

Location:	COLORADO	Slot:	SLOT#05 MULE DEER FEDERAL E-32-29XRLNB (201'FNL & 2131'FEL, SEC.05)
Field:	WELD COUNTY (NAD83/TRUE)	Well:	MULE DEER FEDERAL E-32-29XRLNB
Facility:	SEC.05-T05N-R61W	Wellbore:	MULE DEER FEDERAL E-32-29XRLNB PWB

Plot reference wellpath is MULE DEER FEDERAL E-32-29XRLNB (REV-A.1) PWP		Grid System: NAD83 / Lambert Colorado SP, Northern Zone (50'), 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#05 MULE DEER FEDERAL E-32-29XRLNB (201 PNL & 2131 PNL SEC 05): 0 feet	Depths are in feet	
Offset wellpath MDs are referenced to each path's default MD datum		
Created by rebai01 on 2020-03-26; Database: WellArchivCDB3		

Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.05-T05N-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#05 MULE DEER FEDERAL E-32-209RLNB (201YNL & 2131FELSEC.05)	-2.19	160.34	3353132.280	1404526.980	40°26'12.8184"N	104°13'52.8024"W	
RIG (17) (RKB) to Ground level (A/SLOT: SLOT#05 MULE DEER FEDERAL E-32-209RLNB (201YNL & 2131FELSEC.05))						4676ft	
Mean Sea Level to Ground level (A/SLOT: SLOT#05 MULE DEER FEDERAL E-32-209RLNB (201YNL & 2131FELSEC.05))						0ft	
RIG (17) (RKB) to Mean Sea Level						4676ft	

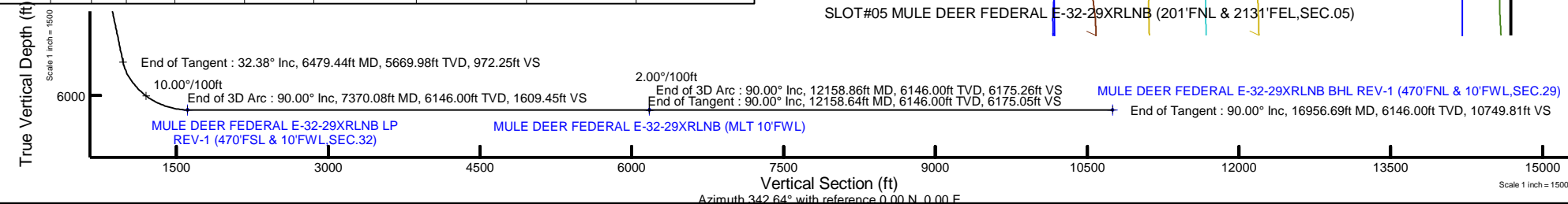
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1600.00	BH NavTrak (superseded model)	BH NavTrak (Rotating-Axial Corr)		MULE DEER FEDERAL E-32-29XRLNB PWB
1600.00	16956.69	BH AutoTrak Curve (superseded model)	BH AutoTrak Curve (Short)		MULE DEER FEDERAL E-32-29XRLNB PWB

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.29-TOWN RE.1W	N/A	-2.00	766.16	-627.94	33625.13.47	1405284.33	40°26'20.3892"N	104°14'34.6648"W
SEC.30-TOWN RE.1W	N/A	-2.00	766.16	-627.94	33625.13.47	1405284.33	40°26'20.3892"N	104°14'34.6648"W
SEC.05-TOWN RE.1W	N/A	0.00	-9930.84	-1941.14	3361333.48	1334669.78	40°24'34.6860"N	104°14'17.8560"W
M&E O&ER FEDERAL E-32-200KRLNB (BLT 10'FWL)	12156.64	6146.00	5462.39	-3222.81	3349831.78	1405942.48	42°27'8.7932"N	104°14'34.6904"W
M&E O&ER FEDERAL E-32-200KRLNB (BLT REV-1 1470FTN & 10'FWL, SEC.29)	16699.69	6146.00	10260.41	-3206.62	3349779.34	1414740.06	42°27'24.3002"N	104°14'34.2892"W
M&E O&ER FEDERAL E-32-200KRLNB LP REV-1 (1470FTN & 10'FWL, SEC.32)	7370.08	6146.00	673.85	-3239.33	3349833.77	1405154.39	40°26'19.4732"N	104°14'34.6904"W

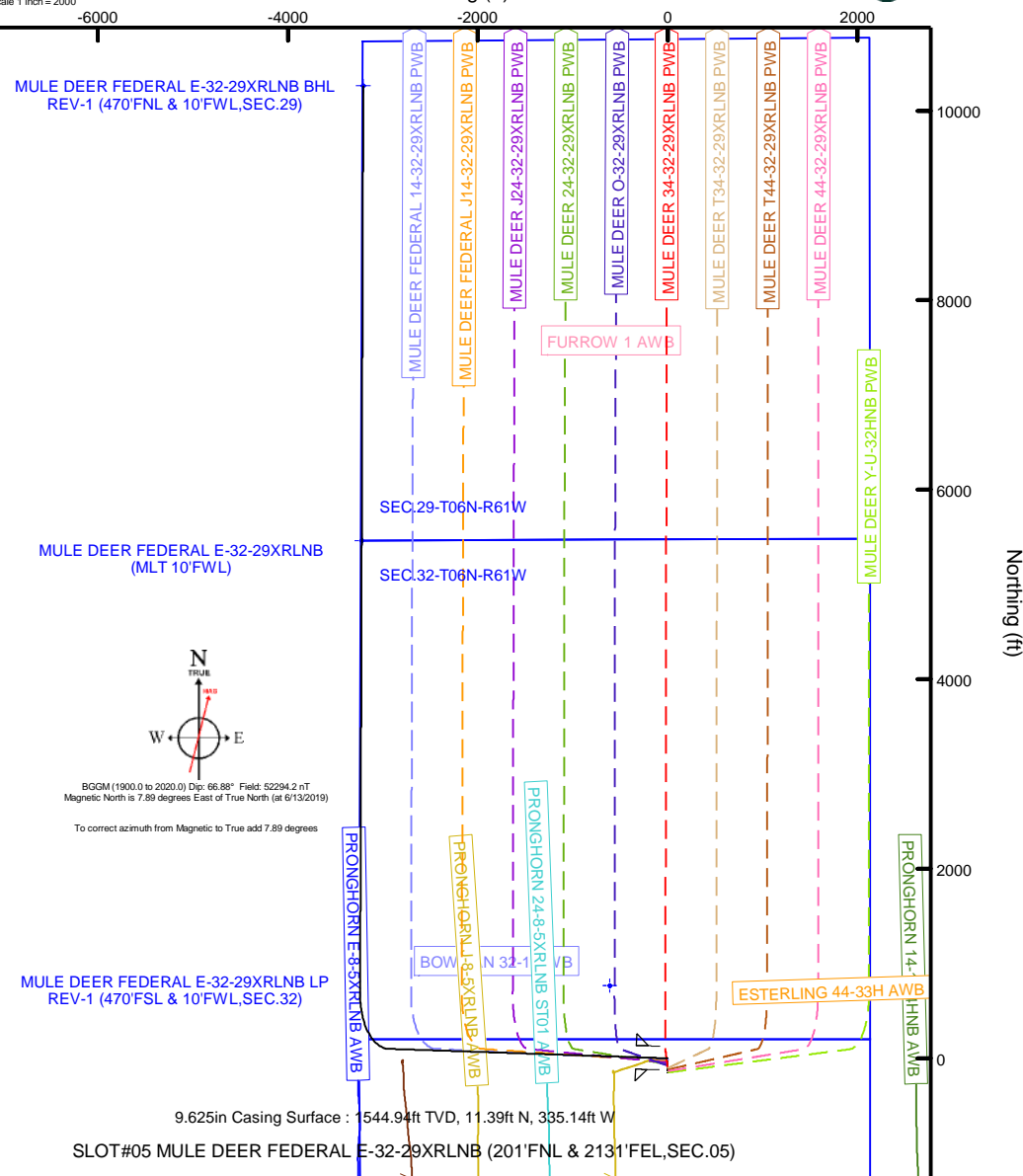
Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
13.5in Open Hole	17.00	1600.00	1583.00	17.00	1544.94	0.00	0.00	11.39	-335.14	MULE DEER FEDERAL E-32-29URLNB PWB
9.025in Casing Surface	17.00	1600.00	1583.00	17.00	1544.94	0.00	0.00	11.39	-335.14	MULE DEER FEDERAL E-32-29URLNB PWB
8.5in Open Hole	1600.00	16956.69	15356.69	1544.94	6146.00	11.39	-335.14	10260.41	-3206.62	MULE DEER FEDERAL E-32-29URLNB 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	271.947	17.00	0.00	0.00	0.00	0.00
End of Tangent	200.00	0.000	271.947	200.00	0.00	0.00	0.00	0.00
End of Build	1819.03	32.381	271.947	1734.21	15.13	-445.19	2.00	147.24
End of Tangent	6479.44	32.381	271.947	5669.98	99.93	-2939.59	0.00	972.25
End of 3D Arc	7370.08	90.000	0.198	6146.00	673.85	-3239.33	10.00	1609.45
End of Tangent	12158.64	90.000	0.198	6146.00	5462.39	-3222.81	0.00	6175.05
End of 3D Arc	12158.86	90.000	0.193	6146.00	5462.60	-3222.81	2.00	6175.26
End of Tangent	16956.69	90.000	0.193	6146.00	10260.41	-3206.62	0.00	10749.81

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
16956.69	90.000	0.193	6146.00	10260.41	-3206.62	334979.34	1414740.06	40°27'54.2050"N	104°14'34.2890"W



Easting (ft)



BGM (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

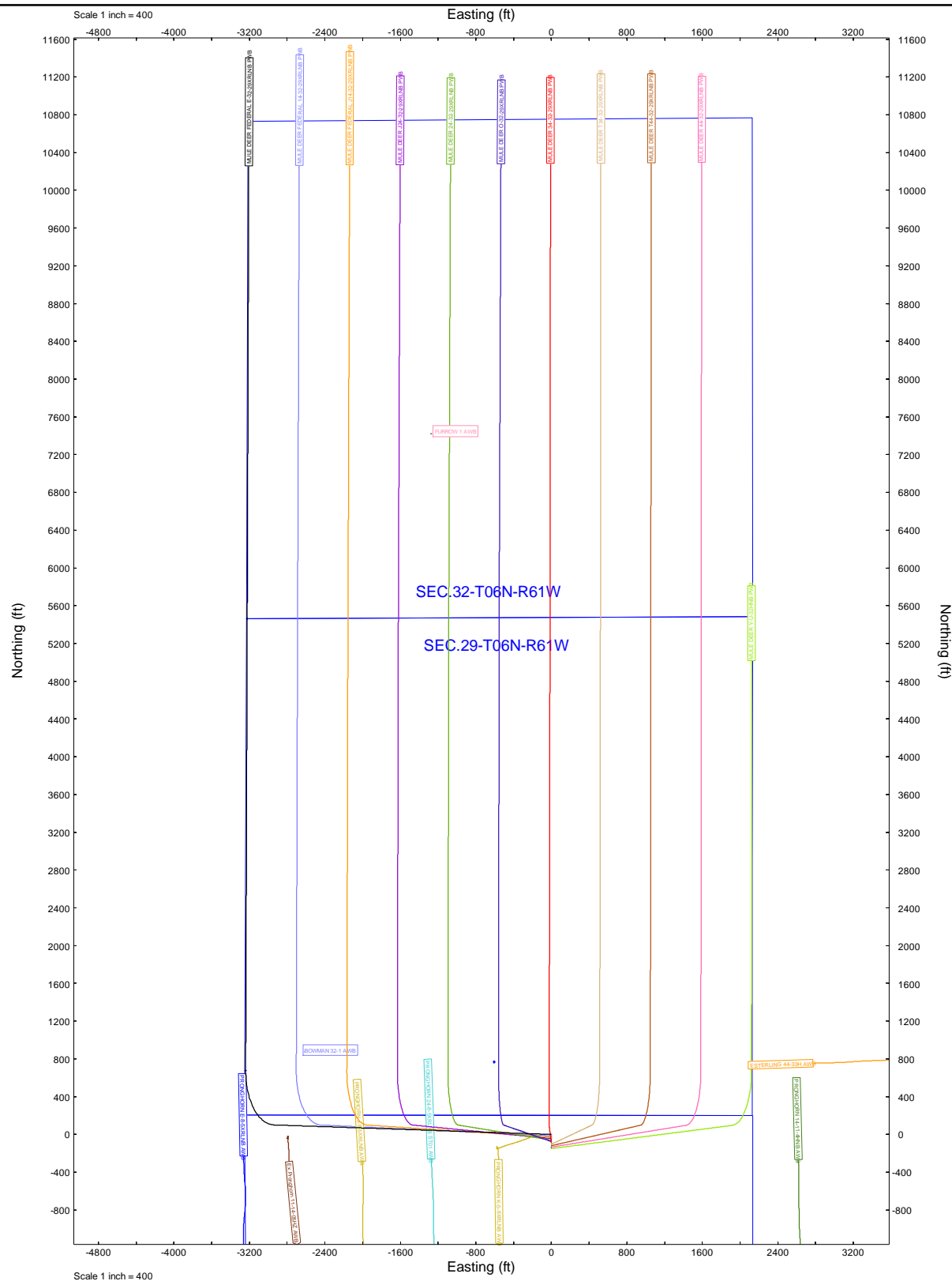
9.625in Casing Surface : 1544.94ft TVD, 11.39ft N, 335.14ft W

