



The Society of Petrophysicists and Well Log Analysts

8866 Gulf Freeway, Suite 320
Houston, TX 77017, USA
P: +1-713-947-8727
F: +1-713-947-7181
Email: Sharon@spwla.org
Membership@spwla.org
www.SPWLA.org

SPWLA Foundation. This fund supports scholarships in higher education and research in formation evaluation. Please send donations to: SPWLA, 8866 Gulf Freeway, Suite 320, Houston, TX 77017, USA

ISSN: 1529-9074

PETROPHYSICS is published bi-monthly by the Society of Petrophysicists and Well Log Analysts (SPWLA). Subscription is included in annual dues for members and is \$150 for non-members. Subscription and membership address changes should be sent to the SPWLA business office. Back issues are \$35 each to members and subscribers, \$40 to others.

Advertising Rates: (based on one-time, full color) Full Page: \$1350, Half Page: \$1100, Quarter Page: \$875, Business Card: \$650. Additional fee for printing on covers. For frequency rates and further information please contact the SPWLA business office. Responsibility: The statements and opinions expressed in PETROPHYSICS are those of the authors and should not be construed as an official action or opinion of the Society of Petrophysicists and Well Log Analysts, Inc. © Copyright 2012 by the Society of Petrophysicists and Well Log Analysts, Inc.

About the Cover

A comparison between simulated and field log data. The simulations resulted from inversion-based interpretation of both nuclear and resistivity measurements. See the paper by Ijason et al.

PRINTED IN USA ON ACID FREE PAPER

PETROPHYSICS

October 2014, Vol. 55, No. 5

Contents

- 360 From the President
- 362 Calendar of Events
- 366 From the Editor

ARTICLES

Best of the 2014 SPWLA Annual Logging Symposium

- 374 **Inversion-Based Interpretation of Logging-While-Drilling Resistivity and Nuclear Measurements: Field Examples of Application in High-Angle and Horizontal Wells**
Olabode Ijason, Carlos Torres-Verdín, William E. Preeg, John Rasmus, and Edward J. Stockhausen
- 392 **Application and Quality Control of Core Data for the Development and Validation of Elemental Spectroscopy Log Interpretation**
Susan Herron, Michael Herron, Iain Pirie, Pablo Saldungaray, Paul Craddock, Alyssa Charsky, Marina Polyakov, Frank Shray, and Ting Li
- 415 **An Assessment of Fundamentals of Nuclear-Based Alternatives to Conventional Chemical-Source Bulk-Density Measurement**
Ahmed Badruzzaman
- 435 **Kerogen Content and Maturity, Mineralogy and Clay Typing from DRIFTS Analysis of Cuttings or Core**
Michael M. Herron, MaryEllen Loan, Alyssa M. Charsky, Susan L. Herron, Andrew E. Pomerantz, and Marina Polyakov
- 447 **Quantifying the Impact of Petrophysical Properties on Spatial Distribution of Contrasting Nanoparticle Agents in the Near-Wellbore Region**
Kai Cheng, Aderonke Aderibigbe, Masoud Alfi, Zoya Heidari, and John Killough
- 461 **Application of an Oil-Movability Quicklook Technique Using Dielectric Measurements at Four Depths of Investigation**
S.T. Grayson and J.L. Hemingway
- 470 Discussion/Reply
- 507 Instructions to Authors

CONFERENCE ABSTRACTS

- 472 Formation Evaluation Society of Japan (JFES) 20th Symposium Abstracts
- 481 Society of Core Analysts International Symposium Abstracts

IN THE SOCIETY

- 511 Chapter News
- 518 55th Annual Business Meeting
- 518 SPWLA Board of Directors Meeting
- 519 Foundation News
- 521 SPWLA Foundation Annual Financial Report
- 522 SPWLA Annual Financial Report
- 523 New Members

The Society of Petrophysicists and Well Log Analysts is dedicated to the advancement of the science of formation evaluation through well logging and other formation evaluation techniques. SPWLA is dedicated to the application of these techniques, to the exploration and exploitation of gas, oil and other minerals. PETROPHYSICS publishes original contributions on theoretical and applied aspects of formation evaluation; particularly well logging and petrophysics.

Editor
Oliver C. Mullins
Schlumberger Doll Research
+1-713-240-8703
mullins1@slb.com

Managing Editor
Stephen Prenskey
+1-301-593-4966
steve@sprenskey.com

Publication Manager
Anna Tarlton
InkSpot Printing
2301 S. Shaver
Pasadena, TX 77502, USA
+1-713-472-1100
orders@inkspotprinting.com