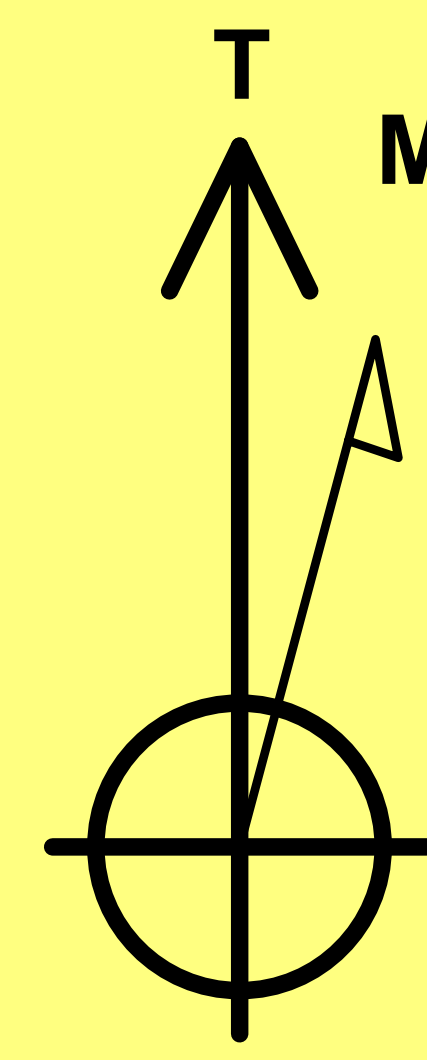


CC 0697-03-14W  
 Garfield County, CO  
 Q180792 & RM-180666  
 Design #3

Company Name: Laramie Energy, LLC  
 CC 0697-03-14W  
 Garfield County, CO  
 Rig: 30' RKB  
 Created By: Will Jircik  
 Date: 6/22/2018

PROJECT DETAILS: Garfield 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



Azimuths to True North  
 Magnetic North: 9.62°

Strength: 51401.6snT  
 Dip Angle: 65.58°  
 Date: 6/15/2018  
 Model: USER DEFINED



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
925.0	927.5	Mahogany
2893.0	2986.6	Wasatch
4883.0	4862.1	Wasatch 'G' Sand
4893.0	5082.2	Fort Union
6427.0	6689.5	Ohio Creek
6615.0	6886.5	Williams Fork
7341.0	7628.8	TOG
8865.0	9152.8	Cameo
9232.0	9519.8	Base Cameo Coal
9278.0	9565.8	Rollins

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - CC 0697-03-14W	9528.0	-1110.3	-1593.5	1638532.28	2235768.68	39.555253	-108.210799	Circle (Radius: 50.0)

DESIGN ANNOTATIONS

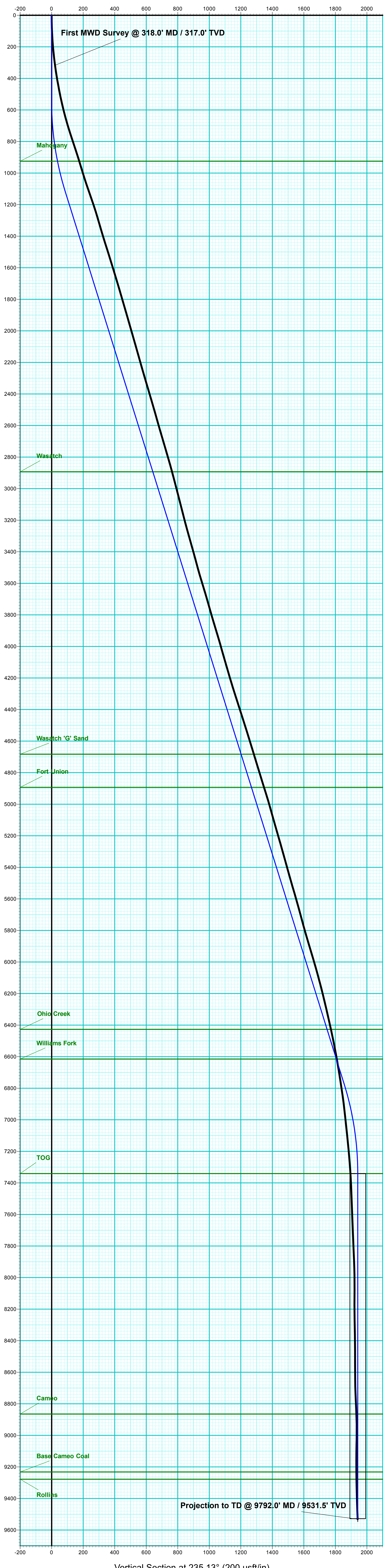
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSecDeparture	Annotation
550.0	0.00	0.00	550.0	0.0	0.0	0.0	KOP (Build 3' / 100')
1129.1	17.37	235.13	1120.3	-49.8	-71.5	87.1	EOB @ 17.37° Inc. / 235.13° Azm
7049.7	17.37	235.13	6770.7	-1060.4	-1522.0	1855.0	Drop 3' / 100'
7628.8	0.00	0.00	7341.0	-1110.3	-1593.5	1942.1	EOD @ Vertical
9815.8	0.00	0.00	9528.0	-1110.3	-1593.5	1942.1	TD @ 9815.8' MD / 9528.0' TVD

