

BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26)
 Field: WELD COUNTY Well: MUSTANG V41-27-28XRLNB
 Facility: SEC.26-T04N-R63W Wellbore: MUSTANG V41-27-28XRLNB PWB

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)		North Reference: True north
Measured depths are referenced to XTREME 19 (17KB) (RKB)		Scale: True distance
XTREME 19 (17KB) (RKB) to Mean Sea Level: 4767 feet		Depths are in feet
Mean Sea Level to Mud line (At Slot: SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26)): 0 feet		Created by: ingnjmr on 2017-10-12
Coordinates are in feet referenced to Slot		Database: WA_DEN_Denver_Defn

Location Information

Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.26-T04N-R63W		3303028.081	1348847.580	40°17'09.210"N	104°24'49.570"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26)	0.00	0.00	3303028.081	1348847.580	40°17'09.210"N	104°24'49.570"W
XTREME 19 (17KB) (RKB) to Mud line (At Slot: SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26))		4767ft				
Mean Sea Level to Mud line (At Slot: SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26))		0ft				
XTREME 19 (17KB) (RKB) to Mean Sea Level		4767ft				

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	16472.59	BHI NaviTrak	BHI NaviTrak (Standard)		MUSTANG V41-27-28XRLNB 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	350.663	17.00	0.00	0.00	0.00	0.00
End of Tangent	1900.00	0.000	350.663	1900.00	0.00	0.00	0.00	0.00
End of Build (XS)	2371.62	9.432	350.663	2369.49	38.22	-6.28	2.00	8.80
End of Tangent (XS)	5952.80	9.432	350.663	5902.26	617.34	-101.50	0.00	142.16
End of 3D Arc (XS)	6837.95	90.000	269.766	6453.00	705.35	-674.63	10.00	719.86
End of Tangent (XS)	11643.11	90.000	269.766	6453.00	685.73	-5479.75	0.00	5513.13
End of 3D Arc (J)	11653.92	90.000	269.982	6453.00	685.70	-5490.56	2.00	5523.92
End of Tangent (J)	16472.59	90.000	269.982	6453.00	684.21	-10309.23	0.00	10331.91

