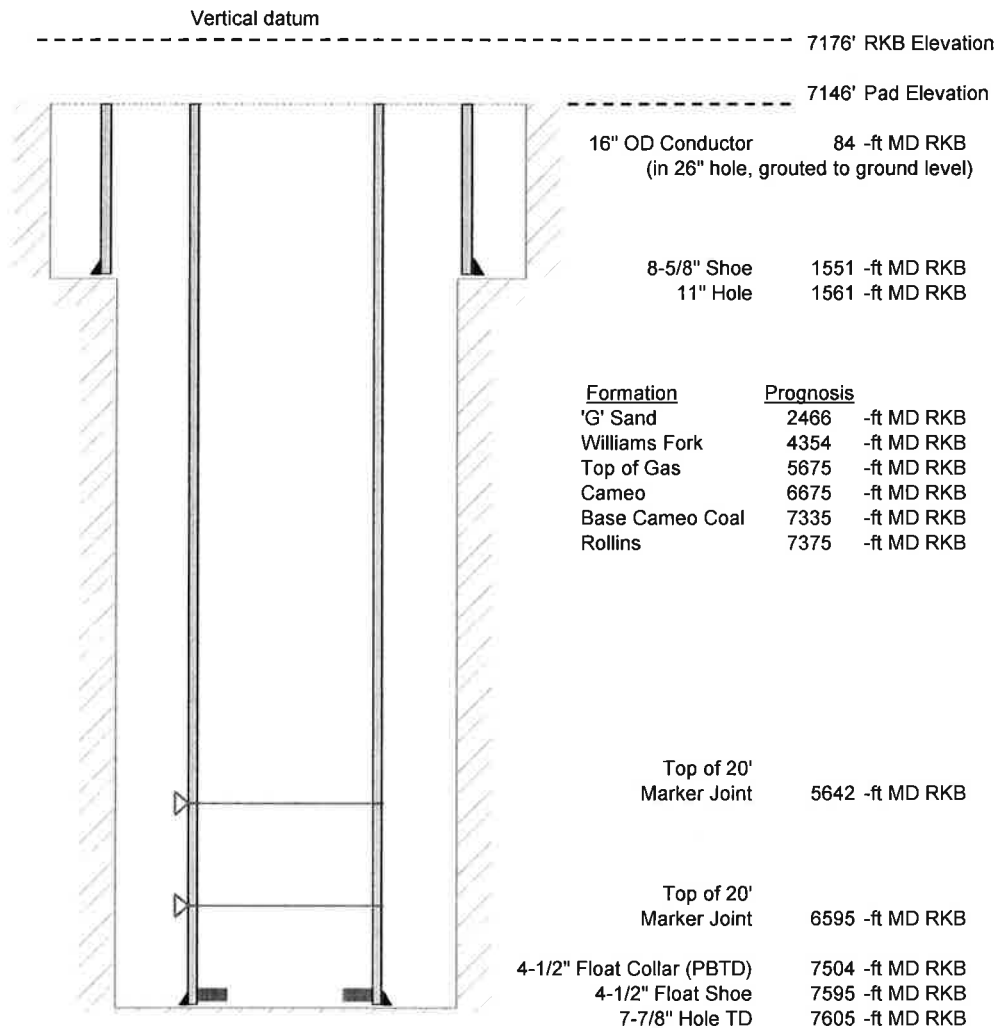


Laramie Energy, LLC
 Gunderson 20-07W
 Slot A-4
 H&P 522 (30-ft KB)

API #: 05-077-10341
 NE/4 NW/4 S20/T9S/R93W/6th PM
 Mesa County, CO
 Date of diagram : 7/12/2017



Cementing details

8-5/8" 24# J55 STC Surface Csg	Lead	Tail
Density (ppg)	12.3	12.8
Volume (sx)	197	109
Yield (cf/sx)	2.45	2.18
Top (ft RKB)	0	1030
Bottom (ft RKB)	1030	1551
Returns (full or partial)	Full	Full

4-1/2" 11.6# Nexteel-80 LTC Prod Csg	Lead	Tail
Density (ppg)	12.5	13.3
Volume (sx)	778	440
Yield (cf/sx)	1.94	1.73
Est Top (ft RKB)	1030	
Est Bottom (ft RKB)	5475	7595
Returns (full or partial)	Full	Full

Displacement
8.3 ppg
bbls

Other Remarks : 30 bbls cement to surface on surface job. 40 BBIS spacer to surface on production job.