



Project: Rio Blanco County, CO
Site: Sec 23 (Wiley 23-9-97 O Pad)
Well: BHR Fed 023-14-397-4RH
Wellbore: Wellbore #1
Design: Design #2
Latitude: 40° 12' 34.751 N
Longitude: 108° 14' 27.744 W
Ground Level: 6023.0
RKB @ 6047.5usft



PROJECT DETAILS: Rio Blanco County, CO

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level

REFERENCE INFORMATION

Co-ordinate (NE) Reference: Well BHR Fed 023-14-397-4RH, True North
Vertical (TVD) Reference: RKB @ 6047.5usft
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: RKB @ 6047.5usft
Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1829.5	1829.5	Mesaverde
5306.5	5336.2	Rollins
6569.4	6623.5	Sego-Lower
6984.9	7046.9	Castlegate
8323.7	8411.7	Manco's - Marker 6 - Condensed Section
9635.0	9749.3	Buck Peak
10089.5	10210.9	Tow Creek
10478.3	10624.3	Wolf Mtn

DESIGN TARGET DETAILS

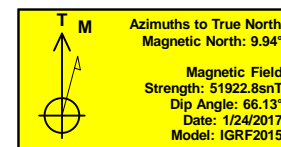
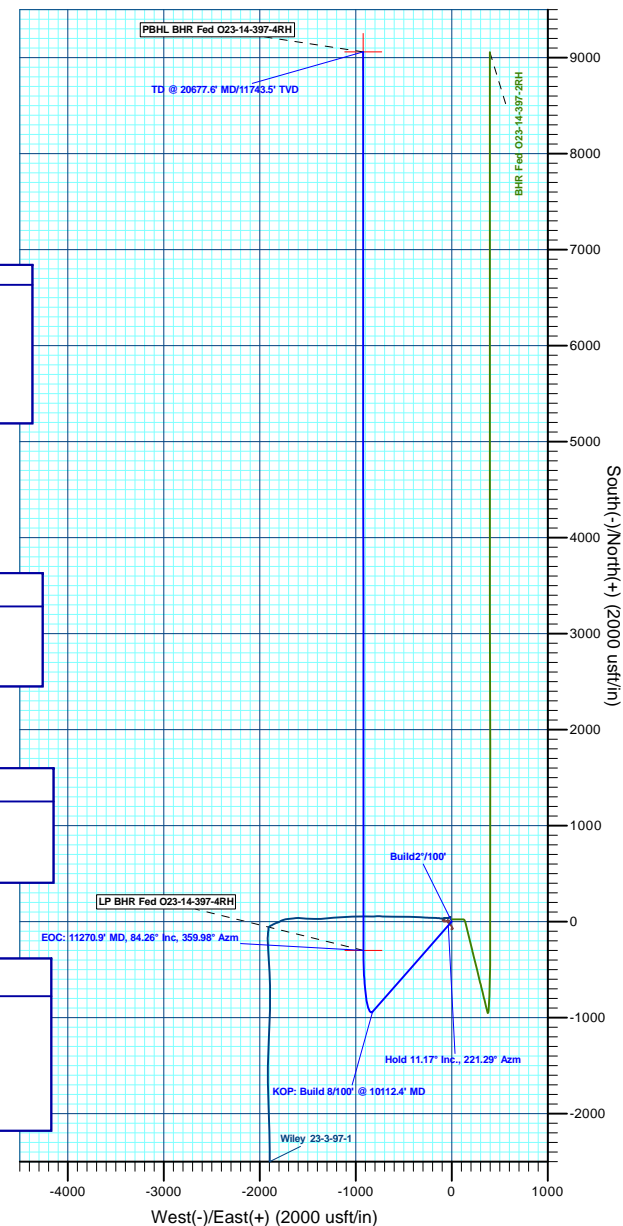
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP BHR Fed 023-14-397-4RH	10803.5	-299.4	-918.9	1330779.10	2233642.76	40° 12' 31.792 N	108° 14' 39.588 W
PBHL BHR Fed 023-14-397-4RH	11743.5	9060.1	-921.3	1340134.26	2233929.59	40° 14' 4.286 N	108° 14' 39.624 W

WELL DETAILS: BHR Fed 023-14-397-4RH

+N/-S	+E/-W	Northing	Ground Level: Easting	6023.0	Latitude	Longitude
0.0	0.0	1331049.97	2234570.46		40° 12' 34.751 N	108° 14' 27.744 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
3400.0	0.00	0.00	3400.0	0.0	0.0	0.00	0.00	0.0	Build2°/100'
3958.7	11.17	221.29	3955.2	-40.8	-35.8	2.00	221.29	-37.0	Hold 11.17° Inc., 221.29° Azm
10112.4	11.17	221.29	9992.2	-936.9	-822.7	0.00	0.00	-848.9	KOP: Build 8°/100' @ 10112.4' MD
11270.9	84.26	359.99	10803.5	-299.4	-918.9	8.00	138.90	-204.9	EOC: 11270.9' MD, 84.26° Inc, 359.98° Azm
20677.6	84.26	359.99	11743.5	9060.1	-921.3	0.00	0.00	9106.9	TD @ 20677.6' MD/11743.5' TVD



BHR Fed 023-14-397-4RH
Design Name: Design #2
Created By: Shelly C. Peterkin
Date: 21:52, January 24 2017