190"W	2.03	
8265.00	89.690	271.360	6505.43	1319.48	665.00	-1276.02	40°16'24.181"N	104°25'15.402"W	1.17	
8359.00	89.750	270.060	6505.89	1413.32	666.16	-1370.01	40°16'24.193"N	104°25'16.615"W	1.38	
8453.00	90.460	269.420	6505.72	1507.05	665.74	-1464.01	40°16'24.188"N	104°25'17.828"W	1.02	



# Actual Wellpath Report

MUSTANG V41-34-33XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-34-33XRLNB (1681'FNL & 513'FEL, SEC.34)
Area	COLORADO	Well	MUSTANG V41-34-33XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-34-33XRLNB AWP
Facility	SEC.34-T04N-R63W		

WELLPATH DATA (177 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8547.00	90.310	270.810	6505.09	1600.83	665.92	-1558.01	40°16'24.190"N	104°25'19.040"W	1.49	
8637.00	90.490	267.290	6504.46	1690.48	664.43	-1647.98	40°16'24.175"N	104°25'20.201"W	3.92	
8727.00	90.030	265.780	6504.05	1779.71	658.99	-1737.81	40°16'24.121"N	104°25'21.360"W	1.75	
8819.00	90.120	266.100	6503.93	1870.79	652.48	-1829.58	40°16'24.057"N	104°25'22.544"W	0.36	
8909.00	89.850	265.730	6503.96	1959.90	646.07	-1919.35	40°16'23.994"N	104°25'23.702"W	0.51	
9089.00	90.090	272.450	6504.05	2139.13	643.21	-2099.22	40°16'23.965"N	104°25'26.023"W	3.74	
9177.00	90.090	271.650	6503.91	2227.07	646.36	-2187.17	40°16'23.996"N	104°25'27.157"W	0.91	
9265.00	89.910	274.180	6503.91	2315.05	650.83	-2275.05	40°16'24.040"N	104°25'28.291"W	2.88	
9358.00	90.620	273.840	6503.48	2408.05	657.34	-2367.82	40°16'24.105"N	104°25'29.488"W	0.85	
9448.00	90.120	271.480	6502.90	2498.02	661.51	-2457.71	40°16'24.146"N	104°25'30.648"W	2.68	
9538.00	90.280	270.480	6502.59	2587.89	663.05	-2547.70	40°16'24.161"N	104°25'31.808"W	1.13	
9628.00	90.120	270.440	6502.27	2677.71	663.78	-2637.69	40°16'24.168"N	104°25'32.969"W	0.18	
9719.00	90.060	270.540	6502.13	2768.54	664.55	-2728.69	40°16'24.176"N	104°25'34.143"W	0.13	
9808.00	90.000	269.750	6502.08	2857.34	664.78	-2817.69	40°16'24.178"N	104°25'35.292"W	0.89	
9898.00	90.250	269.450	6501.89	2947.07	664.15	-2907.69	40°16'24.171"N	104°25'36.453"W	0.43	
9988.00	90.490	272.760	6501.30	3036.94	665.89	-2997.65	40°16'24.188"N	104°25'37.613"W	3.69	
10080.00	90.090	272.850	6500.84	3128.92	670.39	-3089.54	40°16'24.233"N	104°25'38.799"W	0.45	
10259.00	89.910	269.370	6500.84	3307.66	673.86	-3268.48	40°16'24.267"N	104°25'41.107"W	1.95	
10352.00	89.750	269.650	6501.12	3400.37	673.06	-3361.48	40°16'24.259"N	104°25'42.307"W	0.35	
10441.00	90.150	270.450	6501.19	3489.16	673.14	-3450.48	40°16'24.259"N	104°25'43.455"W	1.00	
10533.00	90.000	270.560	6501.07	3580.98	673.95	-3542.47	40°16'24.267"N	104°25'44.642"W	0.20	
10622.00	89.910	270.440	6501.14	3669.82	674.72	-3631.47	40°16'24.275"N	104°25'45.790"W	0.17	
10755.00	89.970	269.930	6501.28	3802.52	675.15	-3764.47	40°16'24.279"N	104°25'47.506"W	0.39	
10845.00	90.220	270.360	6501.13	3892.31	675.38	-3854.47	40°16'24.281"N	104°25'48.667"W	0.55	
10937.00	90.090	270.310	6500.88	3984.12	675.92	-3946.47	40°16'24.286"N	104°25'49.854"W	0.15	
11025.00	90.180	270.600	6500.68	4071.95	676.62	-4034.46	40°16'24.293"N	104°25'50.990"W	0.35	
11115.00	90.340	271.120	6500.27	4161.81	677.97	-4124.45	40°16'24.306"N	104°25'52.151"W	0.60	
11202.00	90.000	271.370	6500.01	4248.71	679.86	-4211.43	40°16'24.325"N	104°25'53.273"W	0.49	
11294.00	89.750	272.460	6500.21	4340.65	682.93	-4303.38	40°16'24.355"N	104°25'54.459"W	1.22	
11384.00	89.660	272.090	6500.67	4430.60	686.51	-4393.31	40°16'24.390"N	104°25'55.619"W	0.42	





