

# 2A PSC North Luconia - an undrilled giant

January 2024

**Exploration in Malaysia - new plays & a high impact drilling opportunity in North Luconia, 2A PSC**

Dr Pierre Eliet & Robert Pfau, Longboat Energy plc;

Azmir Zamri, Resource Exploration, Malaysia Petroleum Management,  
Petroleum Nasional Berhad (PETRONAS)



Longboat  
Energy

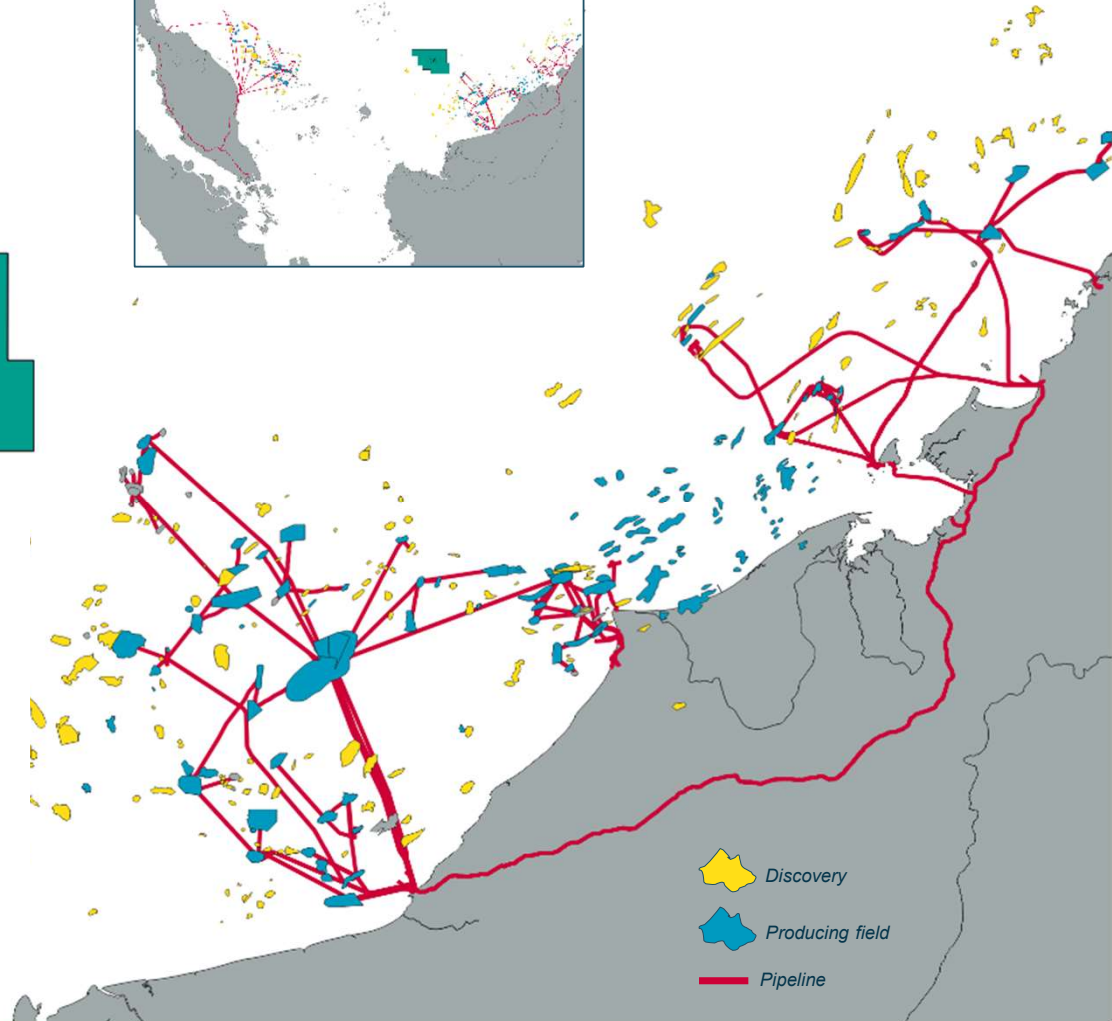
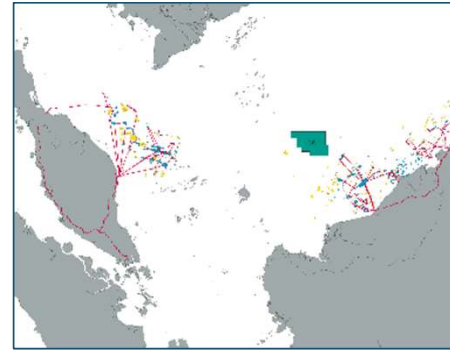
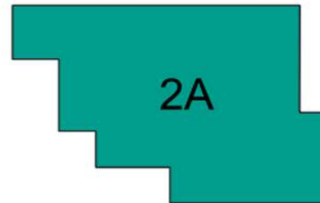


