



## Southern Georgina Basin Acreage Update

2 October 2012

# Disclaimer

## Disclaimer

This presentation may contain forward looking statements that are subject to risk factors associated with the gas and energy industry. It is believed that the expectations reflected in the statements contained within are reasonable, but they may be affected by a range of variables which could cause actual results or trends to differ materially, including but not limited to price and currency fluctuations, geotechnical factors, drilling and production results, development progress, operating results, reserve estimates, legislative, fiscal and regulatory developments, economic and financial markets conditions in various countries, approvals and cost estimates.

## Competent Person Statement

The estimates of 3P reserves and contingent resources for ATP814P and ATP813P have been provided by Mr John Hattner of Netherland, Sewell and Associates Inc. Mr Hattner is a full time employee of NSAI, has over 30 years of industry experience and 20 years' experience in reserve estimation, is a licensed geologist, and has consented to the use of the information presented herein. The estimates in the report by Mr Hattner have been prepared in accordance with the definitions and guidelines set forth in the 2007 Petroleum and Resource Management System (PRMS) approved by the Society of Petroleum Engineers (SPE).

# UPDATE ON NEW ACREAGE

## Southern Georgina Basin

**ATP 1114A; 1117A; 1123A**  
**Blue Energy 100% (Preferred Tenderer)**

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# Blue Energy Asset Portfolio

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- Largest acreage holder of non LNG explorers in Qld

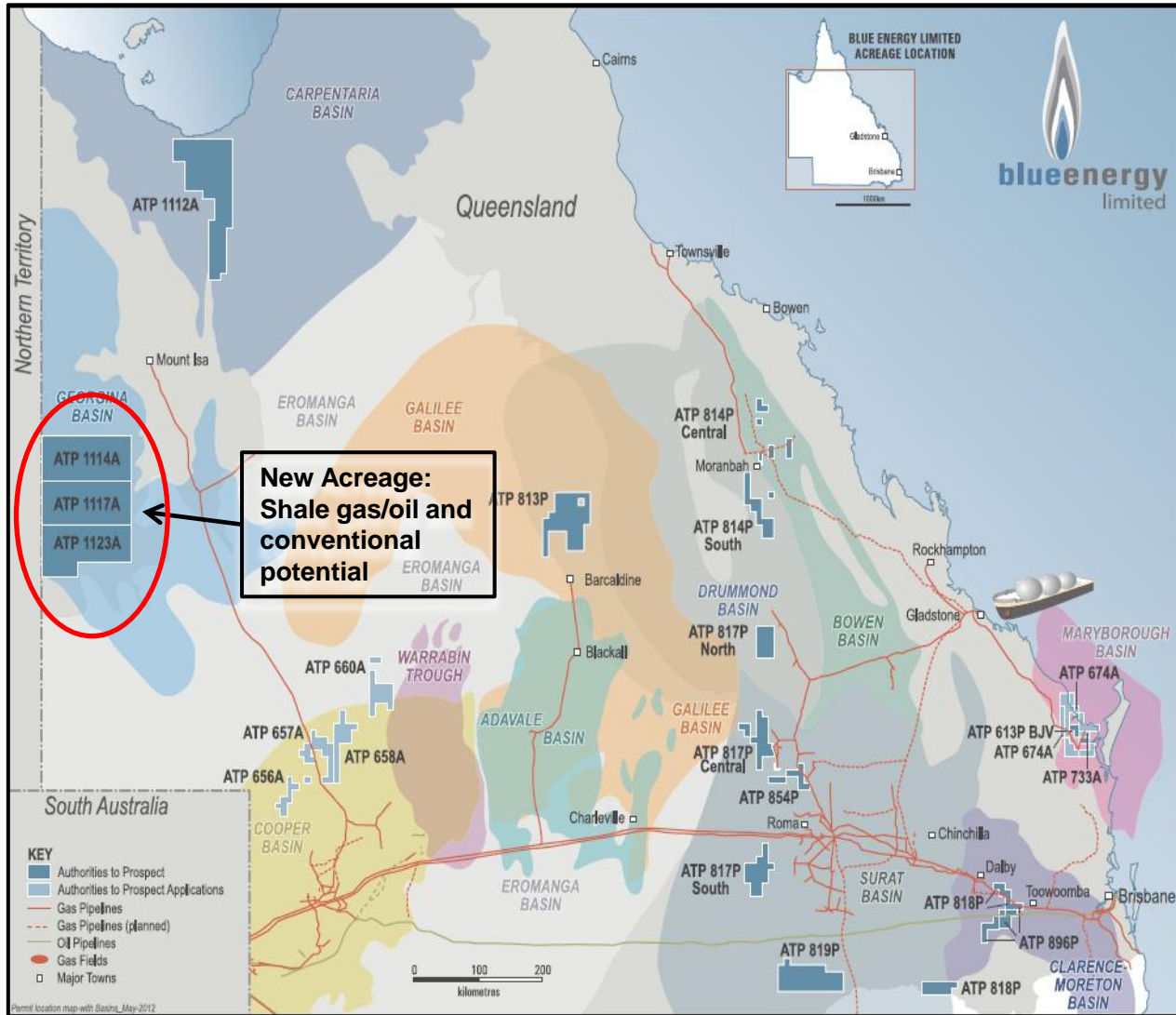
- Acreage in producing basins:

Cooper:	5,200 km <sup>2</sup>
Bowen:	7,332 km <sup>2</sup>
Surat:	5,796 km <sup>2</sup>

- Acreage in frontier basins:

<b>Georgina:</b>	<b>21,300 km<sup>2</sup></b> (5.3 million Ac)
Carpentaria:	8,161 km <sup>2</sup>
Maryborough:	2,448 km <sup>2</sup>
Galilee:	4,124 km <sup>2</sup>

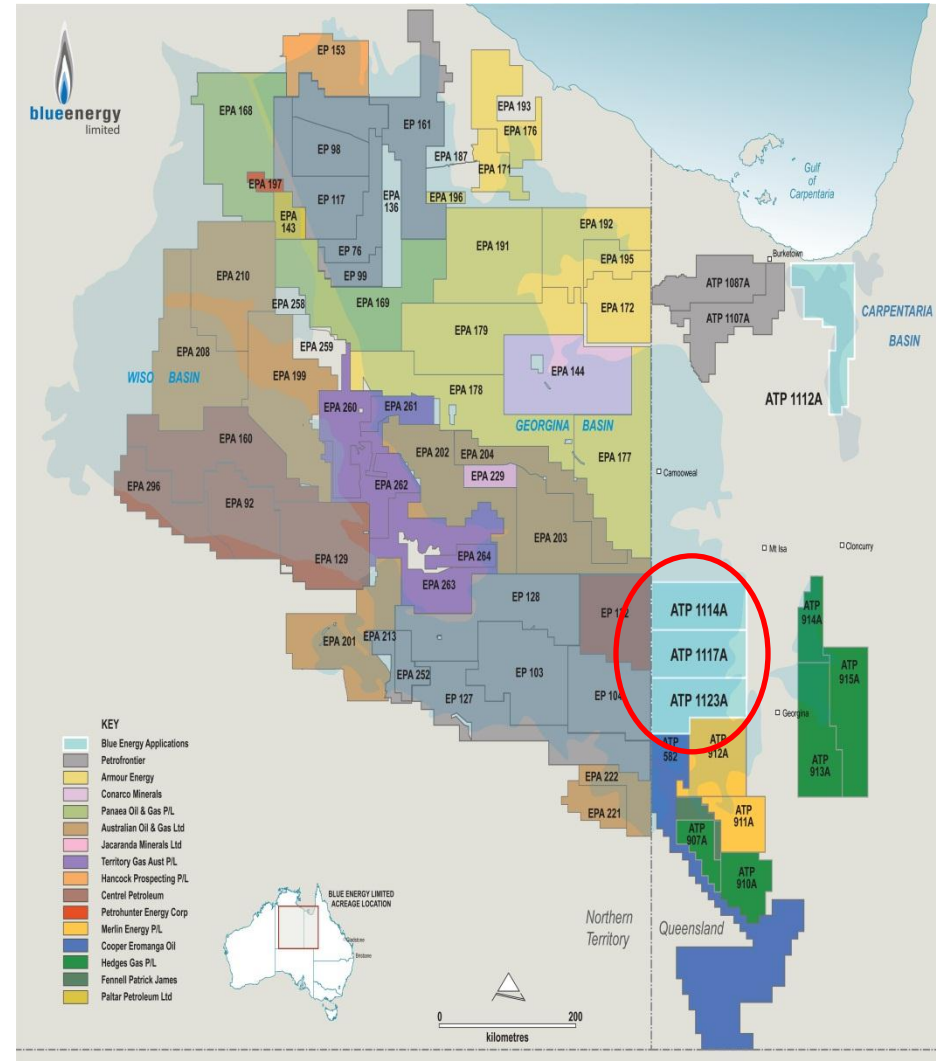
**Total Acreage 54,361km<sup>2</sup>**  
**(13,433,000 Acres)**