SLOT#05 MULE DEER FEDERAL E-32-29XRLNB (201'FNL & 2131'FEL,SEC.05)

MULE DEER FEDERAL E-32-29XRLNB BHL REV-1 (470'ENL & 10'FWL SEC.29)

End of Tangent : 90.00° Inc, 16956.69ft MD, 6146.00ft TVD, 10749.81ft VS

Azimuth 342 64° with reference 0 00 N 0 00 E





Planned Wellpath Report

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

Page 1 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL E-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL E-32-29XRLNB PWB
Slot	SLOT#05 MULE DEER FEDERAL E-32-29XRLNB (201'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 11:56:13 AM
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	-2.19	160.34	3353132.28	1404526.98	40°26'12.8184"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#05 MULE DEER FEDERAL E-32-29XRLNB (201'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	342.64°



Planned Wellpath Report

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

Page 2 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL E-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL E-32-29XRLNB PWB
Slot	SLOT#05 MULE DEER FEDERAL E-32-29XRLNB (201'FNL & 2131'FEL,SEC.05)		

WELLPATH DATA (178 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	271.947	0.00	0.00	0.00	0.00	40°26'12.8184"N	104°13'52.8024"W	0.00	
17.00	0.000	271.947	17.00	0.00	0.00	0.00	40°26'12.8184"N	104°13'52.8024"W	0.00	Tie On
117.00†	0.000	271.947	117.00	0.00	0.00	0.00	40°26'12.8184"N	104°13'52.8024"W	0.00	
200.00	0.000	271.947	200.00	0.00	0.00	0.00	40°26'12.8184"N	104°13'52.8024"W	0.00	End of Tangent
217.00†	0.340	271.947	217.00	0.02	0.00	-0.05	40°26'12.8184"N	104°13'52.8031"W	2.00	
317.00†	2.340	271.947	316.97	0.79	0.08	-2.39	40°26'12.8192"N	104°13'52.8333"W	2.00	
417.00†	4.340	271.947	416.79	2.72	0.28	-8.21	40°26'12.8212"N	104°13'52.9086"W	2.00	
517.00†	6.340	271.947	516.35	5.79	0.60	-17.51	40°26'12.8243"N	104°13'53.0289"W	2.00	
617.00†	8.340	271.947	615.53	10.01	1.03	-30.28	40°26'12.8286"N	104°13'53.1940"W	2.00	
717.00†	10.340	271.947	714.20	15.38	1.58	-46.50	40°26'12.8340"N	104°13'53.4037"W	2.00	
817.00†	12.340	271.947	812.24	21.88	2.25	-66.15	40°26'12.8406"N	104°13'53.6579"W	2.00	
917.00†	14.340	271.947	909.54	29.50	3.03	-89.21	40°26'12.8484"N	104°13'53.9561"W	2.00	
1017.00†	16.340	271.947	1005.97	38.25	3.93	-115.64	40°26'12.8572"N	104°13'54.2980"W	2.00	
1117.00†	18.340	271.947	1101.42	48.10	4.94	-145.43	40°26'12.8672"N	104°13'54.6832"W	2.00	
1217.00†	20.340	271.947	1195.77	59.05	6.07	-178.53	40°26'12.8784"N	104°13'55.1112"W	2.00	
1317.00†	22.340	271.947	1288.91	71.07	7.31	-214.89	40°26'12.8906"N	104°13'55.5815"W	2.00	
1417.00†	24.340	271.947	1380.72	84.17	8.65	-254.49	40°26'12.9039"N	104°13'56.0935"W	2.00	
1517.00†	26.340	271.947	1471.10	98.32	10.11	-297.26	40°26'12.9182"N	104°13'56.6467"W	2.00	
1617.00†	28.340	271.947	1559.92	113.50	11.67	-343.16	40°26'12.9337"N	104°13'57.2403"W	2.00	
1717.00†	30.340	271.947	1647.09	129.69	13.33	-392.13	40°26'12.9501"N	104°13'57.8735"W	2.00	
1817.00†	32.340	271.947	1732.50	146.88	15.10	-444.10	40°26'12.9675"N	104°13'58.5458"W	2.00	
1819.03	32.381	271.947	1734.21	147.24	15.13	-445.19	40°26'12.9679"N	104°13'58.5598"W	2.00	End of Build
1917.00†	32.381	271.947	1816.95	164.59	16.92	-497.63	40°26'12.9855"N	104°13'59.2379"W	0.00	
2017.00†	32.381	271.947	1901.40	182.29	18.74	-551.15	40°26'13.0035"N	104°13'59.9301"W	0.00	
2117.00†	32.381	271.947	1985.85	199.99	20.56	-604.67	40°26'13.0215"N	104°14'0.6223"W	0.00	
2217.00†	32.381	271.947	2070.30	217.69	22.38	-658.20	40°26'13.0394"N	104°14'1.3145"W	0.00	
2317.00†	32.381	271.947	2154.75	235.40	24.19	-711.72	40°26'13.0574"N	104°14'2.0067"W	0.00	
2417.00†	32.381	271.947	2239.20	253.10	26.01	-765.24	40°26'13.0753"N	104°14'2.6989"W	0.00	
2517.00†	32.381	271.947	2323.65	270.80	27.83	-818.77	40°26'13.0933"N	104°14'3.3910"W	0.00	
2617.00†	32.381	271.947	2408.11	288.50	29.65	-872.29	40°26'13.1113"N	104°14'4.0832"W	0.00	



