

Location:	COLORADO	Slot:	SLOT#13 MULE DEER T44-32-29XRLNB (321°FNL & 2131°FEL,SEC.05)
Field:	WELD COUNTY (NAD83/TRUE)	Well:	MULE DEER T44-32-29XRLNB
Facility:	SEC.05-T05N-R61W	Wellbore:	MULE DEER T44-32-29XRLNB PWB
<b>Plot reference wellpath is MULE DEER T44-32-29XRLNB (REV-A.0) PWP</b>			Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (17) (RKB)			North Reference: True north
Measured depths are referenced to RIG (17) (RKB)			Scale: True distance
RIG (17) (RKB) to Mean Sea Level: 4676 feet			Depths are in feet
Mean Sea Level to Ground level (At Slot: SLOT#13 MULE DEER T44-32-29XRLNB (321°FNL & 2131°FEL,SEC.05)): 0 feet			Created by: rkolbe01 on 2019-06-14
Coordinates are in feet referenced to Slot			Database: WA DENVER

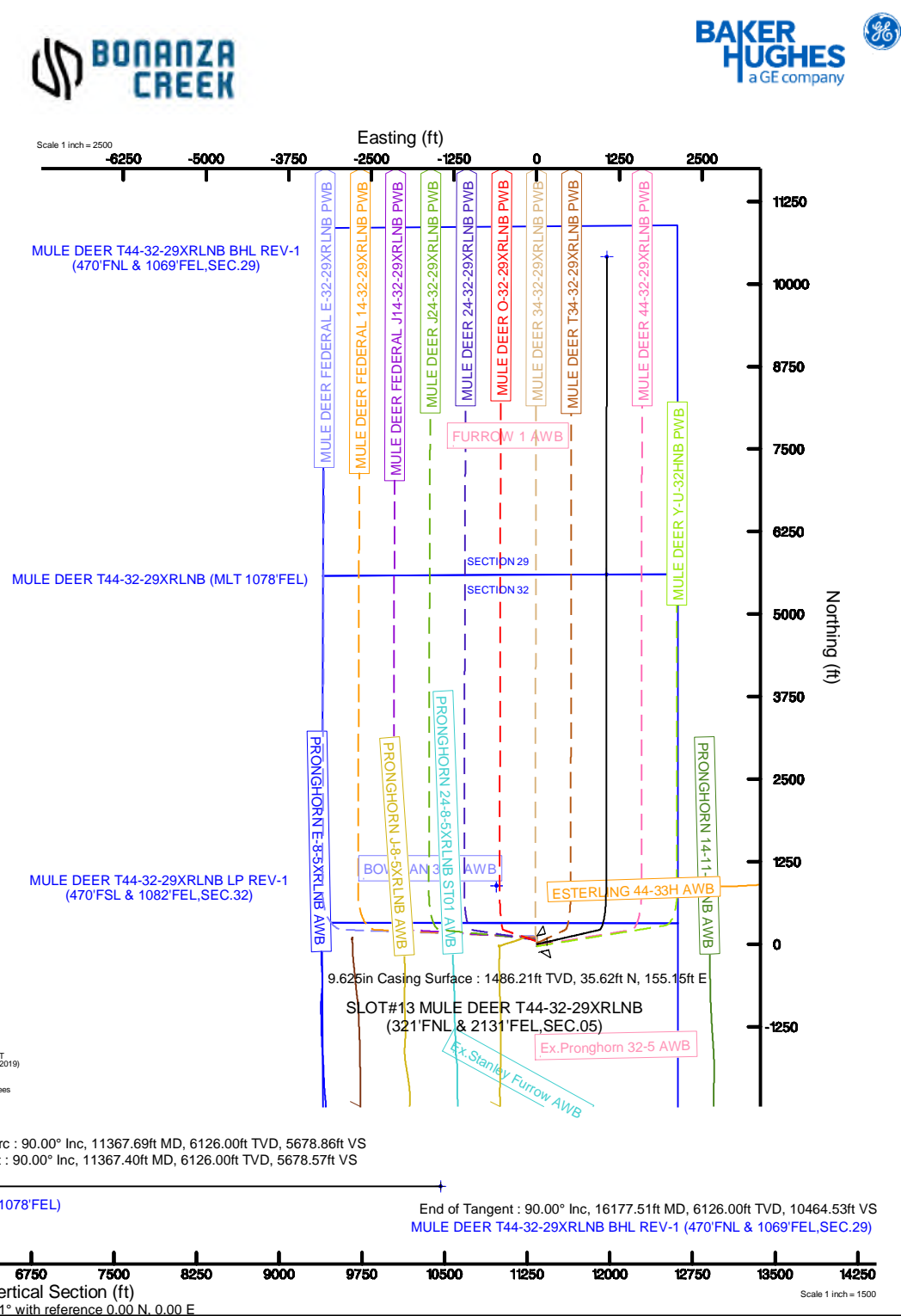
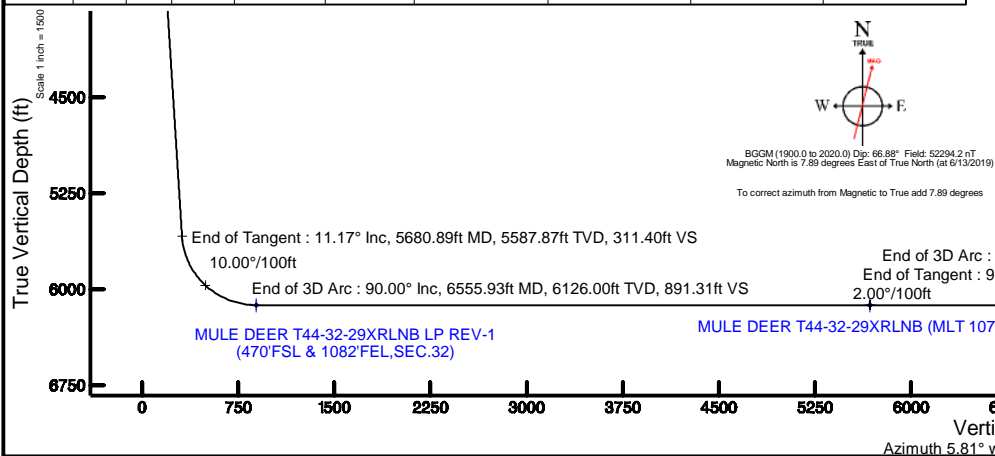
Location Information						
Facility Name			Grid East (US R)	Grid North (US R)	Latitude	Longitude
SEC 05-T05N-R61W			3352971.931	1404526.872	40°26'12.845"N	104°1'354.876"W
Slot	Local N (R)	Local E (R)	Grid East (US R)	Grid North (US R)	Latitude	Longitude
SLOT#13 MULE DEER T44-32-29XRLNB (321FNL & 2131 FEL, SEC.05)	-122.04	160.34	3353133.995	1404407.137	40°26'11.634"N	104°1'352.802"W
RIG (177) (RXB) to Ground level (N Slot: SLOT#13 MULE DEER T44-32-29XRLNB (321FNL & 2131 FEL, SEC.05))					4676R	
Mean Sea Level to Ground level (N Slot: SLOT#13 MULE DEER T44-32-29XRLNB (321FNL & 2131 FEL, SEC.05))					0R	
RIG (177) (RXB) to Mean Sea Level					4676R	

Survey Program					
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1500.00	BHI NaviTrak	BHI NaviTrak (Rotating+Axial Corr)		MULE DEER T44-32-29XRLNB PWB
1500.00	16177.51	BHI AutoTrak Curve	BHI AutoTrak Curve (Short)		MULE DEER T44-32-29XRLNB 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	77.071	17.00	0.00	0.00	0.00	0.00
End of Tangent	400.00	0.000	77.071	400.00	0.00	0.00	0.00	0.00
End of Build	958.59	11.172	77.071	955.06	12.15	52.91	2.00	17.44
End of Tangent	5680.89	11.172	77.071	5587.87	216.86	944.67	0.00	311.40
End of 3D Arc	6555.93	90.000	0.061	6126.00	789.17	1048.84	10.00	891.31
End of Tangent	11367.40	90.000	0.061	6126.00	5600.64	1053.95	0.00	5678.57
End of 3D Arc	11367.69	90.000	0.067	6126.00	5600.93	1053.95	2.00	5678.86
End of Tangent	16177.51	90.000	0.067	6126.00	10410.75	1059.56	0.00	10464.53

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	1500.00	1483.00	17.00	1486.21	0.00	0.00	35.62	155.15	MULE DEER T44-32-29XRLNB PWB
9.625in Casing Surface	17.00	1500.00	1483.00	17.00	1486.21	0.00	0.00	35.62	155.15	MULE DEER T44-32-29XRLNB PWB
8.5in Open Hole	1500.00	16177.51	14677.51	1486.21	6126.00	35.62	155.15	10410.75	1059.56	MULE DEER T44-32-29XRLNB PWB

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
16177.51	90.000	0.067	6126.00	10410.75	1059.56	3354044.47	1414831.56	40°27'54.508"N	104°13'39.094"W



# Planned Wellpath Report

MULE DEER T44-32-29XRLNB (REV-A.0) PWP

Page 1 of 7



## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#13 MULE DEER T44-32-29XRLNB (321'FNL & 2131'FEL,SEC.05)
Area	COLORADO	Well	MULE DEER T44-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER T44-32-29XRLNB PWB
Facility	SEC.05-T05N-R61W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Robiale01
Scale	0.999962	Report Generated	6/14/2019 at 4:00:45 PM
Convergence at slot	0.82° East	Database/Source file	WA DENVER/MULE_DEER_T44-32-29XRLNB_REV-A.0_PWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-122.04	160.34	3353134.00	1404407.14	40°26'11.634"N	104°13'52.802"W
Facility Reference Pt			3352971.93	1404526.87	40°26'12.840"N	104°13'54.876"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') (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#13 MULE DEER T44-32-29XRLNB (321'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	5.81°

# Planned Wellpath Report

## MULE DEER T44-32-29XRLNB (REV-A.0) PWP

Page 2 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#13 MULE DEER T44-32-29XRLNB (321'FNL & 2131'FEL,SEC.05)
Area	COLORADO	Well	MULE DEER T44-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER T44-32-29XRLNB PWB
Facility	SEC.05-T05N-R61W		

WELLPATH DATA (170 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	77.071	0.00	0.00	0.00	0.00	40°26'11.634"N	104°13'52.802"W	0.00	
17.00	0.000	77.071	17.00	0.00	0.00	0.00	40°26'11.634"N	104°13'52.802"W	0.00	Tie On
117.00†	0.000	77.071	117.00	0.00	0.00	0.00	40°26'11.634"N	104°13'52.802"W	0.00	
217.00†	0.000	77.071	217.00	0.00	0.00	0.00	40°26'11.634"N	104°13'52.802"W	0.00	
317.00†	0.000	77.071	317.00	0.00	0.00	0.00	40°26'11.634"N	104°13'52.802"W	0.00	
400.00	0.000	77.071	400.00	0.00	0.00	0.00	40°26'11.634"N	104°13'52.802"W	0.00	End of Tangent
417.00†	0.340	77.071	417.00	0.02	0.01	0.05	40°26'11.634"N	104°13'52.802"W	2.00	
517.00†	2.340	77.071	516.97	0.77	0.53	2.33	40°26'11.639"N	104°13'52.772"W	2.00	
617.00†	4.340	77.071	616.79	2.64	1.84	8.01	40°26'11.652"N	104°13'52.699"W	2.00	
717.00†	6.340	77.071	716.35	5.63	3.92	17.08	40°26'11.673"N	104°13'52.582"W	2.00	
817.00†	8.340	77.071	815.53	9.73	6.78	29.53	40°26'11.701"N	104°13'52.421"W	2.00	
917.00†	10.340	77.071	914.20	14.95	10.41	45.34	40°26'11.737"N	104°13'52.216"W	2.00	
958.59	11.172	77.071	955.06	17.44	12.15	52.91	40°26'11.754"N	104°13'52.118"W	2.00	End of Build
1017.00†	11.172	77.071	1012.36	21.08	14.68	63.94	40°26'11.779"N	104°13'51.976"W	0.00	
1117.00†	11.172	77.071	1110.47	27.30	19.01	82.82	40°26'11.822"N	104°13'51.731"W	0.00	
1217.00†	11.172	77.071	1208.57	33.53	23.35	101.71	40°26'11.865"N	104°13'51.487"W	0.00	
1317.00†	11.172	77.071	1306.68	39.75	27.68	120.59	40°26'11.908"N	104°13'51.243"W	0.00	
1417.00†	11.172	77.071	1404.78	45.98	32.02	139.48	40°26'11.950"N	104°13'50.999"W	0.00	
1517.00†	11.172	77.071	1502.89	52.20	36.35	158.36	40°26'11.993"N	104°13'50.754"W	0.00	
1617.00†	11.172	77.071	1600.99	58.43	40.69	177.24	40°26'12.036"N	104°13'50.510"W	0.00	
1717.00†	11.172	77.071	1699.10	64.65	45.02	196.13	40°26'12.079"N	104°13'50.266"W	0.00	
1817.00†	11.172	77.071	1797.20	70.88	49.36	215.01	40°26'12.122"N	104°13'50.022"W	0.00	
1917.00†	11.172	77.071	1895.31	77.10	53.69	233.90	40°26'12.165"N	104°13'49.778"W	0.00	
2017.00†	11.172	77.071	1993.41	83.33	58.03	252.78	40°26'12.207"N	104°13'49.533"W	0.00	
2117.00†	11.172	77.071	2091.52	89.55	62.36	271.66	40°26'12.250"N	104°13'49.289"W	0.00	
2217.00†	11.172	77.071	2189.62	95.78	66.70	290.55	40°26'12.293"N	104°13'49.045"W	0.00	
2317.00†	11.172	77.071	2287.73	102.00	71.04	309.43	40°26'12.336"N	104°13'48.801"W	0.00	
2417.00†	11.172	77.071	2385.83	108.23	75.37	328.32	40°26'12.379"N	104°13'48.556"W	0.00	
2517.00†	11.172	77.071	2483.94	114.45	79.71	347.20	40°26'12.422"N	104°13'48.312"W	0.00	
2617.00†	11.172	77.071	2582.04	120.68	84.04	366.08	40°26'12.464"N	104°13'48.068"W	0.00	
2717.00†	11.172	77.071	2680.15	126.90	88.38	384.97	40°26'12.507"N	104°13'47.824"W	0.00	
2817.00†	11.172	77.071	2778.25	133.13	92.71	403.85	40°26'12.550"N	104°13'47.580"W	0.00	
2917.00†	11.172	77.071	2876.36	139.35	97.05	422.74	40°26'12.593"N	104°13'47.335"W	0.00	
3017.00†	11.172	77.071	2974.46	145.58	101.38	441.62	40°26'12.636"N	104°13'47.091"W	0.00	
3117.00†	11.172	77.071	3072.57	151.80	105.72	460.51	40°26'12.679"N	104°13'46.847"W	0.00	
3217.00†	11.172	77.071	3170.67	158.03	110.05	479.39	40°26'12.721"N	104°13'46.603"W	0.00	

WELLPATH DATA (170 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3317.00†	11.172	77.071	3268.78	164.25	114.39	498.27	40°26'12.764"N	104°13'46.359"W	0.00	
3417.00†	11.172	77.071	3366.88	170.47	118.72	517.16	40°26'12.807"N	104°13'46.114"W	0.00	
3517.00†	11.172	77.071	3464.99	176.70	123.06	536.04	40°26'12.850"N	104°13'45.870"W	0.00	
3617.00†	11.172	77.071	3563.09	182.92	127.39	554.93	40°26'12.893"N	104°13'45.626"W	0.00	
3717.00†	11.172	77.071	3661.20	189.15	131.73	573.81	40°26'12.936"N	104°13'45.382"W	0.00	
3817.00†	11.172	77.071	3759.30	195.37	136.06	592.69	40°26'12.978"N	104°13'45.137"W	0.00	
3917.00†	11.172	77.071	3857.41	201.60	140.40	611.58	40°26'13.021"N	104°13'44.893"W	0.00	
4017.00†	11.172	77.071	3955.51	207.82	144.73	630.46	40°26'13.064"N	104°13'44.649"W	0.00	
4117.00†	11.172	77.071	4053.62	214.05	149.07	649.35	40°26'13.107"N	104°13'44.405"W	0.00	

# Planned Wellpath Report

## MULE DEER T44-32-29XRLNB (REV-A.0) PWP

Page 3 of 7



### REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#13 MULE DEER T44-32-29XRLNB (321'FNL & 2131'FEL,SEC.05)
Area	COLORADO	Well	MULE DEER T44-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER T44-32-29XRLNB PWB
Facility	SEC.05-T05N-R61W		

### WELLPATH DATA (170 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4217.00†	11.172	77.071	4151.72	220.27	153.40	668.23	40°26'13.150"N	104°13'44.161"W	0.00	
4317.00†	11.172	77.071	4249.83	226.50	157.74	687.11	40°26'13.193"N	104°13'43.916"W	0.00	
4417.00†	11.172	77.071	4347.93	232.72	162.07	706.00	40°26'13.235"N	104°13'43.672"W	0.00	
4517.00†	11.172	77.071	4446.04	238.95	166.41	724.88	40°26'13.278"N	104°13'43.428"W	0.00	
4617.00†	11.172	77.071	4544.14	245.17	170.74	743.77	40°26'13.321"N	104°13'43.184"W	0.00	
4717.00†	11.172	77.071	4642.25	251.40	175.08	762.65	40°26'13.364"N	104°13'42.939"W	0.00	
4817.00†	11.172	77.071	4740.35	257.62	179.41	781.53	40°26'13.407"N	104°13'42.695"W	0.00	
4917.00†	11.172	77.071	4838.46	263.85	183.75	800.42	40°26'13.450"N	104°13'42.451"W	0.00	
5017.00†	11.172	77.071	4936.56	270.07	188.08	819.30	40°26'13.492"N	104°13'42.207"W	0.00	
5117.00†	11.172	77.071	5034.67	276.30	192.42	838.19	40°26'13.535"N	104°13'41.963"W	0.00	
5217.00†	11.172	77.071	5132.77	282.52	196.75	857.07	40°26'13.578"N	104°13'41.718"W	0.00	
5317.00†	11.172	77.071	5230.88	288.75	201.09	875.95	40°26'13.621"N	104°13'41.474"W	0.00	
5417.00†	11.172	77.071	5328.98	294.97	205.42	894.84	40°26'13.664"N	104°13'41.230"W	0.00	
5517.00†	11.172	77.071	5427.09	301.20	209.76	913.72	40°26'13.707"N	104°13'40.986"W	0.00	
5617.00†	11.172	77.071	5525.19	307.42	214.09	932.61	40°26'13.749"N	104°13'40.741"W	0.00	
5680.89	11.172	77.071	5587.87	311.40	216.86	944.67	40°26'13.777"N	104°13'40.585"W	0.00	End of Tangent
5717.00†	12.470	60.542	5623.23	314.78	219.57	951.48	40°26'13.803"N	104°13'40.497"W	10.00	
5817.00†	19.364	33.262	5719.46	335.78	238.79	970.02	40°26'13.993"N	104°13'40.258"W	10.00	
5917.00†	28.141	21.148	5810.96	373.32	274.73	987.66	40°26'14.349"N	104°13'40.029"W	10.00	
6017.00†	37.500	14.586	5894.93	426.28	326.31	1003.88	40°26'14.858"N	104°13'39.820"W	10.00	
6117.00†	47.092	10.365	5968.82	493.04	391.96	1018.17	40°26'15.507"N	104°13'39.635"W	10.00	
6217.00†	56.798	7.296	6030.40	571.57	469.68	1030.10	40°26'16.275"N	104°13'39.480"W	10.00	
6317.00†	66.564	4.846	6077.79	659.49	557.12	1039.31	40°26'17.139"N	104°13'39.361"W	10.00	
6417.00†	76.363	2.737	6109.54	754.12	651.60	1045.52	40°26'18.073"N	104°13'39.281"W	10.00	
6517.00†	86.178	0.798	6124.70	852.58	750.27	1048.55	40°26'19.048"N	104°13'39.242"W	10.00	
6555.93	90.000	0.061	6126.00†	891.31	789.17	1048.84	40°26'19.432"N	104°13'39.238"W	10.00	End of 3D Arc
6617.00†	90.000	0.061	6126.00	952.08	850.24	1048.90	40°26'20.035"N	104°13'39.237"W	0.00	
6717.00†	90.000	0.061	6126.00	1051.57	950.24	1049.01	40°26'21.024"N	104°13'39.236"W	0.00	
6817.00†	90.000	0.061	6126.00	1151.07	1050.24	1049.12	40°26'22.012"N	104°13'39.234"W	0.00	
6917.00†	90.000	0.061	6126.00	1250.57	1150.24	1049.22	40°26'23.000"N	104°13'39.233"W	0.00	
7017.00†	90.000	0.061	6126.00	1350.06	1250.24	1049.33	40°26'23.988"N	104°13'39.231"W	0.00	
7117.00†	90.000	0.061	6126.00	1449.56	1350.24	1049.43	40°26'24.976"N	104°13'39.230"W	0.00	
7217.00†	90.000	0.061	6126.00	1549.06	1450.24	1049.54	40°26'25.964"N	104°13'39.229"W	0.00	
7317.00†	90.000	0.061	6126.00	1648.55	1550.24	1049.65	40°26'26.953"N	104°13'39.227"W	0.00	
7417.00†	90.000	0.061	6126.00	1748.05	1650.24	1049.75	40°26'27.941"N	104°13'39.226"W	0.00	