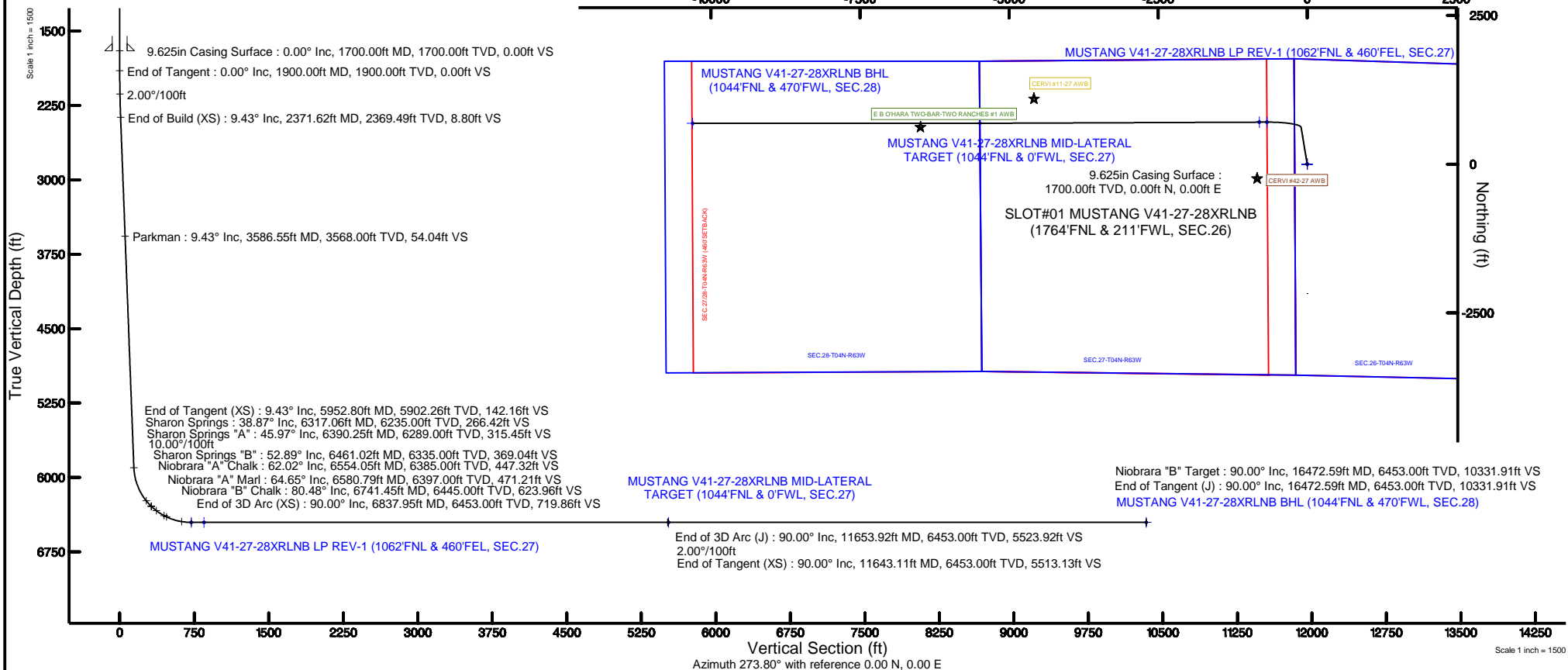
Bottom Hole Location

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
16472.59	90.000	269.982	6453.00	684.21	-10309.23	3292711.70	1349405.43	40°17'15.950"N	104°27'02.600"W



BGGM (1900.0 to 2019.0) Dip: 66.82° Field: 52371.6 nT
 Magnetic North is 8.16 degrees East of True North (at 9/28/2017)

Easting (ft) To correct azimuth from Magnetic to True add 8.16 degrees





Planned Wellpath Report

MUSTANG V41-27-28XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB PWB
Facility	SEC.26-T04N-R63W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Ingmjmr
Scale	0.999957	Report Generated	10/12/2017 at 2:44:37 PM
Convergence at slot	0.70° East	Database/Source file	WA_DEN_Denver_Defn/MUSTANG_V41-27-28XRLNB_PWP_REV-A.0_.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 (1764'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°



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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB PWB
Facility	SEC.26-T04N-R63W		

WELLPATH DATA (181 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	350.663	0.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
17.00	0.000	350.663	17.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	Tie On
117.00†	0.000	350.663	117.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
217.00†	0.000	350.663	217.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
317.00†	0.000	350.663	317.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
417.00†	0.000	350.663	417.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
517.00†	0.000	350.663	517.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
617.00†	0.000	350.663	617.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
717.00†	0.000	350.663	717.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
817.00†	0.000	350.663	817.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
917.00†	0.000	350.663	917.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
1017.00†	0.000	350.663	1017.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
1117.00†	0.000	350.663	1117.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
1217.00†	0.000	350.663	1217.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
1317.00†	0.000	350.663	1317.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
1417.00†	0.000	350.663	1417.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
1517.00†	0.000	350.663	1517.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
1617.00†	0.000	350.663	1617.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
1717.00†	0.000	350.663	1717.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
1817.00†	0.000	350.663	1817.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	
1900.00	0.000	350.663	1900.00	0.00	0.00	0.00	40°17'09.210"N	104°24'49.570"W	0.00	End of Tangent
1917.00†	0.340	350.663	1917.00	0.01	0.05	-0.01	40°17'09.210"N	104°24'49.570"W	2.00	
2017.00†	2.340	350.663	2016.97	0.54	2.36	-0.39	40°17'09.233"N	104°24'49.575"W	2.00	
2117.00†	4.340	350.663	2116.79	1.87	8.11	-1.33	40°17'09.290"N	104°24'49.587"W	2.00	
2217.00†	6.340	350.663	2216.35	3.98	17.29	-2.84	40°17'09.381"N	104°24'49.607"W	2.00	
2317.00†	8.340	350.663	2315.53	6.88	29.89	-4.92	40°17'09.505"N	104°24'49.633"W	2.00	
2371.62	9.432	350.663	2369.49	8.80	38.22	-6.28	40°17'09.588"N	104°24'49.651"W	2.00	End of Build (XS)
2417.00†	9.432	350.663	2414.26	10.49	45.56	-7.49	40°17'09.660"N	104°24'49.667"W	0.00	
2517.00†	9.432	350.663	2512.91	14.21	61.73	-10.15	40°17'09.820"N	104°24'49.701"W	0.00	
2617.00†	9.432	350.663	2611.55	17.94	77.90	-12.81	40°17'09.980"N	104°24'49.735"W	0.00	



