

BONANZA CREEK ENERGY

Location: COLORADO Slot: SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)
Field: WELD COUNTY (NAD83/TRUE) Well: MULE DEER FEDERAL J14-32-29XRLNB
Facility: SEC.05-T06N-R61W Wellbore: MULE DEER FEDERAL J14-32-29XRLNB PWB

Plot reference wellpath is MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP		Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (17) (RKB)		North Reference: True north
Reference wellpath measured depths are referenced to RIG (17) (RKB)		Scale: True distance
RIG (17) (RKB) to Mean Sea Level: 4676 feet		Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)): 0 feet		Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum		Created by: robair01 on 2020-03-26; Database: WellArchitectDB3

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.05-T06N-R61W			3352971.931	1404526.872	40°26'12.8400"N	104°13'54.8750"W
Slot			Grid East (ft)	Grid North (ft)	Latitude	Longitude
SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)			-32.06	160.34	3353132.708	1404487.110
RIG (17) (RKB) to Ground level (At Slot: SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05))			4676 ft			
Mean Sea Level to Ground level (At Slot: SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05))			0 ft			
RIG (17) (RKB) to Mean Sea Level			4676 ft			

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1600.00	BH NavTrak (superseded model)	BH NavTrak (Rotating-Axial Cor)		MULE DEER FEDERAL J14-32-29XRLNB PWB
1600.00	16484.18	BH AutoTrak Curve (superseded model)	BH AutoTrak Curve (Short)		MULE DEER FEDERAL J14-32-29XRLNB PWB

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.29-T06N-R61W	N/A	-2.00	796.03	-407.94	3352513.47	1405284.33	40°26'20.3892"N	104°14'03.6648"W
SEC.32-T06N-R61W	N/A	-2.00	796.03	-407.94	3352513.47	1405284.33	40°26'20.3892"N	104°14'03.6648"W
SEC.05-T06N-R61W	N/A	0.00	-9900.97	-1941.14	3351333.48	1394558.78	40°24'34.6852"N	104°14'17.8892"W
MULE DEER FEDERAL J14-32-29XRLNB (MLT 1078'FWL)	11682.86	6146.00	5496.88	-2155.22	3350899.16	1409962.38	40°27'6.8400"N	104°14'20.6808"W
MULE DEER FEDERAL J14-32-29XRLNB BHL REV-1 (470'FNL & 1079'FWL,SEC.29)	16484.18	6146.00	10298.16	-2138.12	3350847.57	1414753.22	40°27'54.2840"N	104°14'20.4650"W
MULE DEER FEDERAL J14-32-29XRLNB LP REV-1 (470'FSL & 1082'FWL,SEC.32)	6888.46	6146.00	702.49	-2167.64	3350855.33	1405168.49	40°26'19.4640"N	104°14'20.8360"W

Hole and Casing Sections

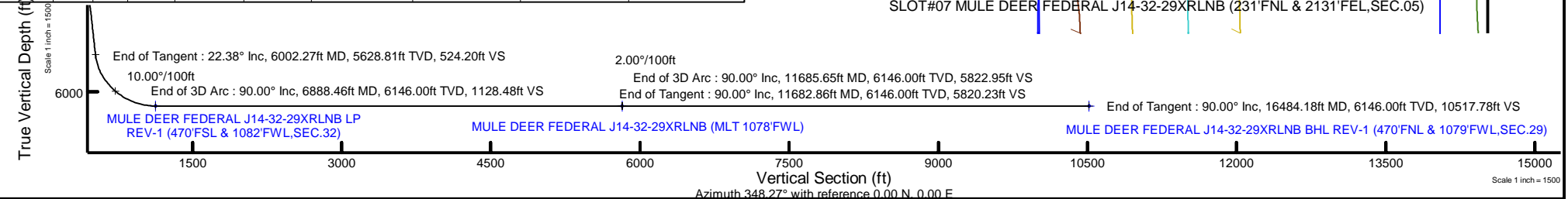
Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
13.5in Open Hole	17.00	1600.00	1583.00	17.00	1558.13	0.00	0.00	18.75	-284.08	MULE DEER FEDERAL J14-32-29XRLNB PWB
9.625in Casing Surface	17.00	1600.00	1583.00	17.00	1558.13	0.00	0.00	18.75	-284.08	MULE DEER FEDERAL J14-32-29XRLNB PWB
8.5in Open Hole	1600.00	16484.18	14884.18	1558.13	6146.00	18.75	-284.08	10298.16	-2138.12	MULE DEER FEDERAL J14-32-29XRLNB PWB

