28 September 2022

ASX Release
ENTERPRISE NORTH INFORMATION UPDATE

Highlights:

- ***Enterprise North Prospect is located onshore within PEP 169, Victoria, on-trend with the offshore Enterprise and Minerva gas fields.***
- ***Seismic data indicates the Enterprise North Prospect covers up to 1,170 acres, with 115 metres of highly productive Waarre Sandstone reservoir filled to spill.***
- ***Enterprise North is estimated to contain up to 419 Bcf of gas and 10 million barrels of condensate (209 Bcf and 5 MMBbl net to Company, respectively).***
- ***Approvals process for future drilling and development of the conventional Enterprise North-1 well is underway.***

The Directors of Lakes Blue Energy NL (the "Company"; ASX:LKO) are pleased to provide the attached presentation regarding the recently identified Enterprise North prospect, located within Petroleum Exploration Permit ("PEP") 169 in the onshore Otway Basin, Victoria.

PEP 169 is 49% owned by the Company and has historically been operated by the Company on behalf of Armour Energy, which holds 51% of the permit. The Enterprise North prospect is well located in relation to existing infrastructure and, being onshore, should be able to be developed quickly and at low-cost. The Prospect on trend with the nearby Enterprise gasfield, discovered by Beach in 2021, estimated to contain 161 PJ of recoverable gas with 25 Bbl condensate per MMcf of gas, and flowing gas on test at 60 MMcfd.

This information update has been provided to ensure all shareholders are aware of the significance of the Enterprise North Prospect. Planning for potential drilling and development of the Prospect is underway. Further information will be released as and when available.

This announcement has been authorised and approved by the Board of Lakes Blue Energy NL for lodgement with ASX.

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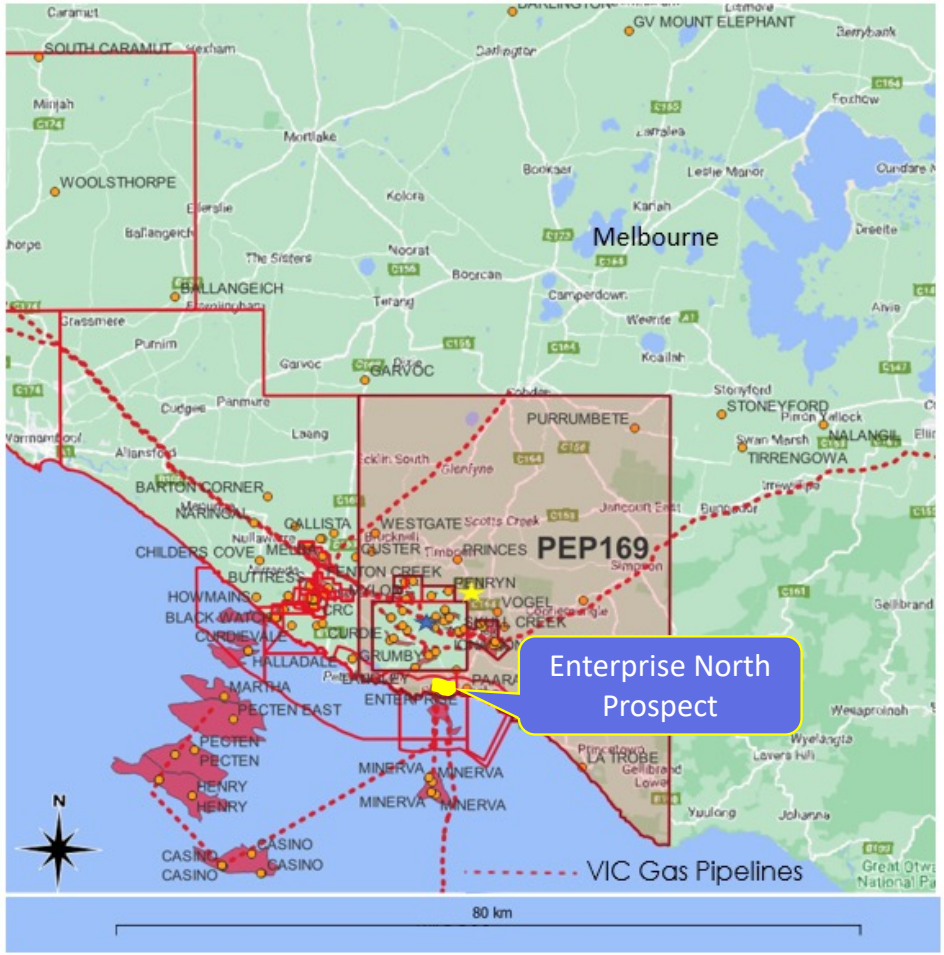
Lakes Blue Energy

