

Project: Mesa County, CO  
 Site: Laramie 0993-29-01  
 Well: Laramie 0993-20-17E  
 Wellbore: OH  
 Design: Design #1  
 Latitude: 39.254600  
 Longitude: -107.783911  
 Ground Level: 7463.0  
 RKB=30' @ 7493.0usft (TBD)

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

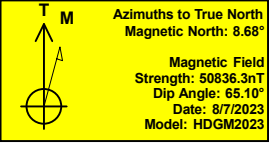
REFERENCE INFORMATION  
 Vertical (TVD) Reference: RKB=30' @ 7493.0usft (TBD)  
 Section (VS) Reference: Slot - A-13(0.0N, 0.0E)  
 Measured Depth Reference: RKB=30' @ 7493.0usft (TBD)  
 Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2666.0	2821.6	Wasatch 'G' Sand
3148.0	3348.6	Fort Union
3828.0	4092.1	Lower Wasatch
4611.0	4948.3	Ohio Creek
5019.0	5394.4	Williams Fork
6042.0	6453.7	TOG
7241.0	7652.7	Cameo
7567.0	7978.7	Rollins

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
325.0	0.00	0.00	325.0	0.0	0.0	0.00	0.00	0.0	KOP (Build 2.5° / 100')
645.0	8.00	265.00	644.0	-1.9	-22.2	2.50	265.00	19.5	EOB @ 8.00° Inc. / 265.00° Azm / Build 2.5° / 100'
1339.8	23.86	295.03	1310.8	53.7	-199.1	2.50	42.68	203.7	EOB @ 23.86° Inc. / 295.03° Azm
5499.5	23.86	295.03	5115.1	765.5	-1723.4	0.00	0.00	1885.8	Drop 2.5° / 100'
6453.7	0.00	0.00	6042.0	848.3	-1900.8	2.50	180.00	2081.6	EOD @ Vertical
8228.7	0.00	0.00	7817.0	848.3	-1900.8	0.00	0.00	2081.6	TD @ 8228.7' MD / 7817.0' TVD



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL - Laramie 20-17E	7463.0	848.3	-1900.8	1526647.18	2351457.98	39.256929	-107.790624

WELL DETAILS: Laramie 0993-20-17E

+N/-S	+E/-W	Ground Level	Eastings	Latitude	Longitude	A-13
0.0	0.0	7463.0	2353336.90	39.254600	-107.783911	A-13