Planned Wellpath Report

MUSTANG V41-27-28XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB PWB
Facility	SEC.26-T04N-R63W		

WELLPATH DATA (181 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	9.432	350.663	2710.20	21.66	94.07	-15.47	40°17'10.140"N	104°24'49.770"W	0.00	
2817.00†	9.432	350.663	2808.85	25.39	110.24	-18.13	40°17'10.299"N	104°24'49.804"W	0.00	
2917.00†	9.432	350.663	2907.50	29.11	126.41	-20.78	40°17'10.459"N	104°24'49.838"W	0.00	
3017.00†	9.432	350.663	3006.15	32.83	142.59	-23.44	40°17'10.619"N	104°24'49.872"W	0.00	
3117.00†	9.432	350.663	3104.79	36.56	158.76	-26.10	40°17'10.779"N	104°24'49.907"W	0.00	
3217.00†	9.432	350.663	3203.44	40.28	174.93	-28.76	40°17'10.939"N	104°24'49.941"W	0.00	
3317.00†	9.432	350.663	3302.09	44.01	191.10	-31.42	40°17'11.098"N	104°24'49.975"W	0.00	
3417.00†	9.432	350.663	3400.74	47.73	207.27	-34.08	40°17'11.258"N	104°24'50.010"W	0.00	
3517.00†	9.432	350.663	3499.39	51.45	223.44	-36.74	40°17'11.418"N	104°24'50.044"W	0.00	
3586.55†	9.432	350.663	3568.00	54.04	234.69	-38.59	40°17'11.529"N	104°24'50.068"W	0.00	Parkman
3617.00†	9.432	350.663	3598.03	55.18	239.61	-39.40	40°17'11.578"N	104°24'50.078"W	0.00	
3717.00†	9.432	350.663	3696.68	58.90	255.79	-42.05	40°17'11.738"N	104°24'50.113"W	0.00	
3817.00†	9.432	350.663	3795.33	62.62	271.96	-44.71	40°17'11.897"N	104°24'50.147"W	0.00	
3917.00†	9.432	350.663	3893.98	66.35	288.13	-47.37	40°17'12.057"N	104°24'50.181"W	0.00	
4017.00†	9.432	350.663	3992.63	70.07	304.30	-50.03	40°17'12.217"N	104°24'50.216"W	0.00	
4117.00†	9.432	350.663	4091.27	73.80	320.47	-52.69	40°17'12.377"N	104°24'50.250"W	0.00	
4217.00†	9.432	350.663	4189.92	77.52	336.64	-55.35	40°17'12.537"N	104°24'50.284"W	0.00	
4317.00†	9.432	350.663	4288.57	81.24	352.81	-58.01	40°17'12.696"N	104°24'50.319"W	0.00	
4417.00†	9.432	350.663	4387.22	84.97	368.98	-60.67	40°17'12.856"N	104°24'50.353"W	0.00	
4517.00†	9.432	350.663	4485.87	88.69	385.16	-63.32	40°17'13.016"N	104°24'50.387"W	0.00	
4617.00†	9.432	350.663	4584.51	92.42	401.33	-65.98	40°17'13.176"N	104°24'50.421"W	0.00	
4717.00†	9.432	350.663	4683.16	96.14	417.50	-68.64	40°17'13.336"N	104°24'50.456"W	0.00	
4817.00†	9.432	350.663	4781.81	99.86	433.67	-71.30	40°17'13.495"N	104°24'50.490"W	0.00	
4917.00†	9.432	350.663	4880.46	103.59	449.84	-73.96	40°17'13.655"N	104°24'50.524"W	0.00	
5017.00†	9.432	350.663	4979.11	107.31	466.01	-76.62	40°17'13.815"N	104°24'50.559"W	0.00	
5117.00†	9.432	350.663	5077.75	111.03	482.18	-79.28	40°17'13.975"N	104°24'50.593"W	0.00	
5217.00†	9.432	350.663	5176.40	114.76	498.36	-81.94	40°17'14.135"N	104°24'50.627"W	0.00	
5317.00†	9.432	350.663	5275.05	118.48	514.53	-84.59	40°17'14.294"N	104°24'50.662"W	0.00	
5417.00†	9.432	350.663	5373.70	122.21	530.70	-87.25	40°17'14.454"N	104°24'50.696"W	0.00	
5517.00†	9.432	350.663	5472.35	125.93	546.87	-89.91	40°17'14.614"N	104°24'50.730"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB PWB
Facility	SEC.26-T04N-R63W		