Planned Wellpath Report
MULE DEER FEDERAL E-32-29XRLNB (REV-A.1) PWP
Page 3 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL E-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL E-32-29XRLNB PWB
Slot	SLOT#05 MULE DEER FEDERAL E-32-29XRLNB (201'FNL & 2131'FEL,SEC.05)		

WELLPATH DATA (178 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	32.381	271.947	2492.56	306.21	31.47	-925.81	40°26'13.1292"N	104°14'4.7754"W	0.00	
2817.00†	32.381	271.947	2577.01	323.91	33.29	-979.33	40°26'13.1472"N	104°14'5.4676"W	0.00	
2917.00†	32.381	271.947	2661.46	341.61	35.11	-1032.86	40°26'13.1651"N	104°14'6.1598"W	0.00	
3017.00†	32.381	271.947	2745.91	359.31	36.93	-1086.38	40°26'13.1831"N	104°14'6.8520"W	0.00	
3117.00†	32.381	271.947	2830.36	377.01	38.75	-1139.90	40°26'13.2011"N	104°14'7.5442"W	0.00	
3217.00†	32.381	271.947	2914.81	394.72	40.57	-1193.43	40°26'13.2190"N	104°14'8.2363"W	0.00	
3317.00†	32.381	271.947	2999.26	412.42	42.39	-1246.95	40°26'13.2370"N	104°14'8.9285"W	0.00	
3417.00†	32.381	271.947	3083.71	430.12	44.21	-1300.47	40°26'13.2549"N	104°14'9.6207"W	0.00	
3517.00†	32.381	271.947	3168.16	447.82	46.03	-1354.00	40°26'13.2729"N	104°14'10.3129"W	0.00	
3617.00†	32.381	271.947	3252.62	465.53	47.85	-1407.52	40°26'13.2908"N	104°14'11.0051"W	0.00	
3717.00†	32.381	271.947	3337.07	483.23	49.67	-1461.04	40°26'13.3088"N	104°14'11.6973"W	0.00	
3817.00†	32.381	271.947	3421.52	500.93	51.49	-1514.57	40°26'13.3267"N	104°14'12.3895"W	0.00	
3917.00†	32.381	271.947	3505.97	518.63	53.31	-1568.09	40°26'13.3447"N	104°14'13.0816"W	0.00	
4017.00†	32.381	271.947	3590.42	536.34	55.13	-1621.61	40°26'13.3626"N	104°14'13.7738"W	0.00	
4117.00†	32.381	271.947	3674.87	554.04	56.95	-1675.13	40°26'13.3806"N	104°14'14.4660"W	0.00	
4217.00†	32.381	271.947	3759.32	571.74	58.77	-1728.66	40°26'13.3985"N	104°14'15.1582"W	0.00	
4317.00†	32.381	271.947	3843.77	589.44	60.59	-1782.18	40°26'13.4164"N	104°14'15.8504"W	0.00	
4417.00†	32.381	271.947	3928.22	607.15	62.40	-1835.70	40°26'13.4344"N	104°14'16.5426"W	0.00	
4517.00†	32.381	271.947	4012.67	624.85	64.22	-1889.23	40°26'13.4523"N	104°14'17.2348"W	0.00	
4617.00†	32.381	271.947	4097.13	642.55	66.04	-1942.75	40°26'13.4703"N	104°14'17.9269"W	0.00	
4717.00†	32.381	271.947	4181.58	660.25	67.86	-1996.27	40°26'13.4882"N	104°14'18.6191"W	0.00	
4817.00†	32.381	271.947	4266.03	677.95	69.68	-2049.80	40°26'13.5061"N	104°14'19.3113"W	0.00	
4917.00†	32.381	271.947	4350.48	695.66	71.50	-2103.32	40°26'13.5241"N	104°14'20.0035"W	0.00	
5017.00†	32.381	271.947	4434.93	713.36	73.32	-2156.84	40°26'13.5420"N	104°14'20.6957"W	0.00	
5117.00†	32.381	271.947	4519.38	731.06	75.14	-2210.36	40°26'13.5599"N	104°14'21.3879"W	0.00	
5217.00†	32.381	271.947	4603.83	748.76	76.96	-2263.89	40°26'13.5779"N	104°14'22.0801"W	0.00	
5317.00†	32.381	271.947	4688.28	766.47	78.78	-2317.41	40°26'13.5958"N	104°14'22.7723"W	0.00	
5417.00†	32.381	271.947	4772.73	784.17	80.60	-2370.93	40°26'13.6137"N	104°14'23.4644"W	0.00	
5517.00†	32.381	271.947	4857.18	801.87	82.42	-2424.46	40°26'13.6317"N	104°14'24.1566"W	0.00	
5617.00†	32.381	271.947	4941.64	819.57	84.24	-2477.98	40°26'13.6496"N	104°14'24.8488"W	0.00	



