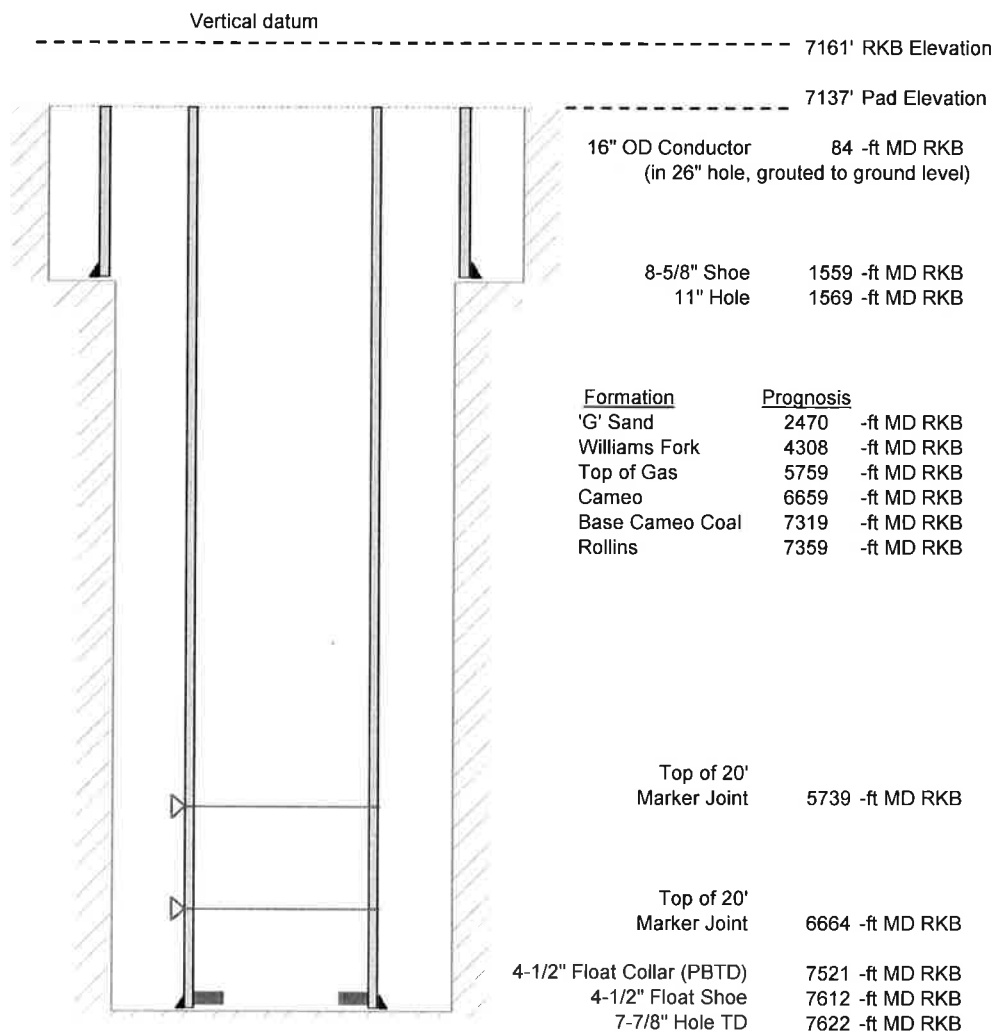


Laramie Energy, LLC
 Nichols 0994-24-09E
 Slot A-12
 H&P 290 (24-ft KB)

API #: 077-10410-00
 SW/4 NE/4 S24/T9S/R94W/6th PM
 Mesa County, CO
 Date of diagram: 11/25/2017



Cementing details

8-5/8" 24# J55 STC Surface Csg	Lead	Tail
Density (ppg)	12.0	12.5
Volume (sx)	168	120
Yield (cf/sx)	2.52	2.22
Top (ft RKB)	24	1024
Bottom (ft RKB)	1024	1559
Returns (full or partial)	Full	Full

4-1/2" 11.6# L-80 LTC Prod Csg	Lead	Tail
Density (ppg)	12.7	13.5
Volume (sx)	781	381
Yield (cf/sx)	1.97	1.90
Est Top (ft RKB)	1024	5559
Est Bottom (ft RKB)	5559	7612
Returns (full or partial)	Full	Full

Displacement
8.3 ppg
116.5 bbls

Other Remarks: Surface-24 bbls cement to surface Production- 30
 bbls spacer to surface