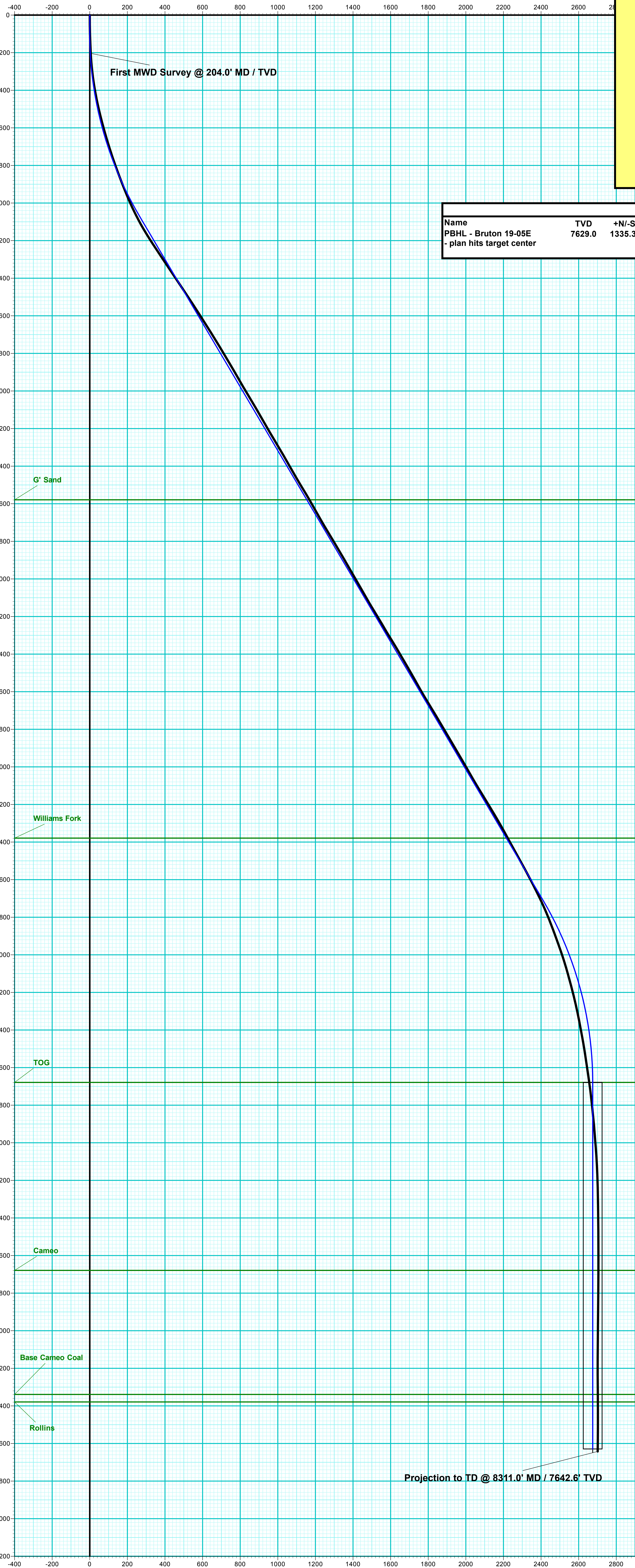


Bruton 19-05E
Mesa County, CO
Q171126 & RM-170946
Design #2

Company Name: Laramie Energy, LLC
Bruton 19-05E
Mesa County, CO
Rig: H&P #290
Created By: Will Jircik
Date: 9/18/2017

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: 51393.5snT
Dip Angle: 65.42°
Date: 8/30/2017
Model: IGRF2015