Planned Wellpath Report
MULE DEER FEDERAL E-32-29XRLNB (REV-A.1) PWP
Page 4 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL E-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL E-32-29XRLNB PWB
Slot	SLOT#05 MULE DEER FEDERAL E-32-29XRLNB (201'FNL & 2131'FEL,SEC.05)		

WELLPATH DATA (178 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5717.00†	32.381	271.947	5026.09	837.28	86.06	-2531.50	40°26'13.6675"N	104°14'25.5410"W	0.00	
5817.00†	32.381	271.947	5110.54	854.98	87.88	-2585.03	40°26'13.6854"N	104°14'26.2332"W	0.00	
5917.00†	32.381	271.947	5194.99	872.68	89.70	-2638.55	40°26'13.7034"N	104°14'26.9254"W	0.00	
6017.00†	32.381	271.947	5279.44	890.38	91.52	-2692.07	40°26'13.7213"N	104°14'27.6176"W	0.00	
6117.00†	32.381	271.947	5363.89	908.09	93.34	-2745.60	40°26'13.7392"N	104°14'28.3098"W	0.00	
6217.00†	32.381	271.947	5448.34	925.79	95.16	-2799.12	40°26'13.7571"N	104°14'29.0020"W	0.00	
6317.00†	32.381	271.947	5532.79	943.49	96.98	-2852.64	40°26'13.7750"N	104°14'29.6941"W	0.00	
6417.00†	32.381	271.947	5617.24	961.19	98.80	-2906.16	40°26'13.7930"N	104°14'30.3863"W	0.00	
6479.44	32.381	271.947	5669.98	972.25	99.93	-2939.59	40°26'13.8041"N	104°14'30.8186"W	0.00	End of Tangent
6517.00†	32.670	278.914	5701.65	980.06	101.84	-2959.66	40°26'13.8230"N	104°14'31.0781"W	10.00	
6617.00†	35.214	296.292	5784.81	1011.99	118.84	-3012.30	40°26'13.9909"N	104°14'31.7590"W	10.00	
6717.00†	39.880	310.855	5864.23	1059.26	152.67	-3062.53	40°26'14.3251"N	104°14'32.4086"W	10.00	
6817.00†	46.015	322.480	5937.51	1120.43	202.30	-3108.81	40°26'14.8155"N	104°14'33.0072"W	10.00	
6917.00†	53.099	331.778	6002.42	1193.66	266.23	-3149.73	40°26'15.4472"N	104°14'33.5365"W	10.00	
7017.00†	60.780	339.433	6056.99	1276.70	342.51	-3184.05	40°26'16.2009"N	104°14'33.9805"W	10.00	
7117.00†	68.835	345.992	6099.55	1367.05	428.82	-3210.74	40°26'17.0538"N	104°14'34.3258"W	10.00	
7217.00†	77.116	351.861	6128.83	1461.95	522.55	-3228.97	40°26'17.9799"N	104°14'34.5618"W	10.00	
7317.00†	85.519	357.350	6143.93	1558.52	620.85	-3238.20	40°26'18.9512"N	104°14'34.6813"W	10.00	
7370.08	90.000	0.198	6146.00†	1609.45	673.85	-3239.33	40°26'19.4750"N	104°14'34.6960"W	10.00	End of 3D Arc
7417.00†	90.000	0.198	6146.00	1654.19	720.77	-3239.17	40°26'19.9387"N	104°14'34.6940"W	0.00	
7517.00†	90.000	0.198	6146.00	1749.53	820.77	-3238.83	40°26'20.9268"N	104°14'34.6897"W	0.00	
7617.00†	90.000	0.198	6146.00	1844.88	920.77	-3238.48	40°26'21.9150"N	104°14'34.6854"W	0.00	
7717.00†	90.000	0.198	6146.00	1940.22	1020.77	-3238.14	40°26'22.9031"N	104°14'34.6811"W	0.00	
7817.00†	90.000	0.198	6146.00	2035.56	1120.77	-3237.79	40°26'23.8913"N	104°14'34.6768"W	0.00	
7917.00†	90.000	0.198	6146.00	2130.91	1220.77	-3237.45	40°26'24.8794"N	104°14'34.6725"W	0.00	
8017.00†	90.000	0.198	6146.00	2226.25	1320.77	-3237.10	40°26'25.8676"N	104°14'34.6682"W	0.00	
8117.00†	90.000	0.198	6146.00	2321.60	1420.77	-3236.76	40°26'26.8557"N	104°14'34.6639"W	0.00	
8217.00†	90.000	0.198	6146.00	2416.94	1520.77	-3236.41	40°26'27.8439"N	104°14'34.6596"W	0.00	
8317.00†	90.000	0.198	6146.00	2512.28	1620.77	-3236.07	40°26'28.8320"N	104°14'34.6553"W	0.00	
8417.00†	90.000	0.198	6146.00	2607.63	1720.77	-3235.72	40°26'29.8202"N	104°14'34.6511"W	0.00	



Planned Wellpath Report
MULE DEER FEDERAL E-32-29XRLNB (REV-A.1) PWP
Page 5 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL E-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL E-32-29XRLNB PWB
Slot	SLOT#05 MULE DEER FEDERAL E-32-29XRLNB (201'FNL & 2131'FEL,SEC.05)		

