



East Seram PSC Opportunity

High impact, under-explored fold belt & exciting shallow Plio-Pleistocene prospects



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Seapex Farmout Forum

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View from Manusela National Park lookout toward Sawai Bay

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Prospective Resources

Prospective Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective Resources have both an associated chance of geologic discovery and a chance of development. Prospective Resources are further categorized in accordance with the range of uncertainty associated with recoverable estimates, assuming discovery and development, and may be sub-classified based on project maturity. Further exploration, appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

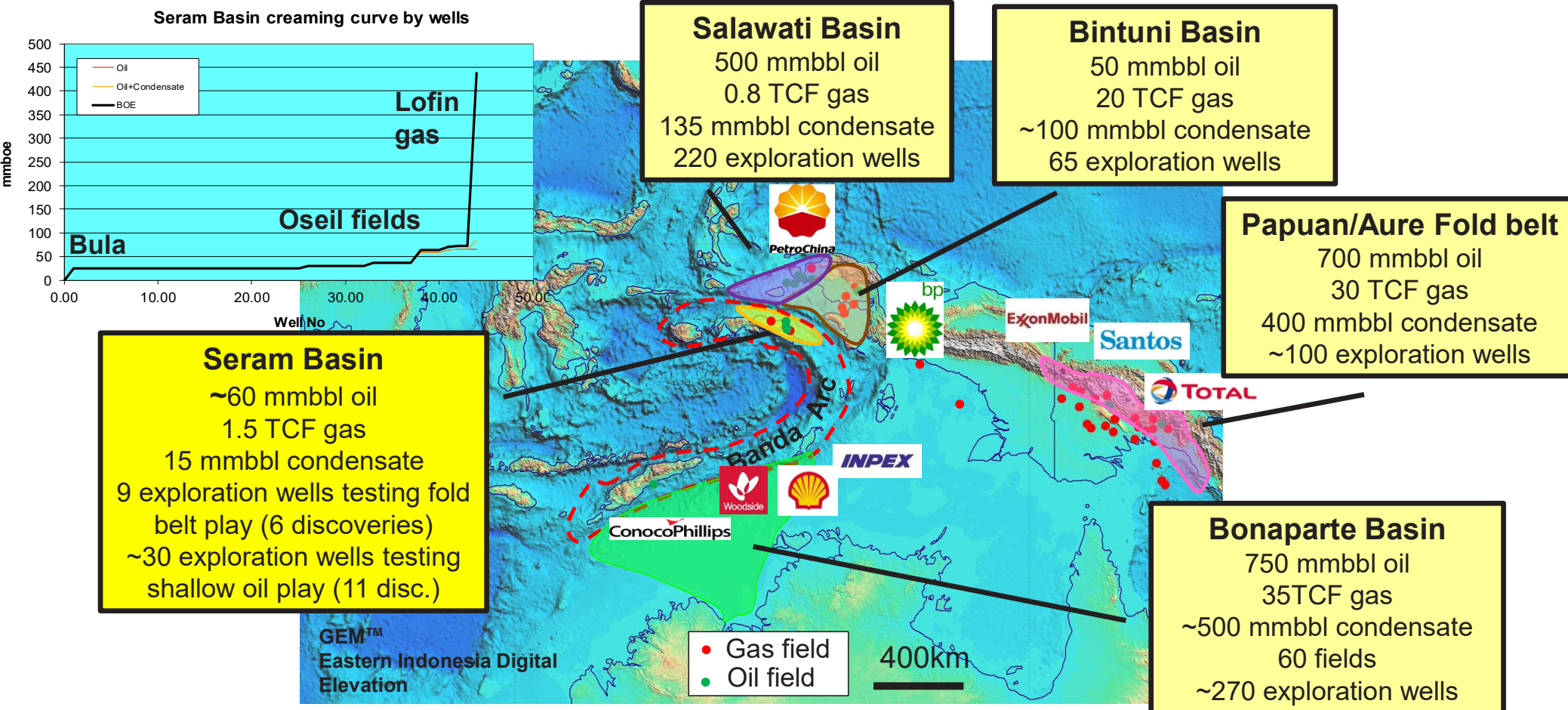
Competent Persons Statement: Qualified Petroleum Reserves and Resources Evaluator

Pursuant to the requirements of the ASX Listing Rules Chapter 5, the technical information, reserve and resource reporting provided in this presentation are based on and fairly represent information and supporting documentation that has been prepared and/or compiled by Mr Kim Morrison, Exploration Manager of Lion Energy Limited. Mr Morrison holds a B.Sc. (Hons) in Geology and Geophysics from the University of Sydney and has over 30 years' experience in exploration, appraisal and development of oil and gas resources - including evaluating petroleum reserves and resources. Mr Morrison has reviewed the results, procedures and data contained in this website. Mr Morrison consents to the release of this report and to the inclusion of the matters based on the information in the form and context in which it appears. Mr Morrison is a member of AAPG.

Conversion from gas volume to barrels of oil equivalent (BOE) in this document is based a BOE conversion ratio of 6 mcf:1 bbl.

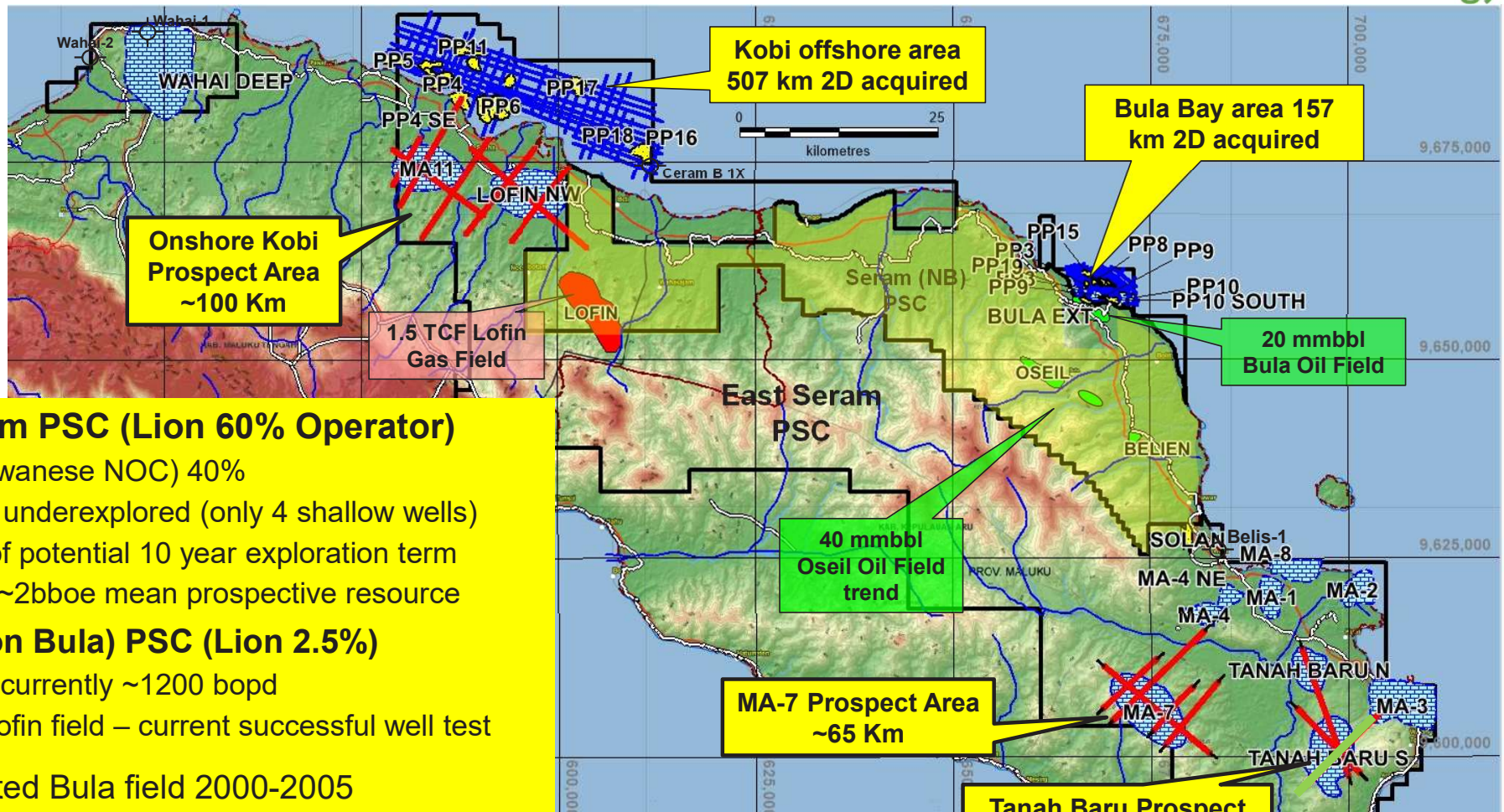
East Seram PSC region contains prolific hydrocarbon provinces