WELLPATH DATA (170 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7517.00†	90.000	0.061	6126.00	1847.55	1750.24	1049.86	40°26'28.929"N	104°13'39.224"W	0.00	
7617.00†	90.000	0.061	6126.00	1947.04	1850.24	1049.97	40°26'29.917"N	104°13'39.223"W	0.00	
7717.00†	90.000	0.061	6126.00	2046.54	1950.24	1050.07	40°26'30.905"N	104°13'39.221"W	0.00	
7817.00†	90.000	0.061	6126.00	2146.04	2050.24	1050.18	40°26'31.893"N	104°13'39.220"W	0.00	
7917.00†	90.000	0.061	6126.00	2245.53	2150.24	1050.29	40°26'32.882"N	104°13'39.219"W	0.00	
8017.00†	90.000	0.061	6126.00	2345.03	2250.24	1050.39	40°26'33.870"N	104°13'39.217"W	0.00	
8117.00†	90.000	0.061	6126.00	2444.53	2350.24	1050.50	40°26'34.858"N	104°13'39.216"W	0.00	
8217.00†	90.000	0.061	6126.00	2544.02	2450.24	1050.60	40°26'35.846"N	104°13'39.214"W	0.00	
8317.00†	90.000	0.061	6126.00	2643.52	2550.24	1050.71	40°26'36.834"N	104°13'39.213"W	0.00	
8417.00†	90.000	0.061	6126.00	2743.02	2650.24	1050.82	40°26'37.822"N	104°13'39.211"W	0.00	

# Planned Wellpath Report

MULE DEER T44-32-29XRLNB (REV-A.0) PWP

Page 4 of 7



## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#13 MULE DEER T44-32-29XRLNB (321'FNL & 2131'FEL,SEC.05)
Area	COLORADO	Well	MULE DEER T44-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER T44-32-29XRLNB PWB
Facility	SEC.05-T05N-R61W		

