

- Targets selected for drilling in 2010 and 2011
- Coal Measures Gas Potential

Stuart headlines

2010 & 2011 drilling to discover additional oil resources.

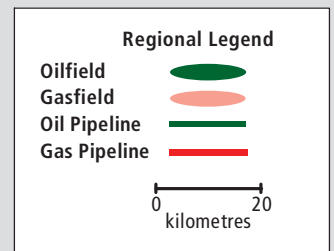
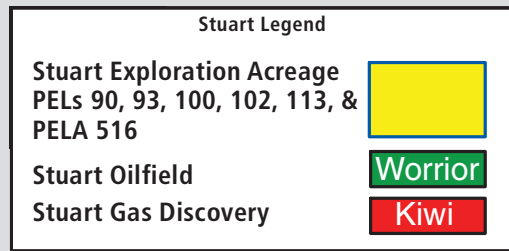
Stuart has an inventory of 209 prospects and 149 leads mapped on its extensive landholdings in the South Australian sector of the Cooper/Eromanga Basin. Stuart will drill seven high probability oil prospects in 2010 and 2011. The Company expects these prospects to replace produced oil reserves, to increase the Company's reserve base and to enable increased production, cashflow and profitability.

2010 & 2011 drilling to define producible gas resources.

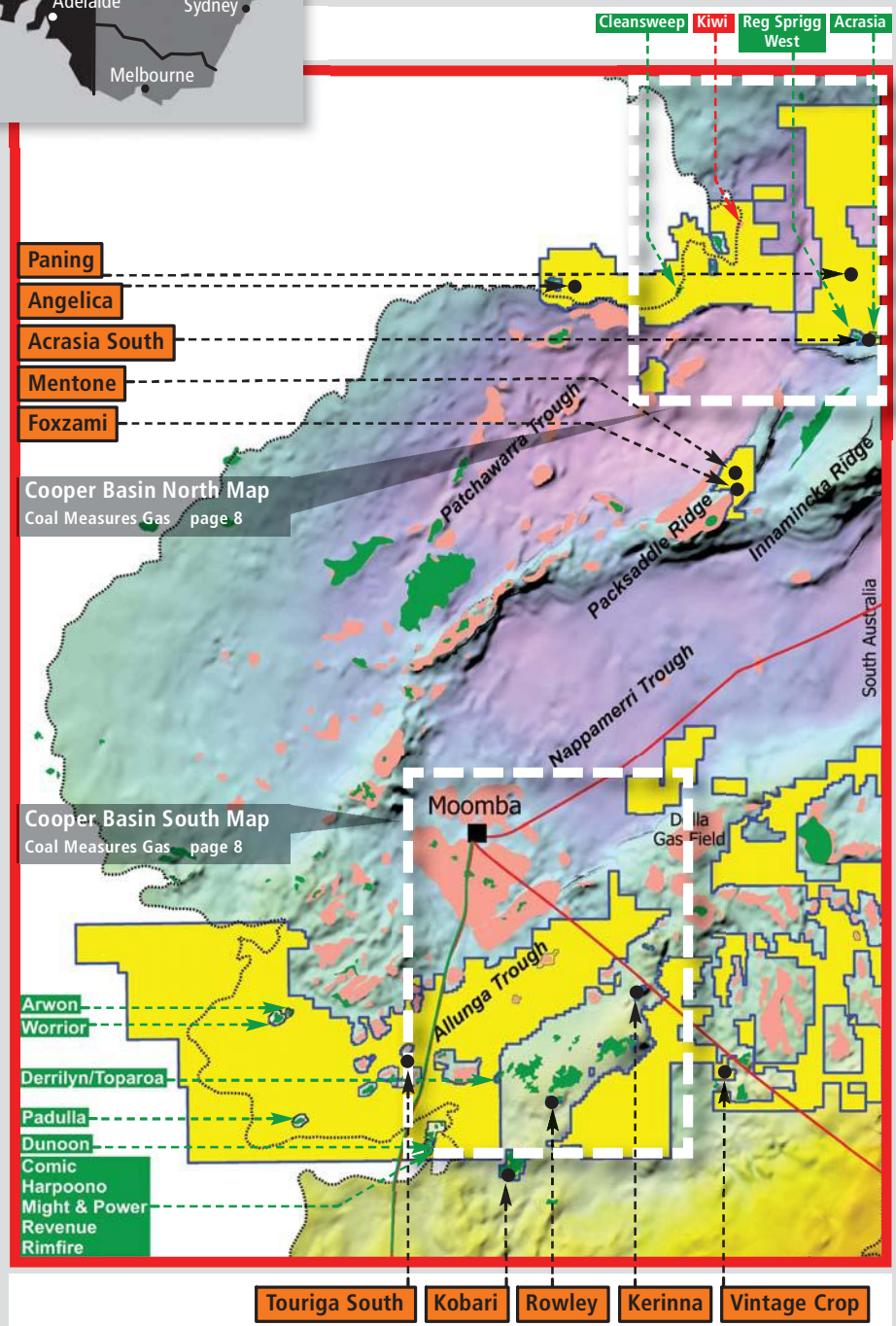
Stuart has a strong portfolio of Cooper Basin gas prospects. 2010/2011 exploration drilling will test three high-impact gas targets.

Coal Seam Gas Project.

A Working Group has been established to plan the realization of gas potential in the extensive Toolachee Formation Coal Measures and other unconventional gas-saturated Permian sections. **This programme has the potential to develop into a project of major significance.**



2010 & 2011 Stuart Drill Targets Kerinna



Oil Prospects

Kerinna 2

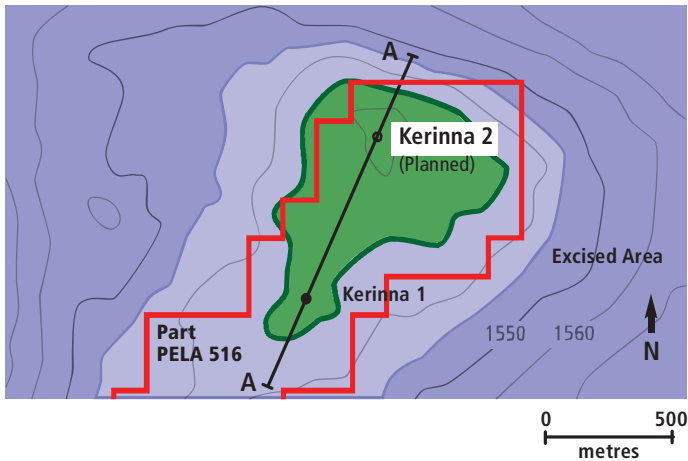
Tenure:

Petroleum Exploration Licence Application	516
Stuart Petroleum Limited interest	100%

Background:

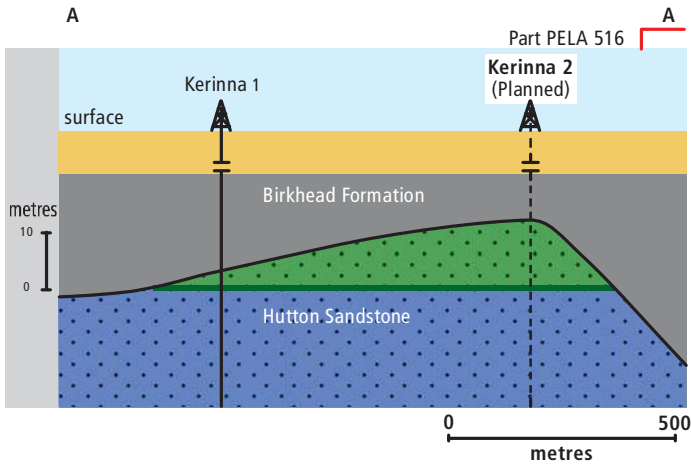
The Kerinna Oilfield was discovered by Santos and partners in 1984 with the drilling of Kerinna 1. Oil shows were recognised in the Murta Formation and in the McKinlay Member of the Namur Sandstone and 3 metres of oil pay was recognised in the Hutton Sandstone. 18,000 barrels of oil were produced from the Hutton Sandstone before the well was abandoned.

Hutton Sandstone depth structure contour map (metres)



Recent Seismic Mapping:

3D seismic mapping of the top of the Hutton Sandstone has located the crest of the Kerinna structure 700 metres to the north northeast of Kerinna 1. At this location the Hutton Sandstone is mapped to contain 11 metres of oil pay.



Diagrammatic cross-section A A showing geological interpretation of seismic and well data from Kerinna 1.

Stuart Drill Programme:

Stuart plans to drill Kerinna 2 on the Hutton Sandstone crest to evaluate and develop Hutton Sandstone oil resources. This well will also evaluate the potential for production from the Murta Formation and the McKinlay Member of the Namur Sandstone. Hutton Sandstone recoverable oil resources at Kerinna are likely to lie in the range of **200,000 to 300,000 barrels** of oil.

Kobari 2

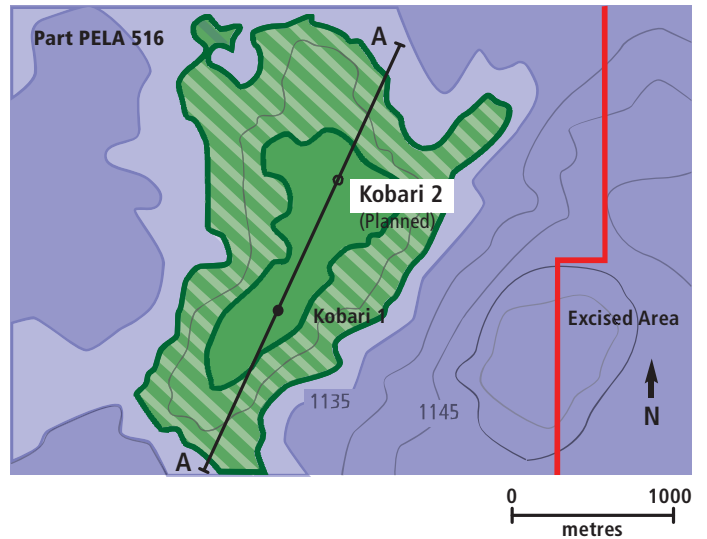
Tenure:

Petroleum Exploration Licence Application	516
Stuart Petroleum Limited interest	100%

Background:

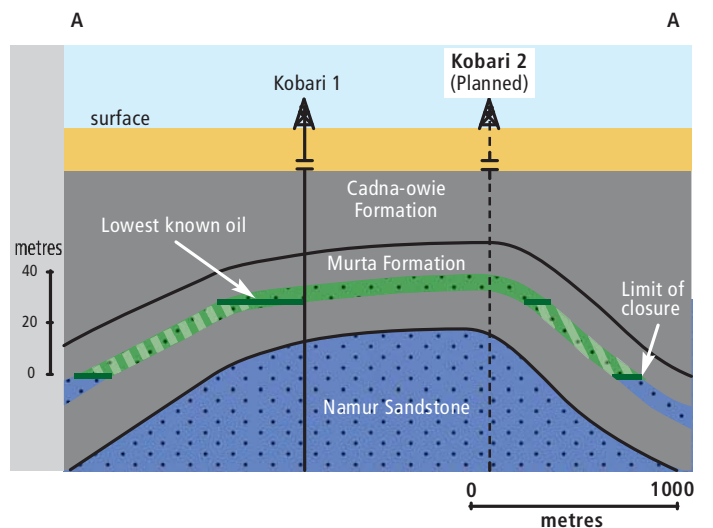
When drilled by Santos and partners in 1984, Kobari 1 flowed oil to surface at the rate of 53 barrels per day from 1 to 2 metres of nett sand in the Murta Formation. Mechanical problems were encountered while preparing the well-bore for production and Kobari 1 was abandoned without ever coming on-stream.

Namur Sandstone time structure contour map (milliseconds)



Recent Seismic Mapping:

3D seismic mapping indicates that the crest of the Kobari structure at Murta Formation level is located approximately 800 metres to the northeast of Kobari 1.



Diagrammatic cross-section A A showing geological interpretation of seismic and well data from Kobari 1.

Stuart Drill Programme:

Stuart will drill Kobari 2 on the Murta Formation crest to evaluate and develop oil resources contained in the Murta Formation. Recoverable Murta Formation oil resources at Kobari are likely to lie in the range **200,000 to 500,000 barrels** of oil.

