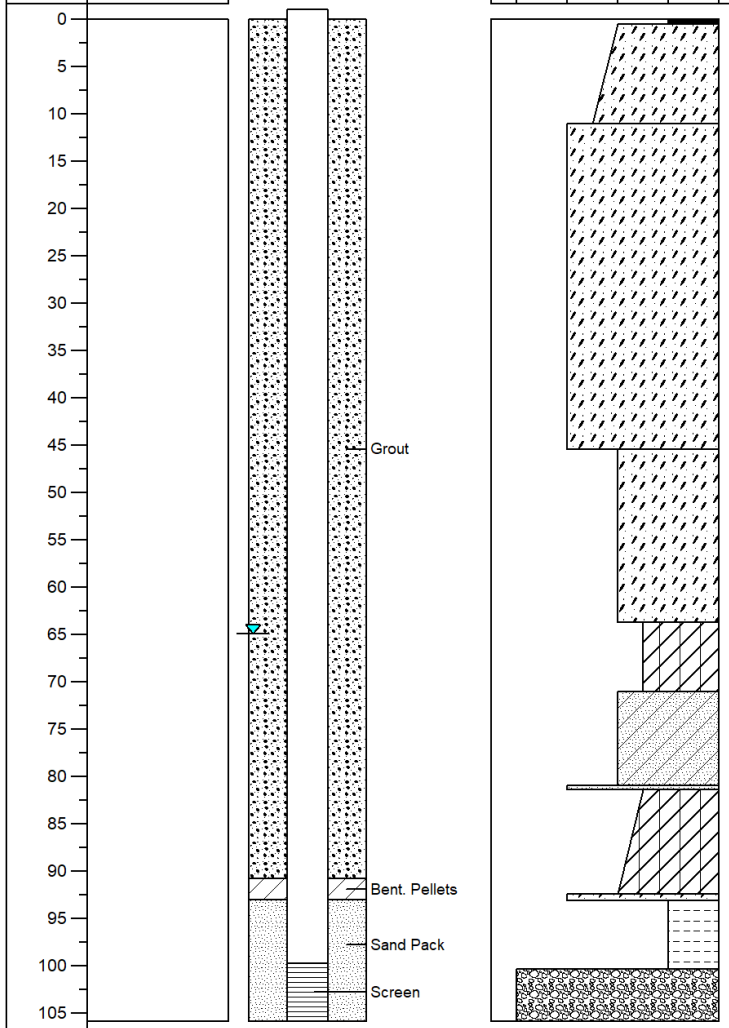
Monitoring Well Network Project
Peace Region, British Columbia, Canada

EERI-21

Energy and Environment Research Initiative
Dept of Earth, Oceans, & Atmospheric Sciences
University of British Columbia

Date Drilled	: 8/14/2019 - 8/16/2019	Drilled By	: Omega Environmental Drilling
Location	: Rolla, BC		
Equipment	: Boart Longyear LS600 Sonic Track	Sonic (O.D. = 15.24 cm)	: 0-99.4m & 102.4-105.8m
Logged By	: Max Goetz	Air Rotary (O.D. = 12.7 cm)	: 99.4-102.4m
Sampled By	: Andrew Allen		

Depth in Meters | Water Info | Well: 3" PVC, 0.020 slot | GRAIN SIZE & LITHOLOGY (gravel, sand, silt, clay) | DESCRIPTION



Topsoil, organic rich, clayey loam.

Silty clay diamict coarsening to a denser clayey silt diamict. 15-20% clasts, mostly pebbles/granules and clusters of sand. Matrix is grey/brown and somewhat oxidized. Minor amounts of fine sand in matrix. 1-2mm gypsum flakes common.

Clayey fine sandy diamict, 20-30% clasts, mostly granules, pebbles and oxidized fine sand clusters. Gypsum flakes common in dense grey matrix. Chert and quartzite pebbles common.

Silty clay diamict, 15-20% clasts granule/pebble size. Matrix is less dense than above, clast oxidation increases with depth

Silty clay, very dense, grey, 1% granule clasts. Small interbed of fine sand at 66m. Gradual transition into underlying unit.

Clayey very fine sand, 50/50 proportion of sand and clay. 0% clasts, moderately dense matrix. Undetermined white mineral specs (<1mm) common.

Lower fine sand, no clay, moist. Driller reports loss of water to formation.

Silty clay with find sand. 0% clasts, dense, grey, small white undetermined specs common. Coarsens to clayey silt.

Silty fine sand diamict, extremely oxidized, light orange color, matrix supported, 50% clasts (granules/pebbes).

Incompetent shale, clayey and reworked by drilling. Some shaley parting visible. Driller switches to air rotary at 99.4m.

Conglomerate, clast supported with 10-50% matrix. Subangular to rounded gravels in silty sand matrix, highly oxidized, poorly sorted. Up to boulder size clasts, quartzite and chert common. Exact contact with overlying shale is unknown, since transition was during air rotary drilling