

Location:	COLORADO	Slot:	SLOT#09 MULE DEER 24-32-29XRLNB (261°FNL & 2131°FEL, SEC.05)
Field:	WELD COUNTY (NAD83/TRUE)	Well:	MULE DEER 24-32-29XRLNB
Facility:	SEC.05-T05N-R61W	Wellbore:	MULE DEER 24-32-29XRLNB PWB
Plot reference wellpath is MULE DEER 24-32-29XRLNB (REV-A.0) PWP		Grid System: NAD83 / Lambert Colorado SP, Northern Zone (601), 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#09 MULE DEER 24-32-29XRLNB (261°FNL & 2131°FEL, SEC.05): 0 feet		Created by: robale01 on 2019-06-14	
Coordinates are in feet referenced to Slot		Database: WA DENVER	

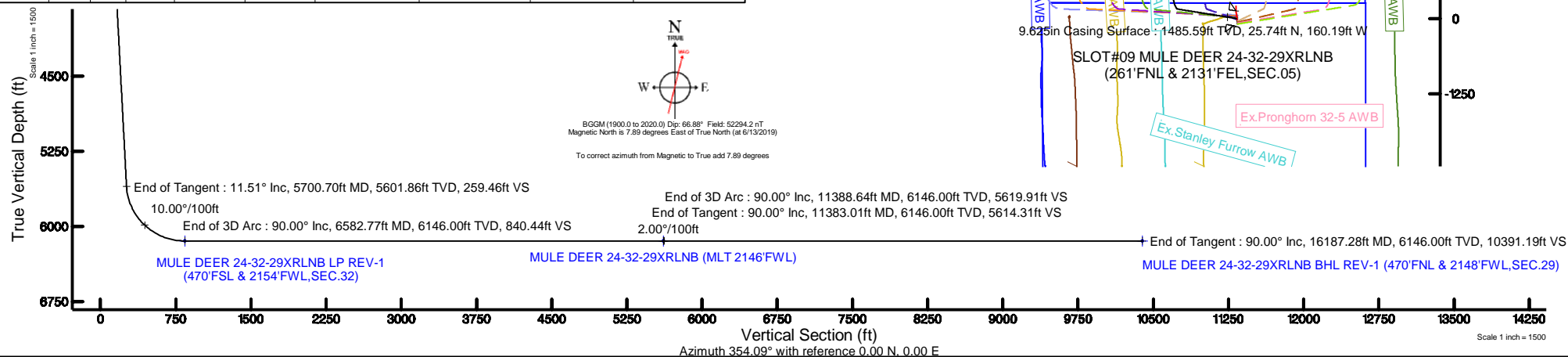
Location Information						
Facility Name			Grid East (US It)	Grid North (US It)	Latitude	Longitude
SEC 05-T05N-R61W			3352971.931	1404526.872	40°26'12.840"N	104°13'54.876"W
Slot	Local N (It)	Local E (It)	Grid East (US It)	Grid North (US It)	Latitude	Longitude
SLOT#09 MULE DEER 24-32-29XRLNB (261NFL & 2131FEL,SEC 05)	-62.30	160.34	3351333.140	1404466.876	40°26'12.224"N	104°13'52.802"W
R/G (17') (RXB) to Ground level (A Slot: SLOT#09 MULE DEER 24-32-29XRLNB (261NFL & 2131FEL,SEC 05))					4676R	
Mean Sea Level to Ground level (A Slot: SLOT#09 MULE DEER 24-32-29XRLNB (261NFL & 2131FEL,SEC 05))					0R	
R/G (17') (RXB) to Mean Sea Level					4676R	

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1500.00	BHI NavTrak	BHI NavTrak (Rotating+Axial Corr)		MULE DEER 24-32-29XRLNB PWB
1500.00	16187.28	BHI AutoTrak Curve	BHI AutoTrak Curve (Short)		MULE DEER 24-32-29XRLNB PWB

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	279.128	17.00	0.00	0.00	0.00	0.00
End of Tangent	400.00	0.000	279.128	400.00	0.00	0.00	0.00	0.00
End of Build	975.35	11.507	279.128	971.49	9.13	-56.85	2.00	14.94
End of Tangent	5700.70	11.507	279.128	5601.86	158.68	-987.56	0.00	259.46
End of 3D Arc	6582.77	90.000	0.103	6146.00	731.55	-1095.94	10.00	840.44
End of Tangent	11383.01	90.000	0.103	6146.00	5531.78	-1087.35	0.00	5614.31
End of 3D Arc	11388.64	90.000	0.215	6146.00	5537.41	-1087.33	2.00	5619.91
End of Tangent	16187.28	90.000	0.215	6146.00	10336.02	-1069.31	0.00	10391.19

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	1485.59	0.00	0.00	25.74	-160.19	MULE DEER 24-32-29XRLNB PWB
9.625in Casing Surface	17.00	1500.00	1483.00	17.00	1485.59	0.00	0.00	25.74	-160.19	MULE DEER 24-32-29XRLNB PWB
8.5in Open Hole	1500.00	16187.28	14687.28	1485.59	6146.00	25.74	-160.19	10336.02	-1069.31	MULE DEER 24-32-29XRLNB PWB

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
16187.28	90.000	0.215	6146.00	10336.02	-1069.31	3351916.11	1414786.13	40°27'54.360"N	104°14'06.637"W



Planned Wellpath Report

MULE DEER 24-32-29XRLNB (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#09 MULE DEER 24-32-29XRLNB (261'FNL & 2131'FEL,SEC.05)
Area	COLORADO	Well	MULE DEER 24-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER 24-32-29XRLNB 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 3:16:25 PM
Convergence at slot	0.82° East	Database/Source file	WA DENVER/MULE_DEER_24-32-29XRLNB_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	-62.30	160.34	3353133.14	1404466.88	40°26'12.224"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#09 MULE DEER 24-32-29XRLNB (261'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	354.09°

Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#09 MULE DEER 24-32-29XRLNB (261'FNL & 2131'FEL,SEC.05)
Area	COLORADO	Well	MULE DEER 24-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER 24-32-29XRLNB 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	279.128	0.00	0.00	0.00	0.00	40°26'12.224"N	104°13'52.802"W	0.00	
17.00	0.000	279.128	17.00	0.00	0.00	0.00	40°26'12.224"N	104°13'52.802"W	0.00	Tie On
117.00†	0.000	279.128	117.00	0.00	0.00	0.00	40°26'12.224"N	104°13'52.802"W	0.00	
217.00†	0.000	279.128	217.00	0.00	0.00	0.00	40°26'12.224"N	104°13'52.802"W	0.00	
317.00†	0.000	279.128	317.00	0.00	0.00	0.00	40°26'12.224"N	104°13'52.802"W	0.00	
400.00	0.000	279.128	400.00	0.00	0.00	0.00	40°26'12.224"N	104°13'52.802"W	0.00	End of Tangent
417.00†	0.340	279.128	417.00	0.01	0.01	-0.05	40°26'12.224"N	104°13'52.803"W	2.00	
517.00†	2.340	279.128	516.97	0.62	0.38	-2.36	40°26'12.228"N	104°13'52.833"W	2.00	
617.00†	4.340	279.128	616.79	2.13	1.30	-8.11	40°26'12.237"N	104°13'52.907"W	2.00	
717.00†	6.340	279.128	716.35	4.54	2.78	-17.30	40°26'12.252"N	104°13'53.026"W	2.00	
817.00†	8.340	279.128	815.53	7.86	4.81	-29.91	40°26'12.272"N	104°13'53.189"W	2.00	
917.00†	10.340	279.128	914.20	12.07	7.38	-45.94	40°26'12.297"N	104°13'53.396"W	2.00	
975.35	11.507	279.128	971.49	14.94	9.13	-56.85	40°26'12.315"N	104°13'53.538"W	2.00	End of Build
1017.00†	11.507	279.128	1012.30	17.09	10.45	-65.06	40°26'12.328"N	104°13'53.644"W	0.00	
1117.00†	11.507	279.128	1110.29	22.27	13.62	-84.75	40°26'12.359"N	104°13'53.898"W	0.00	
