

# Presentation to NSW Farmers Association

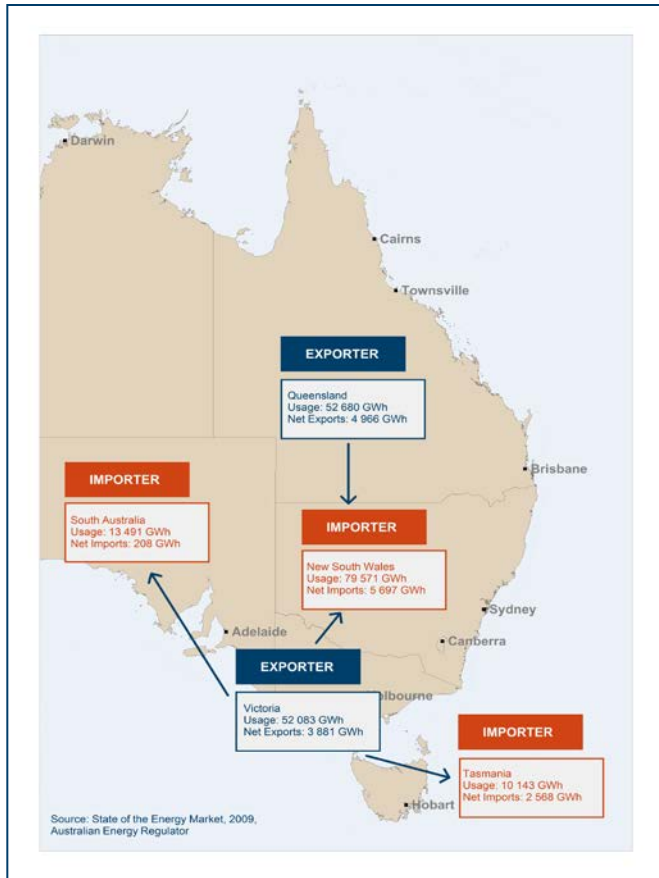
28 Jun 2011

# Obligations & Requirements



- Leichhardt Resources awarded subsurface rights to PELs in 2009 by NSW DII
- PELs contain time constrained seismic and corehole drilling work/expenditure commitments
- Planet Gas is conducting the work program and using MBA Petroleum Consultants as its Project Manager
- Early stage exploration to test for presence of coals in the basin, thickness of coals, gas contents, quality and coal permeability
- Short duration exploration coreholes (~21 days) on small sites, which will be immediately plugged and abandoned post drilling, and the sites rehabilitated

# NSW Energy



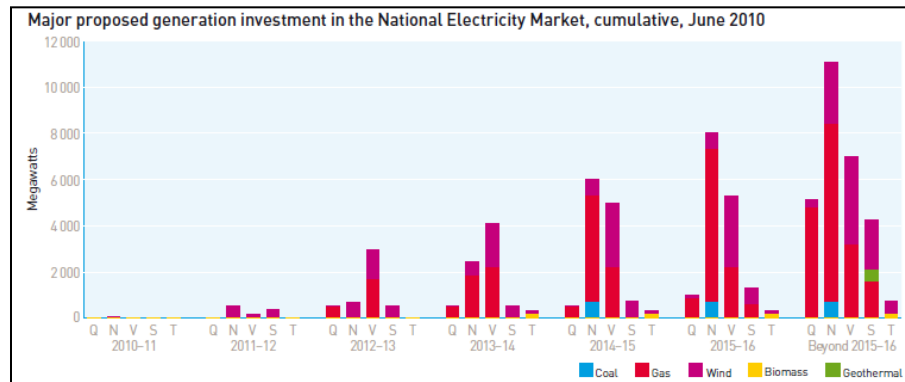
NSW imported 7% of electricity consumed in 2009, and accounts for 27% of Australia's total energy consumption

Power generation is still largely in the hands of the Government – preference for lower emission gas fired power generation going forward

Major additional proposed gas  
fired power generation capacity of  
3226 MW between 2011-16

