Melbana Energy

ÚLTIMOS RESULTADOS DE LA EXPLORACIÓN PETROLERA EN EL BLOQUE 9 (MARTI-CORRALILLO)

XI Convención y Exposición de Ciencias de la Tierra (Geociencias 2025): “Geociencias al servicio de la Sociedad y el Desarrollo”. La Habana.

7-11 de abril de 2025

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Contingent and Prospective Resources: Unless otherwise specified, the information that relates to Contingent Resources and Prospective Resources for Melbana is based on, and fairly represents, information and supporting documentation compiled by Mr. Peter Stickland, who is a Director of the company and has more than 30 years of relevant experience. Mr. Stickland is a member of the European Association of Geoscientists & Engineers and the Petroleum and Exploration Society of Australia. Mr. Stickland consents to the publication of the resource assessments contained herein. The Contingent Resource and Prospective Resource estimates are consistent with the definitions of hydrocarbon resources that appear in the Listing Rules. Conversion factors: 6 Bscf gas equals 1 MMboe; 1 bbl condensate equals 1 boe; "MMstb" means million stock tank barrels of oil.

Prospective Resources Cautionary Statement (PRCS): 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. Future exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

Snapshot of Melbana's core value proposition

World Class Onshore Oil Discovery in Block 9 - Cuba

- Block 9 encompasses 2,344 sq. kms onshore Cuba adjacent to existing oilfield infrastructure
- Three vertically stacked reservoirs discovered by Alameda-1: Amistad, Alameda, and Marti
- The shallowest reservoir (Amistad) alone hosts a 1,439 meters gross oil column
- Certified prospective mid-case resource of 5 billion barrels in place and 267 mmbbl (2U*)

Attractive Production Sharing Contract & Location

- Valid until 2040
- No royalties, attractive fiscal terms
- Downside protection: cost recovery – breakeven oil price v. low
- Long term relationship with regulator
- Adjacent to 11,000 mmbbl OOIP Varadero field that has produced >200 mmbbl to date and is still producing

Phased Development Plan

- Shallow reservoir certified resource: 46 mmbbl (2C) & 122 mmbbl (2U)
- Amistad Unit 1B: API 19°, Sulphur 2.7%
- Phase 1 FDP: oil trucked to port for export
- First oil production aimed for end 2024
- 7 new wells to drill to target 16 mmbbl
- Future wells planned post 3D seismic

Low-risk, Large-scale Opportunity

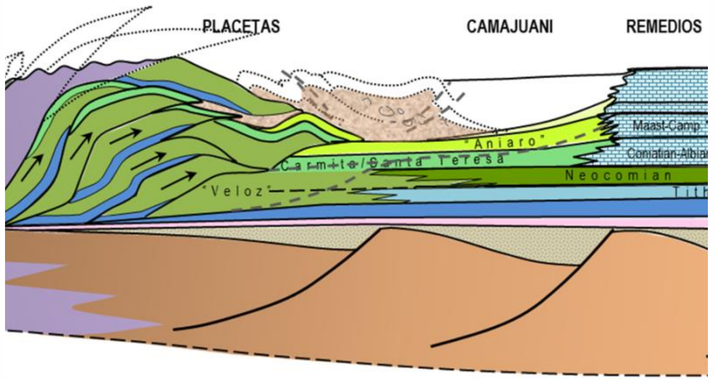
- Oil traders open to offtake / credit options
- New wells will be funded out of production
- Aim to ramp up significantly with new wells
- Goal is 5,000 bopd in 2025
- Additional upside from deep drilling and exploration
- 18 identified prospects and leads
- Long term future for Melbana in Cuba
- Potential to expand beyond Cuba

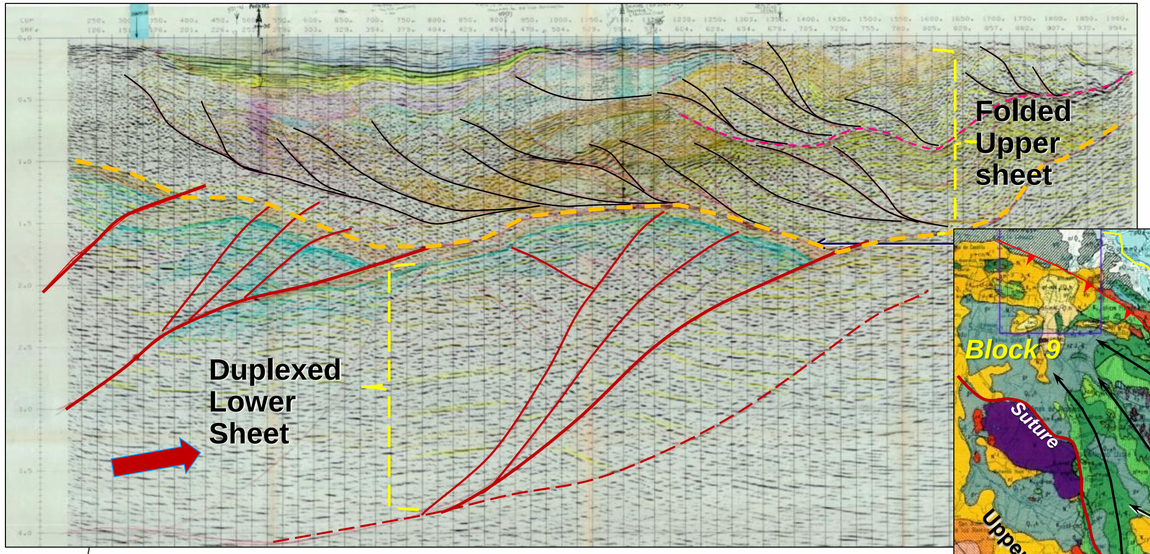
MAY exploring funding options (farm-in and oil trader credit facilities)