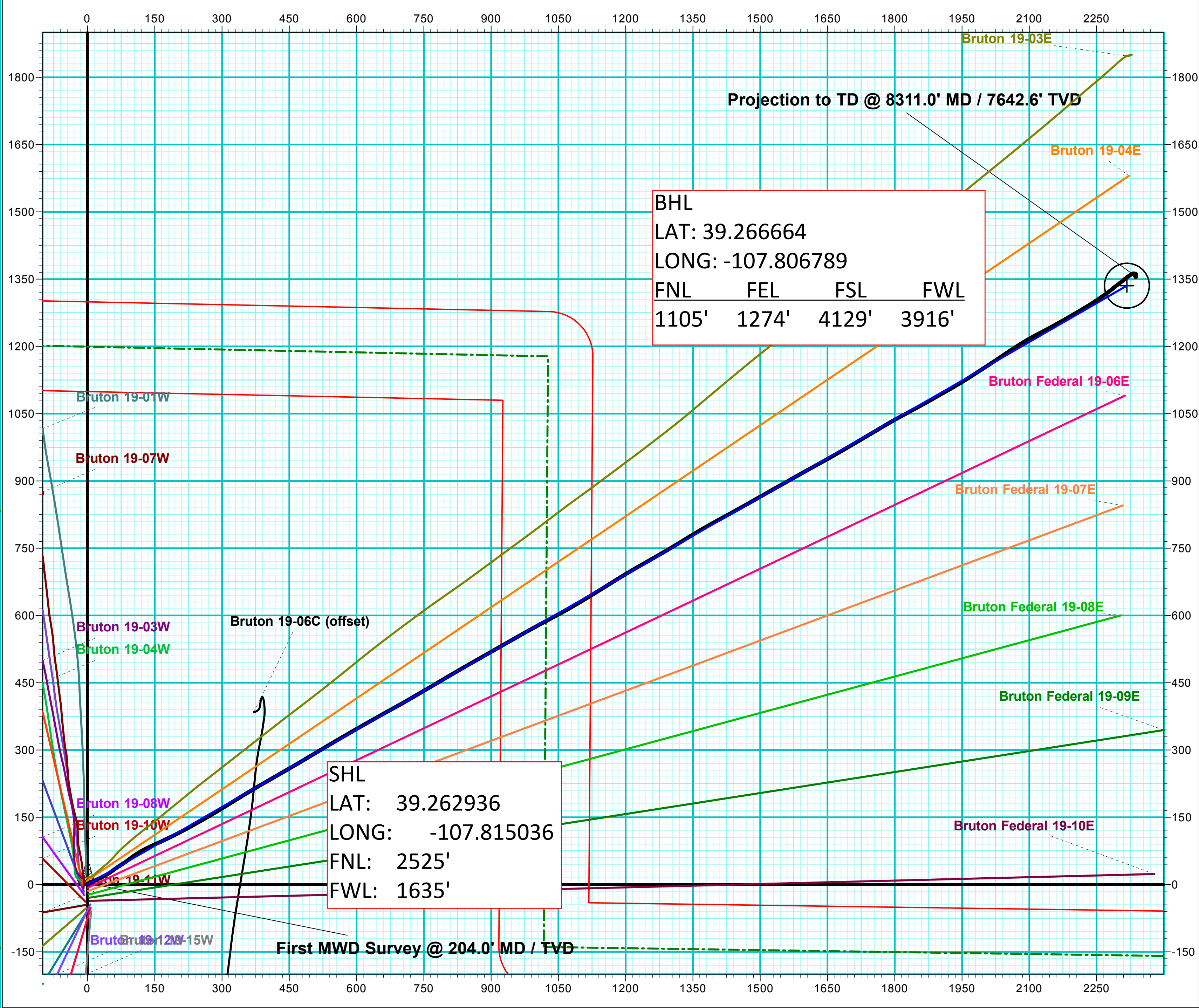
DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - Bruton 19-05E - plan hits target center	7629.0	1335.3	2317.6	1530285.37	2346954.37	39.266602	-107.806850	Circle (Radius: 50.0)

DESIGN # 2 ANNOTATIONS									
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)	
1117.4	30.52	60.05	1070.0	132.1	229.3	264.6	264.6	EOB @ 30.52° Inc. / 60.05° Azm	
5341.9	30.52	60.05	4709.1	1203.2	2088.3	2410.2	2410.2	Drop 3° / 100'	
6359.3	0.00	0.00	5679.0	1335.3	2317.6	2674.8	2674.8	EOD @ Vertical	
8309.3	0.00	0.00	7629.0	1335.3	2317.6	2674.8	2674.8	TD @ 8309' MD / 7629' TVD	

ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation	
204.0	3.00	60.50	203.9	2.6	4.6	5.3	5.3	First MWD Survey @ 204.0' MD / TVD	
8311.0	1.10	285.30	7642.6	1358.0	2335.0	2701.2	2722.4	Projection to TD @ 8311.0' MD / 7642.6' TVD	

FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	
2579.0	2869.2	G' Sand	
4379.0	4958.7	Williams Fork	
5679.0	6359.3	TOG	
6679.0	7359.3	Cameo	
7339.0	8019.3	Base Cameo Coal	
7379.0	8059.3	Rollins	

WELL DETAILS: Bruton 19-05E						
+N/-S	+E/-W	Northing	Ground Level: Easting	7262.0	Latitude	Longitude
0.0	0.0	1529009.52	2344603.48		39.262936	-107.815036



Vertical Section at 60.05° (200 usft/in)