WELLPATH DATA (178 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	0.198	6146.00	2702.97	1820.77	-3235.38	40°26'30.8083"N	104°14'34.6468"W	0.00	
8617.00†	90.000	0.198	6146.00	2798.31	1920.77	-3235.03	40°26'31.7965"N	104°14'34.6425"W	0.00	
8717.00†	90.000	0.198	6146.00	2893.66	2020.77	-3234.69	40°26'32.7846"N	104°14'34.6382"W	0.00	
8817.00†	90.000	0.198	6146.00	2989.00	2120.77	-3234.34	40°26'33.7728"N	104°14'34.6339"W	0.00	
8917.00†	90.000	0.198	6146.00	3084.35	2220.76	-3234.00	40°26'34.7609"N	104°14'34.6296"W	0.00	
9017.00†	90.000	0.198	6146.00	3179.69	2320.76	-3233.65	40°26'35.7491"N	104°14'34.6253"W	0.00	
9117.00†	90.000	0.198	6146.00	3275.03	2420.76	-3233.31	40°26'36.7372"N	104°14'34.6210"W	0.00	
9217.00†	90.000	0.198	6146.00	3370.38	2520.76	-3232.96	40°26'37.7254"N	104°14'34.6167"W	0.00	
9317.00†	90.000	0.198	6146.00	3465.72	2620.76	-3232.62	40°26'38.7135"N	104°14'34.6124"W	0.00	
9417.00†	90.000	0.198	6146.00	3561.07	2720.76	-3232.27	40°26'39.7017"N	104°14'34.6081"W	0.00	
9517.00†	90.000	0.198	6146.00	3656.41	2820.76	-3231.92	40°26'40.6898"N	104°14'34.6038"W	0.00	
9617.00†	90.000	0.198	6146.00	3751.75	2920.76	-3231.58	40°26'41.6780"N	104°14'34.5995"W	0.00	
9717.00†	90.000	0.198	6146.00	3847.10	3020.76	-3231.23	40°26'42.6661"N	104°14'34.5952"W	0.00	
9817.00†	90.000	0.198	6146.00	3942.44	3120.76	-3230.89	40°26'43.6543"N	104°14'34.5909"W	0.00	
9917.00†	90.000	0.198	6146.00	4037.79	3220.76	-3230.54	40°26'44.6424"N	104°14'34.5867"W	0.00	
10017.00†	90.000	0.198	6146.00	4133.13	3320.76	-3230.20	40°26'45.6306"N	104°14'34.5824"W	0.00	
10117.00†	90.000	0.198	6146.00	4228.47	3420.76	-3229.85	40°26'46.6187"N	104°14'34.5781"W	0.00	
10217.00†	90.000	0.198	6146.00	4323.82	3520.76	-3229.51	40°26'47.6069"N	104°14'34.5738"W	0.00	
10317.00†	90.000	0.198	6146.00	4419.16	3620.76	-3229.16	40°26'48.5950"N	104°14'34.5695"W	0.00	
10417.00†	90.000	0.198	6146.00	4514.50	3720.76	-3228.82	40°26'49.5832"N	104°14'34.5652"W	0.00	
10517.00†	90.000	0.198	6146.00	4609.85	3820.75	-3228.47	40°26'50.5713"N	104°14'34.5609"W	0.00	
10617.00†	90.000	0.198	6146.00	4705.19	3920.75	-3228.13	40°26'51.5595"N	104°14'34.5566"W	0.00	
10717.00†	90.000	0.198	6146.00	4800.54	4020.75	-3227.78	40°26'52.5476"N	104°14'34.5523"W	0.00	
10817.00†	90.000	0.198	6146.00	4895.88	4120.75	-3227.44	40°26'53.5358"N	104°14'34.5480"W	0.00	
10917.00†	90.000	0.198	6146.00	4991.22	4220.75	-3227.09	40°26'54.5239"N	104°14'34.5437"W	0.00	
11017.00†	90.000	0.198	6146.00	5086.57	4320.75	-3226.75	40°26'55.5121"N	104°14'34.5394"W	0.00	
11117.00†	90.000	0.198	6146.00	5181.91	4420.75	-3226.40	40°26'56.5002"N	104°14'34.5351"W	0.00	
11217.00†	90.000	0.198	6146.00	5277.26	4520.75	-3226.06	40°26'57.4884"N	104°14'34.5308"W	0.00	
11317.00†	90.000	0.198	6146.00	5372.60	4620.75	-3225.71	40°26'58.4765"N	104°14'34.5265"W	0.00	
11417.00†	90.000	0.198	6146.00	5467.94	4720.75	-3225.37	40°26'59.4647"N	104°14'34.5222"W	0.00	



Planned Wellpath Report

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

Page 6 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL E-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL E-32-29XRLNB PWB
Slot	SLOT#05 MULE DEER FEDERAL E-32-29XRLNB (201'FNL & 2131'FEL,SEC.05)		