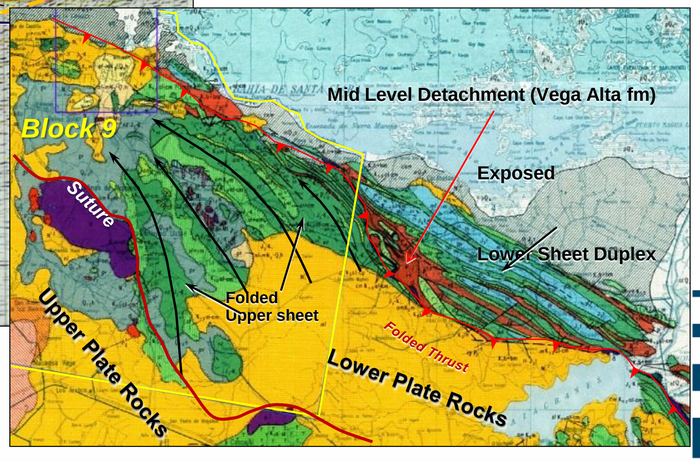
* 2U = best estimate gross prospective resource

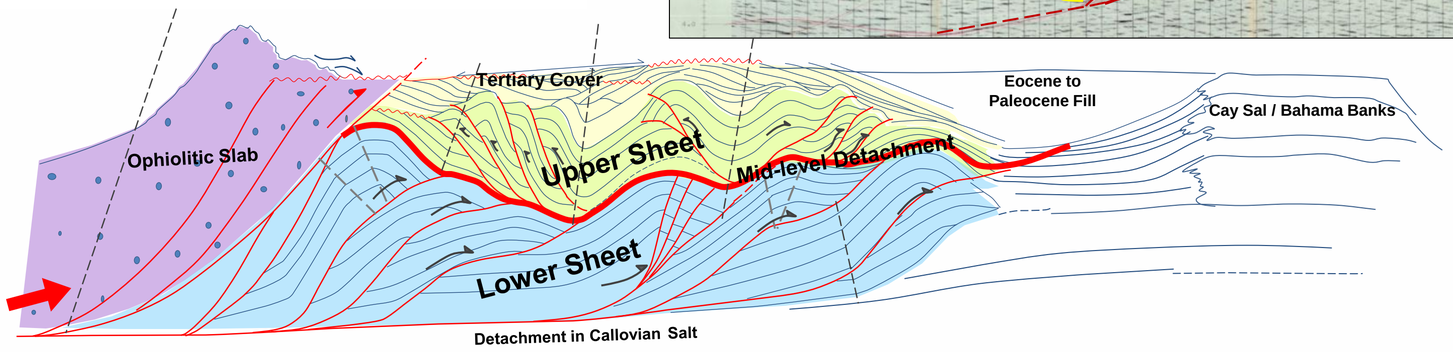
Cuba Block 9 : structural model on country entry

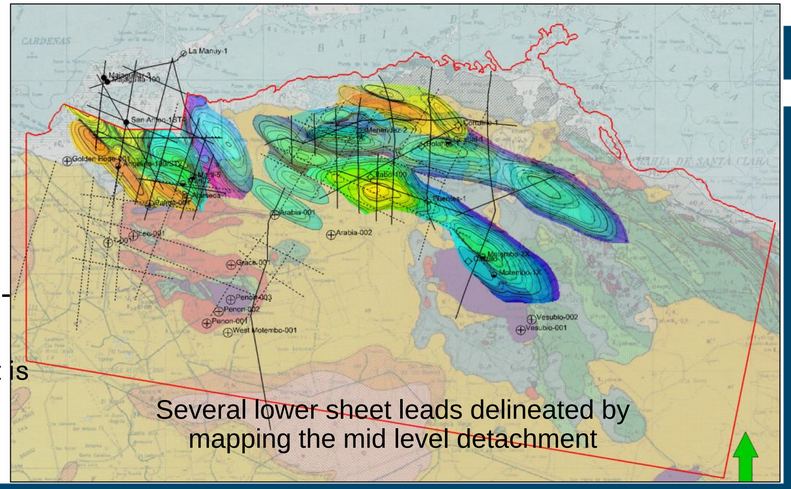
Arc/Continent collision rolls up the carbonate succession into FTB











Basic elements: Concept of a mid level detachment separating a highly deformed upper sheet emplaced by a duplexed lower sheet .

Upper Sheet: composed of distal carbonate facies, highly imbricated and back-thrusted. Seems to be composed of at least 2 sub-sheets.

- Lower Sheet: A thicker, more simply deformed sheet comprised of more proximal, better quality carbonate reservoir. This sheet is duplexed by a blind thrust slices into the mid level detachment. Antiformal stacks are seen on seismic.
- The Mid level Detachment is expected to contain Vega Alta - Olistostrome sea floor facies - a top-seal for deeper structures.

Cuba Block 9 : asset description

- The Block encompasses 2,344 sq. kms in a single onshore PSC.
- Block 9 PSC is close to significant oil field Varadero (c. 11 billion barrels of OIIP) with c. 200 mmbbl produced (~14 kboepd at low operating cost of ~USD10/bbl) (*).
- A deep-water port, Matanzas, with an oil terminal is within 75km of Block-9 and there also is an international airport within 40km.
- Easy access to workforce: Block 9 is approximately 5km east from Cardenas city which has a population of c. 100,000 people.

Upper view of northern Cuba.

Timeline

2013
- Prequalified as Operator.
- Identified Block 9 as preferred opportunity.

2015
- Melbana Energy awarded Block 9 PSC.

2016
- Opened the Havana office.
- Appointed experienced ex-CUPET country manager.

2017
- 2D seismic acquisition.
- Geological data aggregation.
- Synthesis of structural model.

2020 / 2021
- Sonangol farm-in.
- Drilled Alameda-1, Zapato-1.
- Alameda-1 discovered oil in 5 zones.

2022 / 2024
- Drilled Alameda-2 and Alameda-3.
- Alameda-2 flowed at up to 1900 bbl/d.
- Amistad Unit 1B FDP in progress.
- Preparing Alameda-2 acid stimulation.

