

Surficial Hydrostratigraphic Units - Labrador

Hydrostratigraphic Unit	Symbology	Interpreted Relative Groundwater Development Potential	Typical Hydraulic Conductivity Range (m/d) ¹
Unit A Exposed Bedrock and Drift-Poor Areas		Very Low Yield	-
Unit B Till and Ribbed (Rogen) Moraine Deposits		Low to Moderate Yield	Glacial till (10 to 10 ⁻² m/d)
Unit C Ablation Drift Deposits		Moderate Yield	Coarse gravel (10 ² to 10 ³ m/d) to fine to coarse sand (10 ³ to 10 ⁻² m/d)
Unit D Glaciomarine and Marine Deposits and Glaciolacustrine deposits		Low to Moderate to High Yield	Coarse gravel (10 ² to 10 ³ m/d) to fine to coarse sand (10 ² to 10 ² m/d) to silt (1 to 10 ⁻² m/d)
Unit E - Glaciofluvial Deposits		High Yield	Coarse gravel (10 ² to 10 ³ m/d) to fine to coarse sand (10 ² to 10 ² m/d)

Reference: 1. Typical hydraulic conductivity values for consolidated and unconsolidated aquifers as presented in Driscoll (1986) after Davis, 1969; Dunn and Leopold, 1978; Freeze and Cherry, 1979.

Map Features

- Town or Village
- Former Town or Village
- Major Road
- Secondary Road
- Ferry Route
- Southern Limit of Continuous Permafrost

- Number of Well Logs Retrieved per Community**
- 1 - 3
 - 4 - 9
 - 10 - 15
 - 15 - 20
 - > 20

References

Surficial geology is based on Klassen, R.A., S. Paradis, A.M. Bolduc and R.D. Thomas, 1992. Glacial Landforms and Deposits, Labrador, Newfoundland and Quebec. Geological Survey of Canada, Map 1814A, Scale 1:1,000,000. Surficial geology digital dataset obtained from Newfoundland and Labrador Department of Natural Resources (2010) and base data obtained from NL DNR (2003).

Natural Resources Canada, 1993. Canada-Permafrost [map]. Fifth Edition, National Atlas of Canada. http://gsc.nrcan.gc.ca/permafrost/wheredoes_e.php

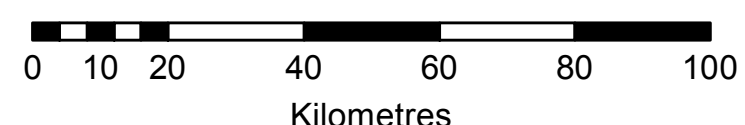


Department of Environment and Conservation

Map No. 3

SURFICIAL HYDROGEOLOGY

Labrador Region, NL



Notes

1. Landform features are not shown on this figure due to variability of the quality of the symbols available within the digital dataset. Refer to the Klassen et al. (1992) map for the landform feature detail for the study area.
2. Additional landform feature detail is available for select areas of Labrador based on digital information provided by Newfoundland and Labrador Department of Natural Resources. The additional detail is available on a local scale for several areas of Labrador developed by current or historical mining operations. This information has been omitted for this figure because it would be misleading due to the regional scale of the subject study.
3. This map should be reviewed in conjunction with the Draft Report on the Hydrogeology of Labrador prepared by AECOM, dated March 23, 2011.
4. Areas of interpreted relative groundwater development potential are inferred and do not necessarily represent actual conditions.

FINAL

DATE: March 23, 2011
 SCALE: 1:1,115,000
 PROJECTION:
 UTM Zone 20N, NAD 83
 REVISION: 3
 DRAWN: HC-SEG

