

BONANZA CREEK ENERGY

Location: COLORADO Slot: SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216'FNL & 2131'FEL,SEC.05)
Field: WELD COUNTY (NAD83/TRUE) Well: MULE DEER FEDERAL 14-32-29XRLNB
Facility: SEC.05-T06N-R61W Wellbore: MULE DEER FEDERAL 14-32-29XRLNB PWB

Plot reference wellpath is MULE DEER FEDERAL 14-32-29XRLNB (REV-A.1) PWB

True vertical depths are referenced to RIG (17) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Reference wellpath measured depths are referenced to RIG (17) (RKB)	North Reference: True north
RIG (17) (RKB) to Mean Sea Level: 4676 feet	Scale: True distance
Mean Sea Level to Ground level (A Slot: SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216'FNL & 2131'FEL,SEC.05): 0 feet	Coordinates are in feet referenced to Slot
Offset wellpath MDs are referenced to each path's default MD datum	Depths are in feet
	Created by: robateo1 on 2020-03-26; Database: WellArchivedB3

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°13'54.8760"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216'FNL & 2131'FEL,SEC.05)	-17.12	160.34	3353132.494	1404512.045	40°26'12.6708"N	104°13'52.8024"W	
RIG (17) (RKB) to Ground level (A Slot: SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216'FNL & 2131'FEL,SEC.05))						4676ft	
Mean Sea Level to Ground level (A Slot: SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216'FNL & 2131'FEL,SEC.05))						0ft	
RIG (17) (RKB) to Mean Sea Level						4676ft	

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17.00	1600.00	BH NavTrak (superseded model)	BH NavTrak (Rotating+Axial Cor)		MULE DEER FEDERAL 14-32-29XRLNB PWB
1600.00	16700.48	BH AutoTrak Curve (superseded model)	BH AutoTrak Curve (Short)		MULE DEER FEDERAL 14-32-29XRLNB PWB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	791.10	-407.94	3352971.931	1405284.33	40°26'20.3892"N	104°14'03.6648"W
SEC.32-T06N-R61W	N/A	-2.00	791.10	-407.94	3352971.931	1405284.33	40°26'20.3892"N	104°14'03.6648"W
SEC.05-T06N-R61W	N/A	0.00	-9915.90	-1941.14	3351333.48	1394569.78	40°24'34.6650"N	104°14'17.8950"W
MULE DEER FEDERAL 14-32-29XRLNB (MLT 544'FWL)	11900.57	6146.00	5479.45	-2689.01	3350365.47	1409952.24	40°27'54.2450"N	104°14'27.3700"W
MULE DEER FEDERAL 14-32-29XRLNB BHL REV-1 (470'FNL & 545'FWL,SEC.29)	16700.48	6146.00	10279.33	-2671.83	3350313.99	1414751.69	40°27'54.2450"N	104°14'27.3700"W
MULE DEER FEDERAL 14-32-29XRLNB LP REV-1 (470'FNL & 546'FWL,SEC.32)	7109.42	6146.00	688.32	-2703.49	3350419.55	1405161.59	40°26'19.4710"N	104°14'27.7660"W

Hole and Casing Sections

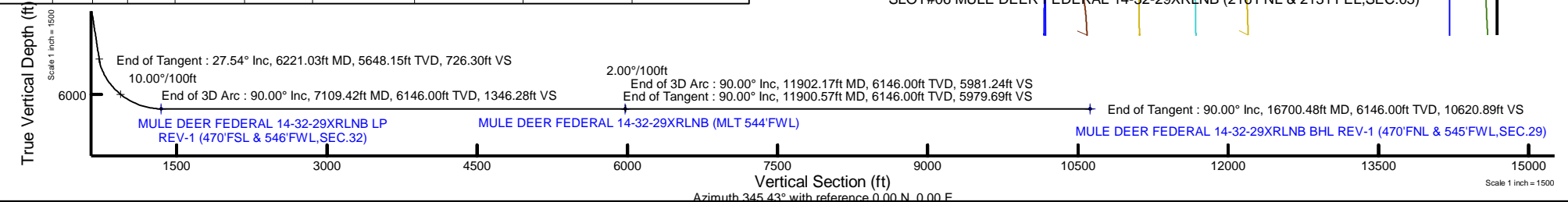
Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
13.5in Open Hole	17.00	1600.00	1583.00	17.00	1550.59	0.00	0.00	14.63	-311.90	MULE DEER FEDERAL 14-32-29XRLNB PWB
9.625in Casing Surface	17.00	1600.00	1583.00	17.00	1550.59	0.00	0.00	14.63	-311.90	MULE DEER FEDERAL 14-32-29XRLNB PWB
8.5in Open Hole	1600.00	16700.48	15100.48	1550.59	6146.00	14.63	-311.90	10279.33	-2671.83	MULE DEER FEDERAL 14-32-29XRLNB 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	272.685	17.00	0.00	0.00	0.00	0.00
End of Tangent	250.00	0.000	272.685	250.00	0.00	0.00	0.00	0.00
End of Build	1626.88	27.538	272.685	1574.48	15.20	-324.20	2.00	96.27
End of Tangent	6221.03	27.538	272.685	5648.15	114.70	-2445.88	0.00	726.30
End of 3D Arc	7109.42	90.000	0.173	6146.00	688.32	-2703.49	10.00	1346.28
End of Tangent	11900.57	90.000	0.173	6146.00	5479.45	-2689.01	0.00	5979.69
End of 3D Arc	11902.17	90.000	0.205	6146.00	5481.05	-2689.01	2.00	5981.24
End of Tangent	16700.48	90.000	0.205	6146.00	10279.33	-2671.83	0.00	10620.89

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
16700.48	90.000	0.205	6146.00	10279.33	-2671.83	3350313.99	1414751.69	40°27'54.2450"N	104°14'27.3700"W

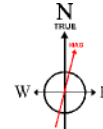


Scale 1 inch = 2000

Easting (ft)

MULE DEER FEDERAL 14-32-29XRLNB BHL REV-1 (470'FNL & 545'FWL,SEC.29)

MULE DEER FEDERAL 14-32-29XRLNB (MLT 544'FWL)



BGGM (1900.0 to 2020.0) Dip: 66.88° Field: 52294.2 nT
Magnetic North is 7.89 degrees East of True North (at 6/13/2019)

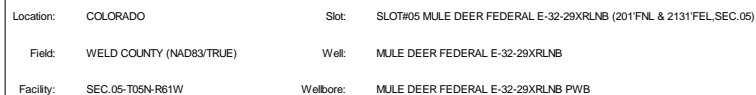
To correct azimuth from Magnetic to True add 7.89 degrees

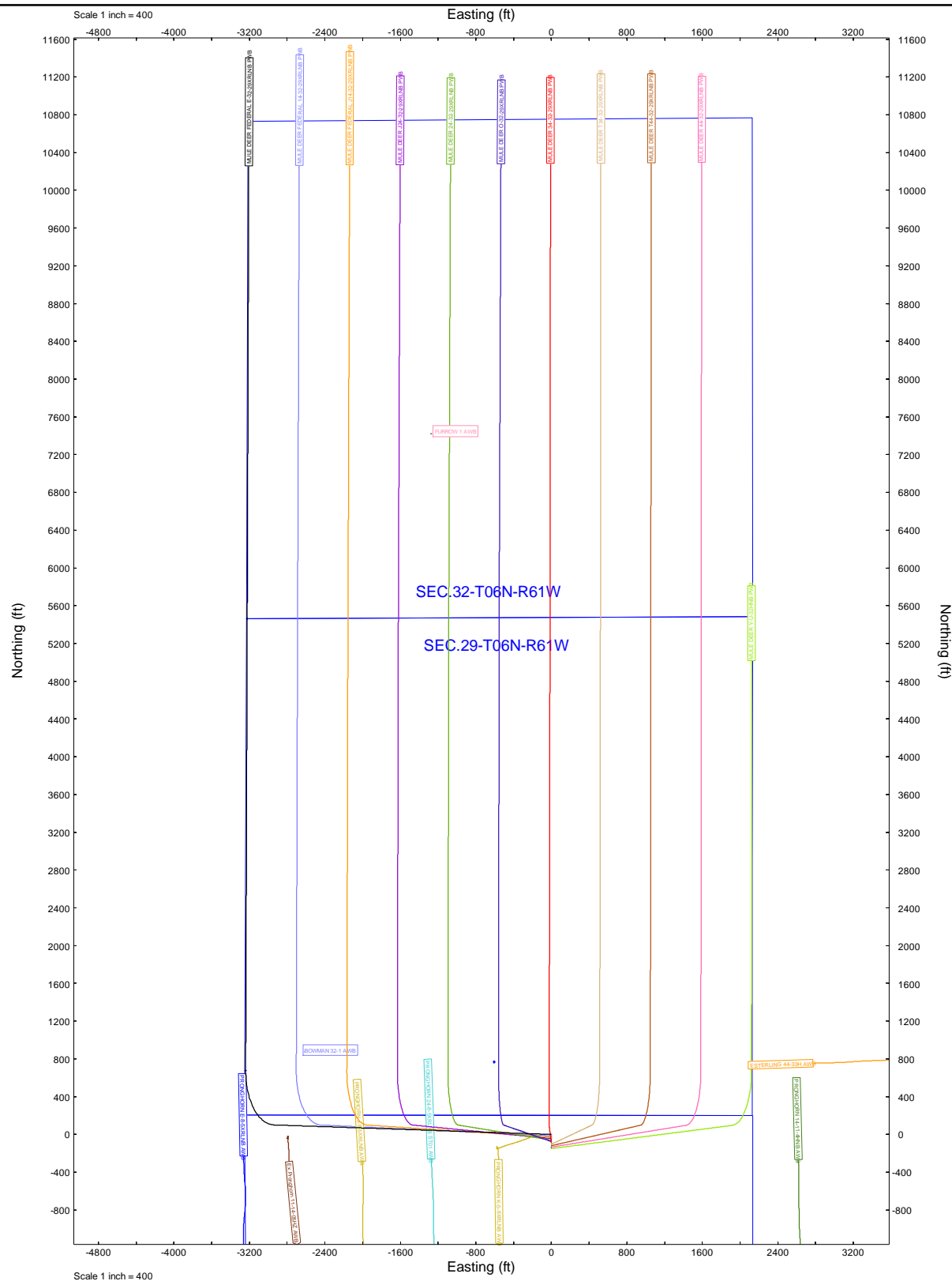
MULE DEER FEDERAL 14-32-29XRLNB LP REV-1 (470'FNL & 546'FWL,SEC.32)

9.625in Casing Surface : 1550.59ft TVD, 14.63ft N, 311.90ft W
SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216'FNL & 2131'FEL,SEC.05)



Northing (ft)







Planned Wellpath Report

MULE DEER FEDERAL 14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL 14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL 14-32-29XRLNB PWB
Slot	SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216'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 12:25:23 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	-17.12	160.34	3353132.49	1404512.05	40°26'12.6708"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#06 MULE DEER FEDERAL 14-32-29XRLNB (216'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	345.43°



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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL 14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL 14-32-29XRLNB PWB
Slot	SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216°FNL & 2131°FEL,SEC.05)		

WELLPATH DATA (175 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	272.685	0.00	0.00	0.00	0.00	40°26'12.6708"N	104°13'52.8024"W	0.00	
17.00	0.000	272.685	17.00	0.00	0.00	0.00	40°26'12.6708"N	104°13'52.8024"W	0.00	Tie On
117.00†	0.000	272.685	117.00	0.00	0.00	0.00	40°26'12.6708"N	104°13'52.8024"W	0.00	
217.00†	0.000	272.685	217.00	0.00	0.00	0.00	40°26'12.6708"N	104°13'52.8024"W	0.00	
250.00	0.000	272.685	250.00	0.00	0.00	0.00	40°26'12.6708"N	104°13'52.8024"W	0.00	End of Tangent
317.00†	1.340	272.685	316.99	0.23	0.04	-0.78	40°26'12.6712"N	104°13'52.8125"W	2.00	
417.00†	3.340	272.685	416.91	1.44	0.23	-4.86	40°26'12.6731"N	104°13'52.8653"W	2.00	
517.00†	5.340	272.685	516.61	3.69	0.58	-12.42	40°26'12.6766"N	104°13'52.9630"W	2.00	
617.00†	7.340	272.685	616.00	6.96	1.10	-23.45	40°26'12.6817"N	104°13'53.1057"W	2.00	
717.00†	9.340	272.685	714.93	11.27	1.78	-37.94	40°26'12.6884"N	104°13'53.2930"W	2.00	
817.00†	11.340	272.685	813.31	16.59	2.62	-55.87	40°26'12.6967"N	104°13'53.5249"W	2.00	
917.00†	13.340	272.685	910.99	22.93	3.62	-77.21	40°26'12.7066"N	104°13'53.8009"W	2.00	
1017.00†	15.340	272.685	1007.87	30.27	4.78	-101.95	40°26'12.7180"N	104°13'54.1209"W	2.00	
1117.00†	17.340	272.685	1103.83	38.62	6.10	-130.05	40°26'12.7311"N	104°13'54.4843"W	2.00	
1217.00†	19.340	272.685	1198.74	47.95	7.57	-161.48	40°26'12.7456"N	104°13'54.8908"W	2.00	
1317.00†	21.340	272.685	1292.50	58.26	9.20	-196.20	40°26'12.7617"N	104°13'55.3398"W	2.00	
1417.00†	23.340	272.685	1384.99	69.54	10.98	-234.17	40°26'12.7793"N	104°13'55.8308"W	2.00	
1517.00†	25.340	272.685	1476.10	81.76	12.91	-275.34	40°26'12.7984"N	104°13'56.3632"W	2.00	
1617.00†	27.340	272.685	1565.71	94.92	14.99	-319.65	40°26'12.8189"N	104°13'56.9363"W	2.00	
1626.88	27.538	272.685	1574.48	96.27	15.20	-324.20	40°26'12.8210"N	104°13'56.9951"W	2.00	End of Build
1717.00†	27.538	272.685	1654.39	108.63	17.15	-365.82	40°26'12.8403"N	104°13'57.5334"W	0.00	
1817.00†	27.538	272.685	1743.06	122.34	19.32	-412.00	40°26'12.8617"N	104°13'58.1306"W	0.00	
1917.00†	27.538	272.685	1831.73	136.06	21.49	-458.19	40°26'12.8831"N	104°13'58.7279"W	0.00	
2017.00†	27.538	272.685	1920.40	149.77	23.65	-504.37	40°26'12.9045"N	104°13'59.3251"W	0.00	
2117.00†	27.538	272.685	2009.07	163.49	25.82	-550.55	40°26'12.9259"N	104°13'59.9224"W	0.00	
2217.00†	27.538	272.685	2097.74	177.20	27.98	-596.73	40°26'12.9472"N	104°14'0.5196"W	0.00	
2317.00†	27.538	272.685	2186.41	190.91	30.15	-642.92	40°26'12.9686"N	104°14'1.1169"W	0.00	
2417.00†	27.538	272.685	2275.09	204.63	32.31	-689.10	40°26'12.9900"N	104°14'1.7141"W	0.00	
2517.00†	27.538	272.685	2363.76	218.34	34.48	-735.28	40°26'13.0114"N	104°14'2.3114"W	0.00	
2617.00†	27.538	272.685	2452.43	232.05	36.65	-781.46	40°26'13.0328"N	104°14'2.9086"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL 14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL 14-32-29XRLNB PWB
Slot	SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216°FNL & 2131°FEL,SEC.05)		

WELLPATH DATA (175 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	27.538	272.685	2541.10	245.77	38.81	-827.64	40°26'13.0542"N	104°14'3.5059"W	0.00	
2817.00†	27.538	272.685	2629.77	259.48	40.98	-873.83	40°26'13.0756"N	104°14'4.1031"W	0.00	
2917.00†	27.538	272.685	2718.44	273.20	43.14	-920.01	40°26'13.0969"N	104°14'4.7004"W	0.00	
3017.00†	27.538	272.685	2807.11	286.91	45.31	-966.19	40°26'13.1183"N	104°14'5.2976"W	0.00	
3117.00†	27.538	272.685	2895.78	300.62	47.47	-1012.37	40°26'13.1397"N	104°14'5.8949"W	0.00	
3217.00†	27.538	272.685	2984.45	314.34	49.64	-1058.56	40°26'13.1611"N	104°14'6.4921"W	0.00	
3317.00†	27.538	272.685	3073.12	328.05	51.81	-1104.74	40°26'13.1825"N	104°14'7.0894"W	0.00	
3417.00†	27.538	272.685	3161.79	341.77	53.97	-1150.92	40°26'13.2039"N	104°14'7.6866"W	0.00	
3517.00†	27.538	272.685	3250.46	355.48	56.14	-1197.10	40°26'13.2252"N	104°14'8.2839"W	0.00	
3617.00†	27.538	272.685	3339.13	369.19	58.30	-1243.29	40°26'13.2466"N	104°14'8.8811"W	0.00	
3717.00†	27.538	272.685	3427.81	382.91	60.47	-1289.47	40°26'13.2680"N	104°14'9.4784"W	0.00	
3817.00†	27.538	272.685	3516.48	396.62	62.63	-1335.65	40°26'13.2894"N	104°14'10.0756"W	0.00	
3917.00†	27.538	272.685	3605.15	410.33	64.80	-1381.83	40°26'13.3107"N	104°14'10.6729"W	0.00	
4017.00†	27.538	272.685	3693.82	424.05	66.97	-1428.01	40°26'13.3321"N	104°14'11.2701"W	0.00	
4117.00†	27.538	272.685	3782.49	437.76	69.13	-1474.20	40°26'13.3535"N	104°14'11.8674"W	0.00	
4217.00†	27.538	272.685	3871.16	451.48	71.30	-1520.38	40°26'13.3749"N	104°14'12.4646"W	0.00	
4317.00†	27.538	272.685	3959.83	465.19	73.46	-1566.56	40°26'13.3962"N	104°14'13.0619"W	0.00	
4417.00†	27.538	272.685	4048.50	478.90	75.63	-1612.74	40°26'13.4176"N	104°14'13.6592"W	0.00	
4517.00†	27.538	272.685	4137.17	492.62	77.79	-1658.93	40°26'13.4390"N	104°14'14.2564"W	0.00	
4617.00†	27.538	272.685	4225.84	506.33	79.96	-1705.11	40°26'13.4603"N	104°14'14.8537"W	0.00	
4717.00†	27.538	272.685	4314.51	520.04	82.12	-1751.29	40°26'13.4817"N	104°14'15.4509"W	0.00	
4817.00†	27.538	272.685	4403.18	533.76	84.29	-1797.47	40°26'13.5031"N	104°14'16.0482"W	0.00	
4917.00†	27.538	272.685	4491.85	547.47	86.46	-1843.66	40°26'13.5244"N	104°14'16.6454"W	0.00	
5017.00†	27.538	272.685	4580.53	561.19	88.62	-1889.84	40°26'13.5458"N	104°14'17.2427"W	0.00	
5117.00†	27.538	272.685	4669.20	574.90	90.79	-1936.02	40°26'13.5672"N	104°14'17.8399"W	0.00	
5217.00†	27.538	272.685	4757.87	588.61	92.95	-1982.20	40°26'13.5885"N	104°14'18.4372"W	0.00	
5317.00†	27.538	272.685	4846.54	602.33	95.12	-2028.38	40°26'13.6099"N	104°14'19.0344"W	0.00	
5417.00†	27.538	272.685	4935.21	616.04	97.28	-2074.57	40°26'13.6313"N	104°14'19.6317"W	0.00	
5517.00†	27.538	272.685	5023.88	629.75	99.45	-2120.75	40°26'13.6526"N	104°14'20.2289"W	0.00	
5617.00†	27.538	272.685	5112.55	643.47	101.62	-2166.93	40°26'13.6740"N	104°14'20.8262"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL 14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL 14-32-29XRLNB PWB
Slot	SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216°FNL & 2131°FEL,SEC.05)		