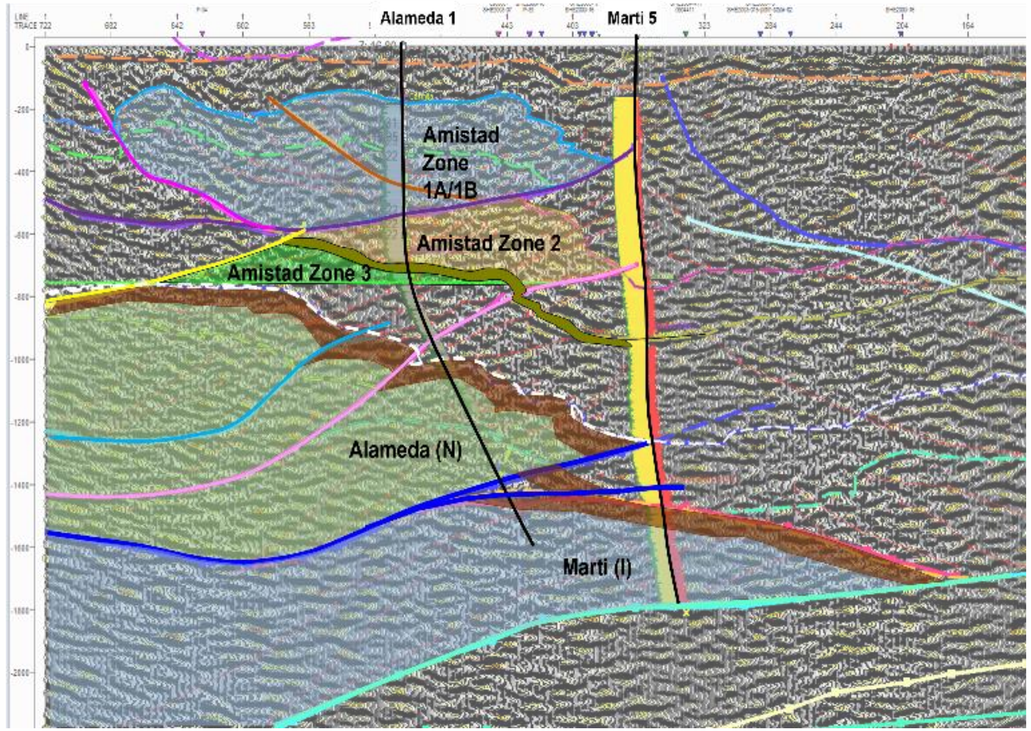
(*) Source: Sherritt International Corporation Year End 2017 Results.

Early success

Alameda-1 (TD of 3,916 mMD) intercepted three geologically independent reservoirs, each with moveable oil under high pressure, that were subsequently independently assessed[1] to contain oil in place of over 5 billion barrels

Total
267
million barrels

Amistad 1, 2 & 3	Alameda	Marti
88	109	70
million barrels	million barrels	million barrels



Prospective Resources as at 1 August 2022* (gross unrisked, millions of barrels)

Objective	Low	Best	Mean	High
Amistad 1, 2 & 3	30	88	119	240
Alameda	34	109	148	297
Marti	21	70	95	197
TOTAL	85	267	362	734

Original 88 mmbbl prospective resource figure for the Upper Sheet Amistad Units 1, 2 and 3 has subsequently been re-evaluated in light of the outstanding results of Alameda-2.

Alameda-3 targetted the 179 mmbbl resource identified from Alameda-1

[1] McDaniel & Associates, Competent Persons Report August 2022

*See Prospective Resources Cautionary Statement on page 2

Appraisal wells

First Appraisal Well

Alameda-2

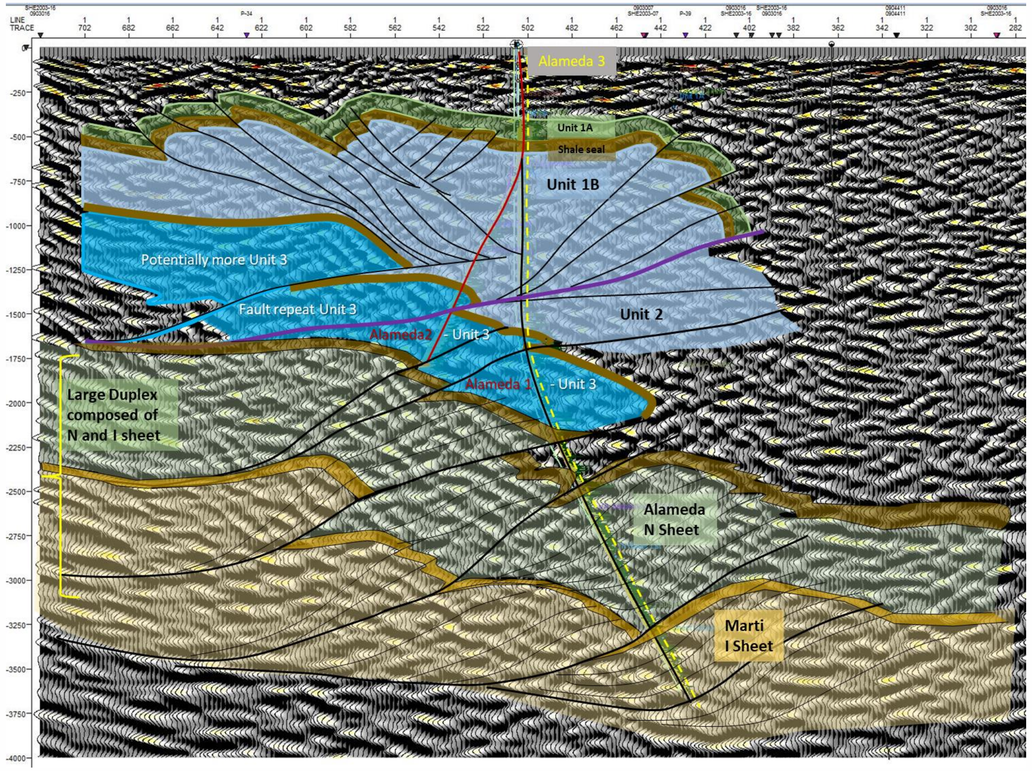
- Goal was to log, core and test all three units of the Amistad formation, intersected during the drilling of Alameda-1 between 450m and ~2,000m, targeting 88 million barrels of Prospective Resource *
- Alameda-2 drilling commenced June 2023 and reached TD (1975m) ahead of schedule on 31 July 2023
- Results on following slide

Second Appraisal Well

Alameda-3

- Goal was to log, core and test the Alameda and Marti formations observed in Alameda-1 between ~2,000m and ~3,900m, targeting 179 million barrels of Prospective Resource*
- Alameda-3 drilling commenced December 2023 and reached TD (3,880m) on 1 June, behind schedule due to fishing operations and sidetrack

Common surface location. Alameda-2 drilled to the south and Alameda-3 drilled to the north.