Anticipated significant Fuel Price increases if indigenous sources not utilised

Projects with development approval				
Power station	Location	Owner	Technology	Capacity
Bamarang Stage 1	Nowra	Delta Electricity	OCGT	400 MW
Bamarang Stage 2	Nowra	Delta Electricity	conversion to CCGT	Base load
Bayswater B	Bayswater Power Station	Macquarie Generation	CCGT or Ultra-supercritical Coal	2000 MW
Leafs Gully	Appin	AGL	Gas	360 MW
Marulan	Marulan	Delta Electricity	OCGT/CCGT	450 MW
Marulan	Marulan	International Power / EnergyAustralia	OCGT	350 MW
Mount Piper Power Station Extension	Mount Piper Power Station	Delta Electricity	CCGT or Ultra-supercritical Coal	2000 MW
Munmorah Power Station Rehabilitation	Munmorah Power Station	Delta Electricity	Coal and/or Gas	700 MW <sup>(1)</sup>
Parkes	Parkes	International Power (Australia)	OCGT	120 MW
Richmond Valley	Richmond Valley	MetGasco	CSM	30 MW
Tallawarra Stage B	Wollongong	TRUenergy	Gas	300-450 MW
Tomago	Newcastle	Macquarie Generation	OCGT/CCGT	790 MW
Wellington	Wellington	NewGen Power	OCGT	660 MW
Wilga Park	Narrabri	Eastern Star	CSM	29-40 MW
Projects in the planning system				
Power station	Location	Owner	Technology	Capacity
Dalton Energy Project	Dalton	AGL Energy	Gas	750-1500 MW
Hanging Rock	Sutton Forrest	Loran Energy Products Penrose	CCGT	600 MW
Narrabri	Narrabri	East Coast Power	CSM	172 MW
Parkes	Parkes	NP Power and Babcock & Brown	CCGT	80 MW



# CBM Sydney and Gunnedah Basins



Planet Gas is farming in to three PELs for 50%, in three phases

**Phase 1** - Data acquisition and Due Diligence completed

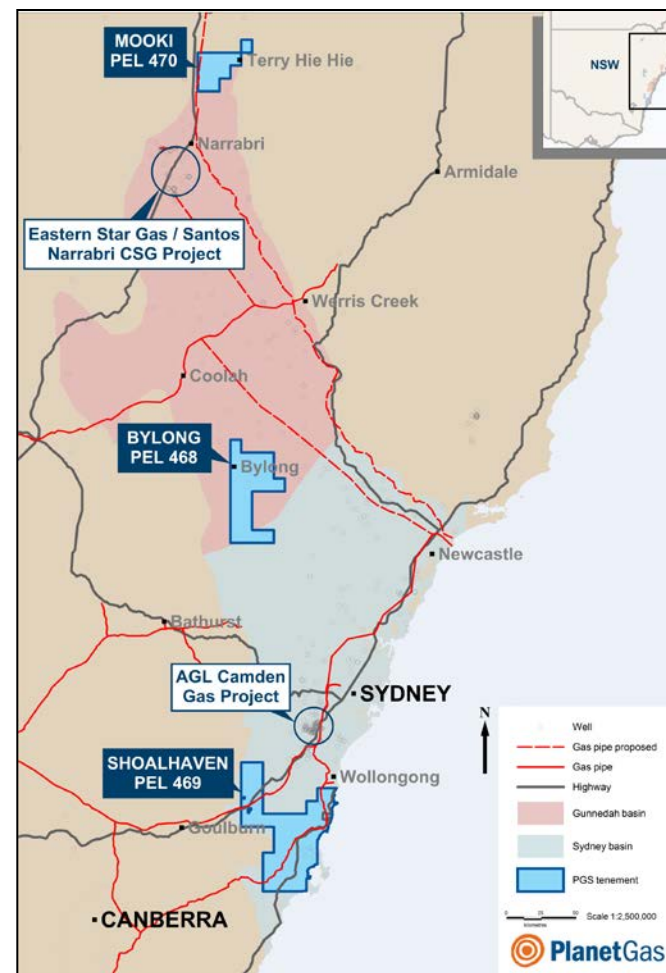
**Phase 2** - Commenced October 2010

- Acquisition and processing of a total of 80 line kms of seismic
- Drilling and testing of a single open hole in PELs 469 and 470 and two open holes in PEL 468
- Estimated cost \$4.6m.
- Exit option at the end of Phase 2

## What we are doing now ...

- ✓ Seismic surveys completed PEL 468 and 470
- ✓ Wellsites located in PEL468. Wellsites to be established in PEL470
- ✓ Local government approvals in progress
- ✓ Drilling and service contracts awarded
- ✓ REFs for PEL 468 drilling operations approved. PEL470 REF to be submitted once location identified.
- ✓ Anticipated drilling commencement in PEL468 Jul 2011

**Phase 3** - Pending exploration results, appraisal drilling of three pilot wells in PEL 468, and two wells each in PELs 469 & 470

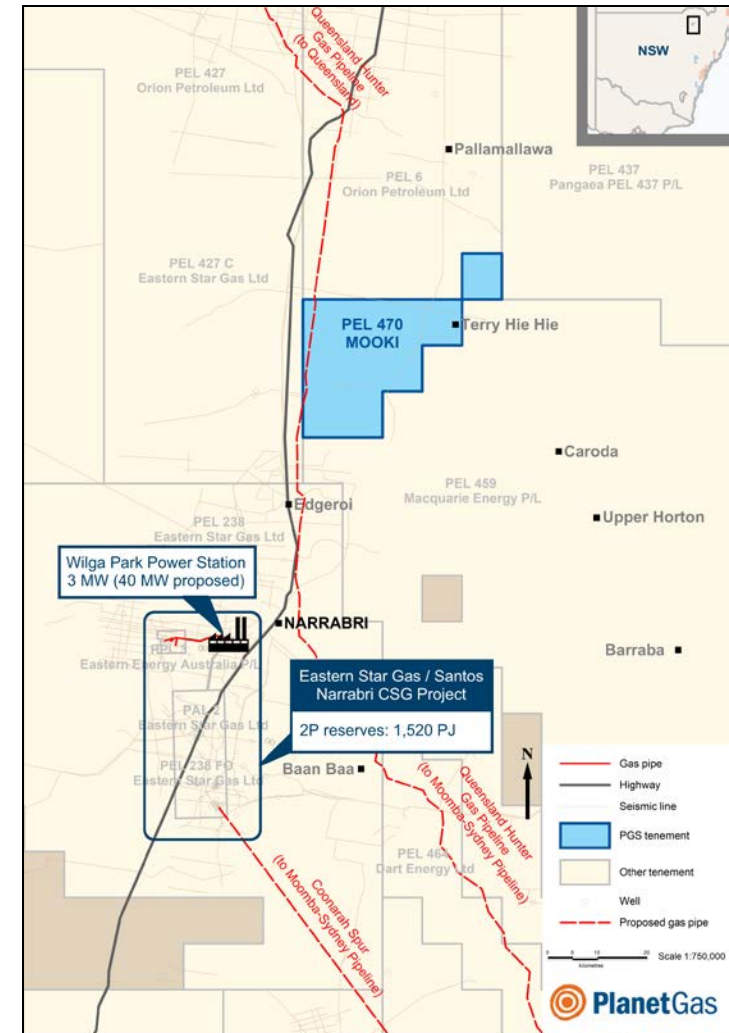




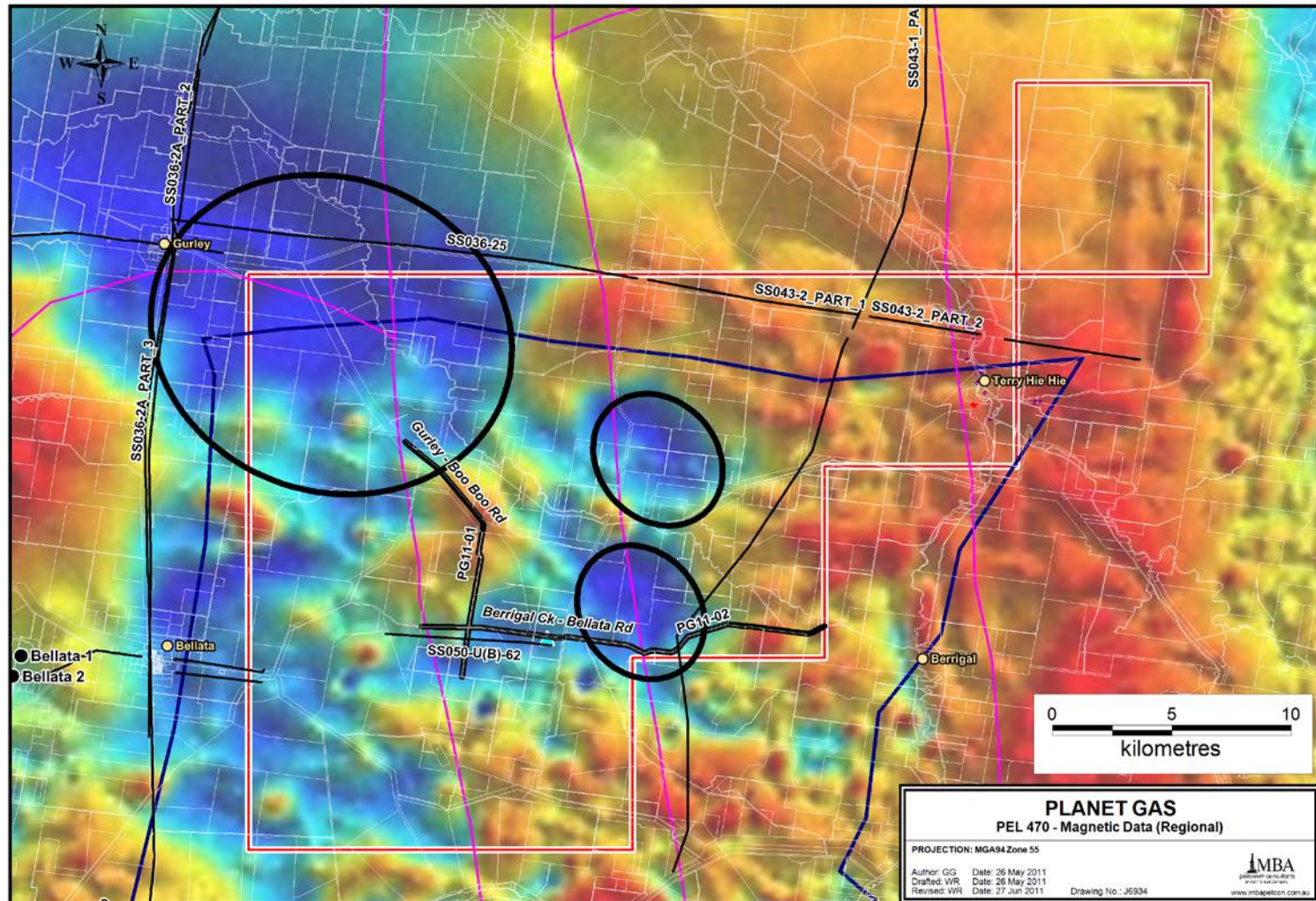
# CBM - Mooki PEL 470



- Mooki covers some 670km<sup>2</sup>, located between the regional centres of Moree and Narrabri in the Northern Gunnedah Basin
- The eastern boundary of the prospect is near the Hunter-Mooki fault, a regional structure, along which a thick accumulation of coal bearing sediments may be present
- Drilling in the area has intersected net coal thicknesses of between 15-20 metres
- The target coal seams are at an estimated depth of 800-1200m