**PETRONAS**



# Malaysia Block "2A PSC"

Company	WI%
Longboat (Op.)	52.5%
Petronas Carigali	40%
Petros	7.5%



- Signed in Feb-23 as part of MBR2022 Awards
- Large exploration block offshore Sarawak
  - North of Prolific Central Luconia province, outboard & north of recent gas discoveries
  - Total block area 12,000km<sup>2</sup>, water depth 100-1,400m; 1,000m approx. at possible proposed well location
  - Initial anchor asset and part of a Malaysian growth strategy for Longboat

# Block 2A - an undrilled giant

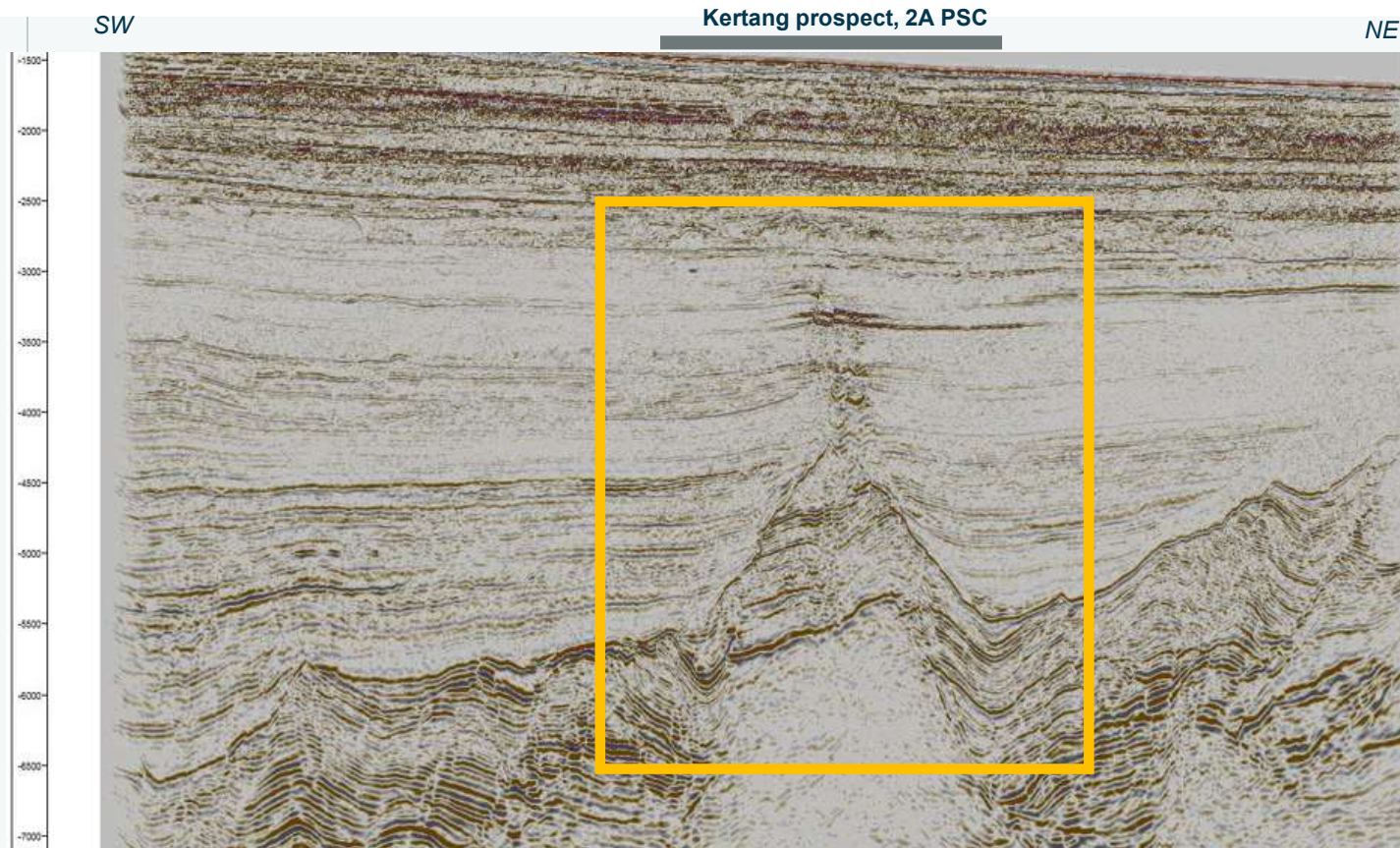


- **Block signed February 2023**
  - 5 year PSC (3 year phase 1 - studies, option to drop at end phase 1); 2 year phase 2 - drill one firm commitment well
- **Block awarded to the following partnership (new PSC signed 15 Feb 2023)**
  - Longboat Energy (52.5 & Operator)\*
  - Petronas Carigali (40%)
  - Petros (7.5%)
- **12,000 sq km deep water block, offshore Sarawak (North Luconia Province)**
  - Water depths 100m - 1,400 m (1,000 m at location over Kertang prospect proposed location)
  - Modern 3D seismic & PSDM (2015 CGG), large structural closures mapped
  - Geochem sea floor sample survey over main target (Kertang prospect)