Enterprise North Prospect – Detailed Overview

September 2022

Enterprise North Prospect - Highlights

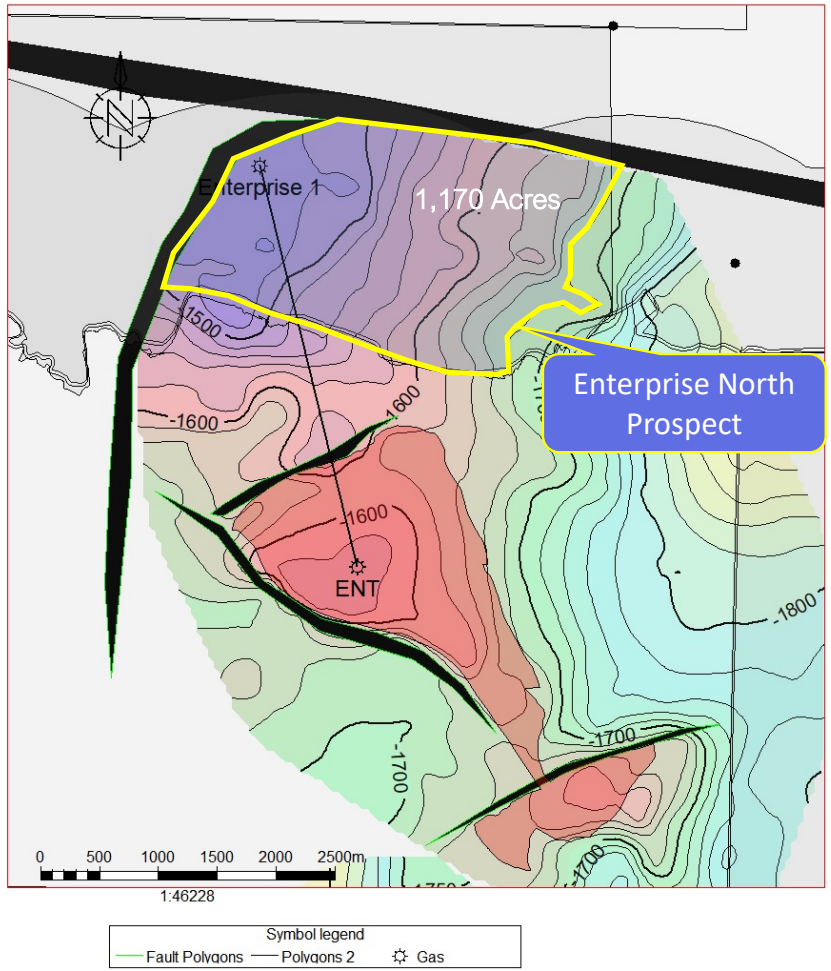
- Located within PEP 169, Victoria. (49% Lakes; 51% Armour)
- On-trend with the Enterprise and Minerva fields.
- Advantageous onshore (low-cost) location.
- Targeting the highly productive Waarre Sandstone Formation.
- **Very large, low-risk Prospect**
  - Up to 209 Bcf OGIP (net to Company)
  - Up to 10 MMBbl condensate in place
  - Estimated 72% Probability of Success.
- Close to existing infrastructure.
- Drilling approval process underway.