Seram Basin proven area (oil production, major gas discovery), plenty of running room



East Seram PSC - Partner sought to help fund exploration drilling

2020 offshore & 2022 onshore 2D (being processed) delineate highly attractive portfolio



East Seram PSC (Lion 60% Operator)

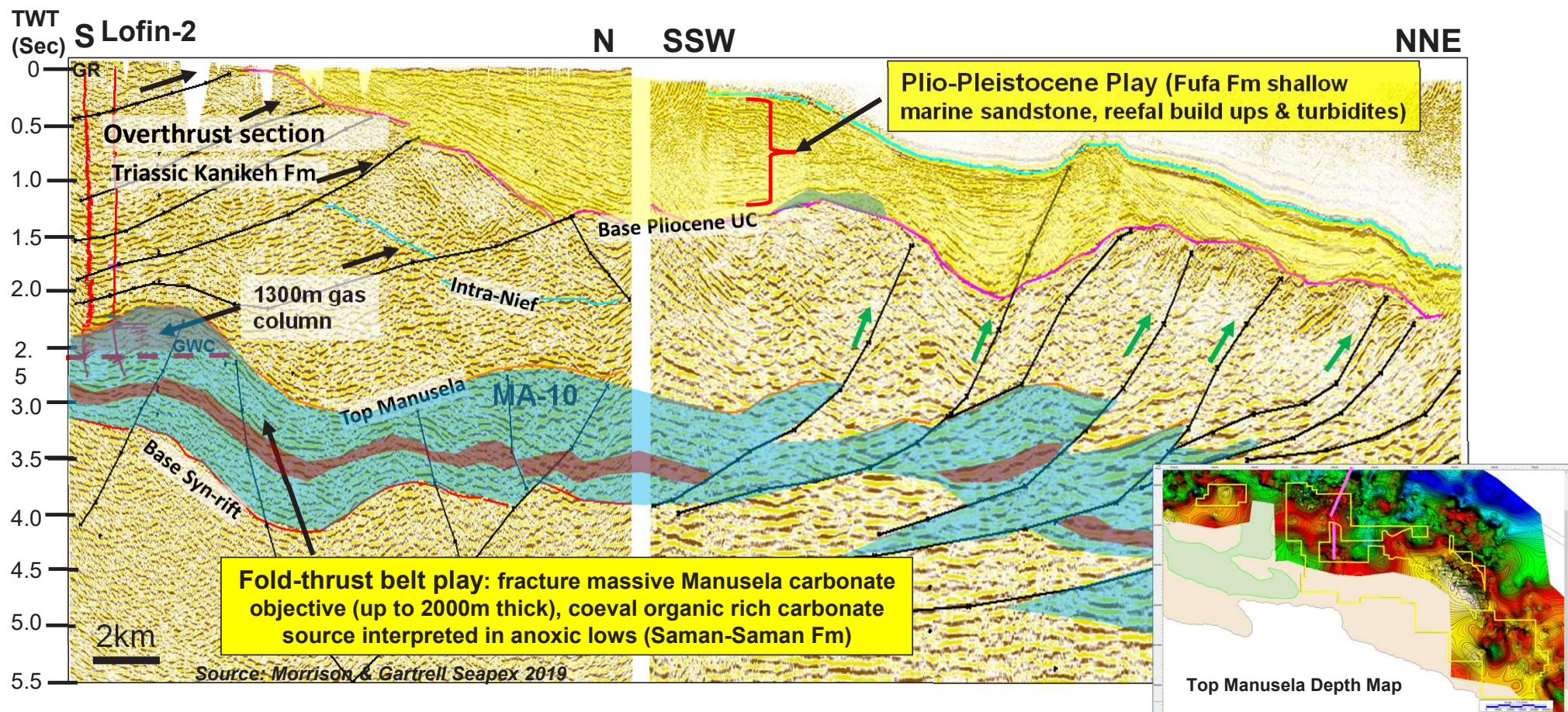
- OPIC (Taiwanese NOC) 40%
- 4457 km², underexplored (only 4 shallow wells)
- In year 5 of potential 10 year exploration term
- 27 P&L's: ~2bboe mean prospective resource

Seram (Non Bula) PSC (Lion 2.5%)

- Oseil field currently ~1200 bopd
- 1-2 TCF Lofin field – current successful well test

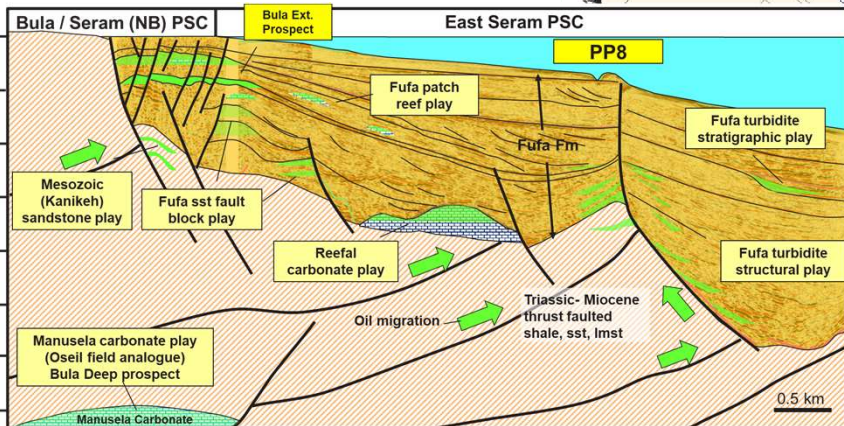
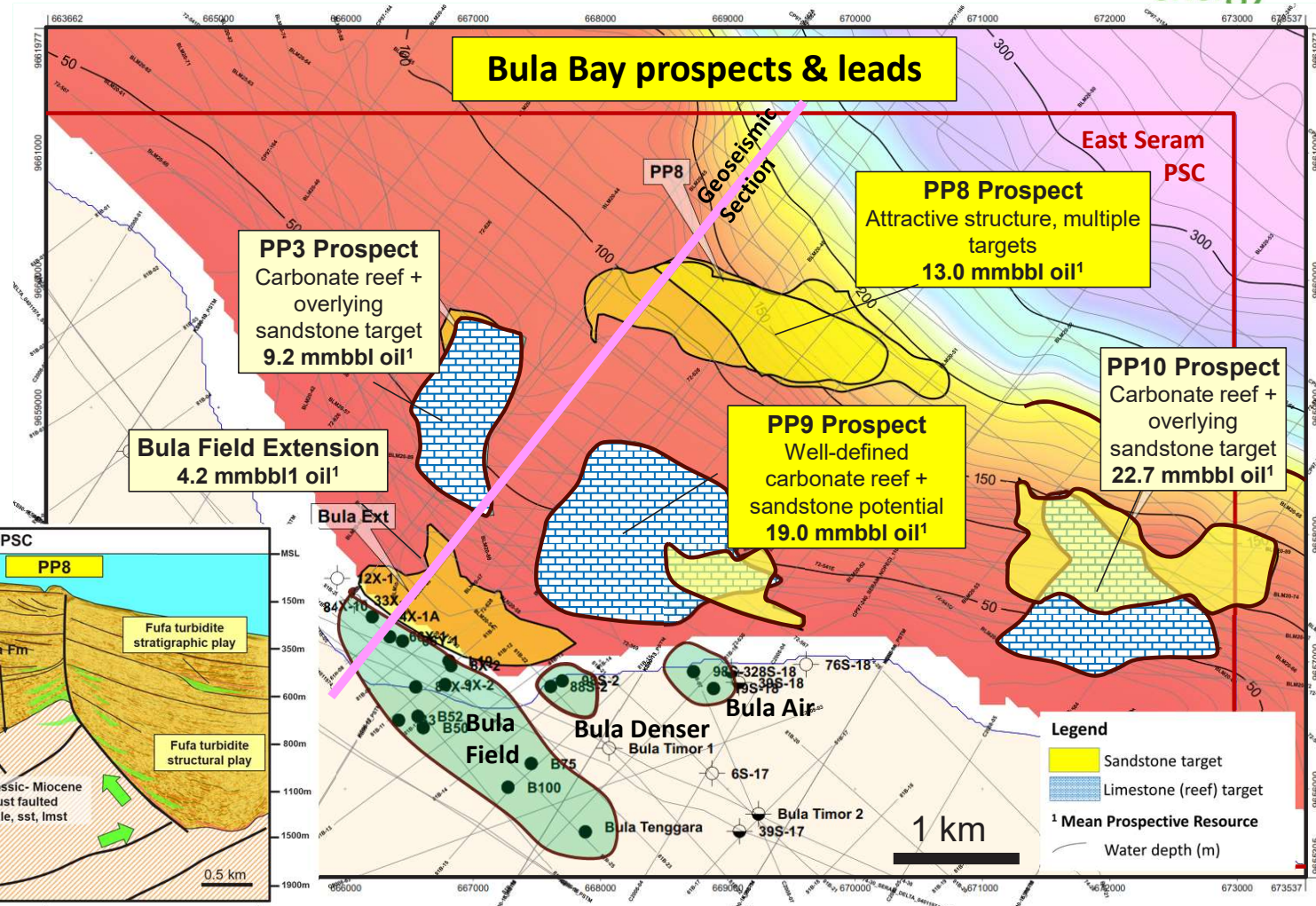
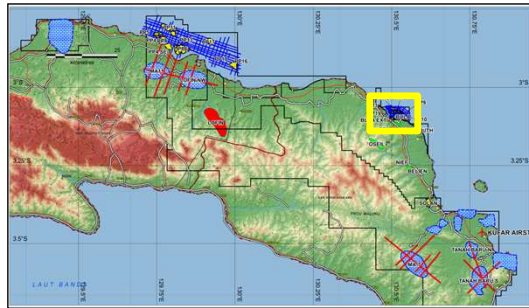
Lion operated Bula field 2000-2005