1217.00†	11.507	279.128	1208.28	27.44	16.78	-104.45	40°26'12.390"N	104°13'54.153"W	0.00	
1317.00†	11.507	279.128	1306.27	32.62	19.95	-124.14	40°26'12.422"N	104°13'54.408"W	0.00	
1417.00†	11.507	279.128	1404.26	37.79	23.11	-143.84	40°26'12.453"N	104°13'54.663"W	0.00	
1517.00†	11.507	279.128	1502.25	42.97	26.28	-163.54	40°26'12.484"N	104°13'54.917"W	0.00	
1617.00†	11.507	279.128	1600.24	48.14	29.44	-183.23	40°26'12.515"N	104°13'55.172"W	0.00	
1717.00†	11.507	279.128	1698.23	53.31	32.61	-202.93	40°26'12.547"N	104°13'55.427"W	0.00	
1817.00†	11.507	279.128	1796.22	58.49	35.77	-222.62	40°26'12.578"N	104°13'55.681"W	0.00	
1917.00†	11.507	279.128	1894.21	63.66	38.93	-242.32	40°26'12.609"N	104°13'55.936"W	0.00	
2017.00†	11.507	279.128	1992.20	68.84	42.10	-262.02	40°26'12.640"N	104°13'56.191"W	0.00	
2117.00†	11.507	279.128	2090.19	74.01	45.26	-281.71	40°26'12.672"N	104°13'56.446"W	0.00	
2217.00†	11.507	279.128	2188.18	79.19	48.43	-301.41	40°26'12.703"N	104°13'56.700"W	0.00	
2317.00†	11.507	279.128	2286.17	84.36	51.59	-321.11	40°26'12.734"N	104°13'56.955"W	0.00	
2417.00†	11.507	279.128	2384.16	89.54	54.76	-340.80	40°26'12.765"N	104°13'57.210"W	0.00	
2517.00†	11.507	279.128	2482.15	94.71	57.92	-360.50	40°26'12.797"N	104°13'57.465"W	0.00	
2617.00†	11.507	279.128	2580.14	99.89	61.09	-380.19	40°26'12.828"N	104°13'57.719"W	0.00	
2717.00†	11.507	279.128	2678.13	105.06	64.25	-399.89	40°26'12.859"N	104°13'57.974"W	0.00	
2817.00†	11.507	279.128	2776.12	110.24	67.42	-419.59	40°26'12.891"N	104°13'58.229"W	0.00	
2917.00†	11.507	279.128	2874.11	115.41	70.58	-439.28	40°26'12.922"N	104°13'58.483"W	0.00	
3017.00†	11.507	279.128	2972.10	120.59	73.75	-458.98	40°26'12.953"N	104°13'58.738"W	0.00	
3117.00†	11.507	279.128	3070.09	125.76	76.91	-478.68	40°26'12.984"N	104°13'58.993"W	0.00	
3217.00†	11.507	279.128	3168.08	130.94	80.08	-498.37	40°26'13.016"N	104°13'59.248"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†	11.507	279.128	3266.07	136.11	83.24	-518.07	40°26'13.047"N	104°13'59.502"W	0.00	
3417.00†	11.507	279.128	3364.06	141.28	86.40	-537.76	40°26'13.078"N	104°13'59.757"W	0.00	
3517.00†	11.507	279.128	3462.05	146.46	89.57	-557.46	40°26'13.109"N	104°14'00.012"W	0.00	
3617.00†	11.507	279.128	3560.04	151.63	92.73	-577.16	40°26'13.141"N	104°14'00.266"W	0.00	
3717.00†	11.507	279.128	3658.03	156.81	95.90	-596.85	40°26'13.172"N	104°14'00.521"W	0.00	
3817.00†	11.507	279.128	3756.02	161.98	99.06	-616.55	40°26'13.203"N	104°14'00.776"W	0.00	
3917.00†	11.507	279.128	3854.01	167.16	102.23	-636.24	40°26'13.234"N	104°14'01.031"W	0.00	
4017.00†	11.507	279.128	3952.00	172.33	105.39	-655.94	40°26'13.266"N	104°14'01.285"W	0.00	
4117.00†	11.507	279.128	4049.99	177.51	108.56	-675.64	40°26'13.297"N	104°14'01.540"W	0.00	

