



MEO AGM

Technical Update

WA-360-P and WA-361-P Carnarvon Basin

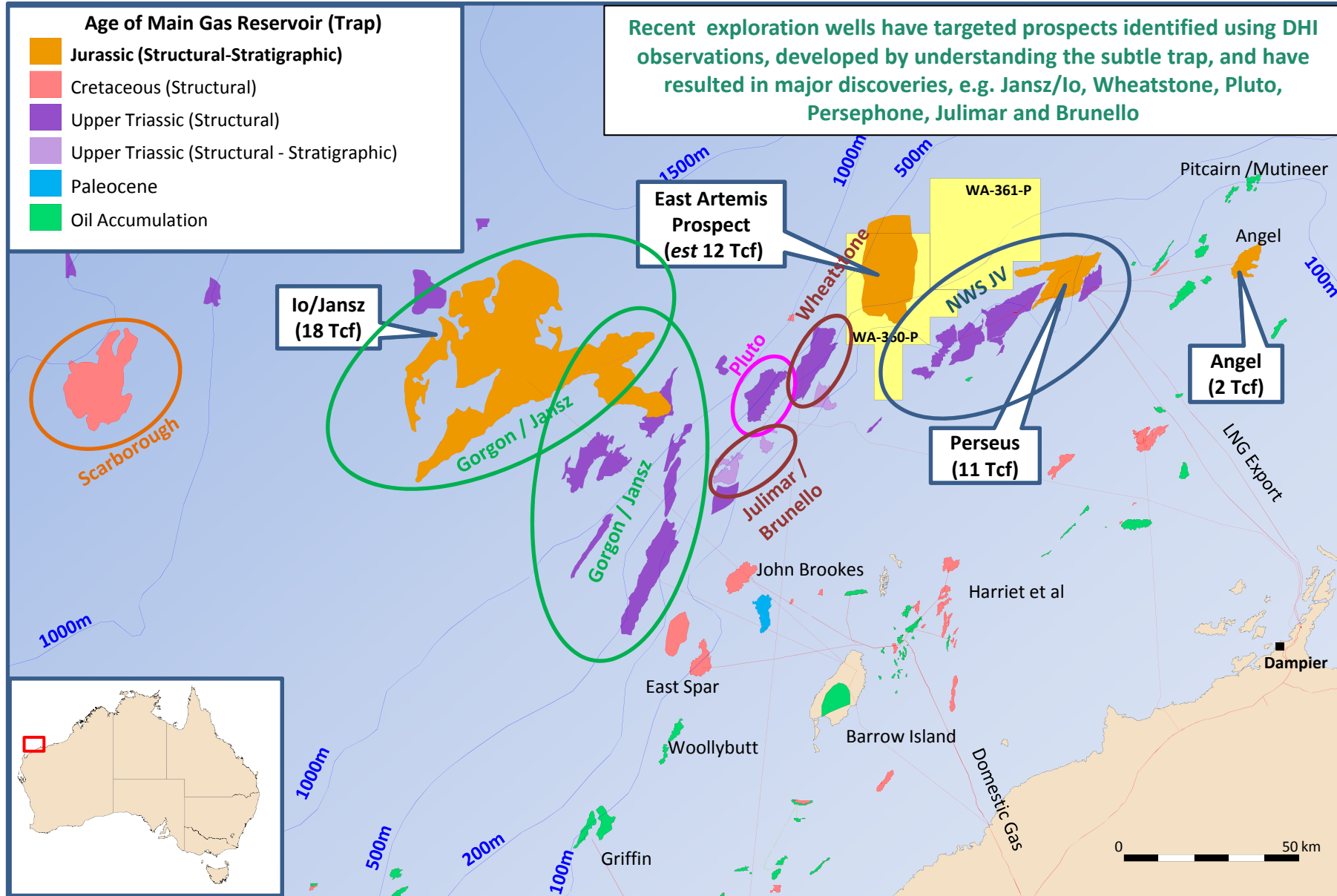
NT/P68 Bonaparte Basin

AC/P 50 and AC/P 51 Vulcan Sub Basin

November 2010

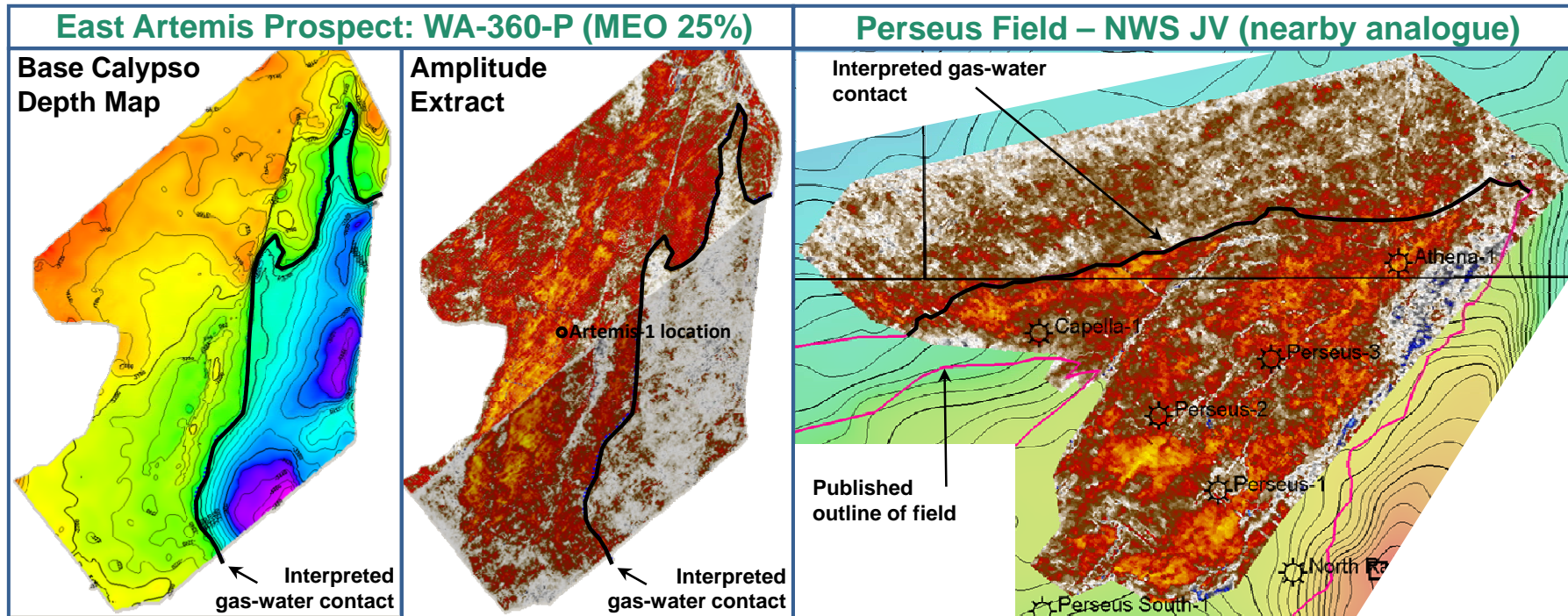
WA-360-P and WA-361-P Location Map

Carnarvon LNG: Continuing success, material prospectivity



WA-360-P

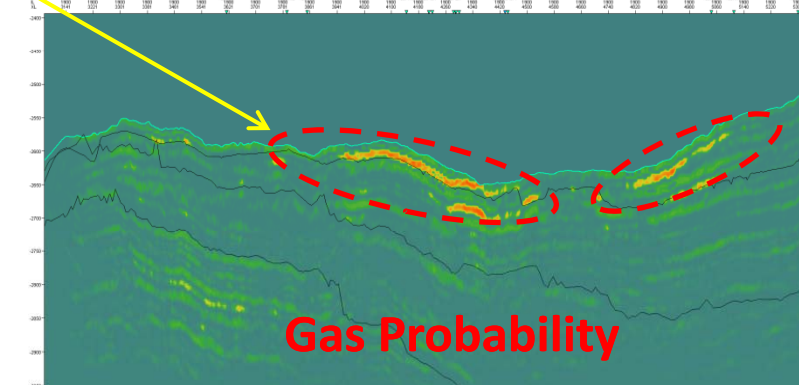
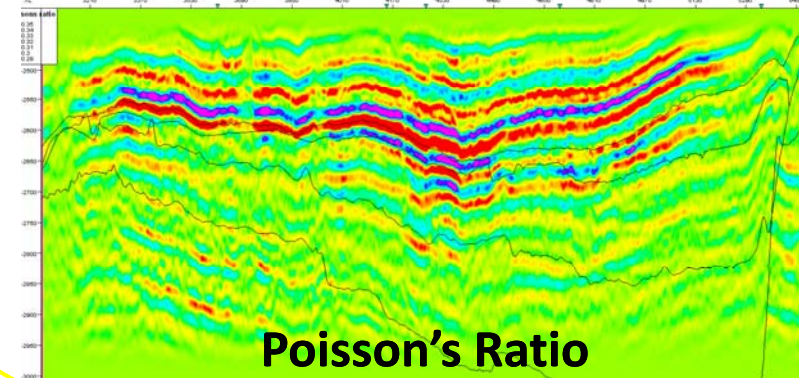
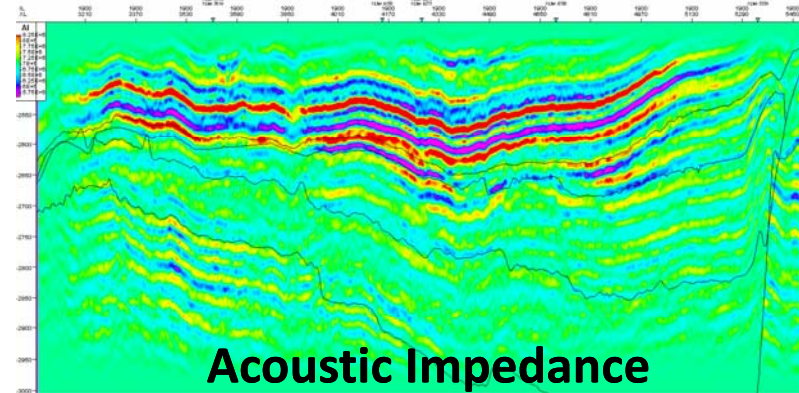
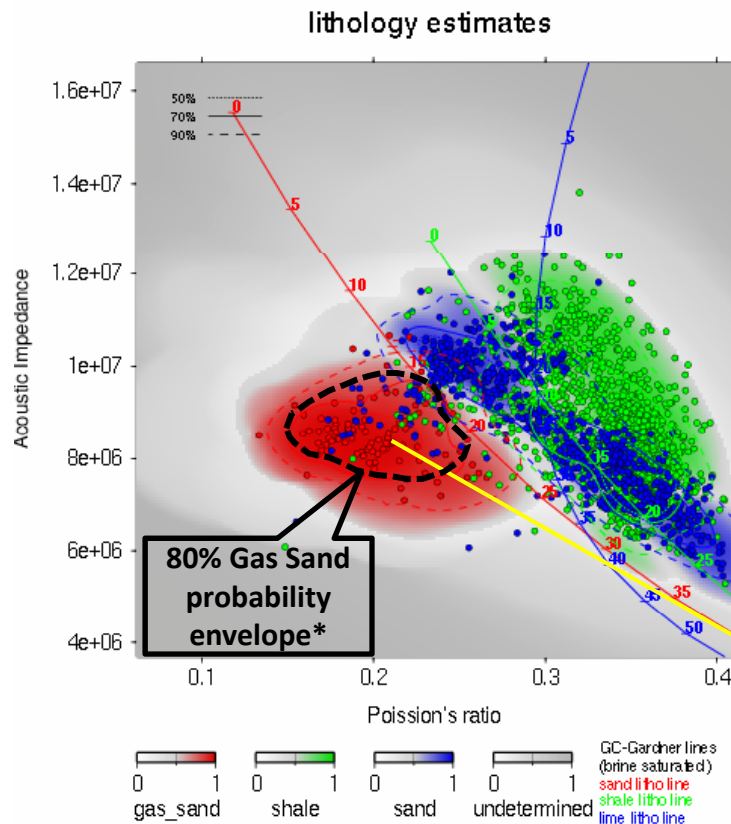
12 Tcf Artemis prospect revealed on MEO 3D
Analogous to Perseus field - DHI* termination = Gas Water Contact?



- * DHI = Direct Hydrocarbon Indicator
- Geological Chance of Success (GCOS) = 32%
- Gas quality expected to be similar to Pluto & Wheatstone (low CO₂, low liquids)
- Multiple options to monetise discovered resources

Rigorous geophysical analysis

Used to identify & quantify probability* of gas sands occurring



Simultaneous inversion was undertaken to produce three datasets (Acoustic Impedance, Poisson's Ratio and Gas Probability*) that were used to determine distribution of likely gas sands

* Note: Gas probability calculation is not calibrated to well data in this 3D seismic data set. Artemis-1 will calibrate the data

Resource assessment (100% basis)

Combined 12 Tcf mean prospective resources, 32% GCOS

Formation		P90	P50	Mean	P10	Parameter	Distribution	Calypso Fm	Legendre Fm
<u>Calypso</u>						GR Volume	10 ⁶ m ³	20,650	23,769
Gas-in-place	TCF	7.7	10.6	10.8	14.0	Net to Gross	Triangular	25%-45%-70%	15%-35%-70%
Recoverable	TCF	4.6	6.3	6.4	8.4	Porosity	Triangular	17%-22%-25%	15%-20%-22%
<u>Legendre</u>						Gas Saturatn	Normal	70%, 4% std dev	70%, 4% std dev
Gas-in-place	TCF	5.9	9.2	9.5	13.4	Gas Expansn	Normal	212, 5% std dev	212, 5% std dev
Recoverable	TCF	3.5	5.5	5.6	8.0	Gas Recovery	Normal	60%, 3% std dev	60%, 3% std dev
<u>Combined</u>						Heating value	Btu/scf	1,000	1,000
Gas-in-place	TCF	13.6	19.8	20.3	27.4	Inerts	%	Nil	Nil
Recoverable	TCF	8.1	11.8	12.0	16.4	GWC	m SS	-3,275m	-3,275m