# Southern Georgina Basin Acreage

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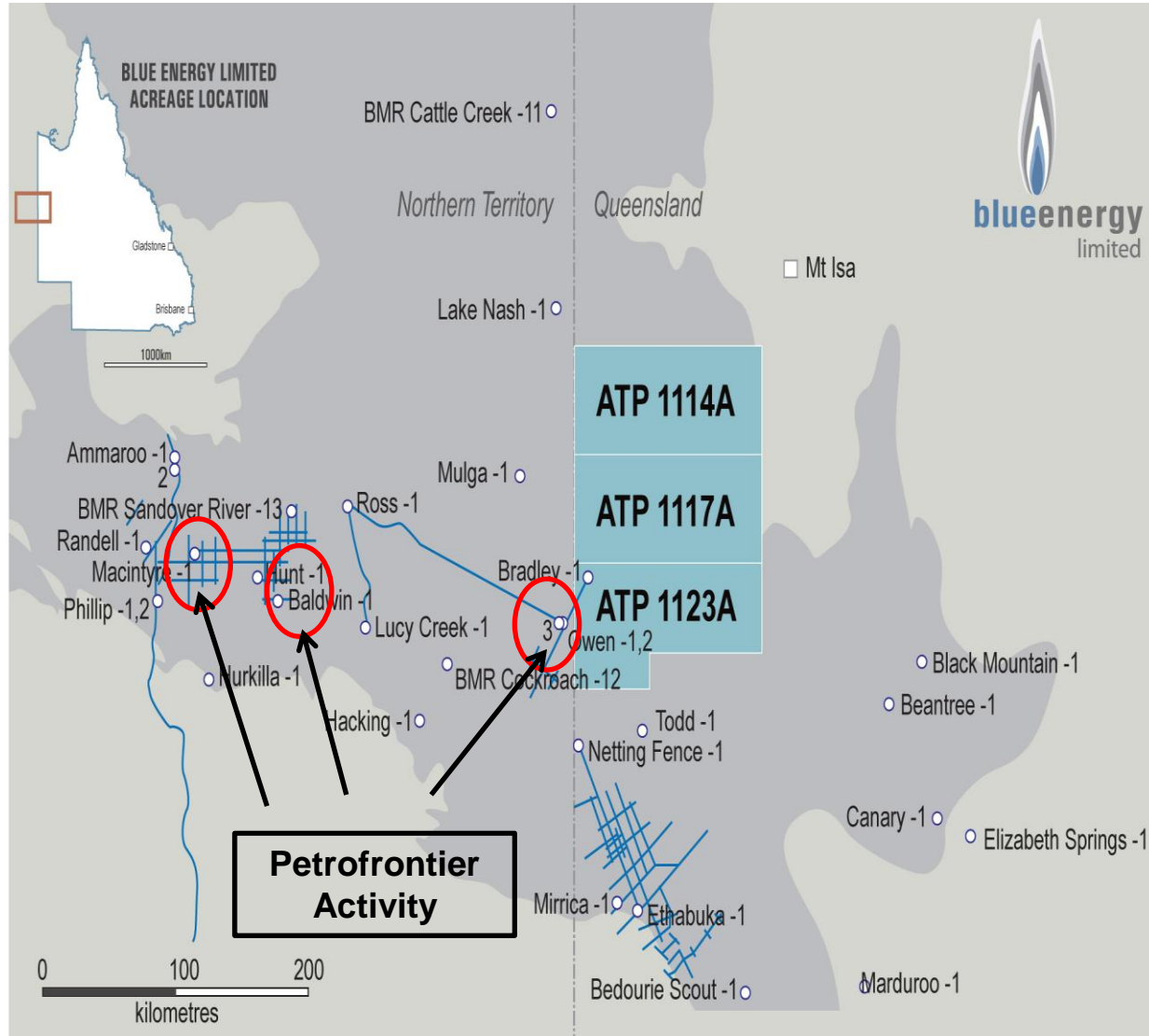
- Large position – 21,300km<sup>2</sup> (5.3 million net acres)
- Blue Energy is preferred tenderer
- Blue Energy is Operator and is 100% equity holder
- Blocks require Native Title Agreements and Environmental Authorities before State will award permits.
- Untested oil and gas potential - conventional and non-conventional
- Adjacent to active exploration program by Petrofrontier/Statoil
- Large liquid potential – Ryder Scott report for AEC estimates up to 39 billion barrel oil potential (unrisked high side prospective resource – recoverable) in adjacent permits (EP103, 104, 127 & 128)
- Central Petroleum nominate potential 8 billion BOE Recoverable Resource in their Georgina acreage (EPA 132; ATP 909A; 911A & 912A)