Oil Prospects

Rowley 1

Tenure:

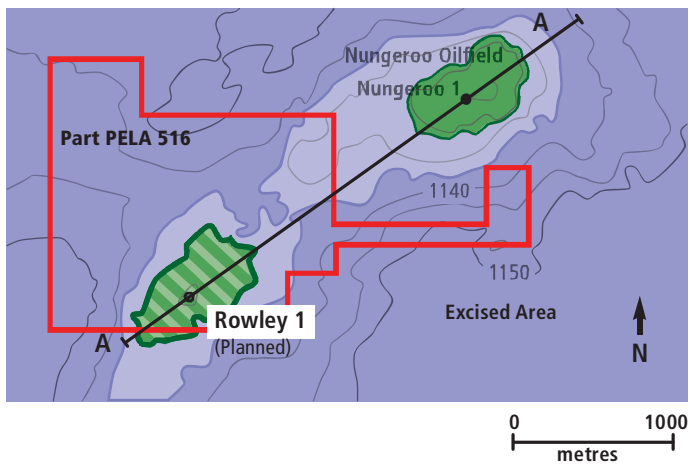
Petroleum Exploration Licence Application 516
 Stuart Petroleum Limited interest 100%

Background:

The Rowley structure is a four way drape closure of Eromanga Basin strata over a basement high bald of Triassic sediments.

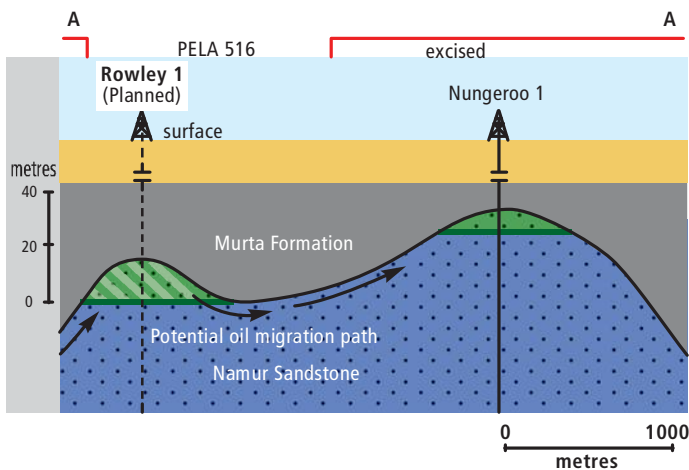
The Rowley closure lies 2 kms southwest of a similar but smaller closure, Nungeroo which was drilled by Delhi Petroleum and partners in 1986. Nungeroo 1 discovered oil in the top of the Namur Sandstone (McKinlay Member) and produced in excess of 130,000 barrels of oil until abandonment of the field in 2000.

Namur Sandstone time structure contour map (milliseconds)



Recent Seismic Mapping:

3D seismic mapping has confirmed the integrity of the Rowley structure.



Diagrammatic cross-section A A showing geological interpretation of seismic and well data from Nungeroo 1.

Stuart Drill Programme:

Stuart plans to drill Rowley 1 on the McKinlay Member crest of the Rowley structure to test for a 4-6 metre oil column in the McKinlay Member and also to evaluate the potential for oil in the Murta Formation and in the Hutton Sandstone. If the McKinlay Member contains oil in Rowley 1 it is likely to recover between 150,000 and 300,000 barrels of oil.

Vintage Crop 1

Tenure:

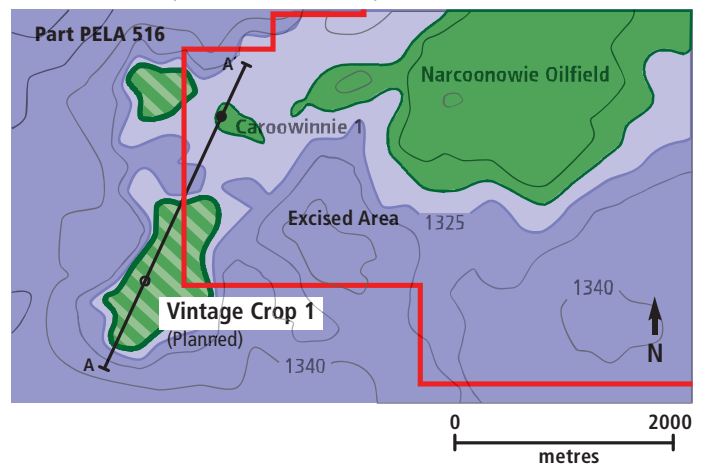
Petroleum Exploration Licence Application 516
 Stuart Petroleum Limited interest 100%

Background:

Vintage Crop is a fourway drape closure of Eromanga Basin sediments over a basement horst. It lies 3.2 km southwest of Santos and partners Narcoowowie Oilfield (6 production wells).

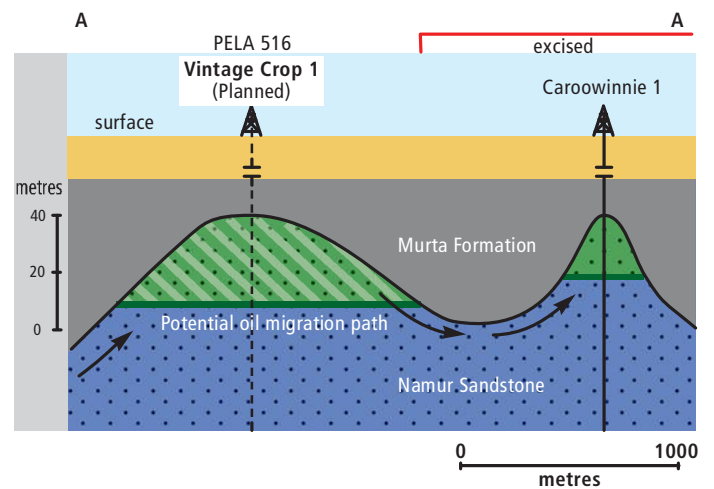
In 2007, Santos and partners discovered the Carooinnie Oilfield, a four way drape closure some 1.6 km northeast of the Vintage Crop structure, in a well which discovered 1 to 2 metres of oil pay in the Murta Formation and 5 metres of oil pay in the top of the Namur Sandstone (McKinlay Member). Oil shows in the Birkhead Formation were not tested.

Murta Formation depth structure contour map (metres)



Recent Seismic Mapping:

Seismic mapping has confirmed that Vintage Crop is the most westerly of the culminations on the Narcoowowie-Carooinnie uplifted block.



Diagrammatic cross-section A A showing geological interpretation of seismic and well data from Carooinnie 1.

Stuart Drill Programme:

Stuart will drill Vintage Crop 1 to test for oil in the Murta Formation, in the McKinlay Member of the Namur Sandstone and in the Birkhead Formation. If these strata contain oil, Murta, McKinlay and Birkhead oil recovery is likely to lie in the range of 250,000 to 500,000 barrels of oil.