Planned Wellpath Report

MULE DEER 24-32-29XRLNB (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#09 MULE DEER 24-32-29XRLNB (261'FNL & 2131'FEL, SEC.05)
Area	COLORADO	Well	MULE DEER 24-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER 24-32-29XRLNB 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†	11.507	279.128	4147.98	182.68	111.72	-695.33	40°26'13.328"N	104°14'01.795"W	0.00	
4317.00†	11.507	279.128	4245.97	187.86	114.89	-715.03	40°26'13.360"N	104°14'02.049"W	0.00	
4417.00†	11.507	279.128	4343.96	193.03	118.05	-734.73	40°26'13.391"N	104°14'02.304"W	0.00	
4517.00†	11.507	279.128	4441.95	198.21	121.22	-754.42	40°26'13.422"N	104°14'02.559"W	0.00	
4617.00†	11.507	279.128	4539.94	203.38	124.38	-774.12	40°26'13.453"N	104°14'02.814"W	0.00	
4717.00†	11.507	279.128	4637.93	208.56	127.54	-793.81	40°26'13.485"N	104°14'03.068"W	0.00	
4817.00†	11.507	279.128	4735.92	213.73	130.71	-813.51	40°26'13.516"N	104°14'03.323"W	0.00	
4917.00†	11.507	279.128	4833.91	218.91	133.87	-833.21	40°26'13.547"N	104°14'03.578"W	0.00	
5017.00†	11.507	279.128	4931.90	224.08	137.04	-852.90	40°26'13.578"N	104°14'03.833"W	0.00	
5117.00†	11.507	279.128	5029.89	229.25	140.20	-872.60	40°26'13.610"N	104°14'04.087"W	0.00	
5217.00†	11.507	279.128	5127.88	234.43	143.37	-892.29	40°26'13.641"N	104°14'04.342"W	0.00	
5317.00†	11.507	279.128	5225.87	239.60	146.53	-911.99	40°26'13.672"N	104°14'04.597"W	0.00	
5417.00†	11.507	279.128	5323.86	244.78	149.70	-931.69	40°26'13.703"N	104°14'04.851"W	0.00	
5517.00†	11.507	279.128	5421.85	249.95	152.86	-951.38	40°26'13.735"N	104°14'05.106"W	0.00	
5617.00†	11.507	279.128	5519.84	255.13	156.03	-971.08	40°26'13.766"N	104°14'05.361"W	0.00	
5700.70	11.507	279.128	5601.86	259.46	158.68	-987.56	40°26'13.792"N	104°14'05.574"W	0.00	End of Tangent
5717.00†	11.866	286.984	5617.83	260.53	159.42	-990.77	40°26'13.800"N	104°14'05.616"W	10.00	
5817.00†	17.523	320.549	5714.68	277.12	174.09	-1010.22	40°26'13.944"N	104°14'05.867"W	10.00	
5917.00†	25.896	335.637	5807.58	310.47	205.68	-1028.84	40°26'14.257"N	104°14'06.108"W	10.00	
6017.00†	35.090	343.473	5893.69	359.56	253.25	-1046.07	40°26'14.727"N	104°14'06.331"W	10.00	
6117.00†	44.598	348.338	5970.40	422.90	315.35	-1061.38	40°26'15.340"N	104°14'06.529"W	10.00	
6217.00†	54.253	351.781	6035.38	498.57	390.08	-1074.31	40°26'16.079"N	104°14'06.696"W	10.00	
6317.00†	63.984	354.471	6086.65	584.26	475.19	-1084.47	40°26'16.920"N	104°14'06.827"W	10.00	
6417.00†	73.758	356.745	6122.65	677.39	568.08	-1091.54	40°26'17.838"N	104°14'06.919"W	10.00	
6517.00†	83.553	358.801	6142.30	775.10	665.92	-1095.32	40°26'18.805"N	104°14'06.968"W	10.00	
6582.77	90.000	0.103	6146.00 [†]	840.44	731.55	-1095.94	40°26'19.453"N	104°14'06.976"W	10.00	End of 3D Arc
6617.00†	90.000	0.103	6146.00	874.49	765.78	-1095.88	40°26'19.791"N	104°14'06.975"W	0.00	
6717.00†	90.000	0.103	6146.00	973.94	865.78	-1095.70	40°26'20.779"N	104°14'06.973"W	0.00	
6817.00†	90.000	0.103	6146.00	1073.39	965.78	-1095.52	40°26'21.768"N	104°14'06.971"W	0.00	
6917.00†	90.000	0.103	6146.00	1172.84	1065.78	-1095.35	40°26'22.756"N	104°14'06.968"W	0.00	
7017.00†	90.000	0.103	6146.00	1272.29	1165.78	-1095.17	40°26'23.744"N	104°14'06.966"W	0.00	
7117.00†	90.000	0.103	6146.00	1371.74	1265.78	-1094.99	40°26'24.732"N	104°14'06.964"W	0.00	
7217.00†	90.000	0.103	6146.00	1471.19	1365.78	-1094.81	40°26'25.720"N	104°14'06.962"W	0.00	
7317.00†	90.000	0.103	6146.00	1570.64	1465.78	-1094.63	40°26'26.708"N	104°14'06.959"W	0.00	
7417.00†	90.000	0.103	6146.00	1670.09	1565.78	-1094.45	40°26'27.697"N	104°14'06.957"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	0.103	6146.00	1769.54	1665.78	-1094.27	40°26'28.685"N	104°14'06.955"W	0.00	
7617.00†	90.000	0.103	6146.00	1868.99	1765.78	-1094.09	40°26'29.673"N	104°14'06.953"W	0.00	
7717.00†	90.000	0.103	6146.00	1968.44	1865.78	-1093.91	40°26'30.661"N	104°14'06.950"W	0.00	
7817.00†	90.000	0.103	6146.00	2067.89	1965.78	-1093.73	40°26'31.649"N	104°14'06.948"W	0.00	
7917.00†	90.000	0.103	6146.00	2167.35	2065.78	-1093.55	40°26'32.637"N	104°14'06.946"W	0.00	
8017.00†	90.000	0.103	6146.00	2266.80	2165.78	-1093.38	40°26'33.625"N	104°14'06.944"W	0.00	
8117.00†	90.000	0.103	6146.00	2366.25	2265.78	-1093.20	40°26'34.614"N	104°14'06.941"W	0.00	
8217.00†	90.000	0.103	6146.00	2465.70	2365.78	-1093.02	40°26'35.602"N	104°14'06.939"W	0.00	
8317.00†	90.000	0.103	6146.00	2565.15	2465.78	-1092.84	40°26'36.590"N	104°14'06.937"W	0.00	
8417.00†	90.000	0.103	6146.00	2664.60	2565.78	-1092.66	40°26'37.578"N	104°14'06.935"W	0.00	

