



Project: Mesa County, CO
 Site: Gunderson 29-09 Pad
 Well: Piceance Federal 29-19E
 Wellbore: Wellbore #1
 Design: Design #1
 Latitude: 39.248436
 Longitude: -107.788292
 Ground Level: 7531.0
 well @ 7561.0usft (H&P #522)



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

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Piceance Federal 29-19E, True North
 Vertical (TVD) Reference: well @ 7561.0usft (H&P #522)
 Section (VS) Reference: Slot - (0.0N, 0.0E)
 Measured Depth Reference: well @ 7561.0usft (H&P #522)
 Calculation Method: Minimum Curvature

WELL DETAILS: Piceance Federal 29-19E

+N/-S	+E/-W	Northing	Easting	Ground Level: 7531.0	Latitude	Longitude
0.0	0.0	1523538.21	2352040.19		39.248436	-107.788292

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

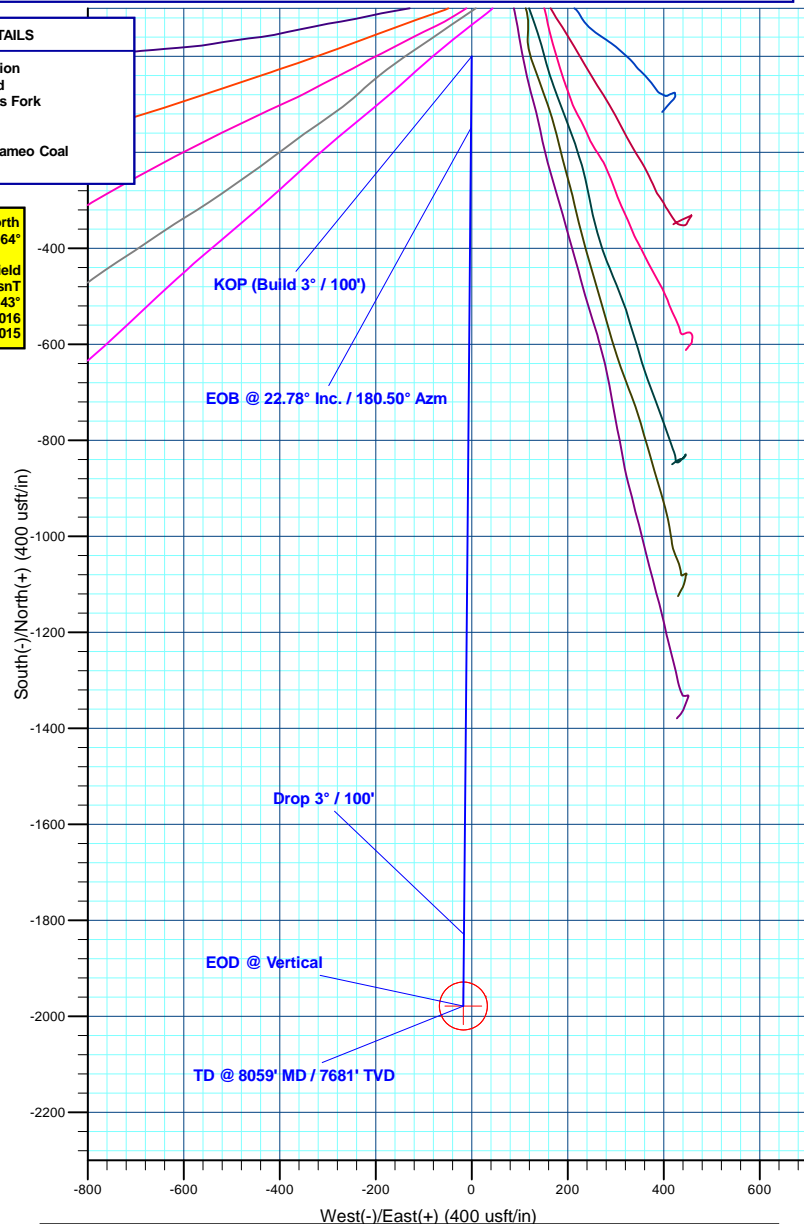
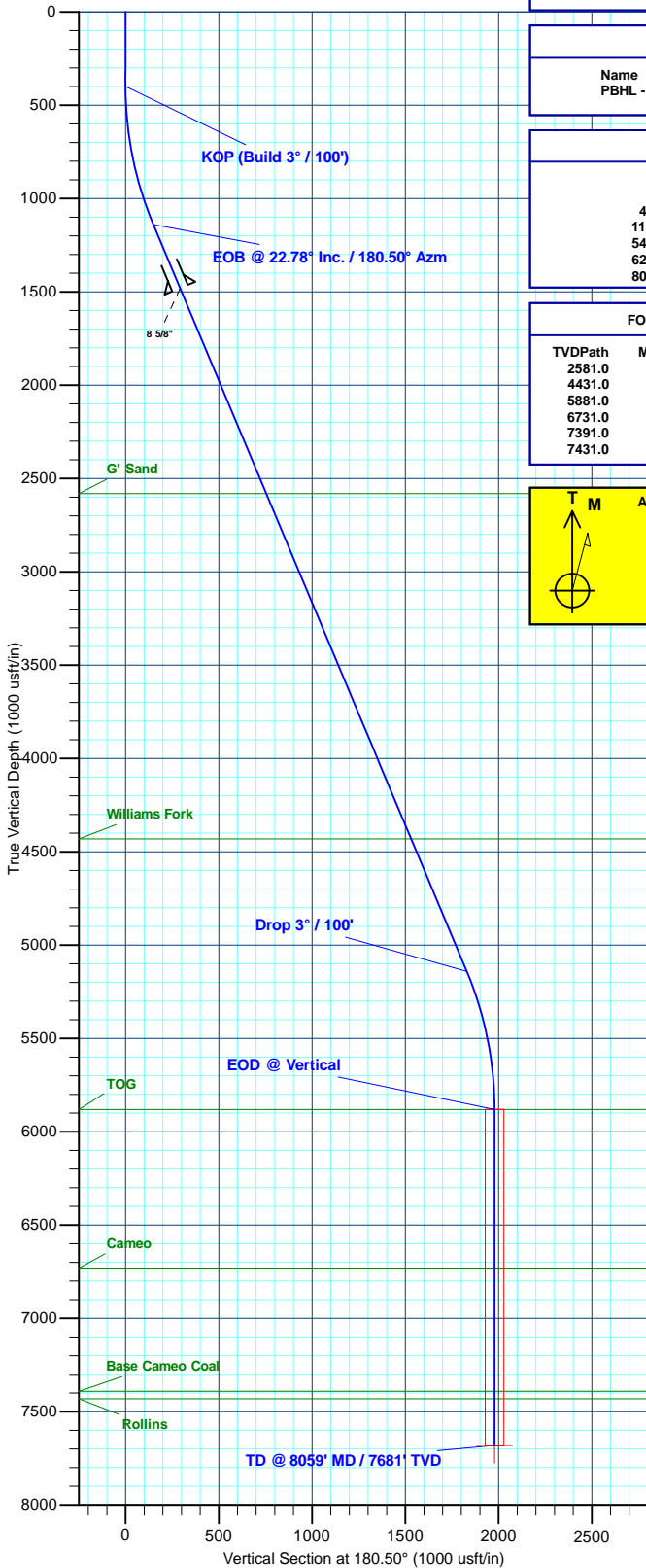