- **Independent review of prospectivity underway**
  - Kertang approx. 8-10 TCF (CPR 2019), giant size prospect, updated CPR underway to reflect more technical work, over 200 sq km in areal extent at MMU closure
  - Gas clouds very evident (& similar to Kasawari gas cloud), amplitude brights at multiple levels
  - Geochemical analysis of sea floor sediments over prospect shows high Methane concentrations & very low CO<sub>2</sub> (Fugro 2019)
  - Petronas Machinchang-1 discovery (2023) in block to the south; reported as significant discovery in post MMU section.

\*Longboat holding in 2A PSC is held through two fully owned subsidiaries; Longboat Energy (2A) Limited (36.75% & Operator) and Topaz Number One Limited (15.75%)



# Kertang - a seismic line that speaks for itself



**Kertang prospect  
approx. 8-10 TCF\***

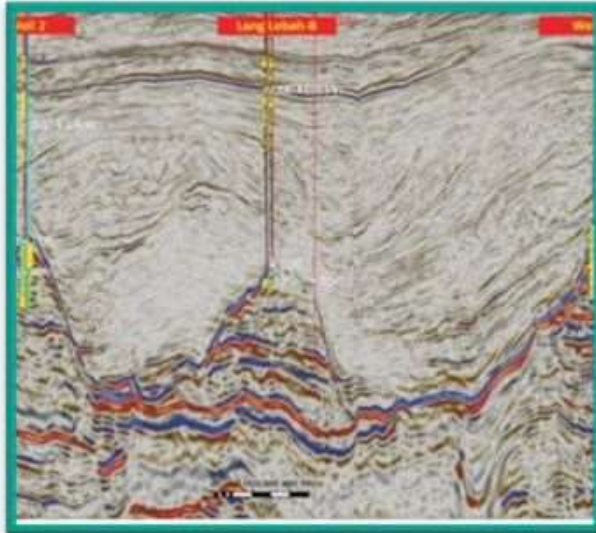
**material undrilled  
prospectivity**

***2A PSC, Sarawak, Malaysia. Kertang prospect; a large & high impact material gas prospect remaining undrilled in North Luconia province, Sarawak, Malaysia***



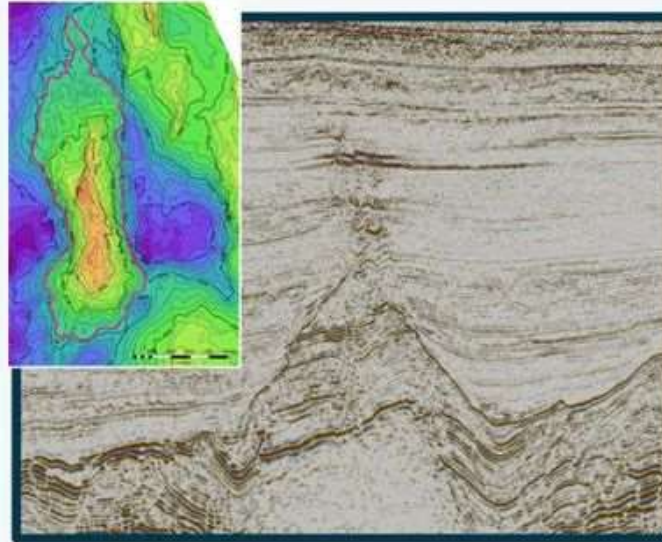
# Lang Lebah, Kertang (2A) & Kasawari analogues

## Lang Lebah (~5TCF)



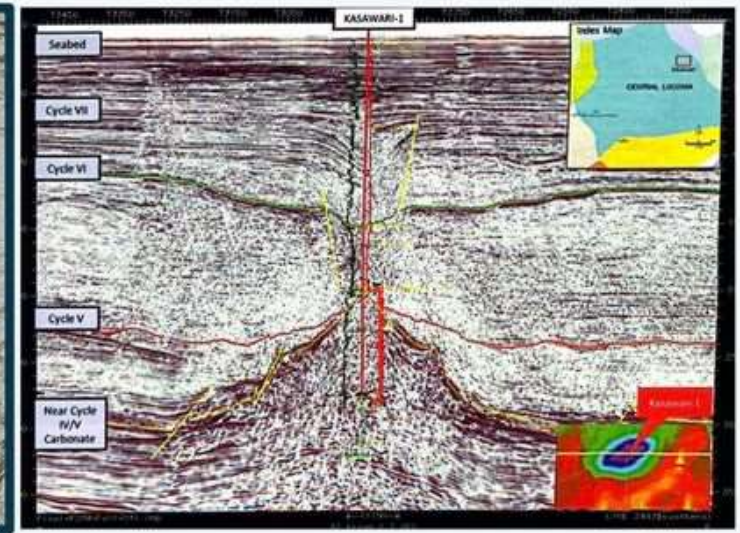
Source: Image from "Unravelling an abandoned giant in Central Luconia Province, offshore Sarawak Malaysia - success story of Lang Lebah". Aquilah Amir Jamalullail et al. *The Leading Edge*, August 2020.

## Kertang (?TCF)



200+ Km<sup>2</sup> four-way dip closure  
Multi-TCF potential in stacked reservoirs  
Excellent 3D seismic data set, clear DHIs  
5-year work programme (3+2), firm well in 2nd phase

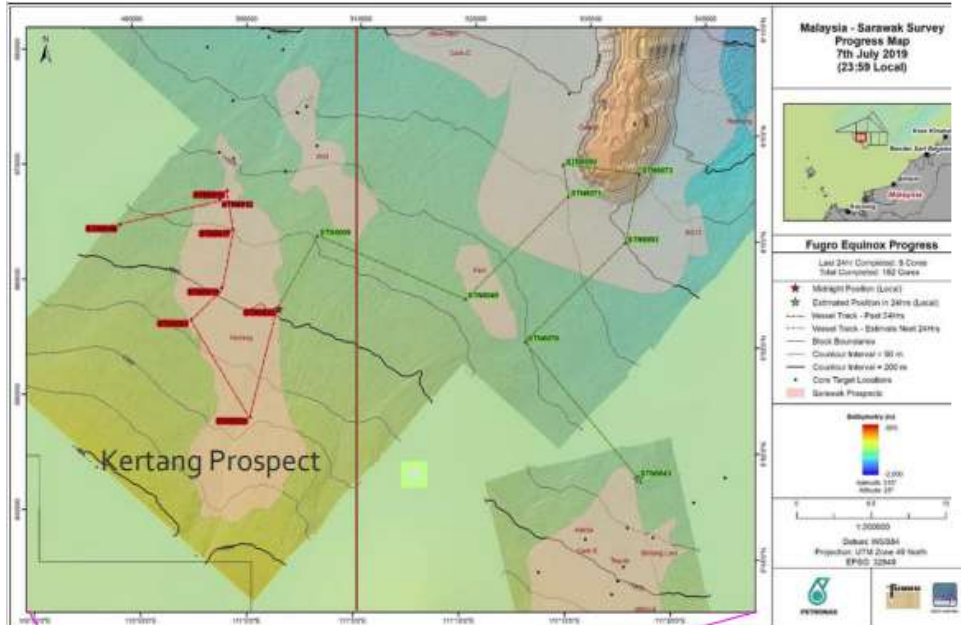
## Kasawari (~6TCF)