Enterprise North - Prospectivity

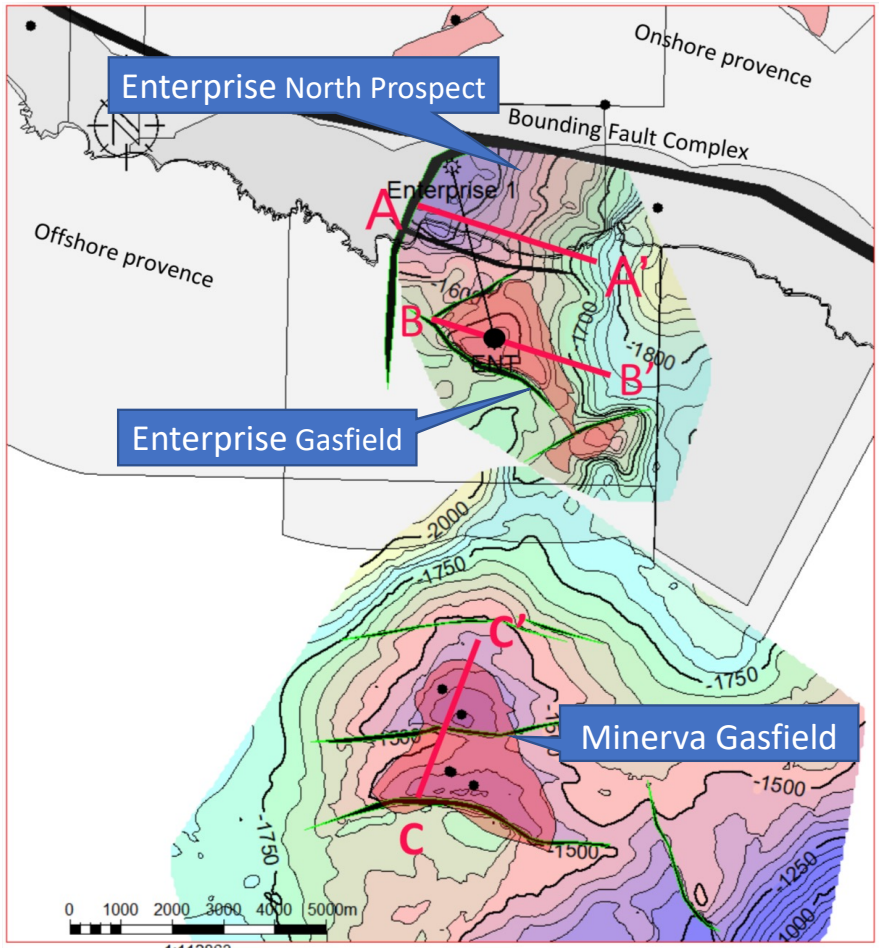
- Seismic indicates Enterprise North Prospect is 'filled to spill', covering 1,170 acres.
- Prognosed 115 metre thick Waarre Sandstone.
- Gas flows up to 60 MMcfd from Waarre.
- Targeting up to 419 Bcf OGIP (209 Bcf Net).

Resource Estimates (Note 1; Lognormal distribution; Net to Company)							
Unrisked OGIP (Bcf)				Unrisked Recov. Gas (PJ)			
Low	Mid	Pmean	High	Low	Mid	Pmean	High
23.7	70.5	101.0	209.5	11.7	32.9	45.9	96.9
				Recov. Condensate (MMBbl)			
				0.3	0.8	1.0	2.4



