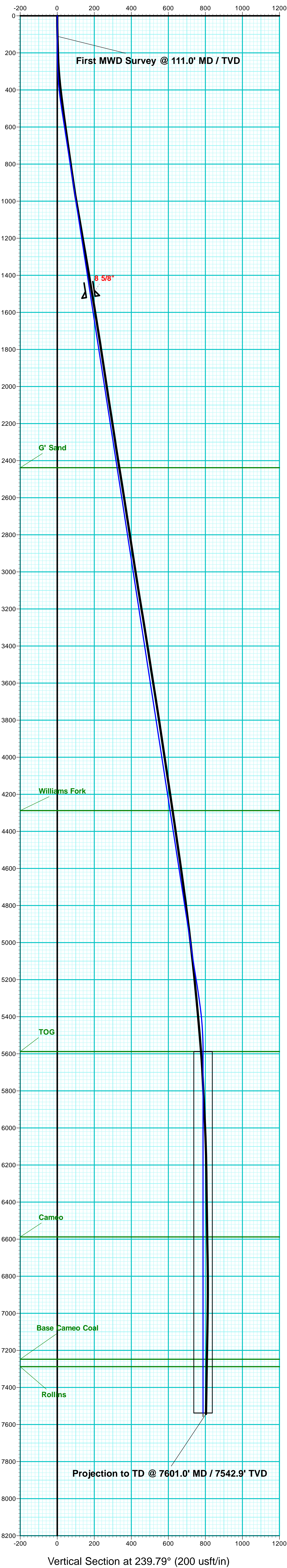


Gunderson 20-06W
Mesa County, CO
Q170836 & RM-170703
Design #4

Company Name: Laramie Energy, LLC
Gunderson 20-06W
Mesa County, CO
Rig: H&P #522
Created By: Will Jircik
Date: 7/8/2017

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: 9.58°

Strength: 51418.8snT
Dip Angle: 65.43°
Date: 6/26/2017
Model: IGRF2015

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2438.0	2462.3	G' Sand
4288.0	4334.2	Williams Fork
5588.0	5647.4	TOG
6588.0	6647.4	Cameo
7248.0	7307.4	Base Cameo Coal
7288.0	7347.4	Rollins

WELL DETAILS: Gunderson 20-06W					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1530308.98	2350221.23	39.266894	-107.795317

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - Gunderson 20-06W	7538.0	-396.3	-680.6	1529930.05	2349530.81	39.265806	-107.797721	Circle (Radius: 50.0)
- plan hits target center								

ANNOTATIONS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
111.0	1.50	246.40	111.0	-0.6	-1.3	1.4	1.5	First MWD Survey @ 111.0' MD / TVD
7601.0	0.90	37.90	7542.9	-397.2	-698.5	803.4	835.0	Projection to TD @ 7601.0' MD / 7542.9' TVD