WELLPATH DATA (178 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	0.198	6146.00	5563.29	4820.75	-3225.02	40°27'0.4528"N	104°14'34.5180"W	0.00	
11617.00†	90.000	0.198	6146.00	5658.63	4920.75	-3224.68	40°27'1.4410"N	104°14'34.5137"W	0.00	
11717.00†	90.000	0.198	6146.00	5753.97	5020.75	-3224.33	40°27'2.4291"N	104°14'34.5094"W	0.00	
11817.00†	90.000	0.198	6146.00	5849.32	5120.75	-3223.99	40°27'3.4173"N	104°14'34.5051"W	0.00	
11917.00†	90.000	0.198	6146.00	5944.66	5220.75	-3223.64	40°27'4.4054"N	104°14'34.5008"W	0.00	
12017.00†	90.000	0.198	6146.00	6040.01	5320.75	-3223.30	40°27'5.3936"N	104°14'34.4965"W	0.00	
12117.00†	90.000	0.198	6146.00	6135.35	5420.75	-3222.95	40°27'6.3817"N	104°14'34.4922"W	0.00	
12158.64	90.000	0.198	6146.00 ²	6175.05	5462.39	-3222.81	40°27'6.7932"N	104°14'34.4904"W	0.00	End of Tangent
12158.86	90.000	0.193	6146.00	6175.26	5462.60	-3222.81	40°27'6.7953"N	104°14'34.4904"W	2.00	End of 3D Arc
12217.00†	90.000	0.193	6146.00	6230.70	5520.74	-3222.61	40°27'7.3699"N	104°14'34.4880"W	0.00	
12317.00†	90.000	0.193	6146.00	6326.04	5620.74	-3222.28	40°27'8.3580"N	104°14'34.4838"W	0.00	
12417.00†	90.000	0.193	6146.00	6421.39	5720.74	-3221.94	40°27'9.3462"N	104°14'34.4796"W	0.00	
12517.00†	90.000	0.193	6146.00	6516.73	5820.74	-3221.60	40°27'10.3343"N	104°14'34.4754"W	0.00	
12617.00†	90.000	0.193	6146.00	6612.08	5920.74	-3221.26	40°27'11.3225"N	104°14'34.4712"W	0.00	
12717.00†	90.000	0.193	6146.00	6707.43	6020.74	-3220.93	40°27'12.3106"N	104°14'34.4670"W	0.00	
12817.00†	90.000	0.193	6146.00	6802.77	6120.74	-3220.59	40°27'13.2988"N	104°14'34.4628"W	0.00	
12917.00†	90.000	0.193	6146.00	6898.12	6220.74	-3220.25	40°27'14.2869"N	104°14'34.4586"W	0.00	
13017.00†	90.000	0.193	6146.00	6993.46	6320.74	-3219.91	40°27'15.2751"N	104°14'34.4544"W	0.00	
13117.00†	90.000	0.193	6146.00	7088.81	6420.74	-3219.58	40°27'16.2632"N	104°14'34.4502"W	0.00	
13217.00†	90.000	0.193	6146.00	7184.16	6520.74	-3219.24	40°27'17.2514"N	104°14'34.4460"W	0.00	
13317.00†	90.000	0.193	6146.00	7279.50	6620.74	-3218.90	40°27'18.2395"N	104°14'34.4418"W	0.00	
13417.00†	90.000	0.193	6146.00	7374.85	6720.74	-3218.56	40°27'19.2277"N	104°14'34.4376"W	0.00	
13517.00†	90.000	0.193	6146.00	7470.20	6820.74	-3218.23	40°27'20.2158"N	104°14'34.4334"W	0.00	
13617.00†	90.000	0.193	6146.00	7565.54	6920.74	-3217.89	40°27'21.2039"N	104°14'34.4292"W	0.00	
13717.00†	90.000	0.193	6146.00	7660.89	7020.74	-3217.55	40°27'22.1921"N	104°14'34.4250"W	0.00	
13817.00†	90.000	0.193	6146.00	7756.23	7120.74	-3217.21	40°27'23.1802"N	104°14'34.4208"W	0.00	
13917.00†	90.000	0.193	6146.00	7851.58	7220.74	-3216.88	40°27'24.1684"N	104°14'34.4166"W	0.00	
14017.00†	90.000	0.193	6146.00	7946.93	7320.73	-3216.54	40°27'25.1565"N	104°14'34.4124"W	0.00	
14117.00†	90.000	0.193	6146.00	8042.27	7420.73	-3216.20	40°27'26.1447"N	104°14'34.4082"W	0.00	
14217.00†	90.000	0.193	6146.00	8137.62	7520.73	-3215.86	40°27'27.1328"N	104°14'34.4040"W	0.00	

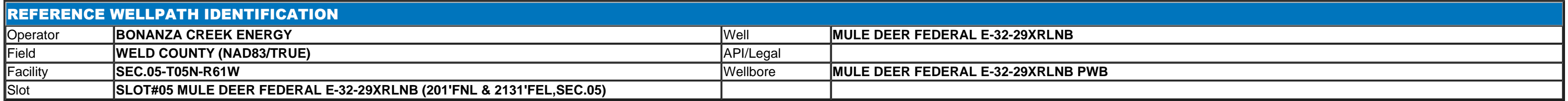
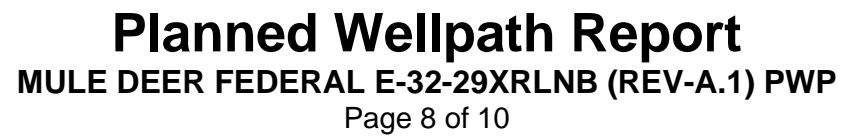


Planned Wellpath Report
MULE DEER FEDERAL E-32-29XRLNB (REV-A.1) PWP
Page 7 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL E-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL E-32-29XRLNB PWB
Slot	SLOT#05 MULE DEER FEDERAL E-32-29XRLNB (201'FNL & 2131'FEL,SEC.05)		

WELLPATH DATA (178 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	0.193	6146.00	8232.96	7620.73	-3215.53	40°27'28.1210"N	104°14'34.3998"W	0.00	
14417.00†	90.000	0.193	6146.00	8328.31	7720.73	-3215.19	40°27'29.1091"N	104°14'34.3956"W	0.00	
14517.00†	90.000	0.193	6146.00	8423.66	7820.73	-3214.85	40°27'30.0973"N	104°14'34.3914"W	0.00	
14617.00†	90.000	0.193	6146.00	8519.00	7920.73	-3214.51	40°27'31.0854"N	104°14'34.3872"W	0.00	
14717.00†	90.000	0.193	6146.00	8614.35	8020.73	-3214.18	40°27'32.0736"N	104°14'34.3830"W	0.00	
14817.00†	90.000	0.193	6146.00	8709.70	8120.73	-3213.84	40°27'33.0617"N	104°14'34.3788"W	0.00	
14917.00†	90.000	0.193	6146.00	8805.04	8220.73	-3213.50	40°27'34.0499"N	104°14'34.3746"W	0.00	
15017.00†	90.000	0.193	6146.00	8900.39	8320.73	-3213.16	40°27'35.0380"N	104°14'34.3704"W	0.00	
15117.00†	90.000	0.193	6146.00	8995.73	8420.73	-3212.83	40°27'36.0262"N	104°14'34.3662"W	0.00	
15217.00†	90.000	0.193	6146.00	9091.08	8520.73	-3212.49	40°27'37.0143"N	104°14'34.3620"W	0.00	
15317.00†	90.000	0.193	6146.00	9186.43	8620.73	-3212.15	40°27'38.0025"N	104°14'34.3578"W	0.00	
15417.00†	90.000	0.193	6146.00	9281.77	8720.73	-3211.81	40°27'38.9906"N	104°14'34.3536"W	0.00	
15517.00†	90.000	0.193	6146.00	9377.12	8820.73	-3211.48	40°27'39.9787"N	104°14'34.3494"W	0.00	
15617.00†	90.000	0.193	6146.00	9472.46	8920.73	-3211.14	40°27'40.9669"N	104°14'34.3452"W	0.00	
15717.00†	90.000	0.193	6146.00	9567.81	9020.72	-3210.80	40°27'41.9550"N	104°14'34.3410"W	0.00	
15817.00†	90.000	0.193	6146.00	9663.16	9120.72	-3210.46	40°27'42.9432"N	104°14'34.3368"W	0.00	
15917.00†	90.000	0.193	6146.00	9758.50	9220.72	-3210.13	40°27'43.9313"N	104°14'34.3326"W	0.00	
16017.00†	90.000	0.193	6146.00	9853.85	9320.72	-3209.79	40°27'44.9195"N	104°14'34.3285"W	0.00	
16117.00†	90.000	0.193	6146.00	9949.20	9420.72	-3209.45	40°27'45.9076"N	104°14'34.3243"W	0.00	
16217.00†	90.000	0.193	6146.00	10044.54	9520.72	-3209.11	40°27'46.8958"N	104°14'34.3201"W	0.00	
16317.00†	90.000	0.193	6146.00	10139.89	9620.72	-3208.78	40°27'47.8839"N	104°14'34.3159"W	0.00	
16417.00†	90.000	0.193	6146.00	10235.23	9720.72	-3208.44	40°27'48.8721"N	104°14'34.3117"W	0.00	
16517.00†	90.000	0.193	6146.00	10330.58	9820.72	-3208.10	40°27'49.8602"N	104°14'34.3075"W	0.00	
16617.00†	90.000	0.193	6146.00	10425.93	9920.72	-3207.76	40°27'50.8484"N	104°14'34.3033"W	0.00	
16717.00†	90.000	0.193	6146.00	10521.27	10020.72	-3207.43	40°27'51.8365"N	104°14'34.2991"W	0.00	
16817.00†	90.000	0.193	6146.00	10616.62	10120.72	-3207.09	40°27'52.8246"N	104°14'34.2949"W	0.00	
16917.00†	90.000	0.193	6146.00	10711.96	10220.72	-3206.75	40°27'53.8128"N	104°14'34.2907"W	0.00	
16956.69	90.000	0.193	6146.00 ³	10749.81	10260.41	-3206.62	40°27'54.2050"N	104°14'34.2890"W	0.00	End of Tangent



HOLE & CASING SECTIONS - Ref Wellbore: MULE DEER FEDERAL E-32-29XRLNB PWB Ref Wellpath: MULE DEER FEDERAL E-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	1544.94	0.00	0.00	11.39	-335.14
9.625in Casing Surface	17.00	1600.00	1583.00	17.00	1544.94	0.00	0.00	11.39	-335.14
8.5in Open Hole	1600.00	16956.69	15356.69	1544.94	6146.00	11.39	-335.14	10260.41	-3206.62

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	766.16	-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	766.16	-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	-9930.84	-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 E-32-29XRLNB (MLT 10'FWL)	12158.64	6146.00	5462.39	-3222.81	3349831.78	1409942.48	40°27'6.7932"N	104°14'34.4904"W	point
3) MULE DEER FEDERAL E-32-29XRLNB BHL REV-1 (470'FNL & 10'FWL,SEC.29)	16956.69	6146.00	10260.41	-3206.62	3349779.34	1414740.06	40°27'54.2050"N	104°14'34.2890"W	point
1) MULE DEER FEDERAL E-32-29XRLNB LP REV-1 (470'FSL & 10'FWL,SEC.32)	7370.08	6146.00	673.85	-3239.33	3349883.77	1405154.39	40°26'19.4750"N	104°14'34.6960"W	point



Planned Wellpath Report

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

Page 9 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL E-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL E-32-29XRLNB PWB
Slot	SLOT#05 MULE DEER FEDERAL E-32-29XRLNB (201'FNL & 2131'FEL,SEC.05)		

SURVEY PROGRAM - Ref Wellbore: MULE DEER FEDERAL E-32-29XRLNB PWB Ref Wellpath: MULE DEER FEDERAL E-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 E-32-29XRLNB PWB
1600.00	16956.69	BH AutoTrak Curve (Short)		MULE DEER FEDERAL E-32-29XRLNB PWB



Planned Wellpath Report

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

Page 10 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	MULE DEER FEDERAL E-32-29XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.05-T05N-R61W	Wellbore	MULE DEER FEDERAL E-32-29XRLNB PWB
Slot	SLOT#05 MULE DEER FEDERAL E-32-29XRLNB (201'FNL & 2131'FEL,SEC.05)		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	271.947	17.00	Tie On
200.00	0.000	271.947	200.00	End of Tangent
1819.03	32.381	271.947	1734.21	End of Build
6479.44	32.381	271.947	5669.98	End of Tangent
7370.08	90.000	0.198	6146.00	End of 3D Arc
12158.64	90.000	0.198	6146.00	End of Tangent
12158.86	90.000	0.193	6146.00	End of 3D Arc
16956.69	90.000	0.193	6146.00	End of Tangent