

Accepted Manuscript

Review of major shale-dominated detachment and thrust characteristics in the diagenetic zone: Part II, rock mechanics and microscopic scale

C.K. Morley, C. von Hagke, R. Hansberry, A. Collins, W. Kanitpanyacharoen, R. King



PII: S0012-8252(17)30289-1
DOI: doi:[10.1016/j.earscirev.2017.09.015](https://doi.org/10.1016/j.earscirev.2017.09.015)
Reference: EARTH 2495

To appear in: *Earth-Science Reviews*

Received date: 31 May 2017
Revised date: 19 September 2017
Accepted date: 19 September 2017

Please cite this article as: C.K. Morley, C. von Hagke, R. Hansberry, A. Collins, W. Kanitpanyacharoen, R. King , Review of major shale-dominated detachment and thrust characteristics in the diagenetic zone: Part II, rock mechanics and microscopic scale. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Earth(2017), doi:[10.1016/j.earscirev.2017.09.015](https://doi.org/10.1016/j.earscirev.2017.09.015)

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.

**REVIEW OF MAJOR SHALE-DOMINATED DETACHMENT AND
THRUST CHARACTERISTICS IN THE DIAGENETIC ZONE: PART II,
ROCK MECHANICS AND MICROSCOPIC SCALE**

MORLEY, C.K.¹, VON HAGKE, C.², HANSBERRY, R.³, COLLINS, A.³,
KANITPANYACHAROEN, W.⁴, AND KING, R.³

1 = PETROLEUM GEOPHYSICS MSc PROGRAM, DEPARTMENT OF GEOLOGICAL SCIENCES,
CHIANG MAI UNIVERSITY, CHIANG MAI, THAILAND

2 = LEHR-UND FORSCHUNGSGEBIET FÜR GEOLOGIE – ENDOGENE DYNAMIK (GED)
RHEINISCH-WESTFÄLISCHE TECHNISCHE HOCHSCHULE, AACHEN UNIVERSITY,
GERMANY

3 = CENTRE FOR TECTONICS, RESOURCES AND EXPLORATION (TRAX), SCHOOL OF
PHYSICAL SCIENCES, UNIVERSITY OF ADELAIDE, SA 5005, AUSTRALIA.

4 = DEPARTMENT OF GEOLOGY, FACULTY OF SCIENCE, CHULALONGKORN UNIVERSITY,
BANGKOK, THAILAND

ABSTRACT

CHARACTERISING LARGE SHALE THRUST ZONE BEHAVIOUR DOWN TO THE
DIAGENETIC-METAMORPHIC BOUNDARY IS BOTH SIMPLE AND COMPLEX. THE TASK IN
CRITICAL TAPER, ANALOGUE AND NUMERICAL MODELS HAS BEEN SUCCESSFULLY
APPROXIMATED USING SIMPLE MATERIAL PARAMETERS. YET THE WEAKNESS OF
SHALES THRUSTS ON A CASE-BY-CASE BASIS SHOW GREAT VARIABILITY IN KEY

Download English Version:

<https://daneshyari.com/en/article/5785017>

Download Persian Version:

<https://daneshyari.com/article/5785017>

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