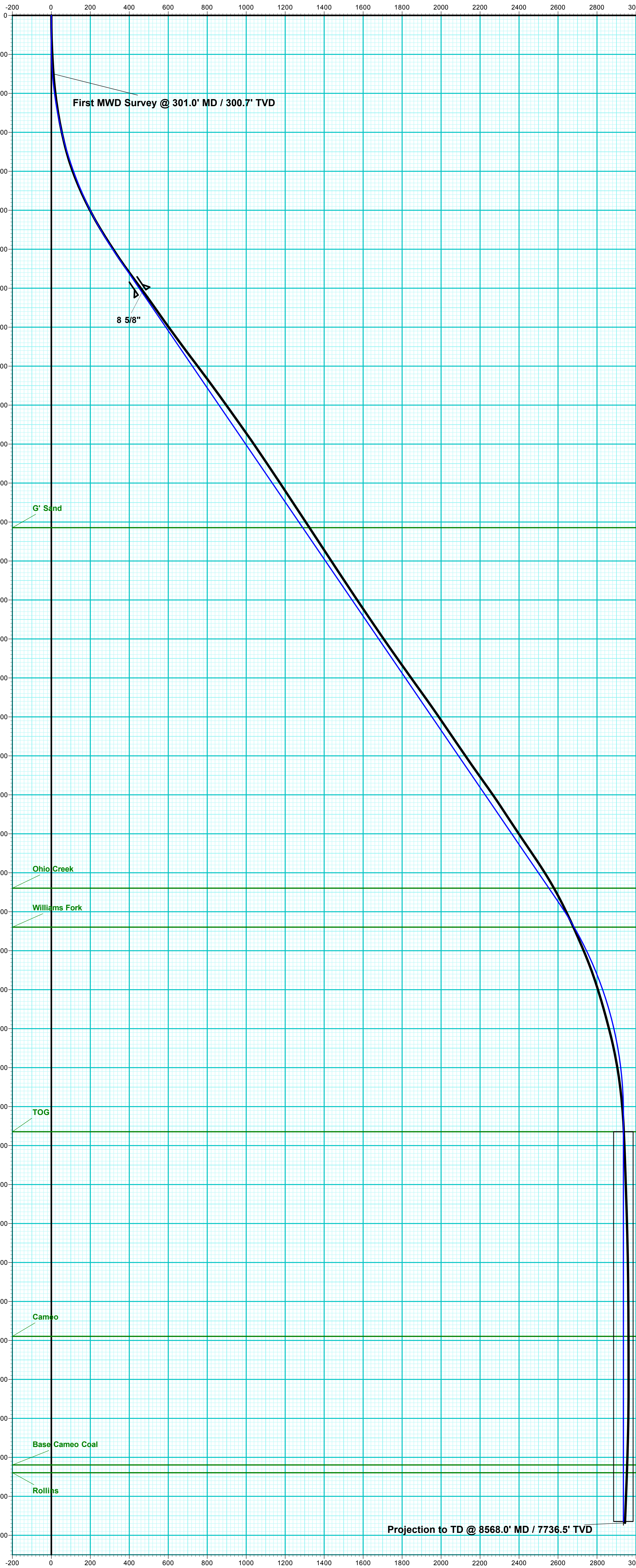


Company Name: Laramie Energy, LLC
BCU 0993-21-08E
Mesa County, CO
Rig: H&P #522
Created By: Will Jircik
Date: 09/07/2018

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 0993-21-08E
Mesa County, CO
Q181186 & RM-181002
Design #2

WELL DETAILS: BCU 0993-21-08E					
+N/-S	+E/-W	Northing	Easting	GL: 7257.0 Latitude	Longitude
0.0	0.0	1529642.82	2354508.71	39.265362	-107.780119



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2629.0	2991.9	G' Sand
4479.0	5232.0	Ohio Creek
4679.0	5470.3	Williams Fork
5729.0	6564.6	TOG
6779.0	7614.6	Cameo
7439.0	8274.6	Base Cameo Coal
7479.0	8314.6	Rollins