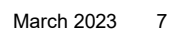
World-class fold belt structures, emerging Plio-Pleistocene play, Multiple targets with abundant evidence of present hydrocarbon charge



Prospects in Bula Bay area

2020 high-resolution data on 0.5km grid has uncovered highly attractive structures



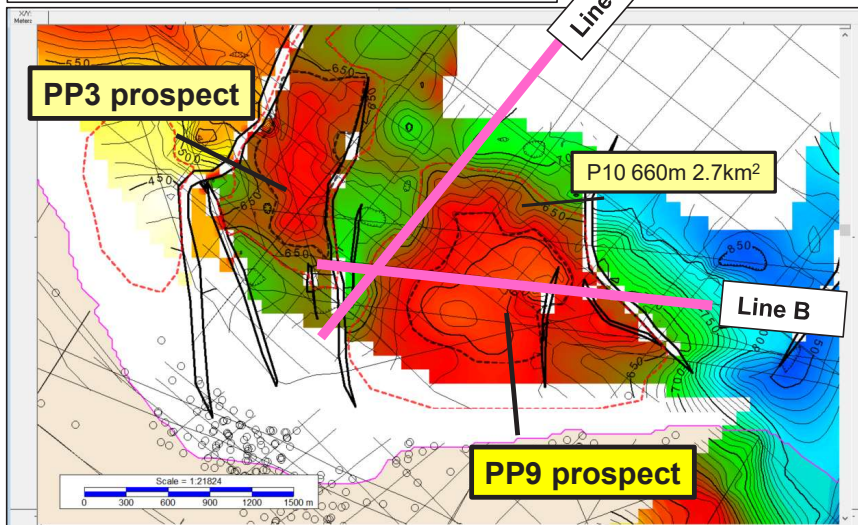


PP9 Prospect: 19mmbo¹

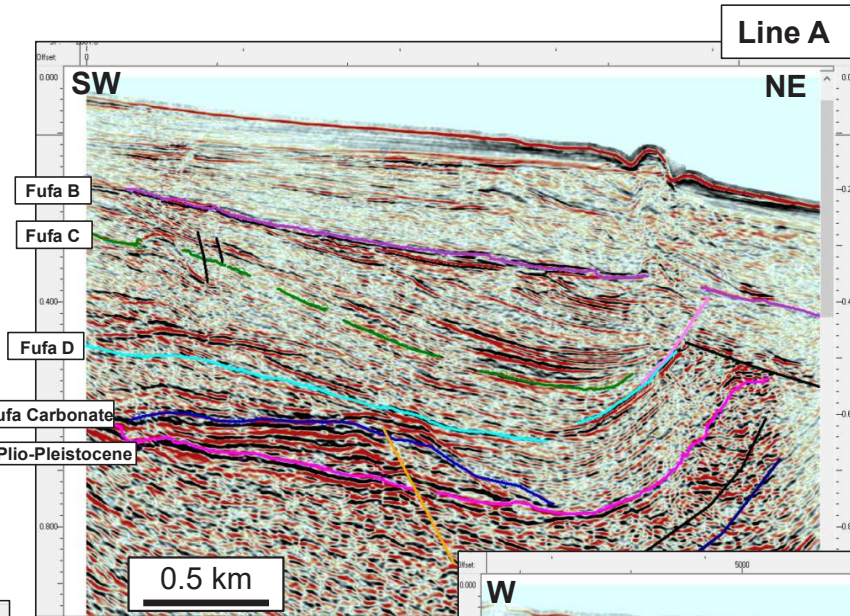
- Newly identified, well defined Plio-Pleistocene reefal buildup up to 2.7 km² with 80m relief
- Amplitudes in overlying Fufa C/D turbidite sandstones fault block
- Water depth 20-60m
- Reservoir depth ~600 mss

¹ mean prospective resource

Fufa Lower Carbonate Depth Map

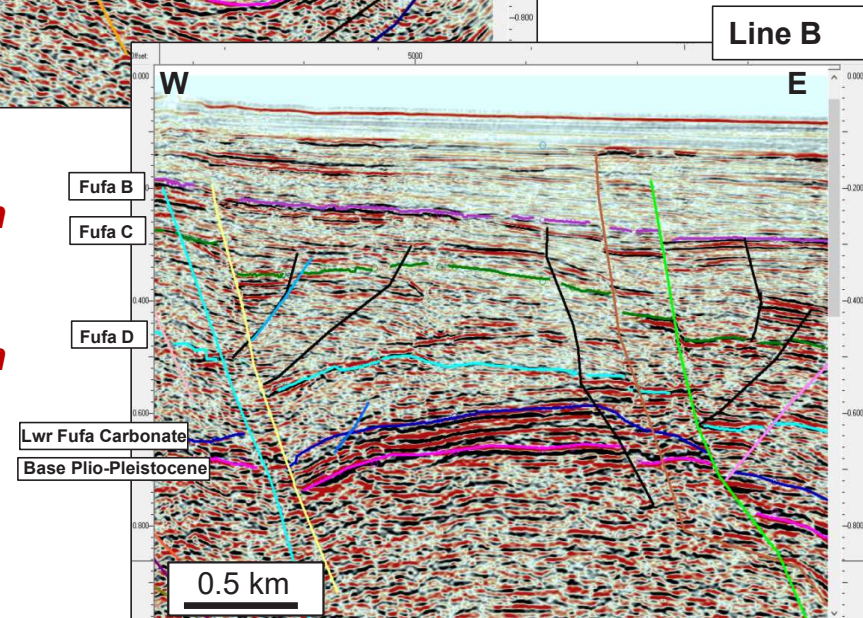


A New Approach to Asian Energy



Prospect can be drilled from onshore deviated well for ~USD 4mm

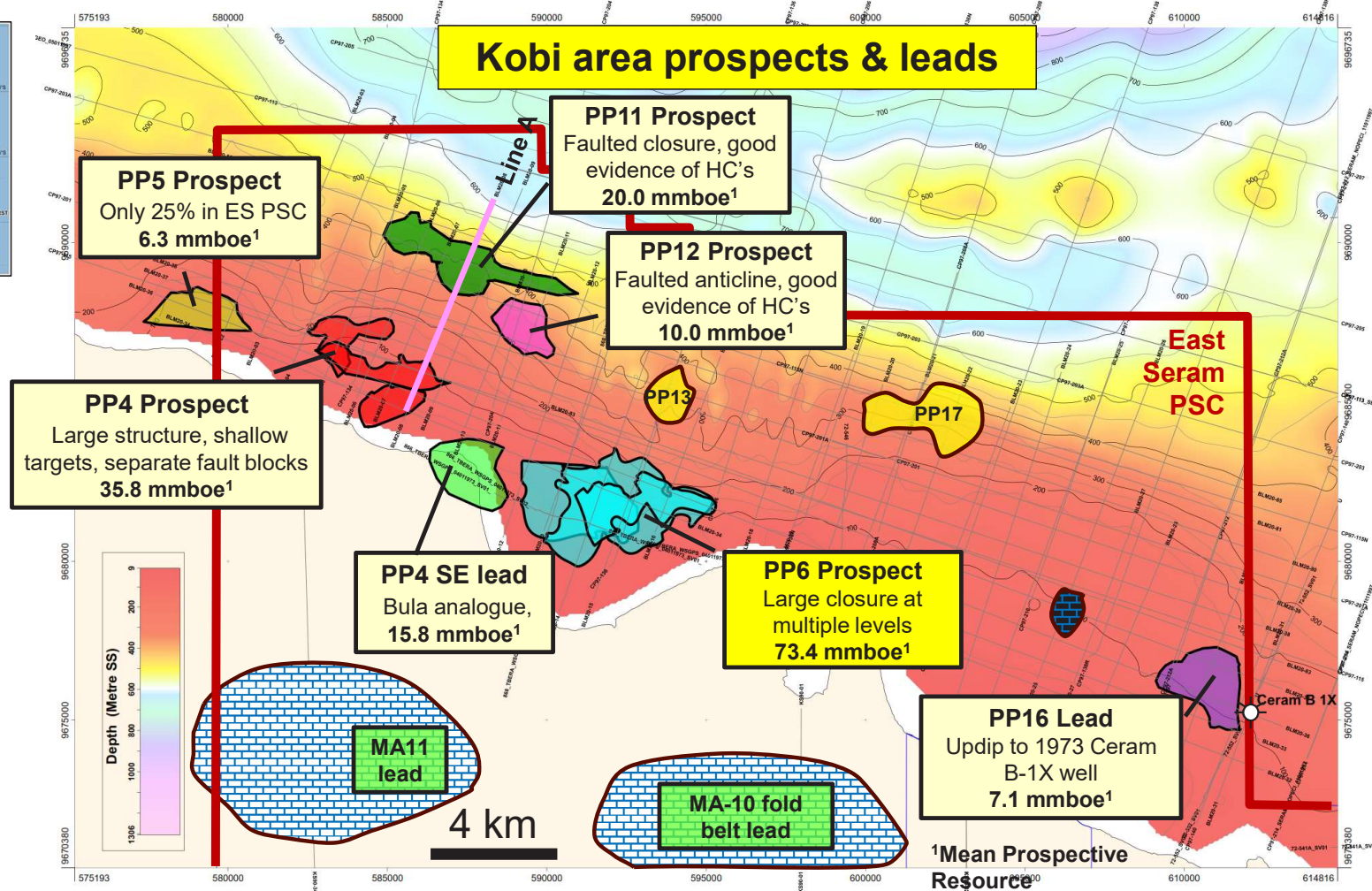
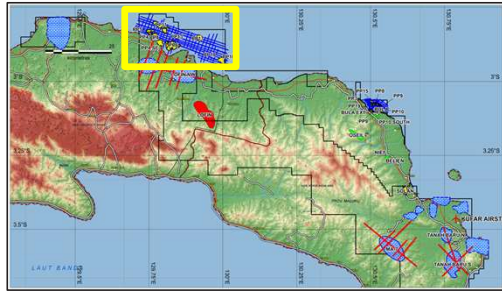
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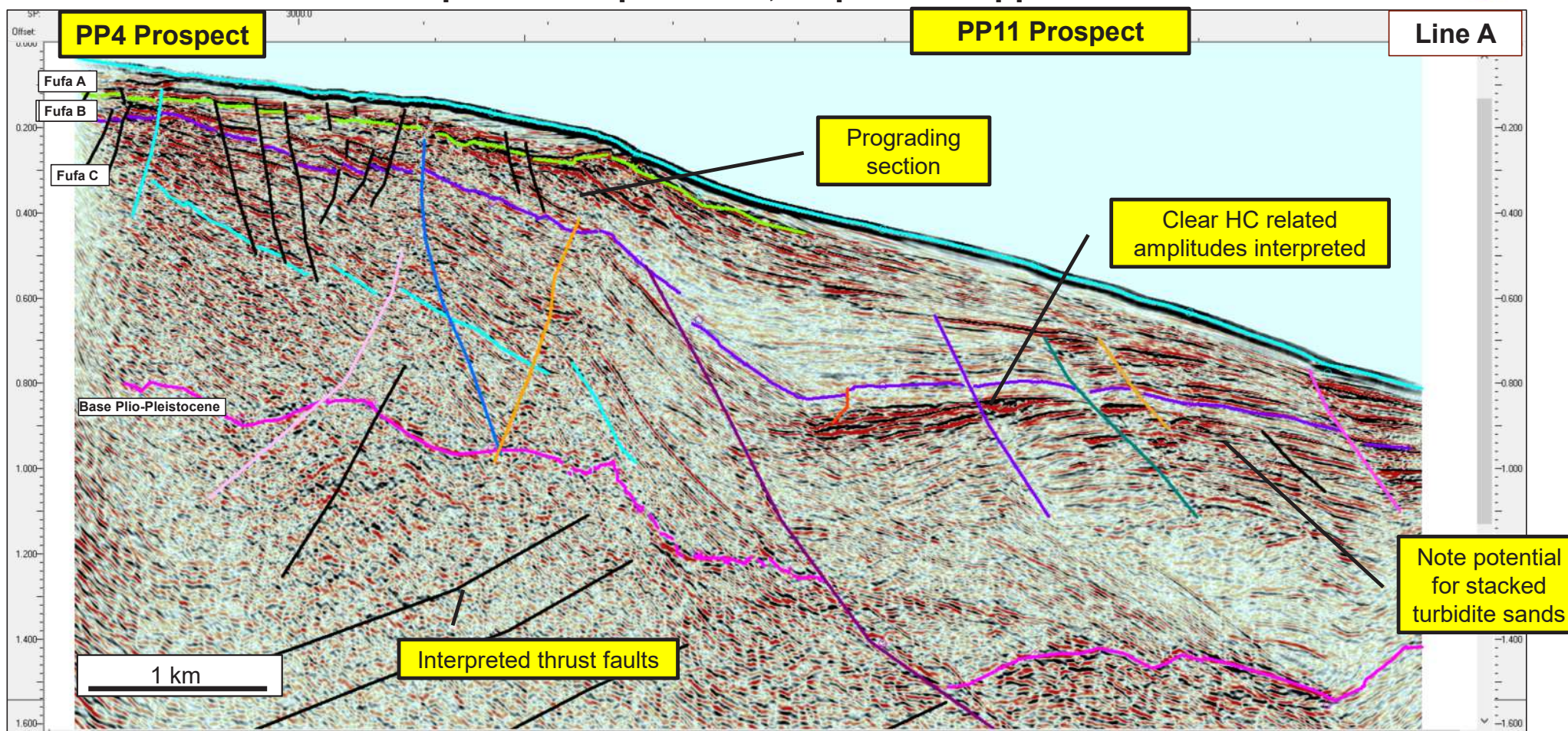
Prospects in offshore Kobi area

2020 data delineates shallow marine prospects, 20km² PP6 Prospect & DW amplitude play



