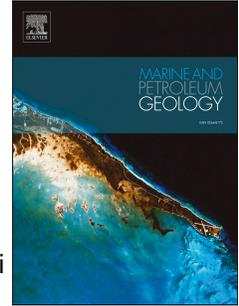


# Accepted Manuscript

On the role of incompetent strata in the structural evolution of the Zagros Fold-Thrust Belt, Dezful Embayment, Iran

Mostafa Ghanadian, Ali Faghih, Iraj Abdollahie Fard, Timothy Kusky, Mehrdad Maleki



PII: S0264-8172(17)30020-X

DOI: [10.1016/j.marpetgeo.2017.01.010](https://doi.org/10.1016/j.marpetgeo.2017.01.010)

Reference: JMPG 2788

To appear in: *Marine and Petroleum Geology*

Received Date: 7 June 2016

Revised Date: 12 January 2017

Accepted Date: 13 January 2017

Please cite this article as: Ghanadian, M., Faghih, A., Fard, I.A., Kusky, T., Maleki, M., On the role of incompetent strata in the structural evolution of the Zagros Fold-Thrust Belt, Dezful Embayment, Iran, *Marine and Petroleum Geology* (2017), doi: 10.1016/j.marpetgeo.2017.01.010.

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.

On the role of incompetent strata in the structural evolution of the Zagros  
Fold-Thrust Belt, Dezful Embayment, Iran

**Mostafa Ghanadian<sup>1</sup>, Ali Faghih<sup>\*1</sup>, Iraj Abdollahie Fard<sup>2</sup>, Timothy Kusky<sup>3</sup>  
, Mehrdad Maleki<sup>2</sup>**

1. Department of Earth Sciences, College of Sciences, Shiraz University, Shiraz, Iran

2. Exploration Directorate of the National Iranian Oil Company (NIOC), Tehran, Iran

3 Center for Global Tectonics, School of Earth Sciences, China University of Geosciences, Wuhan, China

\*Corresponding author: afaghih@shirazu.ac.ir (A. Faghih)

Abstract

The Dezful Embayment is the most important fertile oil province of the Zagros Fold-Thrust Belt. It includes several incompetent strata as basal and intermediate décollement levels that play a significant role on the structural styles and hydrocarbon preservation. Based on the interpretation of seismic profiles, the influence of the Gachsaran Formation and the evaporitic Kalhur Member of the Asmari Formation on the geometry of deformation was investigated in different parts of the Dezful Embayment. Obtained results revealed that the thickness of the incompetent strata plays a crucial role in the formation and geometry of different types of fold structures (e.g. rounded, box, chevron, detachment fold) in the Dezful Embayment. There is a sharp difference between the geometry of surface and deep-seated structures due to the existence of thick intermediate décollements (e.g. Gachsaran and Kalhur) in the Dezful Embayment. Therefore, fault geometry and fold styles in upper and lower parts of these décollements are totally

Download English Version:

<https://daneshyari.com/en/article/5782187>

Download Persian Version:

<https://daneshyari.com/article/5782187>

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