Publication information

Geological Survey of Canada

Open File 8310

Downhole geophysical data in a shallow bedrock aquifer near Sussex, New Brunswick

H. Crow, T. Cartwright, and P. Ladevèze

© Her Majesty the Queen in Right of Canada, as represented by the Minister of Natural Resources, 2017

Permanent link: https://doi.org/10.4095/306173

Publications in this series have not been edited; they are released as submitted by the author.

Recommended citation

Crow, H, Cartwright, T, and Ladevèze, P. 2017. Downhole geophysical data collected in 10 boreholes near Sussex, New Brunswick; Geological Survey of Canada, Open File 8310, 1 .zip file. https://doi.org/10.4095/306173

System requirements

PC with 486 or greater processor, or Mac® with OS® X v. 10.2.2 or later; Adobe® Reader® v. 6.0 or later; video resolution of 1280 x 1024.

Trademarks

Adobe®, Acrobat®, and Reader® are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Contents

The Geological Survey of Canada (GSC) is investigating the vulnerability of shallow aquifers to deep gas development in Sussex, New Brunswick. To support the project, downhole geophysical logs were collected in 10 GSC-drilled observation wells (50 to 80 m in depth) to better understand the in situ lithological, geomechanical, and hydrogeological properties of the near-surface bedrock. The suite of logs included natural gamma and gamma-gamma density, televiewer imagery (optical and acoustic), acoustic logs to compute compressional (P-) and shear (S-) wave velocities, and fluid logs (temperature, conductivity, flow). Logs are interpreted alongside GSC core and cuttings descriptions, and results are discussed in the context of deeper (260 – 770 m) industry-collected logs. This report summarises the downhole geophysical data acquisition and analyses, and provides log suites and digital data in appendices.

Directory structure

of\_8310\_readme.rtf

of\_8310.pdf (includes report and Appendices A and B)

Appendix C (contains 16 files)

 PO-01.las

 PO-02.las

PO-03.las

 PO-04.las

PO-05.las

 PO-06.las

PO-07.las

 PO-09.las

 PO-10.las

 McCully\_structural orientations.xlsx

 PO-01 Heat pulse flow meter test.xlsx

 PO-02 Heat pulse flow meter test.xlsx

 PO-03 Heat pulse flow meter test.xlsx

 PO-04 Heat pulse flow meter test.xlsx

 PO-07 Heat pulse flow meter test.xlsx

PO-09 Heat pulse flow meter test.xlsx

Author contact information

Heather Crow

Geological Survey of Canada

186-601 Booth Street

Ottawa, Ontario

K1A 0E8

Email: Heather.Crow@Canada.ca

Availability information

This publication is available for free download through GEOSCAN (<http://geoscan.nrcan.gc.ca/>).

Terms of use

Information contained in this publication or product may be reproduced, in part or in whole, and by any means, for personal or public non-commercial purposes, without charge or further permission, unless otherwise specified.

You are asked to:

* + exercise due diligence in ensuring the accuracy of the materials reproduced;
	+ indicate the complete title of the materials reproduced, and the name of the author organization; and
	+ indicate that the reproduction is a copy of an official work that is published by Natural Resources Canada (NRCan) and that the reproduction has not been produced in affiliation with, or with the endorsement of, NRCan.

Commercial reproduction and distribution is prohibited except with written permission from NRCan. For more information, contact NRCan at nrcan.copyrightdroitdauteur.rncan@canada.ca.

Terms of use for data

View the licence agreement for data at <http://open.canada.ca/en/open-government-licence-canada>