

Project: Garfield County, CO
 Site: CC 603-23-32 Pad
 Well: CC 0697-03-23W
 Wellbore: B-3
 Design: Permit #1
 Latitude: 39.548838
 Longitude: -108.210067
 Ground Level: 8613.0
 Well @ 8637.0usft (H&P 290)

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well CC 0697-03-23W, True North
 Vertical (TVD) Reference: Well @ 8637.0usft (H&P 290)
 Section (N/S) Reference: Slot - (0.0N, 0.0E)
 Measured Depth Reference: Well @ 8637.0usft (H&P 290)
 Calculation Method: Minimum Curvature

T M
 Azimuths to True North
 Magnetic North: 9.72°
 Magnetic Field
 Strength: 51423.8snT
 Dip Angle: 65.58°
 Date: 3/24/2018
 Model: IGRF2015

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

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	KOP/ (Build 3.00°/100')
2841.3	10.24	62.31	2839.5	14.1	26.9	3.00	62.31	30.4	EOB @ 10.24° Inc / 62.31° Azm
5410.2	10.24	62.31	5367.5	226.3	431.3	0.00	0.00	487.1	Drop @ 3.00°/100'
5751.5	0.00	0.00	5707.0	240.4	458.2	3.00	180.00	517.5	EOD @ Vertical
9751.5	0.00	0.00	9707.0	240.4	458.2	0.00	0.00	517.5	TD @ 9751.5' MD / 9707.0' TVD

DESIGN TARGET DETAILS

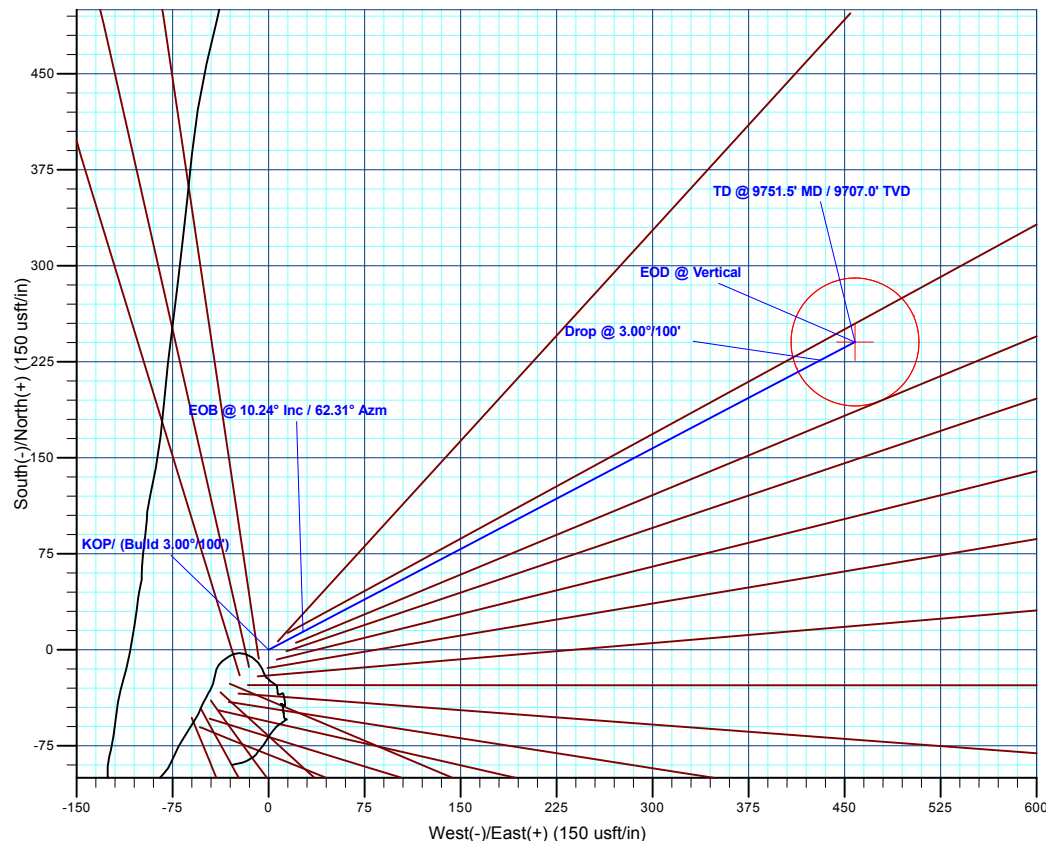
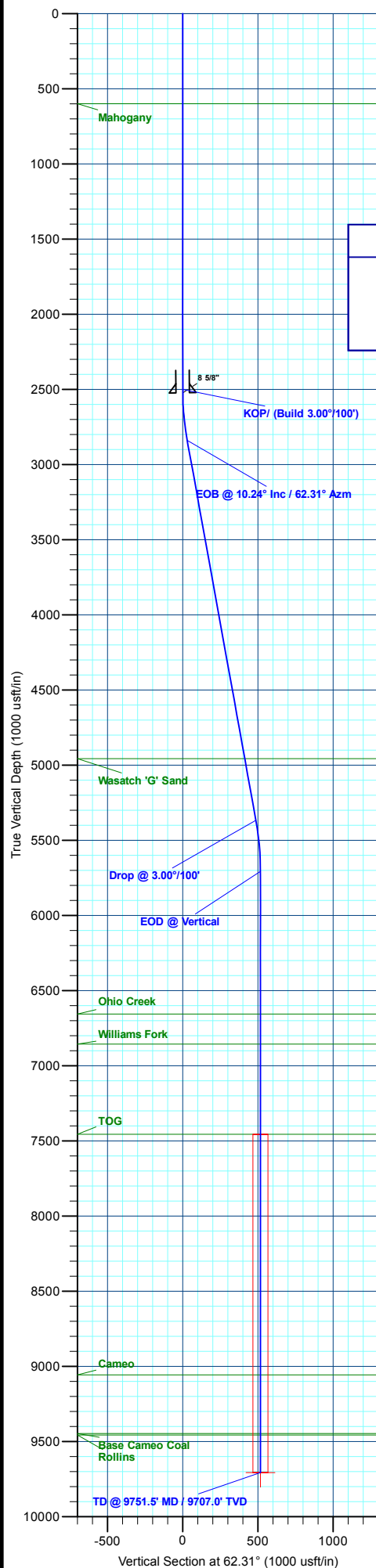
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL - CC 0697-03-23W	9707.0	240.4	458.2	1636417.15	2236370.48	39.549498	-108.208442

WELL DETAILS: CC 0697-03-23W

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1636190.50	8613.0 2235905.29	39.548838	-108.210067

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
600.0	600.0	Mahogany
4957.0	4993.1	Wasatch 'G' Sand
6657.0	6701.5	Ohio Creek
6857.0	6901.5	Williams Fork
7457.0	7501.5	TOG
9057.0	9101.5	Cameo
9447.0	9491.5	Base Cameo Coal
9457.0	9501.5	Rollins



Plan: Permit #1 (CC 0697-03-23W/B-3)

Created By: Will Jircik Date: 15:21, May 14 2018