Source: P. J. Cameron, Resource Invest Pty Ltd, August 2009

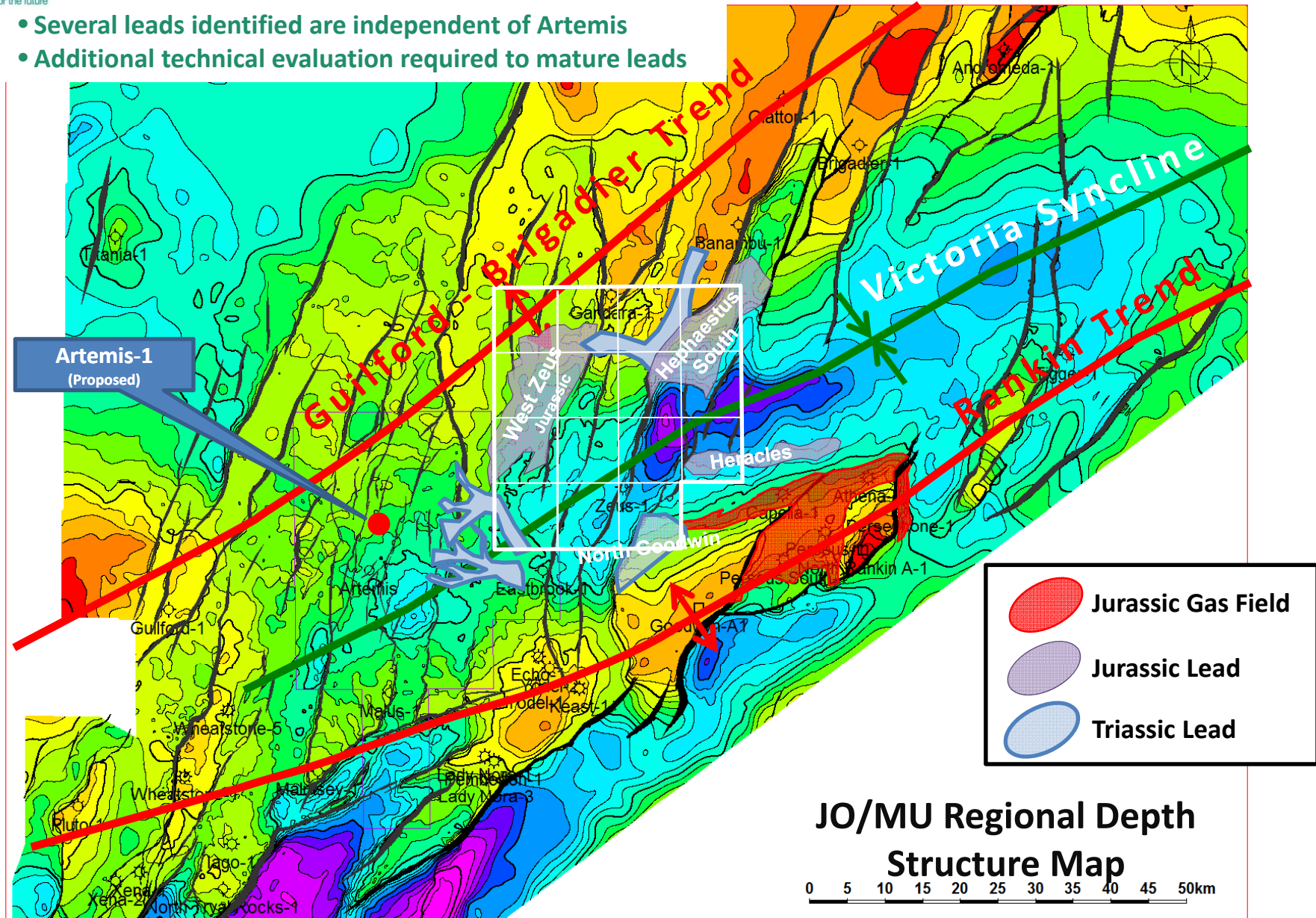
Prospect Elements	Probability
Overall Geological COS	20%
DHI de-risking multiplier	1.6x
Estimated Geological COS	32%
MEO participating interest	25%

Prospect Elements	Probability
Reservoir - presence/quality	80%
Trap* (pre-2009 Artemis 3D estimate)	50%
Source – presence/quality	80%
Seal adequacy	70%
Maturation/Migration	90%
Timing	100%
Preservation	100%

