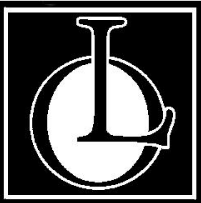


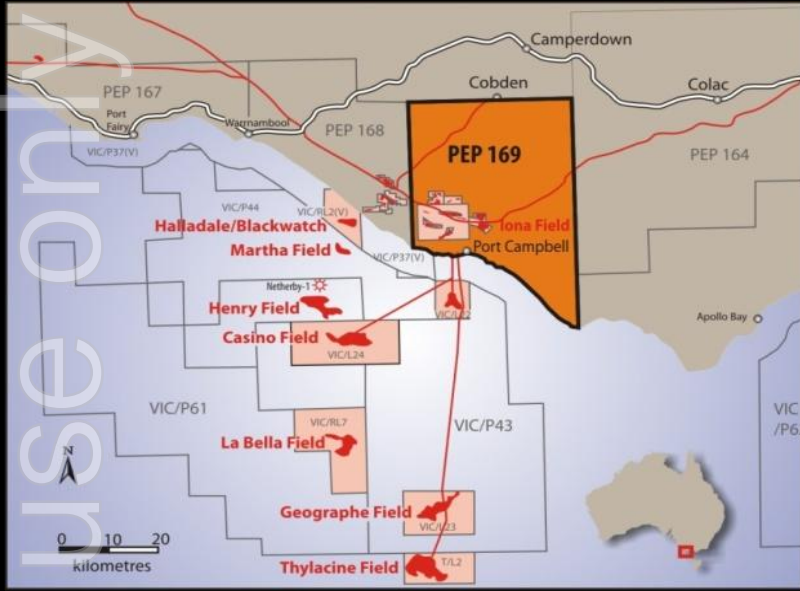
ersonal use only



Lakes Oil N.L.  
General Meeting Presentation  
14 March 2012

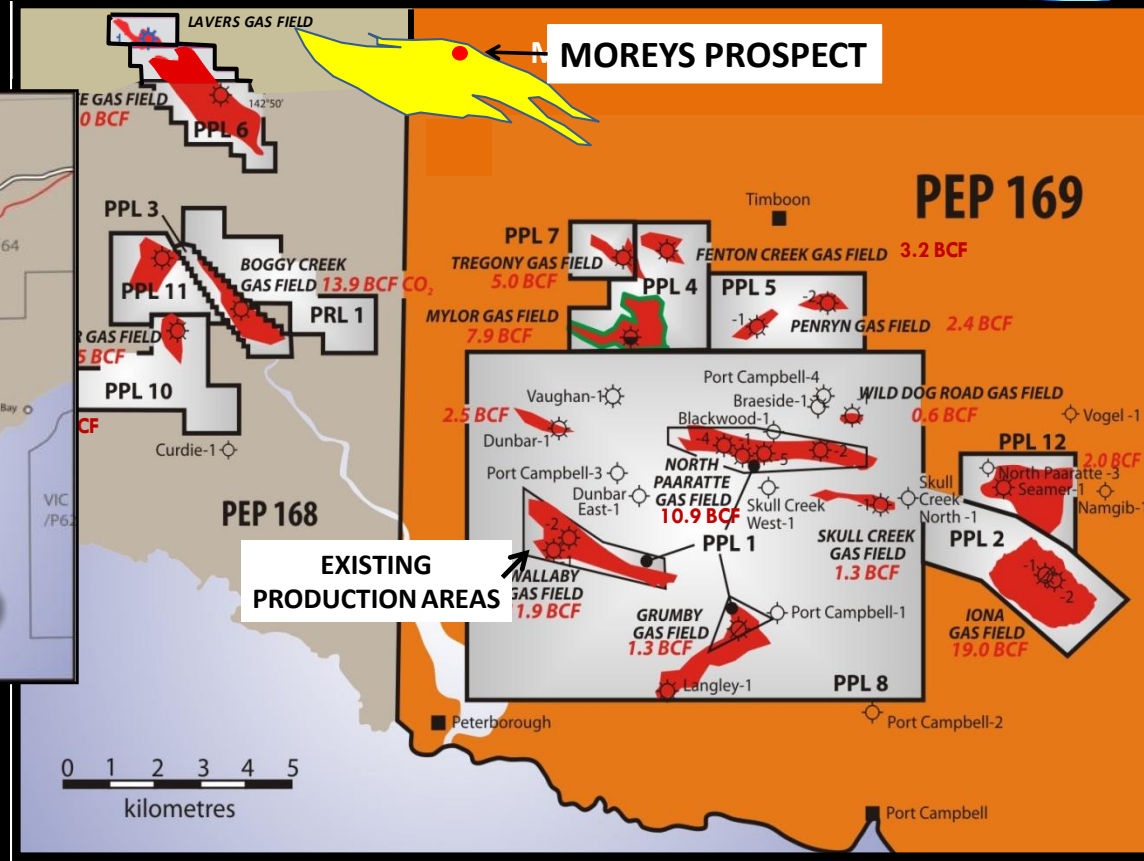


# PEP 169 MOREYS 1 JV with Armour Energy



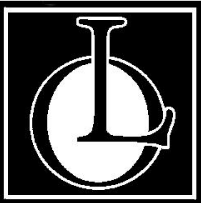
**PEP 169:**

- has existing infrastructure
- and is connected to eastern Australian gas network.



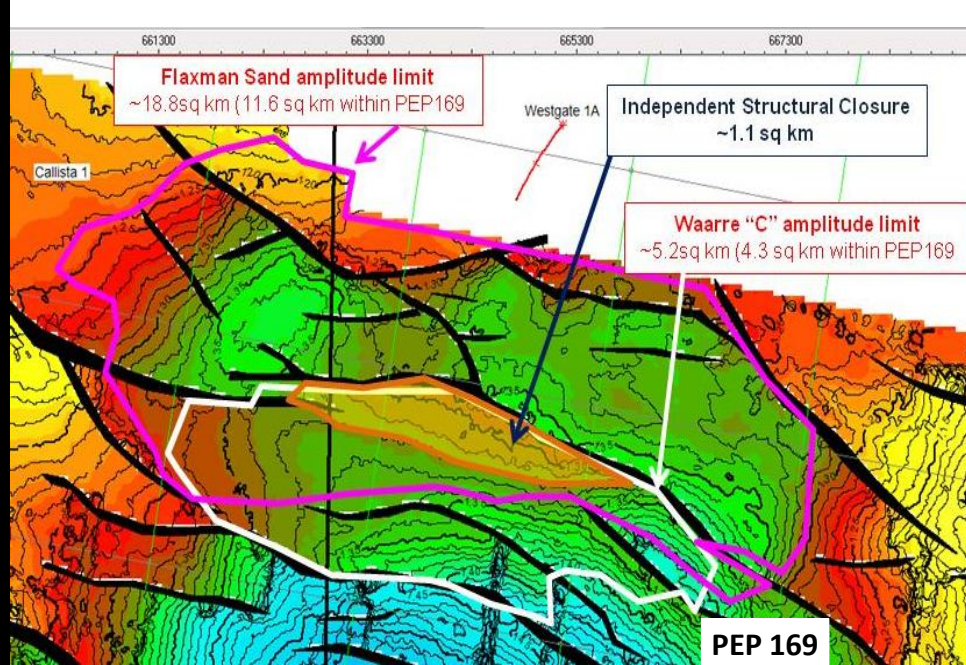
*Moreys 1 prospect is located in a proven WNW hydrocarbon fairway.*