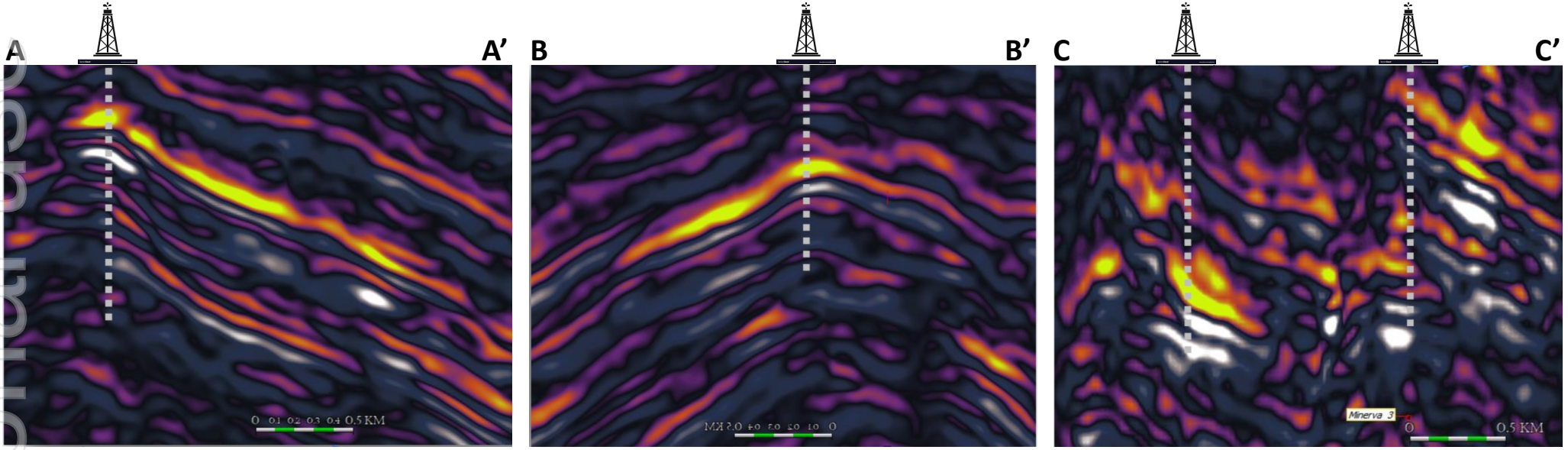
Enterprise North - Geology

- Prospect identified through reinterpretation of merged 3D transition zone seismic.
- Enterprise North Prospect seismic has been calibrated to known offshore gas fields, reducing subsurface risk.
  (See Comparative Cross-sections on next page)
- Potentially the biggest onshore gas discovery in the Otway Basin.
- Enterprise-1 well, to offshore Enterprise field, was drilled by Beach from within PEP 169.



Enterprise North - Comparative Cross-sections

- Enterprise north seismic amplitude is similar to offshore Enterprise (161 PJ*) and Minerva (558 Bcf*) gas fields.
- Interpreted gas-charged sands cause bright amplitude anomaly on seismic.