T

M

Azimuths to True North

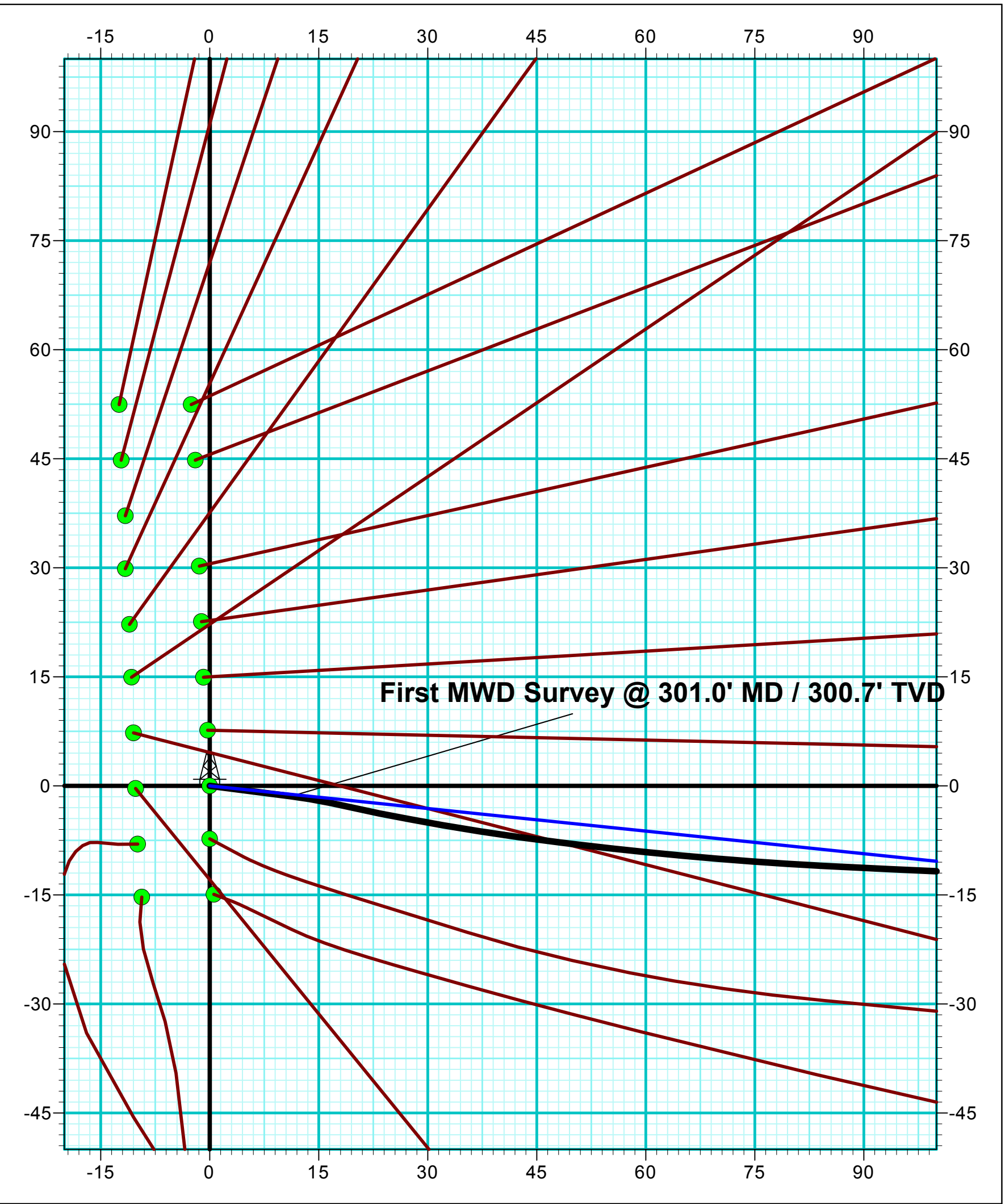
Magnetic North: 9.47°

Strength: 51386.5snT

Dip Angle: 65.43°

Date: 9/3/2018

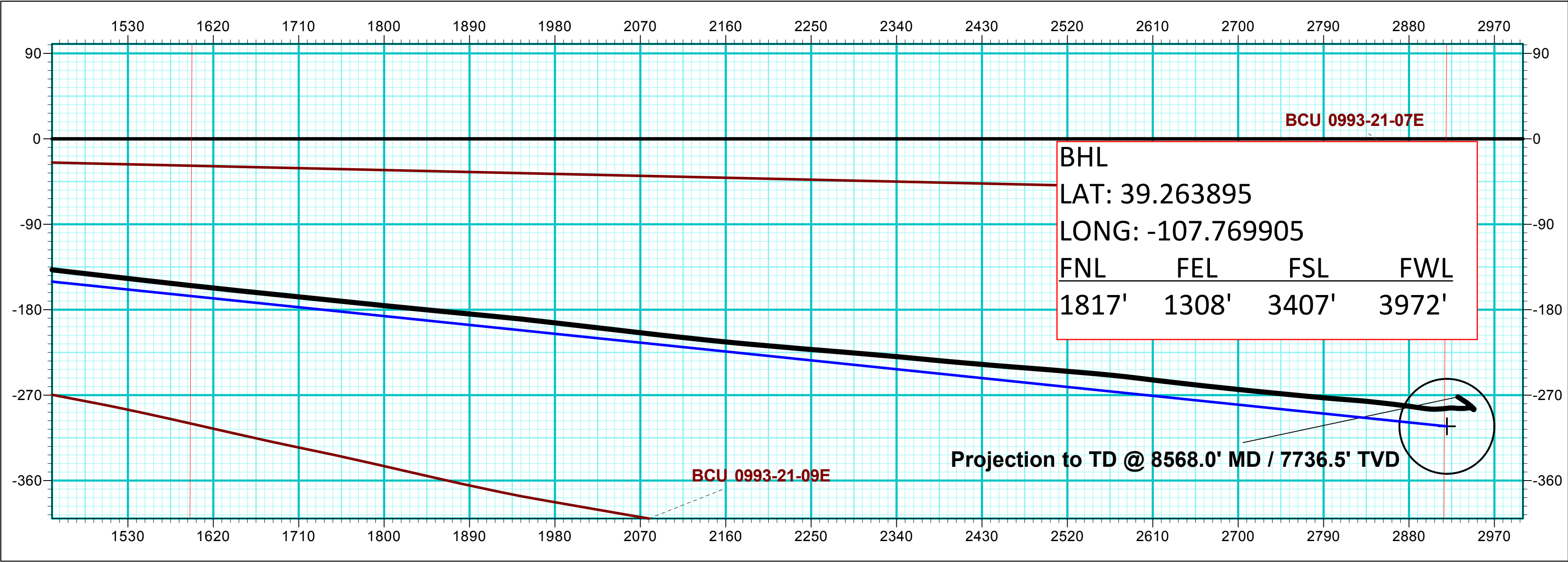
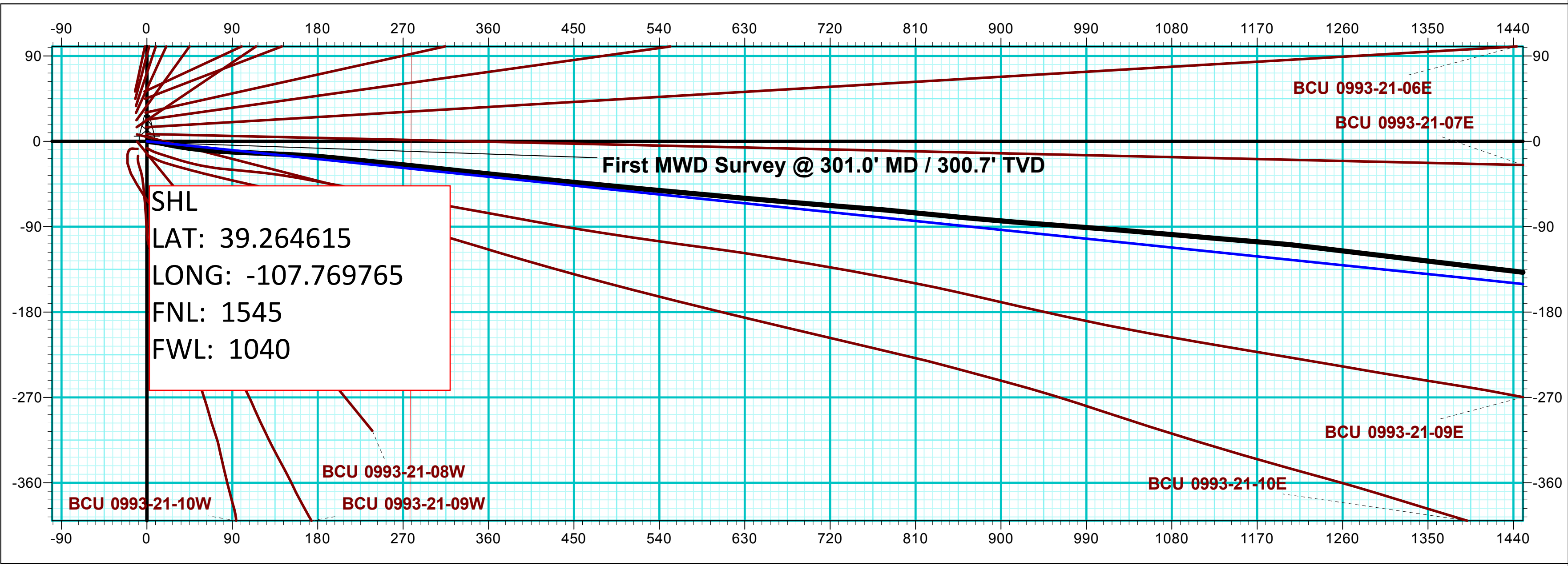
Model: USER DEFINED



DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - BCU 0993-21-08E	7729.0	-302.8	2919.9	1529266.79	2357420.09	39.264530	-107.769806	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')	
1294.2	34.33	95.92	1226.9	-34.3	330.8	332.6	332.6	EOB @ 34.33° Inc / 95.92° Azm	
5320.4	34.33	95.92	4552.1	-268.5	2589.1	2603.0	2603.0	Drop @ 3.00°/100'	
6464.6	0.00	0.00	5629.0	-302.8	2919.9	2935.6	2935.6	EOD @ Vertical	
8564.6	0.00	0.00	7729.0	-302.8	2919.9	2935.6	2935.6	TD @ 8564.6' MD / 7729.0' TVD	

ANNOTATIONS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
301.0	4.30	97.30	300.7	-1.4	11.2	11.3	11.3	First MWD Survey @ 301.0' MD / 300.7' TVD
8568.0	2.40	302.70	7736.5	-271.8	2931.5	2943.9	2985.8	Projection to TD @ 8568.0' MD / 7736.5' TVD



Vertical Section at 95.92° (200 usf/in)