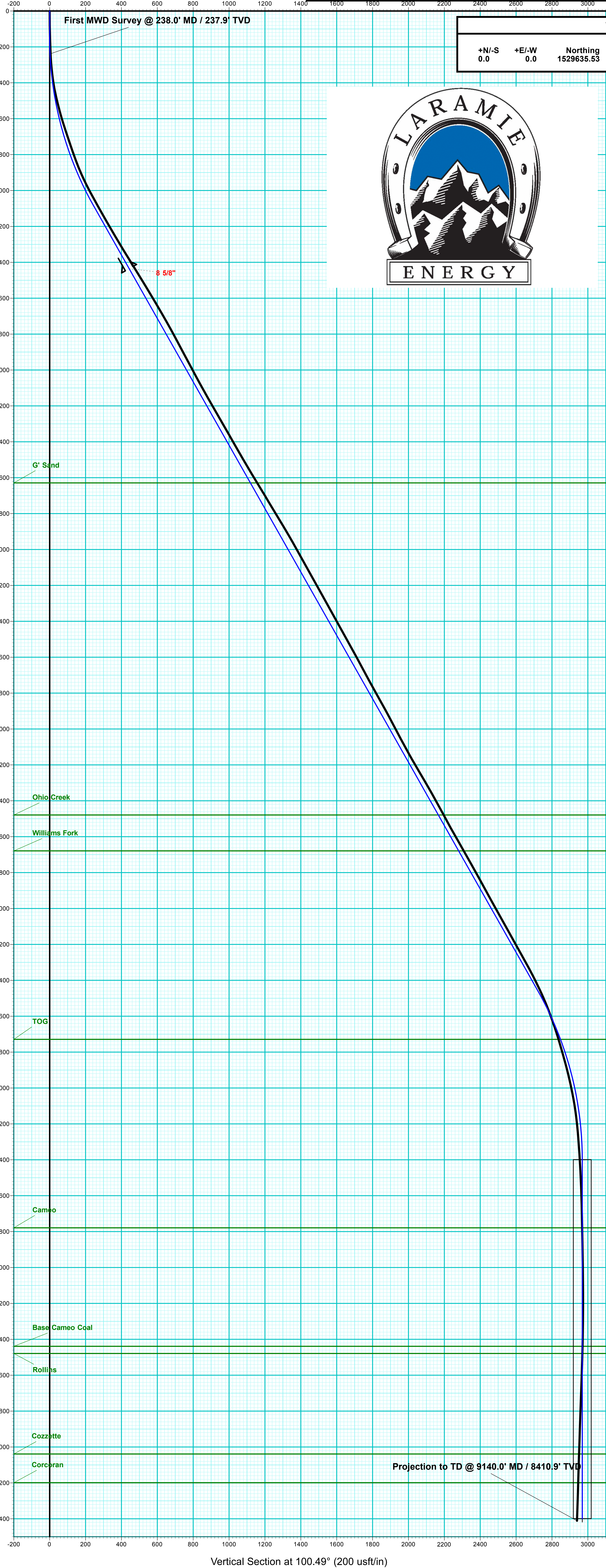
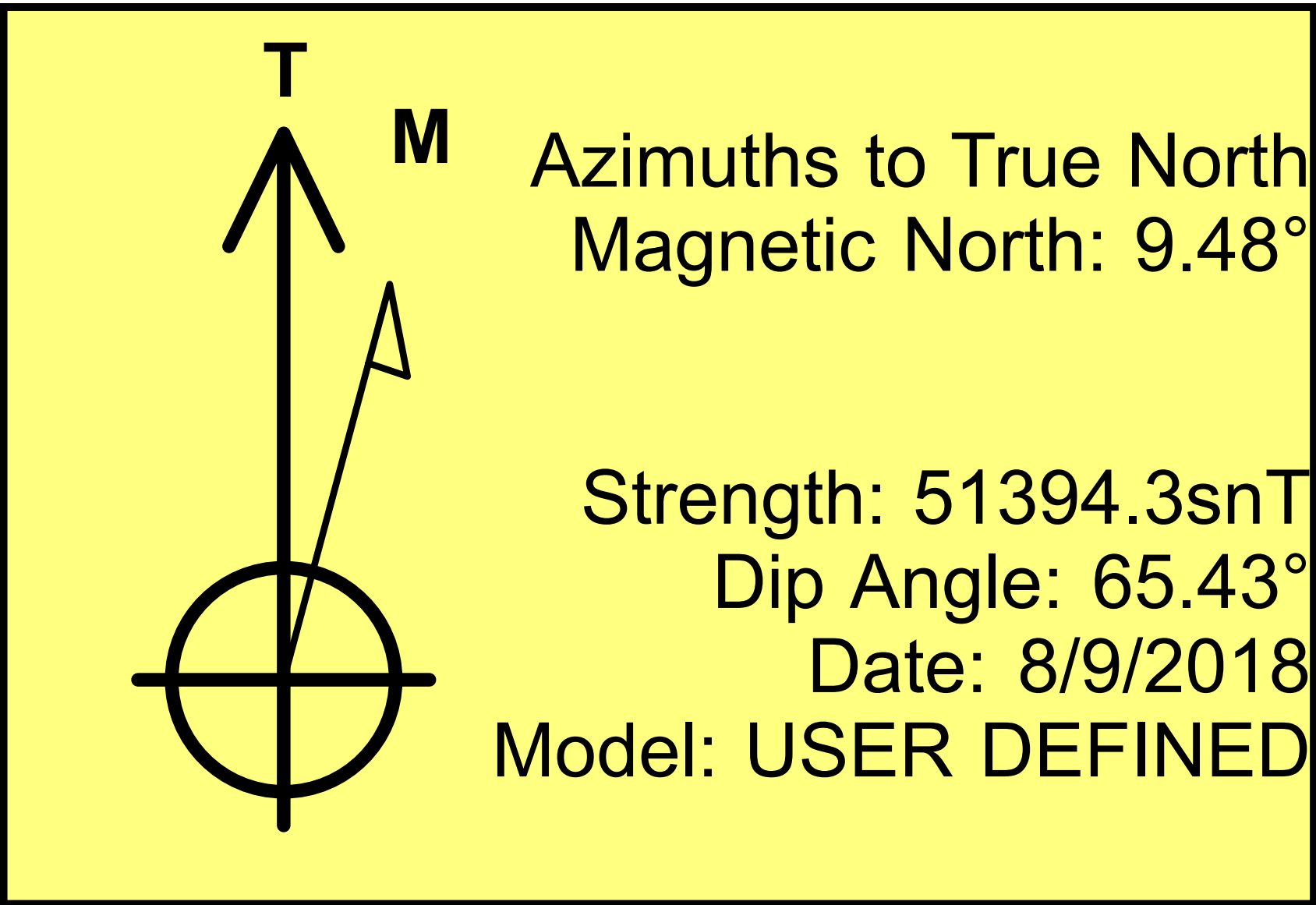