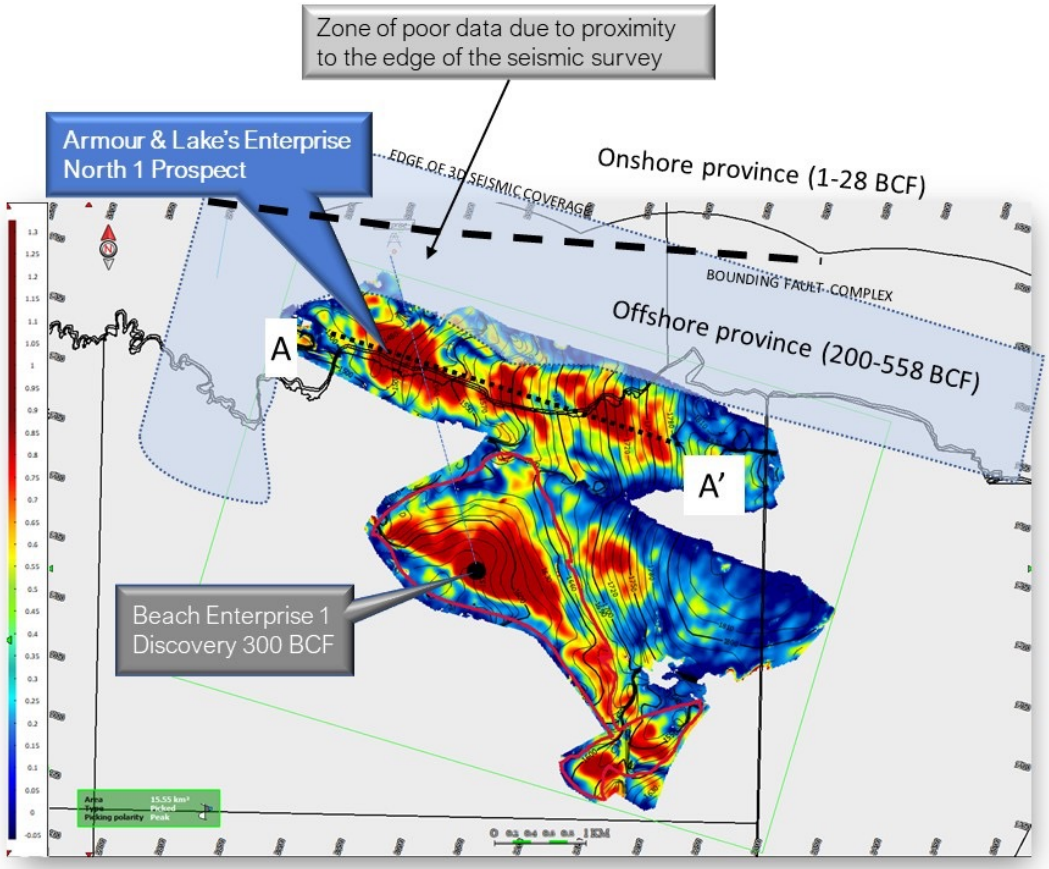


Enterprise North **Enterprise** **Minerva**

* Source: Beach Energy 10 November 2020 ASX announcement; ** Source: DNRME Gas Resources of the Otway Basin Victoria.

Enterprise North - Field Comparative

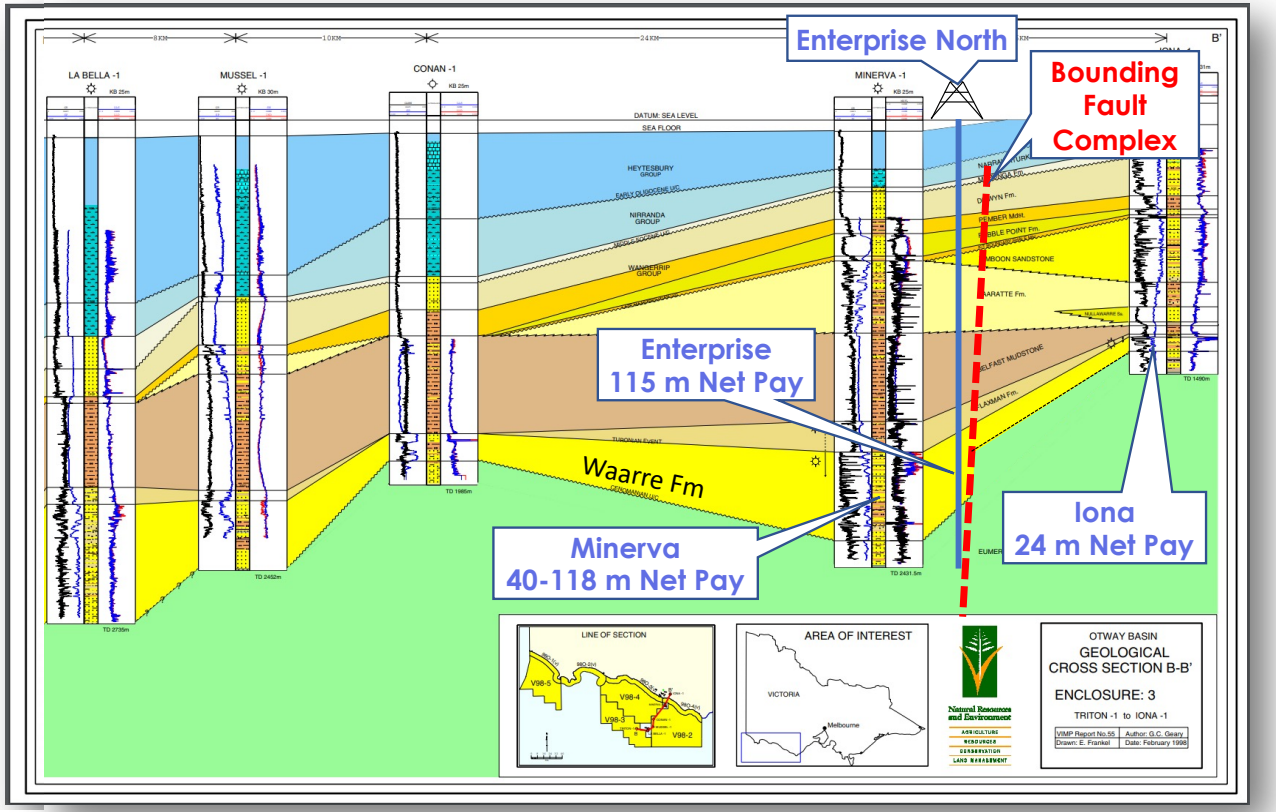
- **Enterprise gas field**
  - On trend 3.2 km from Enterprise North.
  - Discovered by Beach Energy in 2020.
  - 115 m net pay* at 2,052 m depth.
  - 2P*: 161 PJ gas; 352 kT LPG; 4 MMBbl condensate.
- **Minerva gas field**
  - On trend 9.6 km from Enterprise North.
  - Discovered 1993; Produced 2005-2019.
  - 110 m net pay* at 1,790 m depth.
  - 2P*: 330 PJ gas; 331 kT LPG; 0.7 MMBbl condensate.



