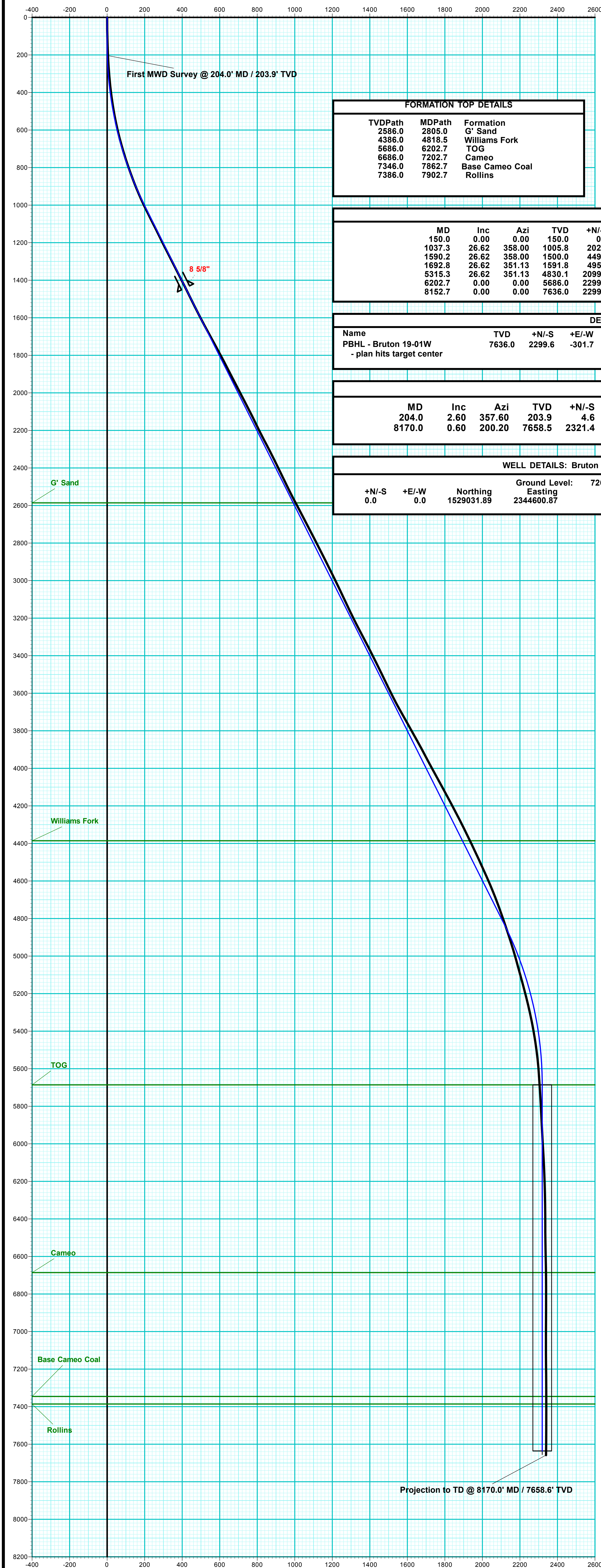


Bruton 19-01W
Mesa County, CO
Q171024 & RM-170873
Design #2

Company Name: Laramie Energy, LLC
Bruton 19-01W
Mesa County, CO
Rig: H&P #290
Created By: Will Jircik
Date: 8/23/2017

PROJECT DETAILS: Mesa County, CO
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Central Zone
System Datum: Mean Sea Level



Vertical Section at 351.53° (200 usft/in)

Azimuths to True North
Magnetic North: 9.57°

Strength: 51400.3snT
Dip Angle: 65.43°
Date: 8/8/2017
Model: IGRF2015

FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	
2586.0	2805.0	G' Sand	
4386.0	4818.5	Williams Fork	
5686.0	6202.7	TOG	
6686.0	7202.7	Cameo	
7346.0	7862.7	Base Cameo Coal	
7386.0	7902.7	Rollins	

Design #2									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.0	KOP (Build 3° / 100')	
1037.3	26.62	358.00	1005.8	202.3	-7.1	201.2	202.4	EOB @ 26.62° Inc. / 358° Azm	
1590.2	26.62	358.00	1500.0	449.9	-15.7	447.3	450.2	Turn 3° / 100'	
1692.8	26.62	351.13	1591.8	495.6	-20.1	493.2	496.1	EOT @ 26.62° Inc. / 351.13° Azm	
5315.3	26.62	351.13	4830.1	2099.5	-270.5	2116.5	2119.5	Drop 3° / 100'	
6202.7	0.00	0.00	5686.0	2299.6	-301.7	2319.0	2322.0	EOD @ Vertical	
8152.7	0.00	0.00	7636.0	2299.6	-301.7	2319.0	2322.0	TD @ 8153' MD / 7636' TVD	

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL - Bruton 19-01W	7636.0	2299.6	-301.7	1531338.44	2344357.83	39.269311	-107.816113
- plan hits target center							
Shape: Circle (Radius: 50.0)							

ANNOTATIONS							
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure
204.0	2.60	357.60	203.9	4.6	-0.2	4.6	4.6
8170.0	0.60	200.20	7658.5	2321.4	-293.1	2339.3	2353.5
First MWD Survey @ 204.0' MD / 203.9' TVD							
Projection to TD @ 8170.0' MD / 7658.6' TVD							

WELL DETAILS: Bruton 19-01W					
			Ground Level: 7262.0		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1529031.89	2344600.87	39.262997	-107.815047