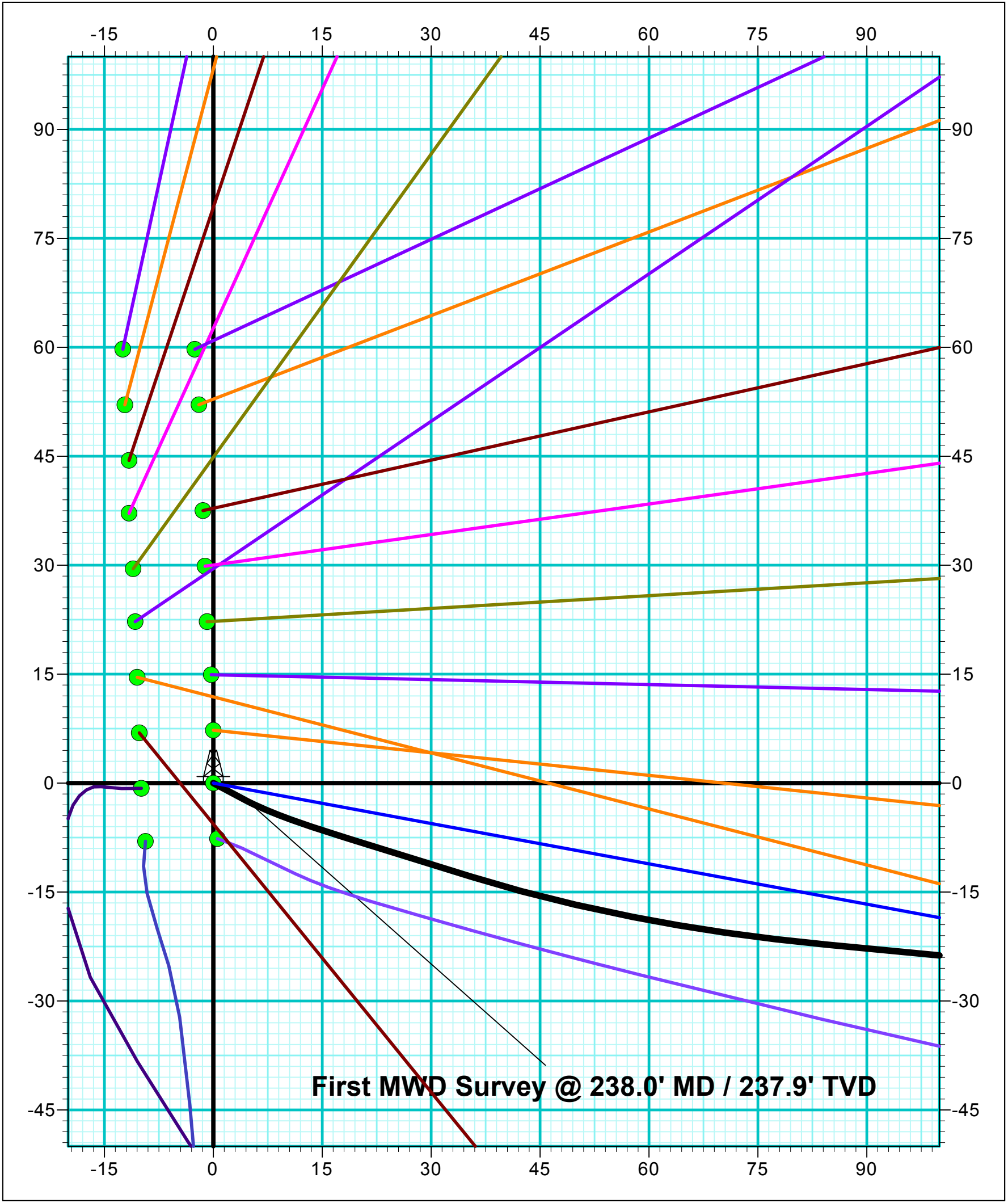
Company Name: Laramie Energy, LLC
BCU 0993-21-09E
Mesa County, CO
Rig: H&P #522
Created By: Will Jircik
Date: 09/03/2018