# CBM - Mooki PEL 470

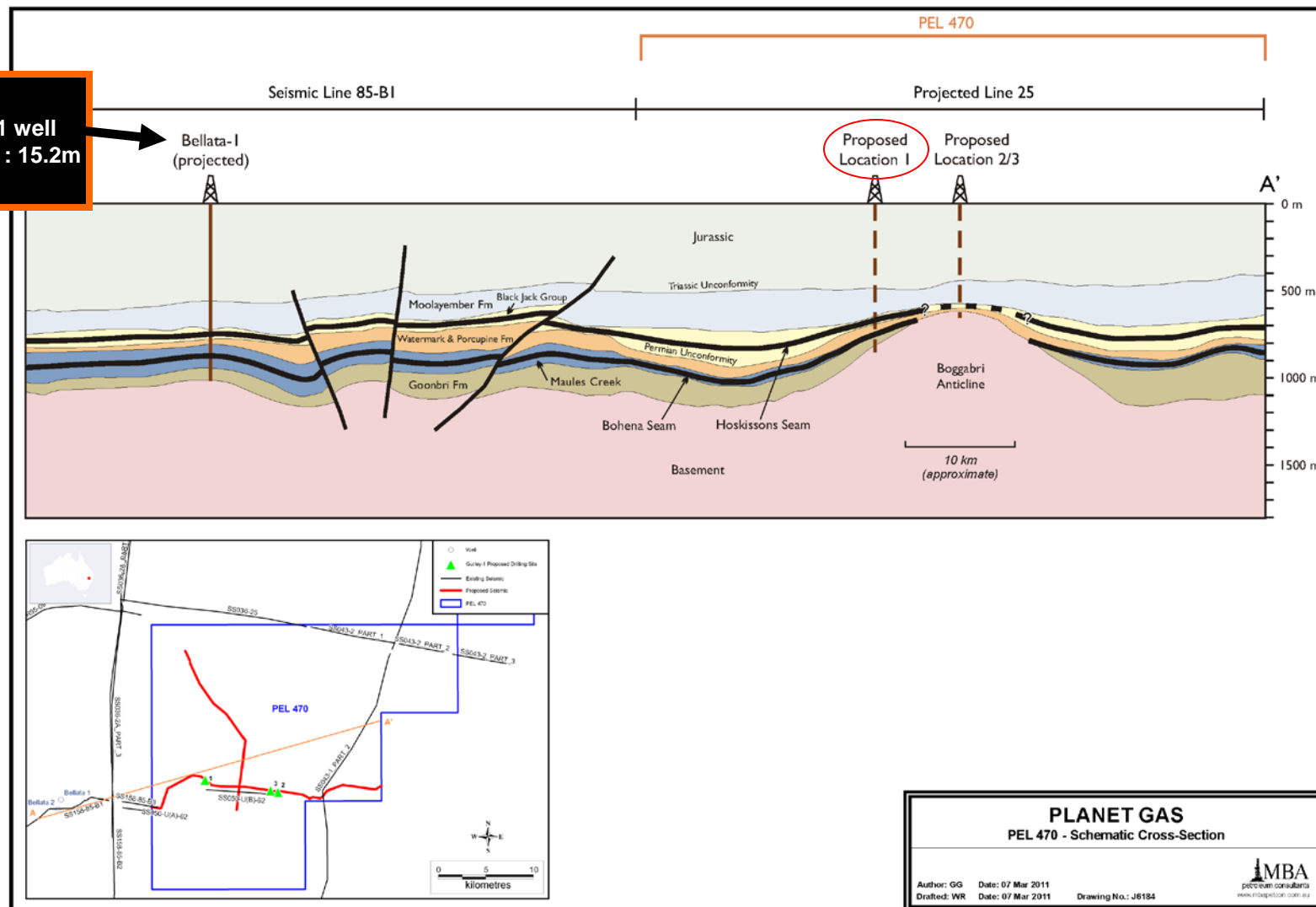




# CBM - Mooki PEL 470



**Bellata-1 well  
Total Coal : 15.2m**



**PLANET GAS**  
PEL 470 - Schematic Cross-Section

Author: GG Date: 07 Mar 2011  
Drafted: WR Date: 07 Mar 2011 Drawing No.: JB184



# Environmental



- Before drilling can commence, the location of the corehole and drilling techniques must be approved by the DII to prevent or mitigate possible damage to the local environment, above or below the surface.
- The project is subject to a variety of regulatory environmental planning requirements including the *Environmental Planning and Assessment Act 1979 NSW (EP&A Act)*, *Conservation Act 1995 (NSW)* and the *Petroleum Onshore Act 1991*.
- The PEL468 REF (Review of Environmental Factors) has been submitted to and approved by the NSW DII
- The PEL470 REF will be completed and submitted once a coring location has been established
- The REF includes controls to ensure no aquifer contamination, surface erosion, noise or impact to threatened species occurs as a consequence of this project
- The REF is public domain and can be found at :  
[http://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0004/395572/20110614-REF-PEL-468-Meads-Crossing-1-and-Stony-Pinch-1-Core-Holes-.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0004/395572/20110614-REF-PEL-468-Meads-Crossing-1-and-Stony-Pinch-1-Core-Holes-.pdf)

