

# ASX Release

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**PETRATHERM LIMITED**  
**ABN 17 106 806 884**

## **Petratherm General Meeting**

Petratherm's Managing Director, Terry Kallis and Exploration Manager Peter Reid will later today present to the Petratherm General Meeting being held at the Hilton Adelaide.

The attached presentation provides a company overview and an update on Petratherm's flagship Paralana Geothermal Energy Project.

Yours faithfully

**Terry Kallis**  
Managing Director

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# Petratherm

Shareholder Presentation

Corporate & Paralana Project Update

Terry Kallis Managing Director

Peter Reid Exploration Manager

2 June 2010

# CLEAN ENERGY FOR FUTURE GENERATIONS

# Disclaimer and competent persons statement

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## Competent Persons Statement

The information in this report relating to geothermal exploration results and geothermal resources is based on information compiled by P.W. Reid, a full-time Petratherm employee. Mr Reid has sufficient experience in the style of geothermal play under consideration to qualify as a Competent Person under the Australian Code for Reporting of Exploration Results, Geothermal Resources and Geothermal Reserves (2008 edition). Mr Reid consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# Presentation Overview

- > Corporate Update
- > Paralana Project Update
- > Questions ?

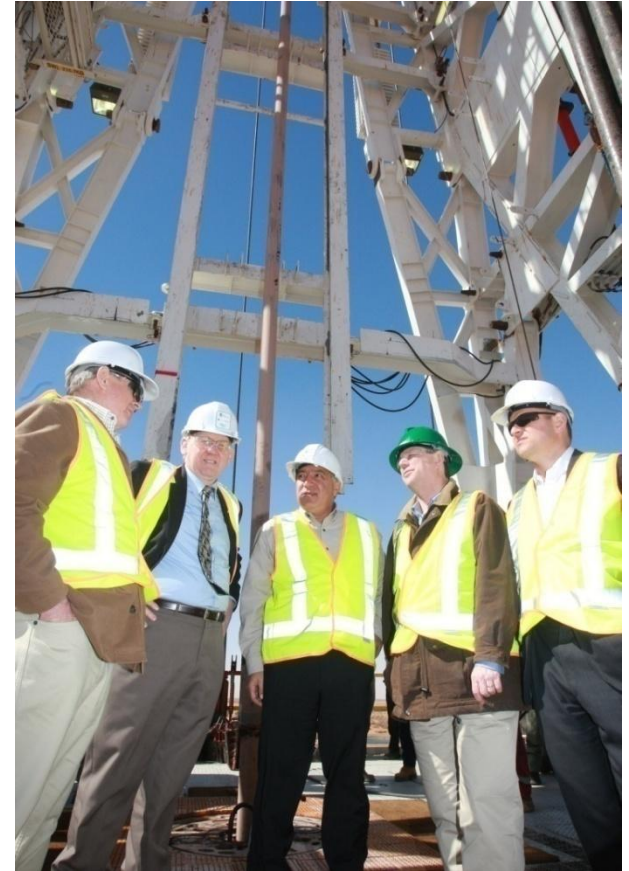
## Recent achievements

- > Paralana 2 deep well successfully completed
- > Temperature of 176°C at 3,672m confirmed and 190°C expected at 4,000m
- > Strong government support for Paralana JV project - awarded \$69.8 million in grants
- > Enel Green Power deal to jointly develop all electricity producing projects in Spain and to explore in Portugal
- > Cooperative Agreement with Spanish Governments for the Geo-Madrid district heating project



