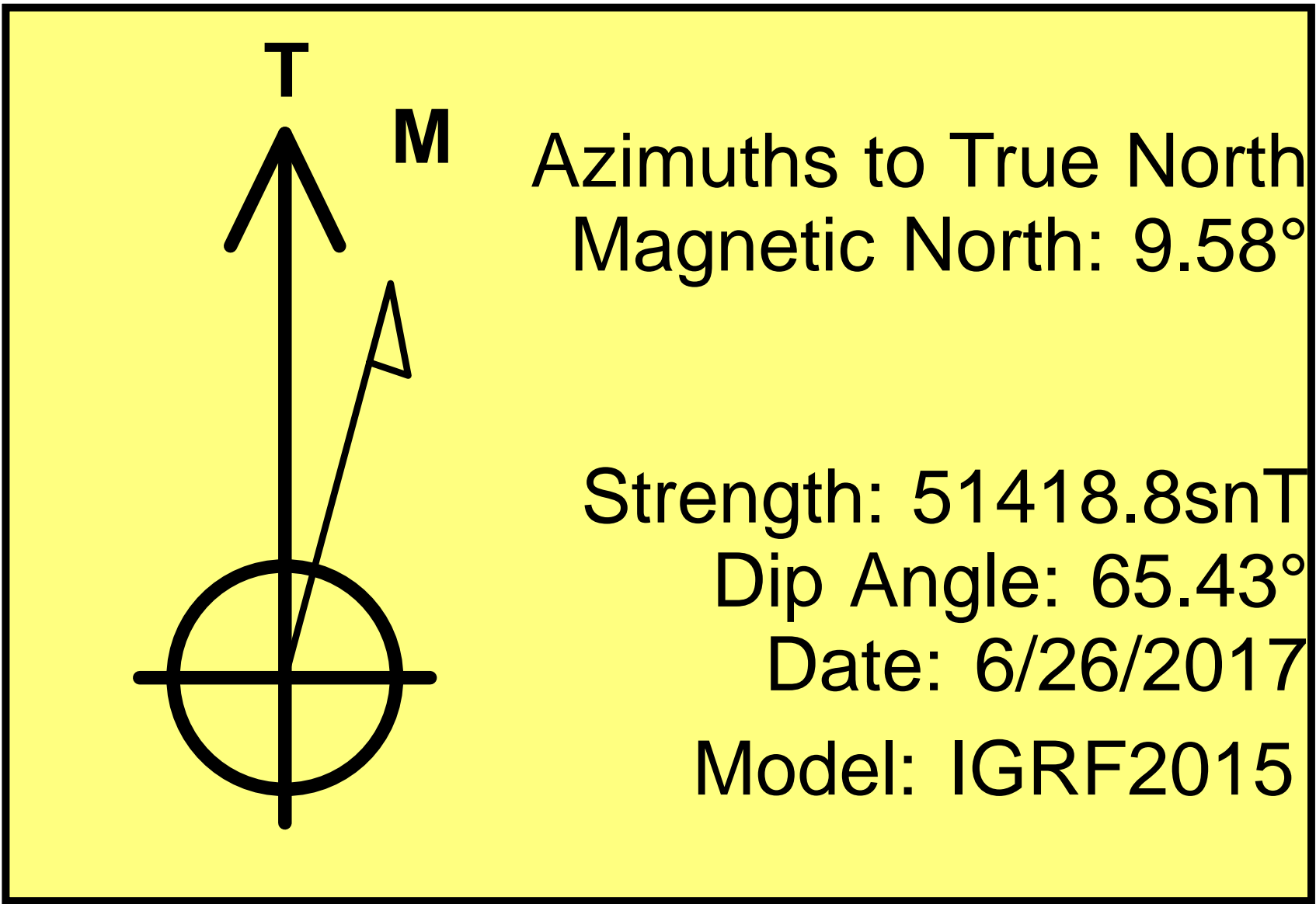
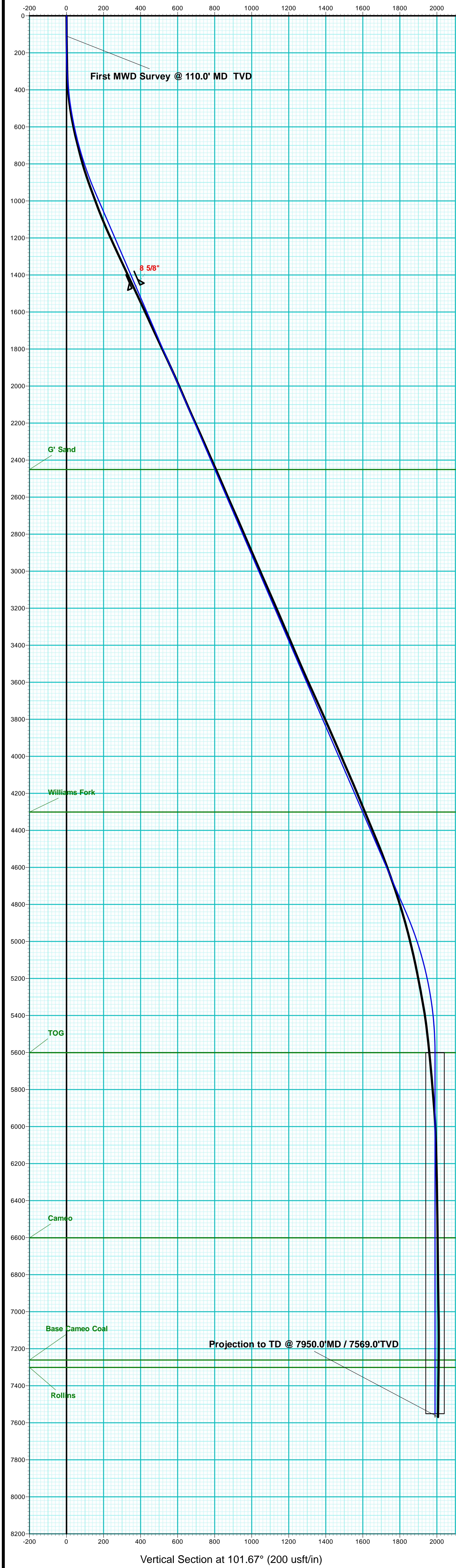


Gunderson BCU 20-06E
Mesa County, CO
Q170835 & RM-170702
Design #4

Company Name: Laramie Energy, LLC
Gunderson BCU 20-06E
Mesa County, CO
Rig: H&P #522
Created By: Will Jircik
Date: 7/05/2017

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



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2451.0	2805.5	G' Sand
4301.0	4620.4	Williams Fork
5601.0	5990.2	TOG
6601.0	6990.2	Cameo
7261.0	7650.2	Base Cameo Coal
7301.0	7690.2	Rollins

WELL DETAILS: Gunderson BCU 20-06E					
+N/-S	+E/-W	Ground Level:	7146.0	Latitude	Longitude
0.0	0.0	Northing	2350231.40	39.266892	-107.795281

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL - Gunderson BCU 20-06E - plan hits target center	7551.0	-402.4	1949.0	1529856.51	2352169.64	39.265787	-107.788397
		Shape Circle (Radius: 50.0)					

ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation	
110.0	0.70	83.10	110.0	0.1	0.7	0.6	0.7	First MWD Survey @ 110.0' MD TVD	
7950.0	0.70	313.30	7569.0	-392.9	1967.7	2006.4	2019.9	Projection to TD @ 7950.0' MD / 7569.0' TVD	

