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Professional Upstream Oil & Gas Advisory



Northern Australia
Satellite
Relief Map

Melbana Energy Limited Licence AC/P70 The Vesta Discovery

A MOYES & CO. DIVESTMENT OPPORTUNITY

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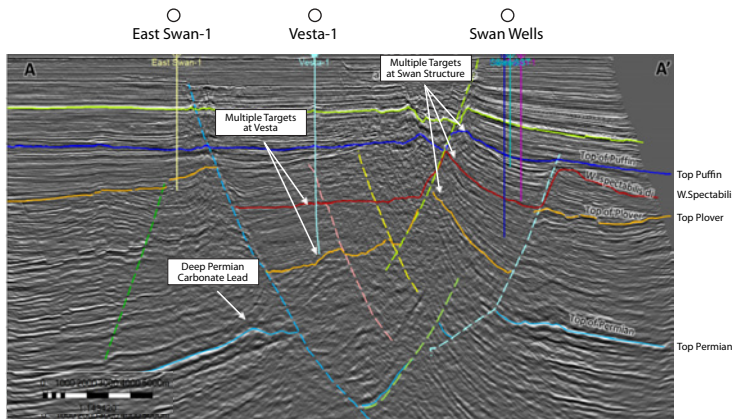


FARM-IN OPPORTUNITY

Oil and gas discoveries, drilling opportunities and multiple play types adjacent to existing production and discoveries

The Opportunity

Melbana Energy is currently 100% equity holder and operator of AC/P70. The permit, currently in its Primary Term, contains more than ten leads and prospects hosted within multiple play fairways known to be prospective for gas, and is close to infrastructure with a clear path to commercialisation.



Seismic Line Through East Swan and Vesta

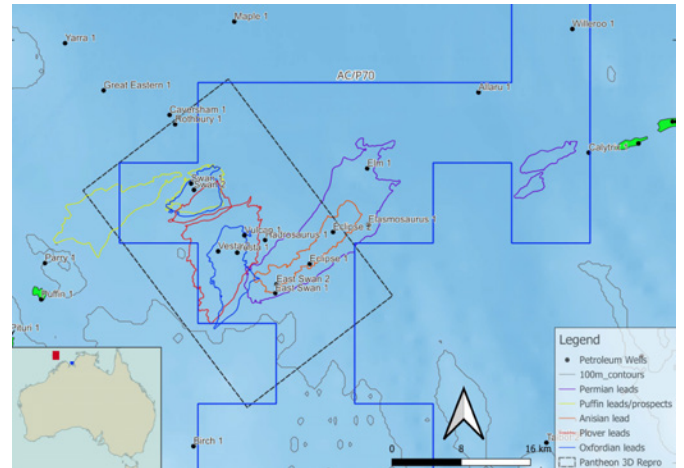
The permit contains the Vesta oil and gas discovery where significant additional resources are likely hosted by un-tested compartments up-dip of legacy drilling.

The permit also contains proven spec (contingent) gas at the Swan discovery - reservoir within the high-quality sands of the Cretaceous Puffin sandstone.

Reprocessed seismic data indicates more closure at Swan in the deeper Oxfordian and Plover sections, suggesting additional gas.

Finally, uplift is proposed in the East Swan Deep Lead where large un-tested Triassic and Permian closures are observed.

An exploration well is not required in AC/P70 until 2027, allowing ample time to select a high potential drilling target. Average water depth is 105m.



Licence Location

Investment Proposition

Melbana is offering significant equity and potentially Operatorship to a suitably qualified partner in return for an upfront cash contribution to back costs and funding the forward technical work programme which includes an exploration well.