* Sources: Beach Energy ASX announcements and DNRME Gas Resources of the Otway Basin Victoria.

Enterprise North - Waarre Sandstone Reservoir

- Enterprise North is located on offshore side of 'bounding fault complex'.
- Waarre Sandstone is thick (up to 115 metres*) on offshore side of bounding fault complex.
- Waarre Sandstone:
  - ✓ High permeability (1-10 Darcies*).
  - ✓ High porosity (19-25%*).
  - ✓ Prolific ability to deliver gas and liquids at high rates.



* Note:

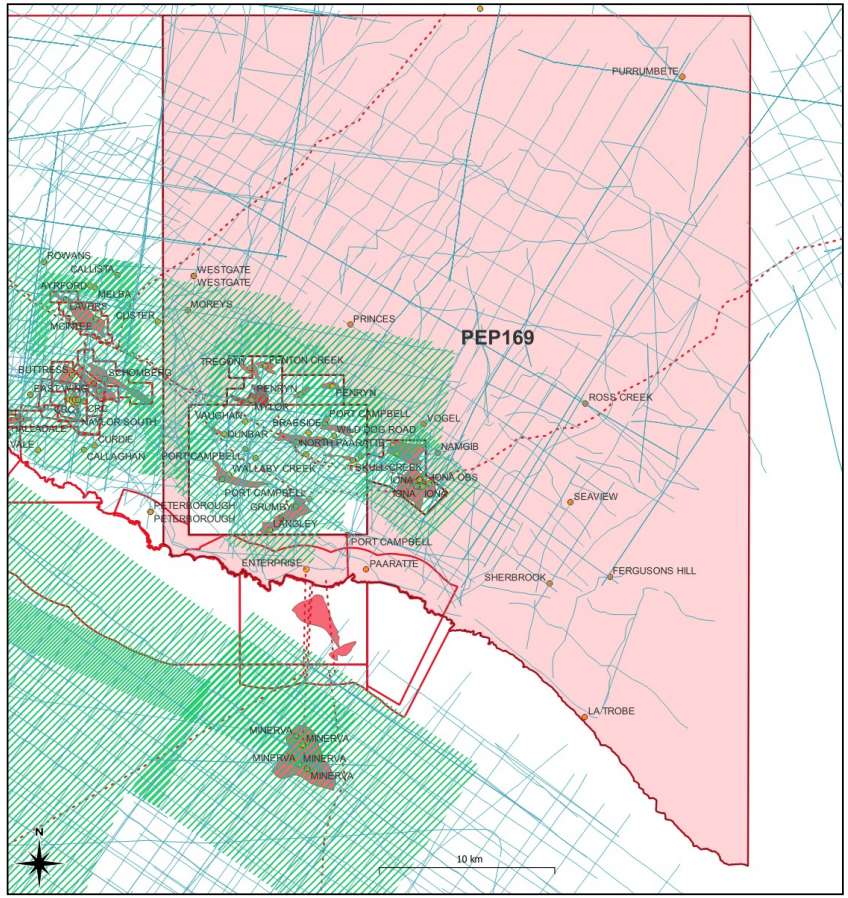
Information and Figure sourced from Beach Energy ASX announcement 10 November 2020 and DNRME Gas Resources of the Otway Basin Victoria. Figure has been modified to illustrate major rifting fault complex. Location of Enterprise, Enterprise North and bounding fault complex are approximate and are shown for illustrative purposes only.