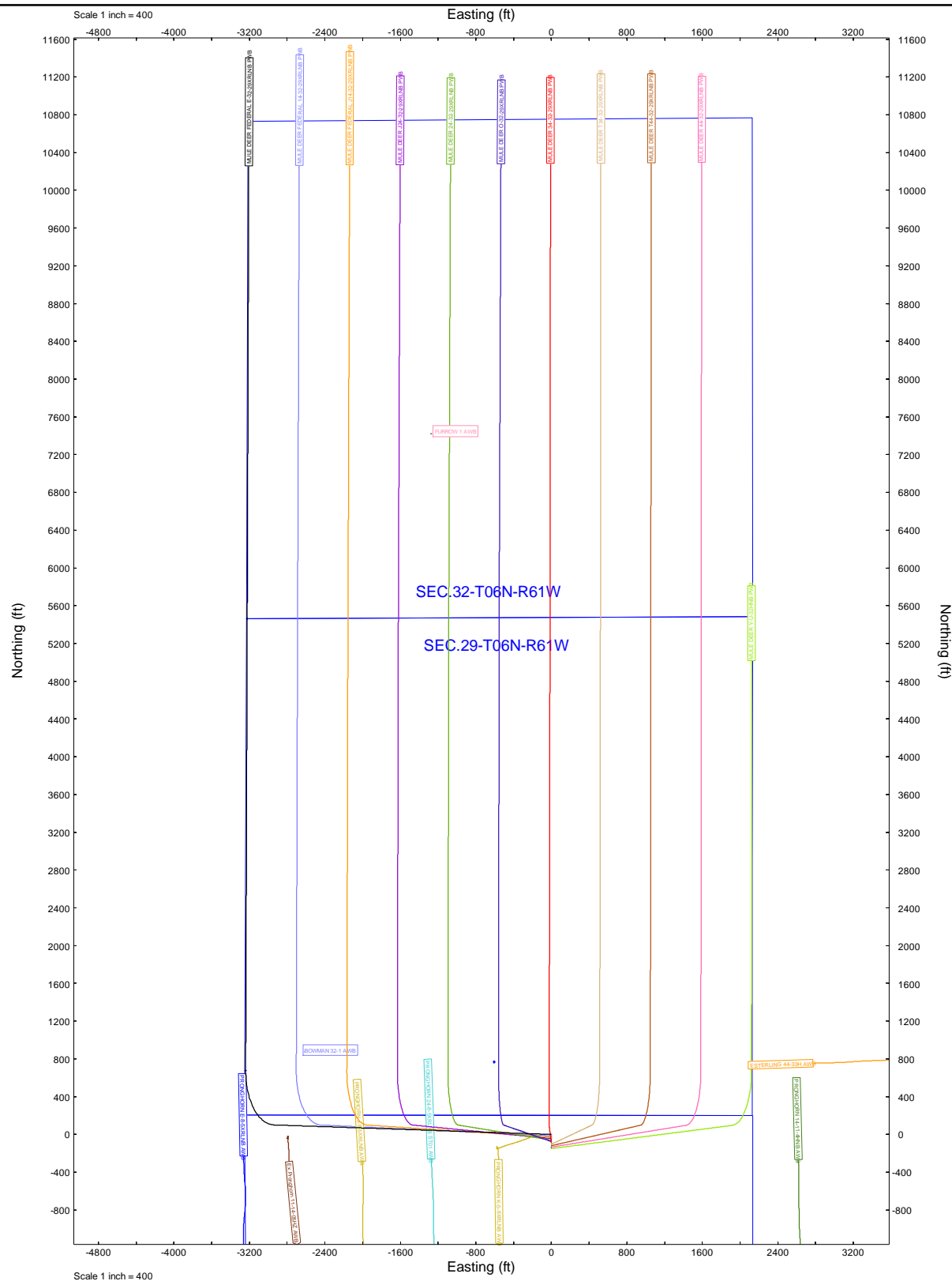
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	273.777	17.00	0.00	0.00	0.00	0.00
End of Tangent	300.00	0.000	273.777	300.00	0.00	0.00	0.00	0.00
End of Build	1419.00	22.380	273.777	1390.76	14.21	-215.31	2.00	57.69
End of Tangent	6002.27	22.380	273.777	5628.81	129.15	-1956.59	0.00	524.20
End of 3D Arc	6888.46	90.000	0.148	6146.00	702.49	-2167.64	10.00	1128.48
End of Tangent	11682.86	90.000	0.148	6146.00	5496.88	-2155.22	0.00	5820.23
End of 3D Arc	11685.65	90.000	0.204	6146.00	5499.66	-2155.21	2.00	5822.95
End of Tangent	16484.18	90.000	0.204	6146.00	10298.16	-2138.12	0.00	10517.78

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
16484.18	90.000	0.204	6146.00	10298.16	-2138.12	3350847.57	1414763.22	40°27'54.2840"N	104°14'20.4650"W







Planned Wellpath Report

MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL J14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL J14-32-29XRLNB PWB
Slot	SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	True	User	Robiale01
Scale	0.999962	Report Generated	3/26/2020 at 12:37:39 PM
Convergence at slot	0.82° East	Database	WellArchitectDB3

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-32.06	160.34	3353132.71	1404497.11	40°26'12.5232"N	104°13'52.8024"W
Facility Reference Pt			3352971.93	1404526.87	40°26'12.8400"N	104°13'54.8760"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.4000"N	104°41'53.5560"W

WELLPATH DATUM			
Calculation method	Minimum curvature	RIG (17") (RKB) to Facility Vertical Datum	4676.00ft
Horizontal Reference Pt	Slot	RIG (17") (RKB) to Mean Sea Level	4676.00ft
Vertical Reference Pt	RIG (17") (RKB)	RIG (17") (RKB) to Ground Level at Slot (SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05))	4676.00ft
MD Reference Pt	RIG (17") (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	348.27°



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MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL J14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL J14-32-29XRLNB PWB
Slot	SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)		

WELLPATH DATA (173 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	273.777	0.00	0.00	0.00	0.00	40°26'12.5232"N	104°13'52.8024"W	0.00	
17.00	0.000	273.777	17.00	0.00	0.00	0.00	40°26'12.5232"N	104°13'52.8024"W	0.00	Tie On
117.00†	0.000	273.777	117.00	0.00	0.00	0.00	40°26'12.5232"N	104°13'52.8024"W	0.00	
217.00†	0.000	273.777	217.00	0.00	0.00	0.00	40°26'12.5232"N	104°13'52.8024"W	0.00	
300.00	0.000	273.777	300.00	0.00	0.00	0.00	40°26'12.5232"N	104°13'52.8024"W	0.00	End of Tangent
317.00†	0.340	273.777	317.00	0.01	0.00	-0.05	40°26'12.5232"N	104°13'52.8031"W	2.00	
417.00†	2.340	273.777	416.97	0.64	0.16	-2.38	40°26'12.5248"N	104°13'52.8332"W	2.00	
517.00†	4.340	273.777	516.79	2.20	0.54	-8.20	40°26'12.5285"N	104°13'52.9084"W	2.00	
617.00†	6.340	273.777	616.35	4.68	1.15	-17.48	40°26'12.5346"N	104°13'53.0285"W	2.00	
717.00†	8.340	273.777	715.53	8.10	2.00	-30.23	40°26'12.5429"N	104°13'53.1933"W	2.00	
817.00†	10.340	273.777	814.20	12.44	3.06	-46.42	40°26'12.5535"N	104°13'53.4028"W	2.00	
917.00†	12.340	273.777	912.24	17.69	4.36	-66.04	40°26'12.5663"N	104°13'53.6565"W	2.00	
1017.00†	14.340	273.777	1009.54	23.86	5.88	-89.06	40°26'12.5813"N	104°13'53.9542"W	2.00	
1117.00†	16.340	273.777	1105.97	30.93	7.62	-115.46	40°26'12.5985"N	104°13'54.2956"W	2.00	
1217.00†	18.340	273.777	1201.42	38.90	9.58	-145.20	40°26'12.6179"N	104°13'54.6802"W	2.00	
1317.00†	20.340	273.777	1295.77	47.75	11.77	-178.24	40°26'12.6395"N	104°13'55.1075"W	2.00	
1417.00†	22.340	273.777	1388.91	57.48	14.16	-214.55	40°26'12.6631"N	104°13'55.5771"W	2.00	
1419.00	22.380	273.777	1390.76	57.69	14.21	-215.31	40°26'12.6636"N	104°13'55.5869"W	2.00	End of Build
1517.00†	22.380	273.777	1481.38	67.66	16.67	-252.54	40°26'12.6879"N	104°13'56.0684"W	0.00	
1617.00†	22.380	273.777	1573.85	77.84	19.18	-290.53	40°26'12.7127"N	104°13'56.5597"W	0.00	
1717.00†	22.380	273.777	1666.32	88.02	21.69	-328.53	40°26'12.7375"N	104°13'57.0510"W	0.00	
1817.00†	22.380	273.777	1758.78	98.20	24.19	-366.52	40°26'12.7622"N	104°13'57.5424"W	0.00	
1917.00†	22.380	273.777	1851.25	108.38	26.70	-404.51	40°26'12.7870"N	104°13'58.0337"W	0.00	
2017.00†	22.380	273.777	1943.72	118.55	29.21	-442.50	40°26'12.8118"N	104°13'58.5250"W	0.00	
2117.00†	22.380	273.777	2036.19	128.73	31.72	-480.50	40°26'12.8366"N	104°13'59.0164"W	0.00	
2217.00†	22.380	273.777	2128.66	138.91	34.23	-518.49	40°26'12.8613"N	104°13'59.5077"W	0.00	
2317.00†	22.380	273.777	2221.12	149.09	36.73	-556.48	40°26'12.8861"N	104°13'59.9990"W	0.00	
2417.00†	22.380	273.777	2313.59	159.27	39.24	-594.47	40°26'12.9109"N	104°14'0.4904"W	0.00	
2517.00†	22.380	273.777	2406.06	169.45	41.75	-632.46	40°26'12.9357"N	104°14'0.9817"W	0.00	
2617.00†	22.380	273.777	2498.53	179.63	44.26	-670.46	40°26'12.9604"N	104°14'1.4730"W	0.00	



Planned Wellpath Report

MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL J14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL J14-32-29XRLNB PWB
Slot	SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)		

WELLPATH DATA (173 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	22.380	273.777	2590.99	189.81	46.76	-708.45	40°26'12.9852"N	104°14'1.9644"W	0.00	
2817.00†	22.380	273.777	2683.46	199.98	49.27	-746.44	40°26'13.0100"N	104°14'2.4557"W	0.00	
2917.00†	22.380	273.777	2775.93	210.16	51.78	-784.43	40°26'13.0347"N	104°14'2.9470"W	0.00	
3017.00†	22.380	273.777	2868.40	220.34	54.29	-822.42	40°26'13.0595"N	104°14'3.4384"W	0.00	
3117.00†	22.380	273.777	2960.87	230.52	56.80	-860.42	40°26'13.0843"N	104°14'3.9297"W	0.00	
3217.00†	22.380	273.777	3053.33	240.70	59.30	-898.41	40°26'13.1090"N	104°14'4.4210"W	0.00	
3317.00†	22.380	273.777	3145.80	250.88	61.81	-936.40	40°26'13.1338"N	104°14'4.9124"W	0.00	
3417.00†	22.380	273.777	3238.27	261.06	64.32	-974.39	40°26'13.1586"N	104°14'5.4037"W	0.00	
3517.00†	22.380	273.777	3330.74	271.24	66.83	-1012.38	40°26'13.1834"N	104°14'5.8950"W	0.00	
3617.00†	22.380	273.777	3423.21	281.41	69.33	-1050.38	40°26'13.2081"N	104°14'6.3864"W	0.00	
3717.00†	22.380	273.777	3515.67	291.59	71.84	-1088.37	40°26'13.2329"N	104°14'6.8777"W	0.00	
3817.00†	22.380	273.777	3608.14	301.77	74.35	-1126.36	40°26'13.2576"N	104°14'7.3690"W	0.00	
3917.00†	22.380	273.777	3700.61	311.95	76.86	-1164.35	40°26'13.2824"N	104°14'7.8604"W	0.00	
4017.00†	22.380	273.777	3793.08	322.13	79.37	-1202.35	40°26'13.3072"N	104°14'8.3517"W	0.00	
4117.00†	22.380	273.777	3885.55	332.31	81.87	-1240.34	40°26'13.3319"N	104°14'8.8430"W	0.00	
4217.00†	22.380	273.777	3978.01	342.49	84.38	-1278.33	40°26'13.3567"N	104°14'9.3344"W	0.00	
4317.00†	22.380	273.777	4070.48	352.67	86.89	-1316.32	40°26'13.3815"N	104°14'9.8257"W	0.00	
4417.00†	22.380	273.777	4162.95	362.84	89.40	-1354.31	40°26'13.4062"N	104°14'10.3170"W	0.00	
4517.00†	22.380	273.777	4255.42	373.02	91.91	-1392.31	40°26'13.4310"N	104°14'10.8084"W	0.00	
4617.00†	22.380	273.777	4347.88	383.20	94.41	-1430.30	40°26'13.4557"N	104°14'11.2997"W	0.00	
4717.00†	22.380	273.777	4440.35	393.38	96.92	-1468.29	40°26'13.4805"N	104°14'11.7910"W	0.00	
4817.00†	22.380	273.777	4532.82	403.56	99.43	-1506.28	40°26'13.5053"N	104°14'12.2824"W	0.00	
4917.00†	22.380	273.777	4625.29	413.74	101.94	-1544.27	40°26'13.5300"N	104°14'12.7737"W	0.00	
5017.00†	22.380	273.777	4717.76	423.92	104.44	-1582.27	40°26'13.5548"N	104°14'13.2650"W	0.00	
5117.00†	22.380	273.777	4810.22	434.10	106.95	-1620.26	40°26'13.5795"N	104°14'13.7564"W	0.00	
5217.00†	22.380	273.777	4902.69	444.27	109.46	-1658.25	40°26'13.6043"N	104°14'14.2477"W	0.00	
5317.00†	22.380	273.777	4995.16	454.45	111.97	-1696.24	40°26'13.6290"N	104°14'14.7390"W	0.00	
5417.00†	22.380	273.777	5087.63	464.63	114.48	-1734.24	40°26'13.6538"N	104°14'15.2304"W	0.00	
5517.00†	22.380	273.777	5180.10	474.81	116.98	-1772.23	40°26'13.6786"N	104°14'15.7217"W	0.00	
5617.00†	22.380	273.777	5272.56	484.99	119.49	-1810.22	40°26'13.7033"N	104°14'16.2130"W	0.00	



Planned Wellpath Report

MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL J14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL J14-32-29XRLNB PWB
Slot	SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)		

WELLPATH DATA (173 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5717.00†	22.380	273.777	5365.03	495.17	122.00	-1848.21	40°26'13.7281"N	104°14'16.7044"W	0.00	
5817.00†	22.380	273.777	5457.50	505.35	124.51	-1886.20	40°26'13.7528"N	104°14'17.1957"W	0.00	
5917.00†	22.380	273.777	5549.97	515.53	127.02	-1924.20	40°26'13.7776"N	104°14'17.6870"W	0.00	
6002.27	22.380	273.777	5628.81	524.20	129.15	-1956.59	40°26'13.7987"N	104°14'18.1060"W	0.00	End of Tangent
6017.00†	22.512	277.620	5642.43	525.89	129.71	-1962.19	40°26'13.8042"N	104°14'18.1783"W	10.00	
6117.00†	25.608	301.126	5733.94	546.98	143.46	-1999.75	40°26'13.9400"N	104°14'18.6642"W	10.00	
6217.00†	31.533	318.103	5821.87	584.39	174.17	-2035.81	40°26'14.2434"N	104°14'19.1305"W	10.00	
6317.00†	39.012	329.668	5903.54	636.96	220.92	-2069.25	40°26'14.7054"N	104°14'19.5631"W	10.00	
6417.00†	47.307	337.870	5976.48	703.10	282.28	-2099.07	40°26'15.3117"N	104°14'19.9487"W	10.00	
6517.00†	56.046	344.085	6038.47	780.81	356.40	-2124.35	40°26'16.0441"N	104°14'20.2757"W	10.00	
6617.00†	65.038	349.120	6087.62	867.72	441.01	-2144.33	40°26'16.8802"N	104°14'20.5342"W	10.00	
6717.00†	74.176	353.460	6122.45	961.19	533.55	-2158.40	40°26'17.7946"N	104°14'20.7163"W	10.00	
6817.00†	83.393	357.420	6141.88	1058.38	631.21	-2166.13	40°26'18.7596"N	104°14'20.8164"W	10.00	
6888.46	90.000	0.148	6146.00†	1128.48	702.49	-2167.64	40°26'19.4640"N	104°14'20.8360"W	10.00	End of 3D Arc
6917.00†	90.000	0.148	6146.00	1156.40	731.03	-2167.56	40°26'19.7460"N	104°14'20.8351"W	0.00	
7017.00†	90.000	0.148	6146.00	1254.26	831.03	-2167.31	40°26'20.7341"N	104°14'20.8318"W	0.00	
7117.00†	90.000	0.148	6146.00	1352.12	931.03	-2167.05	40°26'21.7223"N	104°14'20.8286"W	0.00	
7217.00†	90.000	0.148	6146.00	1449.98	1031.03	-2166.79	40°26'22.7105"N	104°14'20.8254"W	0.00	
7317.00†	90.000	0.148	6146.00	1547.84	1131.03	-2166.53	40°26'23.6986"N	104°14'20.8221"W	0.00	
7417.00†	90.000	0.148	6146.00	1645.70	1231.03	-2166.27	40°26'24.6868"N	104°14'20.8189"W	0.00	
7517.00†	90.000	0.148	6146.00	1743.56	1331.03	-2166.01	40°26'25.6749"N	104°14'20.8157"W	0.00	
7617.00†	90.000	0.148	6146.00	1841.42	1431.03	-2165.75	40°26'26.6631"N	104°14'20.8124"W	0.00	
7717.00†	90.000	0.148	6146.00	1939.27	1531.03	-2165.49	40°26'27.6512"N	104°14'20.8092"W	0.00	
7817.00†	90.000	0.148	6146.00	2037.13	1631.03	-2165.23	40°26'28.6394"N	104°14'20.8059"W	0.00	
7917.00†	90.000	0.148	6146.00	2134.99	1731.03	-2164.97	40°26'29.6275"N	104°14'20.8027"W	0.00	
8017.00†	90.000	0.148	6146.00	2232.85	1831.03	-2164.71	40°26'30.6157"N	104°14'20.7995"W	0.00	
8117.00†	90.000	0.148	6146.00	2330.71	1931.03	-2164.46	40°26'31.6038"N	104°14'20.7962"W	0.00	
8217.00†	90.000	0.148	6146.00	2428.57	2031.03	-2164.20	40°26'32.5920"N	104°14'20.7930"W	0.00	
8317.00†	90.000	0.148	6146.00	2526.43	2131.03	-2163.94	40°26'33.5801"N	104°14'20.7898"W	0.00	
8417.00†	90.000	0.148	6146.00	2624.29	2231.03	-2163.68	40°26'34.5683"N	104°14'20.7865"W	0.00	



Planned Wellpath Report
MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL J14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL J14-32-29XRLNB PWB
Slot	SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)		