Oil Prospects

Mentone 1

Tenure:

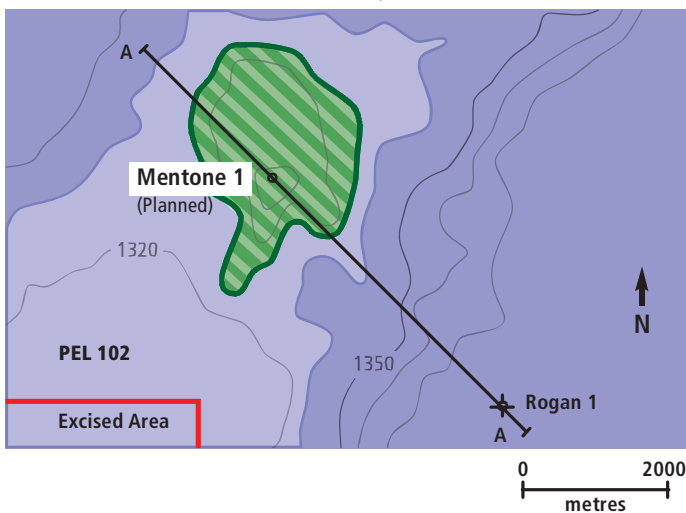
Petroleum Exploration Licence	102
Stuart Petroleum Limited interest	100%

Background:

Mentone is a fourway drape closure on the axis of the structurally prominent Packsaddle Ridge. The Mentone structure is bald of Permian and lies updip of a significant thickness of hydrocarbon-generative Permian strata.

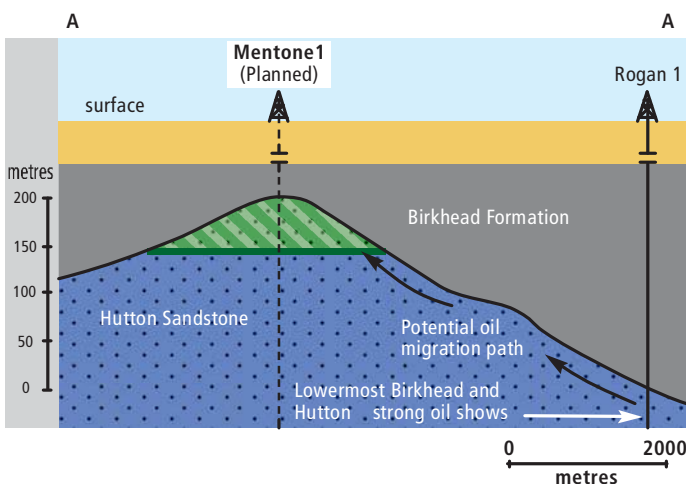
The Mentone structure is also updip of, and on a 3 kilometre oil migration pathway from, Rogan 1, which encountered strong oil shows in the lower Birkhead Formation and in the Hutton Sandstone. There is no closure at Birkhead/Hutton level in Rogan 1 and Mentone is the nearest closure updip of Rogan 1.

Birkhead Formation time structure contour map (milliseconds)



Recent Seismic Mapping:

The Mentone structure has been mapped using reprocessed data from several 3D surveys. The structure has been shown to be valid and the crest of the structure has been reliably defined.



Diagrammatic cross-section A-A showing geological interpretation of seismic and well data from Rogan 1.

Stuart Drill Programme:

Stuart will drill Mentone 1 to test for oil in the Birkhead Formation and the Hutton Sandstone. The Murta Formation, which has yielded extensive oil and gas shows southwest along the Packsaddle Ridge, will also be evaluated.

If these strata contain oil, the Hutton, Birkhead and Murta are likely to recover in the range of 500,000 to 1,450,000 barrels of oil.

Acrasia South 1

Tenure:

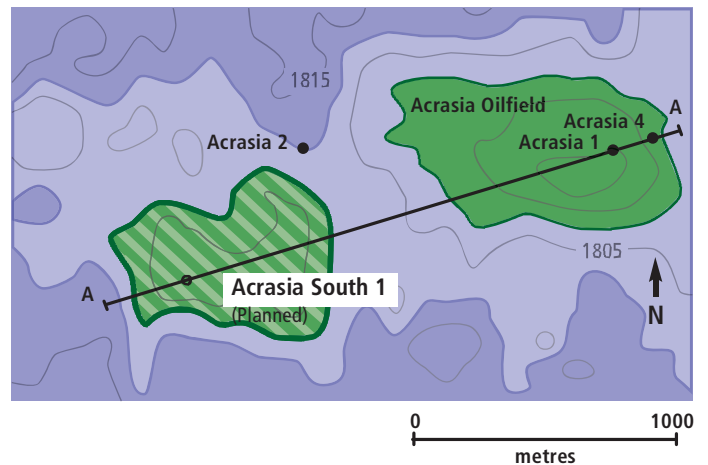
Petroleum Exploration Licence	90
Stuart Petroleum Limited interest	75%

Background:

Stuart Petroleum and its partners discovered oil in the Birkhead Formation, Hutton Sandstone and Tinchoo Formation with exploration well Acrasia 1 in 2002. The Acrasia Oilfield continues in production and further drilling has discovered additional reserves in the Poolowanna and Paning Formations.

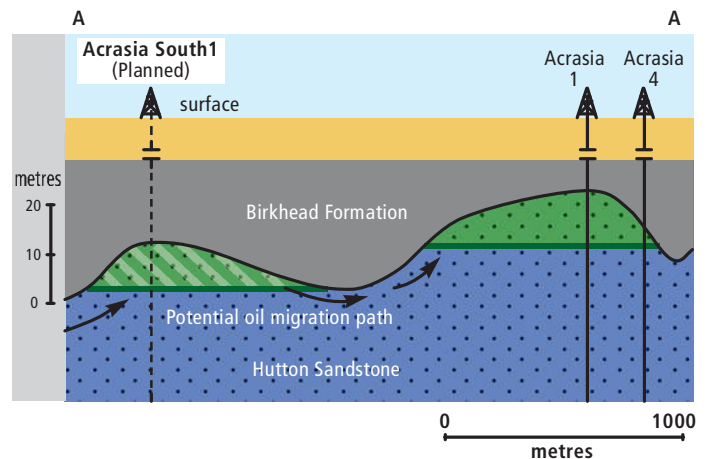
The Acrasia South Prospect is located on the Candra Dome, 700 metres southwest of the Acrasia Oilfield, between the producing Acrasia and Reg Sprigg Oilfields.