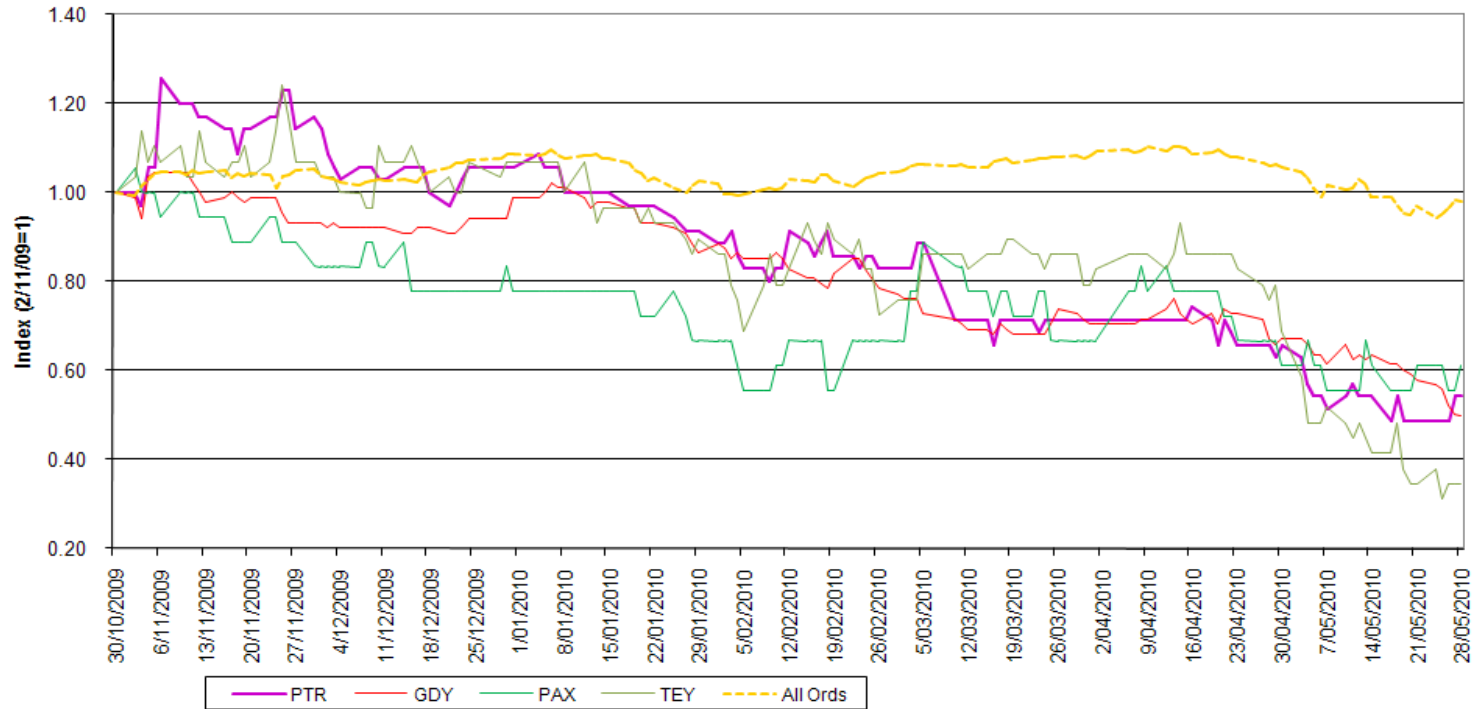
# Operating environment

- > Revised renewable energy target scheme (RECs) creates more certainty in the renewables market and removes initial oversupply ✓✓
- > Deferral of emissions trading scheme to 2013, creates uncertainty in the energy and renewables market **xx??**
- > International markets downturn, notably Europe – downward pressure on equities and AUD **xx??**
- > Mining tax does not apply to geothermal but resources exploration rebate does, but not until July 2011, creates uncertainty and disincentive to invest **xx??**
- > \$652 million Renewable Energy Future Fund - includes more for geothermal ✓?



# Share price performance – Petratherm and geothermal sector

7 month Geothermal Share Price Performance  
30/10/09 to 30/05/10



PTR share price has suffered in an uncertain operating environment

Geothermal sector share prices have also suffered, generally to a similar extent

# Regional community consultation – May 10-13, 2010

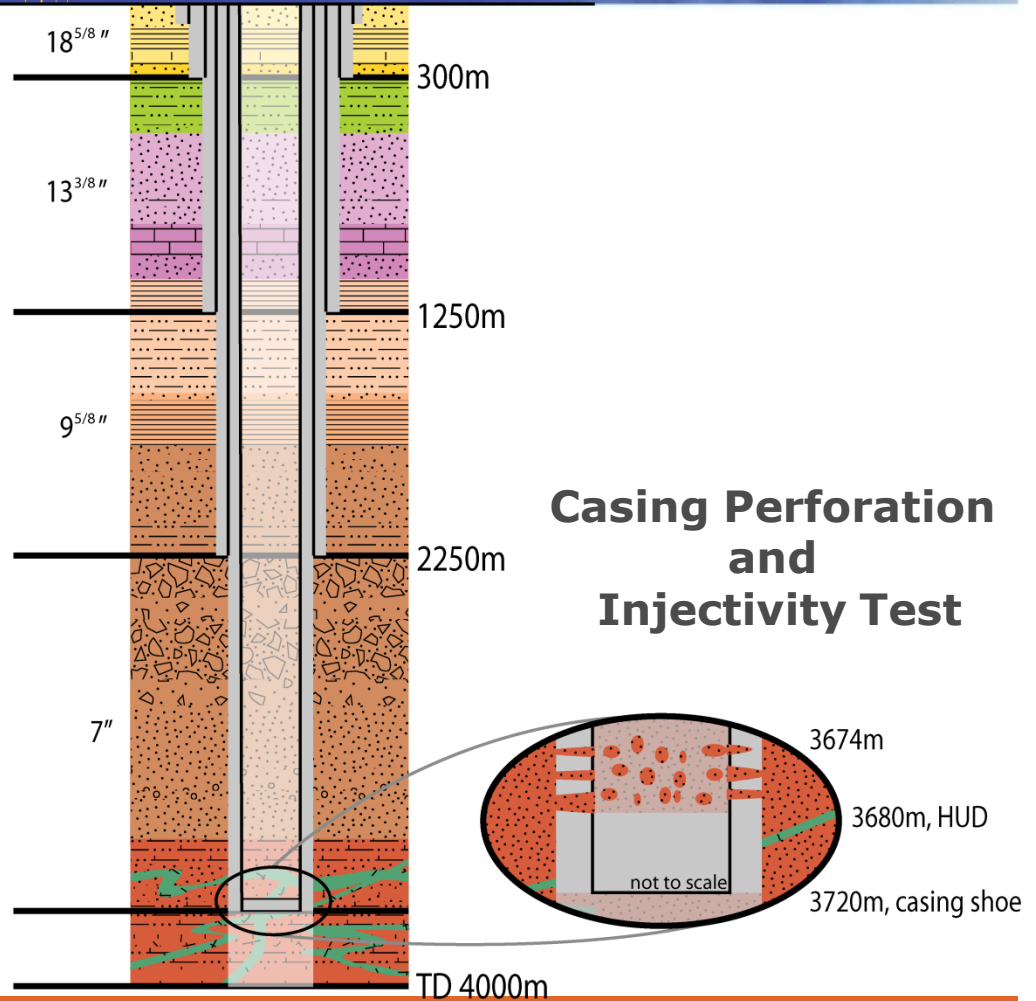
- > Petratherm and PIRSA
- > Port Augusta, Leigh Creek, Hawker, Nepabunna, Arkaroola and Quorn
- > Update on project and outline of next work stage – fracture stimulation
- > Consultation well received by community
- > Common questions
  - > Employment and economic development opportunities
  - > Access to, and use of water
- > Question and Answer to be posted on PTR website



# Paralana 2 well summary



- > Depth 4012m
- > Well cased and cemented to 3725m
- > Extrapolated bottom hole temperature ~ 190°C
- > High pressure geothermal brines intersected from 3690m
- > Zircon dating confirms old 1590Ma Reservoir Sequence
- > Contains numerous fractures and faults
- > 2D Seismic suggests fractured reservoir sequence may be regionally extensive



