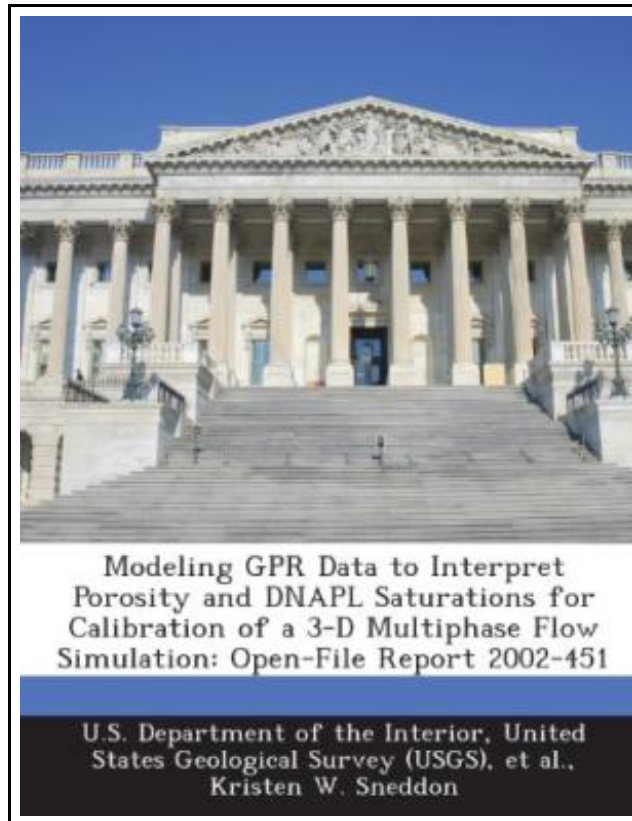


Modeling Gpr Data to Interpret Porosity and Dnapl Saturations for Calibration of a 3-D Multiphase Flow Simulation: Open-File Report 2002-451



Filesize: 1.2 MB

Reviews

This publication is wonderful. It can be rally fascinating throgh reading period of time. You are going to like the way the writer create this publication.

(Mrs. Piper Jacobi)

MODELING GPR DATA TO INTERPRET POROSITY AND DNAPL SATURATIONS FOR CALIBRATION OF A 3-D MULTIPHASE FLOW SIMULATION: OPEN-FILE REPORT 2002-451

[DOWNLOAD](#)

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.Dense nonaqueous phase liquids (DNAPLs) are a pervasive and persistent category of groundwater contamination. In an effort to better understand their unique subsurface behavior, a controlled and carefully monitored injection of PCE (perchloroethylene), a typical DNAPL, was performed in conjunction with the University of Waterloo at Canadian Forces Base Borden in 1991. Of the various geophysical methods used to monitor the migration of injected PCE, the U.S. Geological Survey collected 500-MHz ground penetrating radar (GPR) data. These data are used in determining calibration parameters for a multiphase flow simulation. GPR data were acquired over time on a fixed two-dimensional surficial grid as the DNAPL was injected into the subsurface. Emphasis is on the method of determining DNAPL saturation values from this time-lapse GPR data set. Interactive full-waveform GPR modeling of regularized field traces resolves relative dielectric permittivity versus depth profiles for pre-injection and later-time data. Modeled values are end members in recursive calculations of the Bruggeman-Hanai-Sen (BHS) mixing formula, yielding interpreted pre-injection porosity and post-injection DNAPL saturation values. The resulting interpreted physical properties of porosity and DNAPL saturation of the Borden test cell, defined on a grid spacing of 50 cm with 1-cm depth resolution, are used as observations for calibration of a 3-D multiphase flow simulation. Calculated values of DNAPL saturation in the subsurface at 14 and 22 hours after the start of injection, from both the GPR and the multiphase flow modeling, are interpolated volumetrically and presented for visual comparison.



[Read Modeling Gpr Data to Interpret Porosity and Dnapi Saturations for Calibration of a 3-D Multiphase Flow Simulation: Open-File Report 2002-451 Online](#)



[Download PDF Modeling Gpr Data to Interpret Porosity and Dnapi Saturations for Calibration of a 3-D Multiphase Flow Simulation: Open-File Report 2002-451](#)

Other Books



Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can usually...

[Download Book »](#)



Kindergarten Culture in the Family and Kindergarten; A Complete Sketch of Froebel s System of Early Education, Adapted to American Institutions. for the Use of Mothers and Teachers

Rarebooksclub.com, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can download...

[Download Book »](#)



A Kindergarten Manual for Jewish Religious Schools; Teacher s Text Book for Use in School and Home

Rarebooksclub.com, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can download...

[Download Book »](#)



Froebel s Occupations

Theclassics.Us, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can usually...

[Download Book »](#)



A Year Book for Primary Grades; Based on Froebel s Mother Plays

Rarebooksclub.com, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can download...

[Download Book »](#)

**To Thine Own Self**

Dog Ear Publishing, United States, 2011. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Carefree and self assured Carolyn loves her life. Her uncle runs

[Download eBook »](#)

**Talking Digital: A Parent s Guide for Teaching Kids to Share Smart and Stay Safe Online**

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book. It is time for the digital talk. Today, kids are growing up in a wired world. Their

[Download eBook »](#)

**Crochet: Learn How to Make Money with Crochet and Create 10 Most Popular Crochet Patterns for Sale: (Learn to Read Crochet Patterns, Charts, and Graphs, Beginner s Crochet Guide with Pictures)**

Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Getting Your FREE Bonus Download this book, read it to the end and

[Download eBook »](#)

**A Smarter Way to Learn JavaScript: The New Approach That Uses Technology to Cut Your Effort in Half**

Createspace, United States, 2014. Paperback. Book Condition: New. 251 x 178 mm. Language: English . Brand New Book ***** Print on Demand *****.The ultimate learn-by-doing approachWritten for beginners, useful for experienced developers who want to

[Download eBook »](#)

**Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English]**

Createspace, United States, 2013. Paperback. Book Condition: New. 248 x 170 mm. Language: English . Brand New Book ***** Print on Demand *****.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to

[Download eBook »](#)