WELLPATH DATA (175 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5717.00†	27.538	272.685	5201.22	657.18	103.78	-2213.11	40°26'13.6953"N	104°14'21.4234"W	0.00	
5817.00†	27.538	272.685	5289.89	670.90	105.95	-2259.30	40°26'13.7167"N	104°14'22.0207"W	0.00	
5917.00†	27.538	272.685	5378.56	684.61	108.11	-2305.48	40°26'13.7381"N	104°14'22.6180"W	0.00	
6017.00†	27.538	272.685	5467.23	698.32	110.28	-2351.66	40°26'13.7594"N	104°14'23.2152"W	0.00	
6117.00†	27.538	272.685	5555.90	712.04	112.44	-2397.84	40°26'13.7808"N	104°14'23.8125"W	0.00	
6217.00†	27.538	272.685	5644.57	725.75	114.61	-2444.02	40°26'13.8021"N	104°14'24.4097"W	0.00	
6221.03	27.538	272.685	5648.15	726.30	114.70	-2445.88	40°26'13.8030"N	104°14'24.4338"W	0.00	End of Tangent
6317.00†	29.390	292.530	5732.70	747.14	124.78	-2489.90	40°26'13.9026"N	104°14'25.0030"W	10.00	
6417.00†	33.971	309.540	5817.95	784.67	152.04	-2534.22	40°26'14.1719"N	104°14'25.5763"W	10.00	
6517.00†	40.347	322.352	5897.73	837.22	195.57	-2575.65	40°26'14.6020"N	104°14'26.1120"W	10.00	
6617.00†	47.794	331.982	5969.61	903.19	254.04	-2612.91	40°26'15.1798"N	104°14'26.5940"W	10.00	
6717.00†	55.872	339.499	6031.40	980.57	325.69	-2644.89	40°26'15.8877"N	104°14'27.0077"W	10.00	
6817.00†	64.327	345.672	6081.24	1067.02	408.33	-2670.60	40°26'16.7043"N	104°14'27.3403"W	10.00	
6917.00†	73.006	351.013	6117.61	1159.91	499.45	-2689.27	40°26'17.6047"N	104°14'27.5819"W	10.00	
7017.00†	81.811	355.874	6139.40	1256.42	596.29	-2700.33	40°26'18.5616"N	104°14'27.7250"W	10.00	
7109.42	90.000	0.173	6146.00†	1346.28	688.32	-2703.49	40°26'19.4710"N	104°14'27.7660"W	10.00	End of 3D Arc
7117.00†	90.000	0.173	6146.00	1353.61	695.90	-2703.46	40°26'19.5459"N	104°14'27.7657"W	0.00	
7217.00†	90.000	0.173	6146.00	1450.32	795.90	-2703.16	40°26'20.5341"N	104°14'27.7619"W	0.00	
7317.00†	90.000	0.173	6146.00	1547.03	895.90	-2702.86	40°26'21.5222"N	104°14'27.7582"W	0.00	
7417.00†	90.000	0.173	6146.00	1643.74	995.90	-2702.56	40°26'22.5104"N	104°14'27.7544"W	0.00	
7517.00†	90.000	0.173	6146.00	1740.44	1095.90	-2702.25	40°26'23.4985"N	104°14'27.7507"W	0.00	
7617.00†	90.000	0.173	6146.00	1837.15	1195.90	-2701.95	40°26'24.4867"N	104°14'27.7469"W	0.00	
7717.00†	90.000	0.173	6146.00	1933.86	1295.90	-2701.65	40°26'25.4748"N	104°14'27.7431"W	0.00	
7817.00†	90.000	0.173	6146.00	2030.57	1395.90	-2701.35	40°26'26.4630"N	104°14'27.7394"W	0.00	
7917.00†	90.000	0.173	6146.00	2127.27	1495.90	-2701.05	40°26'27.4511"N	104°14'27.7356"W	0.00	
8017.00†	90.000	0.173	6146.00	2223.98	1595.90	-2700.74	40°26'28.4393"N	104°14'27.7318"W	0.00	
8117.00†	90.000	0.173	6146.00	2320.69	1695.90	-2700.44	40°26'29.4275"N	104°14'27.7281"W	0.00	
8217.00†	90.000	0.173	6146.00	2417.40	1795.90	-2700.14	40°26'30.4156"N	104°14'27.7243"W	0.00	
8317.00†	90.000	0.173	6146.00	2514.11	1895.90	-2699.84	40°26'31.4038"N	104°14'27.7205"W	0.00	
8417.00†	90.000	0.173	6146.00	2610.81	1995.89	-2699.54	40°26'32.3919"N	104°14'27.7168"W	0.00	



Planned Wellpath Report

MULE DEER FEDERAL 14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL 14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL 14-32-29XRLNB PWB
Slot	SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216°FNL & 2131°FEL,SEC.05)		