WA-361-P

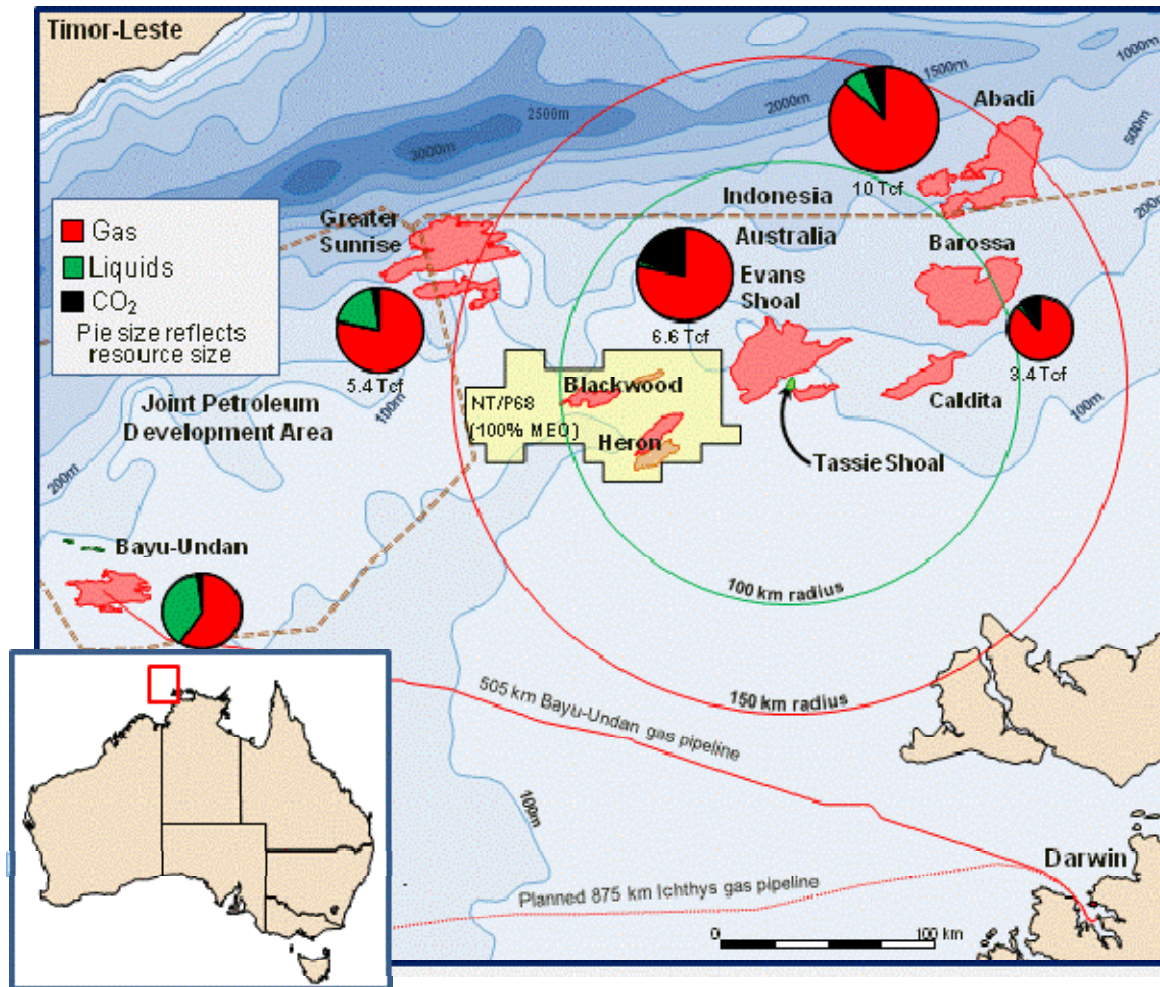
Renewal application submitted

- Several leads identified are independent of Artemis
- Additional technical evaluation required to mature leads