Alameda-2 drilled, tested and completed in Unit 1B.

Alameda-3 drilled, tested and suspended.

* Gross unrisked best estimate Prospective Resource, See PRCS on page 2

Appraisal drilling report card

Maiden Contingent Resource of 46mmbbl achieved and 38% increase in Amistad Prospective Resources

ALAMEDA-2

Results
- Reached TD ✓
- No complications ✓
- On time and on budget ✓
- Four reservoirs tested (1A, 1B, 2 and 3) ✓

Production
- Unit 1B ✓
  - Peak flow of 1900 bbl/d
  - 19° API relatively sweet oil
- Units 1A and 3 ✓
  - Proved moveable oil
- Tested export logistics ✓

Resources
- Unit 1B[1,2] ✓
  - Contingent Resource 46 mmbbl[3]
  - Prospective Resource 90 mmbbl[3]
- Unit 1A[1,2] ✓
  - Prospective Resource 32 mmbbl[4]

Disappointing outcome but lessons learned and well suspended pending outcome of investigations

ALAMEDA-3

Results
- Reached TD ✓
- Drilling complications ✗
- In excess of budget ✗
- Two reservoirs tested (Alameda & Marti) ?

Production
- Reconfirmed presence of oil in deepest structure ✓
- No successful flow tests ✗

Resources
- No immediate increase in daily production ✗
- No immediate increase in resource estimates ✗

[1]see PCRCS on page 2 [2] Gross P50 estimates [3]see announcement on 25 March 2024 [4]see announcement on 11 July 2024

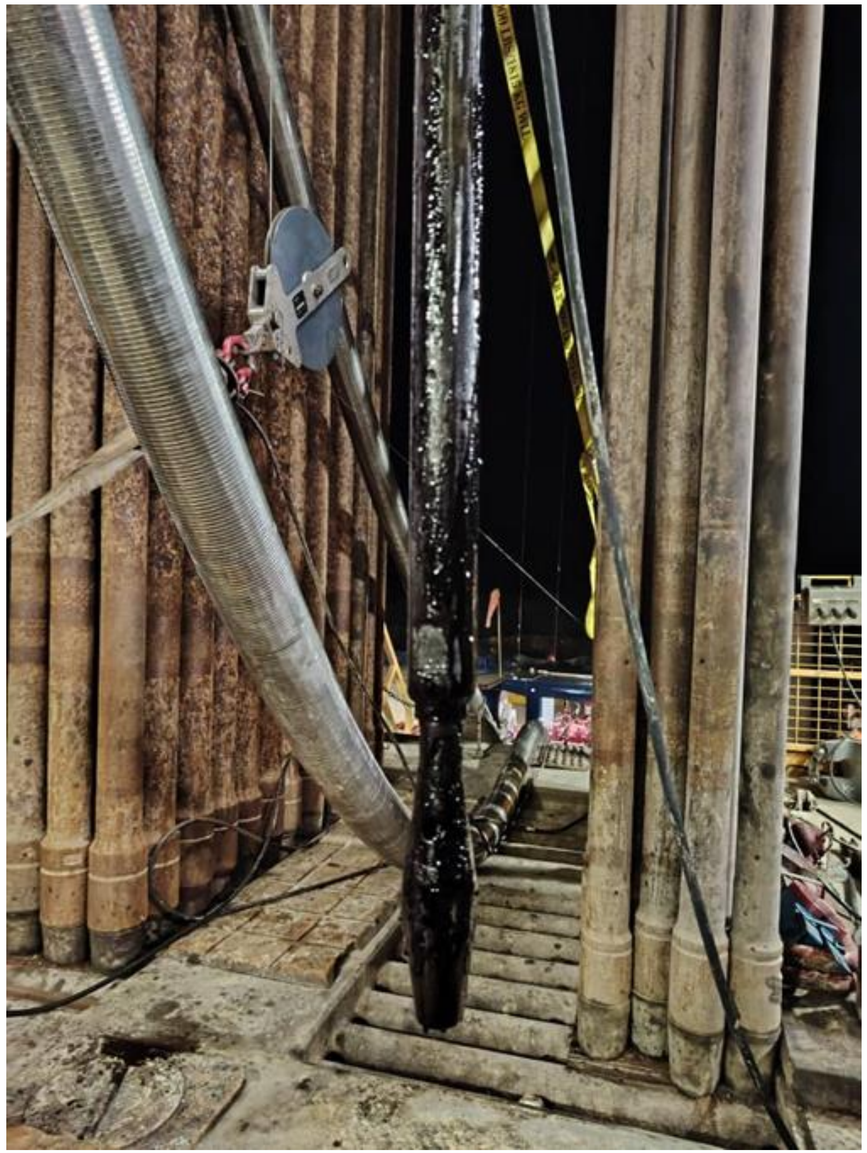
Review of Alameda-3

WHAT HAPPENED?

- Side track required 2908mMD due to hole stability issues.
- Tool stuck in hole caused delays, reached total depth.
- High quality logs and cores acquired in both reservoirs
- Well logs showed good permeability and flow potential.
- However, was not able to instigate flow from either reservoir.
- High pressures and demonstrated oil in well locations.

LEARNINGS?

- Alameda-3 very similar log character and rock properties to Alameda-1.
- Oil recovered in pipe in both tests of the Alameda and Marti reservoirs.
- Oil of good quality (18.9°API and 20.1° API respectively).
- Logs confirm over 667m of net pay combined for Alameda and Marti.
- Location of casing setting impacted mud weight.
- Careful management of carbonate reservoirs essential.
- Mud weight, chemistry and time in openhole impacted ability to flow.
- Future well design modified.



Heavy oil and emulsion recovered on pipe from Marti Reservoir

Formation Damage

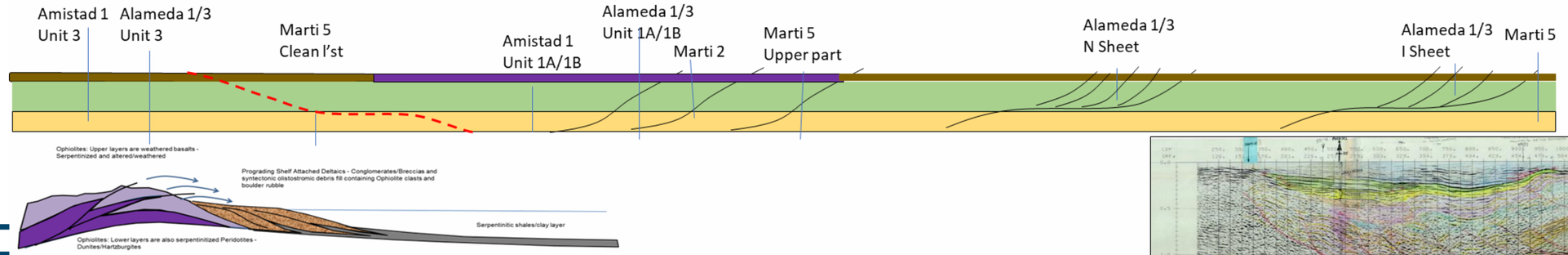
LEARNINGS?

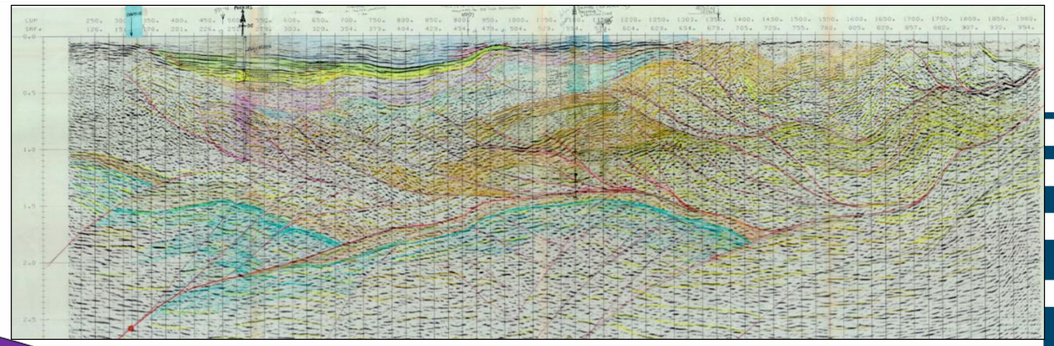
- Fluid-fluid and rock-fluid compatibility testing performed.
- “Varadero-blend.
- Future well design modified.

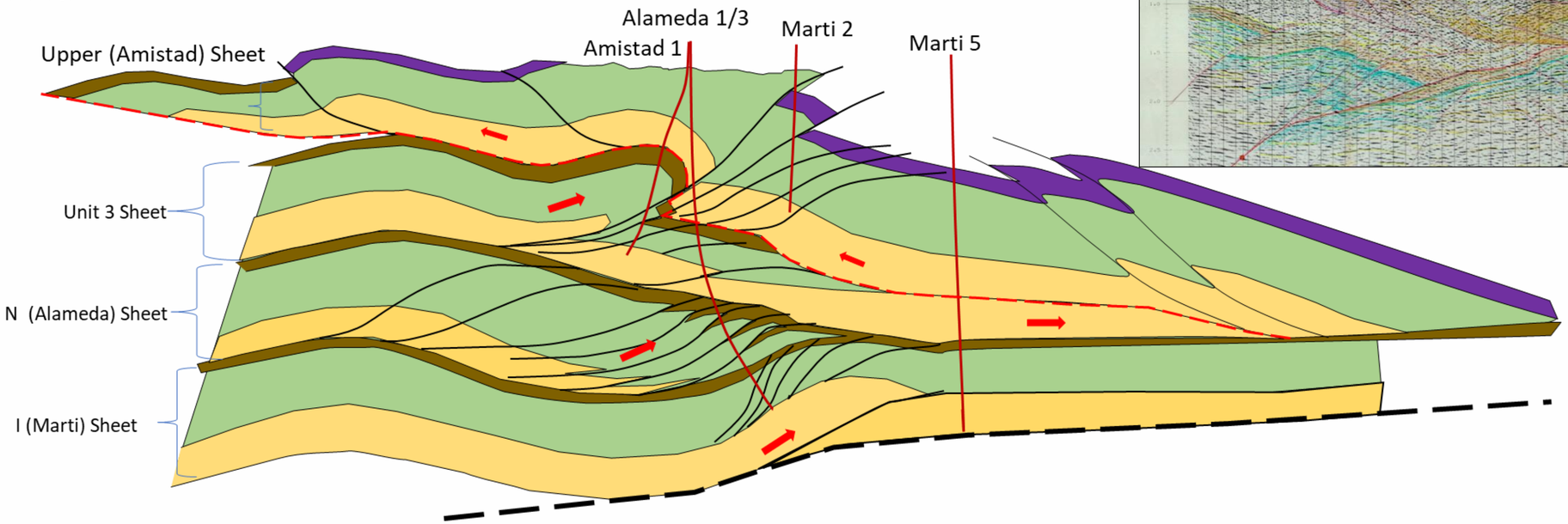
Cuba Block 9 Structural Model

WHAT HAPPENED?