WELLPATH DATA (181 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5617.00†	9.432	350.663	5570.99	129.65	563.04	-92.57	40°17'14.774"N	104°24'50.765"W	0.00	
5717.00†	9.432	350.663	5669.64	133.38	579.21	-95.23	40°17'14.934"N	104°24'50.799"W	0.00	
5817.00†	9.432	350.663	5768.29	137.10	595.38	-97.89	40°17'15.093"N	104°24'50.833"W	0.00	
5917.00†	9.432	350.663	5866.94	140.82	611.55	-100.55	40°17'15.253"N	104°24'50.867"W	0.00	
5952.80	9.432	350.663	5902.26	142.16	617.34	-101.50	40°17'15.310"N	104°24'50.880"W	0.00	End of Tangent (XS)
6017.00†	12.195	319.143	5965.36	148.13	627.67	-106.79	40°17'15.413"N	104°24'50.948"W	10.00	
6117.00†	20.113	296.378	6061.43	171.48	643.34	-129.16	40°17'15.567"N	104°24'51.237"W	10.00	
6217.00†	29.300	286.762	6152.21	211.31	658.08	-168.09	40°17'15.713"N	104°24'51.739"W	10.00	
6317.00†	38.865	281.510	6234.96	266.38	671.43	-222.41	40°17'15.845"N	104°24'52.440"W	10.00	
6317.06†	38.871	281.508	6235.00	266.42	671.43	-222.44	40°17'15.845"N	104°24'52.440"W	10.00	Sharon Springs
6390.25†	45.975	278.889	6289.00	315.45	680.09	-271.01	40°17'15.931"N	104°24'53.067"W	10.00	Sharon Springs "A"
6417.00†	48.584	278.086	6307.15	335.04	682.99	-290.45	40°17'15.959"N	104°24'53.318"W	10.00	
6461.02†	52.889	276.896	6335.00	369.04	687.42	-324.23	40°17'16.003"N	104°24'53.754"W	10.00	Sharon Springs "B"
6517.00†	58.378	275.563	6366.59	415.19	692.42	-370.15	40°17'16.052"N	104°24'54.346"W	10.00	
6554.05†	62.018	274.766	6385.00	447.32	695.31	-402.16	40°17'16.081"N	104°24'54.759"W	10.00	Niobrara "A" Chalk
6580.79†	64.647	274.224	6397.00	471.21	697.18	-425.98	40°17'16.099"N	104°24'55.067"W	10.00	Niobrara "A" Marl
6617.00†	68.212	273.526	6411.48	504.40	699.42	-459.09	40°17'16.121"N	104°24'55.494"W	10.00	
6717.00†	78.067	271.753	6440.45	599.96	703.78	-554.57	40°17'16.165"N	104°24'56.726"W	10.00	
6741.45†	80.479	271.343	6445.00	623.96	704.43	-578.58	40°17'16.171"N	104°24'57.036"W	10.00	Niobrara "B" Chalk
6817.00†	87.933	270.105	6452.62	698.96	705.37	-653.68	40°17'16.180"N	104°24'58.005"W	10.00	
6837.95	90.000	269.766	6453.00†	719.86	705.35	-674.63	40°17'16.180"N	104°24'58.275"W	10.00	End of 3D Arc (XS)
6917.00†	90.000	269.766	6453.00	798.71	705.03	-753.68	40°17'16.177"N	104°24'59.295"W	0.00	
7017.00†	90.000	269.766	6453.00	898.47	704.62	-853.68	40°17'16.173"N	104°25'00.586"W	0.00	
7117.00†	90.000	269.766	6453.00	998.22	704.21	-953.68	40°17'16.169"N	104°25'01.876"W	0.00	
7217.00†	90.000	269.766	6453.00	1097.97	703.80	-1053.68	40°17'16.165"N	104°25'03.167"W	0.00	
7317.00†	90.000	269.766	6453.00	1197.72	703.39	-1153.68	40°17'16.161"N	104°25'04.457"W	0.00	
7417.00†	90.000	269.766	6453.00	1297.48	702.98	-1253.68	40°17'16.156"N	104°25'05.747"W	0.00	
7517.00†	90.000	269.766	6453.00	1397.23	702.58	-1353.67	40°17'16.152"N	104°25'07.038"W	0.00	
7617.00†	90.000	269.766	6453.00	1496.98	702.17	-1453.67	40°17'16.148"N	104°25'08.328"W	0.00	
7717.00†	90.000	269.766	6453.00	1596.73	701.76	-1553.67	40°17'16.144"N	104°25'09.619"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB PWB
Facility	SEC.26-T04N-R63W		