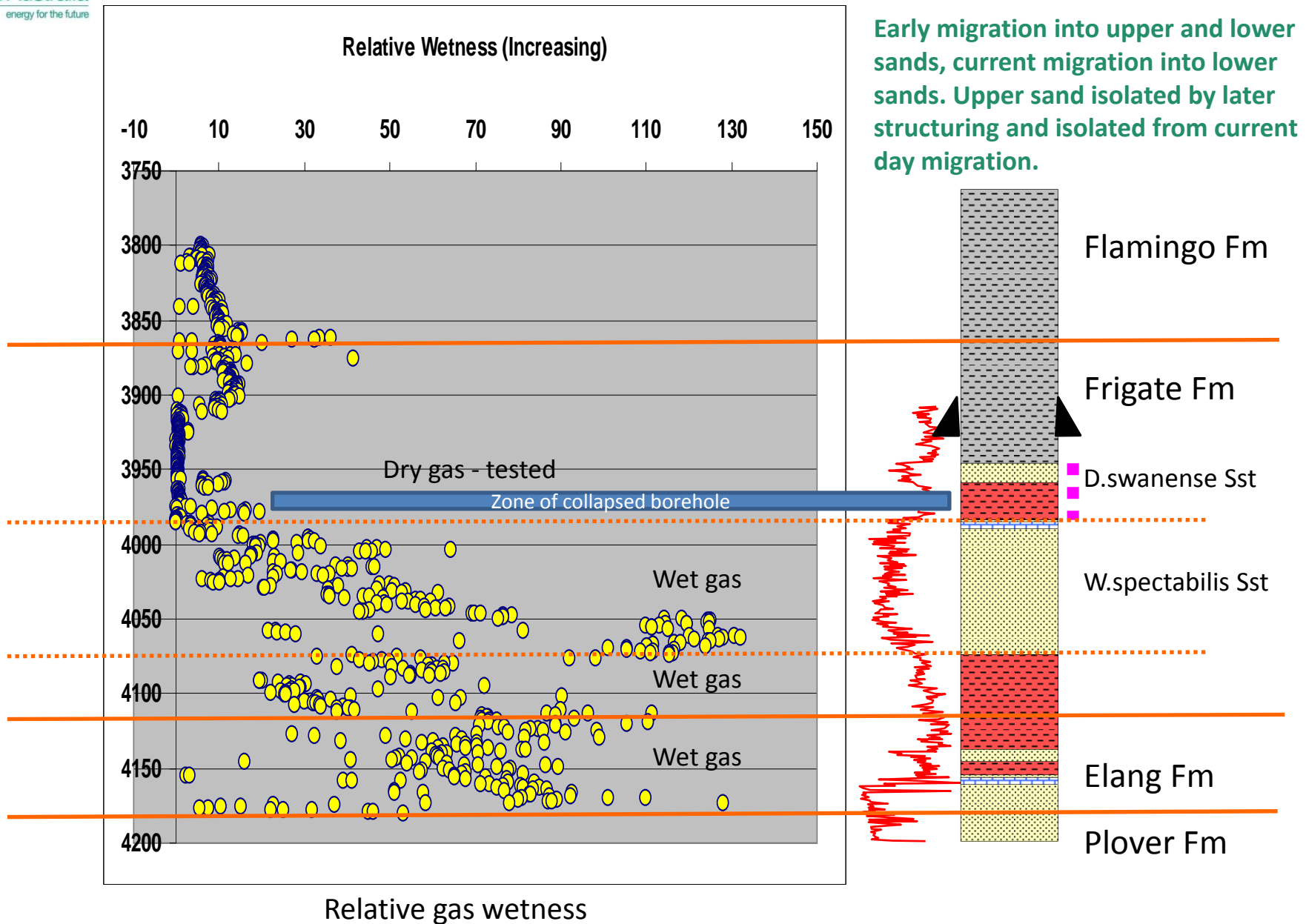
NT/P68 Location Map

Bonaparte Basin



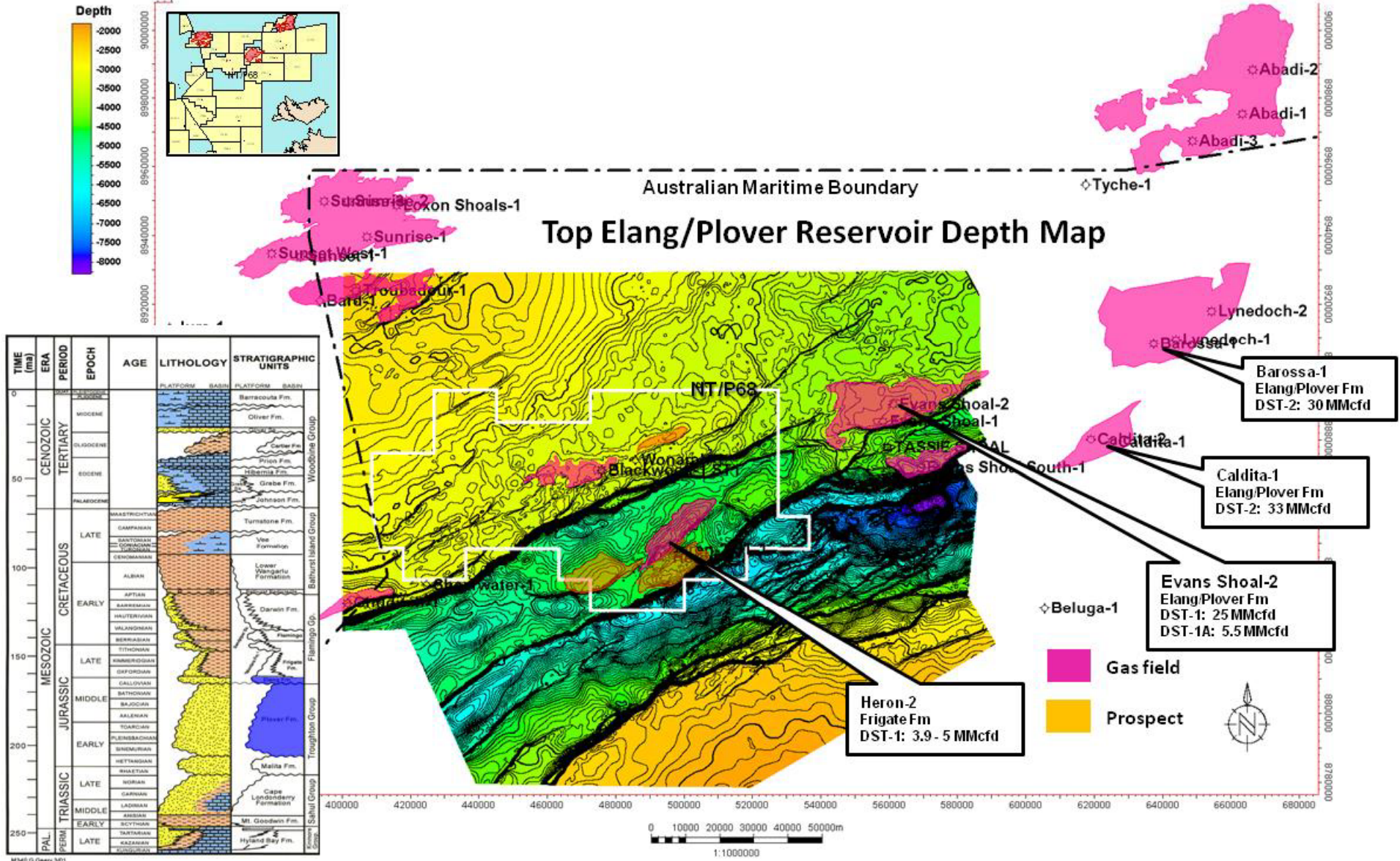
- In first year of the first renewal period
- Permit contains the Blackwood and Heron gas discoveries
- Blackwood is a relatively small, high CO₂ gas field suited to development for methanol
- Heron is assessed as a larger (5TCF total gas) discovery
- Uncertainties that require additional data include
 - Gas composition
 - Reservoir quality
 - Long term reservoir performance
 - Total resource size
- Studies have been conducted to address reservoir quality issues
- A farm-out of the Heron discovery is in progress
 - Farm-out will help fund appraisal drilling
 - The farm-out area covers NT/P68 exclusive of Blackwood

NT/P68: Heron-2 mud-gas wetness



Reservoir Quality

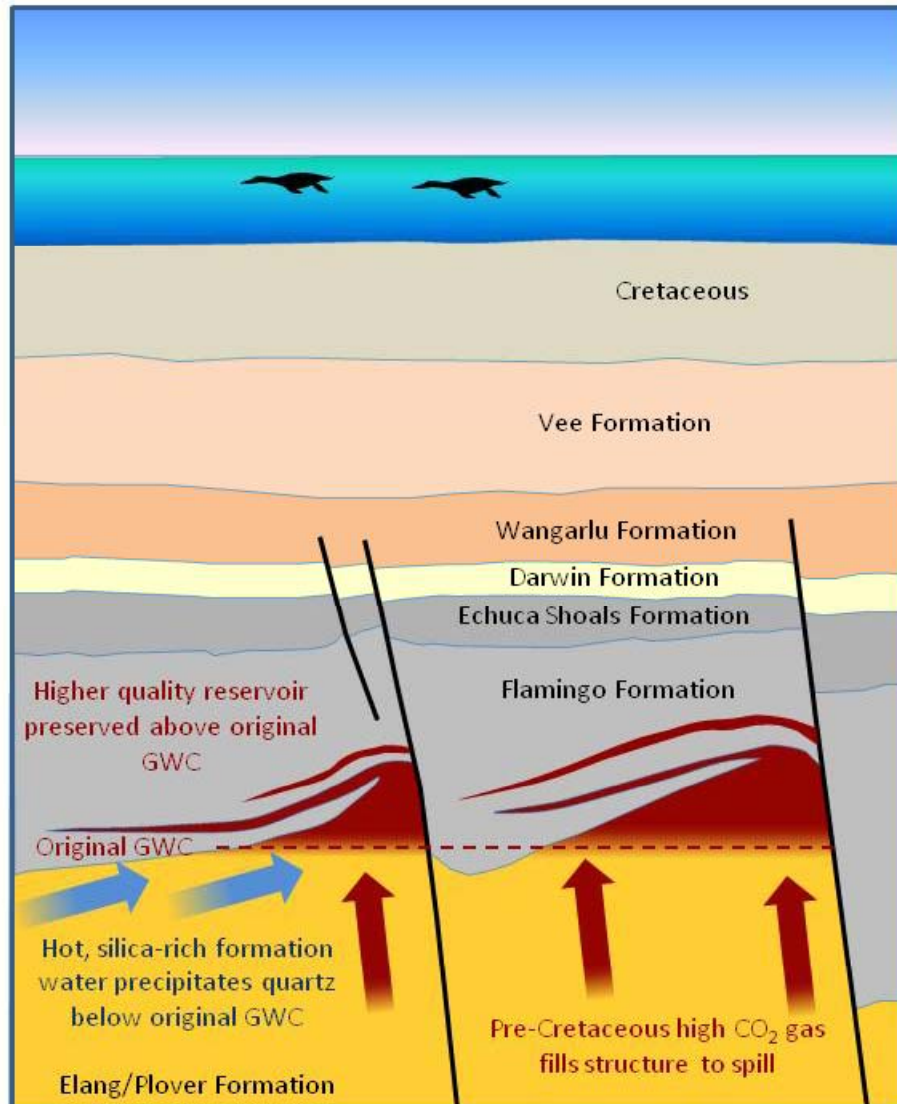
Adjacent discovered Gas Fields show high productivity
Low porosity reservoir is enhanced by significant fracture porosity