- On a wholistic basis, the post-drill structural model is remarkably similar to the original Melbana interpretation







Unit 1B oil qualities export grade

° API	Classification
> 31.1	Light
22.3 – 31.1	Medium
10 – 22.3	Heavy
< 10	Ultra heavy

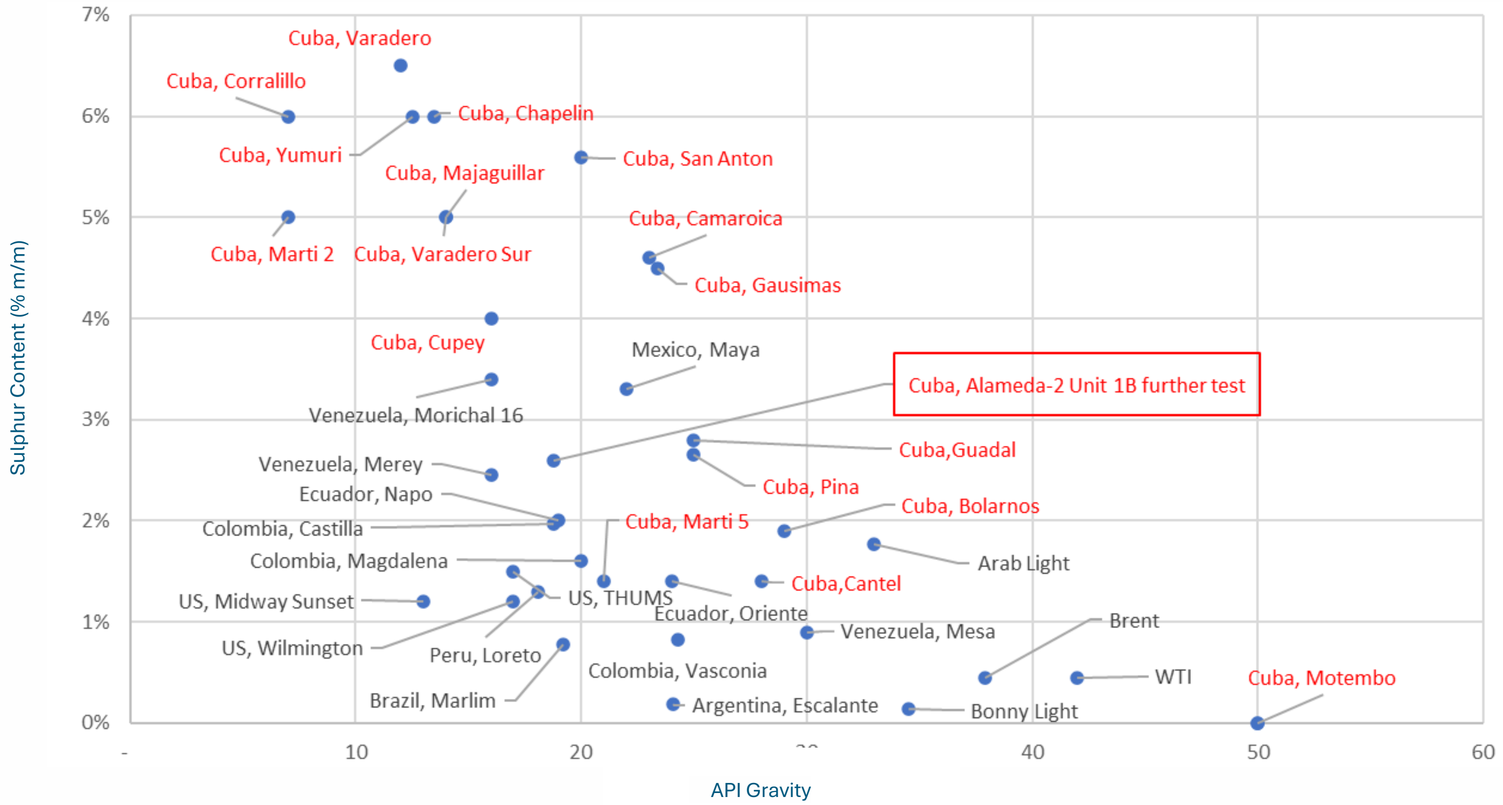
Sulphur (%)	Classification
< 0.5	Low sulphurous
0.5 a 1.5	Medium sulphurous
1.5 a 3.0	Sulphurous
> 3.0	High sulphurous

Next six months

- Unit 1B favourable characteristics of lighter density, lower sulphur and viscosity than analogues fields
- Oil assay indicated good cut of clear products and low asphaltenes
- Offtake term-sheet signed

Test	Unit	Results	☑ or ☒
API	API	18.7	☑
Sulphur	% (m/m)	~ 2.6	☑

API Gravity V Sulphur Content



https://www.mckinseyenergyinsights.com/resources/refinery-reference-desk/crude-grades/

Maiden Contingent Resource and updated Prospective Resource for Unit 1B and Unit 1A reservoirs