Planned Wellpath Report

MULE DEER 24-32-29XRLNB (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#09 MULE DEER 24-32-29XRLNB (261'FNL & 2131'FEL, SEC.05)
Area	COLORADO	Well	MULE DEER 24-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER 24-32-29XRLNB 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	0.103	6146.00	2764.05	2665.78	-1092.48	40°26'38.566"N	104°14'06.932"W	0.00	
8617.00†	90.000	0.103	6146.00	2863.50	2765.78	-1092.30	40°26'39.554"N	104°14'06.930"W	0.00	
8717.00†	90.000	0.103	6146.00	2962.95	2865.78	-1092.12	40°26'40.543"N	104°14'06.928"W	0.00	
8817.00†	90.000	0.103	6146.00	3062.40	2965.78	-1091.94	40°26'41.531"N	104°14'06.926"W	0.00	
8917.00†	90.000	0.103	6146.00	3161.85	3065.78	-1091.76	40°26'42.519"N	104°14'06.923"W	0.00	
9017.00†	90.000	0.103	6146.00	3261.30	3165.78	-1091.59	40°26'43.507"N	104°14'06.921"W	0.00	
9117.00†	90.000	0.103	6146.00	3360.75	3265.78	-1091.41	40°26'44.495"N	104°14'06.919"W	0.00	
9217.00†	90.000	0.103	6146.00	3460.20	3365.78	-1091.23	40°26'45.483"N	104°14'06.917"W	0.00	
9317.00†	90.000	0.103	6146.00	3559.65	3465.78	-1091.05	40°26'46.471"N	104°14'06.914"W	0.00	
9417.00†	90.000	0.103	6146.00	3659.10	3565.78	-1090.87	40°26'47.460"N	104°14'06.912"W	0.00	
9517.00†	90.000	0.103	6146.00	3758.55	3665.78	-1090.69	40°26'48.448"N	104°14'06.910"W	0.00	
9617.00†	90.000	0.103	6146.00	3858.00	3765.78	-1090.51	40°26'49.436"N	104°14'06.907"W	0.00	
9717.00†	90.000	0.103	6146.00	3957.45	3865.78	-1090.33	40°26'50.424"N	104°14'06.905"W	0.00	
9817.00†	90.000	0.103	6146.00	4056.91	3965.78	-1090.15	40°26'51.412"N	104°14'06.903"W	0.00	
9917.00†	90.000	0.103	6146.00	4156.36	4065.78	-1089.97	40°26'52.400"N	104°14'06.901"W	0.00	
10017.00†	90.000	0.103	6146.00	4255.81	4165.78	-1089.80	40°26'53.389"N	104°14'06.898"W	0.00	
10117.00†	90.000	0.103	6146.00	4355.26	4265.78	-1089.62	40°26'54.377"N	104°14'06.896"W	0.00	
10217.00†	90.000	0.103	6146.00	4454.71	4365.78	-1089.44	40°26'55.365"N	104°14'06.894"W	0.00	
10317.00†	90.000	0.103	6146.00	4554.16	4465.77	-1089.26	40°26'56.353"N	104°14'06.892"W	0.00	
10417.00†	90.000	0.103	6146.00	4653.61	4565.77	-1089.08	40°26'57.341"N	104°14'06.889"W	0.00	
10517.00†	90.000	0.103	6146.00	4753.06	4665.77	-1088.90	40°26'58.329"N	104°14'06.887"W	0.00	