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

BCU 0993-21-09E
Mesa County, CO
Q181114 & RM-180933
Design #2



FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	
2629.0	2901.5	G' Sand	
4479.0	5027.6	Ohio Creek	
4679.0	5257.4	Williams Fork	
5729.0	6452.0	TOG	
6779.0	7516.6	Cameo	
7439.0	8176.6	Base Cameo Coal	
7479.0	8216.6	Rollins	
8039.0	8776.6	Cozzette	
8199.0	8936.6	Corcoran	



DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - BCU 0993-21-09E	8399.0	-540.7	2919.4	1529021.76	2357413.40	39.263857	-107.769808	Circle (Radius: 50.0)

DESIGN ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.0	KOP/ (Build 3.00°/100')	
1134.1	29.52	100.49	1091.2	-45.2	243.9	248.0	248.0	EOB @ 29.52° Inc / 100.49° Azm	
6152.5	29.52	100.49	5457.8	-495.5	2675.5	2721.0	2721.0	Drop @ 3.00°/100'	
7136.6	0.00	0.00	6399.0	-540.7	2919.4	2969.0	2969.0	EOD @ Vertical	
9136.6	0.00	0.00	8399.0	-540.7	2919.4	2969.0	2969.0	TD @ 9136.6' MD / 8399.0' TVD	

ANNOTATIONS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
238.0	2.60	118.00	237.9	-2.5	4.8	5.2	5.4	First MWD Survey @ 238.0' MD / 237.9' TVD
9140.0	2.00	284.23	8410.9	-526.9	2892.1	2939.7	3015.0	Projection to TD @ 9140.0' MD / 8410.9' TVD