## WELLPATH DATA (170 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	0.061	6126.00	2842.51	2750.24	1050.92	40°26'38.810"N	104°13'39.210"W	0.00	
8617.00†	90.000	0.061	6126.00	2942.01	2850.24	1051.03	40°26'39.799"N	104°13'39.209"W	0.00	
8717.00†	90.000	0.061	6126.00	3041.51	2950.24	1051.14	40°26'40.787"N	104°13'39.207"W	0.00	
8817.00†	90.000	0.061	6126.00	3141.00	3050.24	1051.24	40°26'41.775"N	104°13'39.206"W	0.00	
8917.00†	90.000	0.061	6126.00	3240.50	3150.24	1051.35	40°26'42.763"N	104°13'39.204"W	0.00	
9017.00†	90.000	0.061	6126.00	3340.00	3250.24	1051.45	40°26'43.751"N	104°13'39.203"W	0.00	
9117.00†	90.000	0.061	6126.00	3439.50	3350.24	1051.56	40°26'44.739"N	104°13'39.201"W	0.00	
9217.00†	90.000	0.061	6126.00	3538.99	3450.24	1051.67	40°26'45.728"N	104°13'39.200"W	0.00	
9317.00†	90.000	0.061	6126.00	3638.49	3550.24	1051.77	40°26'46.716"N	104°13'39.199"W	0.00	
9417.00†	90.000	0.061	6126.00	3737.99	3650.24	1051.88	40°26'47.704"N	104°13'39.197"W	0.00	
9517.00†	90.000	0.061	6126.00	3837.48	3750.24	1051.99	40°26'48.692"N	104°13'39.196"W	0.00	
9617.00†	90.000	0.061	6126.00	3936.98	3850.24	1052.09	40°26'49.680"N	104°13'39.194"W	0.00	
9717.00†	90.000	0.061	6126.00	4036.48	3950.24	1052.20	40°26'50.668"N	104°13'39.193"W	0.00	
9817.00†	90.000	0.061	6126.00	4135.97	4050.24	1052.30	40°26'51.656"N	104°13'39.191"W	0.00	
9917.00†	90.000	0.061	6126.00	4235.47	4150.24	1052.41	40°26'52.645"N	104°13'39.190"W	0.00	
10017.00†	90.000	0.061	6126.00	4334.97	4250.24	1052.52	40°26'53.633"N	104°13'39.189"W	0.00	
10117.00†	90.000	0.061	6126.00	4434.46	4350.24	1052.62	40°26'54.621"N	104°13'39.187"W	0.00	
10217.00†	90.000	0.061	6126.00	4533.96	4450.24	1052.73	40°26'55.609"N	104°13'39.186"W	0.00	
10317.00†	90.000	0.061	6126.00	4633.46	4550.24	1052.84	40°26'56.597"N	104°13'39.184"W	0.00	
10417.00†	90.000	0.061	6126.00	4732.95	4650.24	1052.94	40°26'57.585"N	104°13'39.183"W	0.00	
10517.00†	90.000	0.061	6126.00	4832.45	4750.24	1053.05	40°26'58.574"N	104°13'39.181"W	0.00	
10617.00†	90.000	0.061	6126.00	4931.95	4850.24	1053.16	40°26'59.562"N	104°13'39.180"W	0.00	
10717.00†	90.000	0.061	6126.00	5031.44	4950.24	1053.26	40°27'00.550"N	104°13'39.179"W	0.00	
10817.00†	90.000	0.061	6126.00	5130.94	5050.24	1053.37	40°27'01.538"N	104°13'39.177"W	0.00	
10917.00†	90.000	0.061	6126.00	5230.44	5150.24	1053.47	40°27'02.526"N	104°13'39.176"W	0.00	
11017.00†	90.000	0.061	6126.00	5329.93	5250.24	1053.58	40°27'03.514"N	104°13'39.174"W	0.00	
11117.00†	90.000	0.061	6126.00	5429.43	5350.24	1053.69	40°27'04.502"N	104°13'39.173"W	0.00	
11217.00†	90.000	0.061	6126.00	5528.93	5450.24	1053.79	40°27'05.491"N	104°13'39.171"W	0.00	
11317.00†	90.000	0.061	6126.00	5628.42	5550.24	1053.90	40°27'06.479"N	104°13'39.170"W	0.00	
11367.40	90.000	0.061	6126.00 <sup>2</sup>	5678.57	5600.64	1053.95	40°27'06.977"N	104°13'39.169"W	0.00	End of Tangent
11367.69	90.000	0.067	6126.00	5678.86	5600.93	1053.95	40°27'06.980"N	104°13'39.169"W	2.00	End of 3D Arc
11417.00†	90.000	0.067	6126.00	5727.92	5650.24	1054.01	40°27'07.467"N	104°13'39.168"W	0.00	
11517.00†	90.000	0.067	6126.00	5827.42	5750.24	1054.13	40°27'08.455"N	104°13'39.167"W	0.00	
11617.00†	90.000	0.067	6126.00	5926.92	5850.24	1054.24	40°27'09.443"N	104°13'39.165"W	0.00	
11717.00†	90.000	0.067	6126.00	6026.42	5950.24	1054.36	40°27'10.431"N	104°13'39.164"W	0.00	

WELLPATH DATA (170 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11817.00†	90.000	0.067	6126.00	6125.91	6050.24	1054.48	40°27'11.420"N	104°13'39.162"W	0.00	
11917.00†	90.000	0.067	6126.00	6225.41	6150.24	1054.59	40°27'12.408"N	104°13'39.161"W	0.00	
12017.00†	90.000	0.067	6126.00	6324.91	6250.24	1054.71	40°27'13.396"N	104°13'39.159"W	0.00	
12117.00†	90.000	0.067	6126.00	6424.41	6350.24	1054.83	40°27'14.384"N	104°13'39.157"W	0.00	
12217.00†	90.000	0.067	6126.00	6523.90	6450.24	1054.94	40°27'15.372"N	104°13'39.156"W	0.00	
12317.00†	90.000	0.067	6126.00	6623.40	6550.24	1055.06	40°27'16.360"N	104°13'39.154"W	0.00	
12417.00†	90.000	0.067	6126.00	6722.90	6650.24	1055.18	40°27'17.348"N	104°13'39.153"W	0.00	
12517.00†	90.000	0.067	6126.00	6822.40	6750.24	1055.29	40°27'18.337"N	104°13'39.151"W	0.00	
12617.00†	90.000	0.067	6126.00	6921.90	6850.24	1055.41	40°27'19.325"N	104°13'39.150"W	0.00	
12717.00†	90.000	0.067	6126.00	7021.39	6950.24	1055.53	40°27'20.313"N	104°13'39.148"W	0.00	



# Planned Wellpath Report

MULE DEER T44-32-29XRLNB (REV-A.0) PWP

Page 5 of 7



## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#13 MULE DEER T44-32-29XRLNB (321'FNL & 2131'FEL,SEC.05)
Area	COLORADO	Well	MULE DEER T44-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER T44-32-29XRLNB PWB
Facility	SEC.05-T05N-R61W		

## WELLPATH DATA (170 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12817.00†	90.000	0.067	6126.00	7120.89	7050.24	1055.64	40°27'21.301"N	104°13'39.147"W	0.00	
12917.00†	90.000	0.067	6126.00	7220.39	7150.24	1055.76	40°27'22.289"N	104°13'39.145"W	0.00	
13017.00†	90.000	0.067	6126.00	7319.89	7250.24	1055.88	40°27'23.277"N	104°13'39.143"W	0.00	
13117.00†	90.000	0.067	6126.00	7419.38	7350.24	1055.99	40°27'24.266"N	104°13'39.142"W	0.00	
13217.00†	90.000	0.067	6126.00	7518.88	7450.24	1056.11	40°27'25.254"N	104°13'39.140"W	0.00	
13317.00†	90.000	0.067	6126.00	7618.38	7550.24	1056.23	40°27'26.242"N	104°13'39.139"W	0.00	
13417.00†	90.000	0.067	6126.00	7717.88	7650.24	1056.34	40°27'27.230"N	104°13'39.137"W	0.00	
13517.00†	90.000	0.067	6126.00	7817.38	7750.24	1056.46	40°27'28.218"N	104°13'39.136"W	0.00	
13617.00†	90.000	0.067	6126.00	7916.87	7850.24	1056.58	40°27'29.206"N	104°13'39.134"W	0.00	
13717.00†	90.000	0.067	6126.00	8016.37	7950.24	1056.69	40°27'30.194"N	104°13'39.132"W	0.00	
13817.00†	90.000	0.067	6126.00	8115.87	8050.24	1056.81	40°27'31.183"N	104°13'39.131"W	0.00	
13917.00†	90.000	0.067	6126.00	8215.37	8150.24	1056.92	40°27'32.171"N	104°13'39.129"W	0.00	
14017.00†	90.000	0.067	6126.00	8314.86	8250.24	1057.04	40°27'33.159"N	104°13'39.128"W	0.00	
14117.00†	90.000	0.067	6126.00	8414.36	8350.24	1057.16	40°27'34.147"N	104°13'39.126"W	0.00	
14217.00†	90.000	0.067	6126.00	8513.86	8450.24	1057.27	40°27'35.135"N	104°13'39.125"W	0.00	
14317.00†	90.000	0.067	6126.00	8613.36	8550.24	1057.39	40°27'36.123"N	104°13'39.123"W	0.00	
14417.00†	90.000	0.067	6126.00	8712.86	8650.24	1057.51	40°27'37.111"N	104°13'39.122"W	0.00	
14517.00†	90.000	0.067	6126.00	8812.35	8750.24	1057.62	40°27'38.100"N	104°13'39.120"W	0.00	
14617.00†	90.000	0.067	6126.00	8911.85	8850.24	1057.74	40°27'39.088"N	104°13'39.118"W	0.00	
14717.00†	90.000	0.067	6126.00	9011.35	8950.24	1057.86	40°27'40.076"N	104°13'39.117"W	0.00	
14817.00†	90.000	0.067	6126.00	9110.85	9050.24	1057.97	40°27'41.064"N	104°13'39.115"W	0.00	
14917.00†	90.000	0.067	6126.00	9210.35	9150.24	1058.09	40°27'42.052"N	104°13'39.114"W	0.00	
15017.00†	90.000	0.067	6126.00	9309.84	9250.24	1058.21	40°27'43.040"N	104°13'39.112"W	0.00	
15117.00†	90.000	0.067	6126.00	9409.34	9350.24	1058.32	40°27'44.029"N	104°13'39.111"W	0.00	
15217.00†	90.000	0.067	6126.00	9508.84	9450.24	1058.44	40°27'45.017"N	104°13'39.109"W	0.00	
15317.00†	90.000	0.067	6126.00	9608.34	9550.24	1058.56	40°27'46.005"N	104°13'39.107"W	0.00	
15417.00†	90.000	0.067	6126.00	9707.83	9650.24	1058.67	40°27'46.993"N	104°13'39.106"W	0.00	
15517.00†	90.000	0.067	6126.00	9807.33	9750.24	1058.79	40°27'47.981"N	104°13'39.104"W	0.00	
15617.00†	90.000	0.067	6126.00	9906.83	9850.24	1058.91	40°27'48.969"N	104°13'39.103"W	0.00	
15717.00†	90.000	0.067	6126.00	10006.33	9950.24	1059.02	40°27'49.957"N	104°13'39.101"W	0.00	
15817.00†	90.000	0.067	6126.00	10105.83	10050.24	1059.14	40°27'50.946"N	104°13'39.100"W	0.00	
15917.00†	90.000	0.067	6126.00	10205.32	10150.24	1059.26	40°27'51.934"N	104°13'39.098"W	0.00	
16017.00†	90.000	0.067	6126.00	10304.82	10250.24	1059.37	40°27'52.922"N	104°13'39.097"W	0.00	
16117.00†	90.000	0.067	6126.00	10404.32	10350.24	1059.49	40°27'53.910"N	104°13'39.095"W	0.00	
16177.51	90.000	0.067	6126.00 <sup>3</sup>	10464.53	10410.75	1059.56	40°27'54.508"N	104°13'39.094"W	0.00	End of Tangent

HOLE & CASING SECTIONS - Ref Wellbore: MULE DEER T44-32-29XRLNB PWB      Ref Wellpath: MULE DEER T44-32-29XRLNB (REV-A.0) 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	1500.00	1483.00	17.00	1486.21	0.00	0.00	35.62	155.15
9.625in Casing Surface	17.00	1500.00	1483.00	17.00	1486.21	0.00	0.00	35.62	155.15
8.5in Open Hole	1500.00	16177.51	14677.51	1486.21	6126.00	35.62	155.15	10410.75	1059.56

# Planned Wellpath Report

MULE DEER T44-32-29XRLNB (REV-A.0) PWP

Page 6 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#13 MULE DEER T44-32-29XRLNB (321'FNL & 2131'FEL,SEC.05)
Area	COLORADO	Well	MULE DEER T44-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER T44-32-29XRLNB PWB
Facility	SEC.05-T05N-R61W		

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		-2.00	886.02	-607.94	3352513.47	1405284.33	40°26'20.389"N	104°14'00.665"W	polygon
SEC.32-T06N-R61W		-2.00	886.02	-607.94	3352513.47	1405284.33	40°26'20.389"N	104°14'00.665"W	polygon
SEC.05-T05N-R61W		0.00	-9810.98	-1941.14	3351333.48	1394569.78	40°24'34.685"N	104°14'17.896"W	polygon
2) MULE DEER T44-32-29XRLNB (MLT 1078'FEL)	11367.40	6126.00	5600.64	1053.95	3354107.68	1410022.06	40°27'06.977"N	104°13'39.169"W	point
3) MULE DEER T44-32-29XRLNB BHL REV-1 (470'FNL & 1069'FEL,SEC.29)	16177.51	6126.00	10410.75	1059.56	3354044.47	1414831.56	40°27'54.508"N	104°13'39.094"W	point
1) MULE DEER T44-32-29XRLNB LP REV-1 (470'FSL & 1082'FEL,SEC.32)	6555.93	6126.00	789.17	1048.84	3354171.39	1405211.20	40°26'19.432"N	104°13'39.238"W	point

SURVEY PROGRAM - Ref Wellbore: MULE DEER T44-32-29XRLNB PWB Ref Wellpath: MULE DEER T44-32-29XRLNB (REV-A.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1500.00	BHI NaviTrak (Rotating+Axial Corr)		MULE DEER T44-32-29XRLNB PWB
1500.00	16177.51	BHI AutoTrak Curve (Short)		MULE DEER T44-32-29XRLNB PWB

# Planned Wellpath Report

MULE DEER T44-32-29XRLNB (REV-A.0) PWP

Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#13 MULE DEER T44-32-29XRLNB (321'FNL & 2131'FEL,SEC.05)
Area	COLORADO	Well	MULE DEER T44-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER T44-32-29XRLNB PWB
Facility	SEC.05-T05N-R61W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	77.071	17.00	Tie On
400.00	0.000	77.071	400.00	End of Tangent
958.59	11.172	77.071	955.06	End of Build
5680.89	11.172	77.071	5587.87	End of Tangent
6555.93	90.000	0.061	6126.00	End of 3D Arc
11367.40	90.000	0.061	6126.00	End of Tangent
11367.69	90.000	0.067	6126.00	End of 3D Arc
16177.51	90.000	0.067	6126.00	End of Tangent