

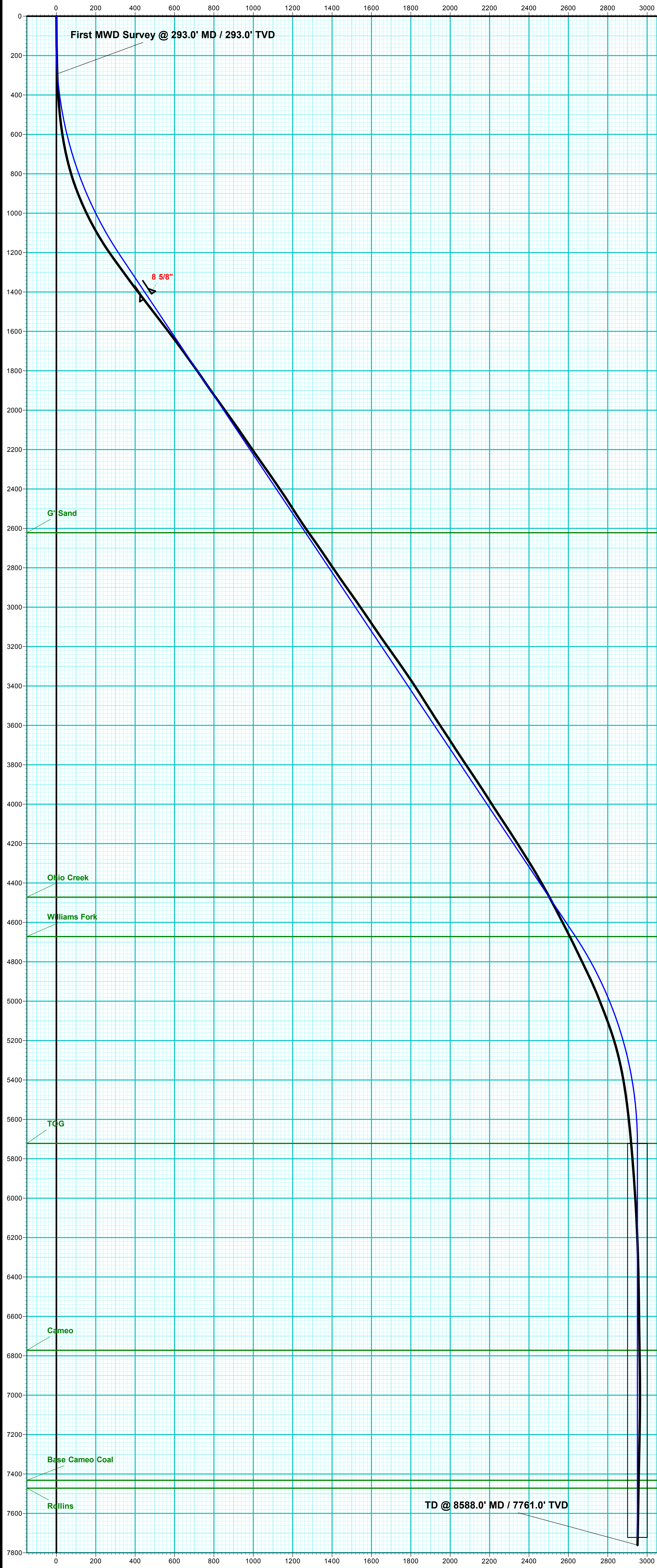
Company Name: Laramie Energy, LLC  
BCU 0993-21-05E  
Mesa County, CO  
Rig: H&P #522  
Created By: Will Jircik  
Date: 10/04/2018

