

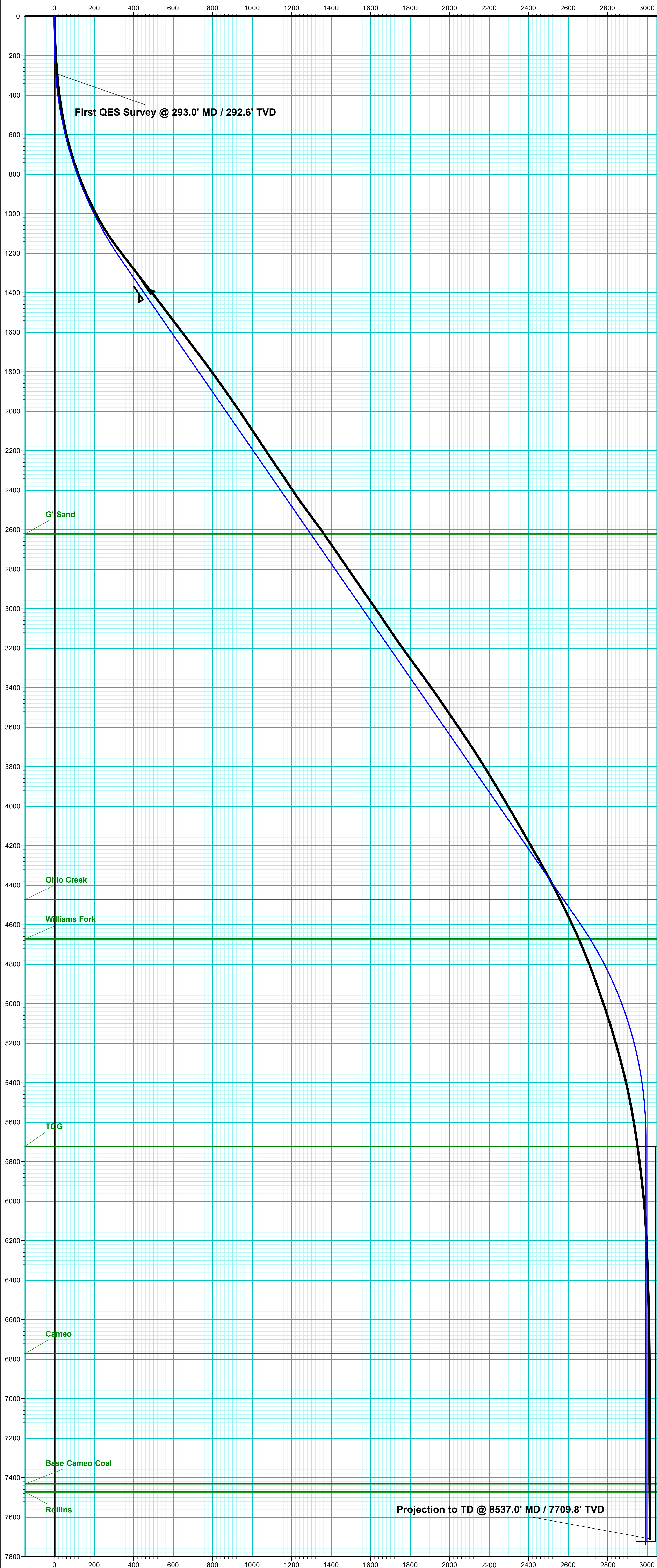
Company Name: Laramie Energy, LLC
BCU 0993-21-04E
Mesa County, CO
Rig: H&P #522
Created By: Will Jircik
Date: 10/9/2018

BCU 0993-21-04E
Mesa County, CO
Q181358 & RM-181141
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 0993-21-04E					
7257.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1529673.08	2354508.05	39.265445	-107.780124



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2622.0	2990.2	G' Sand
4472.0	5239.3	Ohio Creek
4672.0	5480.6	Williams Fork
5722.0	6583.1	TOG
6772.0	7633.1	Cameo
7432.0	8293.1	Base Cameo Coal
7472.0	8333.1	Rollins