# Actual Wellpath Report

MUSTANG V41-34-33XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-34-33XRLNB (1681'FNL & 513'FEL, SEC.34)
Area	COLORADO	Well	MUSTANG V41-34-33XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-34-33XRLNB AWP
Facility	SEC.34-T04N-R63W		

WELLPATH DATA (177 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11476.00	89.600	272.510	6501.27	4522.56	690.20	-4485.23	40°16'24.426"N	104°25'56.805"W	0.46	
11567.00	89.940	273.300	6501.63	4613.54	694.81	-4576.11	40°16'24.472"N	104°25'57.978"W	0.95	
11656.00	89.630	271.950	6501.97	4702.51	698.89	-4665.01	40°16'24.512"N	104°25'59.125"W	1.56	
11748.00	89.820	271.100	6502.41	4794.42	701.33	-4756.98	40°16'24.536"N	104°26'00.311"W	0.95	
11840.00	89.750	270.470	6502.75	4886.28	702.60	-4848.97	40°16'24.548"N	104°26'01.498"W	0.69	
11931.00	90.120	269.980	6502.86	4977.08	702.95	-4939.97	40°16'24.552"N	104°26'02.672"W	0.67	
12020.00	89.750	269.100	6502.96	5065.80	702.24	-5028.96	40°16'24.544"N	104°26'03.820"W	1.07	
12108.00	89.940	268.500	6503.20	5153.44	700.40	-5116.94	40°16'24.526"N	104°26'04.955"W	0.72	
12195.00	90.090	268.870	6503.17	5240.06	698.40	-5203.92	40°16'24.506"N	104°26'06.077"W	0.46	
12285.00	90.310	268.570	6502.86	5329.68	696.39	-5293.90	40°16'24.486"N	104°26'07.238"W	0.41	
12374.00	90.150	268.600	6502.50	5418.28	694.19	-5382.87	40°16'24.464"N	104°26'08.386"W	0.18	
12464.00	90.000	267.920	6502.38	5507.82	691.46	-5472.83	40°16'24.437"N	104°26'09.546"W	0.77	
12553.00	90.150	267.700	6502.27	5596.30	688.06	-5561.76	40°16'24.403"N	104°26'10.694"W	0.30	
12642.00	90.060	268.390	6502.10	5684.82	685.02	-5650.71	40°16'24.373"N	104°26'11.841"W	0.78	
12732.00	90.090	268.140	6501.99	5774.36	682.30	-5740.67	40°16'24.346"N	104°26'13.002"W	0.28	
12822.00	89.940	267.860	6501.96	5863.87	679.15	-5830.61	40°16'24.315"N	104°26'14.162"W	0.35	
12911.00	89.970	267.850	6502.03	5952.35	675.82	-5919.55	40°16'24.281"N	104°26'15.310"W	0.04	
12998.00	90.000	267.690	6502.06	6038.84	672.44	-6006.49	40°16'24.248"N	104°26'16.431"W	0.19	
13088.00	90.180	268.680	6501.91	6128.37	669.59	-6096.44	40°16'24.219"N	104°26'17.592"W	1.12	
13178.00	90.180	269.250	6501.63	6218.02	667.96	-6186.42	40°16'24.203"N	104°26'18.753"W	0.63	
13266.00	90.000	270.180	6501.49	6305.77	667.52	-6274.42	40°16'24.199"N	104°26'19.888"W	1.08	
13356.00	89.970	270.740	6501.52	6395.60	668.25	-6364.42	40°16'24.205"N	104°26'21.049"W	0.62	
13445.00	90.030	271.290	6501.52	6484.47	669.82	-6453.40	40°16'24.221"N	104°26'22.197"W	0.62	
13535.00	90.000	271.770	6501.49	6574.39	672.23	-6543.37	40°16'24.244"N	104°26'23.358"W	0.53	
13624.00	90.120	270.780	6501.40	6663.29	674.21	-6632.35	40°16'24.264"N	104°26'24.506"W	1.12	
13713.00	90.090	269.820	6501.24	6752.10	674.67	-6721.35	40°16'24.268"N	104°26'25.654"W	1.08	
13802.00	88.650	270.410	6502.22	6840.88	674.85	-6810.34	40°16'24.270"N	104°26'26.802"W	1.75	
13893.00	88.580	273.160	6504.42	6931.78	677.68	-6901.26	40°16'24.297"N	104°26'27.975"W	3.02	
13983.00	88.490	273.420	6506.72	7021.74	682.85	-6991.08	40°16'24.348"N	104°26'29.134"W	0.31	
14072.00	88.430	273.270	6509.11	7110.70	688.04	-7079.90	40°16'24.399"N	104°26'30.279"W	0.18	



