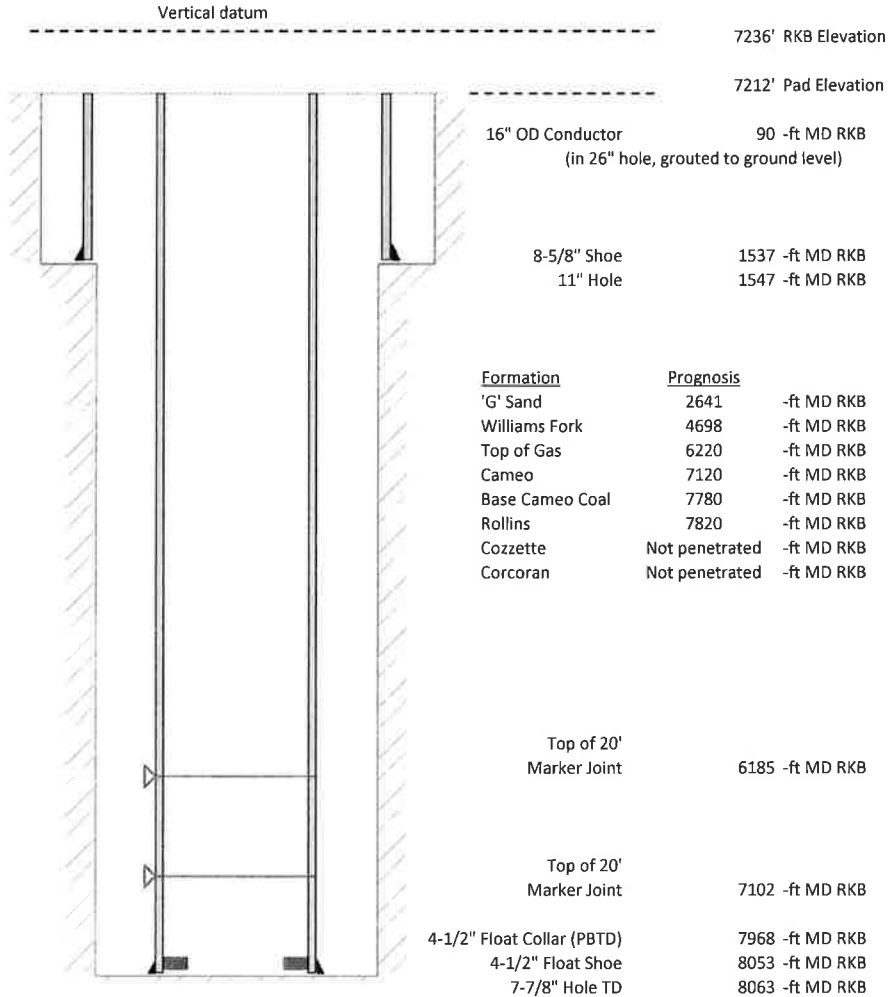


Laramie Energy, LLC  
Nichols Federal 0994-24-19E  
Slot A-9  
H&P 290 (24-ft KB)

API # : 05-077-10393-00  
SENW S24 T9S R94W 6th PM  
Mesa County, CO  
Date of diagram : 5/8/2018



**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	1537
Returns (full or partial)	Full	Full

4-1/2" 11.6# Prod Csg	Lead	Tail
Density (ppg)	12.7	13.5
Volume (sx)	818	369
Yield (cf/sx)	1.97	1.9
Est Top (ft RKB)	1030	5959
Est Bottom (ft RKB)	5959	8053
Returns (full or partial)	Full	Full

Displacement
8.3 ppg
123 bbls

Other Remarks : Surface- 35 bbls cement to surface Production- 60 bbls spacer to surface