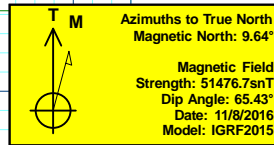
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL - Piceance Federal 29-19E	7681.0	-1978.4	-17.3	1521560.86	2351973.09	39.243004	-107.788353

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	KOP (Build 3° / 100')
1159.3	22.78	180.50	1139.4	-148.9	-1.3	3.00	180.50	149.0	EOB @ 22.78° Inc. / 180.50° Azm
5499.9	22.78	180.50	5141.6	-1829.5	-16.0	0.00	0.00	1829.5	Drop 3° / 100'
6259.2	0.00	0.00	5881.0	-1978.4	-17.3	3.00	180.00	1978.5	EOD @ Vertical
8059.2	0.00	0.00	7681.0	-1978.4	-17.3	0.00	0.00	1978.5	TD @ 8059' MD / 7681' TVD

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2581.0	2722.8	G' Sand
4431.0	4729.3	Williams Fork
5881.0	6259.2	TOG
6731.0	7109.2	Cameo
7391.0	7769.2	Base Cameo Coal
7431.0	7809.2	Rollins



Plan: Design #1 (Piceance Federal 29-19E/Wellbore #1)

Created By: Will Jircik Date: 14:21, November 08 2016