BCU 0993-21-05E  
Mesa County, CO  
Q181279 & RM-181073  
Design #2



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	

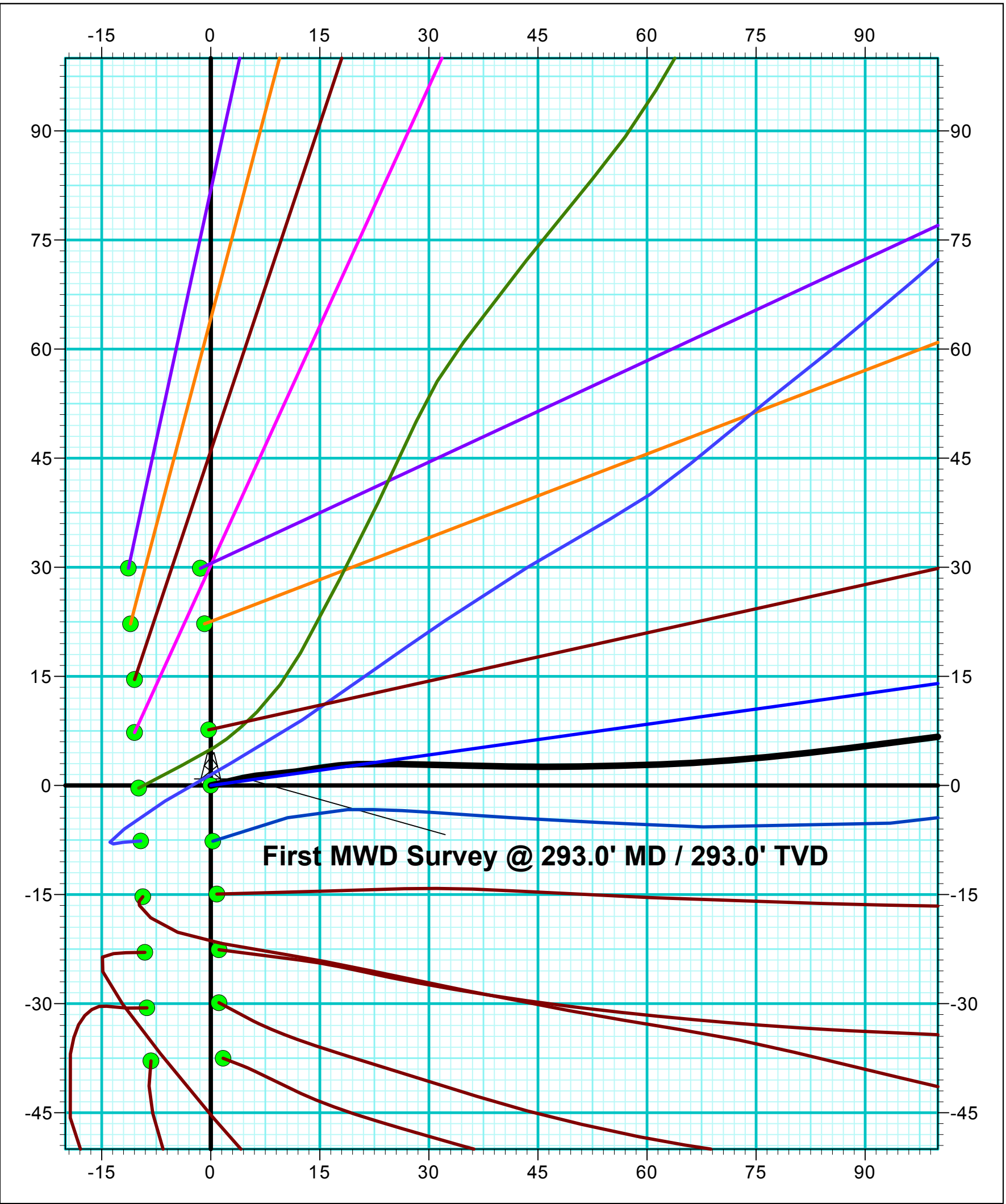
WELL DETAILS: BCU 0993-21-05E					
7257.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1529665.42	2354508.14	39.265424	-107.780123



FORMATION TOP DETAILS		
TVDPATH	MDPATH	Formation
2622.0	2972.4	G' Sand
4472.0	5198.0	Ohio Creek
4672.0	5438.5	Williams Fork
5722.0	6550.2	TOG
6772.0	7600.2	Cameo
7432.0	8260.2	Base Cameo Coal
7472.0	8300.2	Rollins

