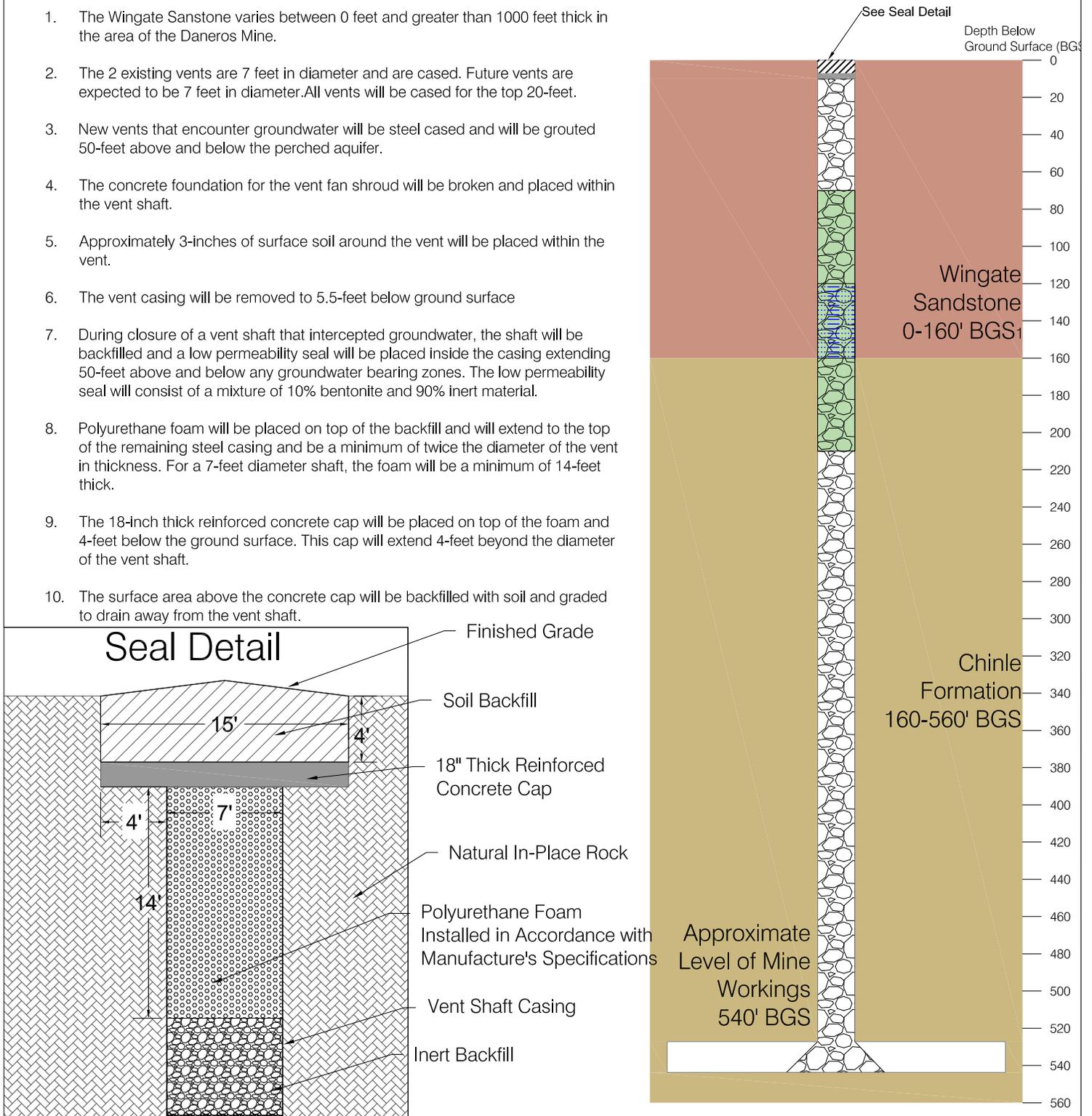
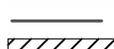


Notes:

1. The Wingate Sandstone varies between 0 feet and greater than 1000 feet thick in the area of the Daneros Mine.
2. The 2 existing vents are 7 feet in diameter and are cased. Future vents are expected to be 7 feet in diameter. All vents will be cased for the top 20-feet.
3. New vents that encounter groundwater will be steel cased and will be grouted 50-feet above and below the perched aquifer.
4. The concrete foundation for the vent fan shroud will be broken and placed within the vent shaft.
5. Approximately 3-inches of surface soil around the vent will be placed within the vent.
6. The vent casing will be removed to 5.5-feet below ground surface
7. During closure of a vent shaft that intercepted groundwater, the shaft will be backfilled and a low permeability seal will be placed inside the casing extending 50-feet above and below any groundwater bearing zones. The low permeability seal will consist of a mixture of 10% bentonite and 90% inert material.
8. Polyurethane foam will be placed on top of the backfill and will extend to the top of the remaining steel casing and be a minimum of twice the diameter of the vent in thickness. For a 7-foot diameter shaft, the foam will be a minimum of 14-feet thick.
9. The 18-inch thick reinforced concrete cap will be placed on top of the foam and 4-feet below the ground surface. This cap will extend 4-feet beyond the diameter of the vent shaft.
10. The surface area above the concrete cap will be backfilled with soil and graded to drain away from the vent shaft.



-  Reinforced Concrete Cap
-  Vent Casing
-  Soil Backfill
-  Perched Aquifer
-  Low Permeability Seal
-  Inert Material

EF Energy Fuels Resources (USA) Inc.

REVISIONS		Project: Daneros Mine	
Date	By	County: San Juan	State: Utah
10/22/14	RE	Location:	
Figure 4-3 Vent Closure Design Cased Vent Shafts With Groundwater Intercept			
Author: RJE		Date: 10/24/14	Drafted By: