

PREVIEWS

A key component for exploiting self-sourced reservoirs	<i>The goal for this special issue of the Bulletin is to highlight the importance of structural, geologic, and geomechanical controls on production from shale and self-sourced reservoirs.</i>	2161
How fractures affect producibility	<i>Fracture systems in shales are heterogeneous. They can enhance or detract from producibility and augment or reduce both rock strength and the propensity to interact with hydraulic-fracture stimulation.</i>	2165
Understanding geomechanical properties	<i>Young's modulus and density are effective in identifying and mapping facies changes and establishing the hydraulically fracturable limits in areas where effective stimulation and proppant embedment are a concern.</i>	2217
Fluid-injection-induced rock deformation	<i>Simple, long planar fractures are unlikely to be induced in most mechanically layered natural systems under typical in situ stress conditions as determined by two-dimensional nonlinear finite element models.</i>	2237
Fluids record deformation conditions	<i>Vein minerals from Middle Devonian shales in the central Appalachian fold-thrust belt show that fluid pressure, temperature, and composition changed continually during deformation and varied spatially.</i>	2263
New insights into fracture characteristics	<i>Recently acquired fracture data coupled with new observations from the Marcellus Formation, Pennsylvania, provide new insights into fracture characteristics and serve as an analog for salt-influenced detachment fold provinces.</i>	2301
Joint density	<i>The joint saturation ratio or the degree of joint saturation is a method to distinguish joint-driving mechanisms and to represent joint saturation levels independent of bed thickness effects. It can improve fracture network modeling.</i>	2347
Cap-rock failure mechanisms	<i>Cap-rock seals fail when permeable pathways created by fractures affect their integrity. The mechanical and fracture stratigraphy of failed seals was examined to better understand this process.</i>	2365
A comprehensive review	<i>In this paper, a synopsis of failure structures of shale is presented. These include joints, pressure solution seams and cleavages, faults, and shear bands. Older structures may both influence later and man-made structures.</i>	2391
Fracture patterns in northern England	<i>The Lower Jurassic Cleveland Ironstone and Whitby Mudstone Formations of northern England serve as an analog to the tectonic history of gas-prospective Mississippian shale. Fracture patterns in United Kingdom shale tend to be heterogeneous and unpredictable.</i>	2411
The analytical tools	<i>The manner in which microseismicity relates to propagating hydrofractures as well as existing natural fractures and faults is investigated by combining seismological and geomechanical techniques.</i>	2439
An example	<i>The results from the tensile source model are used in the Barnett Shale, Fort Worth Basin, Texas, to investigate how activated faults relate to the stress state and geologic setting.</i>	2459
What impacts mechanical rock properties	<i>Fracture studies in the Eagle Ford Formation, south-central Texas, demonstrate important characteristics of fault and joint networks and their relevance in natural fracture permeability assessment.</i>	2477

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C. W. Reynolds

NORTHERN CALIFORNIA

J. R. Gilbert, Jr.
D. W. Lewis
R. G. Lindblom

NORTHERN OHIO

TBD

NORTHWEST (OR/WA)

J. M. Armentrout

OHIO

L. H. Wickstrom
S. P. Zody

OKLAHOMA CITY

D. G. Campbell
H. W. Hanke
T. L. Hollrah
L. W. Holman, II
J. R. Howell

H. W. Peace, II
M. W. Smith

PANHANDLE (TX)

J. F. O'Connell

PITTSBURGH (PAPG)

R. A. Trevail

PITTSBURGH (PGS)

D. A. Billman
A. A. Reynolds

ROCKY MTN. (CO)

S. Cluff
S. P. Cumella
J. J. Cuzella
E. D. Dolly
J. E. Harris
L. A. M. Johnson
W. E. Johnson
B. S. Kelso
S. G. Kirkwood
C. J. N. Knight
S. M. Landon
J. C. Mullarkey
S. A. Sonnenberg

ROSWELL (NM)

D. B. Codding

SACRAMENTO (CA)

S. T. Hector

SAN ANGELO (TX)

B. R. Swartz

SAN JOAQUIN (CA)

A. C. Draucker
L. C. Knauer
S. Mazzoni

SHREVEPORT (LA)

O. R. Berg

SOUTH TEXAS

T. J. McGovern
B. R. Weise
M. A. Younger

SOUTHEASTERN (FL)

TBD

TULSA (OK)

D. G. Burdick
N. J. Hyne
K. L. Luchtel Ferguson
J. S. McGhay

UTAH

T. C. Anderson

WASHINGTON (DC)

J. F. Allan
C. A. Doolan
C. S. Swezey

WEST TEXAS

R. T. Dickey
D. J. Entzminger
R. S. Nail
M. A. Raines

WYOMING

L. D. W. George
L. M. Kozimko