WELLPATH DATA (173 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8517.00†	90.000	0.148	6146.00	2722.15	2331.03	-2163.42	40°26'35.5564"N	104°14'20.7833"W	0.00	
8617.00†	90.000	0.148	6146.00	2820.00	2431.03	-2163.16	40°26'36.5446"N	104°14'20.7801"W	0.00	
8717.00†	90.000	0.148	6146.00	2917.86	2531.03	-2162.90	40°26'37.5328"N	104°14'20.7768"W	0.00	
8817.00†	90.000	0.148	6146.00	3015.72	2631.02	-2162.64	40°26'38.5209"N	104°14'20.7736"W	0.00	
8917.00†	90.000	0.148	6146.00	3113.58	2731.02	-2162.38	40°26'39.5091"N	104°14'20.7703"W	0.00	
9017.00†	90.000	0.148	6146.00	3211.44	2831.02	-2162.12	40°26'40.4972"N	104°14'20.7671"W	0.00	
9117.00†	90.000	0.148	6146.00	3309.30	2931.02	-2161.87	40°26'41.4854"N	104°14'20.7639"W	0.00	
9217.00†	90.000	0.148	6146.00	3407.16	3031.02	-2161.61	40°26'42.4735"N	104°14'20.7606"W	0.00	
9317.00†	90.000	0.148	6146.00	3505.02	3131.02	-2161.35	40°26'43.4617"N	104°14'20.7574"W	0.00	
9417.00†	90.000	0.148	6146.00	3602.88	3231.02	-2161.09	40°26'44.4498"N	104°14'20.7542"W	0.00	
9517.00†	90.000	0.148	6146.00	3700.74	3331.02	-2160.83	40°26'45.4380"N	104°14'20.7509"W	0.00	
9617.00†	90.000	0.148	6146.00	3798.59	3431.02	-2160.57	40°26'46.4261"N	104°14'20.7477"W	0.00	
9717.00†	90.000	0.148	6146.00	3896.45	3531.02	-2160.31	40°26'47.4143"N	104°14'20.7444"W	0.00	
9817.00†	90.000	0.148	6146.00	3994.31	3631.02	-2160.05	40°26'48.4024"N	104°14'20.7412"W	0.00	
9917.00†	90.000	0.148	6146.00	4092.17	3731.02	-2159.79	40°26'49.3906"N	104°14'20.7380"W	0.00	
10017.00†	90.000	0.148	6146.00	4190.03	3831.02	-2159.53	40°26'50.3787"N	104°14'20.7347"W	0.00	
10117.00†	90.000	0.148	6146.00	4287.89	3931.02	-2159.28	40°26'51.3669"N	104°14'20.7315"W	0.00	
10217.00†	90.000	0.148	6146.00	4385.75	4031.02	-2159.02	40°26'52.3550"N	104°14'20.7283"W	0.00	
10317.00†	90.000	0.148	6146.00	4483.61	4131.02	-2158.76	40°26'53.3432"N	104°14'20.7250"W	0.00	
10417.00†	90.000	0.148	6146.00	4581.47	4231.02	-2158.50	40°26'54.3313"N	104°14'20.7218"W	0.00	
10517.00†	90.000	0.148	6146.00	4679.32	4331.02	-2158.24	40°26'55.3195"N	104°14'20.7185"W	0.00	
10617.00†	90.000	0.148	6146.00	4777.18	4431.02	-2157.98	40°26'56.3076"N	104°14'20.7153"W	0.00	
10717.00†	90.000	0.148	6146.00	4875.04	4531.02	-2157.72	40°26'57.2958"N	104°14'20.7121"W	0.00	
10817.00†	90.000	0.148	6146.00	4972.90	4631.02	-2157.46	40°26'58.2839"N	104°14'20.7088"W	0.00	
10917.00†	90.000	0.148	6146.00	5070.76	4731.02	-2157.20	40°26'59.2721"N	104°14'20.7056"W	0.00	
11017.00†	90.000	0.148	6146.00	5168.62	4831.02	-2156.94	40°27'0.2603"N	104°14'20.7024"W	0.00	
11117.00†	90.000	0.148	6146.00	5266.48	4931.02	-2156.68	40°27'1.2484"N	104°14'20.6991"W	0.00	
11217.00†	90.000	0.148	6146.00	5364.34	5031.02	-2156.43	40°27'2.2366"N	104°14'20.6959"W	0.00	
11317.00†	90.000	0.148	6146.00	5462.20	5131.02	-2156.17	40°27'3.2247"N	104°14'20.6926"W	0.00	
11417.00†	90.000	0.148	6146.00	5560.06	5231.02	-2155.91	40°27'4.2129"N	104°14'20.6894"W	0.00	



Planned Wellpath Report

MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL J14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL J14-32-29XRLNB PWB
Slot	SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)		

