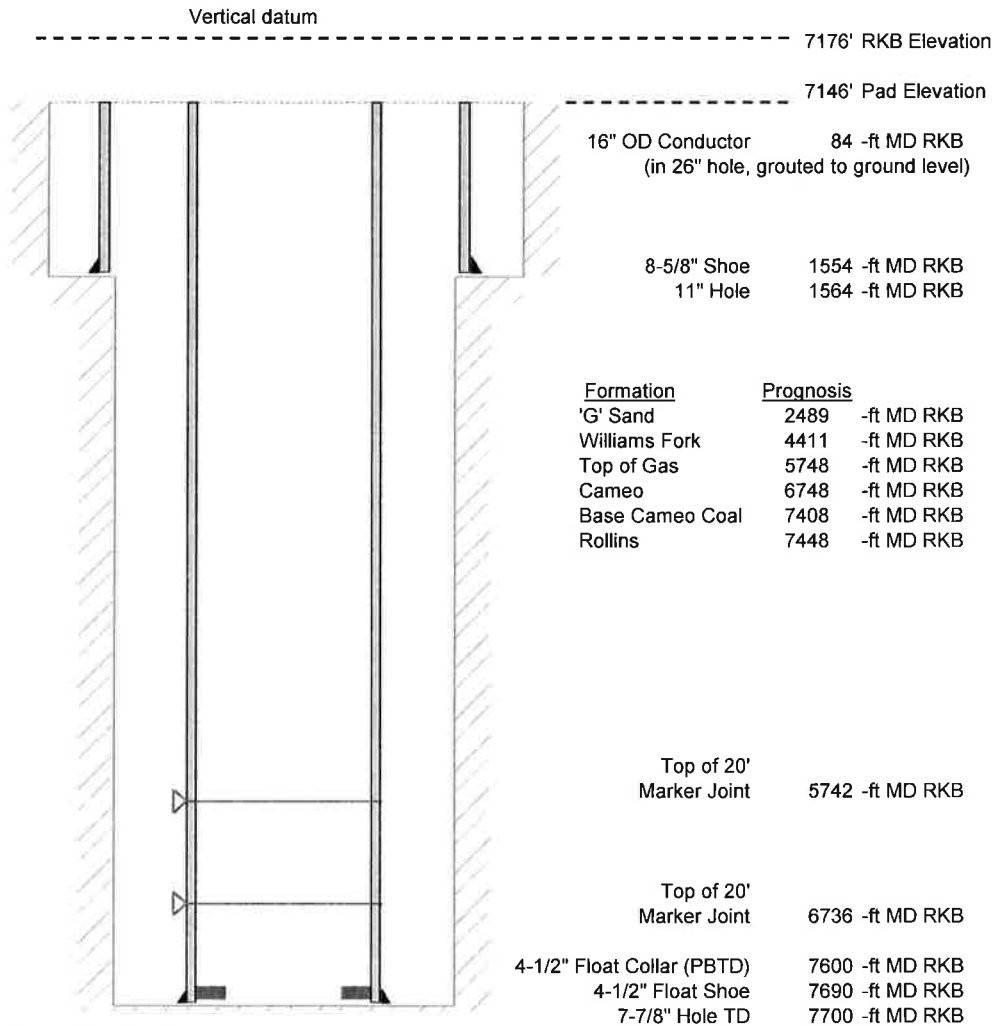


Laramie Energy, LLC
 Gunderson 20-09W
 Slot A-2
 H&P 522 (30-ft KB)

API # : 05-077-10350
 NE/4 NW/4 S20/T9S/R93W/6th PM
 Mesa County, CO
 Date of diagram : 7/28/2017



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	660
Bottom (ft RKB)	660	1554
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)	790	427
Yield (cf/sx)	1.94	1.73
Est Top (ft RKB)	458	5650
Est Bottom (ft RKB)	5650	7690
Returns (full or partial)	Full	Full

Displacement
8.3 ppg
117.8 bbls

Other Remarks : 26 bbls cement back on surface job. 20 bbls spacer back on production job.