ANNOTATIONS

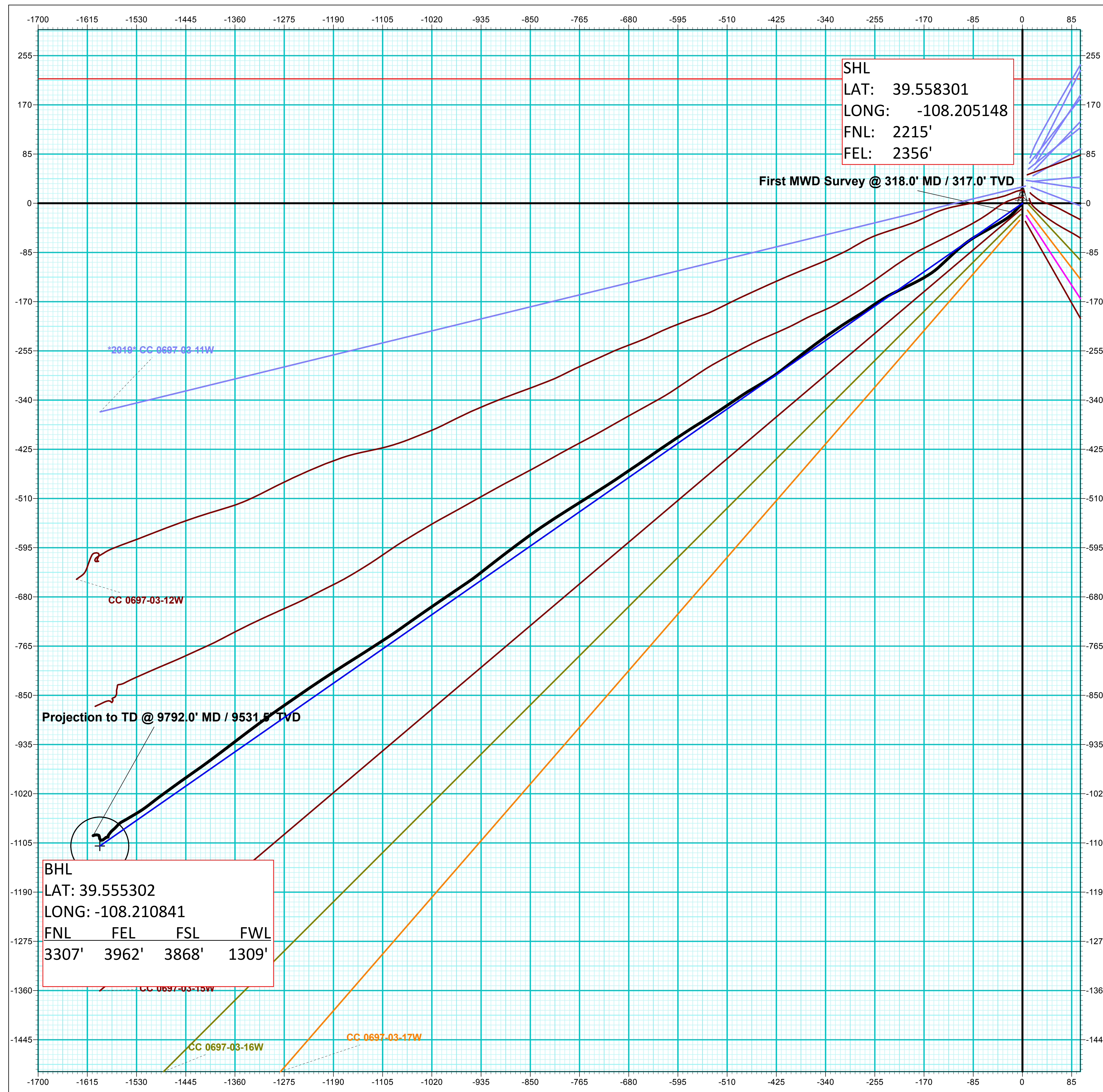
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSecDeparture	Annotation
318.0	7.90	223.20	317.0	-16.0	-15.0	21.4	First MWD Survey @ 318.0' MD / 317.0' TVD
9792.0	2.29	250.89	9531.5	-1092.3	-1605.1	1941.4	Projection to TD @ 9792.0' MD / 9531.5' TVD

WELL DETAILS: CC 0697-03-14W

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1639594.60	2237394.51	39.558301	-108.205148



Vertical Section at 235.13° (200 usft/in)



BHL	FEL	FSL	FWL
3307'	3962'	3868'	1309'