Enterprise North - Risk

- Seismic calibrated across known fields.
- Enterprise North is 2.4 km updip from Enterprise gas field - a proven Waarre Sandstone reservoir with 115 m reservoir thickness*.

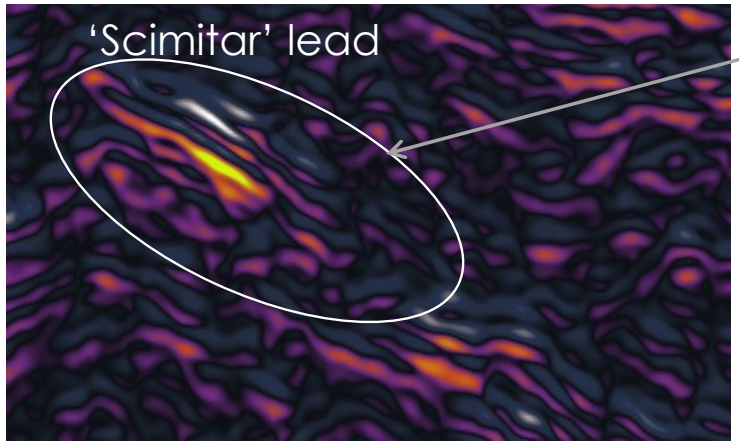
Risk Assessment	
Risk	Chance of Geological Success
Closure	95%
Reservoir	95%
Seal	80%
Charge	100%
Overall	72%