# Fracture stimulation programme – next stage of work

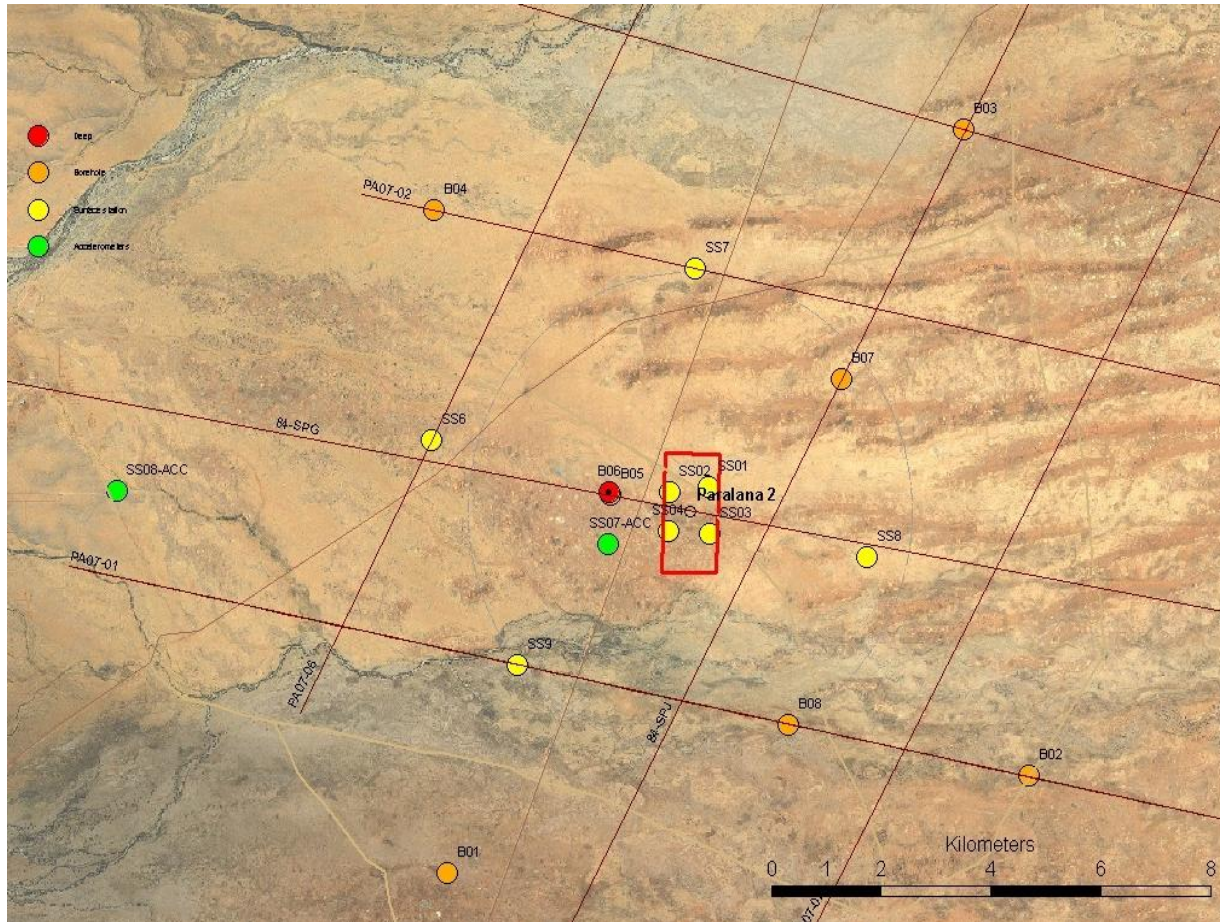
## > **Injectivity test at base of well bore**

- > Inject small volume of water to confirm fracture initiation and propagation
- > Small volume, minimal induced seismic risk

## > **Fracture stimulation**

- > Inject larger volume of water at higher rates
- > Volumes and rates dependent on micro-seismic response
- > Aim to activate natural fracture network

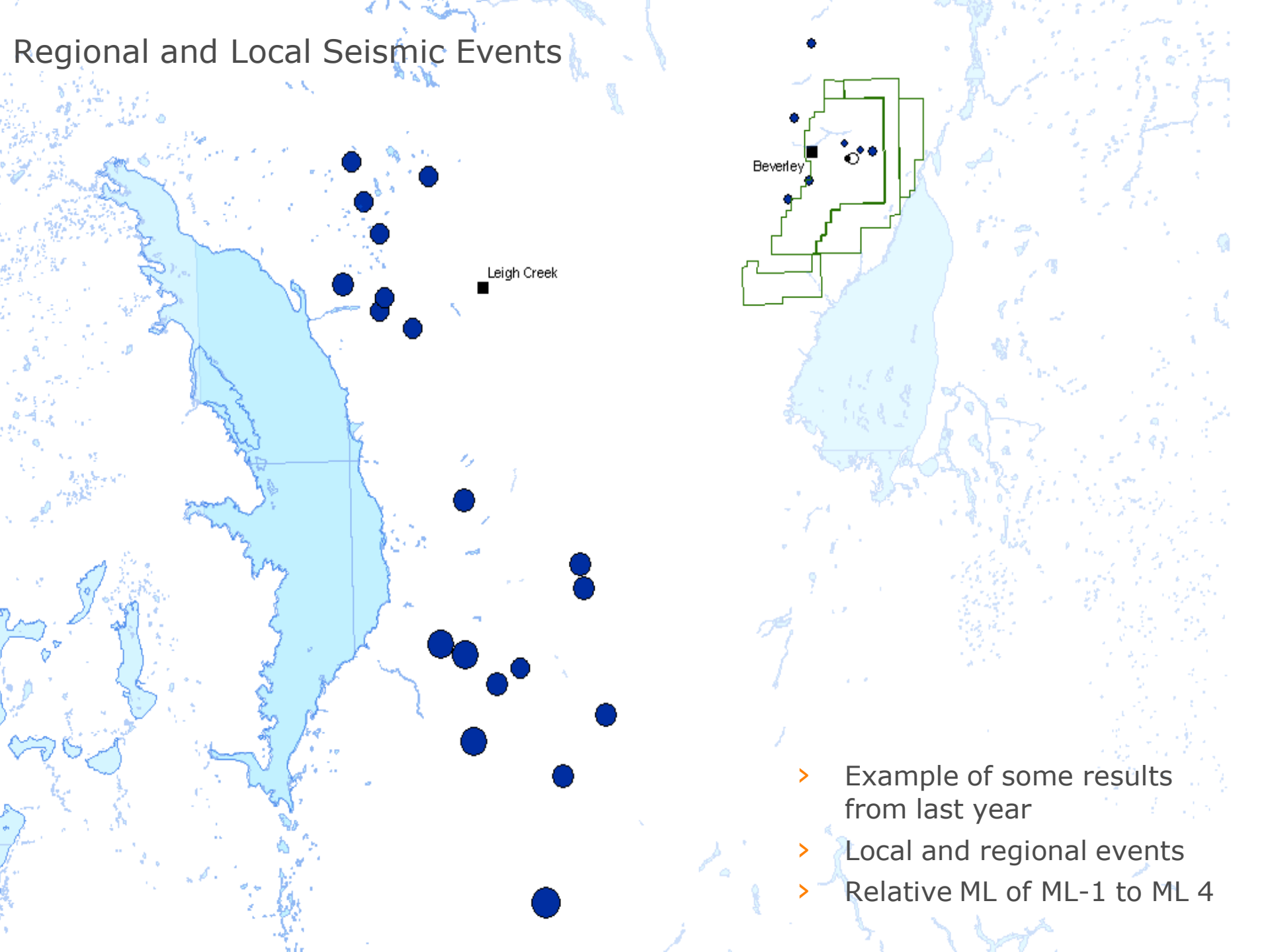
# Passive seismic array



- > IESE (Institute of Earth Science and Engineering NZ)
- > 1 deep borehole sonde at 1790m in Paralana 1b
- > 6 borehole sondes at 200m
- > 8 surface seismometers
- > 2 accelerometers

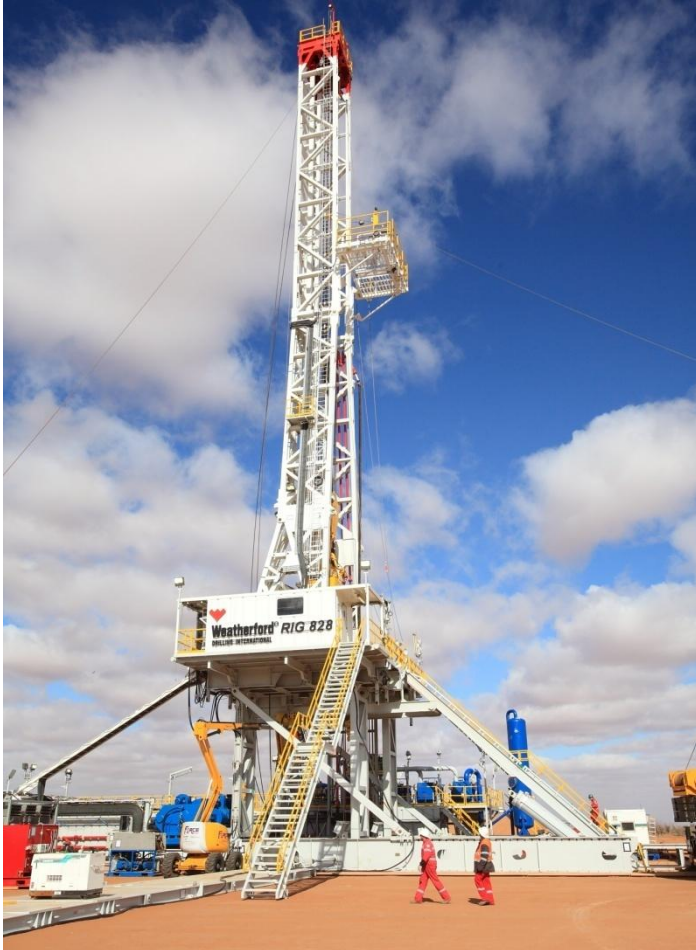
MEQ - Array Managed by IESE

# Regional and Local Seismic Events



- > Example of some results from last year
- > Local and regional events
- > Relative ML of ML-1 to ML 4

# Paralana - next steps



## Paralana JV project milestones\*

- > 2<sup>nd</sup> Qtr 2010: Mini fracture program/fracture stimulation design
- > 3<sup>rd</sup> Qtr 2010: Multi-zone fracture stimulation
- > 1<sup>st</sup> Qtr 2011: drilling of the Paralana 3 deep producer well
- > 2<sup>nd</sup> Qtr 2011: Circulation Test – Proof of Concept
- > Late 2011: Commission first stage 3.75 MW power plant

(\*subject to equipment availability)

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