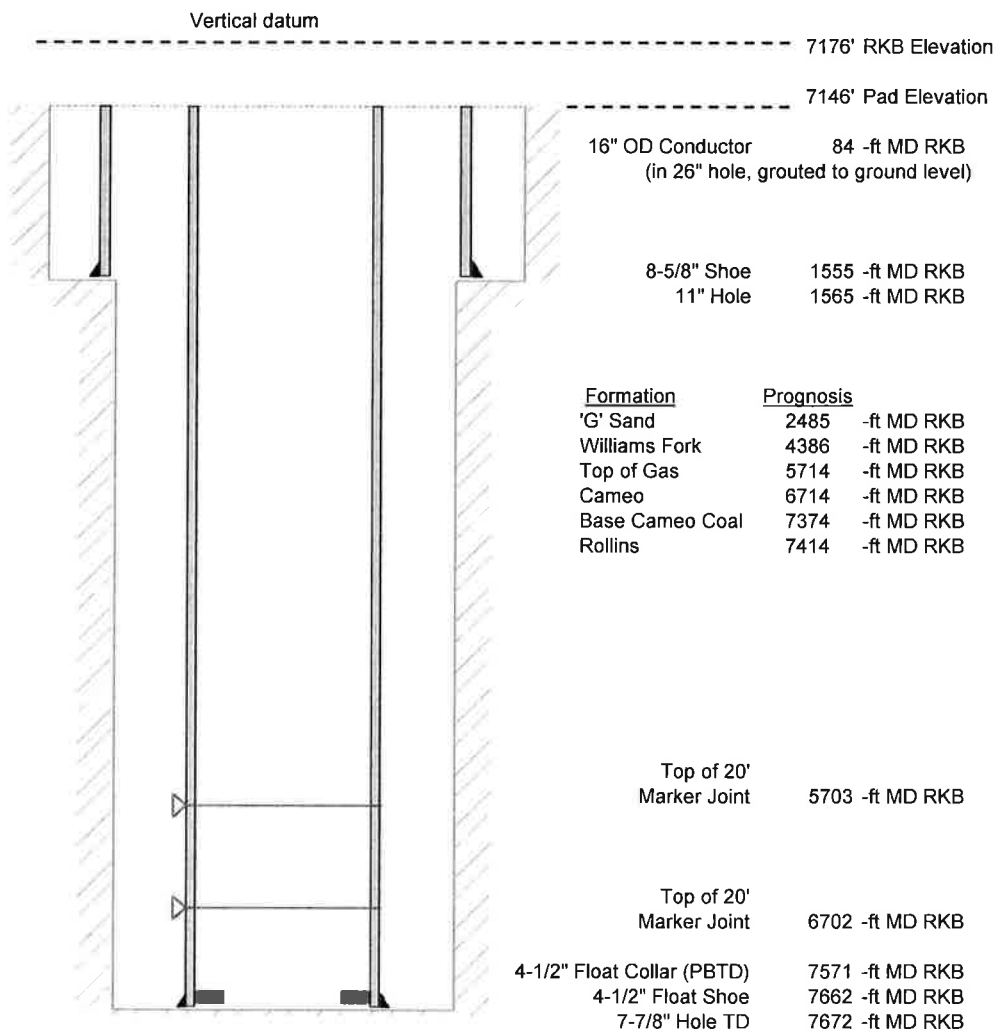


Laramie Energy, LLC
 Gunderson 20-08W
 Slot A-3
 H&P 522 (30-ft KB)

API #: 05-077-10340
 NE/4 NW/4 S20/T9S/R93W/6th PM
 Mesa County, CO
 Date of diagram: 7/23/2017



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	645
Bottom (ft RKB)	645	1555
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)	784	427
Yield (cf/sx)	1.94	1.73
Est Top (ft RKB)	0	5514
Est Bottom (ft RKB)	5514	7662
Returns (full or partial)	Full	Full

Displacement
8.3 ppg
117 bbls

Other Remarks: 21 bbls good cement back on surface. 40 bbls spacer back on production.