WELLPATH DATA (181 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7817.00†	90.000	269.766	6453.00	1696.49	701.35	-1653.67	40°17'16.140"N	104°25'10.909"W	0.00	
7917.00†	90.000	269.766	6453.00	1796.24	700.94	-1753.67	40°17'16.136"N	104°25'12.199"W	0.00	
8017.00†	90.000	269.766	6453.00	1895.99	700.53	-1853.67	40°17'16.132"N	104°25'13.490"W	0.00	
8117.00†	90.000	269.766	6453.00	1995.75	700.13	-1953.67	40°17'16.128"N	104°25'14.780"W	0.00	
8217.00†	90.000	269.766	6453.00	2095.50	699.72	-2053.67	40°17'16.124"N	104°25'16.070"W	0.00	
8317.00†	90.000	269.766	6453.00	2195.25	699.31	-2153.67	40°17'16.120"N	104°25'17.361"W	0.00	
8417.00†	90.000	269.766	6453.00	2295.00	698.90	-2253.67	40°17'16.115"N	104°25'18.651"W	0.00	
8517.00†	90.000	269.766	6453.00	2394.76	698.49	-2353.67	40°17'16.111"N	104°25'19.942"W	0.00	
8617.00†	90.000	269.766	6453.00	2494.51	698.08	-2453.67	40°17'16.107"N	104°25'21.232"W	0.00	
8717.00†	90.000	269.766	6453.00	2594.26	697.68	-2553.66	40°17'16.103"N	104°25'22.522"W	0.00	
8817.00†	90.000	269.766	6453.00	2694.01	697.27	-2653.66	40°17'16.099"N	104°25'23.813"W	0.00	
8917.00†	90.000	269.766	6453.00	2793.77	696.86	-2753.66	40°17'16.095"N	104°25'25.103"W	0.00	
9017.00†	90.000	269.766	6453.00	2893.52	696.45	-2853.66	40°17'16.091"N	104°25'26.394"W	0.00	
9117.00†	90.000	269.766	6453.00	2993.27	696.04	-2953.66	40°17'16.086"N	104°25'27.684"W	0.00	
9217.00†	90.000	269.766	6453.00	3093.02	695.63	-3053.66	40°17'16.082"N	104°25'28.974"W	0.00	
9317.00†	90.000	269.766	6453.00	3192.78	695.23	-3153.66	40°17'16.078"N	104°25'30.265"W	0.00	
9417.00†	90.000	269.766	6453.00	3292.53	694.82	-3253.66	40°17'16.074"N	104°25'31.555"W	0.00	
9517.00†	90.000	269.766	6453.00	3392.28	694.41	-3353.66	40°17'16.070"N	104°25'32.846"W	0.00	
9617.00†	90.000	269.766	6453.00	3492.03	694.00	-3453.66	40°17'16.066"N	104°25'34.136"W	0.00	
9717.00†	90.000	269.766	6453.00	3591.79	693.59	-3553.66	40°17'16.061"N	104°25'35.426"W	0.00	
9817.00†	90.000	269.766	6453.00	3691.54	693.18	-3653.66	40°17'16.057"N	104°25'36.717"W	0.00	
9917.00†	90.000	269.766	6453.00	3791.29	692.78	-3753.65	40°17'16.053"N	104°25'38.007"W	0.00	
10017.00†	90.000	269.766	6453.00	3891.05	692.37	-3853.65	40°17'16.049"N	104°25'39.297"W	0.00	
10117.00†	90.000	269.766	6453.00	3990.80	691.96	-3953.65	40°17'16.045"N	104°25'40.588"W	0.00	
10217.00†	90.000	269.766	6453.00	4090.55	691.55	-4053.65	40°17'16.041"N	104°25'41.878"W	0.00	
10317.00†	90.000	269.766	6453.00	4190.30	691.14	-4153.65	40°17'16.036"N	104°25'43.169"W	0.00	
10417.00†	90.000	269.766	6453.00	4290.06	690.73	-4253.65	40°17'16.032"N	104°25'44.459"W	0.00	
10517.00†	90.000	269.766	6453.00	4389.81	690.33	-4353.65	40°17'16.028"N	104°25'45.749"W	0.00	
10617.00†	90.000	269.766	6453.00	4489.56	689.92	-4453.65	40°17'16.024"N	104°25'47.040"W	0.00	
10717.00†	90.000	269.766	6453.00	4589.31	689.51	-4553.65	40°17'16.019"N	104°25'48.330"W	0.00	