Hutton Sandstone depth structure contour map (metres)



Recent Seismic Mapping:

3D seismic mapping has revealed that three principal culminations - the Acrasia, Acrasia South and Reg Sprigg structures - occur at Hutton Sandstone level on the crest of the Candra Dome. Acrasia South is thought to lie on an oil migration path to the Acrasia Oilfield and, if so, the Acrasia South structure may be filled to spill point. Seismic amplitudes within the lower Birkhead Formation have been integrated with well data and mapped over the adjoining Acrasia and Reg Sprigg oil fields. This work has shown a strong likelihood that reservoir quality sands are developed in the Birkhead Formation along the crest of the Acrasia South structure as defined at Hutton Sandstone level.



Diagrammatic cross-section A-A showing geological interpretation of seismic and well data from Acrasia 1, 2, 3 and 4.

Stuart Drill Programme:

Stuart plans to drill Acrasia South 1 on the crest of the Acrasia South structure as defined at Hutton Sandstone level, to evaluate the oil potential of the Hutton Sandstone and the Birkhead and Paning Formations. If they contain oil, the Hutton and Birkhead sands are expected to recover in the range of 200,000 to 400,000 barrels of oil.

Oil Prospects

Angelica 2

Tenure:

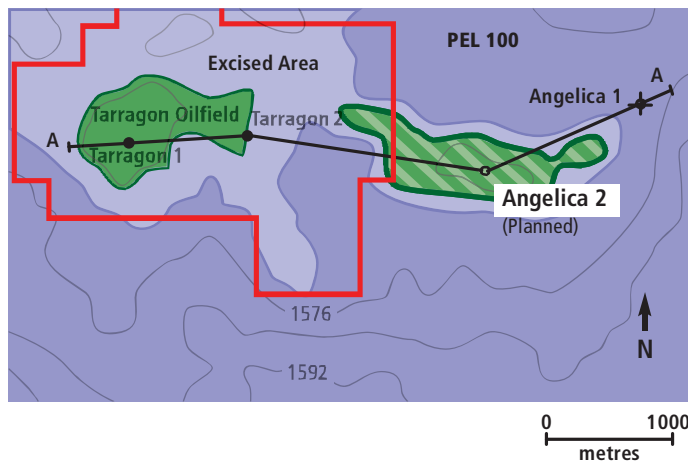
Petroleum Exploration Licence	100
Stuart Petroleum Limited interest	50%

Background:

Angelica is a fourway drape structure of Eromanga Basin sediments over a basement horst bald of Permian strata. It lies 5 km north of, and updip of the margin of Permian strata in the Patchawarra Trough, which is known to generate hydrocarbons.

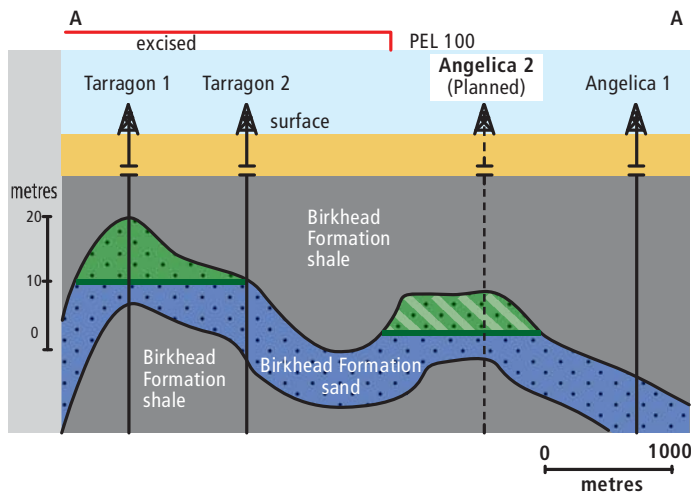
In 1997 Santos and partners drilled Tarragon 1, approximately 2 kilometres west of the Angelica structure, in a well which tested oil at the rate of 1,580 barrels per day from the Birkhead Formation and 500 barrels per day from the Tinchoo Formation. Oil was also recognised in the Poolowanna Formation. In 1998, Santos and partners drilled Angelica 1 at a location which has since been shown to be off-structure.

Birkhead Formation time structure contour map (milliseconds)



Recent Seismic Mapping:

Recent seismic mapping has shown that Angelica 1 was located significantly downdip of the crest of the structure. More detailed 3D seismic will be acquired in 2010 to ensure that Angelica 2 tests the crest of this culmination.



Diagrammatic cross-section A-A showing geological interpretation of seismic and well data from Angelica 1 and Tarragon 1 and 2.

Stuart Drill Programme:

Angelica 2 will evaluate the oil potential of the Birkhead, Poolowanna and Tinchoo Formations in the Angelica structure. If they contain oil, these strata are likely to recover between 600,000 to 1,400,000 barrels of oil.

Oil Strategy

Reserves replacement, adding reserves and increasing production

Stuart Petroleum is a well-established Cooper/Eromanga Basin explorer and producer with more than 2 million barrels of profitably producible oil in proven and probable reserves.

With its existing holdings and a recent award from Government, the Company has become the largest holder of exploration acreage in the southern sector of the Cooper/Eromanga Basin, where it holds more than 4,400 square kilometres under tenure.

During 2010 and 2011, Stuart will seek to replace its annual oil production in the region of 300,000 barrels and build its reserve base with a targeted programme of seven high-probability oil exploration wells.

The 2010/2011 oil programme will target structures capable of yielding mean un-risked recoverable oil of 2.5 million barrels.

The nett effect for shareholders is expected to be that Stuart will, in the medium term:

- increase its reserves
- increase its annual oil production rate
- increase its revenue and profitability.

Legend

Formation Fluid

	Oil
	Oil (interpreted)
	Gas
	Gas (interpreted)
	Water

Lithology

	Undifferentiated sediment
	Sandstone
	Shale
	Coal
	Pre Toolachee Formation strata
	Basement

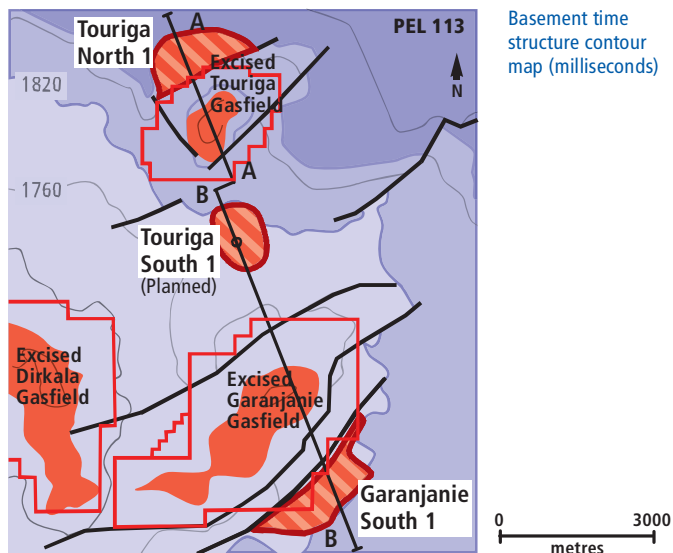
Gas Prospects

Touriga South 1

Tenure:
 Petroleum Exploration Licence 113
 Stuart Petroleum Limited interest 100%

