

LOCATION: 200-I

HYDRAULIC CONDITIONS: Confined bedrock aquifer.

PERTINENT OBSERVATIONS:

Groundwater was first intercepted during drilling at approximately 200 feet bgs. Groundwater within the borehole prior to well installation was reported at 170 feet bgs. Several pressure profiles using Westbay measurement ports have been conducted since installation of the well. Pressure profiles conducted on 10/9/97, 11/4/97, 2/3/98, and 3/21/98 are attached. The profiles indicate a strong upward hydraulic through the Paleozoic limestone/shale sequence. Equivalent groundwater heads from fluid pressures of 180 feet bgs continue from the water table to a depth of 375 feet. The measurement port at 480 feet has an equivalent head of 150 feet bgs, which indicates confined conditions and an upward gradient. Ports at depths of between 490 and 795 feet all show equivalent heads of approximately 106 feet bgs. These values again indicate an upward gradient and the confined nature of the aquifer. The local shale horizons, particularly the interbedded limestone and shale unit in the vicinity of 500 feet bgs form the confining layers.