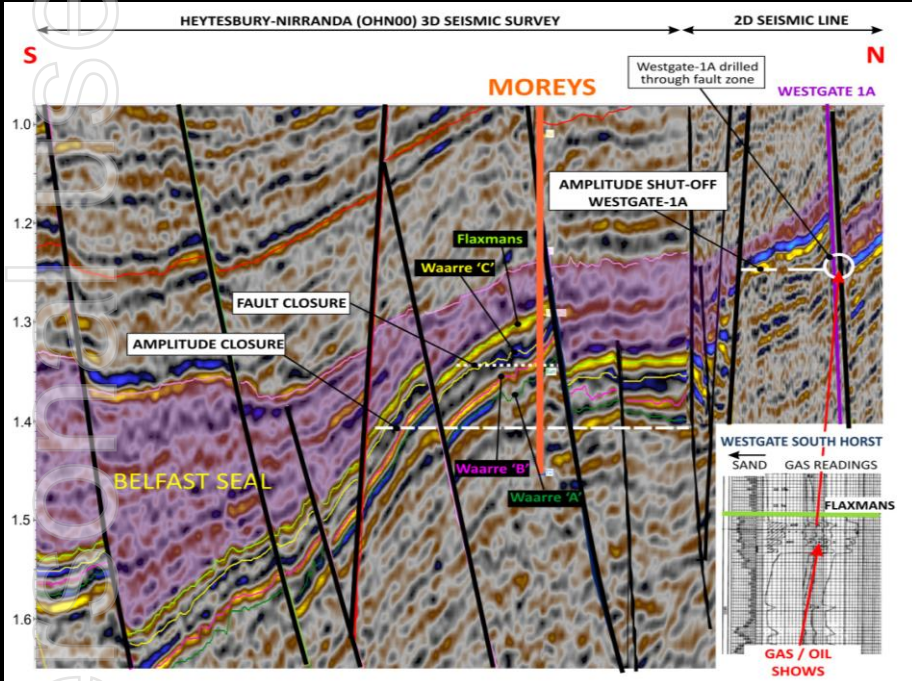


# PEP 169

## MOREYS I PROSPECT



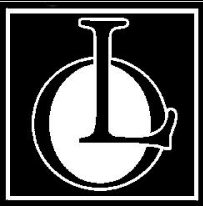
Moreys Prospect showing mapped independent closure and amplitude anomaly limits



**3 targets: Flaxmans, Waarre "C", Eumeralla**  
**Primary target Waarre "C" expected at ~ 1740m**  
**Estimated drilling time : 15 days**  
**TD: 2000 metres.**

### P50 Resource Estimates in PEP 169 only

	Recoverable	GIIP
Flaxmans Sand : amplitude anomaly limit.	16.7 BCF	34.9 BCF
Waarre "C" Sand: Independent structural closure only.	7.9 BCF	14.0 BCF
<b>Total Waarre "C" Sand (combined amplitude plus structural)</b>	<b>46.0 BCF</b>	<b>78.0 BCF</b>

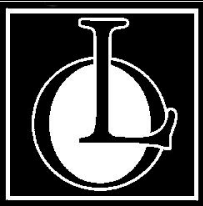


# Hunt Rig #2 on site



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# PEP 166, PRL 2

## KEY HYDROCARBON ASSETS



### Strzelecki Tight gas

Highly prospective tight gas plays in the Strzelecki Group sands  
Estimated MULTI TCF tight gas in place

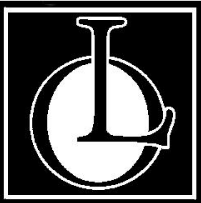
### Lower Strzelecki conventional oil and gas

Conventional gas & oil prospects in lower Strzelecki Group / Rintouls  
Creek Sandstone

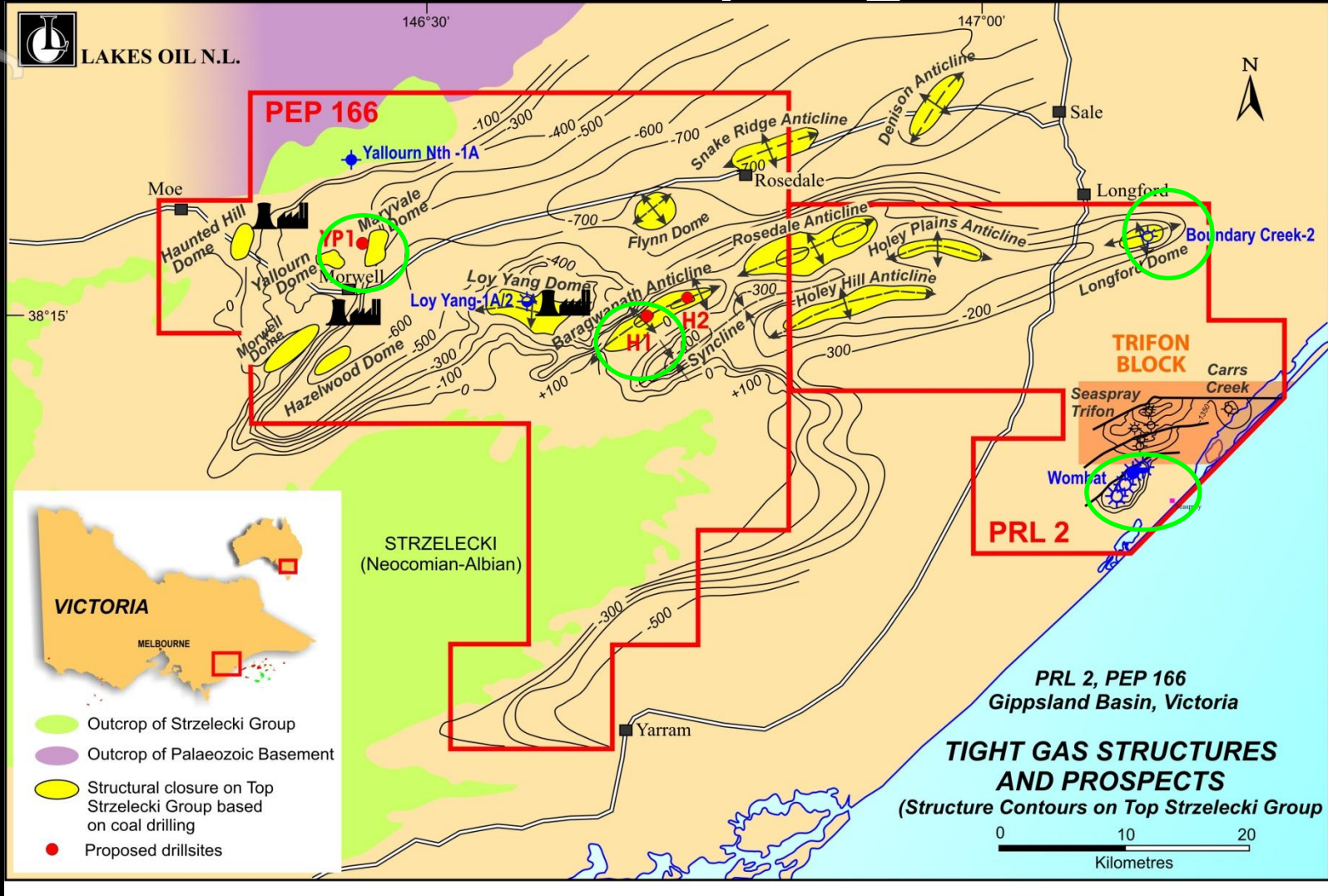
### Potential shale gas & oil

Shale oil & oil prospects in lower Strzelecki Group and Rintouls  
Creek Sandstone

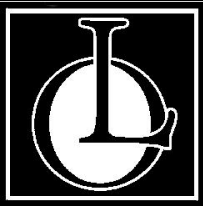
ersonal use only



# PEP 166, PRL 2 2012 work programs



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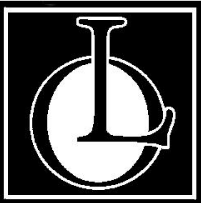


PEP 166

Geological Overview:

Tight gas, shale gas  
and shale oil potential

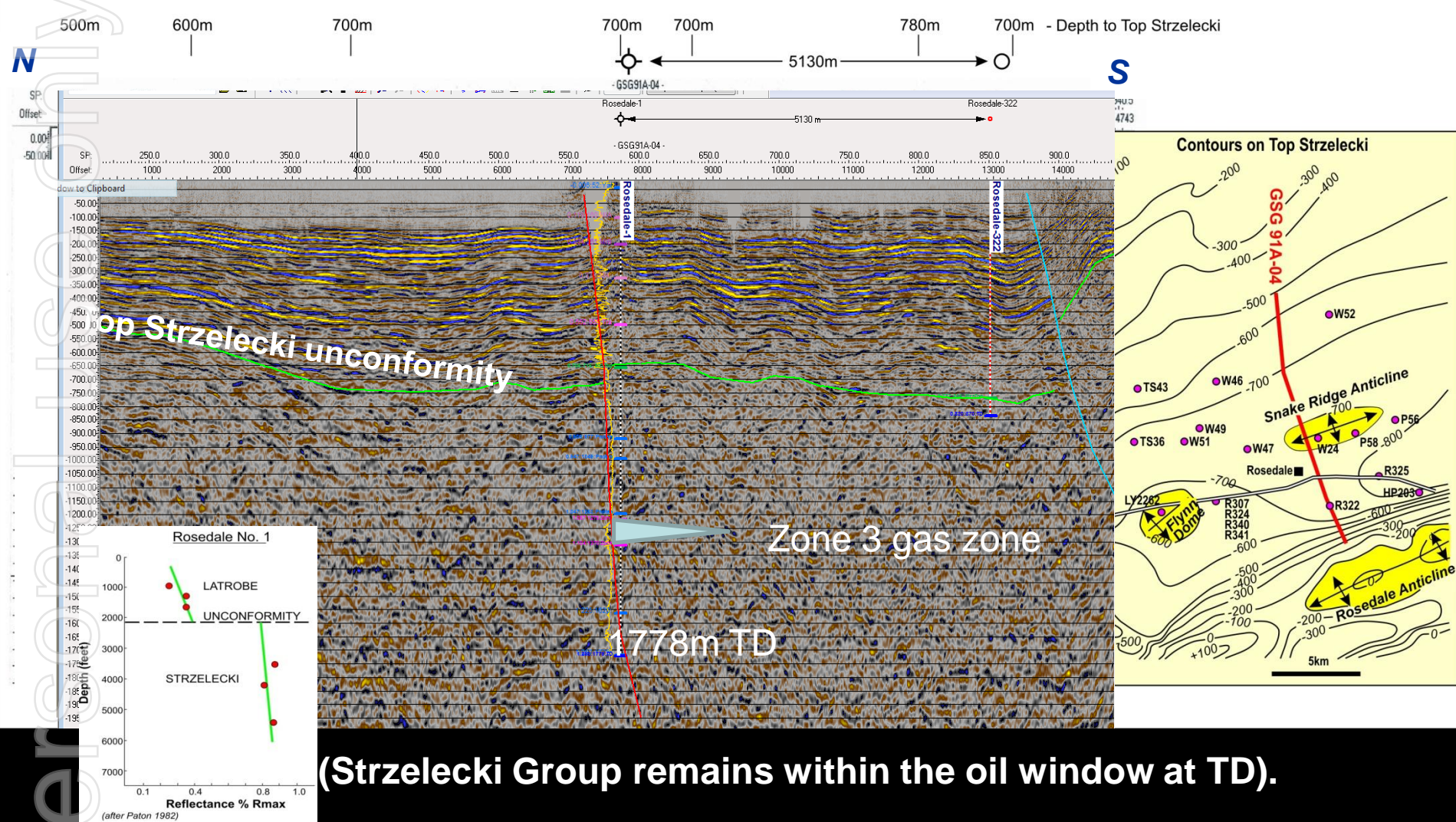




# Rosedale 1 (drilled in 1960) on Snake Ridge Anticline N-S seismic re-interpretation

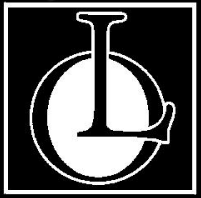


## GSG91A-04 Seismic re-interpretation based on drill holes to Top Strzelecki



(Strzelecki Group remains within the oil window at TD).



