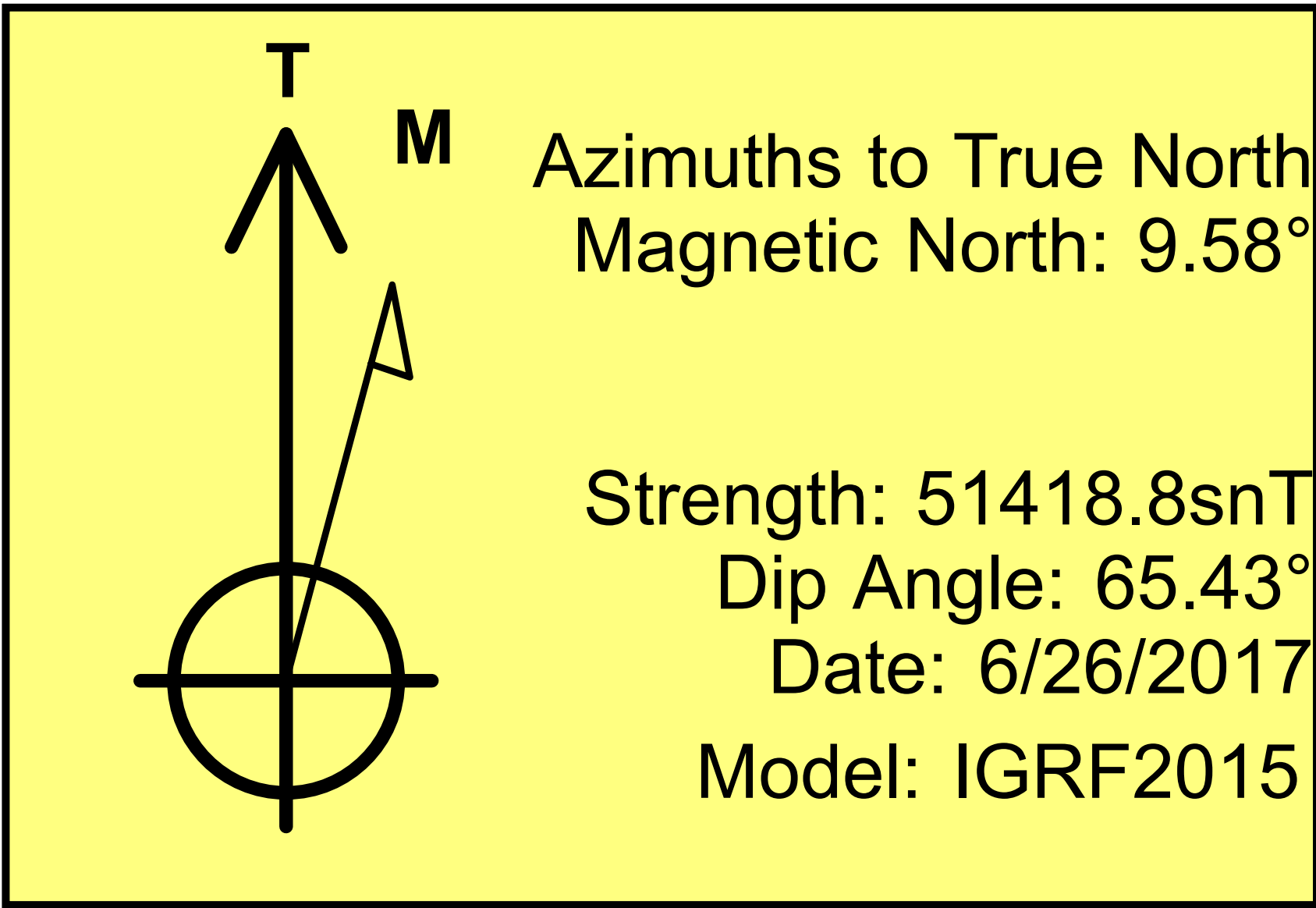


Gunderson BCU 20-05E  
Mesa County, CO  
Q170834 & RM-170701  
Design #4

Company Name: Laramie Energy, LLC  
Gunderson BCU 20-05E  
Mesa County, CO  
Rig: H&P #522  
Created By: Will Jircik  
Date: 6/30/2017

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
2453.0	2599.4	G' Sand
4303.0	4618.1	Williams Fork
5603.0	5988.9	TOG
6603.0	6988.9	Cameo
7263.0	7648.9	Base Cameo Coal
7303.0	7688.9	Rollins

WELL DETAILS: Gunderson BCU 20-05E						
+N/-S	+E/-W	Northing	Ground Level:	7146.0	Latitude	Longitude
0.0	0.0	1530317.83	Easting	2350231.65	39.266919	-107.795281

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - Gunderson BCU 20-05E - plan hits target center	7553.0	-167.5	1949.3	1530101.18	2352176.09	39.266459	-107.788396	Circle (Radius: 50.0)

ANNOTATIONS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
111.0	1.70	106.00	111.0	-0.5	1.6	1.6	1.6	First MWD survey @ 111.0' MD/ TVD
7949.0	1.30	223.80	7569.0	-143.0	1968.0	1973.2	2028.6	Projection to TD @ 7949.0'MD / 7569.0'TVD