T

M

Azimuths to True North

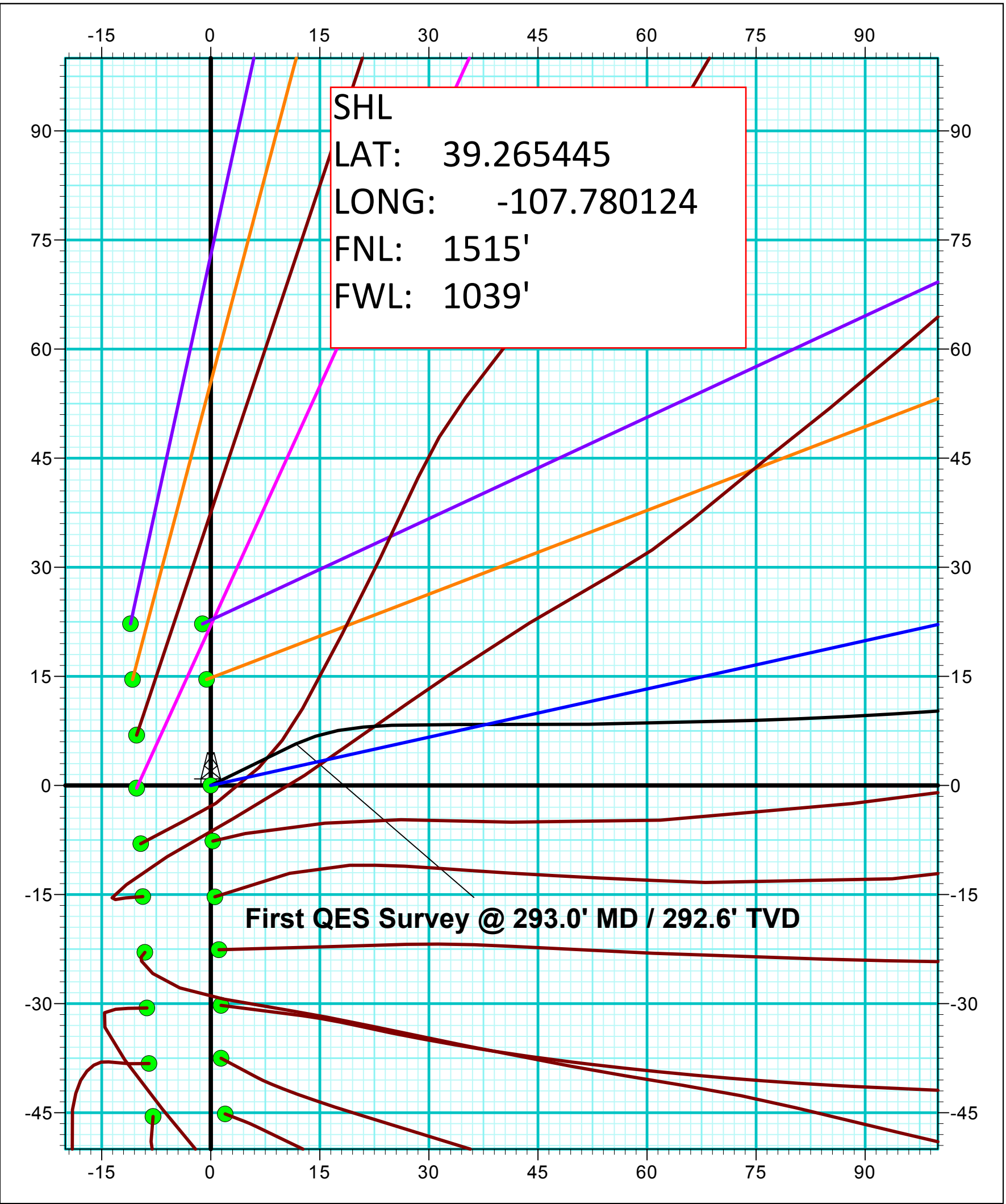
Magnetic North: 9.37°

Strength: 51267.2snT

Dip Angle: 65.39°

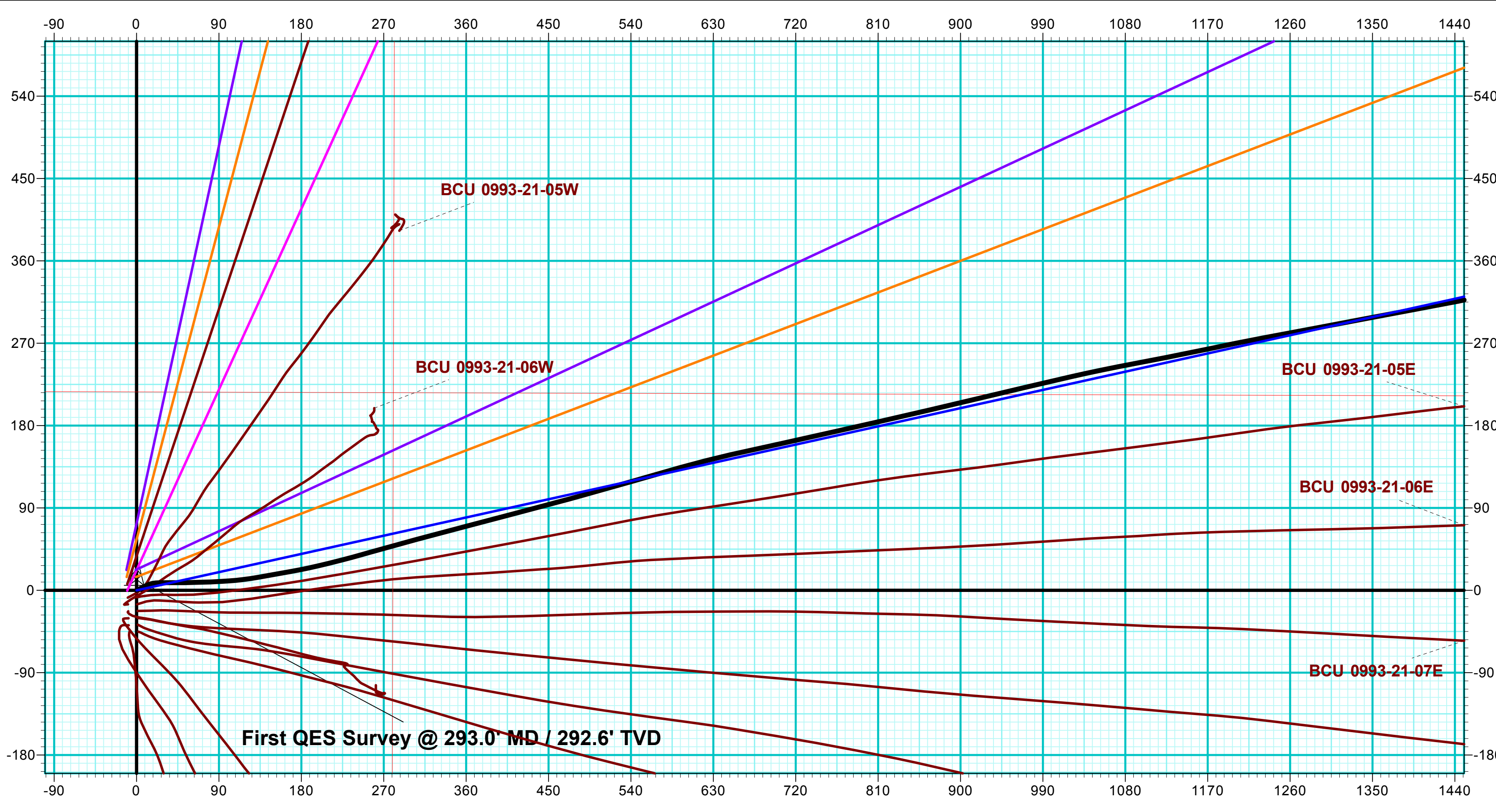
Date: 10/3/2018

Model: USER DEFINED

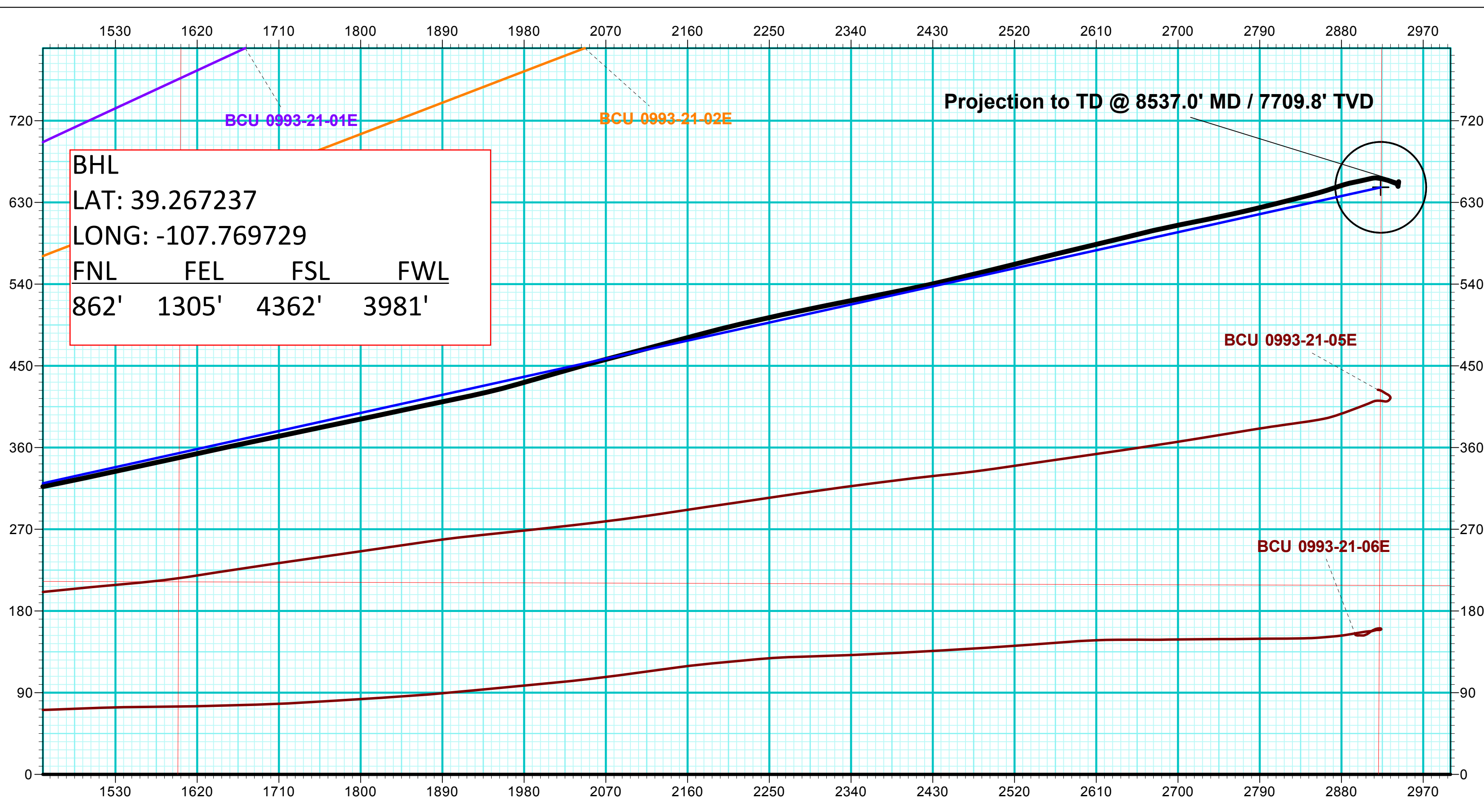


DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - BCU 0993-21-04E	7722.0	646.7	2923.2	1530246.18	2357446.55	39.267220	-107.769799	Circle (Radius: 50.0)

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')	
1305.3	34.66	77.53	1236.2	73.2	330.9	338.9	338.9	EOB @ 34.66° Inc / 77.53° Azm	
5377.7	34.66	77.53	4585.8	573.5	2592.3	2654.9	2654.9	Drop @ 3.00°/100'	
6533.1	0.00	0.00	5672.0	646.7	2923.2	2993.9	2993.9	EOD @ Vertical	
8583.1	0.00	0.00	7722.0	646.7	2923.2	2993.9	2993.9	TD @ 8583.1' MD / 7722.0' TVD	



ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation	
293.0	5.10	64.00	292.6	5.7	11.7	12.7	13.0	First QES Survey @ 293.0' MD / 292.6' TVD	
8537.0	1.10	8.10	7709.8	652.9	2943.0	3014.5	3027.8	Projection to TD @ 8537.0' MD / 7709.8' TVD	



Vertical Section at 77.53° (200 usft/in)