Resources Update

Unit 1B in the eastern part of the Alameda structure

- *Contingent Resource (Development Pending)*

Unit 1B in the western part of the PSC

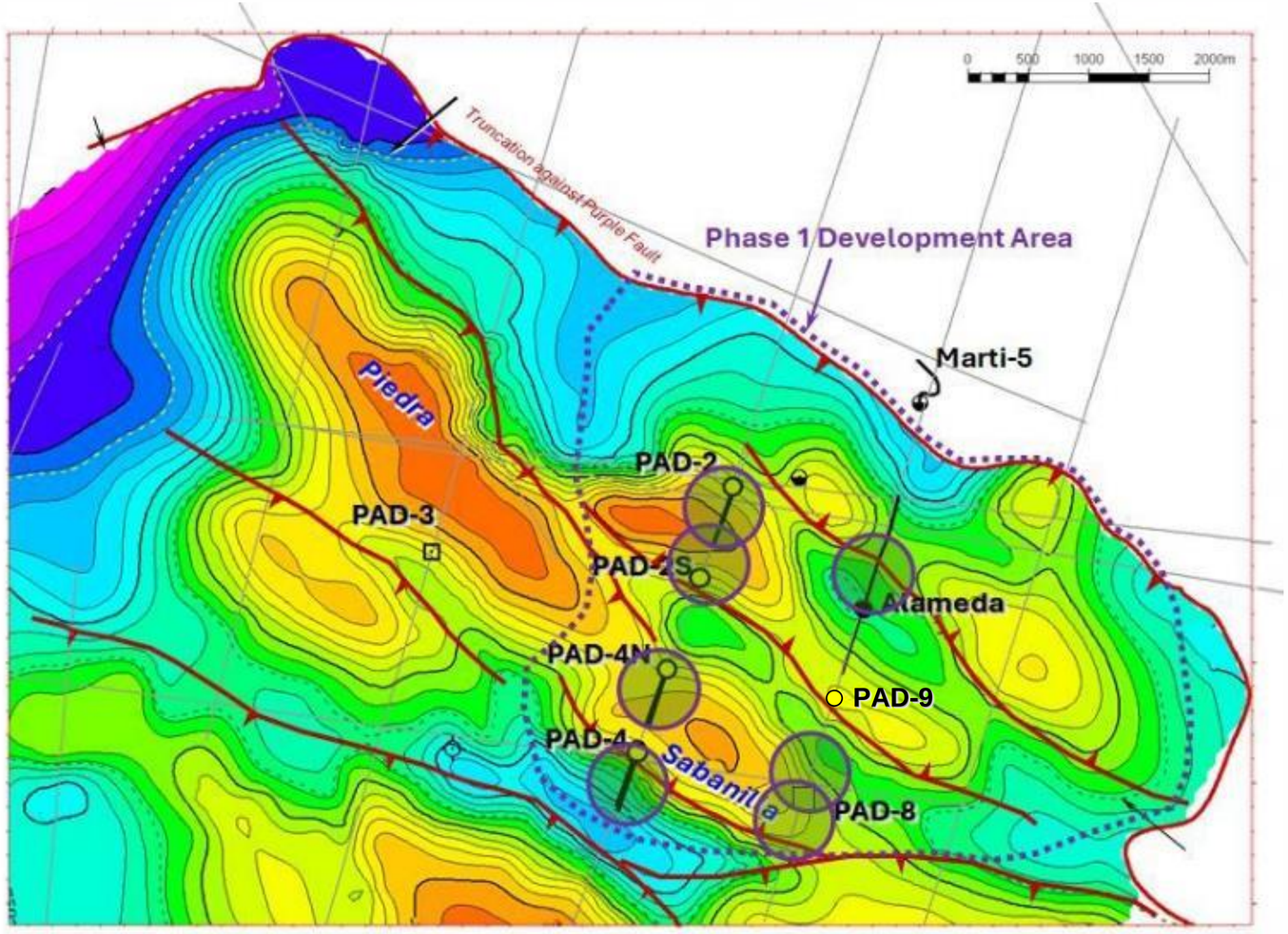
- *Prospective Resource (Chance of Discovery of 70% if additional appraisal well drilled)*

Unit 1A

- *Prospective Resource (Chance of Discovery of 70% could be derisked by additional appraisal well plus pump testing)*

Resources as at 30 June 2024* (gross unrisked, millions of barrels)

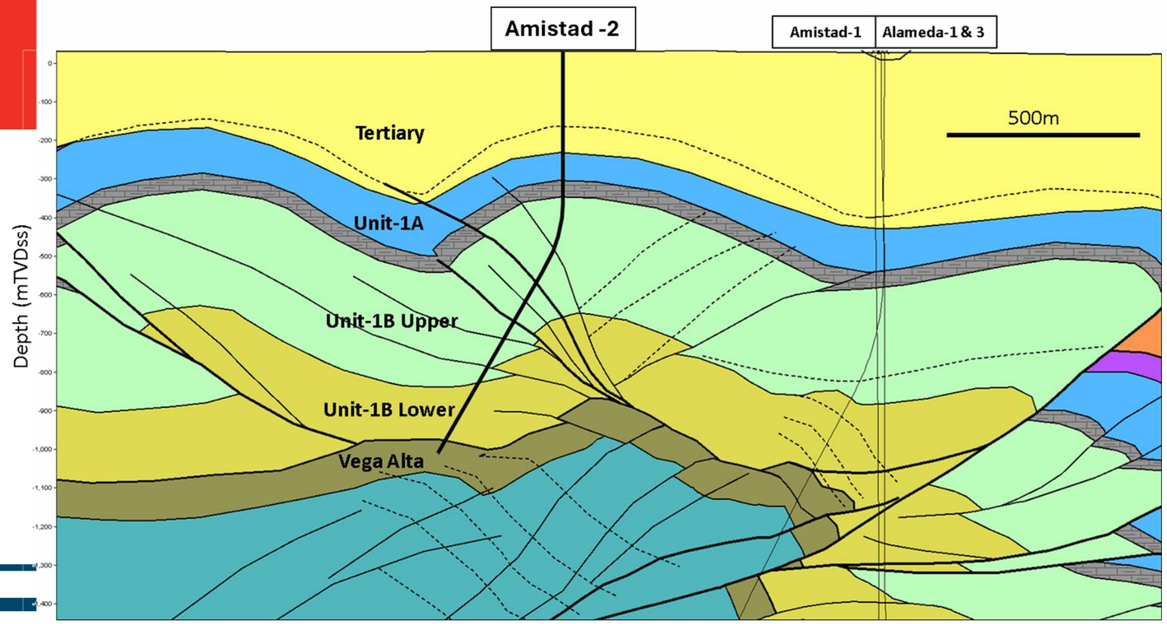
	Low	Best	High
Contingent Resources			
Amistad Unit 1B East	16	46	129
Prospective Resources			
Amistad Unit 1B West	29	90	264
Amistad Unit 1A	11	32	88