# Southern Georgina Basin - Activity

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- Northern Territory portion of the Basin more advanced due to earlier award
- Petrofrontier seismic acquisition yielded drillable prospects –
  - Owen 3/3H
  - Baldwin 2H
  - McIntyre 2H
- Statoil farmed into Petrofrontier acreage for \$210 million (approx. value \$16/acre)
- Owen 3/3H well**
  - Drilled by Petrofrontier in 2012 as a horizontal well for production testing
  - Located 7km from Blue’s permit boundary
  - Intersected oil shows in Thornton Limestone and Lower Arthur Creek
  - Well is awaiting multistage fracture stimulation and testing



# Southern Georgina Basin Stratigraphy

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- Old rocks – Cambrian-Ordovician in geological age
- Both clastic and carbonate reservoir rocks
- Marine source rocks – pre-dating land plants
- Source material – algae and bacteria
- Demonstrated petroleum system – oil and gas shows in multiple wells
- Targets
  - Arthur Creek Shale 0.5-10% TOC (rarely 16%)
    - World class source potential
    - Regionally extensive
  - Thornton Limestone – Platform Carbonate
  - Steamboat Sandstone – inner shelf channel sands
- Relatively shallow target depths - <1,500m

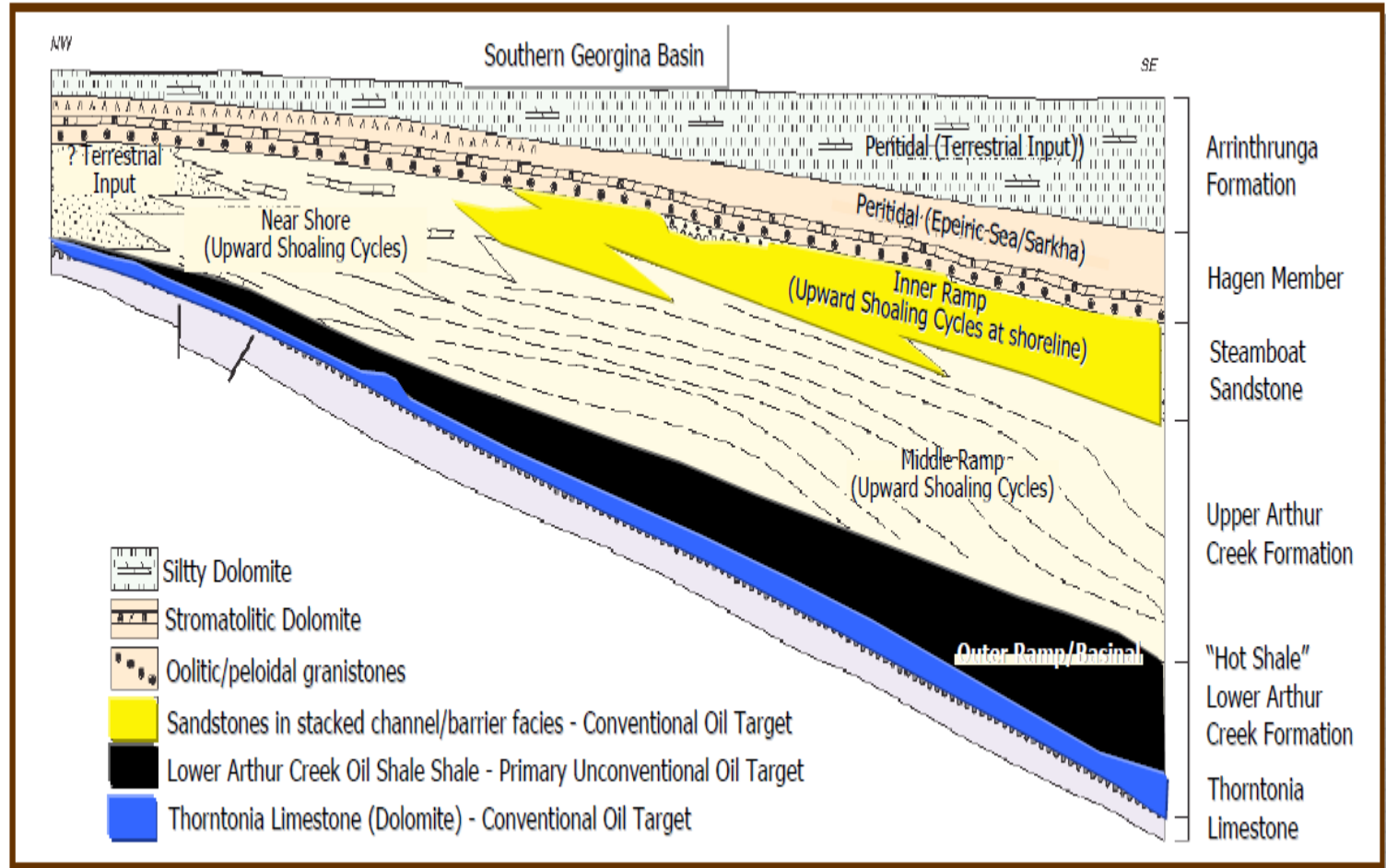