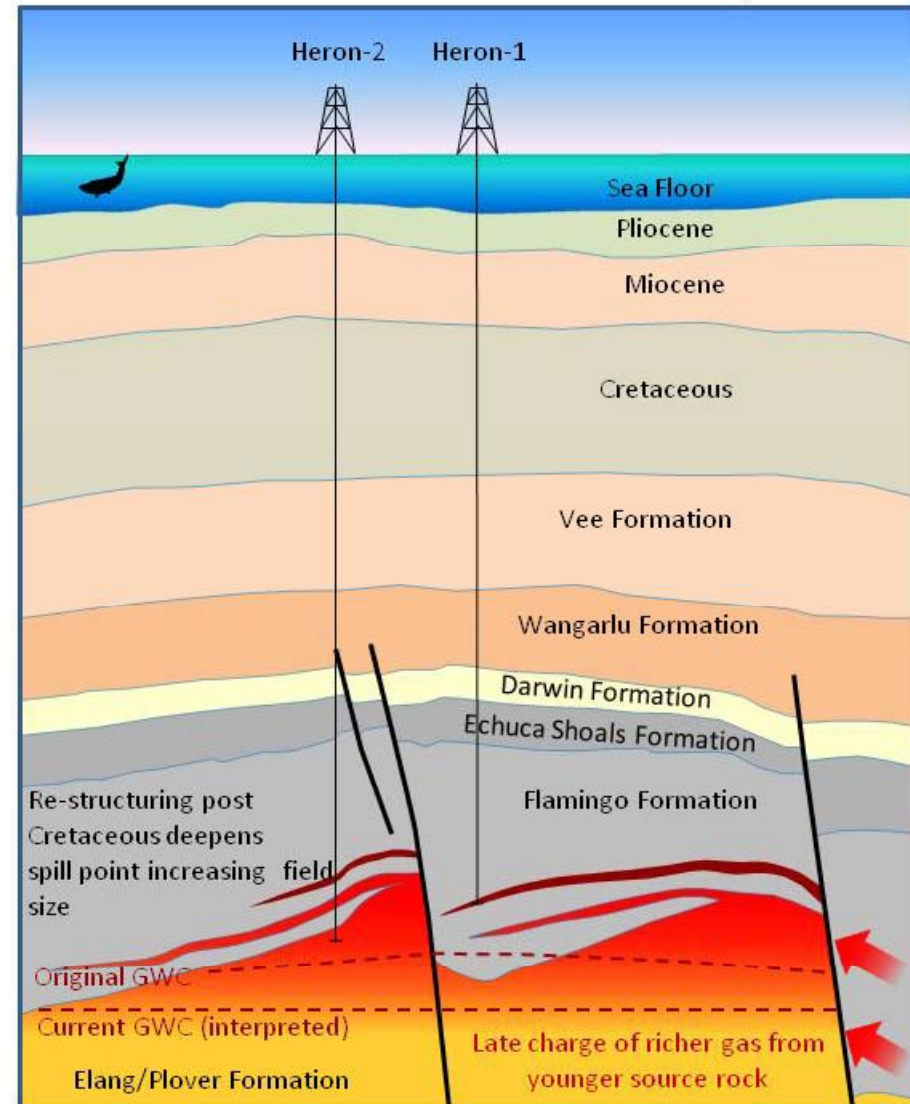
Reservoir Cementation

Porosity preservation by early hydrocarbon charge

Structural Cross Section - Late Cretaceous

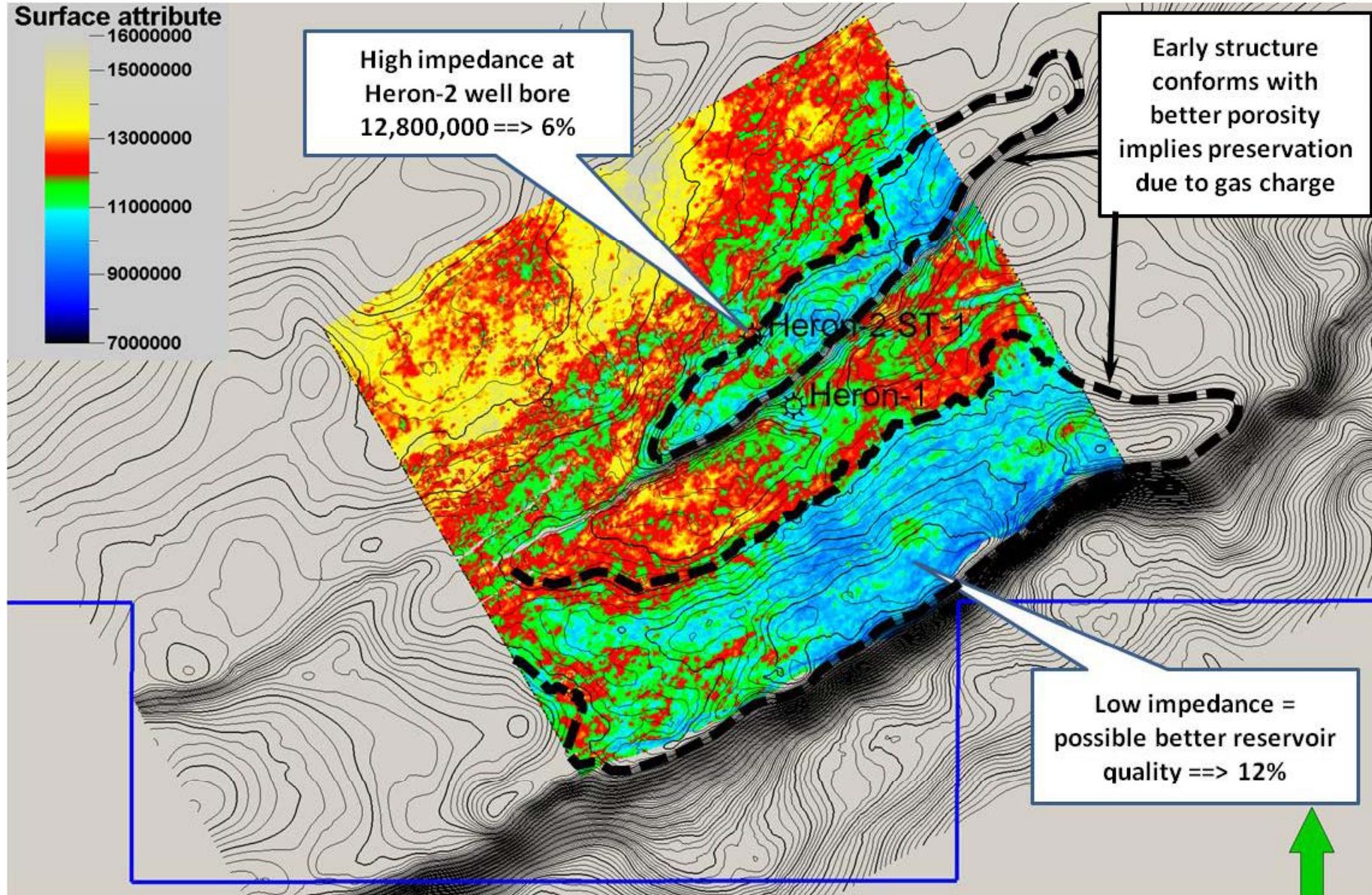


Structural Cross Section - Present Day



Reservoir Distribution

Studies used acoustic impedance on 3D seismic to model porosity



Heron gas discovery

Best estimate, prospective resource ~5 Tcf

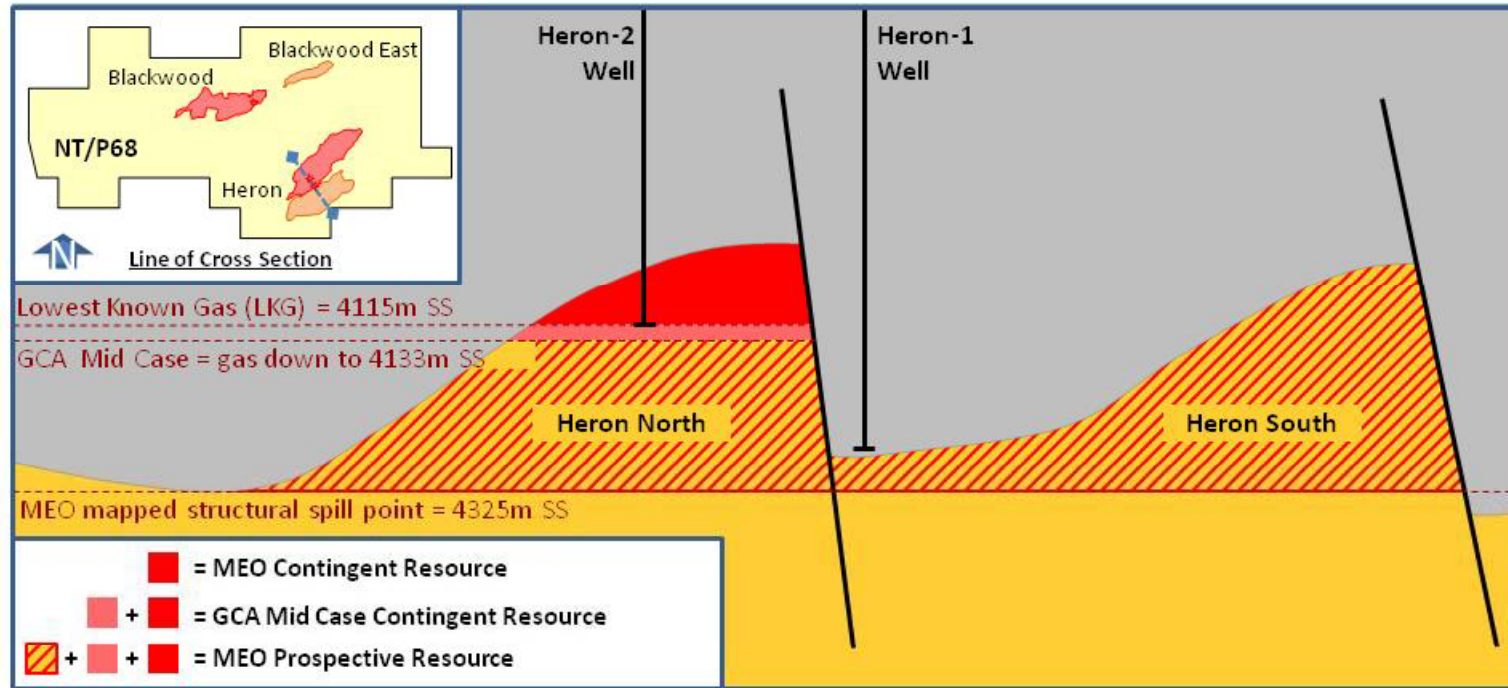


Table 1. Heron North (Discovered Resource)

Raw Gas Ultimate Recovery (Tcf)	1C	2C	3C
GCA Contingent Resource Assessment ¹	0.19	0.39	0.80
MEO Contingent Resource Assessment ¹	0.21	0.29	0.39

Table 2. Greater Heron Structure (Prospective Resource)