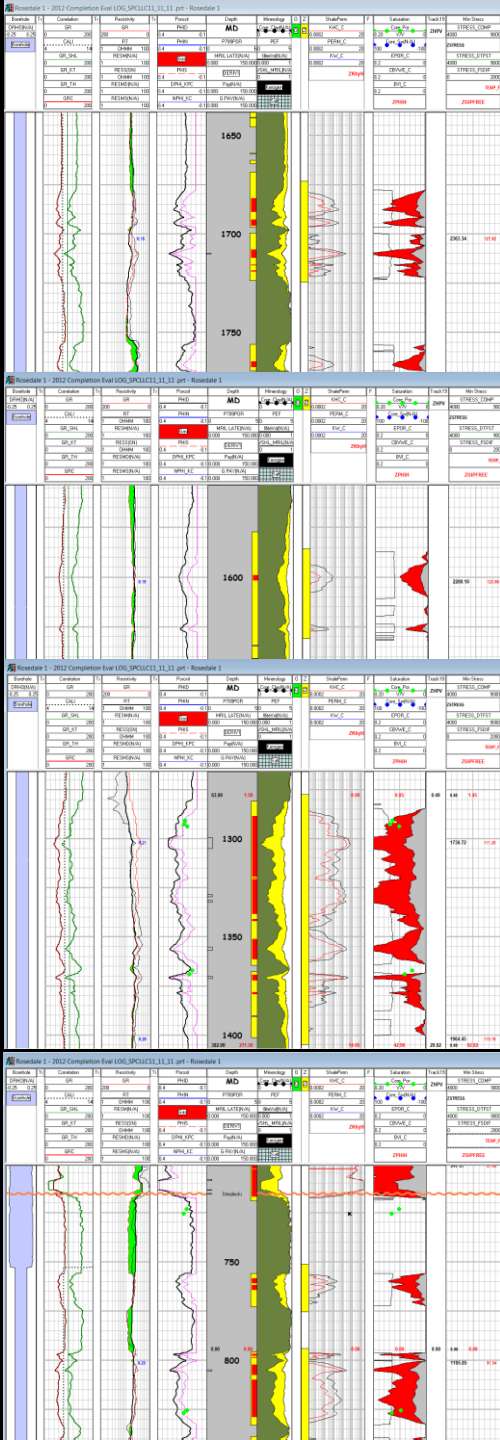


Zone 1

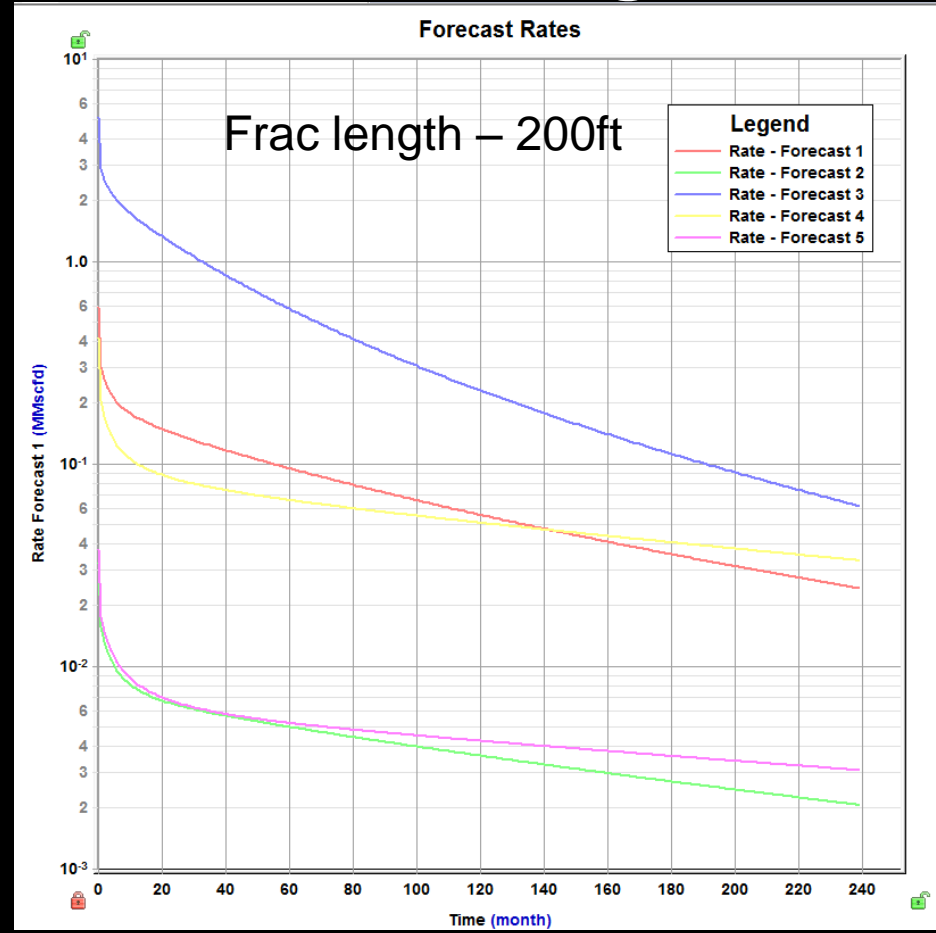
Zone 2

Zone 3

Zones 4,5



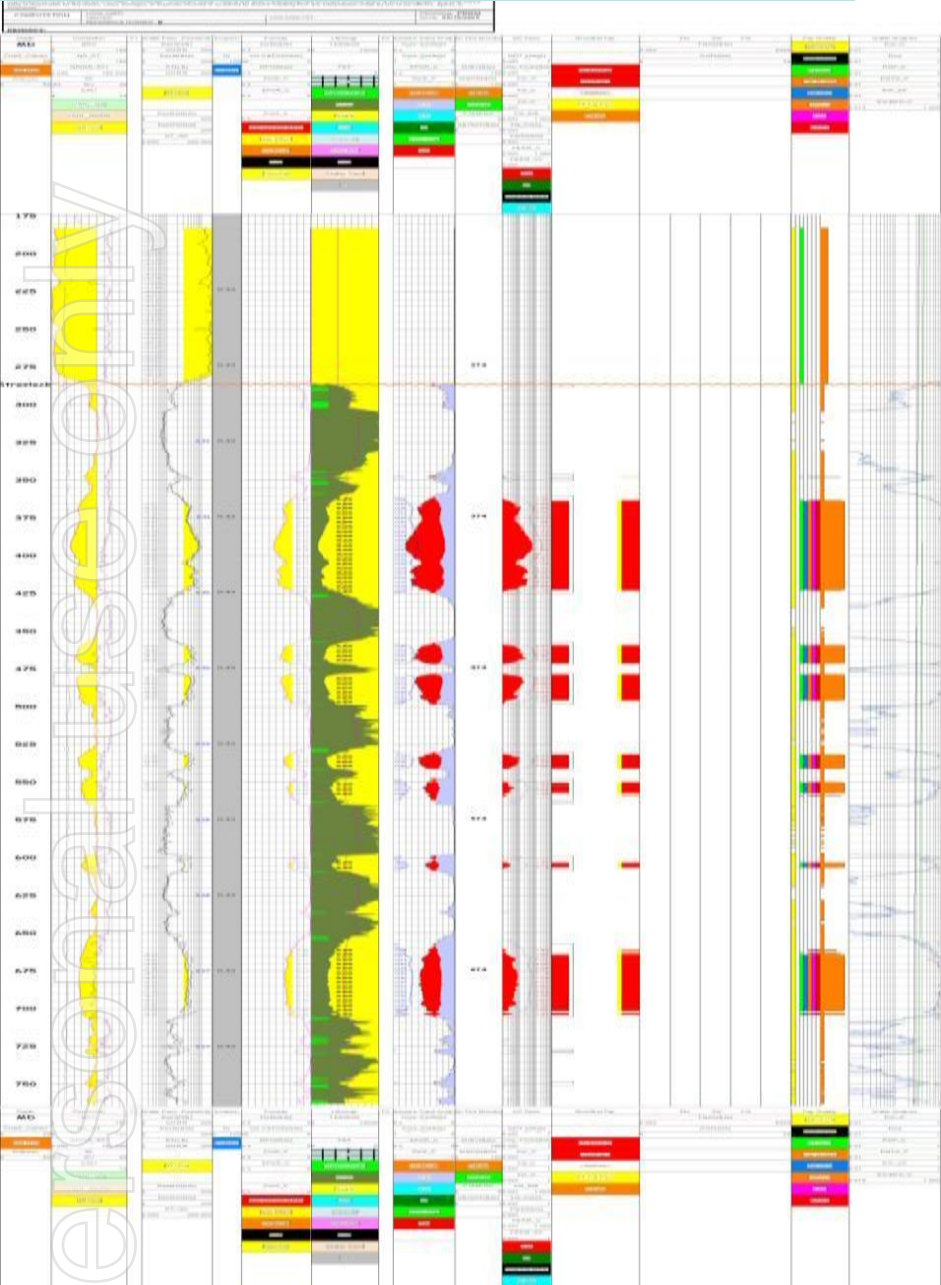
# Rosedale 1 Stimlog Evaluation



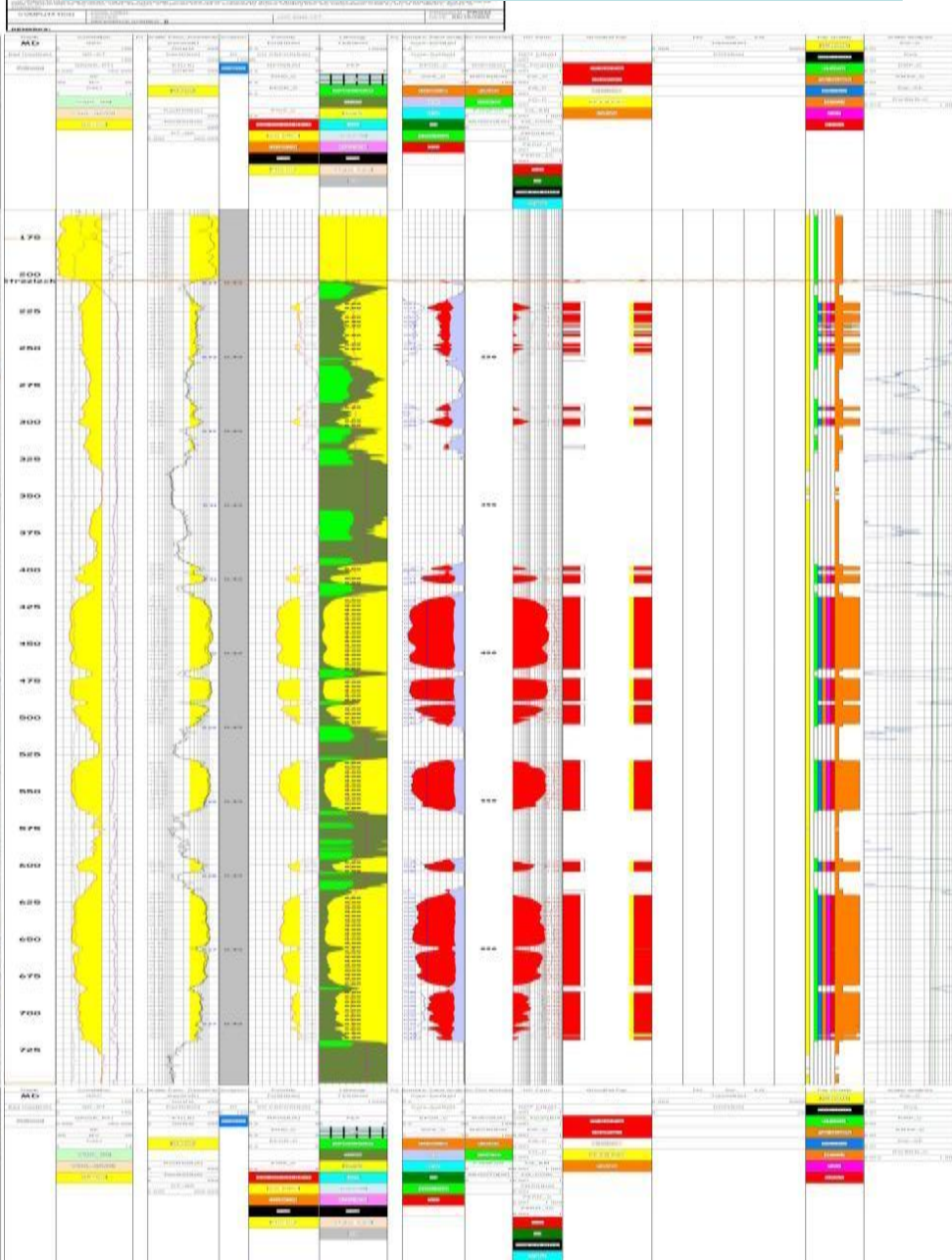
Zone	IP MSCF/D	Forecast EUR BSCF
1	400	0.542
2	20	0.030
3	<b>3000</b>	<b>3.441</b>
4	200	0.428
5	30	0.035

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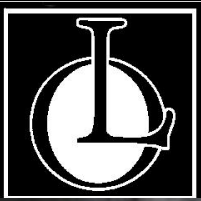
# Strzelecki tight gas analogue along the Baragwanath Anticline in PRL2 BELLBIRD-1 STIMLOG



# Strzelecki tight gas analogue along the Baragwanath Anticline in PRL2 SOUTH LONGFORD-1 STIMLOG







# RINTOULS CREEK SHALES AND OIL SEEPAGE IN RINTOULS CREEK – NORTHERN PEP 166



Potential shale gas and oil exists in Strzelecki and Rintouls Creek shales throughout PEP 166.

Known oil seepages occur in Rintouls Creek associated with dark organic rich shales, confirmed by biomarkers.

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# Possible Extent:

## Early Cretaceous along the northern margin

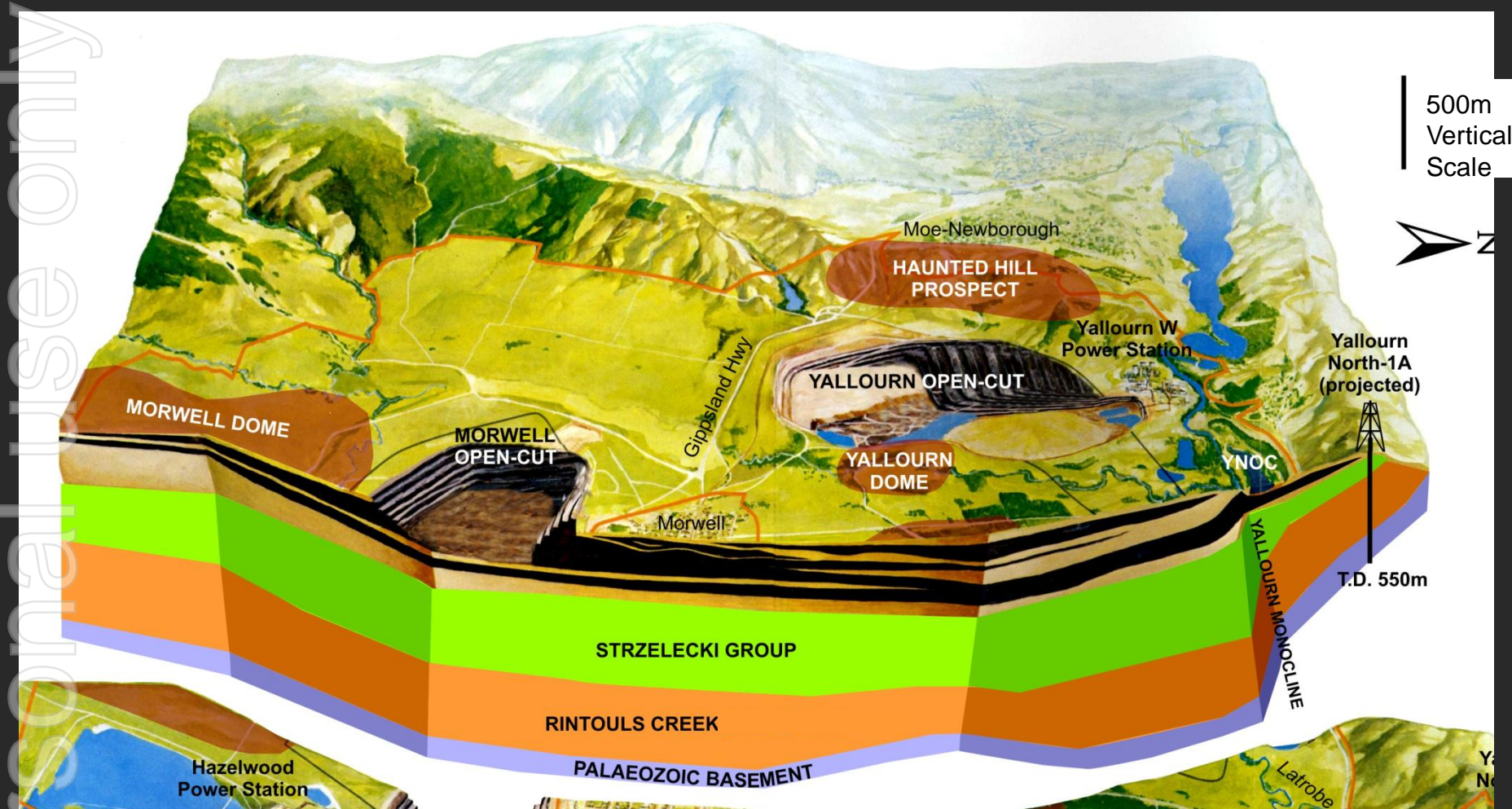


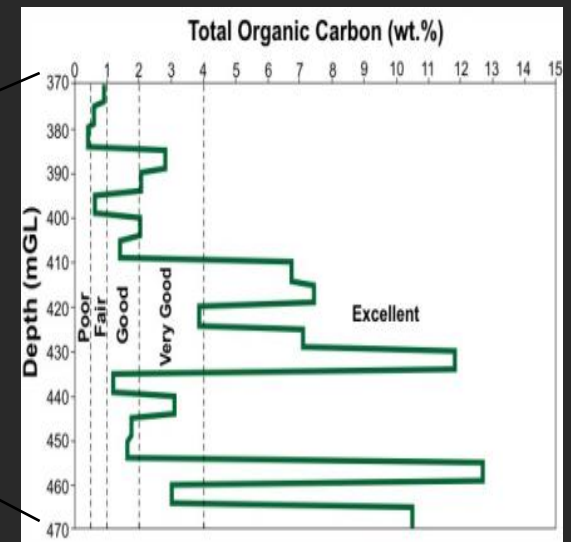
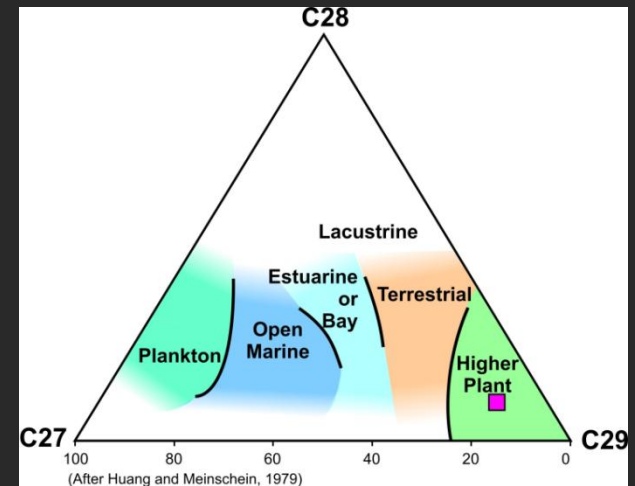
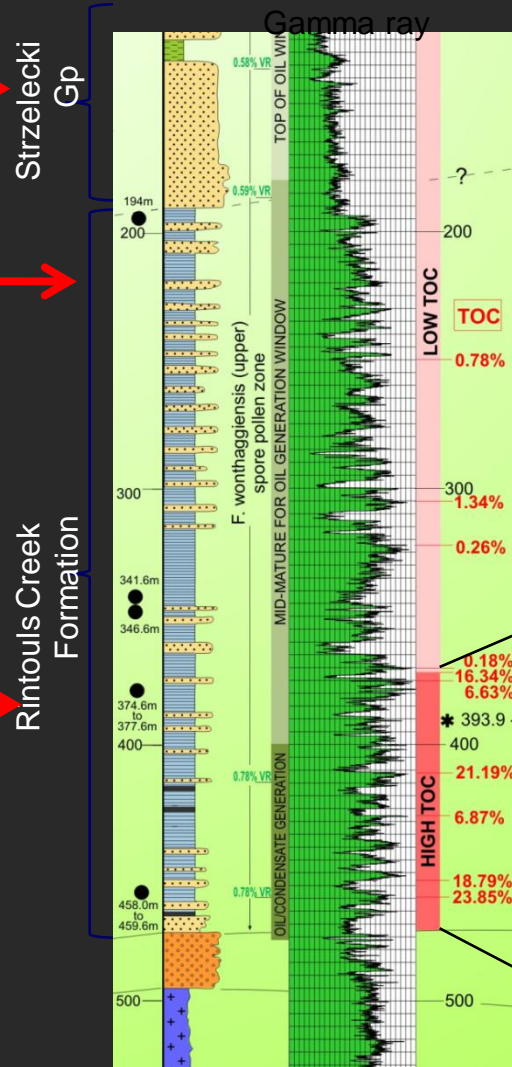
Diagram for illustrative purposes only



# Yallourn North Geochemistry

## Rintouls Creek Formation: Organically Rich

- Oil show within Strzelecki Group
- Interbedded porous sandstones with low-fair TOC are potentially very good reservoirs
- Fair-to-excellent TOC content in lower 100m source rock section
- Isosterane plot suggests organic matter of higher plant terrestrial



