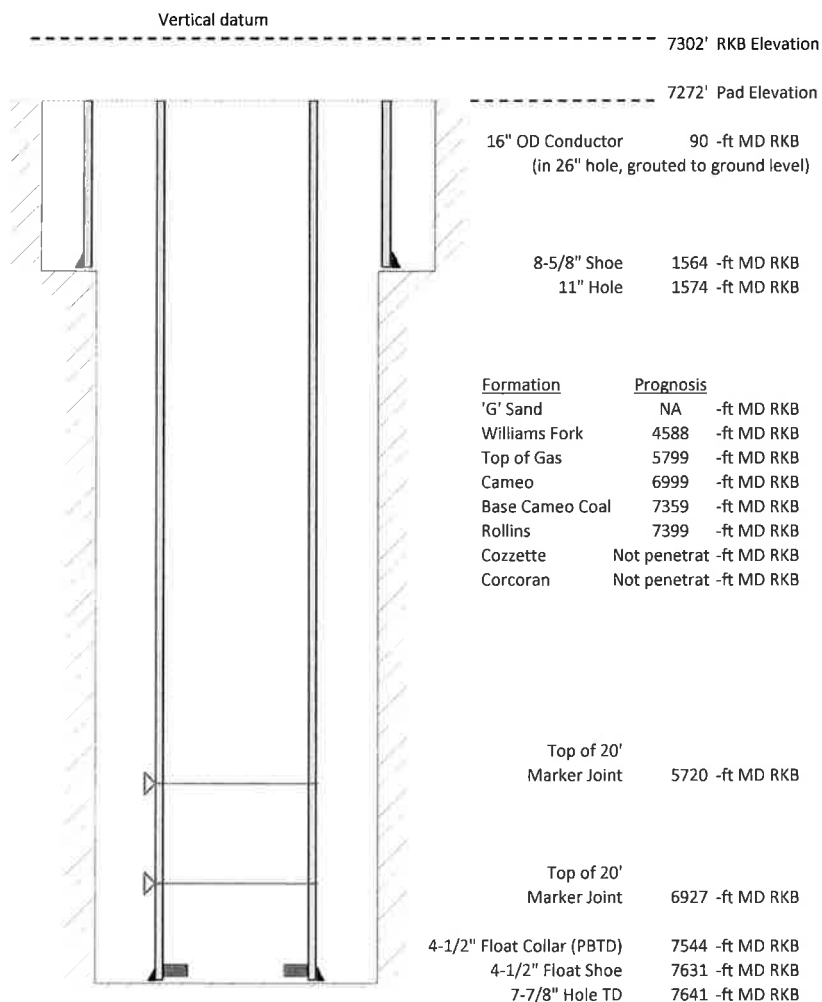


Laramie Energy, LLC
Gunderson 0994-13-12W
Slot A-8
H&P 522 (30-ft KB)

API #: 05-077-10534-00
 NE/4 SW/4 S13/T9S/R94W/6th PM
 Mesa County, CO
 Date of diagram : 3/22/2018



Cementing details

8-5/8" 24# Surface Csg	Lead	Tail
Density (ppg)	12.3	12.8
Volume (sx)	178	109
Yield (cf/sx)	2.45	2.18
Top (ft RKB)	0	1030
Bottom (ft RKB)	1030	1564
Returns (full or partial)	Full	Full

4-1/2" 11.6# Prod Csg	Lead	Tail
Density (ppg)	12.5	13.3
Volume (sx)	755	396
Yield (cf/sx)	1.94	1.73
Est Top (ft RKB)	1030	5599
Est Bottom (ft RKB)	5599	7631
Returns (full or partial)	Full	Full

Displacement
8.3 ppg
bbls

Other Remarks : 34 bbls cement to surface on surface job. 40 bbls spacer to surface on production job.