

BONANZA CREEK OIL COMPANY

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-A.1)	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 (1681°FNL & 513°FEL, SEC.34)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingmjmr on 2017-10-27
	Database: Denver

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.34-T04N-R63W	3302365.821	1343617.624	40°16'17.610"N	104°24'58.940"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
SLOT#01 MUSTANG V41-34-33XRLNB (1681°FNL & 513°FEL, SEC.34)	0.00	0.00	3302365.821	1343617.624
RIG (17KB) (RKB) to Ground level (At Slot: SLOT#01 MUSTANG V41-34-33XRLNB (1681°FNL & 513°FEL, SEC.34))				4796ft
Mean Sea Level to Ground level (At Slot: SLOT#01 MUSTANG V41-34-33XRLNB (1681°FNL & 513°FEL, SEC.34))				0ft
RIG (17KB) (RKB) to Mean Sea Level				4796ft

Survey Program

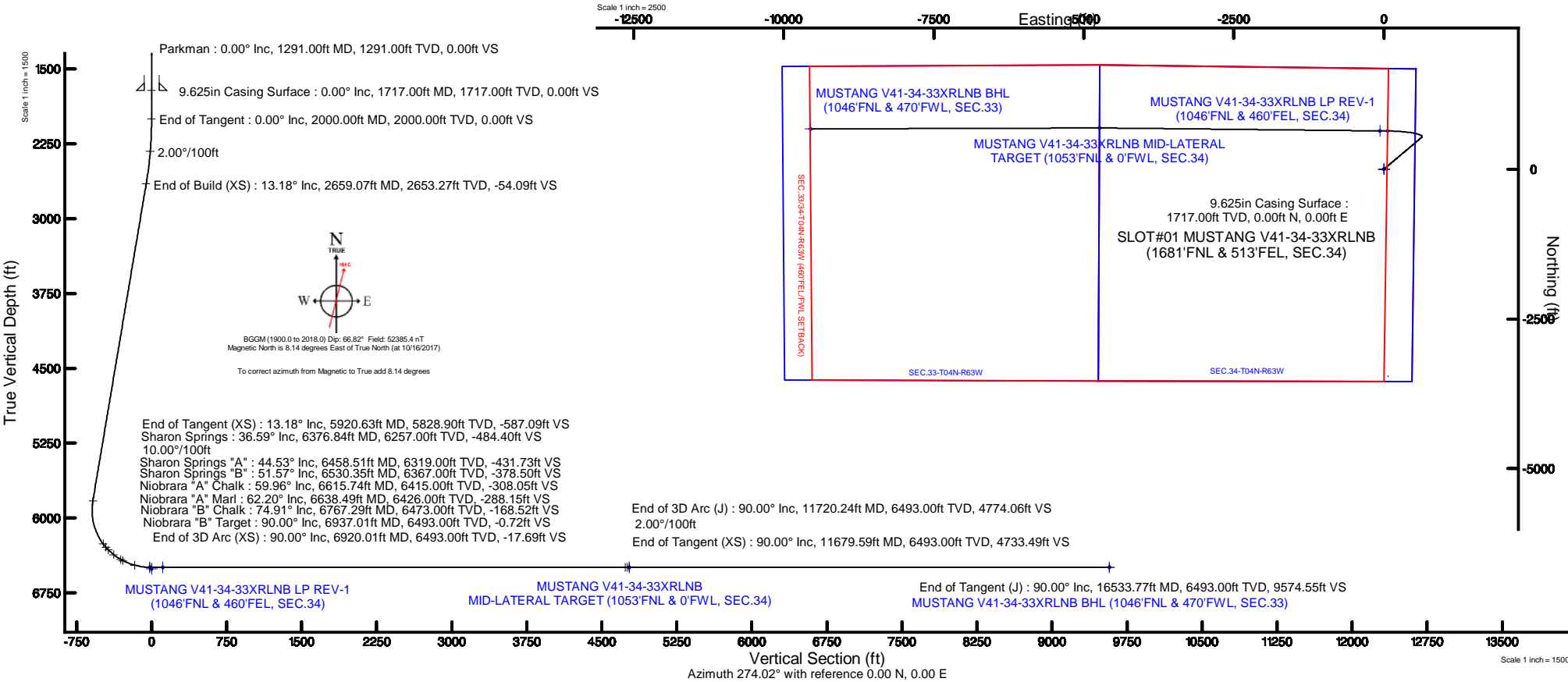
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	16550.77	BHI NaviTrak	BHI NaviTrak (Standard)		MUSTANG V41-34-33XRLNB PWB

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	49.795	17.00	0.00	0.00	0.00	0.00
End of Tangent	2000.00	0.000	49.795	2000.00	0.00	0.00	0.00	0.00
End of Build (XS)	2659.07	13.181	49.795	2653.27	48.72	57.65	2.00	-54.09
End of Tangent (XS)	5920.63	13.181	49.795	5828.90	528.82	625.68	0.00	-587.09
End of 3D Arc (XS)	6920.01	90.000	270.613	6493.00	636.52	62.43	10.00	-17.69
End of Tangent (XS)	11679.59	90.000	270.613	6493.00	687.43	-4696.87	0.00	4733.49
End of 3D Arc (J)	11720.24	90.000	269.800	6493.00	687.57	-4737.53	2.00	4774.06
End of Tangent (J)	16533.77	90.000	269.800	6493.00	670.75	-9551.02	0.00	9574.55

Bottom Hole Location

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
16533.77	90.000	269.800	6493.00	670.75	-9551.02	3292807.74	1344171.58	40°16'24.220"N	104°27'02.160"W





# Planned Wellpath Report

## MUSTANG V41-34-33XRLNB PWP (REV-A.1)

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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 PWB
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	10/27/2017 at 12:29:28 PM
Convergence at slot	0.71° East	Database/Source file	Denver/MUSTANG_V41-34-33XRLNB_PWP__REV-A.1_.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°



# Planned Wellpath Report

## MUSTANG V41-34-33XRLNB PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	MUSTANG V41-34-33XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-34-33XRLNB PWB
Facility	SEC.34-T04N-R63W		

WELLPATH DATA (182 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	49.795	0.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
17.00	0.000	49.795	17.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	Tie On
117.00†	0.000	49.795	117.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
217.00†	0.000	49.795	217.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
317.00†	0.000	49.795	317.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
417.00†	0.000	49.795	417.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
517.00†	0.000	49.795	517.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
617.00†	0.000	49.795	617.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
717.00†	0.000	49.795	717.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
817.00†	0.000	49.795	817.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
917.00†	0.000	49.795	917.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
1017.00†	0.000	49.795	1017.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
1117.00†	0.000	49.795	1117.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
1217.00†	0.000	49.795	1217.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
1291.00†	0.000	49.795	1291.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	Parkman
1317.00†	0.000	49.795	1317.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
1417.00†	0.000	49.795	1417.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
1517.00†	0.000	49.795	1517.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
1617.00†	0.000	49.795	1617.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
1717.00†	0.000	49.795	1717.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
1817.00†	0.000	49.795	1817.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
1917.00†	0.000	49.795	1917.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	
2000.00	0.000	49.795	2000.00	0.00	0.00	0.00	40°16'17.610"N	104°24'58.940"W	0.00	End of Tangent
2017.00†	0.340	49.795	2017.00	-0.04	0.03	0.04	40°16'17.610"N	104°24'58.940"W	2.00	
2117.00†	2.340	49.795	2116.97	-1.71	1.54	1.82	40°16'17.625"N	104°24'58.916"W	2.00	
2217.00†	4.340	49.795	2216.79	-5.89	5.30	6.27	40°16'17.662"N	104°24'58.859"W	2.00	
2317.00†	6.340	49.795	2316.35	-12.56	11.31	13.38	40°16'17.722"N	104°24'58.767"W	2.00	
2417.00†	8.340	49.795	2415.53	-21.71	19.56	23.14	40°16'17.803"N	104°24'58.641"W	2.00	
2517.00†	10.340	49.795	2514.20	-33.34	30.03	35.53	40°16'17.907"N	104°24'58.482"W	2.00	
2617.00†	12.340	49.795	2612.24	-47.43	42.72	50.55	40°16'18.032"N	104°24'58.288"W	2.00	



# Planned Wellpath Report

## MUSTANG V41-34-33XRLNB PWP (REV-A.1)

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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 PWB
Facility	SEC.34-T04N-R63W		

WELLPATH DATA (182 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2659.07	13.181	49.795	2653.27	-54.09	48.72	57.65	40°16'18.091"N	104°24'58.196"W	2.00	End of Build (XS)
2717.00†	13.181	49.795	2709.68	-63.56	57.25	67.74	40°16'18.176"N	104°24'58.066"W	0.00	
2817.00†	13.181	49.795	2807.04	-79.90	71.97	85.15	40°16'18.321"N	104°24'57.841"W	0.00	
2917.00†	13.181	49.795	2904.41	-96.24	86.69	102.57	40°16'18.467"N	104°24'57.617"W	0.00	
3017.00†	13.181	49.795	3001.77	-112.58	101.41	119.98	40°16'18.612"N	104°24'57.392"W	0.00	
3117.00†	13.181	49.795	3099.14	-128.93	116.13	137.40	40°16'18.758"N	104°24'57.167"W	0.00	
3217.00†	13.181	49.795	3196.50	-145.27	130.85	154.81	40°16'18.903"N	104°24'56.943"W	0.00	
3317.00†	13.181	49.795	3293.87	-161.61	145.57	172.23	40°16'19.048"N	104°24'56.718"W	0.00	
3417.00†	13.181	49.795	3391.23	-177.95	160.29	189.65	40°16'19.194"N	104°24'56.493"W	0.00	
3517.00†	13.181	49.795	3488.60	-194.29	175.01	207.06	40°16'19.339"N	104°24'56.269"W	0.00	
3617.00†	13.181	49.795	3585.96	-210.64	189.73	224.48	40°16'19.485"N	104°24'56.044"W	0.00	
3717.00†	13.181	49.795	3683.33	-226.98	204.45	241.89	40°16'19.630"N	104°24'55.819"W	0.00	
3817.00†	13.181	49.795	3780.69	-243.32	219.17	259.31	40°16'19.776"N	104°24'55.595"W	0.00	
3917.00†	13.181	49.795	3878.06	-259.66	233.89	276.73	40°16'19.921"N	104°24'55.370"W	0.00	
4017.00†	13.181	49.795	3975.42	-276.00	248.61	294.14	40°16'20.067"N	104°24'55.145"W	0.00	
4117.00†	13.181	49.795	4072.79	-292.35	263.33	311.56	40°16'20.212"N	104°24'54.921"W	0.00	
4217.00†	13.181	49.795	4170.16	-308.69	278.05	328.97	40°16'20.358"N	104°24'54.696"W	0.00	
4317.00†	13.181	49.795	4267.52	-325.03	292.77	346.39	40°16'20.503"N	104°24'54.471"W	0.00	
4417.00†	13.181	49.795	4364.89	-341.37	307.49	363.81	40°16'20.649"N	104°24'54.247"W	0.00	
4517.00†	13.181	49.795	4462.25	-357.71	322.21	381.22	40°16'20.794"N	104°24'54.022"W	0.00	
4617.00†	13.181	49.795	4559.62	-374.05	336.93	398.64	40°16'20.939"N	104°24'53.797"W	0.00	
4717.00†	13.181	49.795	4656.98	-390.40	351.65	416.05	40°16'21.085"N	104°24'53.572"W	0.00	
4817.00†	13.181	49.795	4754.35	-406.74	366.37	433.47	40°16'21.230"N	104°24'53.348"W	0.00	
4917.00†	13.181	49.795	4851.71	-423.08	381.09	450.89	40°16'21.376"N	104°24'53.123"W	0.00	
5017.00†	13.181	49.795	4949.08	-439.42	395.81	468.30	40°16'21.521"N	104°24'52.898"W	0.00	
5117.00†	13.181	49.795	5046.44	-455.76	410.53	485.72	40°16'21.667"N	104°24'52.674"W	0.00	
5217.00†	13.181	49.795	5143.81	-472.11	425.25	503.13	40°16'21.812"N	104°24'52.449"W	0.00	
5317.00†	13.181	49.795	5241.17	-488.45	439.97	520.55	40°16'21.958"N	104°24'52.224"W	0.00	
5417.00†	13.181	49.795	5338.54	-504.79	454.69	537.96	40°16'22.103"N	104°24'52.000"W	0.00	
5517.00†	13.181	49.795	5435.90	-521.13	469.41	555.38	40°16'22.249"N	104°24'51.775"W	0.00	



# Planned Wellpath Report

## MUSTANG V41-34-33XRLNB PWP (REV-A.1)

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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 PWB
Facility	SEC.34-T04N-R63W		

### WELLPATH DATA (182 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5617.00†	13.181	49.795	5533.27	-537.47	484.13	572.80	40°16'22.394"N	104°24'51.550"W	0.00	
5717.00†	13.181	49.795	5630.64	-553.82	498.85	590.21	40°16'22.539"N	104°24'51.326"W	0.00	
5817.00†	13.181	49.795	5728.00	-570.16	513.57	607.63	40°16'22.685"N	104°24'51.101"W	0.00	
5917.00†	13.181	49.795	5825.37	-586.50	528.29	625.04	40°16'22.830"N	104°24'50.876"W	0.00	
5920.63	13.181	49.795	5828.90	-587.09	528.82	625.68	40°16'22.836"N	104°24'50.868"W	0.00	End of Tangent (XS)
6017.00†	8.709	2.599	5923.67	-594.80	543.24	634.42	40°16'22.978"N	104°24'50.755"W	10.00	
6117.00†	13.004	312.133	6022.06	-585.74	558.39	626.40	40°16'23.128"N	104°24'50.859"W	10.00	
6217.00†	21.466	293.524	6117.55	-559.58	573.28	601.21	40°16'23.275"N	104°24'51.184"W	10.00	
6317.00†	30.836	285.471	6207.24	-517.10	587.45	559.63	40°16'23.415"N	104°24'51.720"W	10.00	
6376.84†	36.592	282.512	6257.00	-484.40	595.42	527.41	40°16'23.494"N	104°24'52.136"W	10.00	Sharon Springs
6417.00†	40.488	280.943	6288.41	-459.61	600.49	502.91	40°16'23.544"N	104°24'52.452"W	10.00	
6458.51†	44.533	279.565	6319.00	-431.73	605.47	475.32	40°16'23.593"N	104°24'52.808"W	10.00	Sharon Springs "A"
6517.00†	50.257	277.926	6358.58	-388.85	611.98	432.78	40°16'23.657"N	104°24'53.357"W	10.00	
6530.35†	51.566	277.590	6367.00	-378.50	613.38	422.51	40°16'23.671"N	104°24'53.489"W	10.00	Sharon Springs "B"
6615.74†	59.960	275.692	6415.00	-308.05	621.48	352.46	40°16'23.751"N	104°24'54.393"W	10.00	Niobrara "A" Chalk
6617.00†	60.084	275.666	6415.63	-306.96	621.58	351.37	40°16'23.752"N	104°24'54.407"W	10.00	
6638.49†	62.201	275.242	6426.00	-288.15	623.37	332.64	40°16'23.770"N	104°24'54.649"W	10.00	Niobrara "A" Marl
6717.00†	69.943	273.817	6457.82	-216.44	629.01	261.15	40°16'23.826"N	104°24'55.571"W	10.00	
6767.29†	74.908	272.979	6473.00	-168.52	631.84	213.31	40°16'23.854"N	104°24'56.188"W	10.00	Niobrara "B" Chalk
6817.00†	79.819	272.188	6483.87	-120.04	634.03	164.87	40°16'23.875"N	104°24'56.813"W	10.00	
6917.00†	89.703	270.658	6492.99	-20.69	636.49	65.44	40°16'23.900"N	104°24'58.096"W	10.00	
6920.01	90.000	270.613	6493.00†	-17.69	636.52	62.43	40°16'23.900"N	104°24'58.135"W	10.00	End of 3D Arc (XS)
6937.01†	90.000	270.613	6493.00	-0.72	636.70	45.43	40°16'23.902"N	104°24'58.354"W	0.00	Niobrara "B" Target
7017.00†	90.000	270.613	6493.00	79.13	637.56	-34.55	40°16'23.910"N	104°24'59.386"W	0.00	
7117.00†	90.000	270.613	6493.00	178.96	638.63	-134.55	40°16'23.921"N	104°25'00.676"W	0.00	
7217.00†	90.000	270.613	6493.00	278.78	639.70	-234.54	40°16'23.931"N	104°25'01.966"W	0.00	
7317.00†	90.000	270.613	6493.00	378.60	640.77	-334.54	40°16'23.942"N	104°25'03.256"W	0.00	
7417.00†	90.000	270.613	6493.00	478.43	641.84	-434.53	40°16'23.952"N	104°25'04.546"W	0.00	
7517.00†	90.000	270.613	6493.00	578.25	642.91	-534.52	40°16'23.963"N	104°25'05.836"W	0.00	
7617.00†	90.000	270.613	6493.00	678.07	643.97	-634.52	40°16'23.974"N	104°25'07.126"W	0.00	





# Planned Wellpath Report

## MUSTANG V41-34-33XRLNB PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	MUSTANG V41-34-33XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-34-33XRLNB PWB
Facility	SEC.34-T04N-R63W		

WELLPATH DATA (182 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7717.00†	90.000	270.613	6493.00	777.90	645.04	-734.51	40°16'23.984"N	104°25'08.416"W	0.00	
7817.00†	90.000	270.613	6493.00	877.72	646.11	-834.51	40°16'23.995"N	104°25'09.706"W	0.00	
7917.00†	90.000	270.613	6493.00	977.54	647.18	-934.50	40°16'24.005"N	104°25'10.996"W	0.00	
8017.00†	90.000	270.613	6493.00	1077.37	648.25	-1034.50	40°16'24.016"N	104°25'12.286"W	0.00	
8117.00†	90.000	270.613	6493.00	1177.19	649.32	-1134.49	40°16'24.026"N	104°25'13.576"W	0.00	
8217.00†	90.000	270.613	6493.00	1277.01	650.39	-1234.48	40°16'24.037"N	104°25'14.866"W	0.00	
8317.00†	90.000	270.613	6493.00	1376.84	651.46	-1334.48	40°16'24.047"N	104°25'16.156"W	0.00	
8417.00†	90.000	270.613	6493.00	1476.66	652.53	-1434.47	40°16'24.058"N	104°25'17.446"W	0.00	
8517.00†	90.000	270.613	6493.00	1576.49	653.60	-1534.47	40°16'24.068"N	104°25'18.737"W	0.00	
8617.00†	90.000	270.613	6493.00	1676.31	654.67	-1634.46	40°16'24.079"N	104°25'20.027"W	0.00	
8717.00†	90.000	270.613	6493.00	1776.13	655.74	-1734.46	40°16'24.089"N	104°25'21.317"W	0.00	
8817.00†	90.000	270.613	6493.00	1875.96	656.81	-1834.45	40°16'24.100"N	104°25'22.607"W	0.00	
8917.00†	90.000	270.613	6493.00	1975.78	657.88	-1934.44	40°16'24.110"N	104°25'23.897"W	0.00	
9017.00†	90.000	270.613	6493.00	2075.60	658.95	-2034.44	40°16'24.121"N	104°25'25.187"W	0.00	
9117.00†	90.000	270.613	6493.00	2175.43	660.02	-2134.43	40°16'24.131"N	104°25'26.477"W	0.00	
9217.00†	90.000	270.613	6493.00	2275.25	661.09	-2234.43	40°16'24.142"N	104°25'27.767"W	0.00	
9317.00†	90.000	270.613	6493.00	2375.07	662.16	-2334.42	40°16'24.152"N	104°25'29.057"W	0.00	
9417.00†	90.000	270.613	6493.00	2474.90	663.23	-2434.42	40°16'24.163"N	104°25'30.347"W	0.00	
9517.00†	90.000	270.613	6493.00	2574.72	664.30	-2534.41	40°16'24.173"N	104°25'31.637"W	0.00	
9617.00†	90.000	270.613	6493.00	2674.54	665.37	-2634.40	40°16'24.184"N	104°25'32.927"W	0.00	
9717.00†	90.000	270.613	6493.00	2774.37	666.43	-2734.40	40°16'24.194"N	104°25'34.217"W	0.00	
9817.00†	90.000	270.613	6493.00	2874.19	667.50	-2834.39	40°16'24.205"N	104°25'35.507"W	0.00	
9917.00†	90.000	270.613	6493.00	2974.01	668.57	-2934.39	40°16'24.215"N	104°25'36.797"W	0.00	
10017.00†	90.000	270.613	6493.00	3073.84	669.64	-3034.38	40°16'24.225"N	104°25'38.087"W	0.00	
10117.00†	90.000	270.613	6493.00	3173.66	670.71	-3134.38	40°16'24.236"N	104°25'39.377"W	0.00	
10217.00†	90.000	270.613	6493.00	3273.49	671.78	-3234.37	40°16'24.246"N	104°25'40.667"W	0.00	
10317.00†	90.000	270.613	6493.00	3373.31	672.85	-3334.36	40°16'24.257"N	104°25'41.957"W	0.00	
10417.00†	90.000	270.613	6493.00	3473.13	673.92	-3434.36	40°16'24.267"N	104°25'43.247"W	0.00	
10517.00†	90.000	270.613	6493.00	3572.96	674.99	-3534.35	40°16'24.278"N	104°25'44.538"W	0.00	
10617.00†	90.000	270.613	6493.00	3672.78	676.06	-3634.35	40°16'24.288"N	104°25'45.828"W	0.00	



# Planned Wellpath Report

## MUSTANG V41-34-33XRLNB PWP (REV-A.1)

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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 PWB
Facility	SEC.34-T04N-R63W		

WELLPATH DATA (182 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10717.00†	90.000	270.613	6493.00	3772.60	677.13	-3734.34	40°16'24.299"N	104°25'47.118"W	0.00	
10817.00†	90.000	270.613	6493.00	3872.43	678.20	-3834.34	40°16'24.309"N	104°25'48.408"W	0.00	
10917.00†	90.000	270.613	6493.00	3972.25	679.27	-3934.33	40°16'24.319"N	104°25'49.698"W	0.00	
11017.00†	90.000	270.613	6493.00	4072.07	680.34	-4034.32	40°16'24.330"N	104°25'50.988"W	0.00	
11117.00†	90.000	270.613	6493.00	4171.90	681.41	-4134.32	40°16'24.340"N	104°25'52.278"W	0.00	
11217.00†	90.000	270.613	6493.00	4271.72	682.48	-4234.31	40°16'24.351"N	104°25'53.568"W	0.00	
11317.00†	90.000	270.613	6493.00	4371.54	683.55	-4334.31	40°16'24.361"N	104°25'54.858"W	0.00	
11417.00†	90.000	270.613	6493.00	4471.37	684.62	-4434.30	40°16'24.371"N	104°25'56.148"W	0.00	
11517.00†	90.000	270.613	6493.00	4571.19	685.69	-4534.30	40°16'24.382"N	104°25'57.438"W	0.00	
11617.00†	90.000	270.613	6493.00	4671.02	686.76	-4634.29	40°16'24.392"N	104°25'58.728"W	0.00	
11679.59	90.000	270.613	6493.00	4733.49	687.43	-4696.87	40°16'24.399"N	104°25'59.536"W	0.00	End of Tangent (XS)
11717.00†	90.000	269.865	6493.00	4770.82	687.58	-4734.29	40°16'24.400"N	104°26'00.018"W	2.00	
11720.24	90.000	269.800	6493.00 <sup>2</sup>	4774.06	687.57	-4737.53	40°16'24.400"N	104°26'00.060"W	2.00	End of 3D Arc (J)
11817.00†	90.000	269.800	6493.00	4870.55	687.23	-4834.29	40°16'24.396"N	104°26'01.308"W	0.00	
11917.00†	90.000	269.800	6493.00	4970.28	686.88	-4934.28	40°16'24.393"N	104°26'02.598"W	0.00	
12017.00†	90.000	269.800	6493.00	5070.01	686.53	-5034.28	40°16'24.389"N	104°26'03.889"W	0.00	
12117.00†	90.000	269.800	6493.00	5169.74	686.18	-5134.28	40°16'24.386"N	104°26'05.179"W	0.00	
12217.00†	90.000	269.800	6493.00	5269.47	685.84	-5234.28	40°16'24.382"N	104°26'06.469"W	0.00	
12317.00†	90.000	269.800	6493.00	5369.20	685.49	-5334.28	40°16'24.378"N	104°26'07.759"W	0.00	
12417.00†	90.000	269.800	6493.00	5468.93	685.14	-5434.28	40°16'24.375"N	104°26'09.049"W	0.00	
12517.00†	90.000	269.800	6493.00	5568.66	684.79	-5534.28	40°16'24.371"N	104°26'10.339"W	0.00	
12617.00†	90.000	269.800	6493.00	5668.39	684.44	-5634.28	40°16'24.367"N	104°26'11.629"W	0.00	
12717.00†	90.000	269.800	6493.00	5768.12	684.09	-5734.28	40°16'24.363"N	104°26'12.919"W	0.00	
12817.00†	90.000	269.800	6493.00	5867.84	683.74	-5834.28	40°16'24.360"N	104°26'14.209"W	0.00	
12917.00†	90.000	269.800	6493.00	5967.57	683.39	-5934.28	40°16'24.356"N	104°26'15.500"W	0.00	
13017.00†	90.000	269.800	6493.00	6067.30	683.04	-6034.28	40°16'24.352"N	104°26'16.790"W	0.00	
13117.00†	90.000	269.800	6493.00	6167.03	682.69	-6134.28	40°16'24.349"N	104°26'18.080"W	0.00	
13217.00†	90.000	269.800	6493.00	6266.76	682.34	-6234.28	40°16'24.345"N	104°26'19.370"W	0.00	
13317.00†	90.000	269.800	6493.00	6366.49	681.99	-6334.28	40°16'24.341"N	104°26'20.660"W	0.00	
13417.00†	90.000	269.800	6493.00	6466.22	681.64	-6434.28	40°16'24.338"N	104°26'21.950"W	0.00	