WELLPATH DATA (175 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	0.173	6146.00	2707.52	2095.89	-2699.23	40°26'33.3801"N	104°14'27.7130"W	0.00	
8617.00†	90.000	0.173	6146.00	2804.23	2195.89	-2698.93	40°26'34.3682"N	104°14'27.7092"W	0.00	
8717.00†	90.000	0.173	6146.00	2900.94	2295.89	-2698.63	40°26'35.3564"N	104°14'27.7055"W	0.00	
8817.00†	90.000	0.173	6146.00	2997.64	2395.89	-2698.33	40°26'36.3445"N	104°14'27.7017"W	0.00	
8917.00†	90.000	0.173	6146.00	3094.35	2495.89	-2698.03	40°26'37.3327"N	104°14'27.6979"W	0.00	
9017.00†	90.000	0.173	6146.00	3191.06	2595.89	-2697.72	40°26'38.3208"N	104°14'27.6942"W	0.00	
9117.00†	90.000	0.173	6146.00	3287.77	2695.89	-2697.42	40°26'39.3090"N	104°14'27.6904"W	0.00	
9217.00†	90.000	0.173	6146.00	3384.47	2795.89	-2697.12	40°26'40.2971"N	104°14'27.6867"W	0.00	
9317.00†	90.000	0.173	6146.00	3481.18	2895.89	-2696.82	40°26'41.2853"N	104°14'27.6829"W	0.00	
9417.00†	90.000	0.173	6146.00	3577.89	2995.89	-2696.52	40°26'42.2734"N	104°14'27.6791"W	0.00	
9517.00†	90.000	0.173	6146.00	3674.60	3095.89	-2696.21	40°26'43.2616"N	104°14'27.6754"W	0.00	
9617.00†	90.000	0.173	6146.00	3771.30	3195.89	-2695.91	40°26'44.2497"N	104°14'27.6716"W	0.00	
9717.00†	90.000	0.173	6146.00	3868.01	3295.89	-2695.61	40°26'45.2379"N	104°14'27.6678"W	0.00	
9817.00†	90.000	0.173	6146.00	3964.72	3395.89	-2695.31	40°26'46.2260"N	104°14'27.6641"W	0.00	
9917.00†	90.000	0.173	6146.00	4061.43	3495.89	-2695.01	40°26'47.2142"N	104°14'27.6603"W	0.00	
10017.00†	90.000	0.173	6146.00	4158.14	3595.89	-2694.70	40°26'48.2023"N	104°14'27.6565"W	0.00	
10117.00†	90.000	0.173	6146.00	4254.84	3695.89	-2694.40	40°26'49.1905"N	104°14'27.6528"W	0.00	
10217.00†	90.000	0.173	6146.00	4351.55	3795.89	-2694.10	40°26'50.1786"N	104°14'27.6490"W	0.00	
10317.00†	90.000	0.173	6146.00	4448.26	3895.89	-2693.80	40°26'51.1668"N	104°14'27.6452"W	0.00	
10417.00†	90.000	0.173	6146.00	4544.97	3995.89	-2693.50	40°26'52.1549"N	104°14'27.6415"W	0.00	
10517.00†	90.000	0.173	6146.00	4641.67	4095.89	-2693.19	40°26'53.1431"N	104°14'27.6377"W	0.00	
10617.00†	90.000	0.173	6146.00	4738.38	4195.88	-2692.89	40°26'54.1312"N	104°14'27.6339"W	0.00	
10717.00†	90.000	0.173	6146.00	4835.09	4295.88	-2692.59	40°26'55.1194"N	104°14'27.6302"W	0.00	
10817.00†	90.000	0.173	6146.00	4931.80	4395.88	-2692.29	40°26'56.1075"N	104°14'27.6264"W	0.00	
10917.00†	90.000	0.173	6146.00	5028.50	4495.88	-2691.99	40°26'57.0957"N	104°14'27.6226"W	0.00	
11017.00†	90.000	0.173	6146.00	5125.21	4595.88	-2691.68	40°26'58.0838"N	104°14'27.6189"W	0.00	
11117.00†	90.000	0.173	6146.00	5221.92	4695.88	-2691.38	40°26'59.0720"N	104°14'27.6151"W	0.00	
11217.00†	90.000	0.173	6146.00	5318.63	4795.88	-2691.08	40°27'0.0601"N	104°14'27.6113"W	0.00	
11317.00†	90.000	0.173	6146.00	5415.34	4895.88	-2690.78	40°27'1.0483"N	104°14'27.6076"W	0.00	
11417.00†	90.000	0.173	6146.00	5512.04	4995.88	-2690.48	40°27'2.0364"N	104°14'27.6038"W	0.00	



Planned Wellpath Report

MULE DEER FEDERAL 14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL 14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL 14-32-29XRLNB PWB
Slot	SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216°FNL & 2131°FEL,SEC.05)		

