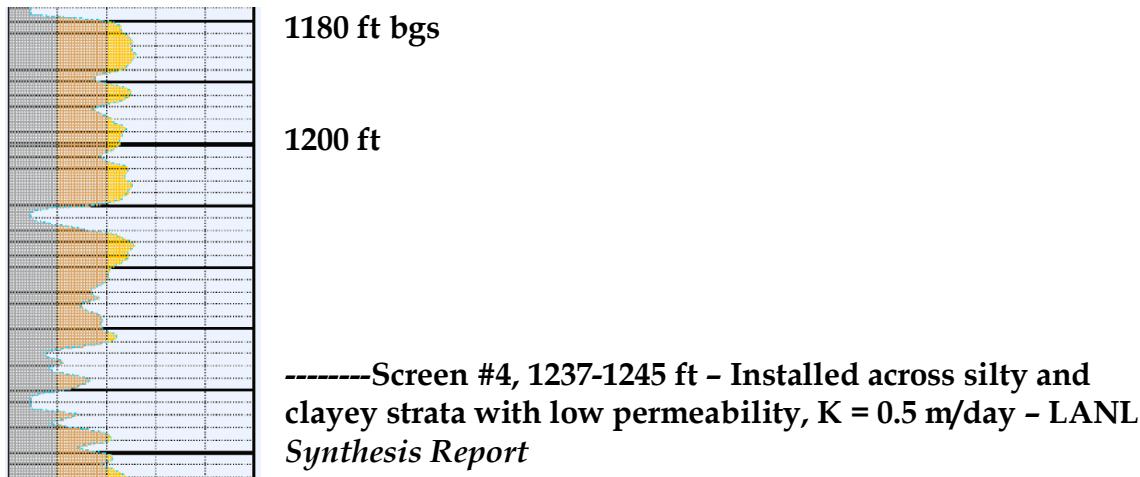


Figure 1-8.

Well R-16 Schlumberger Geophysics of Screen #4.
Permeability increases from left to right on the figure.

Strata with markedly higher permeability are at a depth of 1180 to 1188 feet and at a depth of 1252 to 1262 feet below ground surface (bgs).



- Also, Screen #4 is surrounded by Bentonite Clay Slough that was not cleaned out of the borehole
- Well R-16 was drilled with the Conventional Mud Rotary Method.
- All of the screened intervals are invaded with large quantities of Bentonite Clay Drilling Mud and Organic Additives. None of the Screened Intervals in LANL Well R-16 meet the requirements of RCRA Subpart F.
- All of the drill cuttings produced from the mud rotary borehole are mixtures of cuttings from different depths as the cuttings travel out of the borehole along the borehole wall. Furthermore, all of the drill cuttings were contaminated with the bentonite clay drilling mud.
- The contaminated and mixed drill cuttings are not useful for identifying the strata with highest permeability that are appropriate for monitoring
- The borehole geophysics were the best information for locating the well screens in well R-16 but the Schlumberger report shows that the well screens are not installed in the aquifer strata that are important for long-term monitoring.
- There is a need to install a new monitoring well near the location of well R-16 to monitor the aquifer strata that may form a pathway for contamination from LANL to travel beneath the Rio Grande to the Buckman Well Field, and important water supply for Santa Fe.