Planned Wellpath Report

MUSTANG V41-27-28XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB PWB
Facility	SEC.26-T04N-R63W		

WELLPATH DATA (181 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10817.00†	90.000	269.766	6453.00	4689.07	689.10	-4653.65	40°17'16.015"N	104°25'49.621"W	0.00	
10917.00†	90.000	269.766	6453.00	4788.82	688.69	-4753.65	40°17'16.011"N	104°25'50.911"W	0.00	
11017.00†	90.000	269.766	6453.00	4888.57	688.29	-4853.65	40°17'16.007"N	104°25'52.201"W	0.00	
11117.00†	90.000	269.766	6453.00	4988.32	687.88	-4953.64	40°17'16.003"N	104°25'53.492"W	0.00	
11217.00†	90.000	269.766	6453.00	5088.08	687.47	-5053.64	40°17'15.998"N	104°25'54.782"W	0.00	
11317.00†	90.000	269.766	6453.00	5187.83	687.06	-5153.64	40°17'15.994"N	104°25'56.072"W	0.00	
11417.00†	90.000	269.766	6453.00	5287.58	686.65	-5253.64	40°17'15.990"N	104°25'57.363"W	0.00	
11517.00†	90.000	269.766	6453.00	5387.33	686.24	-5353.64	40°17'15.986"N	104°25'58.653"W	0.00	
11617.00†	90.000	269.766	6453.00	5487.09	685.84	-5453.64	40°17'15.981"N	104°25'59.944"W	0.00	
11643.11	90.000	269.766	6453.00	5513.13	685.73	-5479.75	40°17'15.980"N	104°26'00.281"W	0.00	End of Tangent (XS)
11653.92	90.000	269.982	6453.00 ²	5523.92	685.70	-5490.56	40°17'15.980"N	104°26'00.420"W	2.00	End of 3D Arc (J)
11717.00†	90.000	269.982	6453.00	5586.86	685.69	-5553.64	40°17'15.980"N	104°26'01.234"W	0.00	
11817.00†	90.000	269.982	6453.00	5686.64	685.65	-5653.64	40°17'15.979"N	104°26'02.524"W	0.00	
11917.00†	90.000	269.982	6453.00	5786.41	685.62	-5753.64	40°17'15.979"N	104°26'03.815"W	0.00	
12017.00†	90.000	269.982	6453.00	5886.19	685.59	-5853.64	40°17'15.978"N	104°26'05.105"W	0.00	
12117.00†	90.000	269.982	6453.00	5985.97	685.56	-5953.64	40°17'15.978"N	104°26'06.396"W	0.00	
12217.00†	90.000	269.982	6453.00	6085.75	685.53	-6053.64	40°17'15.977"N	104°26'07.686"W	0.00	
12317.00†	90.000	269.982	6453.00	6185.53	685.50	-6153.64	40°17'15.976"N	104°26'08.976"W	0.00	
12417.00†	90.000	269.982	6453.00	6285.31	685.47	-6253.64	40°17'15.976"N	104°26'10.267"W	0.00	
12517.00†	90.000	269.982	6453.00	6385.08	685.44	-6353.64	40°17'15.975"N	104°26'11.557"W	0.00	
12617.00†	90.000	269.982	6453.00	6484.86	685.41	-6453.64	40°17'15.975"N	104°26'12.848"W	0.00	
12717.00†	90.000	269.982	6453.00	6584.64	685.37	-6553.64	40°17'15.974"N	104°26'14.138"W	0.00	
12817.00†	90.000	269.982	6453.00	6684.42	685.34	-6653.64	40°17'15.974"N	104°26'15.428"W	0.00	
12917.00†	90.000	269.982	6453.00	6784.20	685.31	-6753.64	40°17'15.973"N	104°26'16.719"W	0.00	
13017.00†	90.000	269.982	6453.00	6883.98	685.28	-6853.64	40°17'15.972"N	104°26'18.009"W	0.00	
13117.00†	90.000	269.982	6453.00	6983.76	685.25	-6953.64	40°17'15.972"N	104°26'19.300"W	0.00	
13217.00†	90.000	269.982	6453.00	7083.53	685.22	-7053.64	40°17'15.971"N	104°26'20.590"W	0.00	
13317.00†	90.000	269.982	6453.00	7183.31	685.19	-7153.64	40°17'15.971"N	104°26'21.880"W	0.00	
13417.00†	90.000	269.982	6453.00	7283.09	685.16	-7253.64	40°17'15.970"N	104°26'23.171"W	0.00	
13517.00†	90.000	269.982	6453.00	7382.87	685.13	-7353.64	40°17'15.970"N	104°26'24.461"W	0.00	



