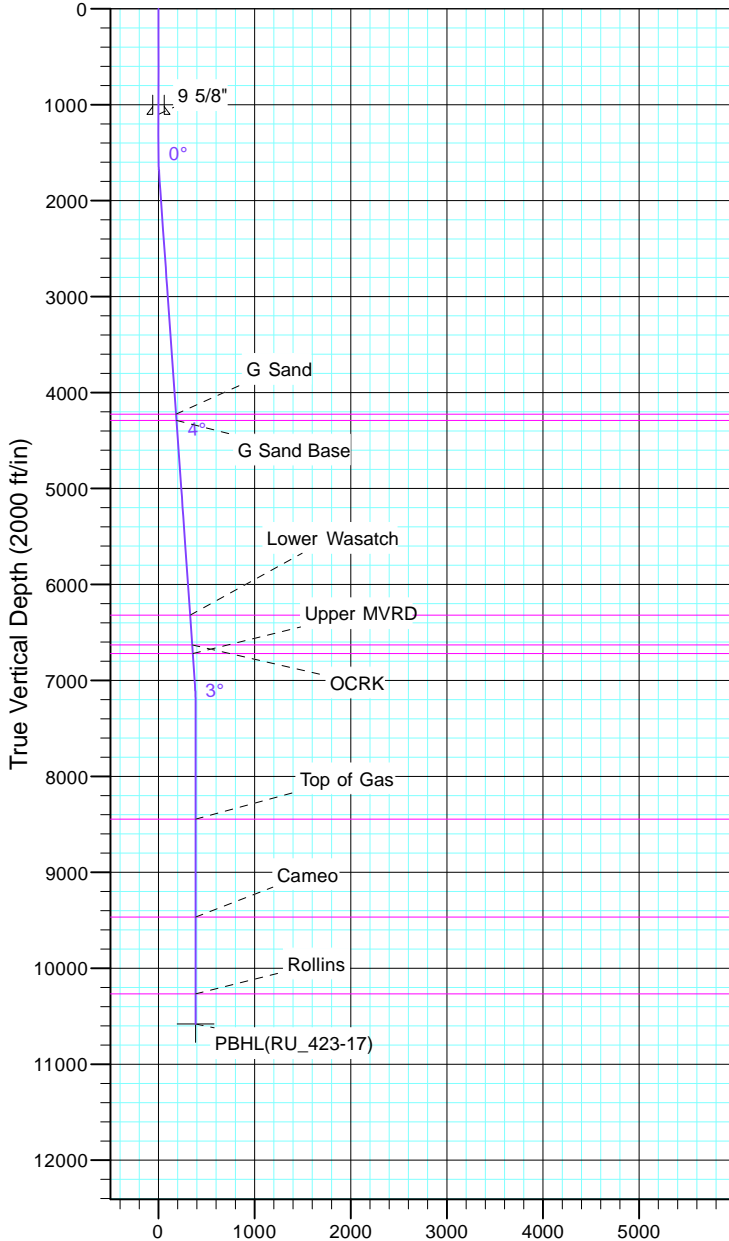


TEP Rocky Mountain LLC
Project: Garfield County, CO NAD83
Site: RU 23-17 Pad
Well: RU 423-17
Wellbore: OH
Design: Plan #1



Azimuths to True North
Magnetic North: 9.60°

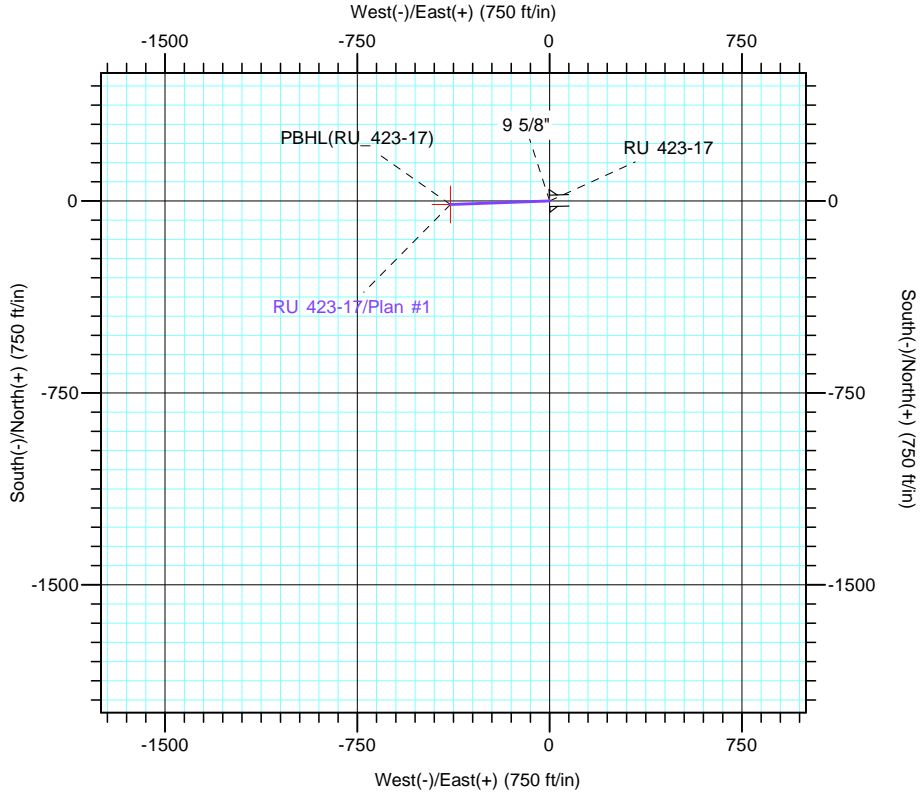
Magnetic Field
Strength: 51501.5nT
Dip Angle: 65.58°
Date: 7/5/2017
Model: IGRF2015



Vertical Section at 267.96° (2000 ft/in)

CASING DETAILS			
TVD	MD	Name	Size
1100.0	1100.0	9 5/8"	9.625

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4226.0	4232.3	G Sand
4291.0	4297.5	G Sand Base
6321.0	6332.5	Lower Wasatch
6631.0	6643.2	OCRK
6721.0	6733.4	Upper MVRD
8446.0	8459.3	Top of Gas
9466.0	9479.3	Cameo
10266.0	10279.3	Rollins



DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL(RU_423-17)	10581.0	-13.8	-386.9	1594624.80	2350862.80	39° 26' 36.439 N	107° 47' 55.737 W

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	1700.1	4.00	267.96	1700.0	-0.2	-7.0	2.00	267.96	7.0	
4	7012.5	4.00	267.96	6999.4	-13.5	-377.6	0.00	0.00	377.8	
5	7279.3	0.00	0.00	7266.0	-13.8	-386.9	1.50	180.00	387.1	
6	10594.3	0.00	0.00	10581.0	-13.8	-386.9	0.00	0.00	387.1	PBHL(RU_423-17)