* Source: Beach Energy 10 November 2020 ASX announcement



Scimitar – A Further Lead

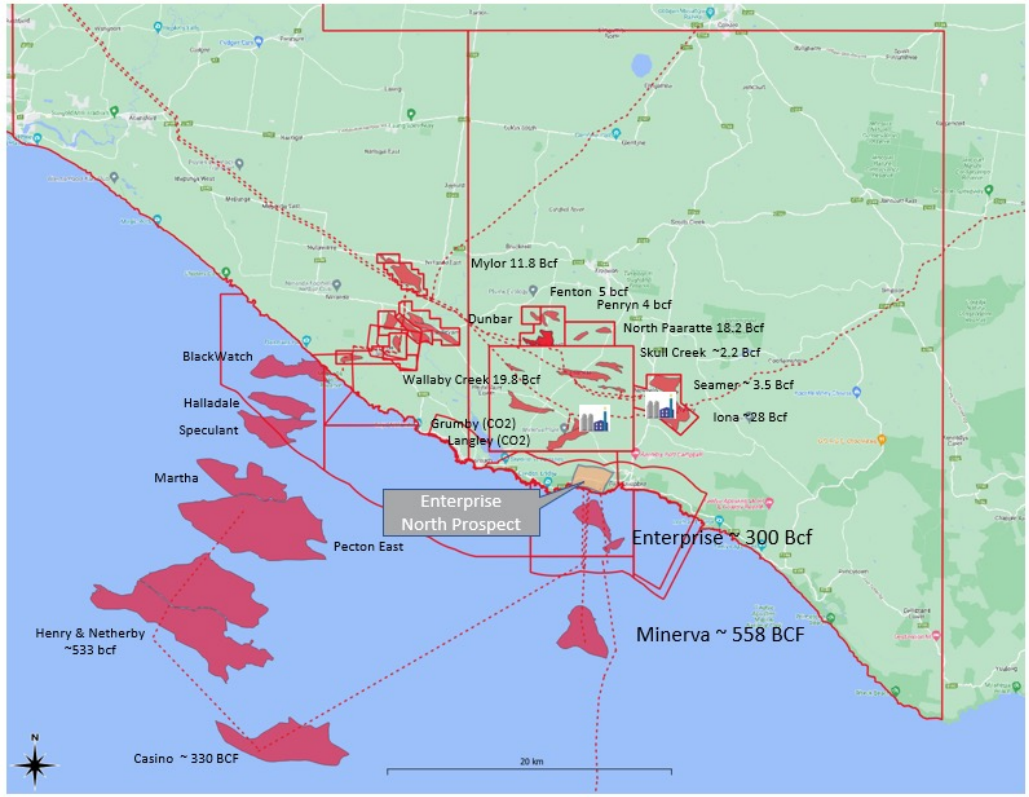
- Scimitar lead is mapped in open-file 2D and 3D seismic data.
- Seismic data indicates closure, seal and charge, similar to Enterprise North.
- Further evaluation required.



Reference Information

Otway Basin Background Information

- Productive reservoirs:
  - Waarre Sandstone.
  - Pebble Point Sandstone.
  - Heathfield Sandstone (Eumeralla Fm.).
- Gas Storage Facilities:
  - Iona (26 PJ).
  - Wallaby Creek (19.8 PJ).
  - North Paaratte (18.2 PJ).
- Gas Processing Plants
  - Otway (Beach), 205 TJ/d capacity.
  - Athena (Cooper/Mitsui), 150 TJ/d cap.



Note: Source of Resource Estimates

Resource estimates set out in this presentation have been prepared by Mr John Mackintosh, Reservoir Engineering Advisor, DGR Global Limited. Mr Mackintosh has over 25 years of diverse oil and gas industry experience and has significant reservoir engineering, production technology and operations experience in multiple basins worldwide with a variety of International Operators and Consulting firms. He has previously held roles in Santos (Australia/Houston), Halliburton Consulting (Russia), Wintershall (Norway) and Apache (Egypt). Mr Mackintosh has sufficient experience that is relevant to Armour Energy Limited and Lakes Blue Energy NL for reserves and resources to qualify as a Reserves and Resources Evaluator as defined in the ASX Listing Rules. Mr Mackintosh has consented to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Assumptions used in preparation of the resource estimates were (P90/P10): Drainage Area 250/1170 acres; Hydrocarbon saturation 70/83%; Net pay 24/110 metres; Recovery factor 50/75% CO2 10/20%; Gas Volume factor 190/210 scf/rcf; Gas energy content 1.104 MJ/scf; 10% shrinkage for LPG; 8% Plant Fuel; LPG content 1.6 ktonne/PJ; Condensate 12/25 Bbl/MMscf.

The Company is not aware of any new information or data that materially affects the information included in this presentation and confirms that all the material assumptions and technical parameters underpinning the estimates in this presentation continue to apply and have not materially changed.

The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

Abbreviations used in this Presentation

Term	Meaning herein
Bcf	Billion (standard) cubic feet
m	metres
MMBbl	Millions of Barrels
MMcfd	Millions of (standard) cubic feet per day
OGIP	Original Gas in Place
PEP	Petroleum Exploration Permit
PJ	Petajoules
Pmean	Mean Probability
TJ/d	Terajoules per day