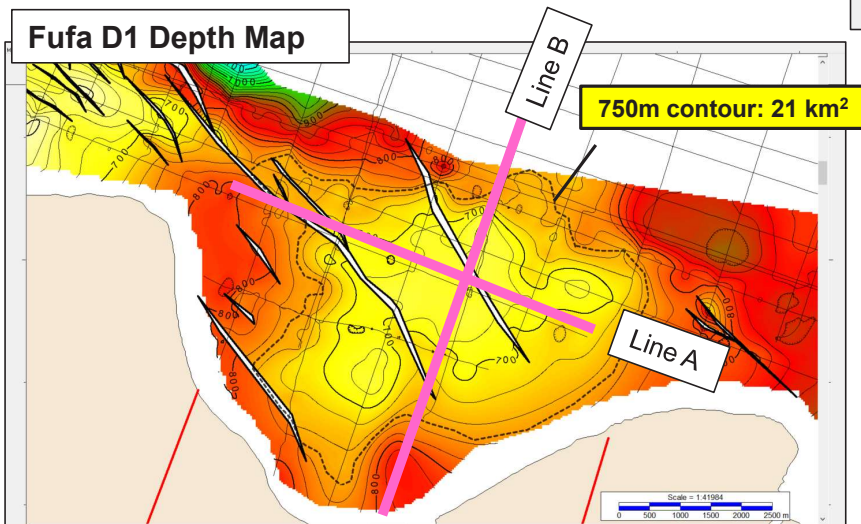
Kobi area NNE-SSW seismic line

Faulted shallow marine traps and deeper water, amplitude supported trend



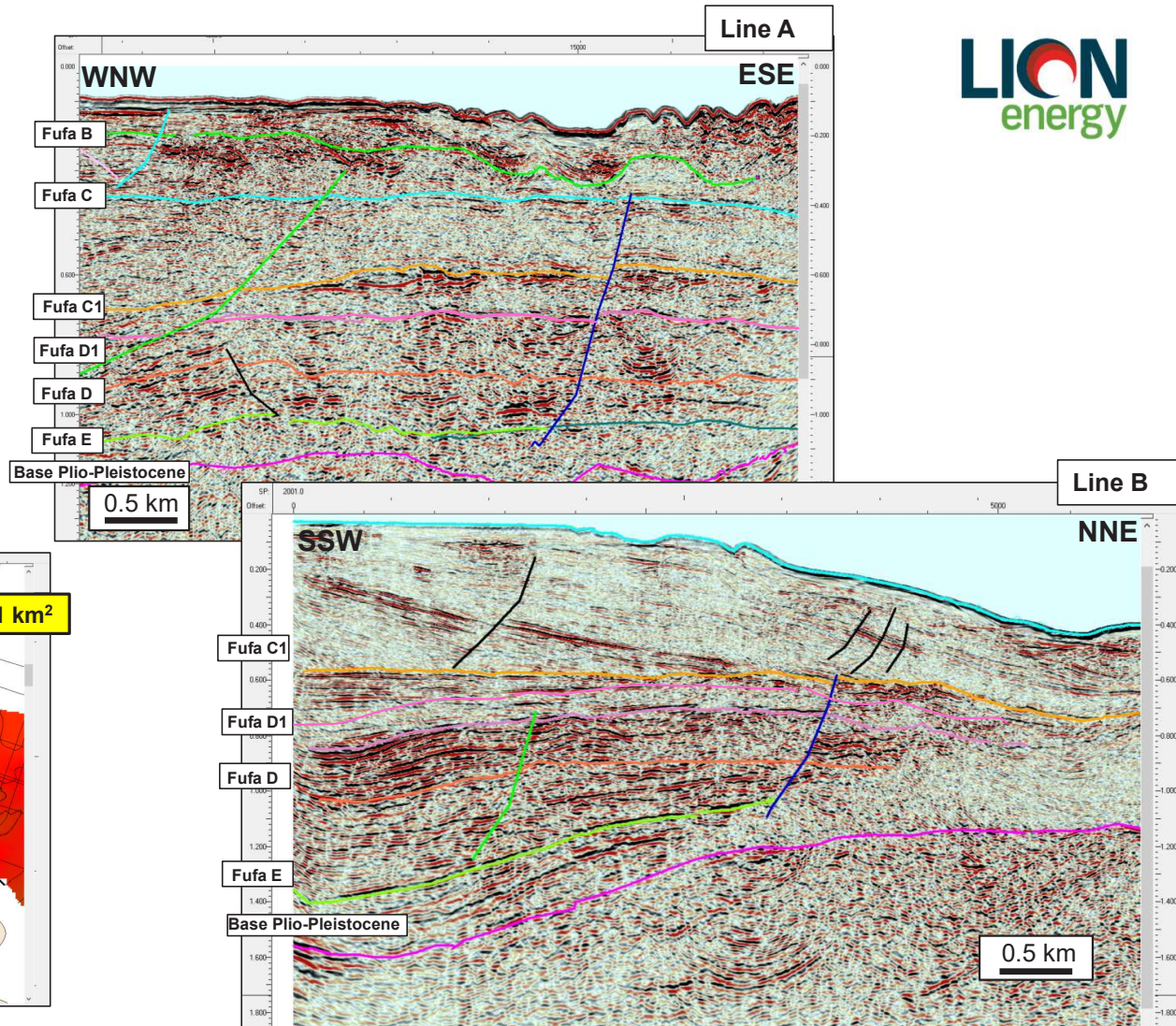
PP6 Prospect: 73 mmboe¹

- 4-way dip closure up to 20 km², 4 potential zones & 100m+ relief
- Good amplitudes response over crest of feature
- Channelised turbidite reservoir development
- Water depth: 50-150m
- Objective interval 550-1200 mss



¹ mean prospective resource

A New Approach to Asian Energy



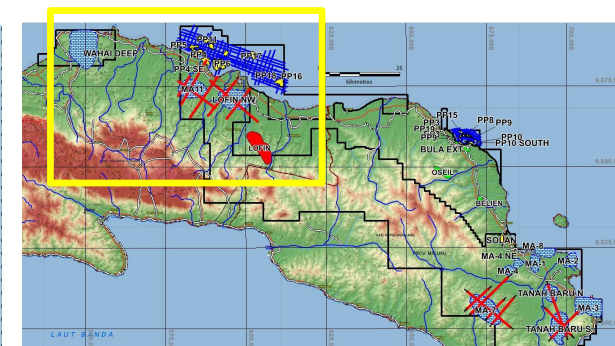
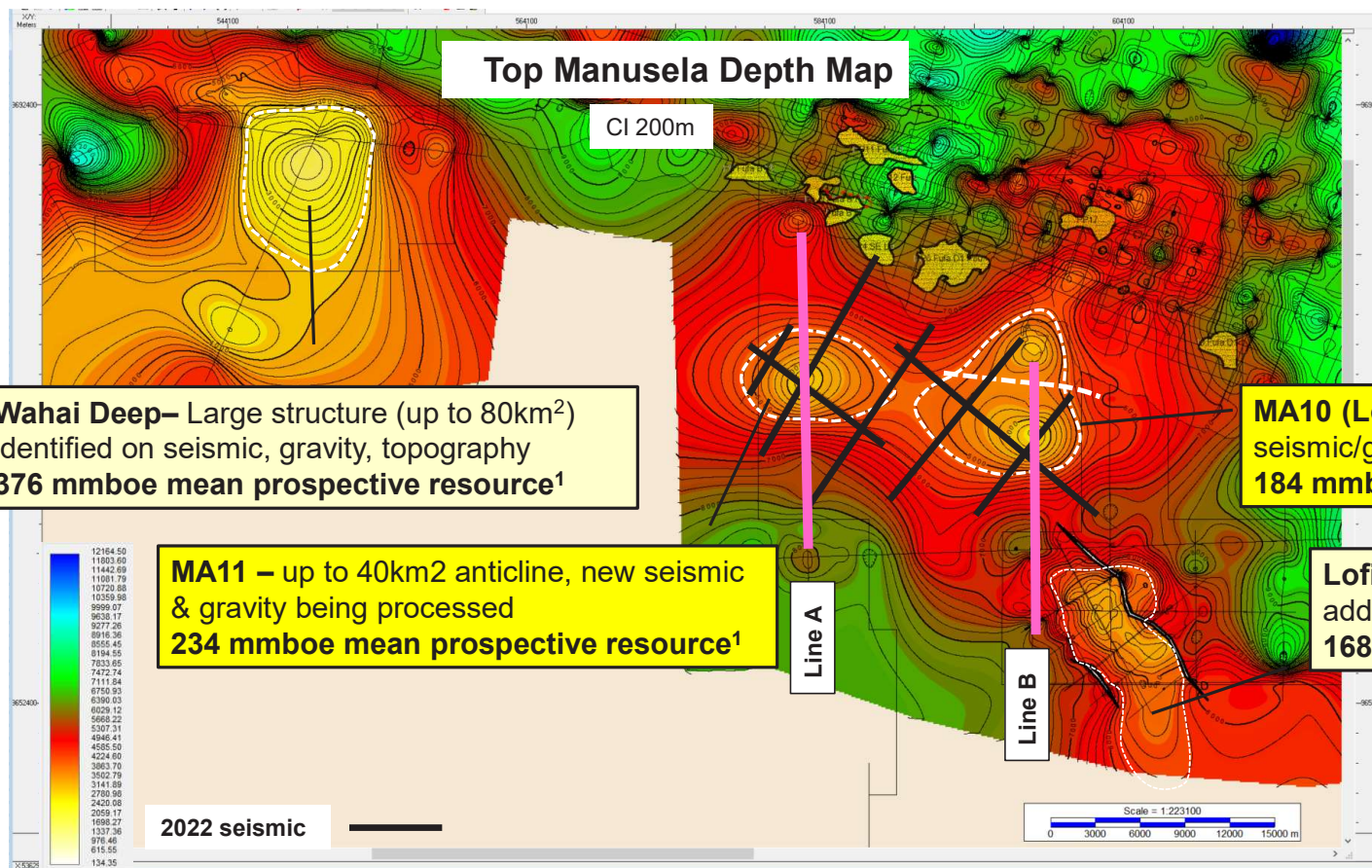
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Onshore Kobi area - large fold belt structures near Lofin Gas Field

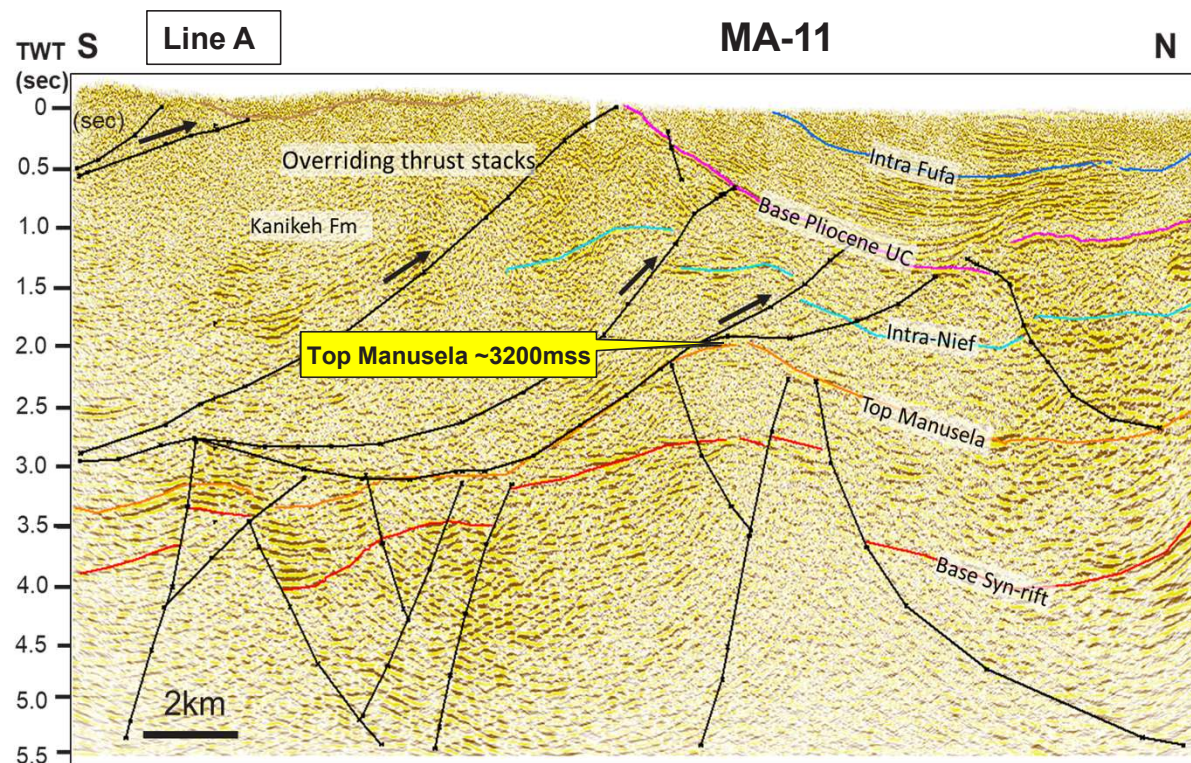


Impressive structures defined by seismic, surface mapping, gravity & topography, oil & gas seeps in area



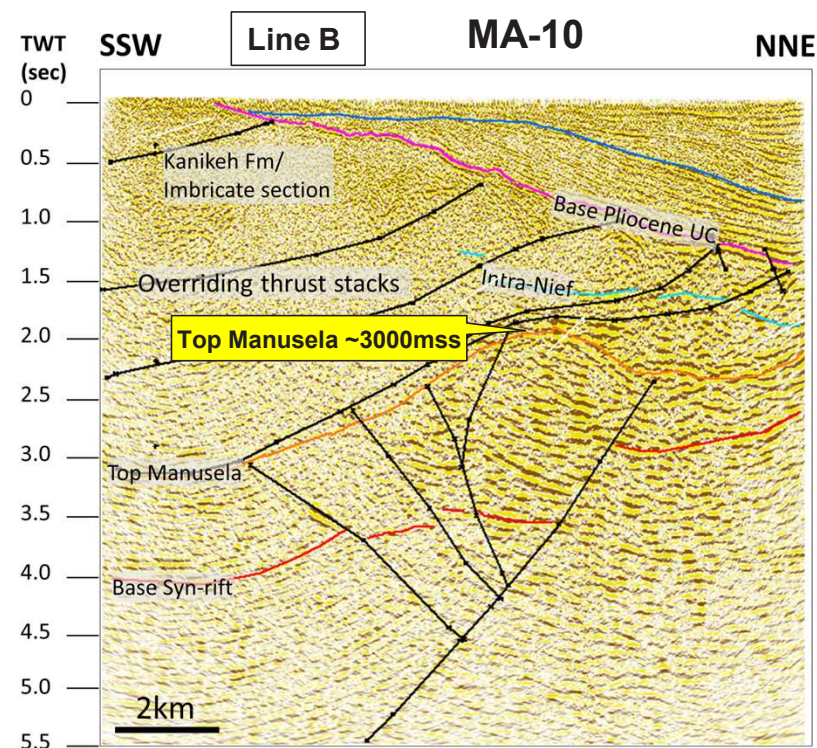
Onshore Kobi: key leads analogous to Lofin but shallower depth

2022 seismic & gravity program (7 lines) cover key leads, preliminary results positive



MA-11 Lead – up to 42 km² (+)

Prospective resource¹ 43 - 520 mmboe (P90-P10)

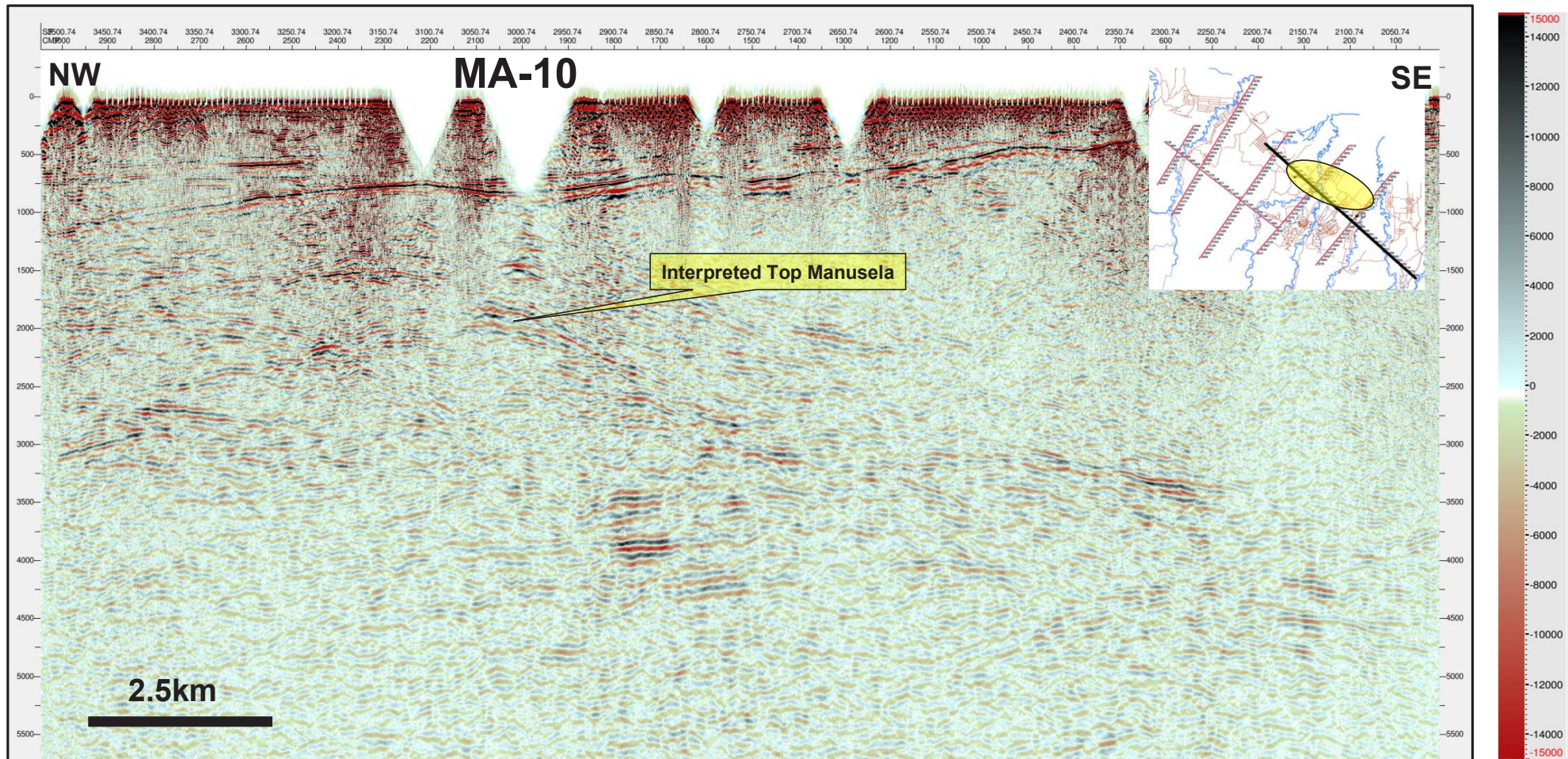


MA-10 Lead ~40 km²

Prospective resource¹ 39 - 417 mmboe (P90-P10)

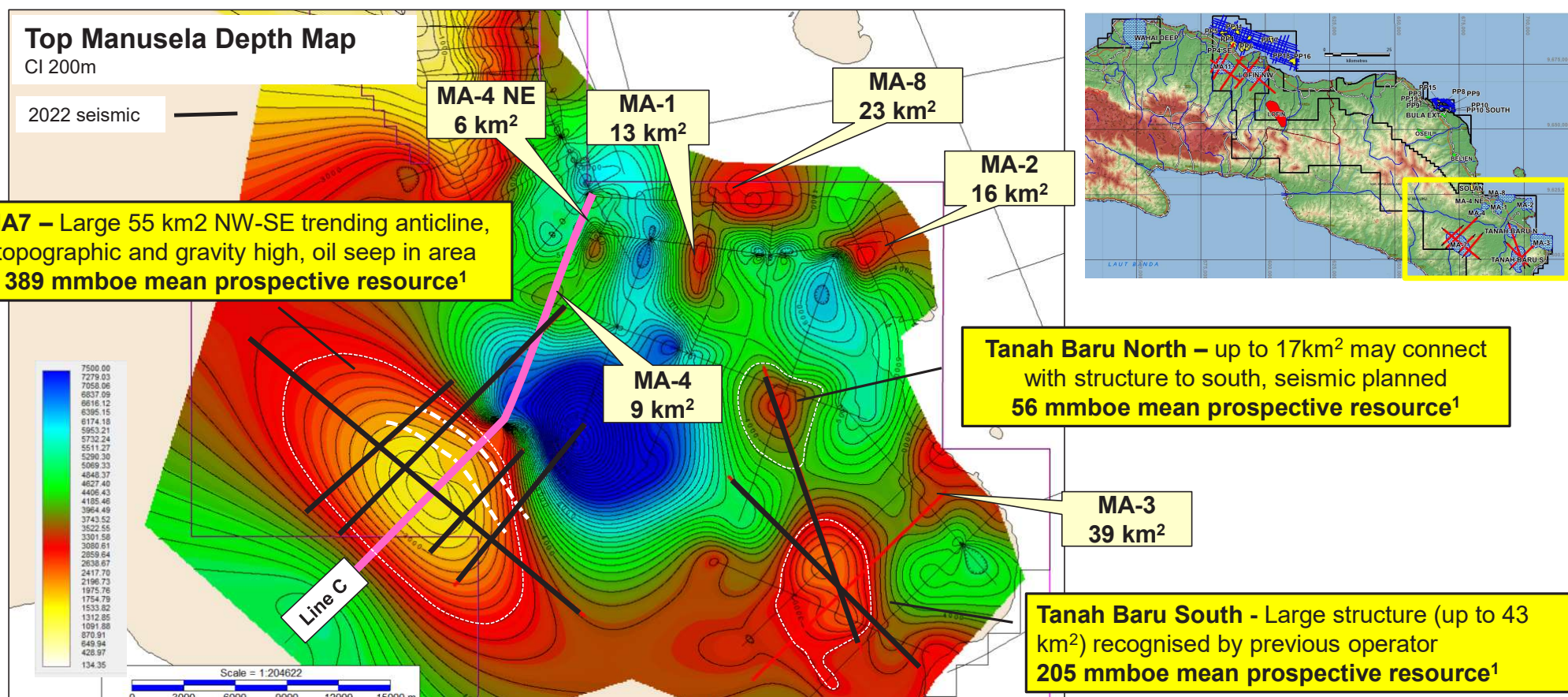
MA-10 Prospect - Line BLM22-107 early processing product

Analogous to Lofin field (Manusela at ~2900mss vs 4150mss at Lofin) – stay tuned!