Case	1C	2C	3C
Gas (bcf)	39	105	199
Oil (MMbbl)	10	30	47.3

Vesta Discovery Contingent Resources (Oxfordian Lower Vulcan Fm)

Case	1C	2C	3C
Gas (bcf)	131.8	171	211.4
Oil (MMbbl)	3.3	4.3	5.4

Swan Discovery Contingent Resources (Puffin Fm)

Lead/Propsect		Mean	P90	P50	P10
Vesta Deep (Plover) (bcf)	Gas (bcf)	338	71.2	231	730
Vesta North spec di (Gas Cap on oil Rim)	Gas (bcf)	200	116	195	287
	Oil (MMbbl)	45.3	22	43.2	71.4
Swan Deep (spec di) (bcf)	Gas (bcf)	222	112	206	352.2
Swan Deep (Plover) (bcf)	Gas (bcf)	143	55	126	253
East Swan Deep (Triassic) (bcf)	Gas (bcf)	702	200	569	1397
East Swan Deep (Permian) (bcf)	Gas (bcf)	1402	337	1231	2695
Recoverable Arithmetic Total (bcf)		3007		2558	
Recoverable Arithmetic Total (MMbbl)		45.3		43.2	

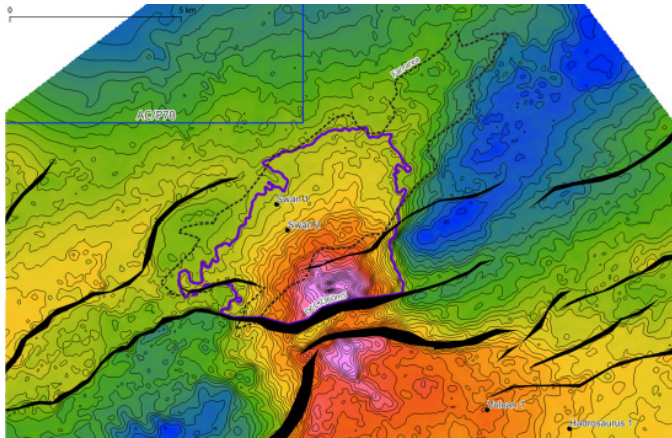
Prospective Resource for Prospects and Leads in AC/P70

“The deeper Plover section has never been successfully tested at Vesta”

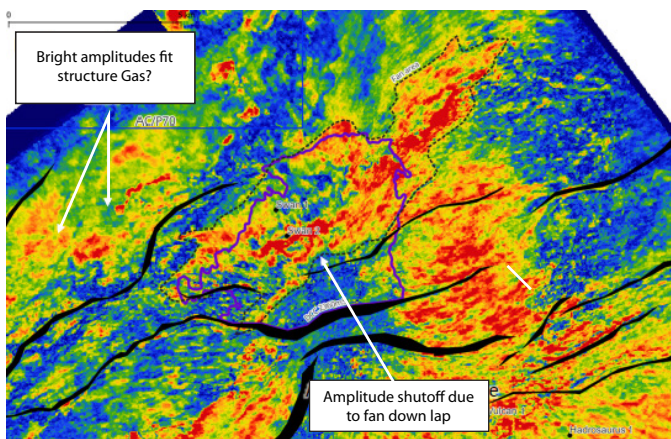
The Swan Gas Discovery

The Swan gas-condensate discovery is hosted within the Cretaceous Puffin sands, which are proven in the nearby Puffin oil field. The discovery was initially made in 1973 with the drilling of Swan-1, and subsequently appraised by Swan-2 and Swan-3/ST1. The wells encountered two gas zones measuring 19.2m and 14.5ms, respectively, with average porosities reaching up to 21%.

- Multiple tests by FIT recovered gas and condensate across several stacked submarine fan sandstones.
- RFT pressure data indicates communication of the gas zone between all three wells, and substantial down-dip potential.
- Melbana Energy's recent reprocessing of the Pantheon 3D MSS, provides enhanced imagery of the Swan structure and reservoir distribution, revealing a clearly distinguished high amplitude fan sand fitting a structural closure of ~20 sq km.
- More closure is recognised at the deeper Oxfordian and Plover levels, adding substantially to the prospective gas resource.



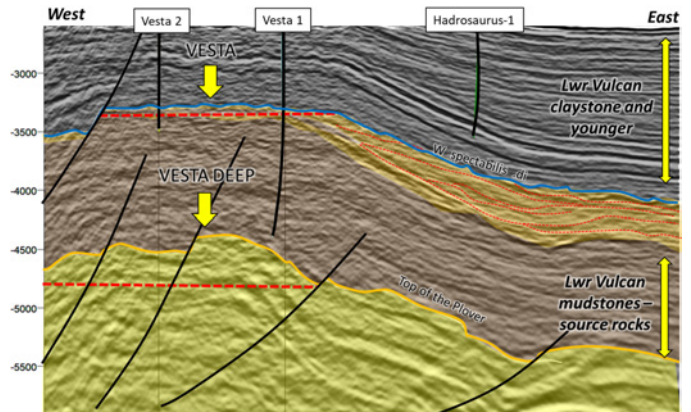
Top of Puffin Depth Structure 30m ci



RMS Amplitude at Top of Puffin (120m Search Window)

Vesta-1 Oil and Gas Discovery Late Jurassic Syn-Rift Reservoir

Drilled by ENI in 2005 to 3,342mD, the original objective was to test the oil potential of the 'Near Callovian Unconformity' (Plover). The well however was halted ~ 200m short of the Callovian target due to high geo-pressure and failure to stabilise.



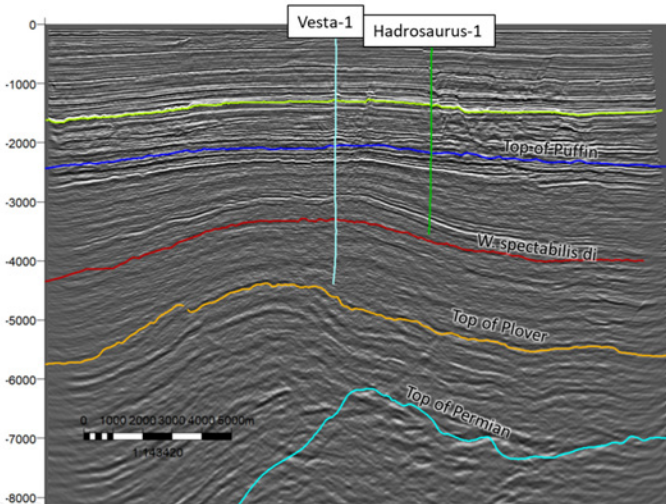
Seismic Line Through Vesta

- Hydrocarbon bearing sands were encountered within the Oxfordian Lower Vulcan Formation (Vesta Sandstone) between 3,342-3,365mD.
- DST results confirm oil deliverability from the reservoir with significant associated gas.
- Vesta-2 was drilled in 2008 and encountered 6.4m net gas within reservoir sands of the same age.
- Melbana's recent seismic interpretation indicates that the Vesta Oxfordian oil sand closes across a structure of ~48sq km. The area includes series of tilt-blocks located up-dip from the Vesta wells where considerable additional resources may be present.

"Upfront cash payment for back costs, fund technical work programme, and carry exploration drilling in return for significant equity in permit"

Vesta Deep: Plover

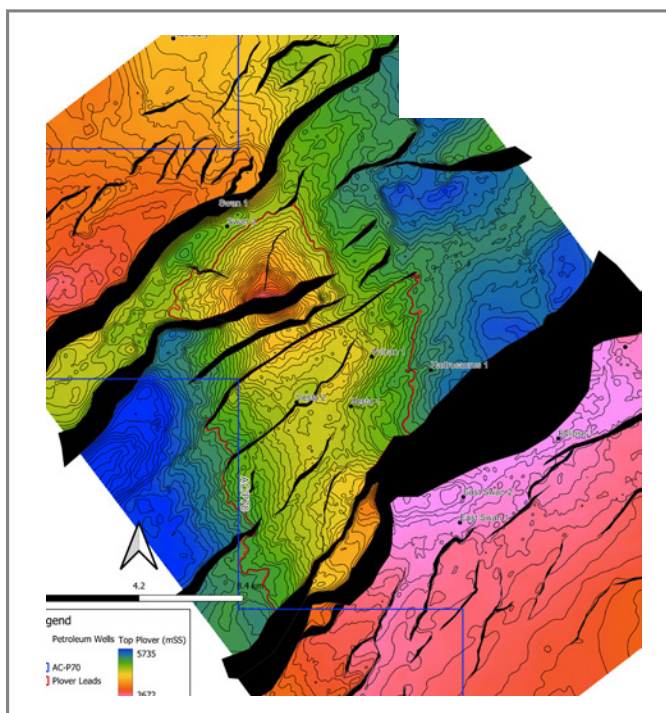
Further potential is recognised at the Top of Plover which may be associated with strong reflectors ~200m beneath the TD of the Vesta-1 well. Reprocessing has assisted with imaging the Plover section at Vesta Deep more clearly.



