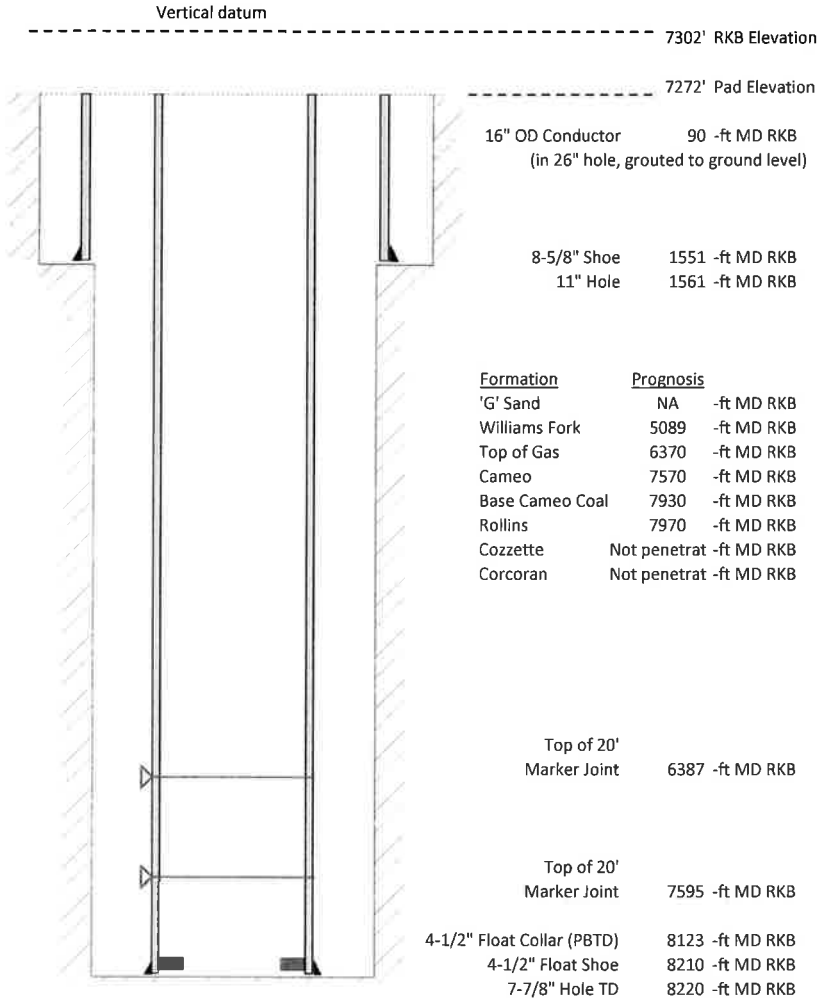


**Laramie Energy, LLC**  
**Gunderson 0994-13-05W**  
**Slot B-11**  
**H&P 522 (30-ft KB)**

API #: 05-077-10537-00  
NE/4 SW/4 S13/T9S/R94W/6th PM  
Mesa County, CO  
Date of diagram : 2/28/2018



**Cementing details**

8-5/8" 24# 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# Prod Csg	Lead	Tail
Density (ppg)	12.5	13.3
Volume (sx)	902	420
Yield (cf/sx)	1.94	1.73
Est Top (ft RKB)	0	5500
Est Bottom (ft RKB)	5500	8210
Returns (full or partial)	Full	Full

Displacement
8.3 ppg
129 bbls

Other Remarks : 43 bbls cement to surface on surface job. 40 bbls spacer back on production job.