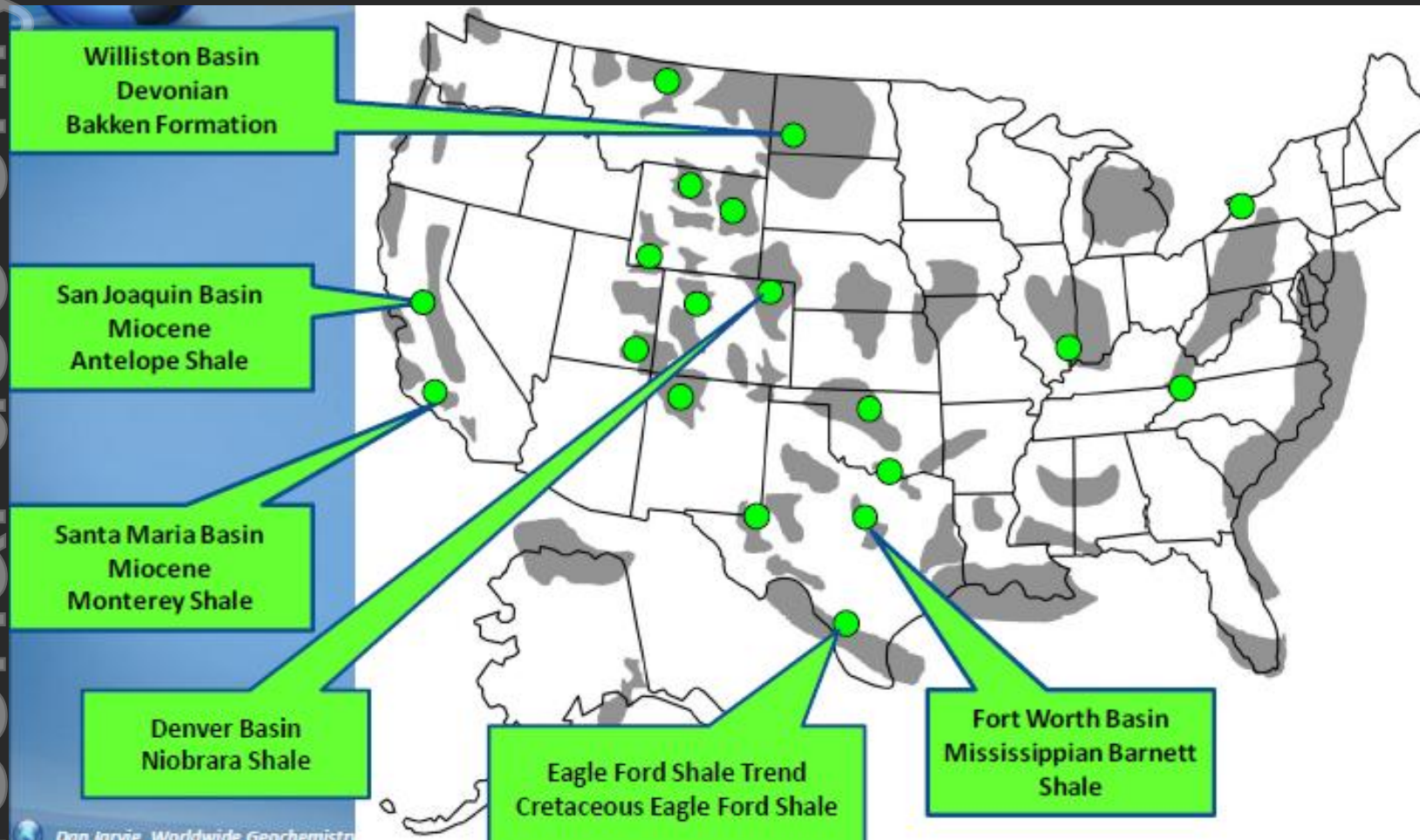
Well continuously cored



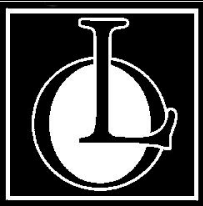


# Global Shale Oil: US is leader

Shale oil plays are developed across the US







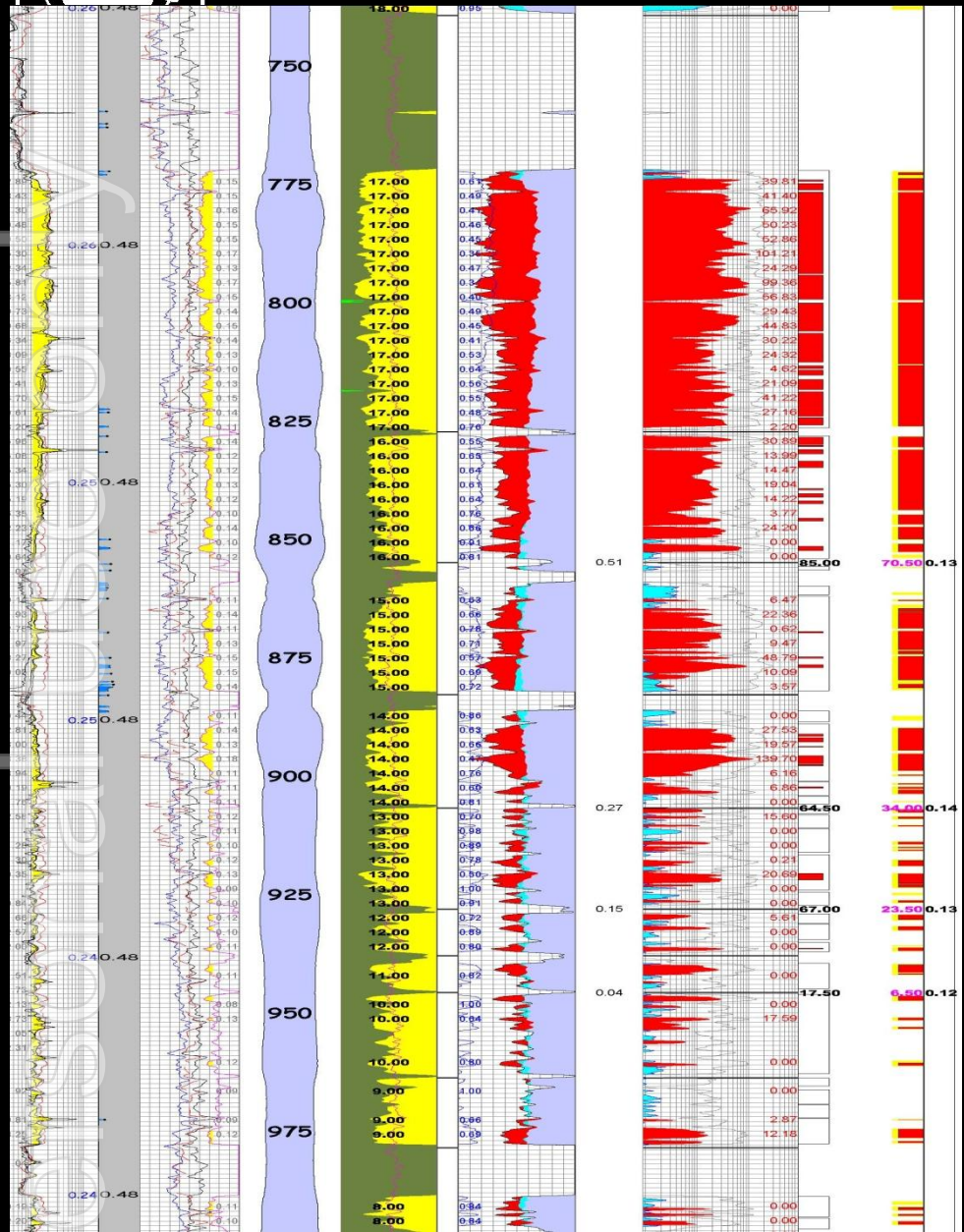
# PRL 2 Activities JV with Beach Energy

## 2012 Fracture Stimulation Program

- Wombat 4 and Boundary Creek2



# Strzelecki tight gas along Baragwanath Anticline in PRL2 BOUNDARY CREEK-2 STIMLOG



Shallow, untested tight gas.

Net gas column of 300m.

Gas zones over 700 to 1,050 meters.

Additional zones below.