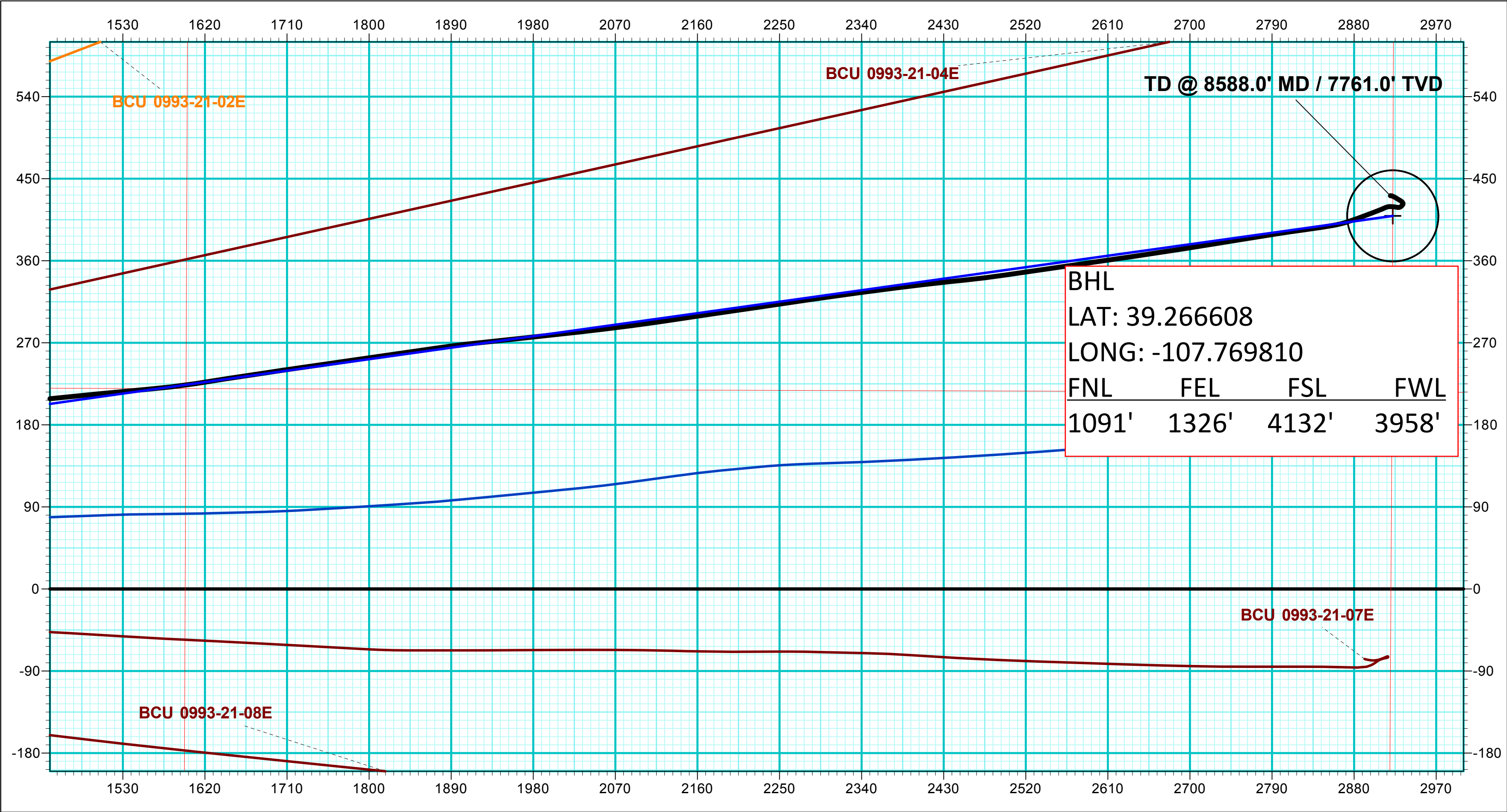
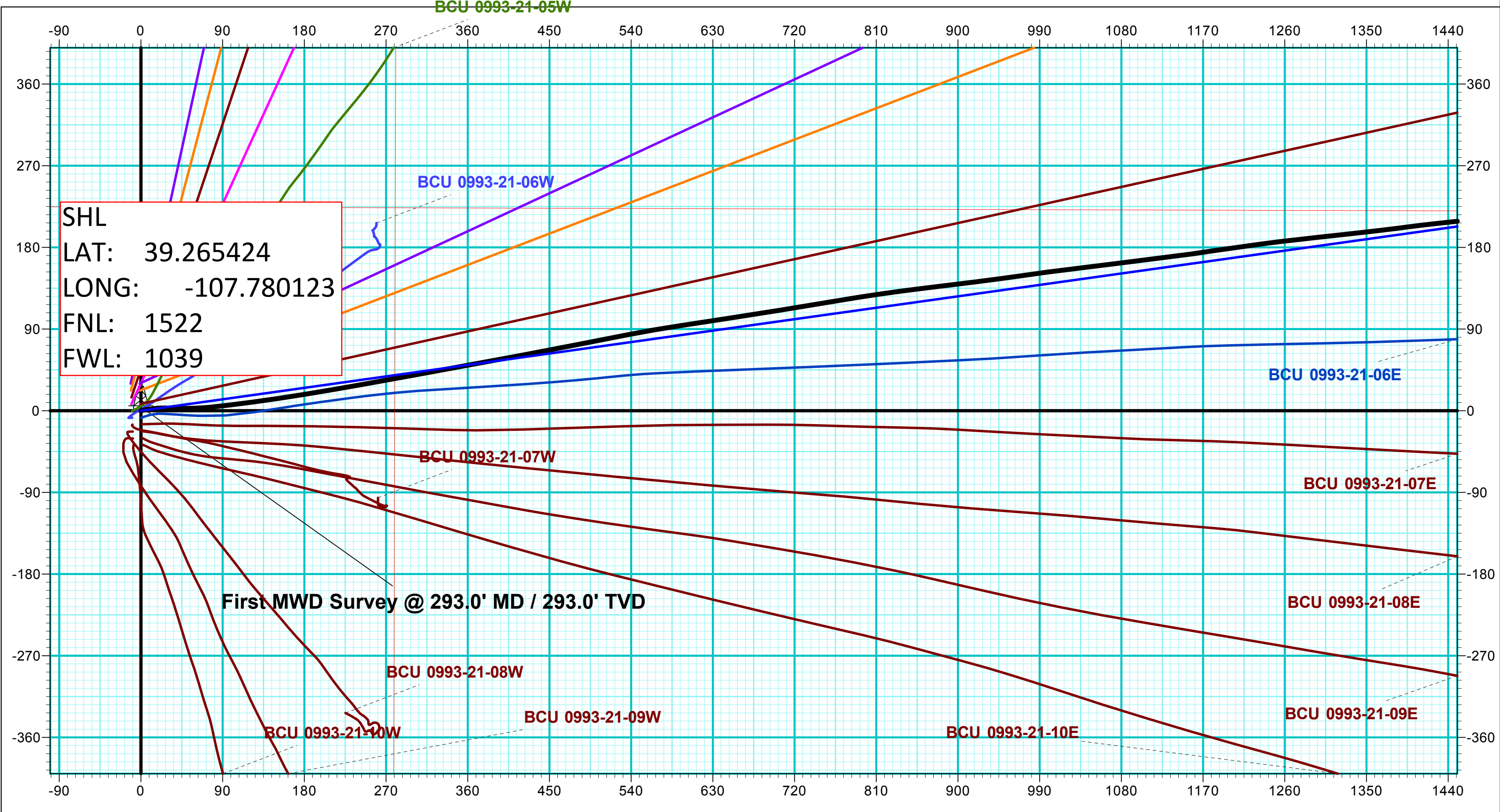
**Azimuths to True North**  
Magnetic North: 9.47°

**Strength: 51381.9snT**  
**Dip Angle: 65.42°**  
**Date: 9/18/2018**  
**Model: USER DEFINED**



DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - BCU 0993-21-05E	7722.0	409.2	2922.4	1530001.16	2357439.86	39.266547	-107.769801	Circle (Radius: 50.0)

DESIGN ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.0	KOP/ (Build 3.00°/100')	
1275.8	33.77	82.03	1211.7	44.7	319.2	322.3	322.3	EOB @ 33.77° Inc / 82.03° Azm	
5424.5	33.77	82.03	4660.3	364.5	2603.2	2628.6	2628.6	Drop @ 3.00°/100'	
6550.2	0.00	0.00	5722.0	409.2	2922.4	2950.9	2950.9	EOD @ Vertical	
8550.2	0.00	0.00	7722.0	409.2	2922.4	2950.9	2950.9	TD @ 8550.2' MD / 7722.0' TVD	



ANNOTATIONS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
293.0	1.80	77.00	293.0	1.0	4.5	4.6	4.6	First MWD Survey @ 293.0' MD / 293.0' TVD
8588.0	1.10	277.60	7761.0	431.3	2919.8	2951.4	2985.5	TD @ 8588.0' MD / 7761.0' TVD