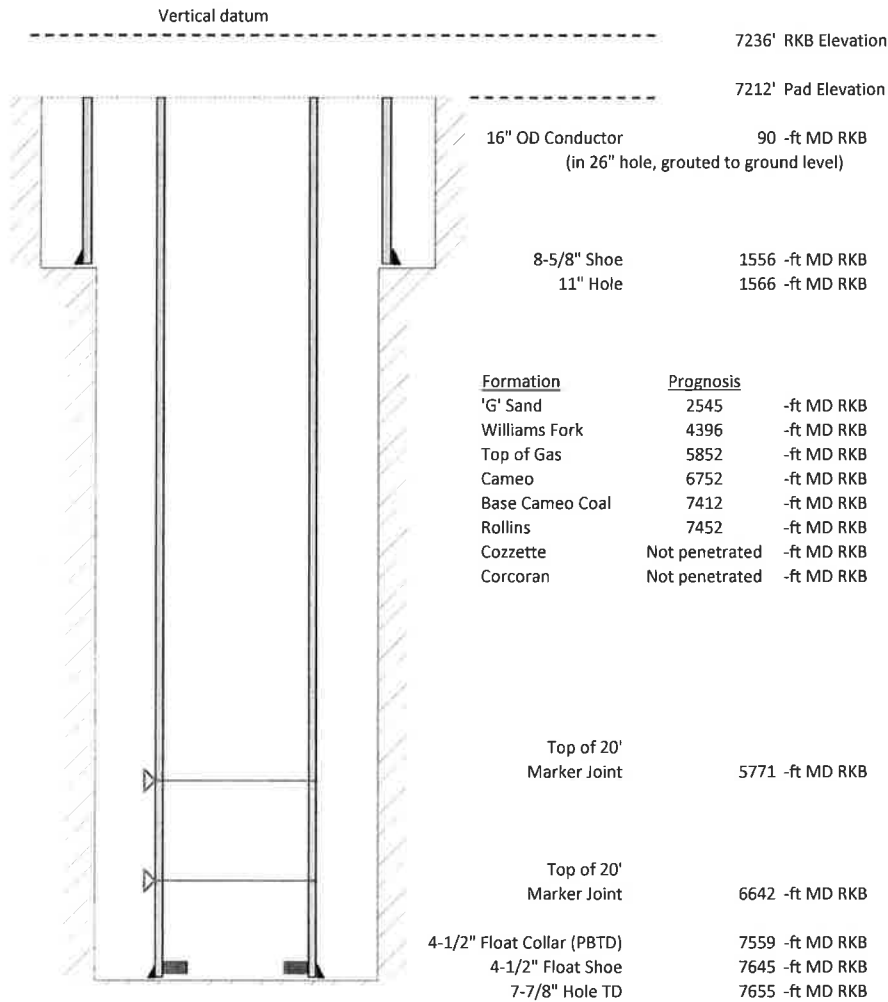


**Laramie Energy, LLC**  
**Nichols 0994-24-13E**  
**Slot A-4**  
**H&P 290 (24-ft KB)**

API # : 05-077-10396-00  
 SENW S24 T9S R94W 6th PM  
 Mesa County, CO  
 Date of diagram : 3/24/2018



**Cementing details**

8-5/8" 28# Surface Csg	Lead	Tail
Density (ppg)	12	12.5
Volume (sx)	192	107
Yield (cf/sx)	2.52	2.22
Top (ft RKB)	24	1030
Bottom (ft RKB)	1030	1556
Returns (full or partial)	Full	Full

4-1/2" 11.6# Prod Csg	Lead	Tail
Density (ppg)	12.7	13.5
Volume (sx)	860	393
Yield (cf/sx)	1.97	1.85
Est Top (ft RKB)	1030	5652
Est Bottom (ft RKB)	5652	7645
Returns (full or partial)	Full	Full

Displacement
8.3 ppg
117 bbls

Other Remarks : Surface- 35 bbls cement to surface Production- 30 bbls spacer to surface