

Well Name: Alp Fee 24-3D (J24NW)

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 @ 40' Cement to surface with 5 yds redi-mix
WasatchSurface / Surface 14.75" Hole to 200' MD 12.25" Hole to Surf TD		WasatchSurface/ Surface
12.25" Surface Hole		
Surface Casing980 / 960 9.625" - 36# - 55 Grade - 8 Round Cement to surface with: Lead: 250 sxs 12.5 Glass G 2.11 ft³/sk Tail: 134 sx, 15.8, Class G 1.17 ft³/sk Total: 384 sx (volume includes 80% excess)		Surface Casing1223' / 1200' 9-5/8" 36" J55 LTC Cemented to surface with Lead: 323 sxs 12.5# G at 2.11 ft³/ Tail 150 sxs 15.8# G at 1.16 ft³/sk Total: 473 sxs
8.75" Hole to Top of Gas 7.875" Hole to TD		8.75" Hole to 4627' MD 7.875" Production Hole
TOC requirement 500ft above TOG		TOC from CBL: 3620' MD
Ohio Creek4125 / 3921 Mesaverde Marker4125 / 3921 Williams Fork4999 / 4744 Top Gas6084 / 5804 Coal Ridge7140 / 6860 Rollins7930 / 7650 Cozzette- / - Corcoran- / - Permit TD8180 / 7900		Ohio CreekNot picked Mesaverde Marker4170 / 3936 Williams Fork5051 / 4766 Top Gas6084 / 5784 Coal Ridge7137 / 6835 Rollins7961 / 7659 CozzetteN/A / N/A CorcoranN/A / N/A Actual TD8115' / 7812'
Production Casing8180 / 7900 4.5" - 11.6# - 80 Grade - Buttress Cement with: Lead: 112 sx, 12 TXI, 1.79 ft³/sk Tail: 434 sx, 13 TXI, 1.43 ft³/sk Total: 546 sx (volume includes 30% excess)		Production Casing8095' / 7792' 4.5" 11.6# S80 BTC Cement with: Lead: 581 sxs 12# TXI at 1.79 ft³/sk Tail: 317 sxs 13# TXI at 1.88 ft³/sl Total: 898 sxs