AGE	DULCIE SYNCLINE (N.T.)	WESTERN TOKO SYNCLINE (QLD.)	DEFORMATION	OIL / GAS
	UNDIFFERENTIATED	UNDIFFERENTIATED		
LATE JURASSIC CRETACEOUS		UNDIFFERENTIATED	ALICE SPRINGS OROGENY	
DEVONIAN	DULCIE SANDSTONE	CRAVENS PEAK BEDS		
LATE ORD - SILURIAN			RODINGAN MOVEMENT	
EARLY - MIDDLE ORDOVICIAN		ETHABUKA SST. MITHAKA FM. CARLO SST.		
	NORA FM.	NORA FM.		☀
	KELLY CREEK FM.	COOLIBAH FM. KELLY CREEK FM.		
	TOMAHAWK BEDS	NINMAROO FM.		
LATE CAMBRIAN			DELAMERIAN OROGENY	
	ARRINHRUNGA FM.	ARRINHRUNGA FM.		☀
	EUROWIE SST. Mbr.	EUROWIE SST. Mbr.		☀
	CHABELOWE FM. HAGEN Mbr.			☀
MIDDLE CAMBRIAN		STEAMBOAT SST.		☀
	ARTHUR CREEK FM. "HOT SHALE"	ARTHUR CREEK FM. "HOT SHALE"		☀
	THORNTONIA LSST.	THORNTONIA LSST.		☀
EARLY CAMBRIAN	RED HEART DOLOSTONE	RED HEART DOLOSTONE		☀
	MOUNT BALDWIN FM.	ADAM SHALE		☀
NEOPROTEROZOIC			PETERMANN OROGENY	
	MOPUNGA GP	MOPUNGA GP		

Ambrose et al 2012

# Southern Georgina Basin - Depositional Settings

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- Marine shelfal to outer ramp setting
- Carbonate rich environment
- Rich algal/bacterial source rocks
- Conventional and unconventional traps - potential reefal build ups and clastic structural closures



Source: JN Dunster, PD Kruse, ML Duffett1 and GJ Ambrose - Geology and resource potential of the southern Georgina Basin

