

CLOSE DRAWER MENU OPEN DRAWER MENU

## Menu

No Access SEG Technical Program Expanded Abstracts 2018 Aug 2018

Fracture characterization using diffraction attributes in tight sandstone reservoirs: A case study from Keshen Gas Field, Tarim Basin

Authors:

Yao Liang,

Zhenli Wang,

Oluwatosin John Rotimi,

Xueliang Li,

Guiting Chen,

Hu Shi, and

Rui Cui

<https://doi.org/10.1190/segam2018-2996657.1>

## Abstract

Reservoir characterization is indispensable in the development of the Cretaceous structural fractured Bashijiqike tight sandstone reservoir formation, which is the main production zone and known to exhibit high structural variability imparting on production at different scales. We performed an improved workflow based on diffraction extraction and analysis to characterize the fractures especially in locations proximal to the wellbore. Diffraction attributes significantly provide more details in the area, which are proven by three well FMI images and dipmeter logs. The results show that structural fractures in the study area are dominated by the upright shearing stress forming fractures with medium to high angles. The trending direction is also delineated to be similar despite the significant well offset, which is an indication of the underlying tectonic framework responsible for the overall architecture of this section of the basin. We opine due to our success that the proposed approach may be helpful to describe the distribution and direction of fractures in naturally fractured reservoirs tied by the well logs.

Presentation Date: Tuesday, October 16, 2018

Start Time: 1:50:00 PM

Keywords: diffraction, fractures, reservoir characterization, case history, unconventional

ACCESS CONTENT

Sign in:

\$21.00

ADD TO CART

RESTORE CONTENT ACCESS FOR PURCHASE MADE AS A GUEST

RESTORE CONTENT ACCESS FOR PURCHASE MADE AS A GUEST

SEG Members who wish to add publications benefits to those they already have may contact SEG's Constituent Engagement Department at +1.918.497.5581 or [ormembers@seg.org](mailto:ormembers@seg.org).

SEG Membership costs no more than four journal-article pay-per-view purchases. If you are not an SEG Member and wish to join, [click here](#).

Information about institutional subscriptions is available [here](#).

JOIN

© 1996–2019 Society of Exploration Geophysicists