WELLPATH DATA (175 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	0.173	6146.00	5608.75	5095.88	-2690.17	40°27'3.0246"N	104°14'27.6000"W	0.00	
11617.00†	90.000	0.173	6146.00	5705.46	5195.88	-2689.87	40°27'4.0127"N	104°14'27.5963"W	0.00	
11717.00†	90.000	0.173	6146.00	5802.17	5295.88	-2689.57	40°27'5.0009"N	104°14'27.5925"W	0.00	
11817.00†	90.000	0.173	6146.00	5898.87	5395.88	-2689.27	40°27'5.9890"N	104°14'27.5887"W	0.00	
11900.57	90.000	0.173	6146.00 ²	5979.69	5479.45	-2689.01	40°27'6.8148"N	104°14'27.5856"W	0.00	End of Tangent
11902.17	90.000	0.205	6146.00	5981.24	5481.05	-2689.01	40°27'6.8307"N	104°14'27.5855"W	2.00	End of 3D Arc
11917.00†	90.000	0.205	6146.00	5995.58	5495.88	-2688.96	40°27'6.9772"N	104°14'27.5849"W	0.00	
12017.00†	90.000	0.205	6146.00	6092.27	5595.88	-2688.60	40°27'7.9653"N	104°14'27.5804"W	0.00	
12117.00†	90.000	0.205	6146.00	6188.97	5695.88	-2688.24	40°27'8.9535"N	104°14'27.5759"W	0.00	
12217.00†	90.000	0.205	6146.00	6285.66	5795.88	-2687.88	40°27'9.9416"N	104°14'27.5714"W	0.00	
12317.00†	90.000	0.205	6146.00	6382.35	5895.88	-2687.52	40°27'10.9298"N	104°14'27.5669"W	0.00	
12417.00†	90.000	0.205	6146.00	6479.05	5995.88	-2687.17	40°27'11.9179"N	104°14'27.5624"W	0.00	
12517.00†	90.000	0.205	6146.00	6575.74	6095.87	-2686.81	40°27'12.9061"N	104°14'27.5579"W	0.00	
12617.00†	90.000	0.205	6146.00	6672.43	6195.87	-2686.45	40°27'13.8942"N	104°14'27.5534"W	0.00	
12717.00†	90.000	0.205	6146.00	6769.13	6295.87	-2686.09	40°27'14.8824"N	104°14'27.5489"W	0.00	
12817.00†	90.000	0.205	6146.00	6865.82	6395.87	-2685.73	40°27'15.8705"N	104°14'27.5444"W	0.00	
12917.00†	90.000	0.205	6146.00	6962.51	6495.87	-2685.38	40°27'16.8587"N	104°14'27.5400"W	0.00	
13017.00†	90.000	0.205	6146.00	7059.21	6595.87	-2685.02	40°27'17.8468"N	104°14'27.5355"W	0.00	
13117.00†	90.000	0.205	6146.00	7155.90	6695.87	-2684.66	40°27'18.8350"N	104°14'27.5310"W	0.00	
13217.00†	90.000	0.205	6146.00	7252.59	6795.87	-2684.30	40°27'19.8231"N	104°14'27.5265"W	0.00	
13317.00†	90.000	0.205	6146.00	7349.29	6895.87	-2683.94	40°27'20.8113"N	104°14'27.5220"W	0.00	
13417.00†	90.000	0.205	6146.00	7445.98	6995.87	-2683.58	40°27'21.7994"N	104°14'27.5175"W	0.00	
13517.00†	90.000	0.205	6146.00	7542.67	7095.87	-2683.23	40°27'22.7875"N	104°14'27.5130"W	0.00	
13617.00†	90.000	0.205	6146.00	7639.37	7195.87	-2682.87	40°27'23.7757"N	104°14'27.5085"W	0.00	
13717.00†	90.000	0.205	6146.00	7736.06	7295.87	-2682.51	40°27'24.7638"N	104°14'27.5040"W	0.00	
13817.00†	90.000	0.205	6146.00	7832.75	7395.87	-2682.15	40°27'25.7520"N	104°14'27.4995"W	0.00	
13917.00†	90.000	0.205	6146.00	7929.45	7495.87	-2681.79	40°27'26.7401"N	104°14'27.4950"W	0.00	
14017.00†	90.000	0.205	6146.00	8026.14	7595.87	-2681.44	40°27'27.7283"N	104°14'27.4905"W	0.00	
14117.00†	90.000	0.205	6146.00	8122.83	7695.86	-2681.08	40°27'28.7164"N	104°14'27.4861"W	0.00	
14217.00†	90.000	0.205	6146.00	8219.53	7795.86	-2680.72	40°27'29.7046"N	104°14'27.4816"W	0.00	



Planned Wellpath Report

MULE DEER FEDERAL 14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL 14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL 14-32-29XRLNB PWB
Slot	SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216°FNL & 2131°FEL,SEC.05)		