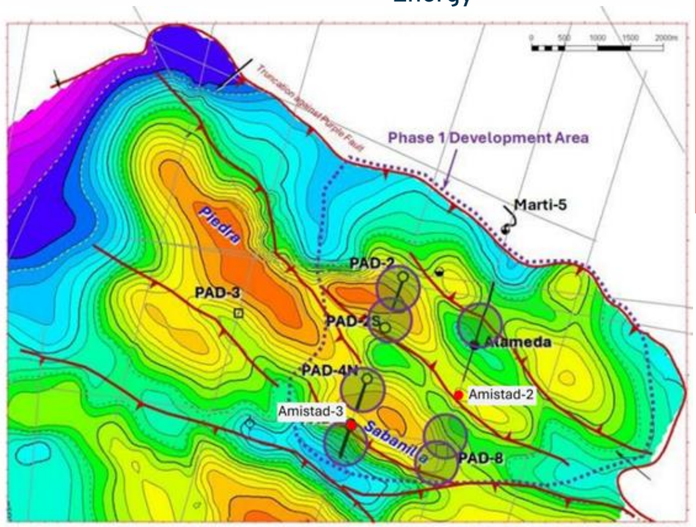


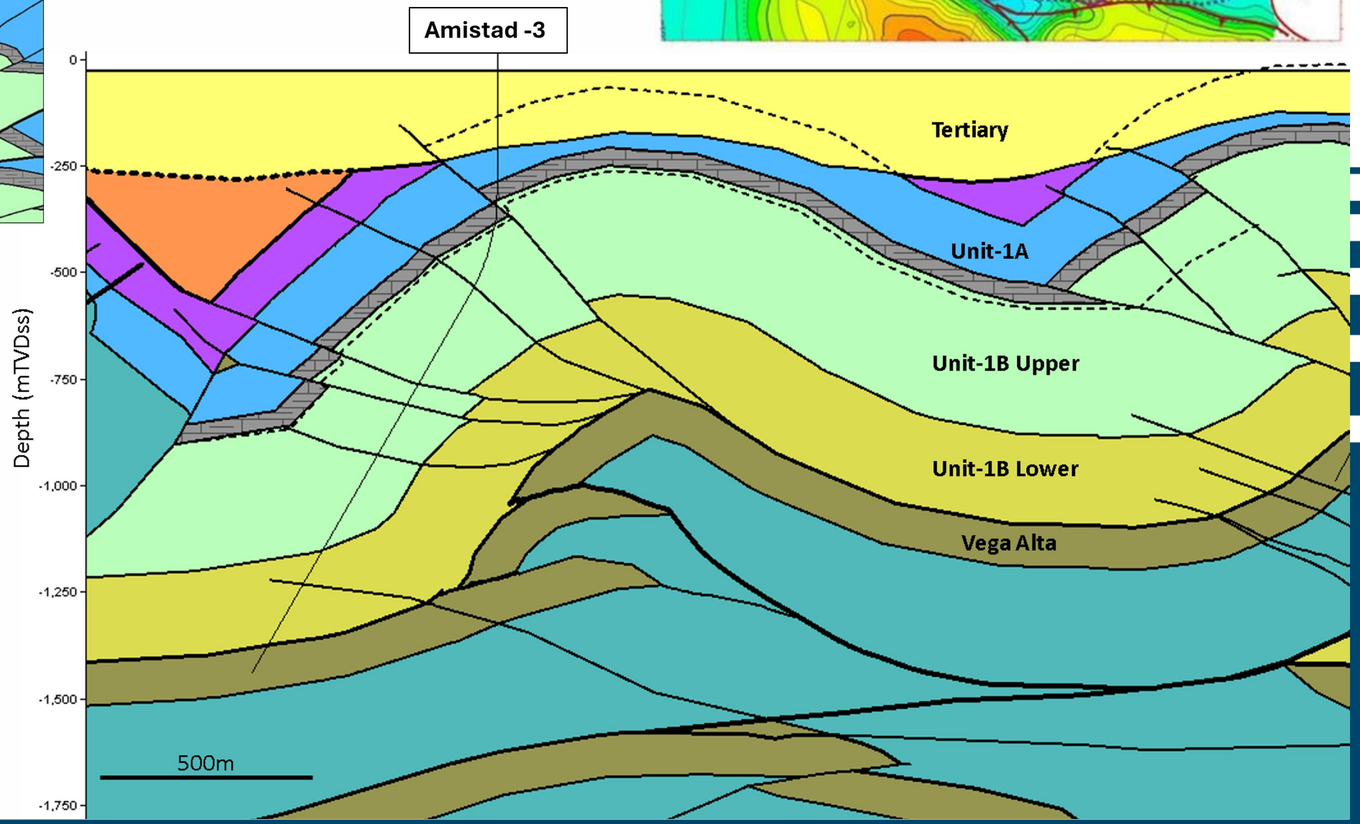
[1] McDaniel & Associates, Competent Persons Report August 2022

*See Prospective Resources Cautionary Statement on page 2

Next two wells to be focused on maximising Unit-1B intersection







- Amistad-2 is immediately up-dip from Alameda-2 (Amistad-1).
- Amistad-3 is designed for maximising Unit-1B reservoir penetration.
- Both wells will be deviated ~30 degrees to south.

Amistad Unit-1B field development program

SHORT TERM PRODUCTION PROGRAM

- Workover Alameda-2
- Recommence production from Unit 1B.
- Export of first oil to test logistics, storage and commercial arrangements.
- Progressively construct offset well pads.
- Starting drilling new Unit 1B production wells.

GOALS OF PHASED DEVELOPMENT PROGRAM

- Drill 7 new production wells in Unit 1B commencing 2025 to produce 1C (high confidence) Contingent Resource (16 mmbbl[1,2,3]) volume.
- Continue drilling new Unit 1B production wells post 3D seismic acquisition to drain 2C (medium confidence) Contingent Resource (46 mmbbl[1,2,3]).

LONGER TERM

- Drill development wells defined by 3D seismic selected for commercialisation.
- Review plan for deeper Alameda & Marti reservoirs incorporating findings of studies.
- Further field development and exploration funded from oil revenues.

[1] [2] McDaniel & Associates, Competent Persons Report August 2022 and updated resources announced on 25 March 2024 [3] See Prospective Resources Cautionary Statement on page 2

Questions?

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