

Well Name: Alp Fee 24-12A (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 Casing1273 / 1226 9.625" - 36# - 55 Grade - 8 Round Cement to surface with: Lead: 329 sxs 12.5 Glass G 2.11 ft³/sk Tail: 134 sx, 15.8, Class G 1.17 ft³/sk Total: 463 sx (volume includes 80% excess)		Surface Casing1315' / 1250' 9-5/8" 36" J55 LTC Cemented to surface with Lead: 319 sxs 12.5# G at 2.11 ft3/ Tail 150 sxs 15.8# G at 1.18 ft3/sk Total: 469 sxs
8.75" Hole to Top of Gas 7.875" Hole to TD		8.75" Hole to 6049' MD 7.875" Production Hole
TOC requirement 500ft above TOG		TOC from CBL: 3800' MD
Ohio Creek4238 / 3851 Mesaverde Marker4238 / 3851 Williams Fork5129 / 4643 Top Gas6317 / 5797 Coal Ridge7354 / 6834 Rollins8092 / 7572 Cozzette- / - Corcoran- / - Permit TD8342 / 7822		Ohio CreekNot picked Mesaverde Marker4363 / 3943 Williams Fork5086 / 4593 Top Gas6315 / 5792 Coal Ridge7354 / 6831 Rollins8120 / 7597 CozzetteN/A / N/A CorcoranN/A / N/A Actual TD8266' / 7742'
Production Casing8342 / 7822 4.5" - 11.6# - 80 Grade - Buttress Cement with: Lead: 112 sx, 12 TXI, 1.79 ft³/sk Tail: 419 sx, 13 TXI, 1.43 ft³/sk Total: 531 sx (volume includes 30% excess)		Production Casing8246' / 7662' 4.5" 11.6# L80 BTC Cement with: Lead: 687 sxs 12.5# TXI at 1.58 ft3/sl Tail: 306 sxs 13# TXI at 1.88 ft3/sl Total: 993 sxs