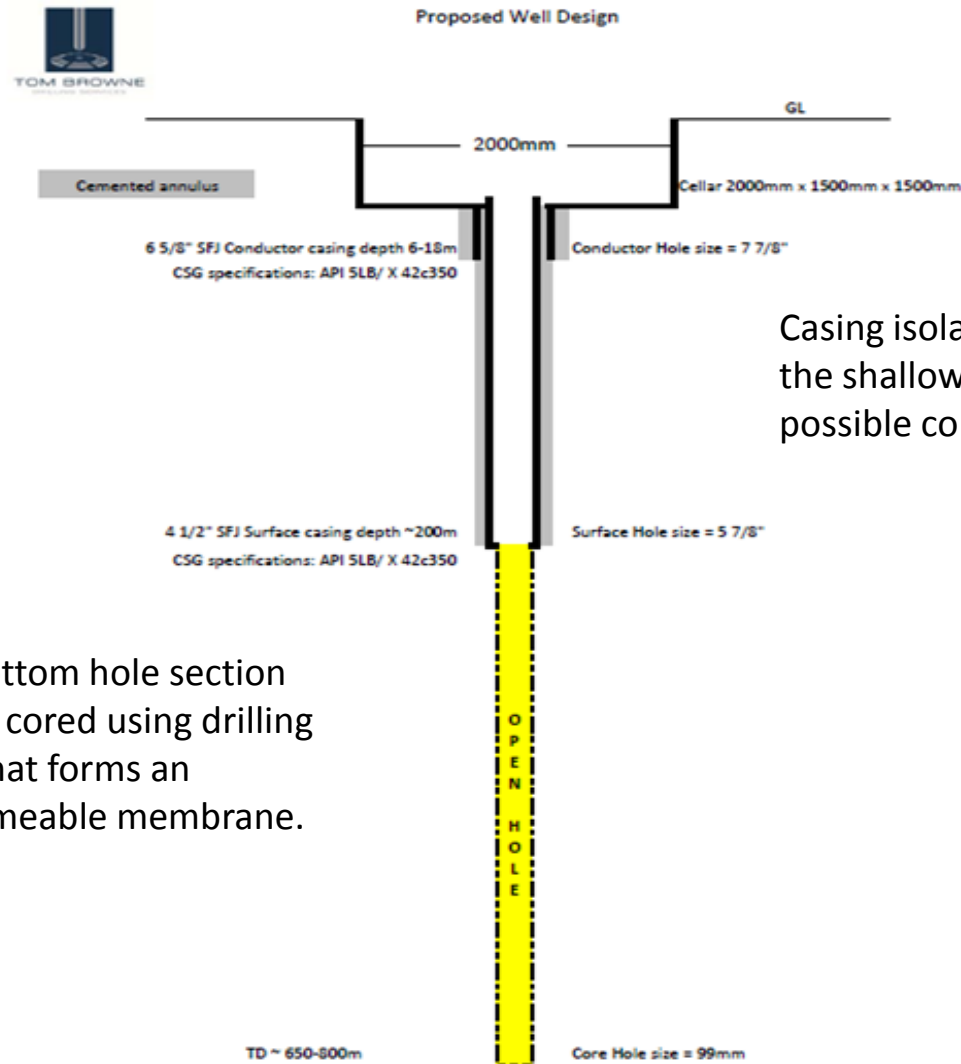


# Proposed Operations



- Single core hole to be drilled to 800-1200m
- Environmentally benign drilling fluid will be used
- The core hole will recover solid rock samples including coal
- Evaluation will comprise wireline logging, gas desorption testing of coal samples and a contingent permeability test (no flow to surface)
- No production will take place and the corehole will be filled with cement and abandoned at the end of this project
- Fraccing will not be conducted in this operation
- The land will be returned to its pre-drill condition upon completion of operations