Source: Geophysical applications in Malaysian basins", PETRONAS, 2019, in co-operation with EAGE

Lang Lebah & Kasawari - major recent Malaysian discoveries; both fields are progressing to development and will provide feed-gas to Bintulu LNG in Sarawak, Malaysia

# 2A PSC - seabed Geochem & sampling



*A seabed geochem and detailed bathymetry survey carried out by MPM & Fugro in 2019*

*Nine drop cores over Kertang structure; high methane in samples*

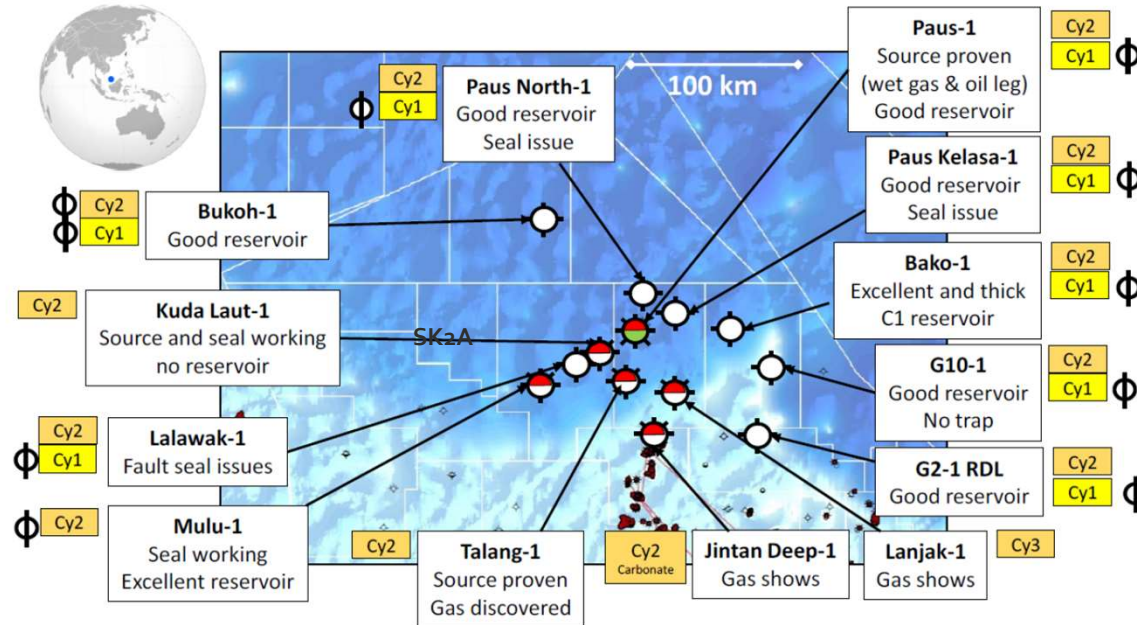
Survey Vessel: *Fugro Equinox*  
Survey commenced as reported: July 2019





