

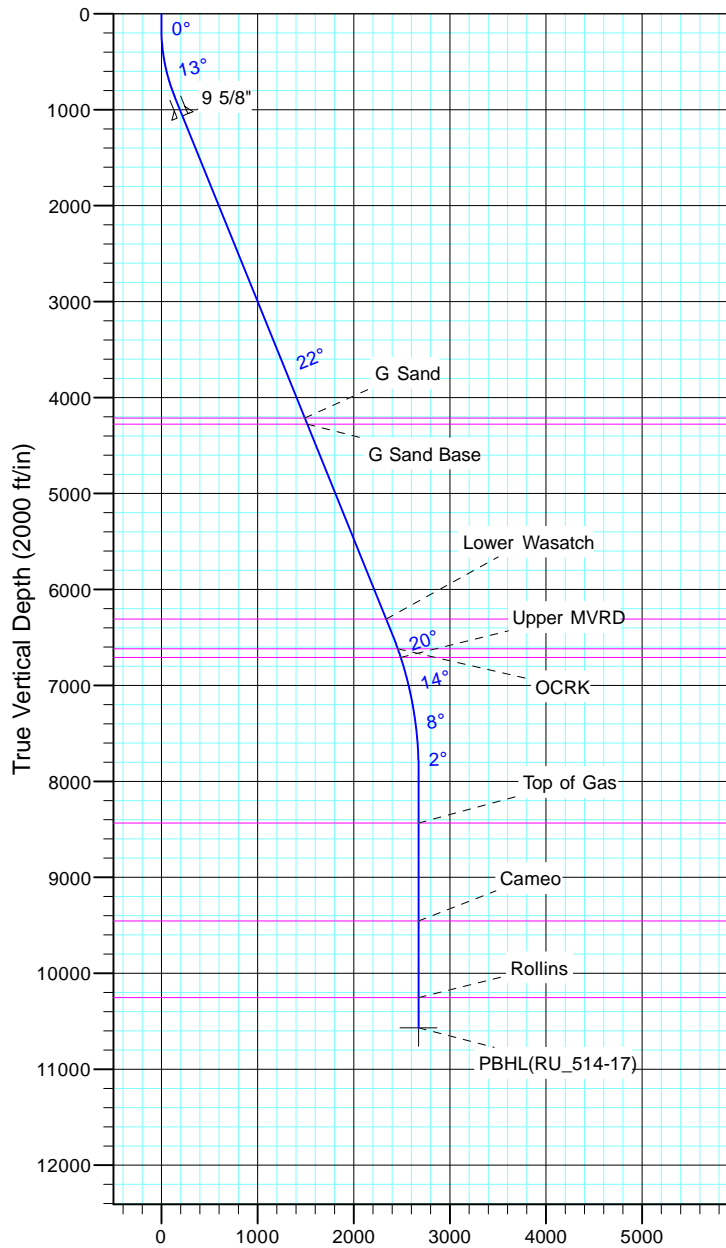
TEP Rocky Mountain LLC

Project: Garfield County, CO NAD83
Site: RU 23-17 Pad
Well: RU 514-17
Wellbore: OH
Design: Plan #1



Azimuths to True North
Magnetic North: 9.60°

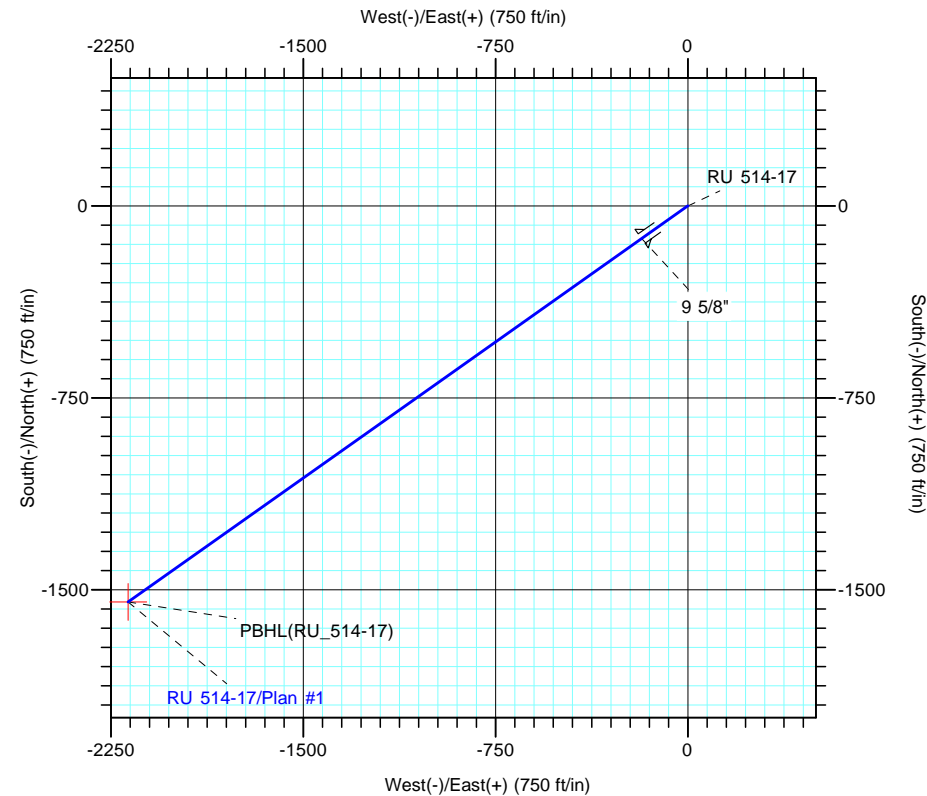
Magnetic Field
Strength: 51501.5nT
Dip Angle: 65.58°
Date: 7/5/2017
Model: IGRF2015



Vertical Section at 234.67° (2000 ft/in)

CASING DETAILS			
TVD	MD	Name	Size
1066.3	1100.0	9 5/8"	9.625

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4214.0	4494.8	G Sand
4279.0	4564.9	G Sand Base
6309.0	6754.3	Lower Wasatch
6619.0	7087.0	OCRK
6709.0	7182.1	Upper MVRD
8434.0	8926.6	Top of Gas
9454.0	9946.6	Cameo
10254.0	10746.6	Rollins



DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL(RU_514-17)	10569.0	-1547.2	-2182.9	1593084.00	2349057.90	39° 26' 20.763 N	107° 48' 18.239 W

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSection	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	883.2	22.00	234.67	865.3	-80.4	-113.4	3.00	234.67	139.0	
4	6913.1	22.00	234.67	6456.3	-1386.4	-1956.0	0.00	0.00	2397.5	
5	8379.6	0.00	0.00	7887.0	-1547.2	-2182.9	1.50	180.00	2675.6	
6	11061.6	0.00	0.00	10569.0	-1547.2	-2182.9	0.00	0.00	2675.6	PBHL(RU_514-17)