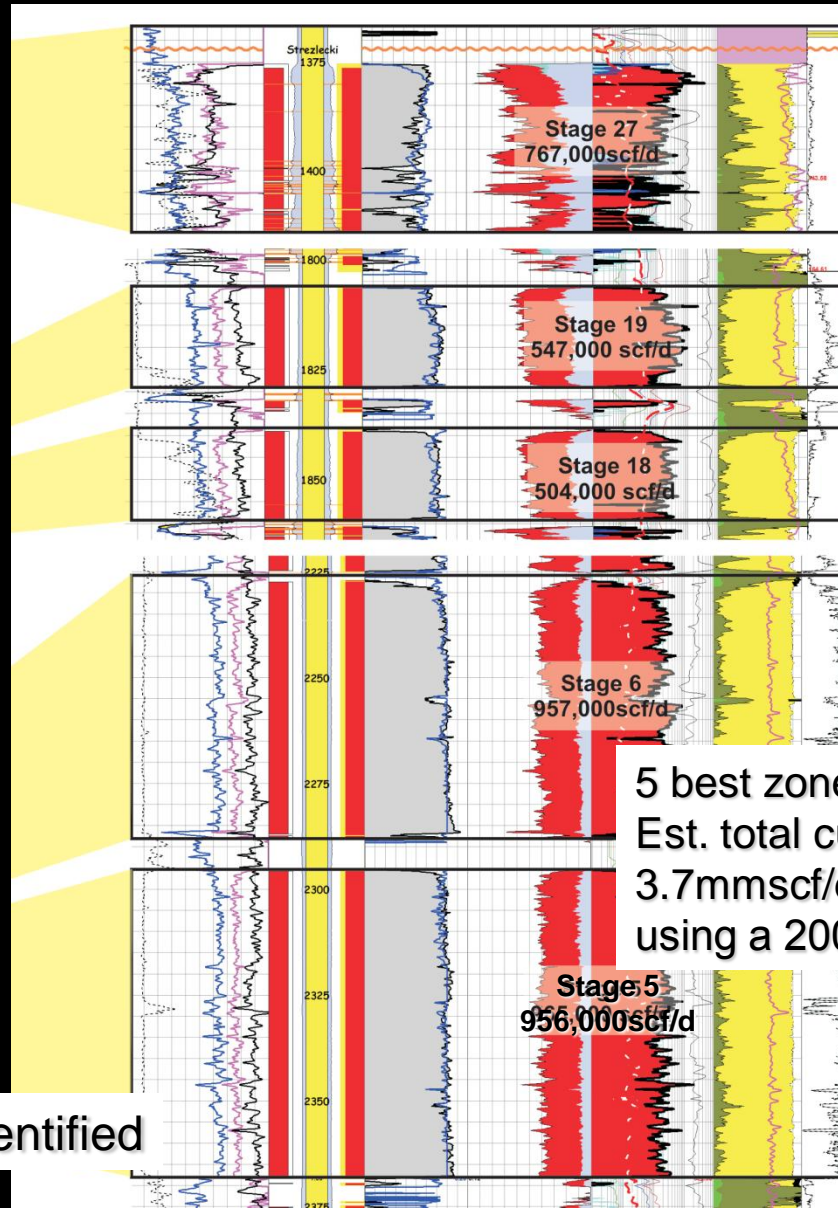
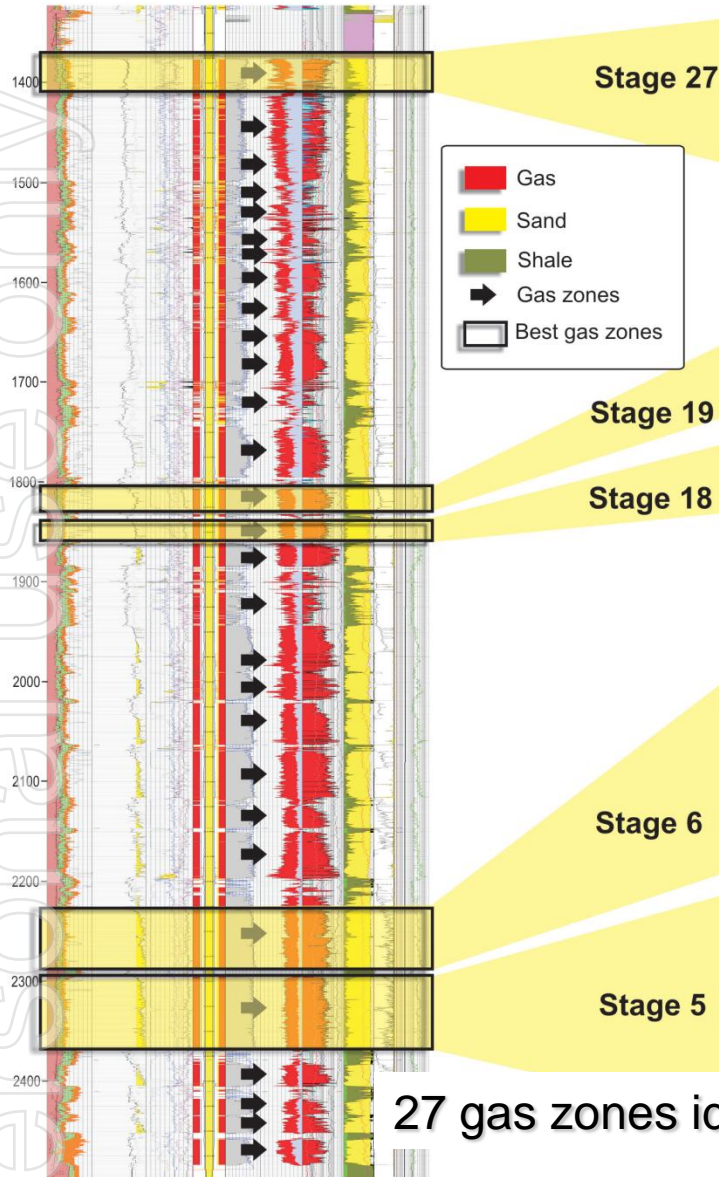
Total well pre-stimulated production rate of 2,300 mscf/d (cumulative for all zones).

Corresponding post-stimulation production rate of 5,400 mscf/d (assumes all zone fractured)



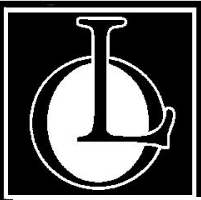
# Wombat - 4: StimLOG identification of Strzelecki gas zones over 1400-2500m section

Wombat-4 StimLOG across Strzelecki Group (1400-2500m)



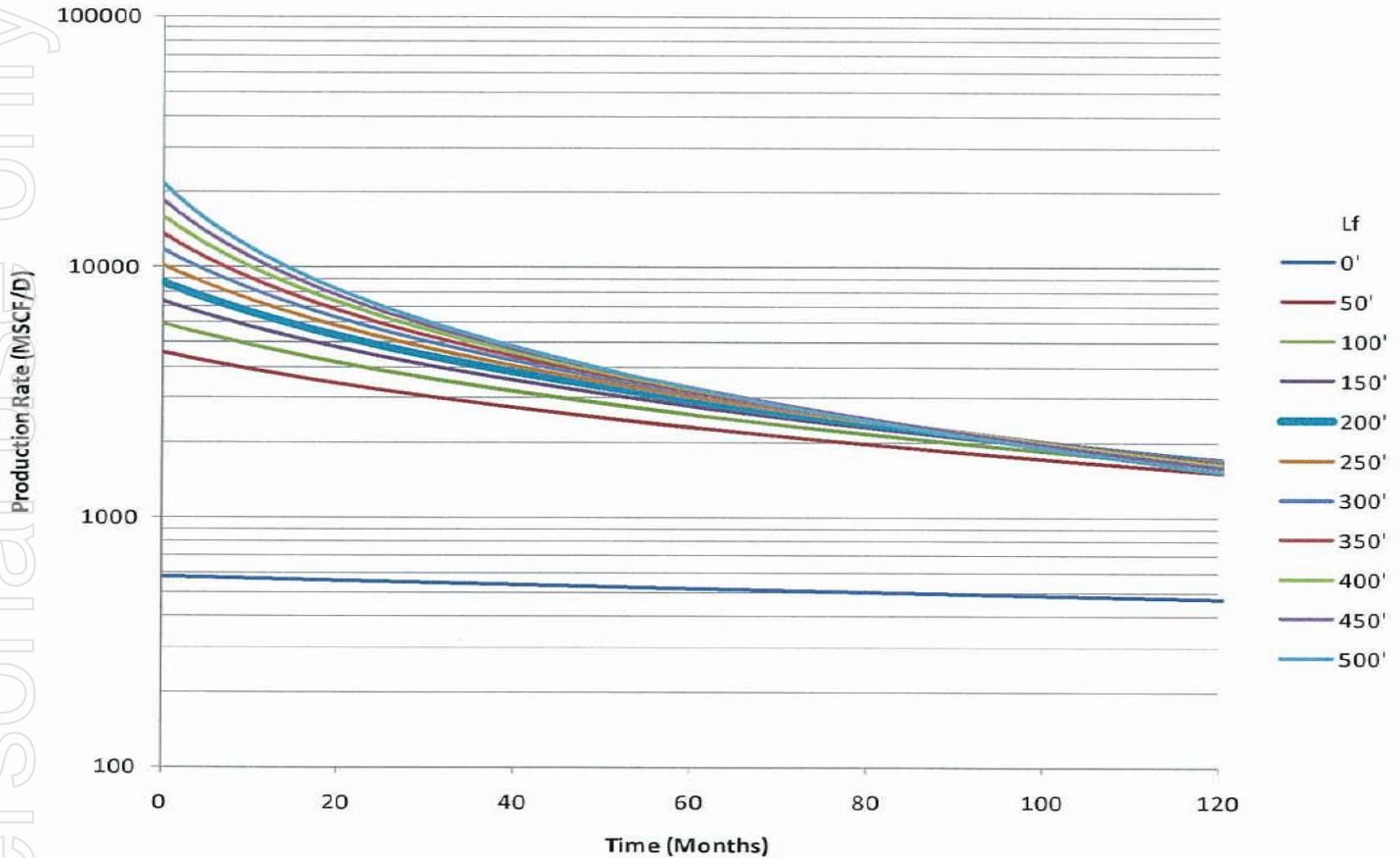
**5 best zones:**  
Est. total cum. production  
3.7mm scf/d after fracking  
using a 200' frac length





# Wombat 4 : Total Production Estimates for all 27 Stages

## Total Well Production Forecast for Wombat 4



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