Planned Wellpath Report

MUSTANG V41-27-28XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB PWB
Facility	SEC.26-T04N-R63W		

WELLPATH DATA (181 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13617.00†	90.000	269.982	6453.00	7482.65	685.10	-7453.64	40°17'15.969"N	104°26'25.752"W	0.00	
13717.00†	90.000	269.982	6453.00	7582.43	685.06	-7553.64	40°17'15.968"N	104°26'27.042"W	0.00	
13817.00†	90.000	269.982	6453.00	7682.20	685.03	-7653.64	40°17'15.968"N	104°26'28.332"W	0.00	
13917.00†	90.000	269.982	6453.00	7781.98	685.00	-7753.64	40°17'15.967"N	104°26'29.623"W	0.00	
14017.00†	90.000	269.982	6453.00	7881.76	684.97	-7853.64	40°17'15.966"N	104°26'30.913"W	0.00	
14117.00†	90.000	269.982	6453.00	7981.54	684.94	-7953.64	40°17'15.966"N	104°26'32.204"W	0.00	
14217.00†	90.000	269.982	6453.00	8081.32	684.91	-8053.64	40°17'15.965"N	104°26'33.494"W	0.00	
14317.00†	90.000	269.982	6453.00	8181.10	684.88	-8153.64	40°17'15.965"N	104°26'34.784"W	0.00	
14417.00†	90.000	269.982	6453.00	8280.87	684.85	-8253.64	40°17'15.964"N	104°26'36.075"W	0.00	
14517.00†	90.000	269.982	6453.00	8380.65	684.82	-8353.64	40°17'15.963"N	104°26'37.365"W	0.00	
14617.00†	90.000	269.982	6453.00	8480.43	684.78	-8453.64	40°17'15.963"N	104°26'38.655"W	0.00	
14717.00†	90.000	269.982	6453.00	8580.21	684.75	-8553.64	40°17'15.962"N	104°26'39.946"W	0.00	
14817.00†	90.000	269.982	6453.00	8679.99	684.72	-8653.64	40°17'15.961"N	104°26'41.236"W	0.00	
14917.00†	90.000	269.982	6453.00	8779.77	684.69	-8753.64	40°17'15.961"N	104°26'42.527"W	0.00	
15017.00†	90.000	269.982	6453.00	8879.55	684.66	-8853.64	40°17'15.960"N	104°26'43.817"W	0.00	
15117.00†	90.000	269.982	6453.00	8979.32	684.63	-8953.64	40°17'15.959"N	104°26'45.107"W	0.00	
15217.00†	90.000	269.982	6453.00	9079.10	684.60	-9053.64	40°17'15.959"N	104°26'46.398"W	0.00	
15317.00†	90.000	269.982	6453.00	9178.88	684.57	-9153.64	40°17'15.958"N	104°26'47.688"W	0.00	
15417.00†	90.000	269.982	6453.00	9278.66	684.54	-9253.64	40°17'15.957"N	104°26'48.979"W	0.00	
15517.00†	90.000	269.982	6453.00	9378.44	684.50	-9353.64	40°17'15.957"N	104°26'50.269"W	0.00	
15617.00†	90.000	269.982	6453.00	9478.22	684.47	-9453.64	40°17'15.956"N	104°26'51.559"W	0.00	
15717.00†	90.000	269.982	6453.00	9577.99	684.44	-9553.64	40°17'15.955"N	104°26'52.850"W	0.00	
15817.00†	90.000	269.982	6453.00	9677.77	684.41	-9653.64	40°17'15.955"N	104°26'54.140"W	0.00	
15917.00†	90.000	269.982	6453.00	9777.55	684.38	-9753.64	40°17'15.954"N	104°26'55.431"W	0.00	
16017.00†	90.000	269.982	6453.00	9877.33	684.35	-9853.64	40°17'15.953"N	104°26'56.721"W	0.00	
16117.00†	90.000	269.982	6453.00	9977.11	684.32	-9953.64	40°17'15.953"N	104°26'58.011"W	0.00	
16217.00†	90.000	269.982	6453.00	10076.89	684.29	-10053.64	40°17'15.952"N	104°26'59.302"W	0.00	
16317.00†	90.000	269.982	6453.00	10176.66	684.26	-10153.64	40°17'15.951"N	104°27'00.592"W	0.00	
16417.00†	90.000	269.982	6453.00	10276.44	684.23	-10253.64	40°17'15.950"N	104°27'01.883"W	0.00	
16472.59†	90.000	269.982	6453.00	10331.91	684.21	-10309.23	40°17'15.950"N	104°27'02.600"W	0.00	Niobrara "B" Target



