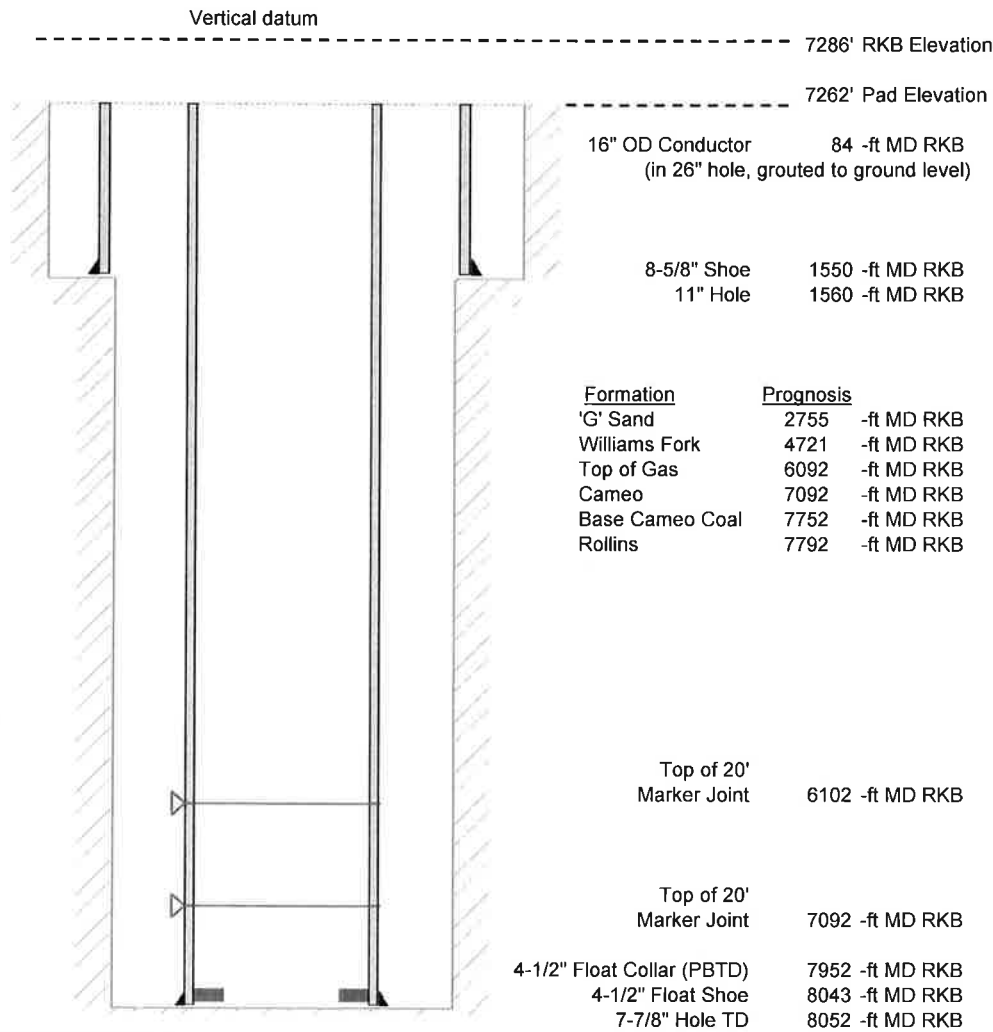


Laramie Energy, LLC
 Bruton 19-02W
 Slot A-12
 H&P 290 (24-ft KB)

API # : 077-10423-00
 SE/4 NW/4 S19/T9S/R93W/6th PM
 Mesa County, CO
 Date of diagram : 8/19/2017



Cementing details

8-5/8" 24# J55 STC Surface Csg	Lead	Tail
Density (ppg)	12.0	12.5
Volume (sx)	191	124
Yield (cf/sx)	2.45	2.18
Top (ft RKB)	24	1024
Bottom (ft RKB)	1024	1550
Returns (full or partial)	full	full

4-1/2" 11.6# L-80 LTC Prod Csg	Lead	Tail
Density (ppg)	12.7	13.5
Volume (sx)	837	402
Yield (cf/sx)	1.97	1.90
Est Top (ft RKB)	1024	5892
Est Bottom (ft RKB)	5892	8043
Returns (full or partial)	Full	Full

Displacement
8.3 ppg
124 bbls

Other Remarks : Surface- 24 bbls cement to surface Production-30
 bbls spacer to surface