WELLPATH DATA (173 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11517.00†	90.000	0.148	6146.00	5657.91	5331.02	-2155.65	40°27'5.2010"N	104°14'20.6862"W	0.00	
11617.00†	90.000	0.148	6146.00	5755.77	5431.02	-2155.39	40°27'6.1892"N	104°14'20.6829"W	0.00	
11682.86	90.000	0.148	6146.00 ²	5820.23	5496.88	-2155.22	40°27'6.8400"N	104°14'20.6808"W	0.00	End of Tangent
11685.65	90.000	0.204	6146.00	5822.95	5499.66	-2155.21	40°27'6.8675"N	104°14'20.6807"W	2.00	End of 3D Arc
11717.00†	90.000	0.204	6146.00	5853.63	5531.01	-2155.10	40°27'7.1773"N	104°14'20.6793"W	0.00	
11817.00†	90.000	0.204	6146.00	5951.46	5631.01	-2154.74	40°27'8.1655"N	104°14'20.6748"W	0.00	
11917.00†	90.000	0.204	6146.00	6049.30	5731.01	-2154.39	40°27'9.1536"N	104°14'20.6703"W	0.00	
12017.00†	90.000	0.204	6146.00	6147.14	5831.01	-2154.03	40°27'10.1418"N	104°14'20.6658"W	0.00	
12117.00†	90.000	0.204	6146.00	6244.98	5931.01	-2153.67	40°27'11.1299"N	104°14'20.6613"W	0.00	
12217.00†	90.000	0.204	6146.00	6342.82	6031.01	-2153.32	40°27'12.1180"N	104°14'20.6568"W	0.00	
12317.00†	90.000	0.204	6146.00	6440.66	6131.01	-2152.96	40°27'13.1062"N	104°14'20.6523"W	0.00	
12417.00†	90.000	0.204	6146.00	6538.50	6231.01	-2152.61	40°27'14.0943"N	104°14'20.6478"W	0.00	
12517.00†	90.000	0.204	6146.00	6636.34	6331.01	-2152.25	40°27'15.0825"N	104°14'20.6433"W	0.00	
12617.00†	90.000	0.204	6146.00	6734.18	6431.01	-2151.89	40°27'16.0706"N	104°14'20.6388"W	0.00	
12717.00†	90.000	0.204	6146.00	6832.01	6531.01	-2151.54	40°27'17.0588"N	104°14'20.6343"W	0.00	
12817.00†	90.000	0.204	6146.00	6929.85	6631.01	-2151.18	40°27'18.0469"N	104°14'20.6298"W	0.00	
12917.00†	90.000	0.204	6146.00	7027.69	6731.01	-2150.82	40°27'19.0351"N	104°14'20.6254"W	0.00	
13017.00†	90.000	0.204	6146.00	7125.53	6831.01	-2150.47	40°27'20.0232"N	104°14'20.6209"W	0.00	
13117.00†	90.000	0.204	6146.00	7223.37	6931.01	-2150.11	40°27'21.0114"N	104°14'20.6164"W	0.00	
13217.00†	90.000	0.204	6146.00	7321.21	7031.01	-2149.76	40°27'21.9995"N	104°14'20.6119"W	0.00	
13317.00†	90.000	0.204	6146.00	7419.05	7131.00	-2149.40	40°27'22.9877"N	104°14'20.6074"W	0.00	
13417.00†	90.000	0.204	6146.00	7516.89	7231.00	-2149.04	40°27'23.9758"N	104°14'20.6029"W	0.00	
13517.00†	90.000	0.204	6146.00	7614.73	7331.00	-2148.69	40°27'24.9640"N	104°14'20.5984"W	0.00	
13617.00†	90.000	0.204	6146.00	7712.56	7431.00	-2148.33	40°27'25.9521"N	104°14'20.5939"W	0.00	
13717.00†	90.000	0.204	6146.00	7810.40	7531.00	-2147.98	40°27'26.9403"N	104°14'20.5894"W	0.00	
13817.00†	90.000	0.204	6146.00	7908.24	7631.00	-2147.62	40°27'27.9284"N	104°14'20.5849"W	0.00	
13917.00†	90.000	0.204	6146.00	8006.08	7731.00	-2147.26	40°27'28.9165"N	104°14'20.5804"W	0.00	
14017.00†	90.000	0.204	6146.00	8103.92	7831.00	-2146.91	40°27'29.9047"N	104°14'20.5759"W	0.00	
14117.00†	90.000	0.204	6146.00	8201.76	7931.00	-2146.55	40°27'30.8928"N	104°14'20.5714"W	0.00	
14217.00†	90.000	0.204	6146.00	8299.60	8031.00	-2146.19	40°27'31.8810"N	104°14'20.5669"W	0.00	



Planned Wellpath Report

MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL J14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL J14-32-29XRLNB PWB
Slot	SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)		

WELLPATH DATA (173 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14317.00†	90.000	0.204	6146.00	8397.44	8131.00	-2145.84	40°27'32.8691"N	104°14'20.5624"W	0.00	
14417.00†	90.000	0.204	6146.00	8495.28	8231.00	-2145.48	40°27'33.8573"N	104°14'20.5579"W	0.00	
14517.00†	90.000	0.204	6146.00	8593.12	8331.00	-2145.13	40°27'34.8454"N	104°14'20.5534"W	0.00	
14617.00†	90.000	0.204	6146.00	8690.95	8431.00	-2144.77	40°27'35.8336"N	104°14'20.5489"W	0.00	
14717.00†	90.000	0.204	6146.00	8788.79	8531.00	-2144.41	40°27'36.8217"N	104°14'20.5444"W	0.00	
14817.00†	90.000	0.204	6146.00	8886.63	8631.00	-2144.06	40°27'37.8099"N	104°14'20.5399"W	0.00	
14917.00†	90.000	0.204	6146.00	8984.47	8730.99	-2143.70	40°27'38.7980"N	104°14'20.5355"W	0.00	
15017.00†	90.000	0.204	6146.00	9082.31	8830.99	-2143.35	40°27'39.7862"N	104°14'20.5310"W	0.00	
15117.00†	90.000	0.204	6146.00	9180.15	8930.99	-2142.99	40°27'40.7743"N	104°14'20.5265"W	0.00	
15217.00†	90.000	0.204	6146.00	9277.99	9030.99	-2142.63	40°27'41.7624"N	104°14'20.5220"W	0.00	
15317.00†	90.000	0.204	6146.00	9375.83	9130.99	-2142.28	40°27'42.7506"N	104°14'20.5175"W	0.00	
15417.00†	90.000	0.204	6146.00	9473.67	9230.99	-2141.92	40°27'43.7387"N	104°14'20.5130"W	0.00	
15517.00†	90.000	0.204	6146.00	9571.50	9330.99	-2141.56	40°27'44.7269"N	104°14'20.5085"W	0.00	
15617.00†	90.000	0.204	6146.00	9669.34	9430.99	-2141.21	40°27'45.7150"N	104°14'20.5040"W	0.00	
15717.00†	90.000	0.204	6146.00	9767.18	9530.99	-2140.85	40°27'46.7032"N	104°14'20.4995"W	0.00	
15817.00†	90.000	0.204	6146.00	9865.02	9630.99	-2140.50	40°27'47.6913"N	104°14'20.4950"W	0.00	
15917.00†	90.000	0.204	6146.00	9962.86	9730.99	-2140.14	40°27'48.6795"N	104°14'20.4905"W	0.00	
16017.00†	90.000	0.204	6146.00	10060.70	9830.99	-2139.78	40°27'49.6676"N	104°14'20.4860"W	0.00	
16117.00†	90.000	0.204	6146.00	10158.54	9930.99	-2139.43	40°27'50.6558"N	104°14'20.4815"W	0.00	
16217.00†	90.000	0.204	6146.00	10256.38	10030.99	-2139.07	40°27'51.6439"N	104°14'20.4770"W	0.00	
16317.00†	90.000	0.204	6146.00	10354.22	10130.99	-2138.72	40°27'52.6320"N	104°14'20.4725"W	0.00	
16417.00†	90.000	0.204	6146.00	10452.05	10230.99	-2138.36	40°27'53.6202"N	104°14'20.4680"W	0.00	
16484.18	90.000	0.204	6146.00 ³	10517.78	10298.16	-2138.12	40°27'54.2840"N	104°14'20.4650"W	0.00	End of Tangent



