

Elements

An International Magazine of Mineralogy, Geochemistry, and Petrology



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Unconventional Hydrocarbons

Guest Editors: **David R. Cole** and **Michael A. Arthur**



Unconventional Hydrocarbon Resources: Prospects and Problems

Michael A. Arthur and David R. Cole



Dash for Gas, 21st-Century Style!

Seth Blumsack



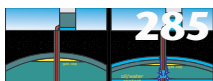
From Source Rock to Reservoir: The Evolution of Self-Sourced Unconventional Resource Plays

L. Taras Bryndzia and Neil R. Braunsdorf



Oil Sands and Heavy Oil: Origin and Exploitation

Stephen R. Larter and Ian M. Head



Fingerprinting "Stray" Formation Fluids Associated with Hydrocarbon Exploration and Production

Benjamin J. Rostron and Serguey Arkadakskiy



Abiotic Gas: Atypical, But Not Rare

Giuseppe Etiope and Martin Schoell

ABOUT THE COVER:
Drilling the Devonian Marcellus Shale for natural gas in Pennsylvania, USA. If industry best-practices are followed, gas-shale exploration, drilling, and exploitation can occur in both rural and urban settings with minimal impact on the environment. PHOTO © ANDREWMITTS | DREAMSTIME.COM

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