Planned Wellpath Report

MUSTANG V41-27-28XRLNB PWP (REV-A.0)
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB PWB
Facility	SEC.26-T04N-R63W		

WELLPATH DATA (181 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16472.59	90.000	269.982	6453.00 ³	10331.91	684.21	-10309.23	40°17'15.950"N	104°27'02.600"W	0.00	End of Tangent (J)

HOLE & CASING SECTIONS									
- Ref Wellbore: MUSTANG V41-27-28XRLNB PWB Ref Wellpath: MUSTANG V41-27-28XRLNB PWP (REV-A.0)									
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	1700.00	1683.00	17.00	1700.00	0.00	0.00	0.00	0.00
8.5in Open Hole	1700.00	16472.59	14772.59	1700.00	6453.00	0.00	0.00	684.21	-10309.23



Planned Wellpath Report

MUSTANG V41-27-28XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB PWB
Facility	SEC.26-T04N-R63W		

TARGETS									
Name	MD [ft]	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
3) MUSTANG V41-27-28XRLNB BHL (1044'FNL & 470'FWL, SEC.28)	16472.59	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
1) MUSTANG V41-27-28XRLNB LP REV-1 (1062'FNL & 460'FEL, SEC.27)	6837.95	6453.00	705.35	-674.63	3302344.89	1349544.58	40°17'16.180"N	104°24'58.275"W	point
2) MUSTANG V41-27-28XRLNB MID-LATERAL TARGET (1044'FNL & 0'FWL, SEC.27)	11653.92	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

SURVEY PROGRAM -						
Start MD [ft]		End MD [ft]		Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00		16472.59		BHI NaviTrak (Standard)		MUSTANG V41-27-28XRLNB PWB



Planned Wellpath Report

MUSTANG V41-27-28XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 MUSTANG V41-27-28XRLNB (1764'FNL & 211'FWL, SEC.26)
Area	COLORADO	Well	MUSTANG V41-27-28XRLNB
Field	WELD COUNTY	Wellbore	MUSTANG V41-27-28XRLNB PWB
Facility	SEC.26-T04N-R63W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3586.55	9.432	350.663	3568.00	Parkman
6317.06	38.871	281.508	6235.00	Sharon Springs
6390.25	45.975	278.889	6289.00	Sharon Springs "A"
6461.02	52.889	276.896	6335.00	Sharon Springs "B"
6554.05	62.018	274.766	6385.00	Niobrara "A" Chalk
6580.79	64.647	274.224	6397.00	Niobrara "A" Marl
6741.45	80.479	271.343	6445.00	Niobrara "B" Chalk
16472.59	90.000	269.982	6453.00	Niobrara "B" Target

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	350.663	17.00	Tie On
1900.00	0.000	350.663	1900.00	End of Tangent
2371.62	9.432	350.663	2369.49	End of Build (XS)
5952.80	9.432	350.663	5902.26	End of Tangent (XS)
6837.95	90.000	269.766	6453.00	End of 3D Arc (XS)
11643.11	90.000	269.766	6453.00	End of Tangent (XS)
11653.92	90.000	269.982	6453.00	End of 3D Arc (J)
16472.59	90.000	269.982	6453.00	End of Tangent (J)