

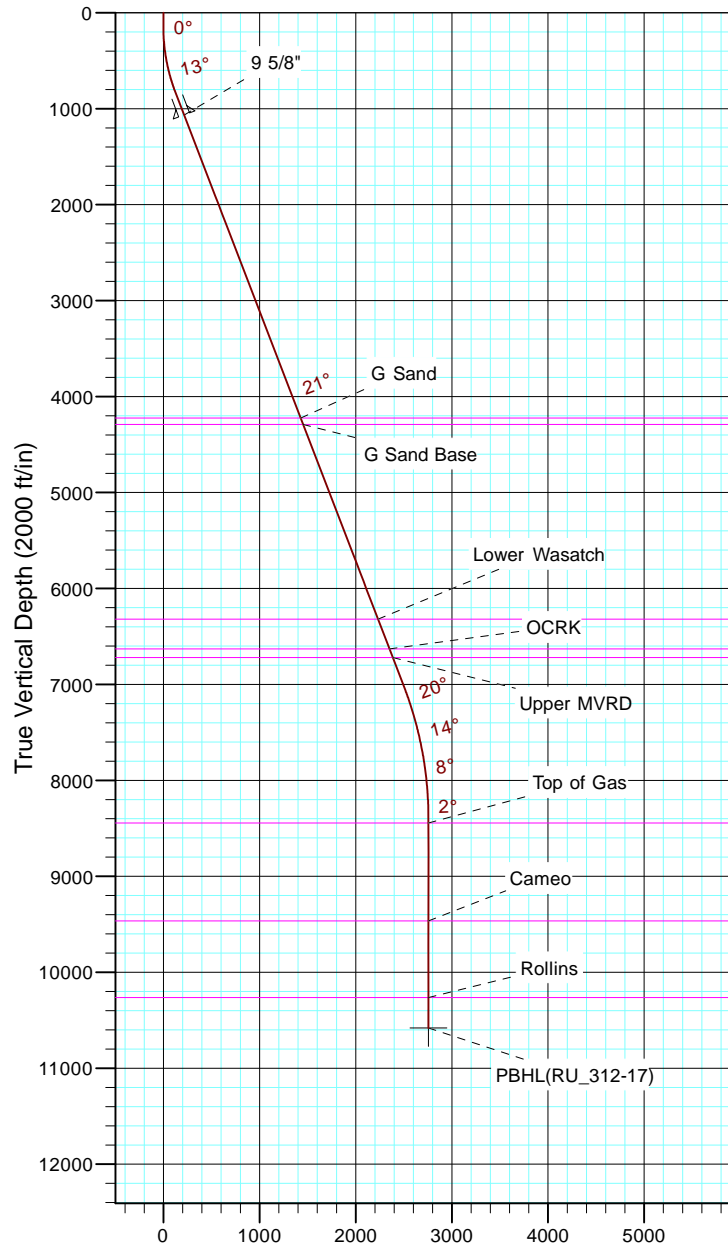
TEP Rocky Mountain LLC

Project: Garfield County, CO NAD83
Site: RU 23-17 Pad
Well: RU 312-17
Wellbore: OH
Design: Plan #1



Azimuths to True North
Magnetic North: 9.60°

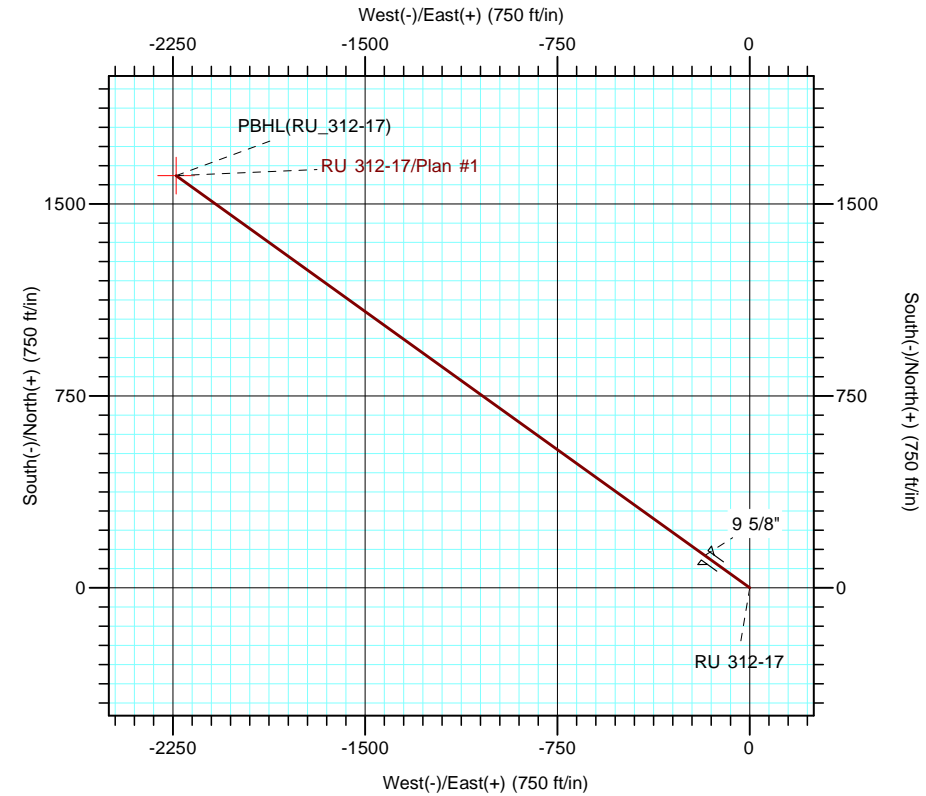
Magnetic Field
Strength: 51502.1snT
Dip Angle: 65.58°
Date: 7/3/2017
Model: IGRF2015



Vertical Section at 305.75° (2000 ft/in)

CASING DETAILS			
TVD	MD	Name	Size
1067.8	1100.0	9 5/8"	9.625

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4225.0	4481.8	G Sand
4290.0	4551.4	G Sand Base
6320.0	6725.9	Lower Wasatch
6630.0	7057.9	OCRK
6720.0	7154.3	Upper MVRD
8445.0	8932.1	Top of Gas
9465.0	9952.1	Cameo
10265.0	10752.1	Rollins



Name	TVD	+N/-S	DESIGN TARGET DETAILS			Latitude	Longitude
			+E/-W	Northing	Easting		
PBHL(RU_312-17)	10580.0	1610.5	-2237.2	1596318.70	2349023.10	39° 26' 52.715 N	107° 48' 19.728 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	150.0	0.00	0.00	150.0	0.0	0.0	0.00	0.00	0.0	
3	850.0	21.00	305.75	834.5	74.1	-103.0	3.00	305.75	126.9	
4	7480.1	21.00	305.75	7024.1	1462.3	-2031.3	0.00	0.00	2502.9	
5	8880.1	0.00	0.00	8393.0	1610.5	-2237.2	1.50	180.00	2756.6	
6	11067.1	0.00	0.00	10580.0	1610.5	-2237.2	0.00	0.00	2756.6	PBHL(RU_312-17)