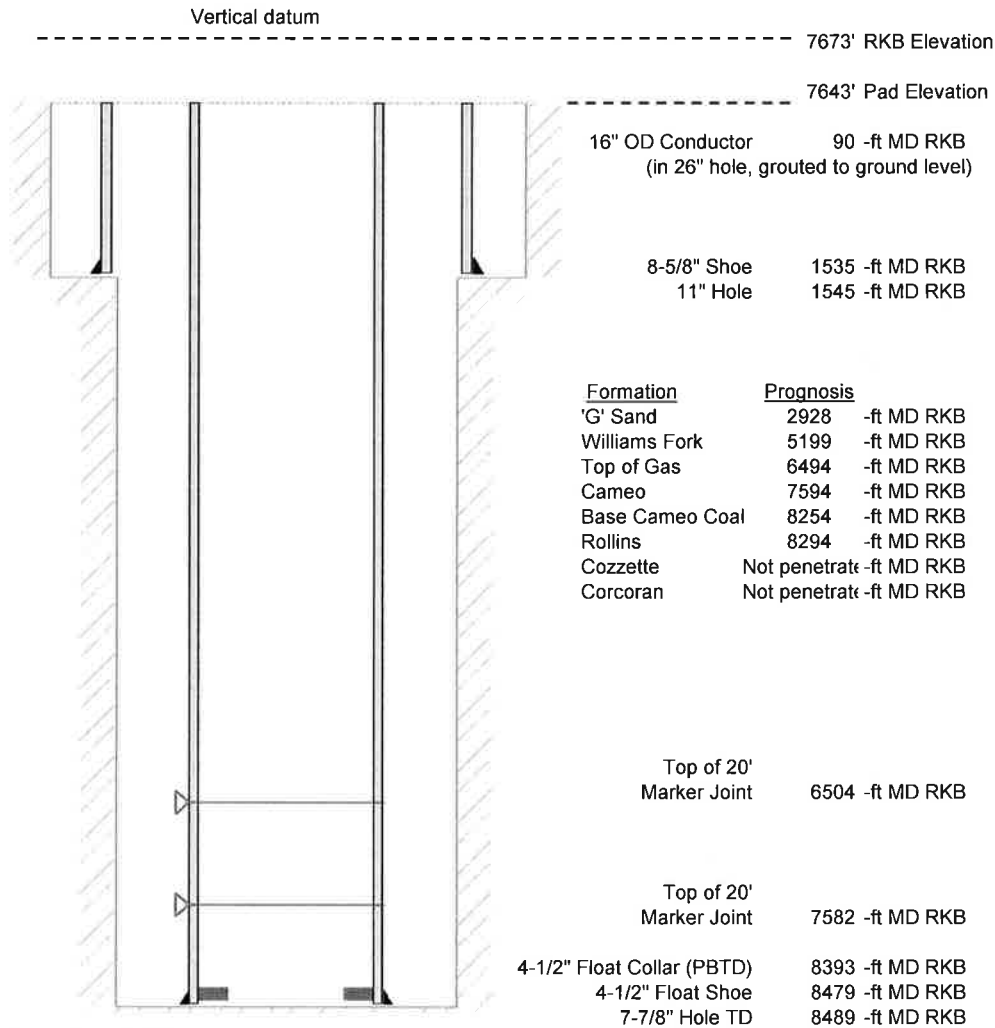


Laramie Energy, LLC  
 Bruton Federal 30-21W  
 Slot A-1  
 H&P 522 (30-ft KB)

API # : 05-077-10476  
 NW/4 SE/4 S30/T9S/R93W/6th PM  
 Mesa County, CO  
 Date of diagram : 2/13/2018



**Cementing details**

8-5/8" 24# Surface Csg	Lead	Tail
Density (ppg)	12.3	12.8
Volume (sx)	175	109
Yield (cf/sx)	2.45	2.18
Top (ft RKB)	0	660
Bottom (ft RKB)	660	1535
Returns (full or partial)	Full	Full

4-1/2" 11.6# Prod Csg	Lead	Tail
Density (ppg)	12.5	13.3
Volume (sx)	926	461
Yield (cf/sx)	1.94	1.73
Est Top (ft RKB)	1030	
Est Bottom (ft RKB)	6294	8479
Returns (full or partial)	Full	Full

Displacement
8.3 ppg
bbls

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