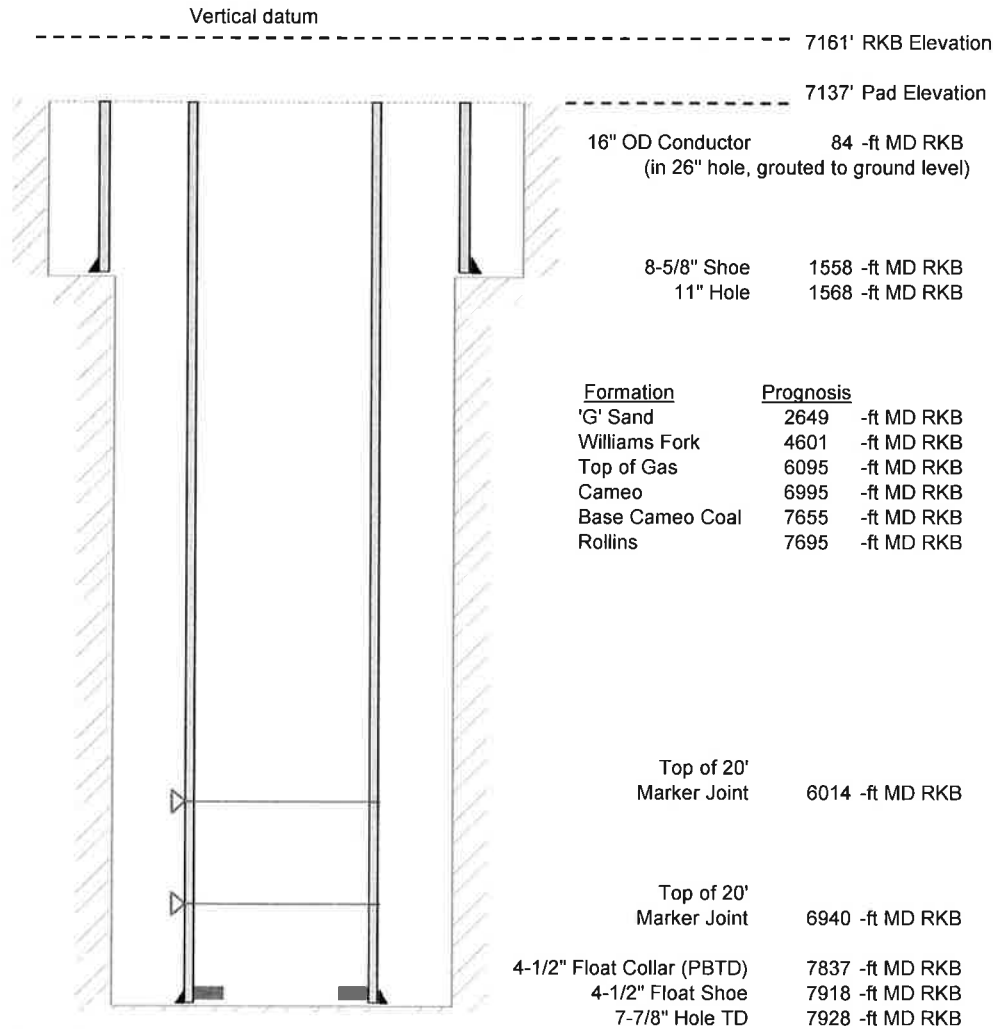


Laramie Energy, LLC
 Nichols 0994-24-01E
 Slot A-4
 H&P 290 (24-ft KB)

API # : 077-10406-00
 SW/4 NE/4 S24/T9S/R94W/6th PM
 Mesa County, CO
 Date of diagram : 1/20/2018



Cementing details

8-5/8" 24# J55 STC Surface Csg	Lead	Tail
Density (ppg)	12.0	12.5
Volume (sx)	191	107
Yield (cf/sx)	2.52	2.22
Top (ft RKB)	24	1024
Bottom (ft RKB)	1024	1558
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)	841	393
Yield (cf/sx)	1.97	1.90
Est Top (ft RKB)	1026	5895
Est Bottom (ft RKB)	5895	7918
Returns (full or partial)	full	full

Displacement
8.3 ppg
121 bbls

Other Remarks : Surface-22 bbls cement to surface Production-40
 bbls spacer to surface