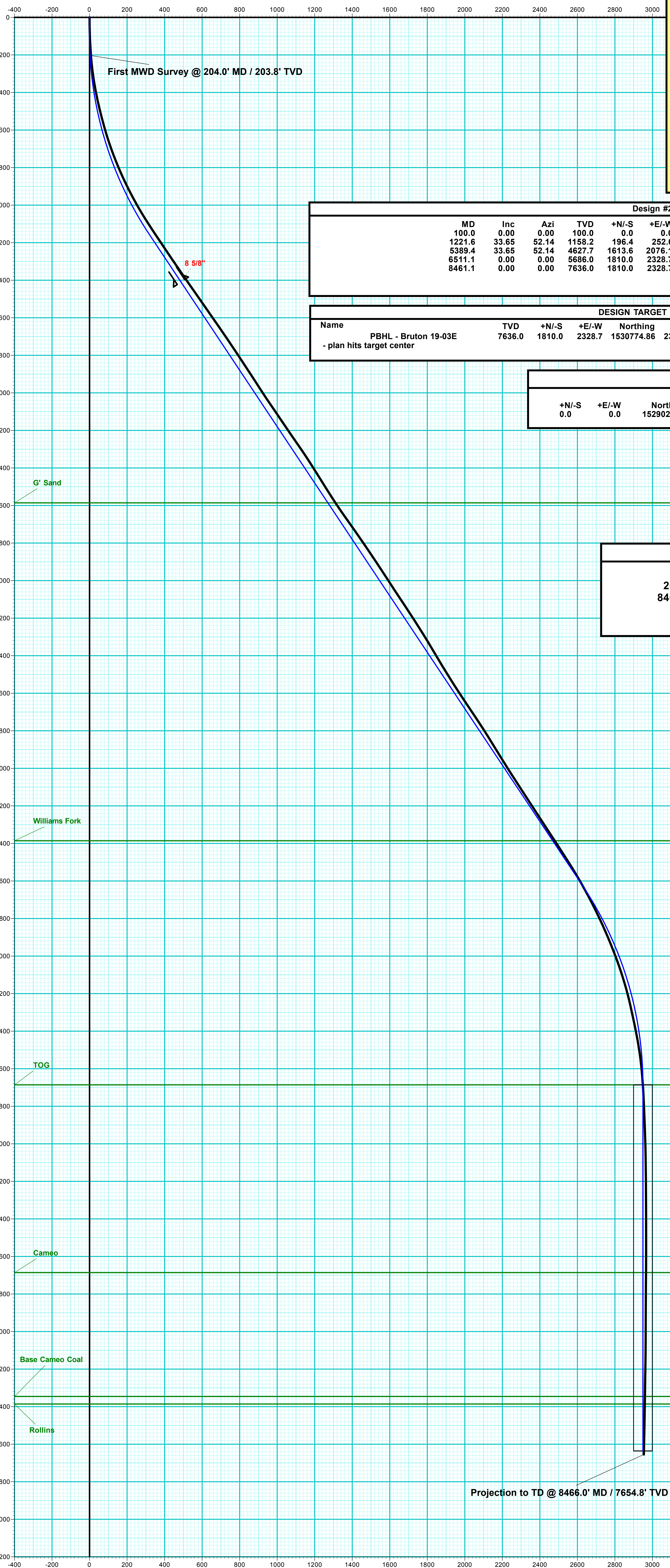


Bruton 19-03E  
Mesa County, CO  
Q171025 & RM-170874  
Design #2

Company Name: Laramie Energy, LLC  
Bruton 19-03E  
Mesa County, CO  
Rig: H&P #290  
Created By: Will Jircik  
Date: 8/27/2017

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



**Azimuths to True North**  
Magnetic North: 9.57°

Strength: 51400.2snT  
Dip Angle: 65.43°  
Date: 8/8/2017  
Model: IGRF2015

Design #2									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.0	KOP (Build 3° / 100)	
1221.6	33.65	52.14	1153.2	196.4	252.6	320.0	320.0	EOB @ 33.65° Inc. / 52.14° Azm	
5389.4	33.65	52.14	4627.7	1613.6	2076.1	2629.4	2629.4	Drop 3° / 100'	
6511.1	0.00	0.00	5686.0	1810.0	2328.7	2949.4	2949.4	EOD @ Vertical	
8461.1	0.00	0.00	7636.0	1810.0	2328.7	2949.4	2949.4	TD @ 8461' MD / 7636' TVD	

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL - Bruton 19-03E - plan hits target center	7636.0	1810.0	2328.7	1530774.86	2346975.58	39.267947	-107.806819
Shape Circle (Radius: 50.0)							

WELL DETAILS: Bruton 19-03E						
+N/-S	+E/-W	Northing	Ground Level: Easting	7262.0 Latitude	Longitude	
0.0	0.0	1529024.79	2344601.47	39.262978	-107.815044	

FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	
2586.0	2936.8	G' Sand	
4386.0	5099.1	Williams Fork	
5686.0	6511.1	TOG	
6686.0	7511.1	Cameo	
7346.0	8171.1	Base Cameo Coal	
7386.0	8211.1	Rollins	

ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation	
204.0	4.80	78.20	203.8	1.7	8.4	7.7	8.5	First MWD Survey @ 204.0' MD / 203.8' TVD	
8466.0	1.50	261.90	7654.8	1832.6	2317.3	2954.2	2986.3	Projection to TD @ 8466.0' MD / 7654.8' TVD	