# Database - Offset wells - reservoir & source proven

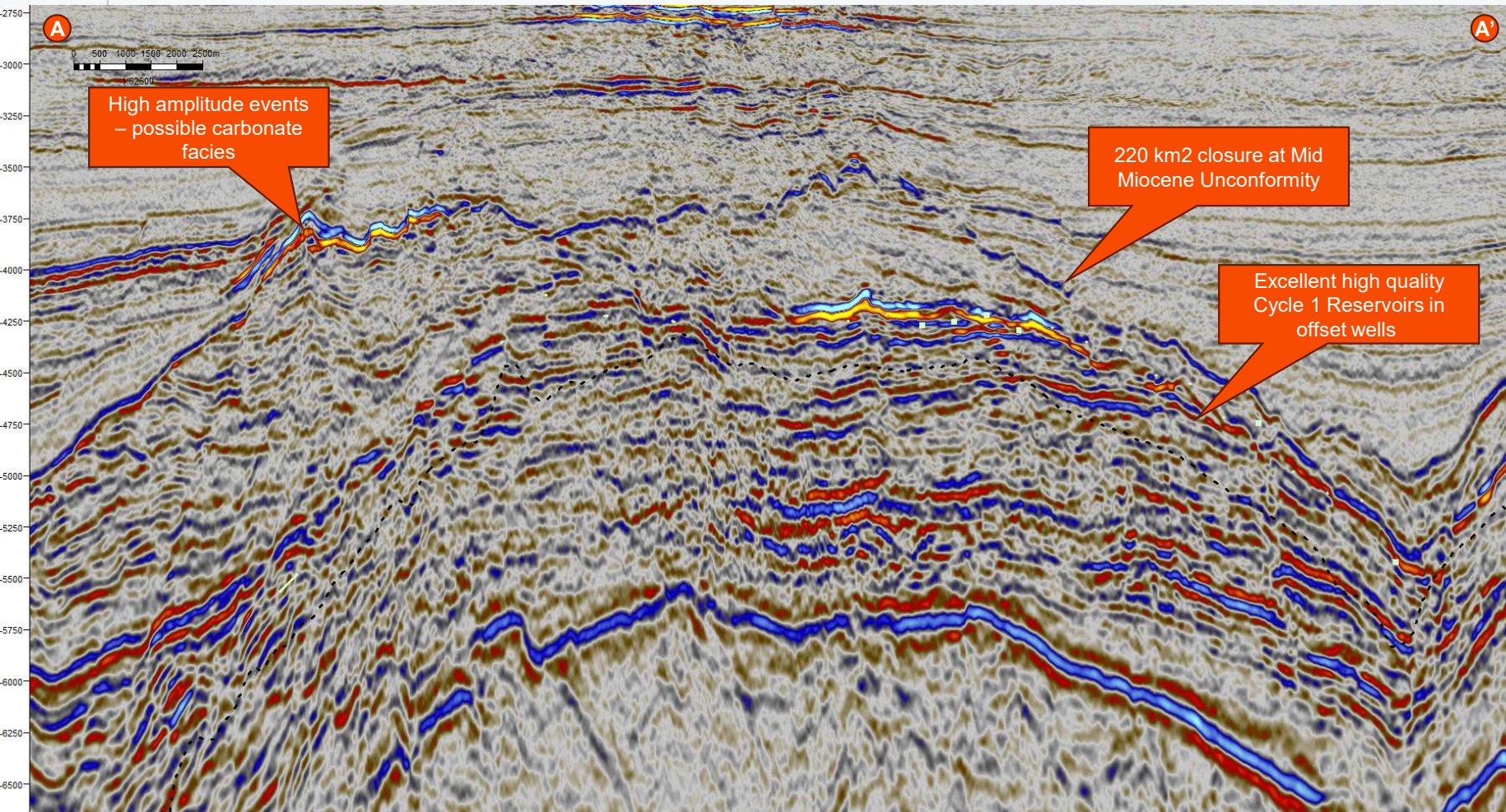
- SK2A offset wells
- Offset well results significantly de-risk Cycle I & II clastic plays for reservoir presence and source presence
- Good reservoir encountered in Paus, Paus North, Paus Kelasa, Kekek, Mulu and Bukoh in Cycle I and Cycle II/III clastics.
- Significant nearby gas & oil discoveries at Paus (90km) and Talang gas discovery (70km)
- **Extensive & high quality well database de-risking the play**



From Lorenzen, APGCE Abstracts 2017, Prospect Analysis in North Luconia, Deepwater Sarawak.



# Kertang prospect detail - North-South



Age (Ma)	Period/ Epoch	Sub-Period	Age	Group Cycle (Ho K. F., 1978)	Lithology
0 - 2.6	Quaternary	Quaternary	Quaternary	Cycle VIII	Quaternary
2.6 - 5.3	Pliocene	Late Pliocene	Cenozoic	Cycle VII	Pliocene
5.3 - 2.6		Early Pliocene	Zenozoic	Cycle VI	
5.3 - 23.0	Miocene	Late Miocene	Messinien	Cycle V Upper	Miocene
23.0 - 16.0		Tortonian	Cenozoic	Cycle V Lower	
16.0 - 5.3		Middle Miocene	Saravali	Cycle IV	
5.3 - 23.0	Early Miocene	Lampiran	Cenozoic	Cycle III	Early Miocene
23.0 - 5.3		Burdigali	Cenozoic	Cycle II	
23.0 - 2.6	Oligocene	Late Oligocene	Challien	Cenozoic	Oligocene
2.6 - 23.0		Early Oligocene	Rupelian	Cycle I	
23.0 - 65.0	Eocene	Late Eocene	Prionian	Basement (Eocene to Basement)	Eocene