# Actual Wellpath Report

MUSTANG V41-34-33XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-34-33XRLNB (1681'FNL & 513'FEL, SEC.34)
Area	COLORADO	Well	MUSTANG V41-34-33XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-34-33XRLNB AWP
Facility	SEC.34-T04N-R63W		

WELLPATH DATA (177 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14163.00	88.460	271.990	6511.58	7201.64	692.21	-7170.77	40°16'24.440"N	104°26'31.452"W	1.41	
14254.00	90.220	271.070	6512.63	7292.54	694.64	-7261.72	40°16'24.464"N	104°26'32.625"W	2.18	
14343.00	90.180	269.060	6512.32	7381.33	694.74	-7350.72	40°16'24.465"N	104°26'33.773"W	2.26	
14436.00	89.660	267.580	6512.45	7473.87	692.02	-7443.67	40°16'24.437"N	104°26'34.973"W	1.69	
14526.00	89.850	267.300	6512.83	7563.27	688.00	-7533.58	40°16'24.397"N	104°26'36.133"W	0.38	
14616.00	89.970	267.660	6512.97	7652.69	684.04	-7623.50	40°16'24.358"N	104°26'37.293"W	0.42	
14705.00	90.090	267.960	6512.93	7741.17	680.64	-7712.43	40°16'24.324"N	104°26'38.440"W	0.36	
14794.00	90.090	267.390	6512.79	7829.62	677.03	-7801.36	40°16'24.288"N	104°26'39.587"W	0.64	
14884.00	90.090	266.330	6512.64	7918.92	672.10	-7891.22	40°16'24.239"N	104°26'40.747"W	1.18	
14974.00	90.120	267.710	6512.48	8008.24	667.42	-7981.10	40°16'24.193"N	104°26'41.906"W	1.53	
15064.00	90.030	268.950	6512.36	8097.80	664.80	-8071.06	40°16'24.166"N	104°26'43.067"W	1.38	
15154.00	90.090	267.940	6512.27	8187.37	662.36	-8161.02	40°16'24.142"N	104°26'44.227"W	1.12	
15244.00	89.820	267.620	6512.34	8276.84	658.87	-8250.95	40°16'24.107"N	104°26'45.387"W	0.47	
15333.00	89.750	267.640	6512.67	8365.29	655.19	-8339.88	40°16'24.071"N	104°26'46.535"W	0.08	
15424.00	90.030	269.590	6512.85	8455.88	652.99	-8430.85	40°16'24.049"N	104°26'47.708"W	2.16	
15515.00	89.720	270.470	6513.04	8546.66	653.04	-8521.85	40°16'24.049"N	104°26'48.882"W	1.03	
15607.00	89.940	270.580	6513.32	8638.49	653.88	-8613.84	40°16'24.057"N	104°26'50.069"W	0.27	
15699.00	89.880	269.950	6513.46	8730.29	654.31	-8705.84	40°16'24.061"N	104°26'51.256"W	0.69	
15790.00	89.910	269.460	6513.63	8821.03	653.84	-8796.84	40°16'24.056"N	104°26'52.430"W	0.54	
15880.00	89.940	269.300	6513.75	8910.74	652.86	-8886.83	40°16'24.046"N	104°26'53.591"W	0.18	
15970.00	89.720	268.950	6514.01	9000.41	651.49	-8976.82	40°16'24.032"N	104°26'54.752"W	0.46	
16060.00	89.910	269.060	6514.30	9090.06	649.93	-9066.81	40°16'24.016"N	104°26'55.913"W	0.24	
16152.00	90.090	269.330	6514.30	9181.74	648.63	-9158.80	40°16'24.003"N	104°26'57.100"W	0.35	
16328.00	90.000	270.170	6514.17	9357.25	647.87	-9334.80	40°16'23.995"N	104°26'59.370"W	0.48	
16419.00	90.150	269.880	6514.05	9448.03	647.90	-9425.79	40°16'23.995"N	104°27'00.544"W	0.36	
16519.00	90.220	269.700	6513.72	9547.75	647.54	-9525.79	40°16'23.991"N	104°27'01.834"W	0.19	LAST BHI MWD SURVEY
16544.00	90.220	269.700	6513.63	9572.68	647.41	-9550.79	40°16'23.989"N	104°27'02.157"W	0.00	PROJECTION TO BIT, 5.5°/BHL (1085'FNL & 471'FWL, SEC.33-T04N-R63W,NWNW)