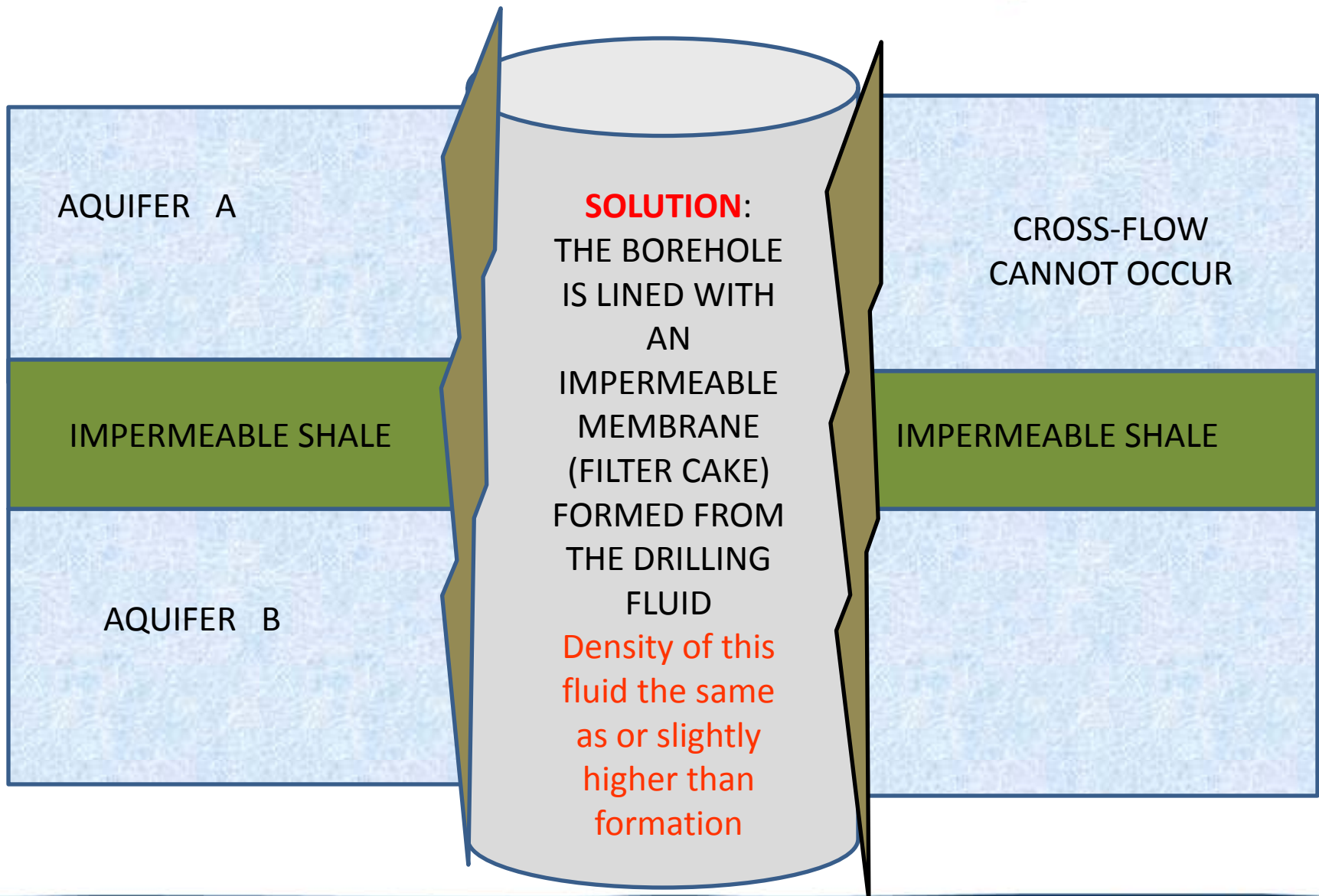
# Well Design



Casing isolates and protects the shallow formations from possible contamination.

The bottom hole section will be cored using drilling fluid that forms an impermeable membrane.