10617.00†	90.000	0.103	6146.00	4852.51	4765.77	-1088.72	40°26'59.317"N	104°14'06.885"W	0.00	
10717.00†	90.000	0.103	6146.00	4951.96	4865.77	-1088.54	40°27'00.306"N	104°14'06.883"W	0.00	
10817.00†	90.000	0.103	6146.00	5051.41	4965.77	-1088.36	40°27'01.294"N	104°14'06.880"W	0.00	
10917.00†	90.000	0.103	6146.00	5150.86	5065.77	-1088.18	40°27'02.282"N	104°14'06.878"W	0.00	
11017.00†	90.000	0.103	6146.00	5250.31	5165.77	-1088.01	40°27'03.270"N	104°14'06.876"W	0.00	
11117.00†	90.000	0.103	6146.00	5349.76	5265.77	-1087.83	40°27'04.258"N	104°14'06.874"W	0.00	
11217.00†	90.000	0.103	6146.00	5449.21	5365.77	-1087.65	40°27'05.246"N	104°14'06.871"W	0.00	
11317.00†	90.000	0.103	6146.00	5548.66	5465.77	-1087.47	40°27'06.235"N	104°14'06.869"W	0.00	
11383.01	90.000	0.103	6146.00 ²	5614.31	5531.78	-1087.35	40°27'06.887"N	104°14'06.868"W	0.00	End of Tangent
11388.64	90.000	0.215	6146.00	5619.91	5537.41	-1087.33	40°27'06.942"N	104°14'06.867"W	2.00	End of 3D Arc
11417.00†	90.000	0.215	6146.00	5648.11	5565.77	-1087.23	40°27'07.223"N	104°14'06.866"W	0.00	
11517.00†	90.000	0.215	6146.00	5747.54	5665.77	-1086.85	40°27'08.211"N	104°14'06.861"W	0.00	
11617.00†	90.000	0.215	6146.00	5846.97	5765.77	-1086.48	40°27'09.199"N	104°14'06.856"W	0.00	
11717.00†	90.000	0.215	6146.00	5946.40	5865.77	-1086.10	40°27'10.187"N	104°14'06.852"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	0.215	6146.00	6045.83	5965.77	-1085.73	40°27'11.175"N	104°14'06.847"W	0.00	
11917.00†	90.000	0.215	6146.00	6145.26	6065.77	-1085.35	40°27'12.163"N	104°14'06.842"W	0.00	
12017.00†	90.000	0.215	6146.00	6244.69	6165.77	-1084.97	40°27'13.152"N	104°14'06.837"W	0.00	
12117.00†	90.000	0.215	6146.00	6344.12	6265.77	-1084.60	40°27'14.140"N	104°14'06.832"W	0.00	
12217.00†	90.000	0.215	6146.00	6443.55	6365.77	-1084.22	40°27'15.128"N	104°14'06.828"W	0.00	
12317.00†	90.000	0.215	6146.00	6542.97	6465.77	-1083.85	40°27'16.116"N	104°14'06.823"W	0.00	
12417.00†	90.000	0.215	6146.00	6642.40	6565.77	-1083.47	40°27'17.104"N	104°14'06.818"W	0.00	
12517.00†	90.000	0.215	6146.00	6741.83	6665.77	-1083.10	40°27'18.092"N	104°14'06.813"W	0.00	
12617.00†	90.000	0.215	6146.00	6841.26	6765.76	-1082.72	40°27'19.080"N	104°14'06.808"W	0.00	
12717.00†	90.000	0.215	6146.00	6940.69	6865.76	-1082.35	40°27'20.069"N	104°14'06.804"W	0.00	

