

# Badleys

## Badley Geoscience News

Issue 46, July 2011

### TOPICS IN THIS NEWSLETTER

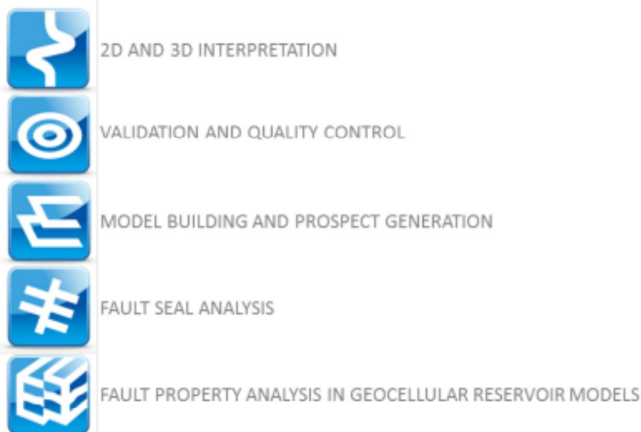
- TrapTester Webinars
- New TrapTester Workshop
- Latest TrapTester Patches Available
- New in OCTek: Heat Flow Prediction at Rifted Margins

### TRAPTESTER WEBINARS

Coming soon...

We have been developing a series of webinars that focus on typical everyday tasks users can perform within TrapTester. The webinars have been designed as ~30min presentations with the aim of increasing our clients' knowledge of TrapTester. The presentations can be delivered via online meeting software during a ~45 minute session leaving enough time for discussions. We can schedule the webinars at a time and date of your choosing, we will happily arrange a schedule with you.

A full list of the topics covered in our new webinars:



Please send us an [e-mail](#) if you are interested in learning more about our webinars.

### NEW TRAPTESTER WORKSHOP

*A one-day workshop using TrapTester*

We are pleased to announce the latest addition to our training courses:

*Structural Interpretation, QC & Analysis in Oil and Gas Exploration.*

This workshop is a hands-on practical class that introduces the key concepts for interpreting faulted structures, assessing their validity, analysing the resulting structural relationships of reservoir units and assessing the

### Badleys Calendar

#### AAPG ICE 2011

23-26 October  
Milan, Italy

Badleys will be at the AAPG ICE to be held in Milan, Italy. Our geologists Dave Quinn and Andy Alvey will be presenting at the meeting. More details will follow in upcoming newsletters. Visit the AAPG ICE [website](#) for more info.

#### AAPG post-conference short course

27 October  
Milan, Italy

Graham Yielding will be teaching a Fault-Seal Analysis course, designed to give geologists, geophysicists and reservoir engineers a thorough overview of new structural techniques for quantitative prediction of fault seal. The emphasis is placed on the application of an objective methodology to the analysis of subsurface data (seismic interpretation and wells). Please visit the AAPG [website](#) for more info on this course.

#### MM3 meeting 2011

8-10 November  
French Pyrenees

A meeting of the MM3 rifted margins research project, coordinated by Profs Nick Kusznir and Gianreto Manatschal, will be held in the French Pyrenees later this year. All MM3-participating companies ([link](#)) have been informed about the meeting, which Alan Roberts and Andy Alvey from Badleys will be attending.

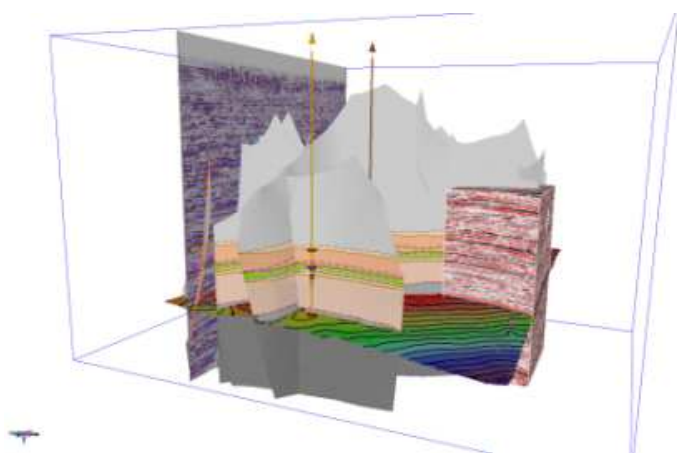
### Badleys Publications

Here is an updated list of our most

implications for prospectivity. Attendees will learn the basic rules of structural interpretation by using TrapTester on a live interpretation with the goal of being able to solve typical exploration problems. Practical work will be complemented by brief and introductory theory where required.

The outline for the workshop:

- Interpret a faulted structure from 2D seismic
- Assess/Verify/Modify fault plane interpretations guided by simple displacement analysis
- Generate prospect quality contoured maps of the interpretation
- Examine, analyse and understand the structural relationships of the reservoirs across the faults
- Explain the hydrocarbon distributions observed in two wells
- Propose a new prospect
- Revisit the interpretation using 3D seismic data, compare and contrast the similarities/differences between the 2D and 3D interpretation
- Assess the benefits of a rigorous structural interpretation method



The course is designed for any geologist/geophysicist involved with interpreting faulted structures in an exploration context. Please [contact us](#) for more information and to discuss the opportunity to run the course in-house.

## LATEST TRAPTESTER PATCHES AVAILABLE

6.051, 6.052, 6.053 & 6.054

TrapTester patches 6.051, 6.052, 6.053 & 6.054 contain a number of fixes for improved stability and are available for download now. TrapTester is now officially certified against Ubuntu. Ubuntu (a Linux environment) installs under Windows Vista and Windows 7. It provides a dual boot system without requiring a repartitioning of the hard disk and thus is a convenient route to the faster Linux implementation. Please call or [e-mail](#) for more details about this installation option. For more information regarding our patches, please visit our dedicated software bulletins area on our [website](#).

## NEW IN OCTEK - HEAT FLOW PREDICTION AT RIFTED MARGINS



Following requests from a number of existing OCTek customers we have added to the technical output from each of our OCTek reports and projects (gravity inversion at rifted margins) by enabling the prediction of top-basement Heat Flow. Heat Flow prediction is now derived directly from OCTek maps of thinning factor.

recent publications. A full overview can be found on our [website](#).

### 2011:

Bretan, Yielding, Mathiassen & Thorsnes.

*Fault-seal analysis for CO<sub>2</sub> storage: an example from the Troll area, Norwegian Continental Shelf.*  
Petroleum Geoscience. 17, 181-192

Yielding, Lykakis & Underhill.

*The role of stratigraphic juxtaposition for seal integrity in proven CO<sub>2</sub> fault-bounded traps of the Southern North Sea.*  
Petroleum Geoscience. 17, 193-203

### 2010:

Freeman, Boulton, Yielding & Menpes.

*Using empirical geological rules to reduce structural uncertainty in seismic interpretation of faults.*  
Journal Structural Geology 32, 1668-1676

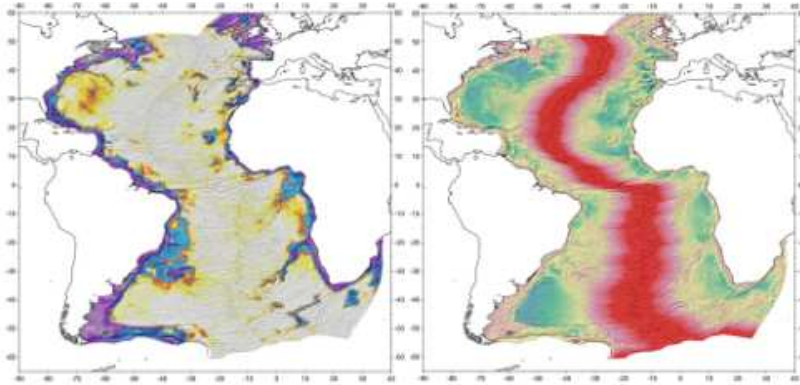
Scotchman, Gilchrist, Kuznir, Roberts & Fletcher.

*The breakup of the South Atlantic Ocean: formation of failed spreading axes and blocks of thinned continental crust in the Santos Basin, Brazil and its consequence for petroleum system development.*  
Petroleum Geology Conference Series 2010, vol. 7 855-866

Yielding, Bretan & Freeman.

*Fault Seal Calibration: a brief review.*  
Geological Society Special Publication, 347, 243-255

Each OCTek digital report now includes an executable file which will read in an existing OCTek grid of thinning factor, together with a specified breakup age and a user-adjustable value for the basement radiogenic heat-flow. From this the executable will produce a grid of present-day top-basement heat-flow for the entire OCTek study area. We have set-up these grids to be user generated so that proprietary in-house calibrations of the radiogenic heat-flow component can be used to target particular areas of interest. In oceanic areas an isochron file can also be used to extend the Heat Flow prediction into areas of oceanic crust, but the use of isochrons is entirely optional.



*The left image shows an OCTek map of thinning factor for the Atlantic ocean and, most importantly, its conjugate rifted margins. On the right is a new map of top basement Heat Flow for the same area.*

OCTek Heat Flow has now been included retrospectively in the existing OCTek-Atlantic and OCTek-Asia/Pacific reports and will be included from the outset in the upcoming OCTek-Indian Ocean and OCTek Arctic/Atlantic reports.

Use of the Heat Flow predictor is not restricted to use with OCTek thinning factor grids. Once you have purchased an OCTek report any other in-house grids or profiles of thinning factor can be used as the primary input to generate Heat Flow maps.

For more information on OCTek please visit our [website](#) or contact Alan Roberts by [e-mail](#) or telephone.



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