

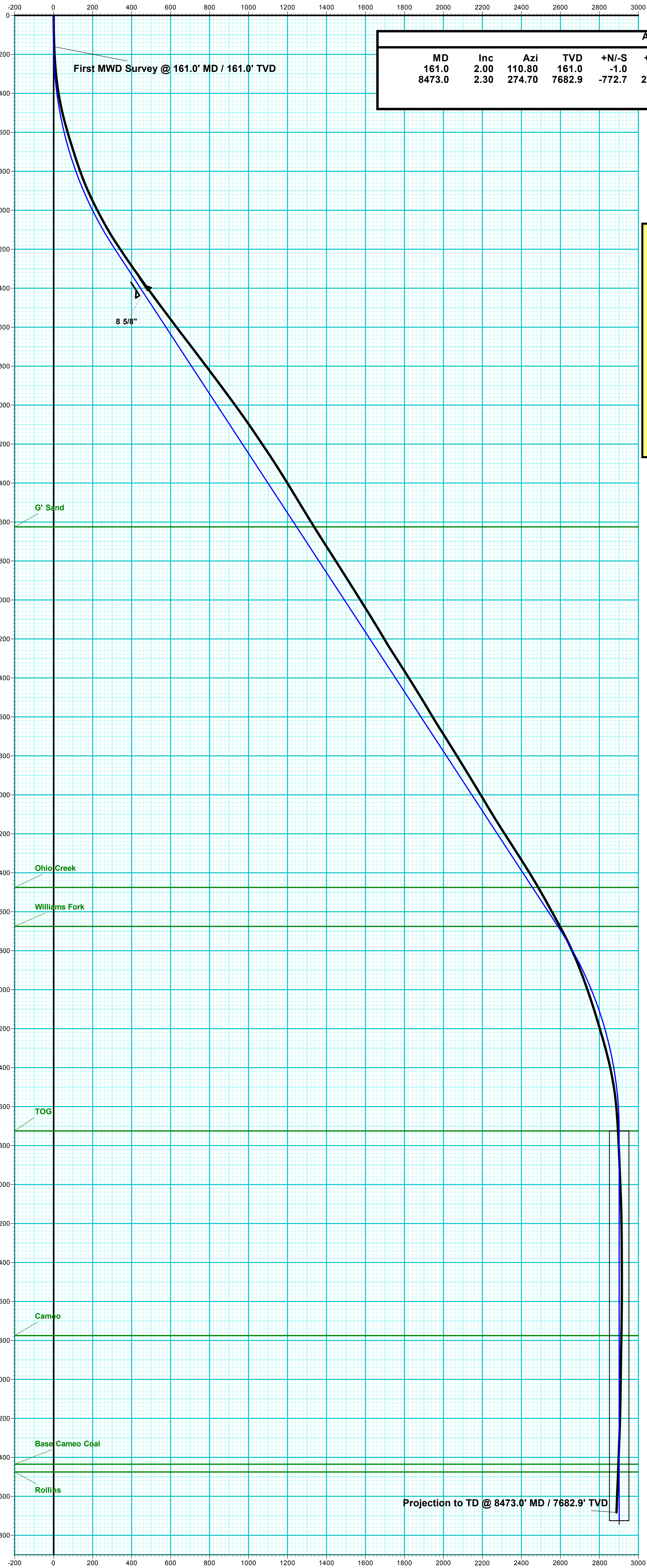
Company Name: Laramie Energy, LLC
BCU 0993-21-10E
Mesa County, CO
Rig: H&P #522
Created By: Will Jircik
Date: 08/23/2018

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 0993-21-10E
Mesa County, CO
Q181111 & RM-180930
Design #2

WELL DETAILS: BCU 0993-21-10E					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1529627.88	2354508.90	39.265321	-107.780117



ANNOTATIONS						
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSecDeparture
161.0	2.00	110.80	161.0	-1.0	2.6	2.8
8473.0	2.30	274.70	7682.9	-772.7	2783.0	2888.0

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2625.0	2964.4	G' Sand
4475.0	5174.9	Ohio Creek
4675.0	5413.9	Williams Fork
5725.0	6525.6	TOG
6775.0	7575.6	Cameo
7435.0	8235.6	Base Cameo Coal
7475.0	8275.6	Rollins