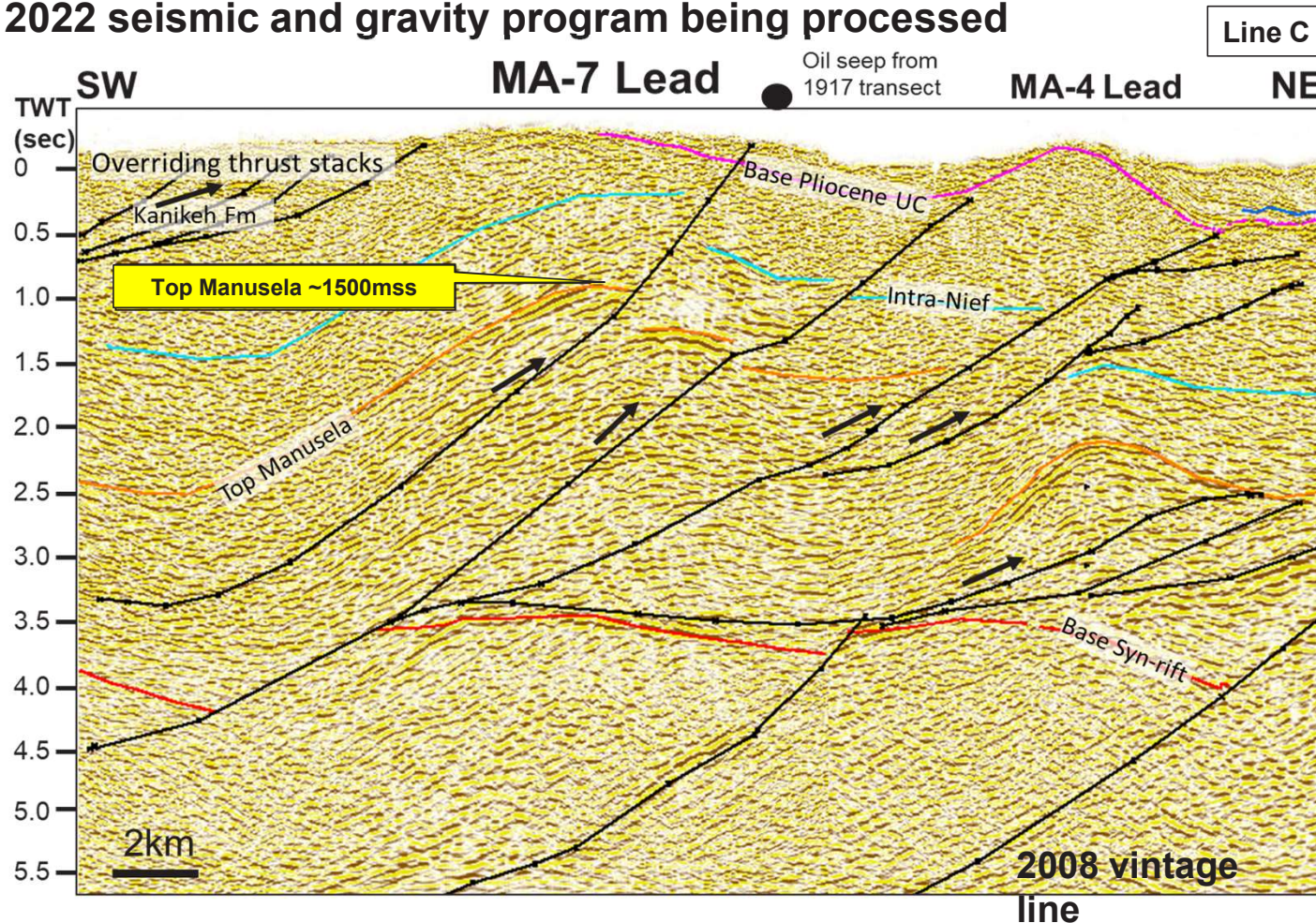
SE Area, large fold belts structure, analogues with Oseil oil field

Impressive structures defined by seismic, surface mapping, gravity & topography



SE Area of Seram fold belt play: MA-7 is standout structure

2022 seismic and gravity program being processed



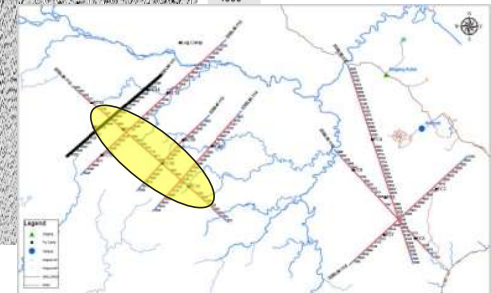
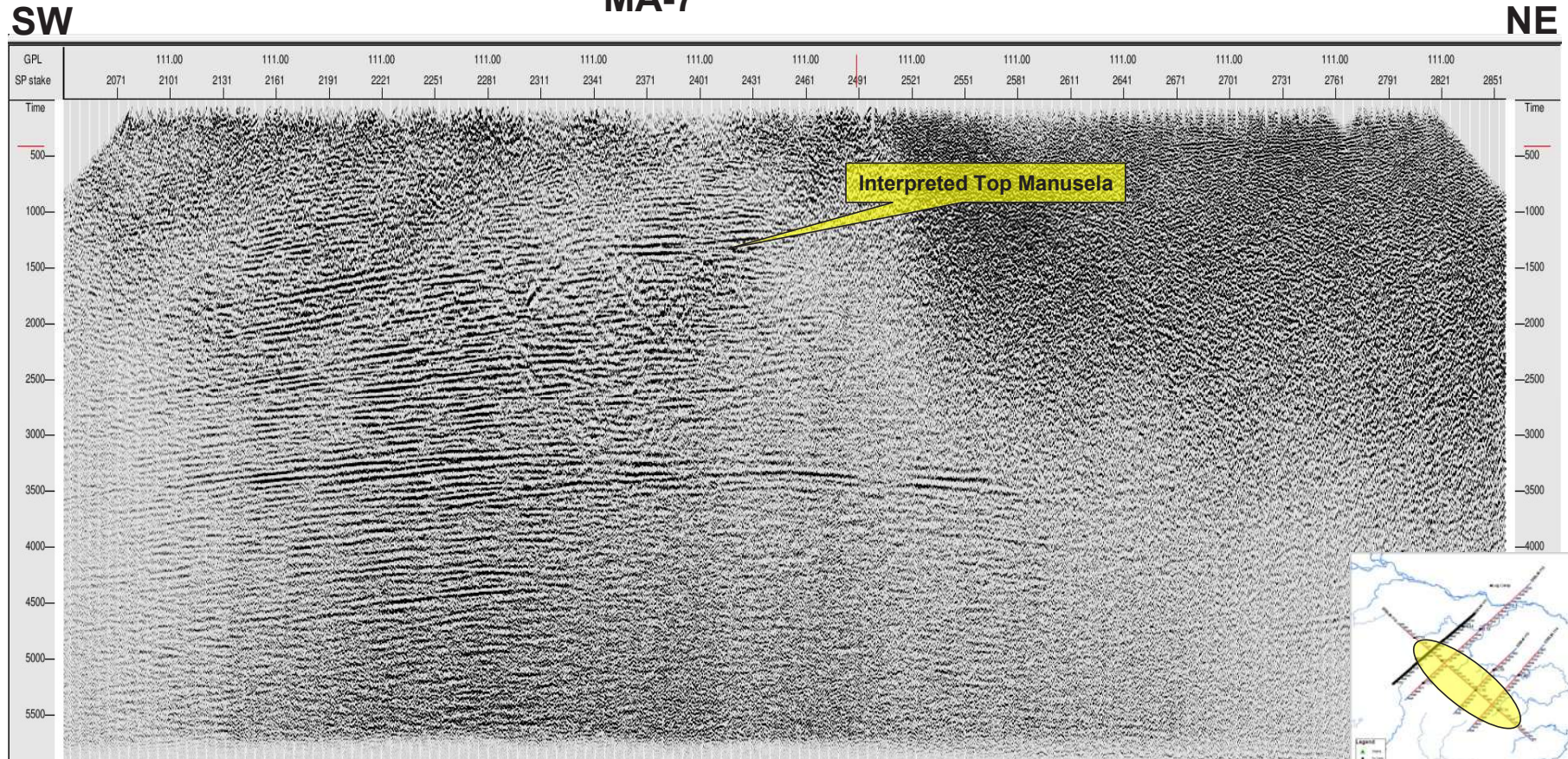
**MA-7 lead –
up to 55 km²
Prospective resource¹
45 – 1006 mmboe
(P90-P10)**

**Gravity & topographic
high, seeps in area
5 new lines confirm
structure**

¹Prospective Resource: 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. P90-P10 range given.

SE Area MA7 Prospect – BLM22-111 (field processing)

Clear fold belt high on seismic with gravity & topographic expression
MA-7



East Seram Investment Value Proposition

Up to 35% working interest available



Proven Basin, Immature Plays with High Prospectivity	<ul style="list-style-type: none">• Proven, underexplored fold-belt: new 2D data delineates major prospects• 2020 marine seismic has uncovered exciting new Plio-Pleistocene prospects• Impressive P&L portfolio exceeding 2 bboe (mean Prospective Resource)
Attractive Fiscal Terms Operating Flexibility	<ul style="list-style-type: none">• New Gross Split PSC with light handed regulation and operating flexibility, regulator approves work programs, not budgets or procurement• Contractor take after all tax at least 48%
Lion Data, Knowledge, & Insight Advantage	<ul style="list-style-type: none">• Unrivalled Seram data & knowledge from long history in Seram E&P• Strong relationships: experienced Indonesian team
Established Oil Production & Export Infrastructure	<ul style="list-style-type: none">• Bula and Oseil oil production facilities with capacity up to 21,000 bopd, significant ullage
Low Commitments & Low Cost Flexible Program	<ul style="list-style-type: none">• Modest signature bonus (US\$0.5mm) & performance bond (US\$1.5mm) - paid• Firm work commitment met (664 km marine 2D/200 km land 2D).• Up to 5 yrs left on exploration PSC, 20 yr production licence on discovery



Thank you!

**Please visit our poster display or for more
information contact**

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Testing of Lofin-2 well – Feb 2023