

Author's Accepted Manuscript

Micro fractures and pores in lacustrine shales of the Upper Triassic Yanchang Chang7 Member, Ordos Basin, China

Wenzheng Zhang, Liqin Xie, Weiwei Yang, Yan Qin, Ping'an Peng



www.elsevier.com/locate/petrol

PII: S0920-4105(17)30397-2
DOI: <http://dx.doi.org/10.1016/j.petrol.2017.03.044>
Reference: PETROL3932

To appear in: *Journal of Petroleum Science and Engineering*

Received date: 8 August 2016
Revised date: 26 February 2017
Accepted date: 23 March 2017

Cite this article as: Wenzheng Zhang, Liqin Xie, Weiwei Yang, Yan Qin and Ping'an Peng, Micro fractures and pores in lacustrine shales of the Upper Triassic Yanchang Chang7 Member, Ordos Basin, China, *Journal of Petroleum Science and Engineering*, <http://dx.doi.org/10.1016/j.petrol.2017.03.044>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Micro fractures and pores in lacustrine shales of the Upper Triassic

Yanchang Chang7 Member, Ordos Basin, China

Wenzheng Zhang^{a,b,c}, Liqin Xie^{b,c}, Weiwei Yang^{b,c*}, Yan Qin^a, Ping an Peng^a

^a*State Key Laboratory of Organic Geochemistry, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou 510640, China*

^b*National Engineering Laboratory for Exploration and Development of Low-Permeability Oil and Gas Fields, Xi'an 710018, China*

^c*Changqing Research Institute of Petroleum Exploration and Development, Changqing Oilfield Company, Petro China, Xi'an 710021, China*

ABSTRACT

Following the successful exploration of shale oil in North America, China recently started to explore unconventional oil resources. Industrial shale oil flows were obtained from some strata in lacustrine basins, especially in the Chang7 Member of the Ordos Basin that may reach 150 barrels a day (e.g., in well Geng 295, 2655 m). So one of the most significant questions now being asked focuses on the shale oil storage within the reservoir interval. In the present study, five organic rich shale samples were collected from the Chang 7 Member of the Yanchang Formation in the Ordos Basin and were analyzed by field emission scanning electron microscopy to characterize pores and fractures in the shales. The results show that microfractures are predominant storage space for shale oil produced from the Chang 7 Member. Three types of fractures and pores were recognized, including (i) fractures and pores associated with interstitial organic matter and organic lamina, (ii) fractures and pores occurring in minerals such as pyrite framboid, mica, and feldspar, and (iii)

Download English Version:

<https://daneshyari.com/en/article/5484101>

Download Persian Version:

<https://daneshyari.com/article/5484101>

[Daneshyari.com](https://daneshyari.com)