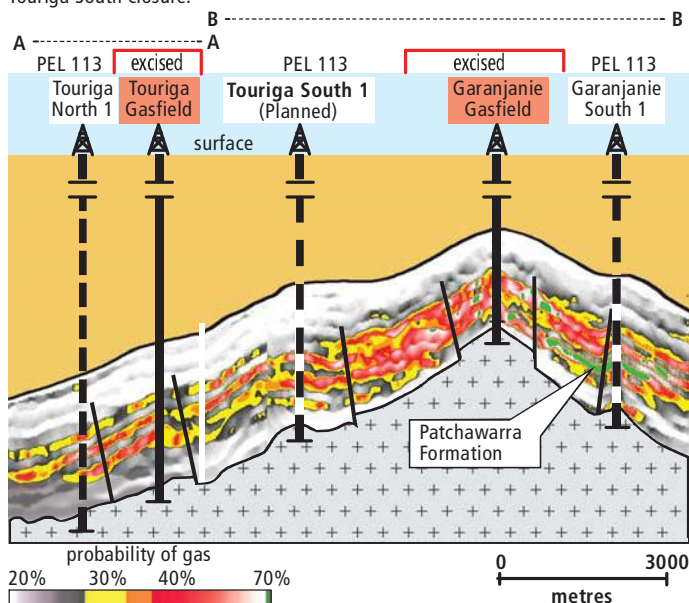
Background:

Touriga South is a fourway drape closure of Eromanga and Cooper Basin strata over a basement horst, located approximately midway between Santos and partners Touriga and Garanjanie gasfields. The Touriga and Garanjanie fields have to date produced 24 billion cubic feet of gas, rich in condensate and LPG from the Permian Patchawarra Formation.



Recent Seismic Mapping:

Seismic reprocessing has revealed gas-saturated Patchawarra sands in the Touriga and Garanjanie gasfields. This reprocessing has also identified similar gas-saturation characteristics in Patchawarra sands contained within the Touriga South closure.



Composite cross-section A-A and B-B. Reprocessed seismic data reveals gas-saturated sands in the Patchawarra Formation at the Garanjanie and Touriga gasfields and also in the Touriga North, Touriga South and Garanjanie South structures.

Stuart Drill Programme:

Stuart will drill Touriga South 1 to test for gas in the Patchawarra Formation. Recoverable gas and associated liquids are likely to lie in the range of 2 to 5 billion cubic feet of gas and 70,000 to 200,000 barrels of condensate.

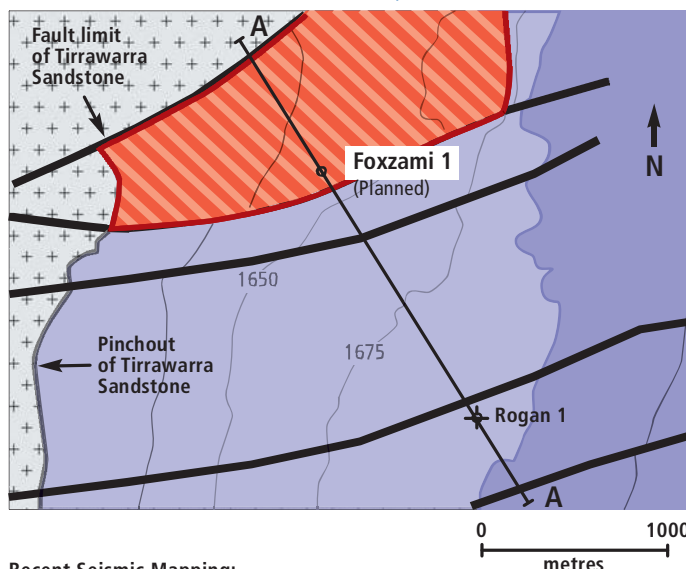
Foxzami 1

Tenure:
 Petroleum Exploration Licence 102
 Stuart Petroleum Limited interest 100%

Background:

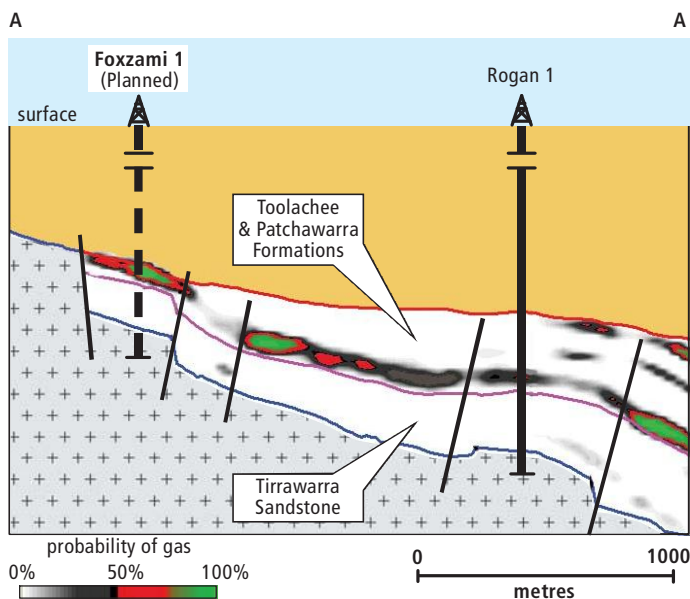
Foxzami is a fault-bounded trap on the southeastern flank of the Packsaddle Ridge. It is located 7 kilometres north-east, along strike and on a separate fault slice from Santos and partners Pondrinie gasfield, which has produced 116 billion cubic feet of gas to date from the Permian Toolachee Formation and the Tirrawarra Sandstone in an 18 well field.

Tirrawarra Sandstone time structure contour map (milliseconds)



Recent Seismic Mapping:

Seismic reprocessing has revealed gas saturation in the Toolachee and Patchawarra Formations and in the Tirrawarra Sandstone within the Foxzami closure.