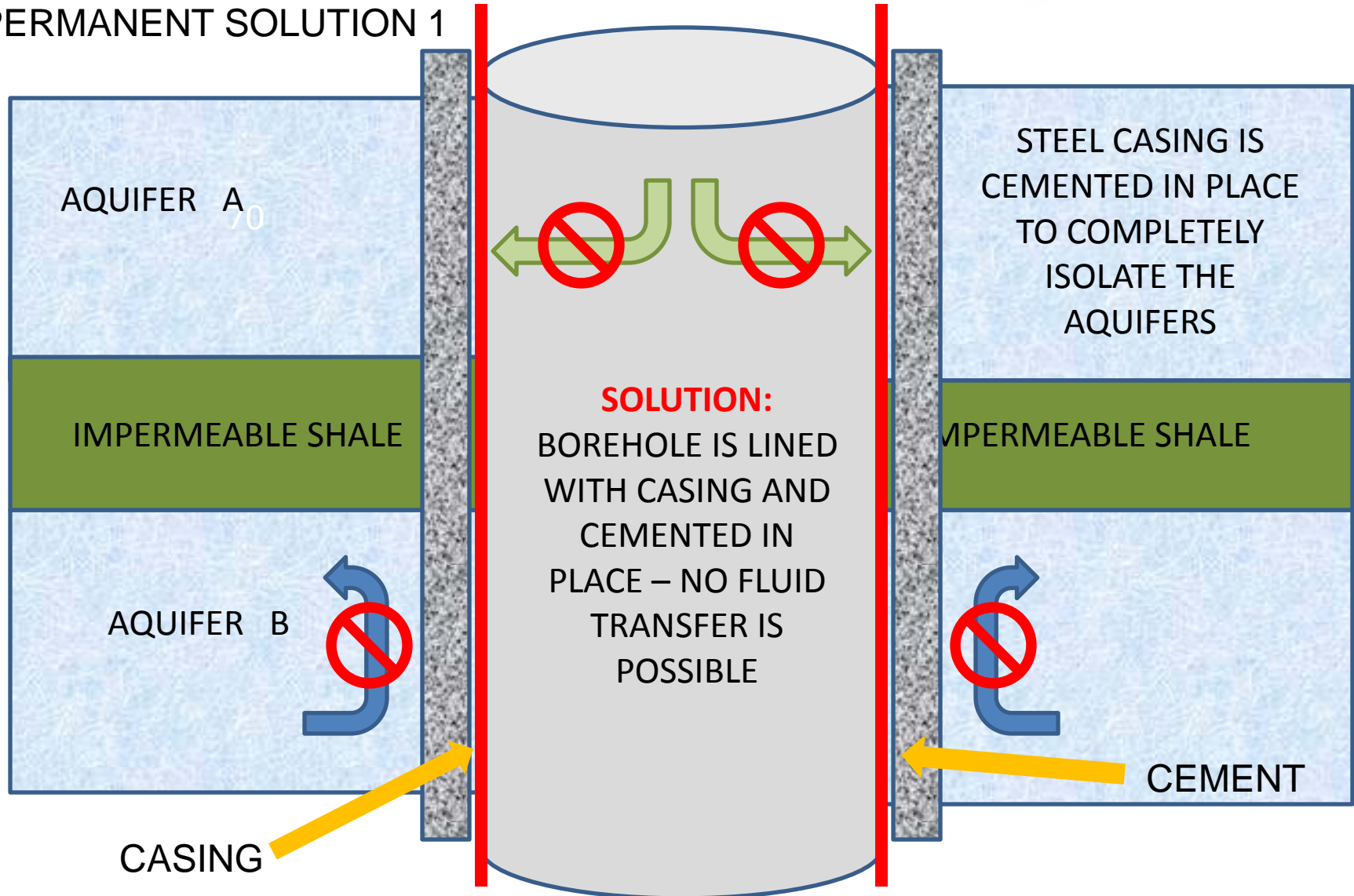
# Protection of Aquifers



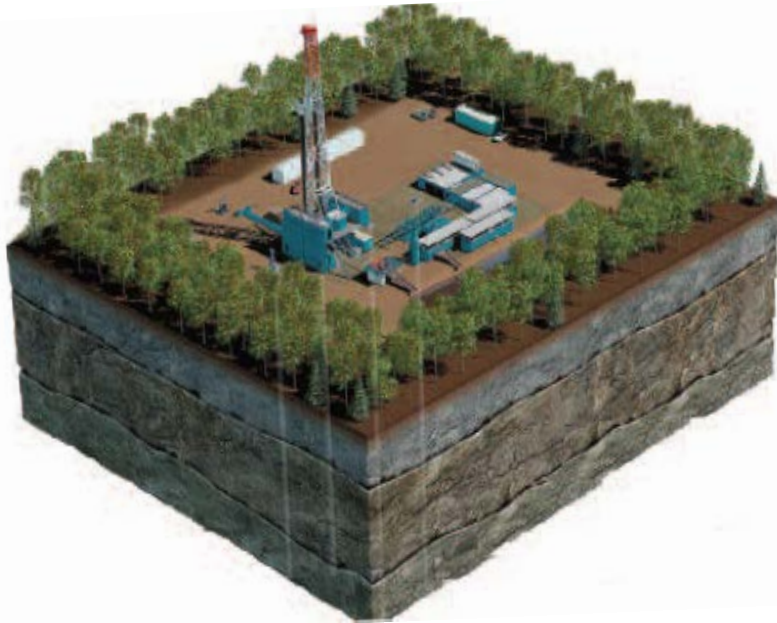


# Protection of Aquifers

## PERMANENT SOLUTION 1

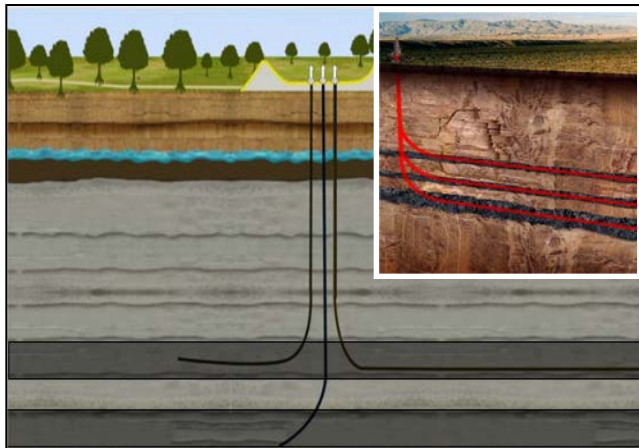


# CBM Conceptual Development



## Multi well screened drilling pads

- Reduce amount of land required and number of individual sites (single=2.5 acres, multi 4 acres)
- Reduce overall environmental and visual impact
- Drain very large areas of the reservoir. One multi-well pad with 10 wells can access 5-10 sq kms of reservoir



## CBM Operations and the Community

- Early engagement with, and education of, local communities
- Explanation of Pilot Hole(s) and Field Development strategy
- **Multi-well pads, possible multi-lateral wells**
- **Screened sites with reduced environmental and visual impact**
- Use of non-toxic chemicals in drilling fluids
- **Design wells to minimise exposure/isolate aquifers**
- Retain proactive community response team

# Summary



- Short duration, minimal impact exploration corehole programme to test presence of coals, thickness, gas content and quality
- Coring, wireline logging and permeability testing, no flow of fluids to surface
- Minimal exposure to aquifers which will be permanently isolated from each other with a cement plug from total depth to surface, after the borehole is complete
- Environmentally benign drilling fluids will be used
- Wellsites will be rehabilitated immediately after operations
- If subsequent appraisal takes place at an early stage, Planet will, engage and consult with the community



## **Planet Gas Limited**

66, Hunter Street,  
Sydney NSW 2000  
Australia

+61 2 9300 3322  
+61 2 9221 6333

### **Contact**

- Ian Halstead, CEO
- Andrew Coffey, Planning and Development Manager

The information in this report that relates to Exploration Results is based on information compiled by Mr Ian Halstead, geologist, who is a Member of the American Association of Petroleum Geologists. Ian Halstead is a full-time employee of the Company who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Ian Halstead has consented to the inclusion in this report of the matters based on his information in the form and context in which they appear.