# Planned Wellpath Report

## MUSTANG V41-34-33XRLNB PWP (REV-A.1)

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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 PWB	
Facility	SEC.34-T04N-R63W			

WELLPATH DATA (182 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13517.00†	90.000	269.800	6493.00	6565.95	681.29	-6534.28	40°16'24.334"N	104°26'23.240"W	0.00	
13617.00†	90.000	269.800	6493.00	6665.68	680.94	-6634.27	40°16'24.330"N	104°26'24.530"W	0.00	
13717.00†	90.000	269.800	6493.00	6765.41	680.59	-6734.27	40°16'24.326"N	104°26'25.820"W	0.00	
13817.00†	90.000	269.800	6493.00	6865.14	680.24	-6834.27	40°16'24.323"N	104°26'27.111"W	0.00	
13917.00†	90.000	269.800	6493.00	6964.87	679.89	-6934.27	40°16'24.319"N	104°26'28.401"W	0.00	
14017.00†	90.000	269.800	6493.00	7064.60	679.54	-7034.27	40°16'24.315"N	104°26'29.691"W	0.00	
14117.00†	90.000	269.800	6493.00	7164.32	679.19	-7134.27	40°16'24.312"N	104°26'30.981"W	0.00	
14217.00†	90.000	269.800	6493.00	7264.05	678.84	-7234.27	40°16'24.308"N	104°26'32.271"W	0.00	
14317.00†	90.000	269.800	6493.00	7363.78	678.49	-7334.27	40°16'24.304"N	104°26'33.561"W	0.00	
14417.00†	90.000	269.800	6493.00	7463.51	678.15	-7434.27	40°16'24.300"N	104°26'34.851"W	0.00	
14517.00†	90.000	269.800	6493.00	7563.24	677.80	-7534.27	40°16'24.297"N	104°26'36.141"W	0.00	
14617.00†	90.000	269.800	6493.00	7662.97	677.45	-7634.27	40°16'24.293"N	104°26'37.432"W	0.00	
14717.00†	90.000	269.800	6493.00	7762.70	677.10	-7734.27	40°16'24.289"N	104°26'38.722"W	0.00	
14817.00†	90.000	269.800	6493.00	7862.43	676.75	-7834.27	40°16'24.285"N	104°26'40.012"W	0.00	
14917.00†	90.000	269.800	6493.00	7962.16	676.40	-7934.27	40°16'24.281"N	104°26'41.302"W	0.00	
15017.00†	90.000	269.800	6493.00	8061.89	676.05	-8034.27	40°16'24.278"N	104°26'42.592"W	0.00	
15117.00†	90.000	269.800	6493.00	8161.62	675.70	-8134.27	40°16'24.274"N	104°26'43.882"W	0.00	
15217.00†	90.000	269.800	6493.00	8261.35	675.35	-8234.26	40°16'24.270"N	104°26'45.172"W	0.00	
15317.00†	90.000	269.800	6493.00	8361.07	675.00	-8334.26	40°16'24.266"N	104°26'46.462"W	0.00	
15417.00†	90.000	269.800	6493.00	8460.80	674.65	-8434.26	40°16'24.263"N	104°26'47.752"W	0.00	
15517.00†	90.000	269.800	6493.00	8560.53	674.30	-8534.26	40°16'24.259"N	104°26'49.043"W	0.00	
15617.00†	90.000	269.800	6493.00	8660.26	673.95	-8634.26	40°16'24.255"N	104°26'50.333"W	0.00	
15717.00†	90.000	269.800	6493.00	8759.99	673.60	-8734.26	40°16'24.251"N	104°26'51.623"W	0.00	
15817.00†	90.000	269.800	6493.00	8859.72	673.25	-8834.26	40°16'24.247"N	104°26'52.913"W	0.00	
15917.00†	90.000	269.800	6493.00	8959.45	672.90	-8934.26	40°16'24.244"N	104°26'54.203"W	0.00	
16017.00†	90.000	269.800	6493.00	9059.18	672.55	-9034.26	40°16'24.240"N	104°26'55.493"W	0.00	
16117.00†	90.000	269.800	6493.00	9158.91	672.20	-9134.26	40°16'24.236"N	104°26'56.783"W	0.00	
16217.00†	90.000	269.800	6493.00	9258.64	671.85	-9234.26	40°16'24.232"N	104°26'58.073"W	0.00	
16317.00†	90.000	269.800	6493.00	9358.37	671.50	-9334.26	40°16'24.228"N	104°26'59.363"W	0.00	
16417.00†	90.000	269.800	6493.00	9458.10	671.15	-9434.26	40°16'24.224"N	104°27'00.654"W	0.00	





