

Project: Garfield County, CO
 Site: CC 603-23-32 Pad
 Well: CC 0697-03-22E
 Wellbore: A-4
 Design: Permit #1
 Latitude: 39.548799
 Longitude: -108.210070
 Ground Level: 8613.0
 Well @ 8637.0usft (H&P 290)



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	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	KOP/ (Build 3.00°/100')
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	EOB @ 31.94° Inc / 80.50° Azm
1264.8	31.94	80.50	1210.5	47.8	285.3	3.00	80.50	289.2	EOB @ 3.00°/100'
6085.9	31.94	80.50	5301.5	468.9	2801.1	0.00	0.00	2840.0	EOD @ Vertical
7150.7	0.00	0.00	6312.0	516.7	3086.3	3.00	180.00	3129.3	TD @ Vertical
10600.7	0.00	0.00	9762.0	516.7	3086.3	0.00	0.00	3129.3	TD @ 10600.7' MD / 9762.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL - CC 0697-03-22E	9762.0	516.7	3086.3	1636600.75	2239004.36	39.550217	-108.199125

WELL DETAILS: CC 0697-03-22E

+N/-S	+E/-W	Northing	8613.0 Easting	Latitude	Longitude
0.0	0.0	1636176.34	2235904.02	39.548799	-108.210070

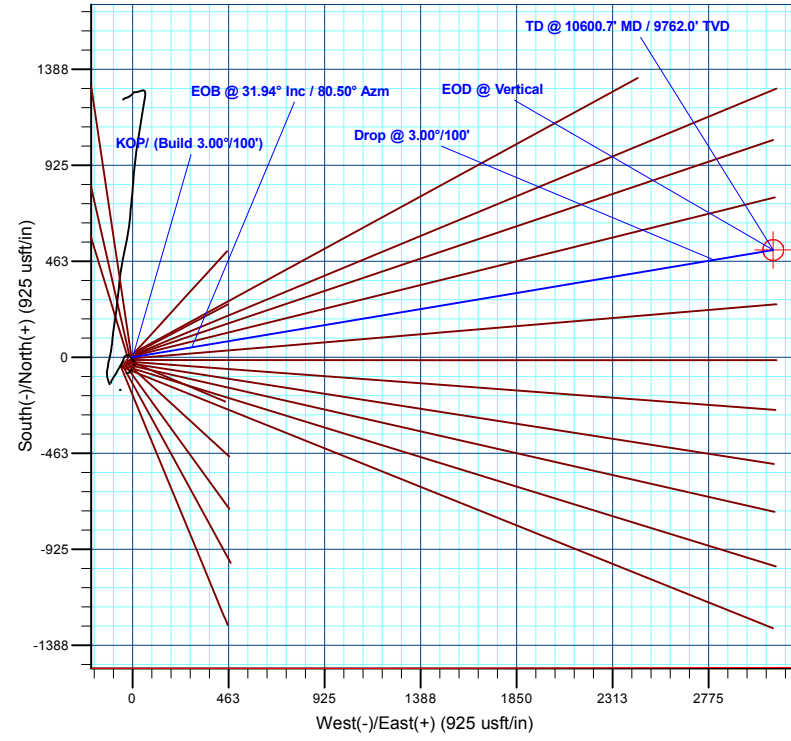
REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well CC 0697-03-22E, True North
 Vertical (TVD) Reference: Well @ 8637.0usft (H&P 290)
 Section (VS) Reference: Slot - (0.0N, 0.0E)
 Measured Depth Reference: Well @ 8637.0usft (H&P 290)
 Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
600.0	603.0	Mahogany
5012.0	5744.7	Wasatch 'G' Sand
6712.0	7550.7	Ohio Creek
6912.0	7750.7	Williams Fork
7512.0	8350.7	TOG
9112.0	9950.7	Cameo
9502.0	10340.7	Base Cameo Coal
9512.0	10350.7	Rollins

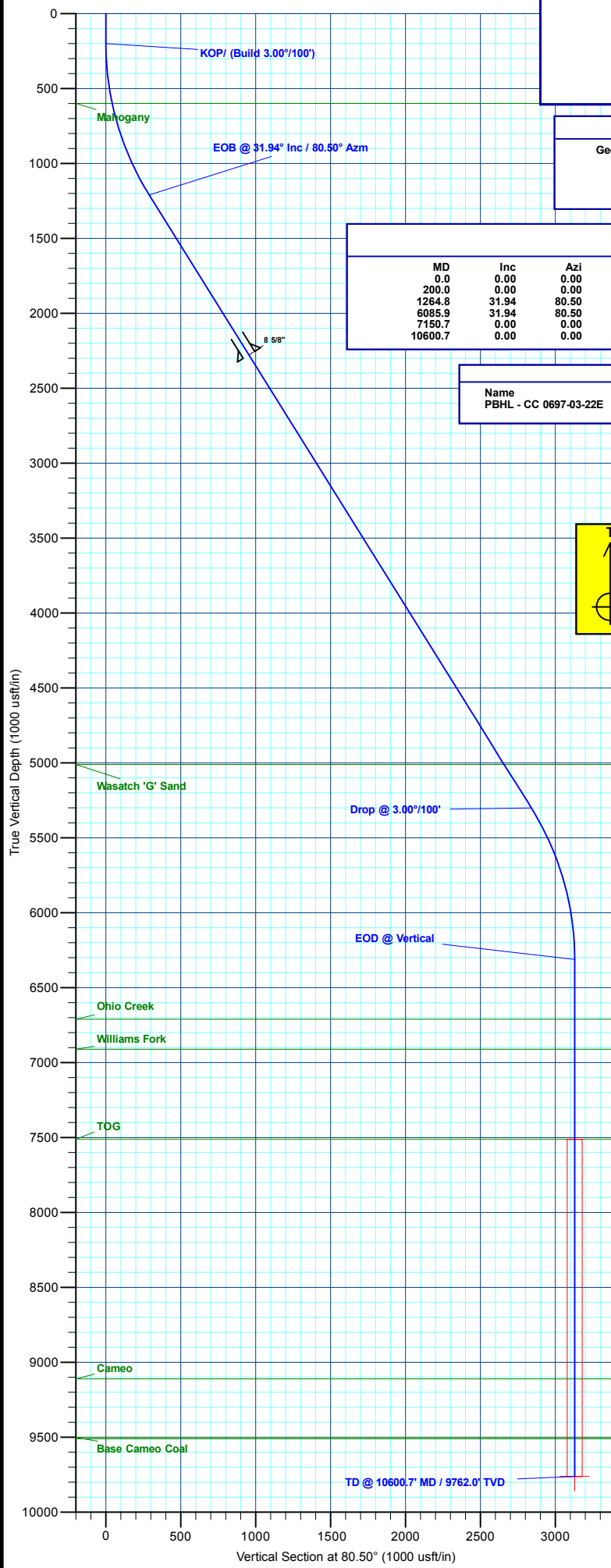
Azimuths to True North
 Magnetic North: 9.72°
 Magnetic Field Strength: 51423.8nT
 Dip Angle: 65.58°
 Date: 3/24/2018
 Model: IGRF2015



Plan: Permit #1 (CC 0697-03-22E/A-4)

Created By: Will Jircik

Date: 14:28, May 14 2018



Vertical Section at 80.50° (1000 usft/in)