WELLPATH DATA (175 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	0.205	6146.00	8316.22	7895.86	-2680.36	40°27'30.6927"N	104°14'27.4771"W	0.00	
14417.00†	90.000	0.205	6146.00	8412.91	7995.86	-2680.00	40°27'31.6809"N	104°14'27.4726"W	0.00	
14517.00†	90.000	0.205	6146.00	8509.61	8095.86	-2679.65	40°27'32.6690"N	104°14'27.4681"W	0.00	
14617.00†	90.000	0.205	6146.00	8606.30	8195.86	-2679.29	40°27'33.6572"N	104°14'27.4636"W	0.00	
14717.00†	90.000	0.205	6146.00	8702.99	8295.86	-2678.93	40°27'34.6453"N	104°14'27.4591"W	0.00	
14817.00†	90.000	0.205	6146.00	8799.69	8395.86	-2678.57	40°27'35.6335"N	104°14'27.4546"W	0.00	
14917.00†	90.000	0.205	6146.00	8896.38	8495.86	-2678.21	40°27'36.6216"N	104°14'27.4501"W	0.00	
15017.00†	90.000	0.205	6146.00	8993.07	8595.86	-2677.86	40°27'37.6097"N	104°14'27.4456"W	0.00	
15117.00†	90.000	0.205	6146.00	9089.77	8695.86	-2677.50	40°27'38.5979"N	104°14'27.4411"W	0.00	
15217.00†	90.000	0.205	6146.00	9186.46	8795.86	-2677.14	40°27'39.5860"N	104°14'27.4366"W	0.00	
15317.00†	90.000	0.205	6146.00	9283.15	8895.86	-2676.78	40°27'40.5742"N	104°14'27.4322"W	0.00	
15417.00†	90.000	0.205	6146.00	9379.85	8995.86	-2676.42	40°27'41.5623"N	104°14'27.4277"W	0.00	
15517.00†	90.000	0.205	6146.00	9476.54	9095.86	-2676.07	40°27'42.5505"N	104°14'27.4232"W	0.00	
15617.00†	90.000	0.205	6146.00	9573.23	9195.86	-2675.71	40°27'43.5386"N	104°14'27.4187"W	0.00	
15717.00†	90.000	0.205	6146.00	9669.93	9295.85	-2675.35	40°27'44.5268"N	104°14'27.4142"W	0.00	
15817.00†	90.000	0.205	6146.00	9766.62	9395.85	-2674.99	40°27'45.5149"N	104°14'27.4097"W	0.00	
15917.00†	90.000	0.205	6146.00	9863.31	9495.85	-2674.63	40°27'46.5031"N	104°14'27.4052"W	0.00	
16017.00†	90.000	0.205	6146.00	9960.01	9595.85	-2674.27	40°27'47.4912"N	104°14'27.4007"W	0.00	
16117.00†	90.000	0.205	6146.00	10056.70	9695.85	-2673.92	40°27'48.4793"N	104°14'27.3962"W	0.00	
16217.00†	90.000	0.205	6146.00	10153.39	9795.85	-2673.56	40°27'49.4675"N	104°14'27.3917"W	0.00	
16317.00†	90.000	0.205	6146.00	10250.09	9895.85	-2673.20	40°27'50.4556"N	104°14'27.3872"W	0.00	
16417.00†	90.000	0.205	6146.00	10346.78	9995.85	-2672.84	40°27'51.4438"N	104°14'27.3827"W	0.00	
16517.00†	90.000	0.205	6146.00	10443.47	10095.85	-2672.48	40°27'52.4319"N	104°14'27.3782"W	0.00	
16617.00†	90.000	0.205	6146.00	10540.17	10195.85	-2672.13	40°27'53.4201"N	104°14'27.3738"W	0.00	
16700.48	90.000	0.205	6146.00 ³	10620.89	10279.33	-2671.83	40°27'54.2450"N	104°14'27.3700"W	0.00	End of Tangent



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL 14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL 14-32-29XRLNB PWB
Slot	SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216'FNL & 2131'FEL,SEC.05)		

HOLE & CASING SECTIONS - Ref Wellbore: MULE DEER FEDERAL 14-32-29XRLNB PWB Ref Wellpath: MULE DEER FEDERAL 14-32-29XRLNB (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	1550.59	0.00	0.00	14.63	-311.90
9.625in Casing Surface	17.00	1600.00	1583.00	17.00	1550.59	0.00	0.00	14.63	-311.90
8.5in Open Hole	1600.00	16700.48	15100.48	1550.59	6146.00	14.63	-311.90	10279.33	-2671.83

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	781.10	-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	781.10	-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	-9915.90	-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 14-32-29XRLNB (MLT 544'FWL)	11900.57	6146.00	5479.45	-2689.01	3350365.47	1409952.24	40°27'6.8148"N	104°14'27.5856"W	point
3) MULE DEER FEDERAL 14-32-29XRLNB BHL REV-1 (470'FNL & 545'FWL,SEC.29)	16700.48	6146.00	10279.33	-2671.83	3350313.99	1414751.69	40°27'54.2450"N	104°14'27.3700"W	point
1) MULE DEER FEDERAL 14-32-29XRLNB LP REV-1 (470'FSL & 546'FWL,SEC.32)	7109.42	6146.00	688.32	-2703.49	3350419.55	1405161.59	40°26'19.4710"N	104°14'27.7660"W	point



Planned Wellpath Report

MULE DEER FEDERAL 14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL 14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL 14-32-29XRLNB PWB
Slot	SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216'FNL & 2131'FEL,SEC.05)		

SURVEY PROGRAM - Ref Wellbore: MULE DEER FEDERAL 14-32-29XRLNB PWB Ref Wellpath: MULE DEER FEDERAL 14-32-29XRLNB (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 14-32-29XRLNB PWB
1600.00	16700.48	BH AutoTrak Curve (Short)		MULE DEER FEDERAL 14-32-29XRLNB PWB



Planned Wellpath Report

MULE DEER FEDERAL 14-32-29XRLNB (REV-A.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL 14-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL 14-32-29XRLNB PWB
Slot	SLOT#06 MULE DEER FEDERAL 14-32-29XRLNB (216'FNL & 2131'FEL,SEC.05)		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	272.685	17.00	Tie On
250.00	0.000	272.685	250.00	End of Tangent
1626.88	27.538	272.685	1574.48	End of Build
6221.03	27.538	272.685	5648.15	End of Tangent
7109.42	90.000	0.173	6146.00	End of 3D Arc
11900.57	90.000	0.173	6146.00	End of Tangent
11902.17	90.000	0.205	6146.00	End of 3D Arc
16700.48	90.000	0.205	6146.00	End of Tangent