Planned Wellpath Report

MULE DEER 24-32-29XRLNB (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#09 MULE DEER 24-32-29XRLNB (261'FNL & 2131'FEL, SEC.05)
Area	COLORADO	Well	MULE DEER 24-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER 24-32-29XRLNB 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	0.215	6146.00	7040.12	6965.76	-1081.97	40°27'21.057"N	104°14'06.799"W	0.00	
12917.00†	90.000	0.215	6146.00	7139.55	7065.76	-1081.60	40°27'22.045"N	104°14'06.794"W	0.00	
13017.00†	90.000	0.215	6146.00	7238.98	7165.76	-1081.22	40°27'23.033"N	104°14'06.789"W	0.00	
13117.00†	90.000	0.215	6146.00	7338.41	7265.76	-1080.84	40°27'24.021"N	104°14'06.784"W	0.00	
13217.00†	90.000	0.215	6146.00	7437.84	7365.76	-1080.47	40°27'25.009"N	104°14'06.780"W	0.00	
13317.00†	90.000	0.215	6146.00	7537.27	7465.76	-1080.09	40°27'25.997"N	104°14'06.775"W	0.00	
13417.00†	90.000	0.215	6146.00	7636.70	7565.76	-1079.72	40°27'26.986"N	104°14'06.770"W	0.00	
13517.00†	90.000	0.215	6146.00	7736.13	7665.76	-1079.34	40°27'27.974"N	104°14'06.765"W	0.00	
13617.00†	90.000	0.215	6146.00	7835.56	7765.76	-1078.97	40°27'28.962"N	104°14'06.760"W	0.00	
13717.00†	90.000	0.215	6146.00	7934.99	7865.76	-1078.59	40°27'29.950"N	104°14'06.756"W	0.00	
13817.00†	90.000	0.215	6146.00	8034.42	7965.76	-1078.22	40°27'30.938"N	104°14'06.751"W	0.00	
13917.00†	90.000	0.215	6146.00	8133.85	8065.76	-1077.84	40°27'31.926"N	104°14'06.746"W	0.00	
14017.00†	90.000	0.215	6146.00	8233.28	8165.75	-1077.46	40°27'32.914"N	104°14'06.741"W	0.00	
14117.00†	90.000	0.215	6146.00	8332.71	8265.75	-1077.09	40°27'33.903"N	104°14'06.736"W	0.00	
14217.00†	90.000	0.215	6146.00	8432.14	8365.75	-1076.71	40°27'34.891"N	104°14'06.732"W	0.00	
14317.00†	90.000	0.215	6146.00	8531.57	8465.75	-1076.34	40°27'35.879"N	104°14'06.727"W	0.00	
14417.00†	90.000	0.215	6146.00	8631.00	8565.75	-1075.96	40°27'36.867"N	104°14'06.722"W	0.00	
14517.00†	90.000	0.215	6146.00	8730.43	8665.75	-1075.59	40°27'37.855"N	104°14'06.717"W	0.00	
14617.00†	90.000	0.215	6146.00	8829.86	8765.75	-1075.21	40°27'38.843"N	104°14'06.712"W	0.00	
14717.00†	90.000	0.215	6146.00	8929.29	8865.75	-1074.84	40°27'39.831"N	104°14'06.708"W	0.00	
14817.00†	90.000	0.215	6146.00	9028.72	8965.75	-1074.46	40°27'40.820"N	104°14'06.703"W	0.00	
14917.00†	90.000	0.215	6146.00	9128.15	9065.75	-1074.08	40°27'41.808"N	104°14'06.698"W	0.00	
15017.00†	90.000	0.215	6146.00	9227.58	9165.75	-1073.71	40°27'42.796"N	104°14'06.693"W	0.00	
15117.00†	90.000	0.215	6146.00	9327.01	9265.75	-1073.33	40°27'43.784"N	104°14'06.688"W	0.00	
15217.00†	90.000	0.215	6146.00	9426.44	9365.75	-1072.96	40°27'44.772"N	104°14'06.684"W	0.00	
15317.00†	90.000	0.215	6146.00	9525.87	9465.75	-1072.58	40°27'45.760"N	104°14'06.679"W	0.00	
15417.00†	90.000	0.215	6146.00	9625.30	9565.74	-1072.21	40°27'46.748"N	104°14'06.674"W	0.00	
15517.00†	90.000	0.215	6146.00	9724.73	9665.74	-1071.83	40°27'47.737"N	104°14'06.669"W	0.00	
15617.00†	90.000	0.215	6146.00	9824.16	9765.74	-1071.46	40°27'48.725"N	104°14'06.664"W	0.00	
15717.00†	90.000	0.215	6146.00	9923.59	9865.74	-1071.08	40°27'49.713"N	104°14'06.660"W	0.00	
15817.00†	90.000	0.215	6146.00	10023.02	9965.74	-1070.71	40°27'50.701"N	104°14'06.655"W	0.00	
15917.00†	90.000	0.215	6146.00	10122.45	10065.74	-1070.33	40°27'51.689"N	104°14'06.650"W	0.00	
16017.00†	90.000	0.215	6146.00	10221.88	10165.74	-1069.95	40°27'52.677"N	104°14'06.645"W	0.00	
16117.00†	90.000	0.215	6146.00	10321.31	10265.74	-1069.58	40°27'53.666"N	104°14'06.640"W	0.00	
16187.28	90.000	0.215	6146.00 ³	10391.19	10336.02	-1069.31	40°27'54.360"N	104°14'06.637"W	0.00	End of Tangent