Raw Gas Ultimate Recovery (Tcf)	Low	Best Estimate	High
MEO Prospective Resource Assessment ²	3.66	4.96	6.64

- The GCA and MEO volumes reported in this table have NOT been reduced for non-hydrocarbon gas (CO₂, N₂) content. Expected ranges are shown in Table 3 below. MEO has limited the non-hydrocarbon gas (CO₂, N₂) content to that observed in the primary reservoir at Evans Shoal-2.

Heron Volumetrics

Parameters for Resource Assessment

Table 2. Heron - Bulk Rock Volumes.

4325 LCC	10 ⁶ m ³	57,491.90 +/- 25%
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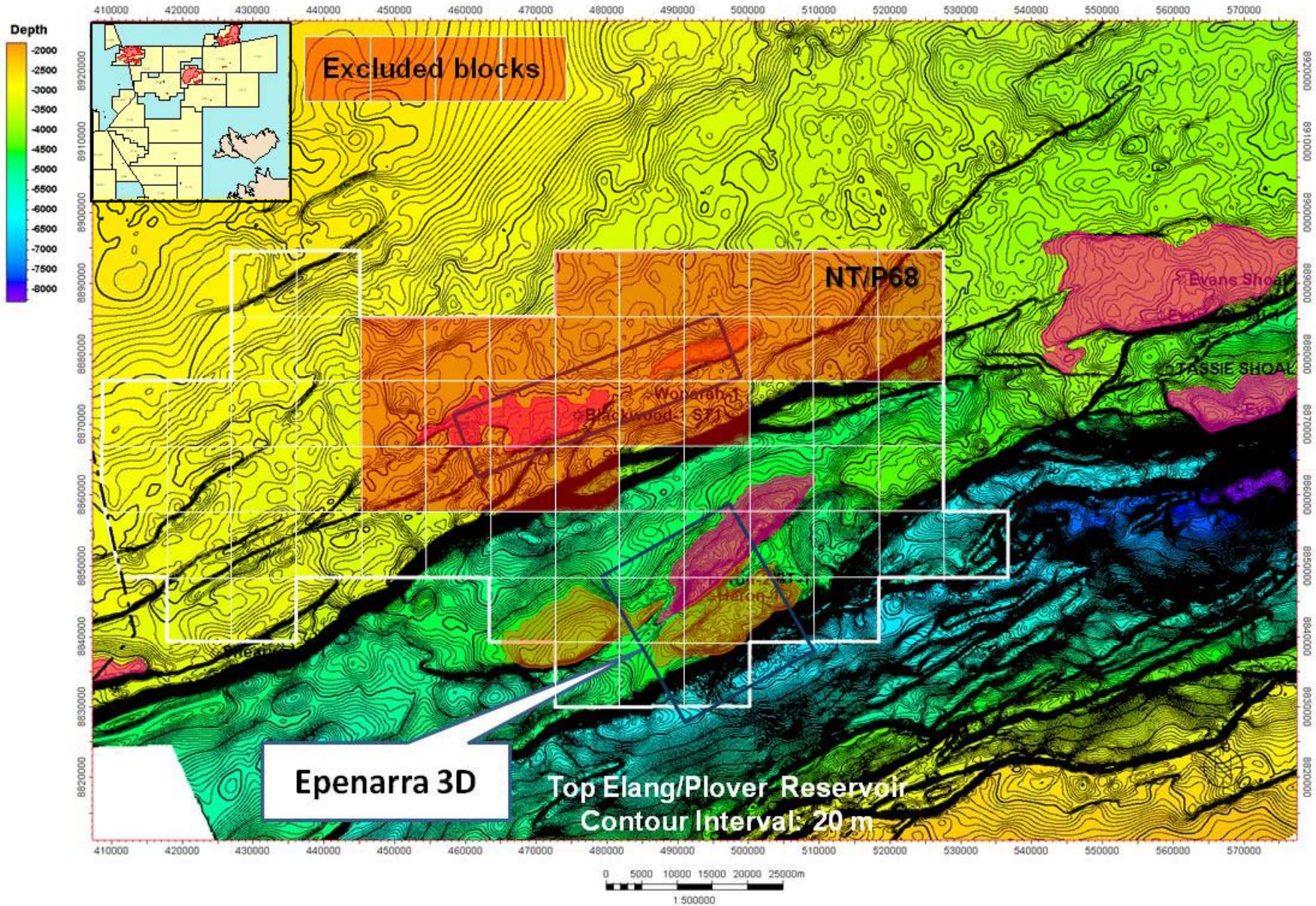
Table 3. Heron – Reservoir Input data.

