

Well Name: Federal 31-2CC (PF-31)

Permit Estimated Formation Tops (MD / TVD)	Casing & Hole size	Actual Conditions (MD / TVD)
16" Conductor @ 60' Cement to surface with 5 yds redi-mix		16" Conductor @82' Cement to surface with 5 yds redi-mix
WasatchSurface / Surface 14.75" Hole to 200' MD 12.25" Hole to Surf TD		WasatchSurface/ Surface
Surface Casing1661 / 1538 9.625" - 36# - 55 Grade - 8 Round Cement to surface with: Lead: 432 sxs 12.5 Glass G 2.11 ft³/sk Tail: 134 sx, 15.8, Class G 1.17 ft³/sk Total: 566 sx (volume includes 80% excess)		
8.75" Hole to Top of Gas 8.75" Hole to TD		Top of fish 1521'
TOC Requirement 200 ft above Mesa V		12.25" Surface Hole Surface Hole depth / 1710
Ohio Creek3791 / 3265 Mesaverde Marker3791 / 3265 Williams Fork4453 / 3905 Top Gas4843 / 4294 Coal Ridge6186 / 5637 Rollins6637 / 6088 CozzetteN/A / N/A CorcoranN/A / N/A Permit TD6888 / 6338		
Production Casing6888 / 6338 4.5" - 11.6# - 80 Grade - Buttress Cement with: Lead: 279 sx, 12 TXI, 1.79 ft³/sk Tail: 571 sx, 13 TXI, 1.43 ft³/sk Total: 850 sx (volume includes 30% excess)		Total: