

Accepted Manuscript

Hydrogen isotope characteristics of thermogenic methane in Chinese sedimentary basins

Xiaofeng Wang, Wenhui Liu, Baoguang Shi, Zhongning Zhang, Yongchang Xu, Jianjing Zheng

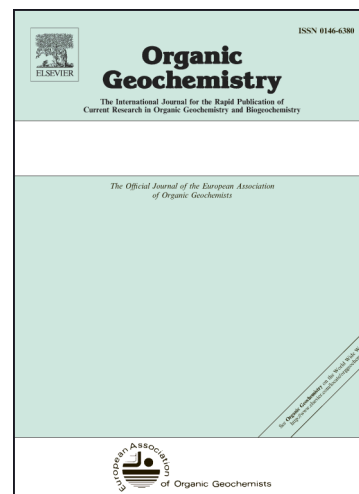
PII: S0146-6380(15)00064-9
DOI: <http://dx.doi.org/10.1016/j.orggeochem.2015.03.010>
Reference: OG 3255

To appear in: *Organic Geochemistry*

Received Date: 9 April 2014
Revised Date: 13 March 2015
Accepted Date: 13 March 2015

Please cite this article as: Wang, X., Liu, W., Shi, B., Zhang, Z., Xu, Y., Zheng, J., Hydrogen isotope characteristics of thermogenic methane in Chinese sedimentary basins, *Organic Geochemistry* (2015), doi: <http://dx.doi.org/10.1016/j.orggeochem.2015.03.010>

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 proof before it is published in its final 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.



**Hydrogen isotope characteristics of thermogenic methane in Chinese
sedimentary basins**

Xiaofeng Wang ^{a*}, Wenhui Liu ^b, Baoguang Shi ^a, Zhongning Zhang ^a, Yongchang Xu ^a, Jianjing
Zheng ^a

^a *Key Laboratory of Petroleum Resources, Gansu Province/ Key Laboratory of Petroleum
Resources Research, Institute of Geology and Geophysics, Chinese Academy of Sciences, Lanzhou
730000, PR China*

^b *Institution of Petroleum Exploration and Development, SINOPEC, Beijing 100083, China*

*Corresponding author: Xiaofeng Wang, Tel.: +86-931-4960853; Fax:
+86-931-4960853.

E-mail address: wangxf@lzb.ac.cn.

Abstract

The hydrogen isotope composition of methane is an important parameter in natural gas research and provides complementary information to that provided by carbon isotopes. The stable hydrogen isotope ratios of 313 natural gas samples from six of China's sedimentary basins are used to evaluate the factors that influence the stable hydrogen isotopic composition of methane. An important factor is the δ of organic matter in hydrocarbon source rocks, which is influenced by the sedimentary environment and type of organic matter. Natural gases generated from sapropelic organic matter have relatively less negative δ_{CH_4} , while natural gases generated from

Download English Version:

<https://daneshyari.com/en/article/5161632>

Download Persian Version:

<https://daneshyari.com/article/5161632>

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