HOLE & CASING SECTIONS - Ref Wellbore: MULE DEER 24-32-29XRLNB PWB Ref Wellpath: MULE DEER 24-32-29XRLNB (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	1485.59	0.00	0.00	25.74	-160.19
9.625in Casing Surface	17.00	1500.00	1483.00	17.00	1485.59	0.00	0.00	25.74	-160.19
8.5in Open Hole	1500.00	16187.28	14687.28	1485.59	6146.00	25.74	-160.19	10336.02	-1069.31

Planned Wellpath Report

MULE DEER 24-32-29XRLNB (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#09 MULE DEER 24-32-29XRLNB (261'FNL & 2131'FEL,SEC.05)
Area	COLORADO	Well	MULE DEER 24-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER 24-32-29XRLNB 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	826.27	-607.94	3352513.47	1405284.33	40°26'20.389"N	104°14'00.665"W	polygon
SEC.32-T06N-R61W		-2.00	826.27	-607.94	3352513.47	1405284.33	40°26'20.389"N	104°14'00.665"W	polygon
SEC.05-T05N-R61W		0.00	-9870.73	-1941.14	3351333.48	1394569.78	40°24'34.685"N	104°14'17.896"W	polygon
2) MULE DEER 24-32-29XRLNB (MLT 2146'FWL)	11383.01	6146.00	5531.78	-1087.35	3351966.81	1409982.32	40°27'06.887"N	104°14'06.868"W	point
3) MULE DEER 24-32-29XRLNB BHL REV-1 (470'FNL & 2148'FWL,SEC.29)	16187.28	6146.00	10336.02	-1069.31	3351916.11	1414786.13	40°27'54.360"N	104°14'06.637"W	point
1) MULE DEER 24-32-29XRLNB LP REV-1 (470'FSL & 2154'FWL,SEC.32)	6582.77	6146.00	731.55	-1095.94	3352026.89	1405182.64	40°26'19.453"N	104°14'06.976"W	point

SURVEY PROGRAM - Ref Wellbore: MULE DEER 24-32-29XRLNB PWB Ref Wellpath: MULE DEER 24-32-29XRLNB (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 24-32-29XRLNB PWB
1500.00	16187.28	BHI AutoTrak Curve (Short)		MULE DEER 24-32-29XRLNB PWB

Planned Wellpath Report

MULE DEER 24-32-29XRLNB (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#09 MULE DEER 24-32-29XRLNB (261'FNL & 2131'FEL,SEC.05)
Area	COLORADO	Well	MULE DEER 24-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	MULE DEER 24-32-29XRLNB PWB
Facility	SEC.05-T05N-R61W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	279.128	17.00	Tie On
400.00	0.000	279.128	400.00	End of Tangent
975.35	11.507	279.128	971.49	End of Build
5700.70	11.507	279.128	5601.86	End of Tangent
6582.77	90.000	0.103	6146.00	End of 3D Arc
11383.01	90.000	0.103	6146.00	End of Tangent
11388.64	90.000	0.215	6146.00	End of 3D Arc
16187.28	90.000	0.215	6146.00	End of Tangent