Seismic cross-section A-A. Reprocessed seismic data has revealed gas-saturated sands in the Toolachee and Patchawarra Formations, northeast of the Pondrinie Gasfield.

Stuart Drill Programme:

Foxzami 1 will test for gas in the Tirrawarra Sandstone and in the Patchawarra and Toolachee Formations. If these strata are gas saturated, the Foxzami structure is likely to contain 3 to 11 billion cubic feet of gas.

Gas Prospects

Paning 2

Tenure:

Petroleum Exploration Licence	90
Stuart Petroleum Limited interest	100%

Background:

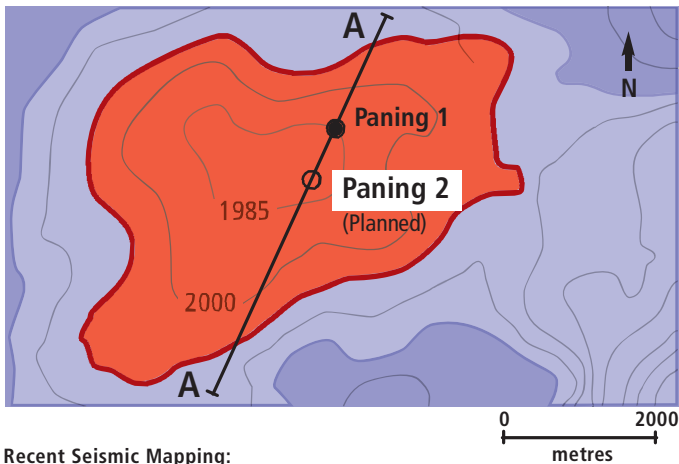
The Paning structure has been recognised for thirty years as one of the largest gas-prone culminations in the Cooper Basin's Patchawarra Trough.

Paning is a fourway drape closure of Cooper Basin and Eromanga Basin strata over a basement horst. At top Patchawarra level, the Paning structure has a closure of 9,700 acres. Paning 1, drilled in 1980, intersected:

- 34 metres of gas-saturated Permian sandstone
- 71 metres of gas-saturated Permian coal
- 19 metres of carbonaceous Murteree Shale

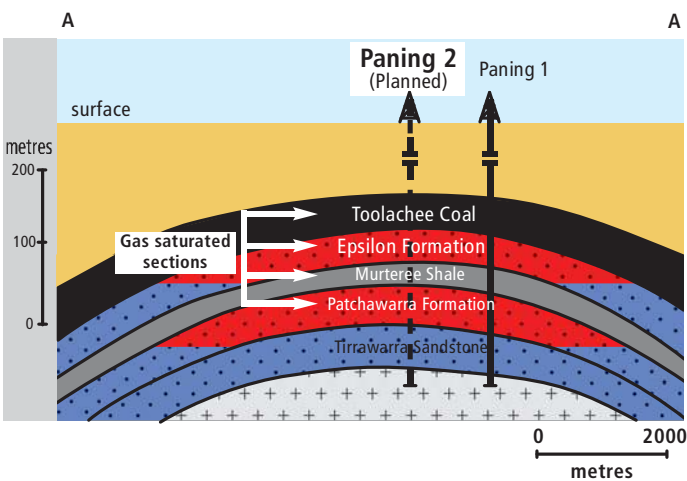
A gas-saturated sand at the base of the Epsilon Formation – a sand which has subsequently proved to be a high-rate gas producer elsewhere in the Basin – was not tested in Paning 1 because of poor hole conditions.

Patchawarra Formation time structure contour map (milliseconds)



Recent Seismic Mapping:

No further seismic is required to locate a crestal well, Paning 2.



Diagrammatic cross-section A-A showing geological interpretation of seismic and well data from Paning 1.

Stuart Drill Programme:

Stuart plans to drill Paning 2 approximately 1.1 km southwest of Paning 1 to evaluate gas saturations found in the Toolachee, Epsilon, Murteree and Patchawarra Formations in Paning 1. Gas-saturated sections in Paning 2 will be subject to multiple hydraulic fracturing to optimise gas flow rates. Recoverable gas resources are likely to lie in the range 5 to 20 billion cubic feet of gas.

Coal Seam Gas

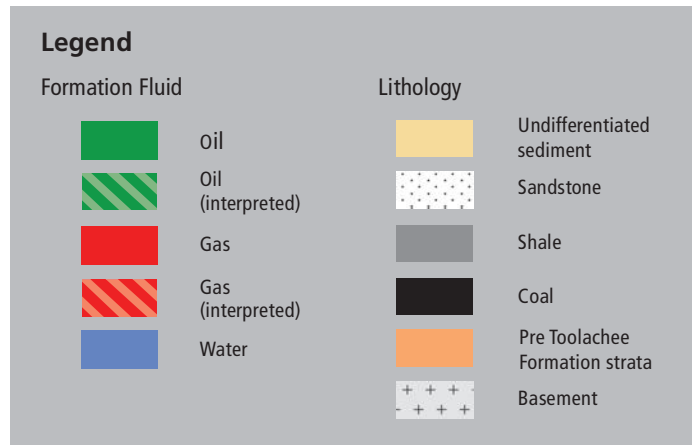
Stuart evaluation of Coal Seam Gas production potential

Stuart recognises that the Toolachee Formation Coal Measures – particularly those in the northern sector of the Cooper Basin – are thick, extensive and gassy. They are host to extremely large quantities of gas and they may present Stuart with an opportunity to become a major developer and producer of Coal Seam gas from the Cooper Basin.

Other operators have demonstrated that Cooper Basin coals can be hydraulically fractured to induce gas flow. An extensive array of gas delivery infrastructure is already in place linking the Cooper Basin to southeast Australian industrial and domestic gas markets.

Stuart has established a working group to incorporate its own geological and engineering expertise with coal seam gas expertise from United States practitioners. Work is scheduled to begin in the coming Quarter with a detailed study of the stratigraphy of Stuart's Toolachee Coal Measures and the potential for natural fracture porosity and permeability to be developed adjacent to major fault systems.

Cooper Basin fault systems are known to have commonly remained active from Permian through to Cainozoic times. Repeated build-up of stresses along these faults – and their release by movement – is likely to have resulted in extensive zones of enhanced coal seam permeability. This effect will be investigated by the working group.



Coal Seam Gas

Potential to Produce Coal Seam Gas

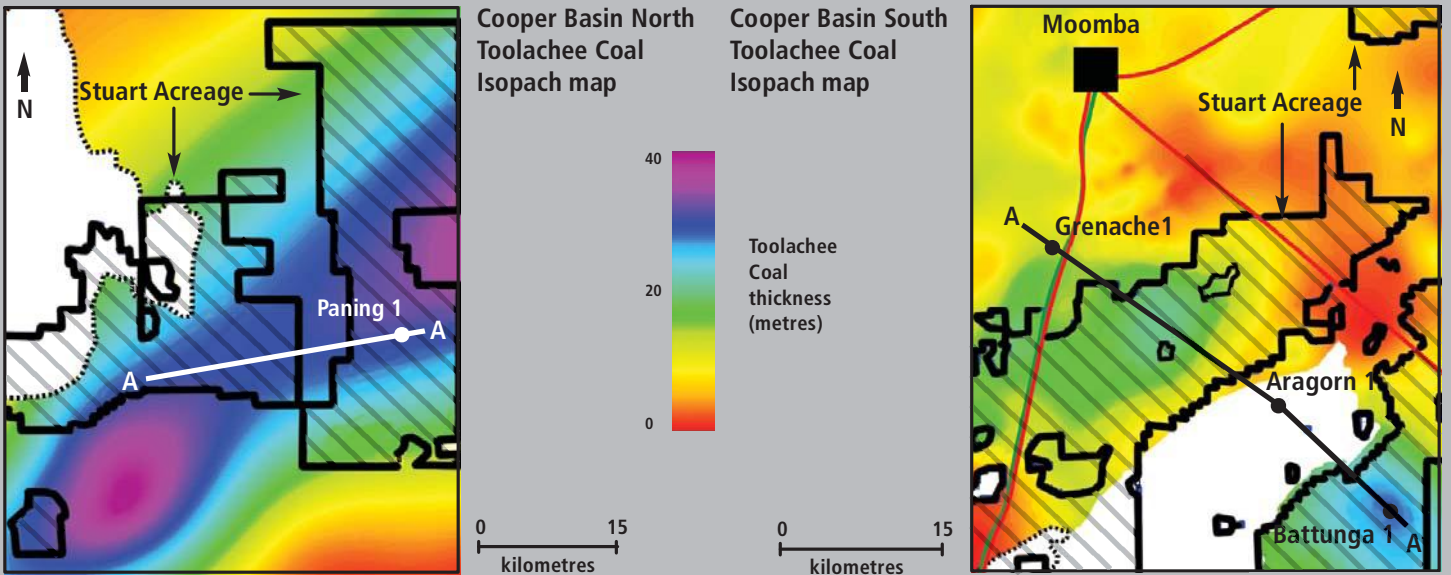
Tenure:

Petroleum Exploration Licences	90	102	516(A)
Stuart Petroleum Limited interest	100%	100%	100%

Background:

Permian coals occur widely throughout the Cooper Basin in Toolachee and Patchawarra Formation strata. Drilling and seismic mapping has discovered thick coal seam development in the northern Patchawarra Trough, within Stuart's Petroleum Exploration Licences, PEL 90 and PEL 102.

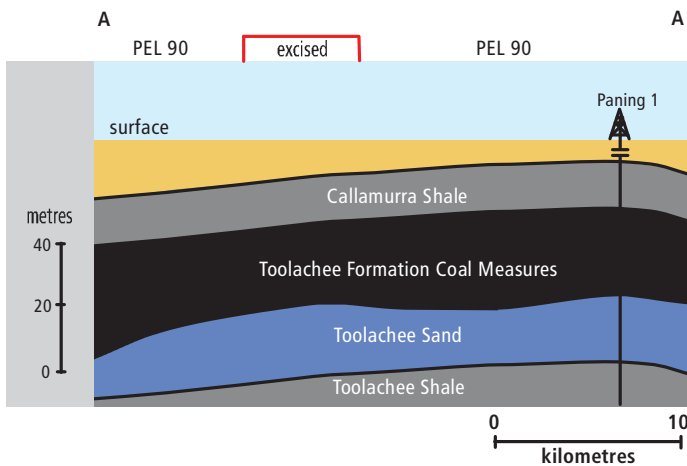
Strongly developed but less extensive Toolachee coals have also been intersected by drilling in the Allunga and Tenappera Troughs, near the southern margin of the Cooper Basin. These coal measures are largely covered by Stuart's 100% owned Petroleum Exploration Licence Application 516.



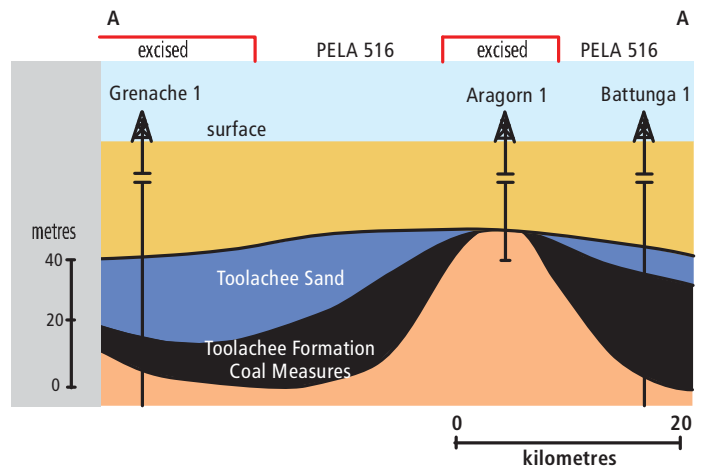
Coal Measures Isopach maps in the northern and southern Cooper Basin, showing the thickness of Toolachee Coal Measures.

Recent Seismic Mapping:

Seismic mapping has shown that coals intersected by drilling in the Cooper Basin are commonly, because of their excellent seismic reflectance characteristics, mappable with confidence over exceptionally large areas. Further seismic acquisition is not required at this stage.



Diagrammatic Cross-section A-A through Paning 1 showing the thickness (approximately 30 m) and the east-west lateral extent (approximately 30 km) of Coal Measures intersected in the Permian Toolachee Formation in Paning 1 and as mapped by surrounding seismic.



Diagrammatic Cross-section A-A showing the thickness (up to 30 metres) and the lateral extent in a northwest/southeast direction of Coal Measures intersected in the Toolachee Formation in Grenache 1 and Battunga 1 and as mapped by surrounding seismic.

Stuart Drill Programme

Subject to the completion of working group studies, it is likely that the first well to be hydraulically fractured to produce coal seam gas (and other tight formation gas) will be Paning 2. This well is scheduled to be drilled in 2010/2011.