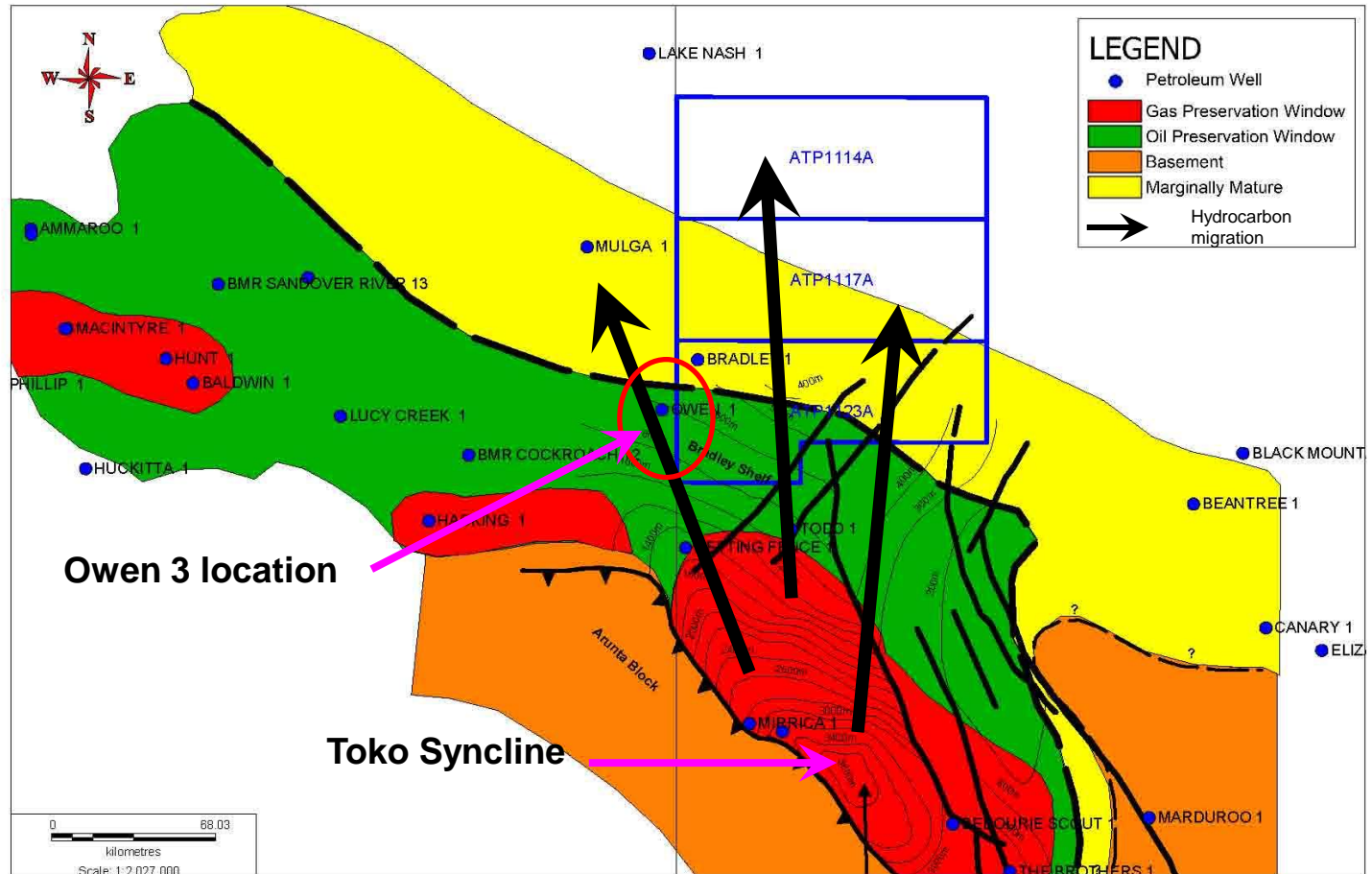


# Southern Georgina Hydrocarbon Potential

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- Lower Arthur Creek Source has generated significant volumes of hydrocarbons
- Toko Syncline – in gas preservation window
- Area has expelled early liquids – oil shows in nearby wells
- Migration pathways lead through Blue’s acreage
- Blue’s acreage in the oil window to marginally mature
- Blocks have unassessed conventional and unconventional potential.

Lower Arthur Creek Depth and Thermal Maturity Map



After Ambrose et al July 2012

# Southern Georgina Basin Strategy

- Effect grant of permits through Native Title Agreement execution and environmental approvals
- Conduct geological and geophysical studies and data trades (where possible)
- Identify play types and play fairways
- Acquire 2D seismic data to identify regional structural trends, stratigraphic continuity and conventional trap potential. Follow up with detailing seismic as required. Leverage cooperation with other Operators to minimise cost (mob/demob)
- Develop seriatim of leads/prospects
- Target liquids rich plays/prospects – which will enable near term cash flow
- Drill most prospective targets

# Southern Georgina Basin Summary

- Large acreage position (21,300km<sup>2</sup> – 5.26 million net acres)
- Blue Energy is preferred tenderer, has 100% equity and is Operator
- Under-explored basin
- Basin has a demonstrated petroleum system – oil shows in multiple wells (gas flows in Toko Syncline)
- Exploration activity ramping up in the Northern Territory portion of the Southern Georgina Basin – Owen 3 results imminent
- Adjacent Operator utilising North American unconventional shale technology
  - multistage hydraulic stimulation in horizontal wells

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**blueenergy**  
limited

[www.blueenergy.com.au](http://www.blueenergy.com.au)

[info@blueenergy.com.au](mailto:info@blueenergy.com.au)