# Actual Wellpath Report

MUSTANG V41-34-33XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-34-33XRLNB (1681'FNL & 513'FEL, SEC.34)
Area	COLORADO	Well	MUSTANG V41-34-33XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-34-33XRLNB AWP
Facility	SEC.34-T04N-R63W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.34-T04N-R63W	-22.00	0.00	0.00	3302365.82	1343617.62	40°16'17.610"N	104°24'58.940"W	polygon
SEC.33-T04N-R63W	17.00	0.00	0.00	3302365.82	1343617.62	40°16'17.610"N	104°24'58.940"W	polygon
MUSTANG V41-34-33XRLNB BHL REV-2 (1046'FNL & 470'FWL, SEC.33)	6478.00	670.75	-9551.02	3292807.74	1344171.58	40°16'24.220"N	104°27'02.160"W	point
MUSTANG V41-34-33XRLNB LP REV-2 (1046'FNL & 460'FEL, SEC.34)	6478.00	636.52	62.43	3302420.47	1344254.83	40°16'23.900"N	104°24'58.135"W	point
MUSTANG V41-34-33XRLNB MID-LATERAL TARGET REV-1 (1053'FNL & 0'FWL, SEC.34)	6478.00	687.57	-4737.53	3297620.46	1344247.22	40°16'24.400"N	104°26'00.060"W	point
MUSTANG V41-34-33XRLNB BHL (1046'FNL & 470'FWL, SEC.33)	6493.00	670.75	-9551.02	3292807.74	1344171.58	40°16'24.220"N	104°27'02.160"W	point
MUSTANG V41-34-33XRLNB LP (1046'FNL & 589'FEL, SEC.34)	6493.00	636.52	-67.44	3302290.62	1344253.24	40°16'23.900"N	104°24'59.810"W	point
MUSTANG V41-34-33XRLNB LP REV-1 (1046'FNL & 460'FEL, SEC.34)	6493.00	636.52	62.43	3302420.47	1344254.83	40°16'23.900"N	104°24'58.135"W	point
MUSTANG V41-34-33XRLNB MID-LATERAL TARGET (1053'FNL & 0'FWL, SEC.34)	6493.00	687.57	-4737.53	3297620.46	1344247.22	40°16'24.400"N	104°26'00.060"W	point
SEC.33/34-T04N-R63W (460'FEL/FWL SETBACK)	6510.00	0.00	0.00	3302365.82	1343617.62	40°16'17.610"N	104°24'58.940"W	polygon



# Actual Wellpath Report

MUSTANG V41-34-33XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-34-33XRLNB (1681'FNL & 513'FEL, SEC.34)
Area	COLORADO	Well	MUSTANG V41-34-33XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-34-33XRLNB AWB
Facility	SEC.34-T04N-R63W		

WELLPATH COMPOSITION - Ref Wellbore: MUSTANG V41-34-33XRLNB AWB      Ref Wellpath: MUSTANG V41-34-33XRLNB AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1658.00	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)	BHI NAVITRAK +SR+ROCKIES <115-1658>	MUSTANG V41-34-33XRLNB AWB
1658.00	16519.00	Custom BHI AutoTrak Curve (Short) (Rockies 0.03Gt model)	BHI ATCURVE +SHORT+ROCKIES <1780-16519>	MUSTANG V41-34-33XRLNB AWB
16519.00	16544.00	Blind Drilling (std)	Projection to bit	MUSTANG V41-34-33XRLNB AWB



# Actual Wellpath Report

MUSTANG V41-34-33XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-34-33XRLNB (1681'FNL & 513'FEL, SEC.34)
Area	COLORADO	Well	MUSTANG V41-34-33XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-34-33XRLNB AWB
Facility	SEC.34-T04N-R63W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
115.00	0.380	225.470	115.00	FIRST BHI MWD SURVEY
6982.00	91.140	268.479	6467.10	TOP (1018'FNL & 508'FEL, SEC.34-T04N-R63W, NENE)
16519.00	90.220	269.700	6513.72	LAST BHI MWD SURVEY
16544.00	90.220	269.700	6513.63	PROJECTION TO BIT, 5.5"/BHL (1085'FNL & 471'FWL, SEC.33-T04N-R63W,NWNW)