T

M

Azimuths to True North

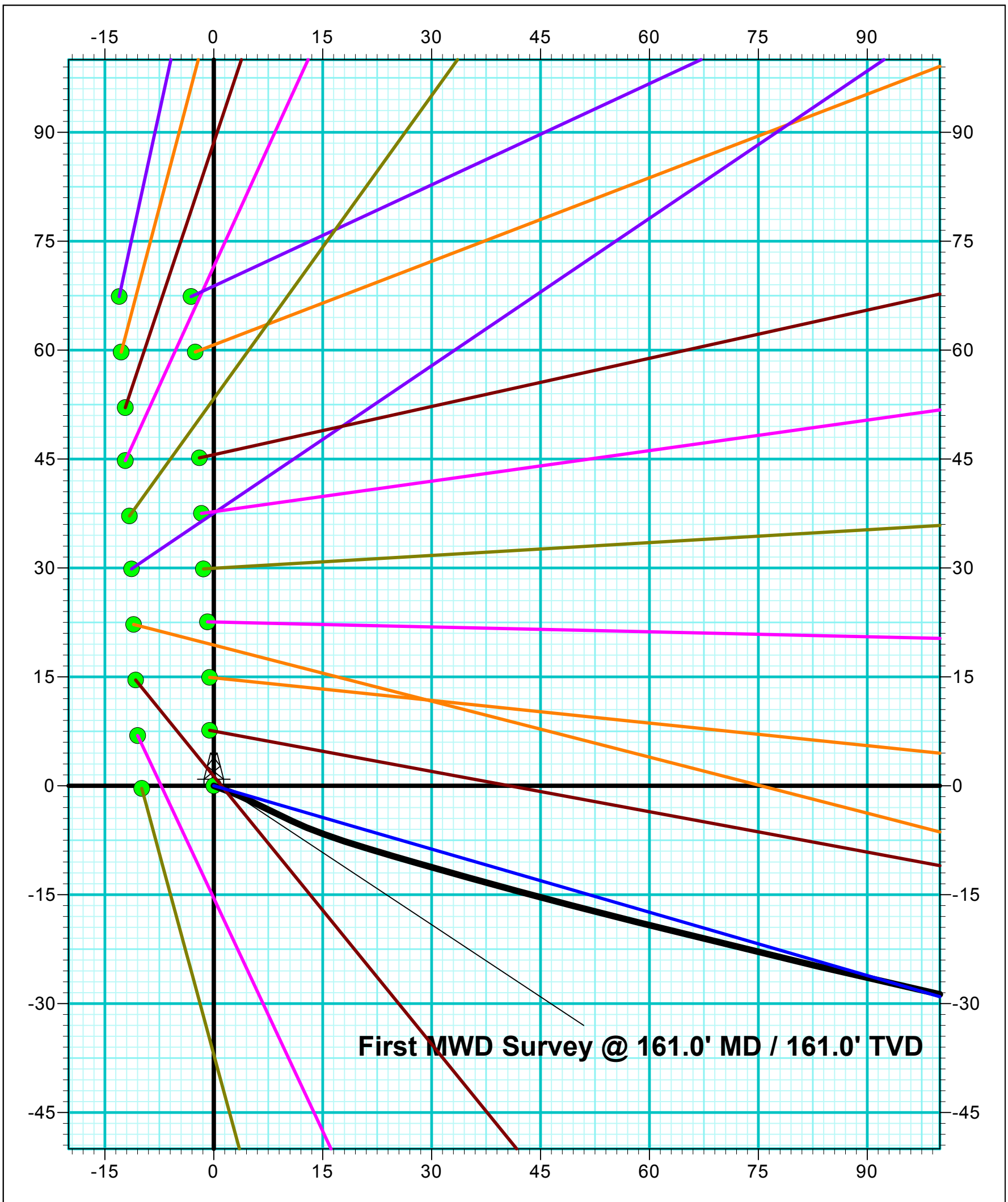
Magnetic North: 9.48°

Strength: 51394.3snT

Dip Angle: 65.43°

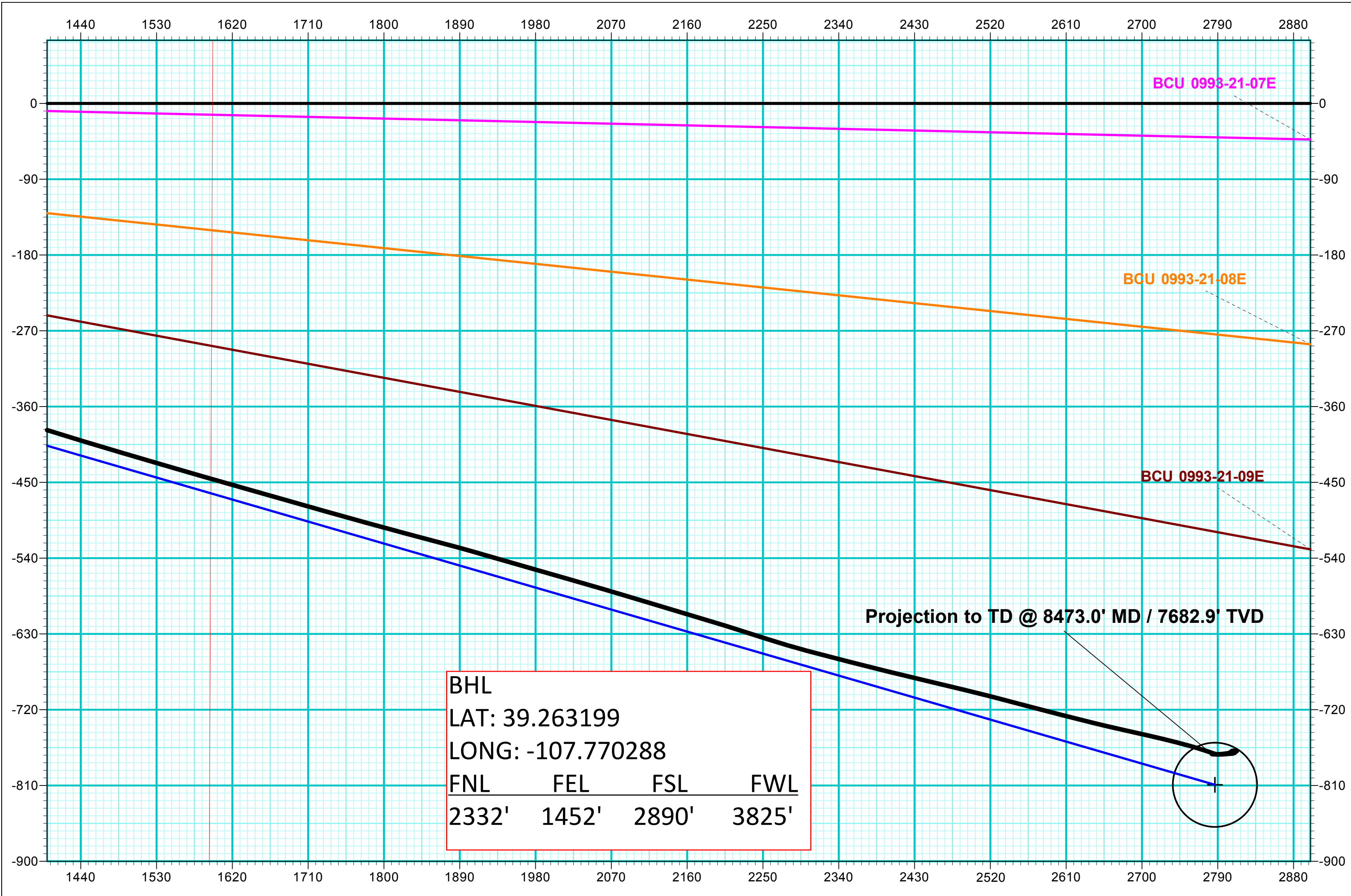
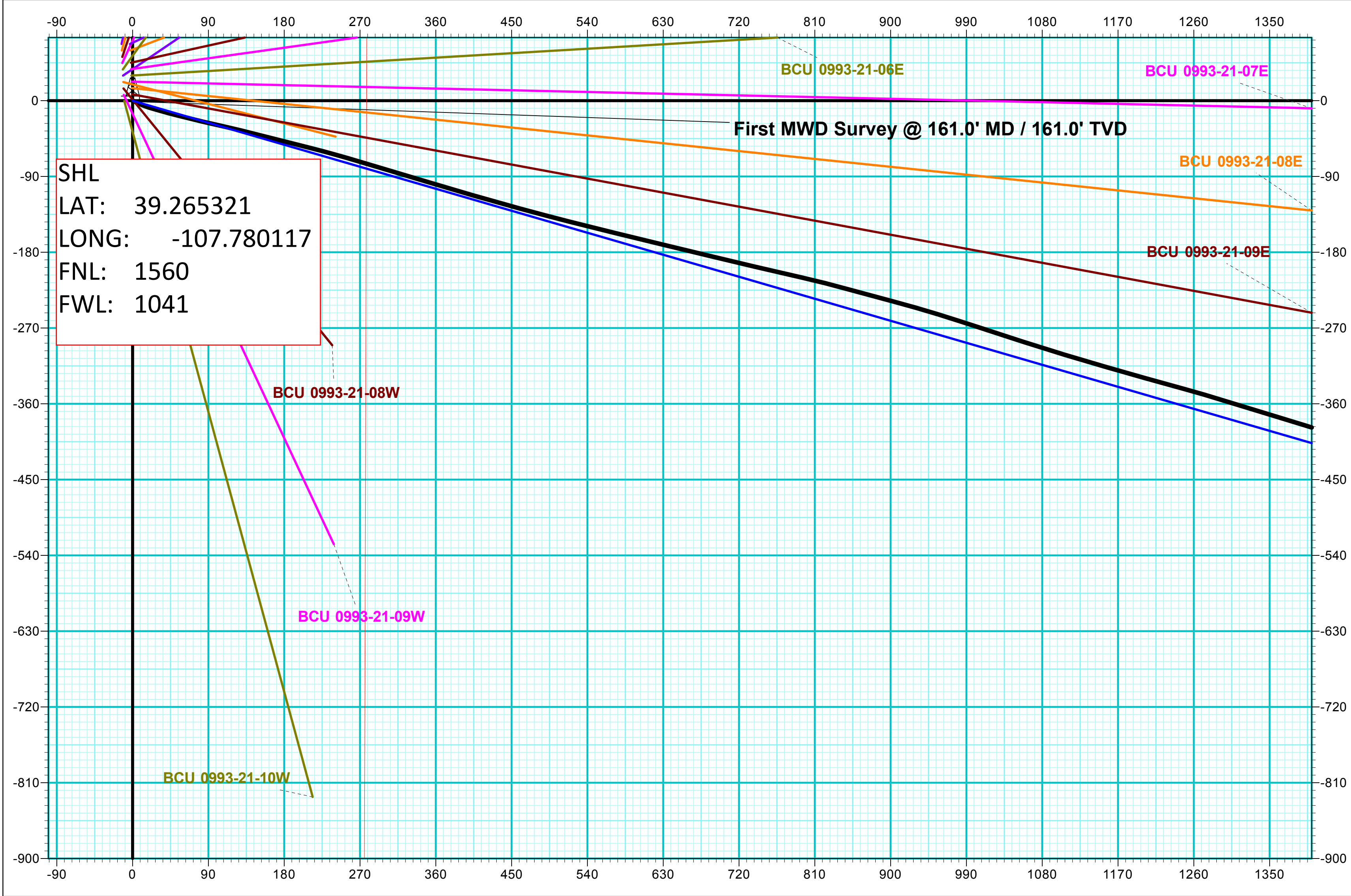
Date: 8/9/2018

Model: USER DEFINED



DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - BCU 0993-21-10E	7725.0	-809.1	2786.6	1528749.08	2357274.32	39.263099	-107.770275	Circle (Radius: 50.0)

DESIGN ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSecDeparture	Annotation		
150.0	0.00	0.00	150.0	0.0	0.0	0.0	KOP/ (Build 3.00°/100')		
1256.2	33.18	106.19	1195.3	-86.9	299.1	311.5	EOB @ 33.18° Inc / 106.19° Azm		
5419.5	33.18	106.19	4679.7	-722.3	2487.5	2590.2	Drop @ 3.00°/100'		
6525.6	0.00	0.00	5725.0	-809.1	2786.6	2901.7	EOD @ Vertical		
8525.6	0.00	0.00	7725.0	-809.1	2786.6	2901.7	TD @ 8525.6' MD / 7725.0' TVD		



Vertical Section at 106.19° (200 usft/in)