

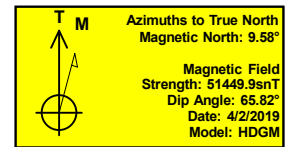
Project: Garfield County, CO
 Site: CC 0697-03-07 Pad
 Well: CC 0697-03-09E
 Wellbore: A-4
 Design: Design #4
 Latitude: 39.558432
 Longitude: -108.205082
 Ground Level: 8428.0
 WELL @ 8458.0usft (30' RKB)

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

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well CC 0697-03-09E, True North
 Vertical (TVD) Reference: WELL @ 8458.0usft (30' RKB)
 Section (VS) Reference: Slot - (0.0N, 0.0E)
 Measured Depth Reference: WELL @ 8458.0usft (30' RKB)
 Calculation Method: Minimum Curvature



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL - CC 0697-03-09E	10248.0	234.6	1654.2	1639826.94	2239074.86	39.559076	-108.199215

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	
150.0	0.00	0.00	150.0	0.0	0.0	0.00	0.00	0.0	KOP (Build 2° / 100°)
883.7	14.67	81.93	875.7	13.1	92.5	2.00	81.93	93.4	EOB @ 14.67° Inc. / 81.93° Azm
6741.3	14.67	81.93	6542.3	221.5	1561.7	0.00	0.00	1577.3	Drop 2° / 100°
7475.1	0.00	0.00	7268.0	234.6	1654.2	2.00	180.00	1670.7	EOD @ Vertical
10455.1	0.00	0.00	10248.0	234.6	1654.2	0.00	0.00	1670.7	TD @ 10455.1' MD / 10248.0' TVD

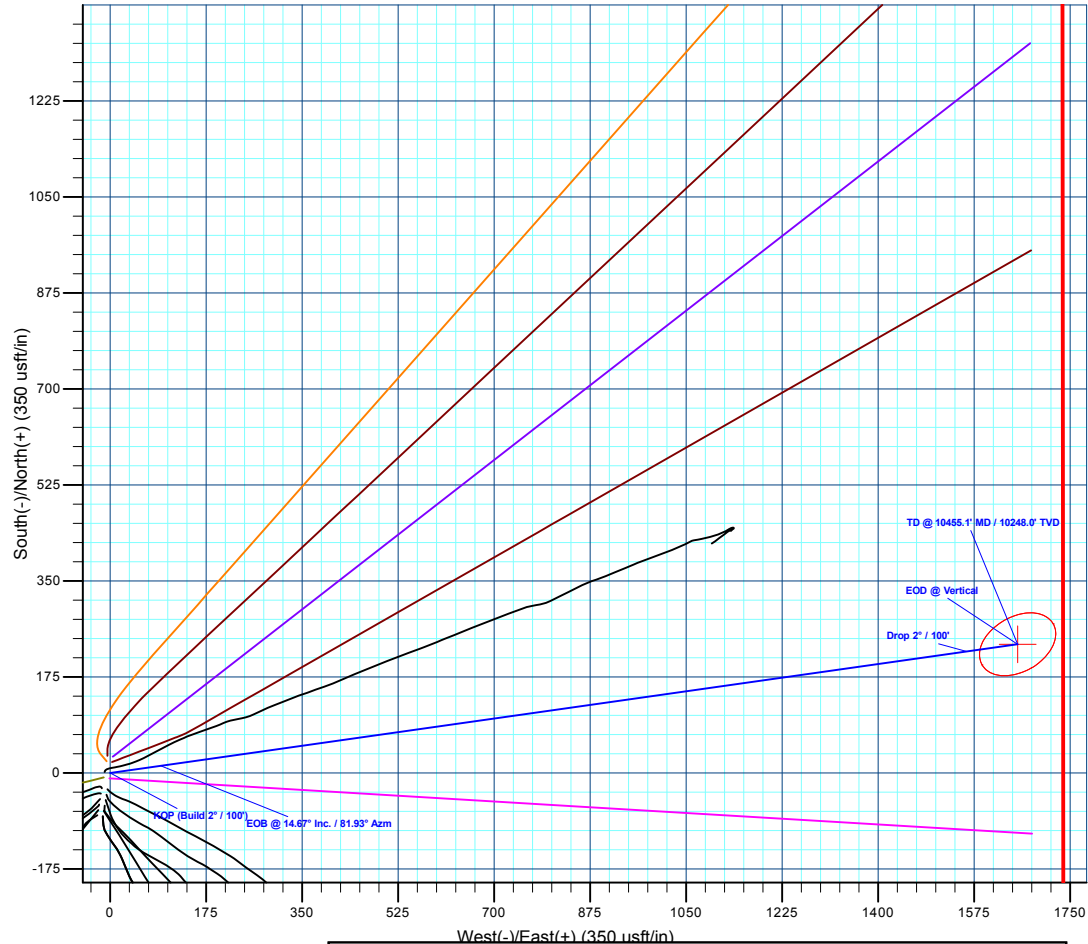
FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1119.0	1135.2	Mahogany
3053.0	3134.4	Wasatch
4668.0	4803.9	Wasatch 'G' Sand
5044.0	5192.5	Fort Union
6548.0	6747.2	Ohio Creek
6733.0	6936.9	Williams Fork
7268.0	7475.1	TOG
9062.0	9269.1	Cameo
9458.0	9655.1	Base Cameo Coal
9468.0	9675.1	Rollins
9708.0	9915.1	Cozzette
9948.0	10155.1	Corcoran



WELL DETAILS: CC 0697-03-09E

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1639641.65	2237414.42	39.558432	-108.205082



Plan: Design #4 (CC 0697-03-09E/A-4)

Created By: Will Jircik

Date: 8:07, April 08 2019