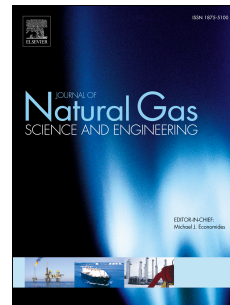


Accepted Manuscript

Improvement of non-aqueous colloidal gas aphron-based drilling fluids properties:
Role of hydrophobic nanoparticles

Amir Hossein Hassani, Mohammad Hossein Ghazanfari



PII: S1875-5100(17)30111-7

DOI: [10.1016/j.jngse.2017.03.005](https://doi.org/10.1016/j.jngse.2017.03.005)

Reference: JNGSE 2103

To appear in: *Journal of Natural Gas Science and Engineering*

Received Date: 24 October 2016

Revised Date: 3 February 2017

Accepted Date: 9 March 2017

Please cite this article as: Hassani, A.H., Ghazanfari, M.H., Improvement of non-aqueous colloidal gas aphron-based drilling fluids properties: Role of hydrophobic nanoparticles, *Journal of Natural Gas Science & Engineering* (2017), doi: 10.1016/j.jngse.2017.03.005.

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.

Improvement of Non-Aqueous Colloidal Gas Aphron-Based drilling Fluids Properties: Role of Hydrophobic Nanoparticles

Amir Hossein Hassani^{1, a}, Mohammad Hossein Ghazanfari^a.

^a Department of Chemical and Petroleum Engineering, Sharif University of Technology, Tehran, Iran.

Research highlights

- The role of nanoparticles in improving non-aqueous CGA drilling fluid properties is investigated.
- Kerosene as a base fluid and Bentone 34 as a stabilizer are used for non-aqueous CGAs generation.
- Sorbitane monooleate as a non-ionic surfactant is applied for a non-aqueous CGAs generation.
- Two special designed setups are used for evaluating pore blockage ability of CGAs.
- Hydrophobic nanoclay showed better performance in enhancing features of non-aqueous CGAs.

¹ Corresponding author, [email:amirh.hassani@yahoo.com](mailto:amirh.hassani@yahoo.com), Sharif University of Technology, Chemical and Petroleum Engineering Department, Azadi Ave., Tel: +989132999983, Fax: +98-21-66622853.

Download English Version:

<https://daneshyari.com/en/article/5484701>

Download Persian Version:

<https://daneshyari.com/article/5484701>

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