Parameter	Distribution	
Net to Gross	Triangular	48.9% – 54.3% – 59.7%
Porosity	Triangular	6.6% – 6.75% – 6.9%
Gas Saturation	Triangular	40% – 48% – 67%
Gas Expansion Factor	Triangular	218 – 230 – 250
Gas Recovery	Triangular	40% – 55% – 75%

Table 4. Heron – Potential gas distributions.

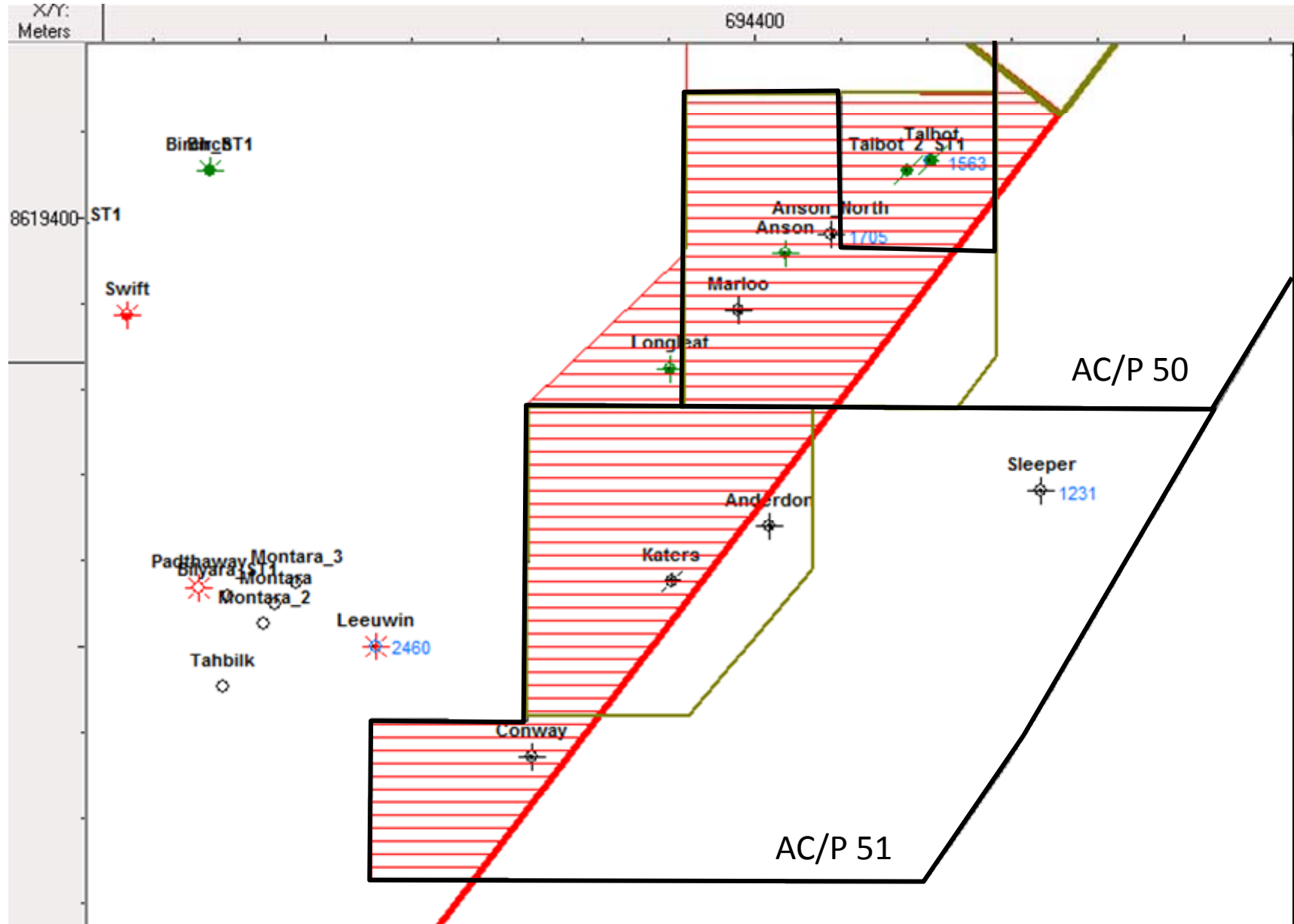
4325 LCC Case		P90	P50	Mean	P10
Potential Gas in place	BCF	6,811	8,812	8,940	11,240
Potential recoverable raw gas	BCF	3,659	4,955	5,022	6,638

NT/P68 Farm In Area



Seismic Reprocessing

Area of poor seismic data quality



Work Programme

Exploration Permit AC/P50 and AC/P51 Work Program:

	Permit Year	AC/P50 Program	AC/P51 Program
Primary Term	1	1000k 2D seismic reprocessing, 250k 3D seismic reprocessing	1000k 2D seismic reprocessing, 250k 3D seismic reprocessing
	2	Geotechnical studies	Geotechnical studies
	3	200 km ² 3D seismic	1000 km 2D seismic
Secondary Term	4	Geotechnical studies	Geotechnical studies
	5	1 exploration well	1000 km 2D seismic
	6	Geotechnical studies	1 exploration well

- Permit awarded 21 April 2009 to Silver Wave Energy Pte Ltd
- Currently in Year 2 of primary term
- Year 1 seismic reprocessing in progress prior to MEO acquisition