Planned Wellpath Report

MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL J14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL J14-32-29XRLNB PWB
Slot	SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)		

HOLE & CASING SECTIONS - Ref Wellbore: MULE DEER FEDERAL J14-32-29XRLNB PWB Ref Wellpath: MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP									
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]
13.5in Open Hole	17.00	1600.00	1583.00	17.00	1558.13	0.00	0.00	18.75	-284.08
9.625in Casing Surface	17.00	1600.00	1583.00	17.00	1558.13	0.00	0.00	18.75	-284.08
8.5in Open Hole	1600.00	16484.18	14884.18	1558.13	6146.00	18.75	-284.08	10298.16	-2138.12

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.29-T06N-R61W	N/A	-2.00	796.03	-607.94	3352513.47	1405284.33	40°26'20.3892"N	104°14'0.6648"W	polygon
	2D Polygon: dimensions not calculated								
SEC.32-T06N-R61W	N/A	-2.00	796.03	-607.94	3352513.47	1405284.33	40°26'20.3892"N	104°14'0.6648"W	polygon
	2D Polygon: dimensions not calculated								
SEC.05-T05N-R61W	N/A	0.00	-9900.97	-1941.14	3351333.48	1394569.78	40°24'34.6850"N	104°14'17.8960"W	polygon
	2D Polygon: dimensions not calculated								
2) MULE DEER FEDERAL J14-32-29XRLNB (MLT 1078'FWL)	11682.86	6146.00	5496.88	-2155.22	3350899.16	1409962.38	40°27'6.8400"N	104°14'20.6808"W	point
3) MULE DEER FEDERAL J14-32-29XRLNB BHL REV-1 (470'FNL & 1079'FWL,SEC.29)	16484.18	6146.00	10298.16	-2138.12	3350847.57	1414763.22	40°27'54.2840"N	104°14'20.4650"W	point
1) MULE DEER FEDERAL J14-32-29XRLNB LP REV-1 (470'FSL & 1082'FWL,SEC.32)	6888.46	6146.00	702.49	-2167.64	3350955.33	1405168.49	40°26'19.4640"N	104°14'20.8360"W	point



Planned Wellpath Report

MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL J14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL J14-32-29XRLNB PWB
Slot	SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)		

SURVEY PROGRAM - Ref Wellbore: MULE DEER FEDERAL J14-32-29XRLNB PWB Ref Wellpath: MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1600.00	BHI NaviTrak (Rotating+Axial Corr)		MULE DEER FEDERAL J14-32-29XRLNB PWB
1600.00	16484.18	BH AutoTrak Curve (Short)		MULE DEER FEDERAL J14-32-29XRLNB PWB



Planned Wellpath Report

MULE DEER FEDERAL J14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL J14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL J14-32-29XRLNB PWB
Slot	SLOT#07 MULE DEER FEDERAL J14-32-29XRLNB (231'FNL & 2131'FEL,SEC.05)		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	273.777	17.00	Tie On
300.00	0.000	273.777	300.00	End of Tangent
1419.00	22.380	273.777	1390.76	End of Build
6002.27	22.380	273.777	5628.81	End of Tangent
6888.46	90.000	0.148	6146.00	End of 3D Arc
11682.86	90.000	0.148	6146.00	End of Tangent
11685.65	90.000	0.204	6146.00	End of 3D Arc
16484.18	90.000	0.204	6146.00	End of Tangent