# Planned Wellpath Report

## MUSTANG V41-34-33XRLNB PWP (REV-A.1)

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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 PWB
Facility	SEC.34-T04N-R63W		

WELLPATH DATA (182 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16517.00†	90.000	269.800	6493.00	9557.83	670.80	-9534.26	40°16'24.221"N	104°27'01.944"W	0.00	
16533.77	90.000	269.800	6493.00 <sup>3</sup>	9574.55	670.75	-9551.02	40°16'24.220"N	104°27'02.160"W	0.00	End of Tangent (J)

HOLE & CASING SECTIONS - Ref Wellbore: MUSTANG V41-34-33XRLNB PWB      Ref Wellpath: MUSTANG V41-34-33XRLNB PWP (REV-A.1)									
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	17.00	1717.00	1700.00	17.00	1717.00	0.00	0.00	0.00	0.00
8.5in Open Hole	1717.00	16533.77	14816.77	1717.00	6493.00	0.00	0.00	670.75	-9551.02



# Planned Wellpath Report

## MUSTANG V41-34-33XRLNB PWP (REV-A.1)

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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 PWB
Facility	SEC.34-T04N-R63W		

TARGETS									
Name	MD [ft]	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
3) MUSTANG V41-34-33XRLNB BHL (1046'FNL & 470'FWL, SEC.33)	16533.77	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
1) MUSTANG V41-34-33XRLNB LP REV-1 (1046'FNL & 460'FEL, SEC.34)	6920.01	6493.00	636.52	62.43	3302420.47	1344254.83	40°16'23.900"N	104°24'58.135"W	point
2) MUSTANG V41-34-33XRLNB MID-LATERAL TARGET (1053'FNL & 0'FWL, SEC.34)	11720.24	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

SURVEY PROGRAM - Ref Wellbore: MUSTANG V41-34-33XRLNB PWB Ref Wellpath: MUSTANG V41-34-33XRLNB PWP (REV-A.1)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	16550.77	BHI NaviTrak (Standard)		MUSTANG V41-34-33XRLNB PWB



# Planned Wellpath Report

## MUSTANG V41-34-33XRLNB PWP (REV-A.1)

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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 PWB	
Facility	SEC.34-T04N-R63W			

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1291.00	0.000	49.795	1291.00	Parkman
6376.84	36.592	282.512	6257.00	Sharon Springs
6458.51	44.533	279.565	6319.00	Sharon Springs "A"
6530.35	51.566	277.590	6367.00	Sharon Springs "B"
6615.74	59.960	275.692	6415.00	Niobrara "A" Chalk
6638.49	62.201	275.242	6426.00	Niobrara "A" Marl
6767.29	74.908	272.979	6473.00	Niobrara "B" Chalk
6937.01	90.000	270.613	6493.00	Niobrara "B" Target

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	49.795	17.00	Tie On
2000.00	0.000	49.795	2000.00	End of Tangent
2659.07	13.181	49.795	2653.27	End of Build (XS)
5920.63	13.181	49.795	5828.90	End of Tangent (XS)
6920.01	90.000	270.613	6493.00	End of 3D Arc (XS)
11679.59	90.000	270.613	6493.00	End of Tangent (XS)
11720.24	90.000	269.800	6493.00	End of 3D Arc (J)
16533.77	90.000	269.800	6493.00	End of Tangent (J)