Seismic Line Through Vesta Structure

The original target of Vesta-1, the Plover Formation, has never been successfully tested on the structure.

Numerous hydrocarbon shows within the Plover, in and around AC/P70, encourage further exploration of the play. While considerably deeper (> 4,500m), the Top of Plover surface has a large closure of ~60 sq km.

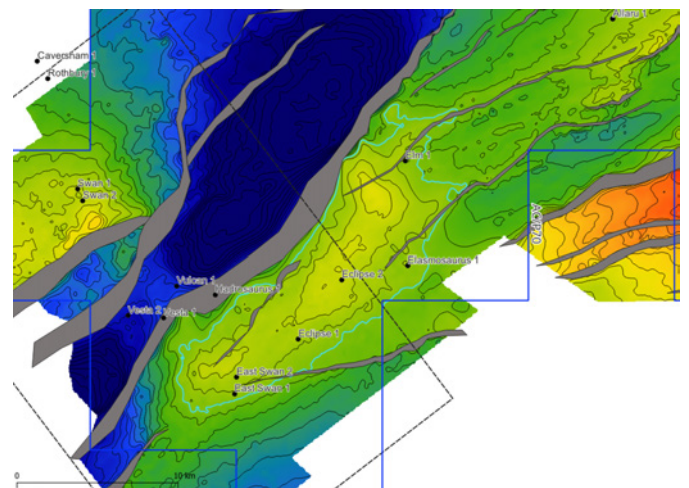


Plover Depth Structure

Near Field Potential Triassic & Permian

Additional potential is also recognised within the Permian and Triassic sections of the East Swan Deep lead. Structures could be induced by deep mobile salt causing roll-over and significant fault-independent closure.

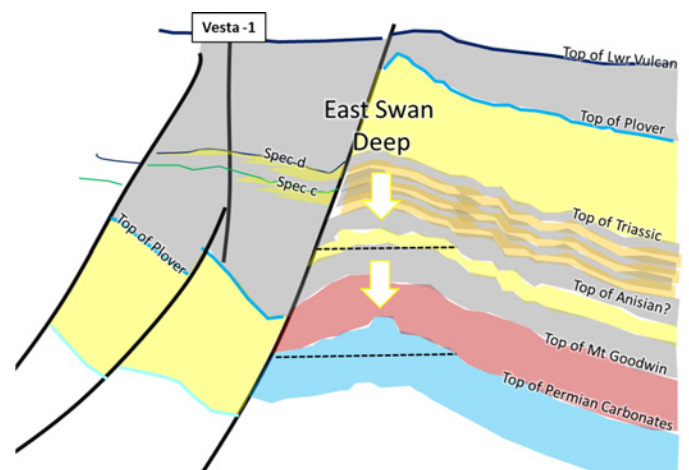
The Permian section is clearly distinguishable by thick and repeating, high amplitude reflectors likely associated with the Late Permian carbonate shelf. These are capped by a thick, 'bland' section representing the Mount Goodwin Shale, an ideal sealing unit.



Permian Depth Structure - Showing East Swan Deep Lead

The mid-Triassic Anisian section is distinguished by a strong impedance contrast that can be correlated with reservoir quality sands at Osprey-1 and Whimbrel-1 to the east.

The combined areal closure of at least 150 sq km and significant vertical closures across the Permian and mid-Triassic structures make East Swan Deep larger than the nearby Tern/Frigate and Petrel gas fields which together host ~1.4 tcf of recoverable gas.



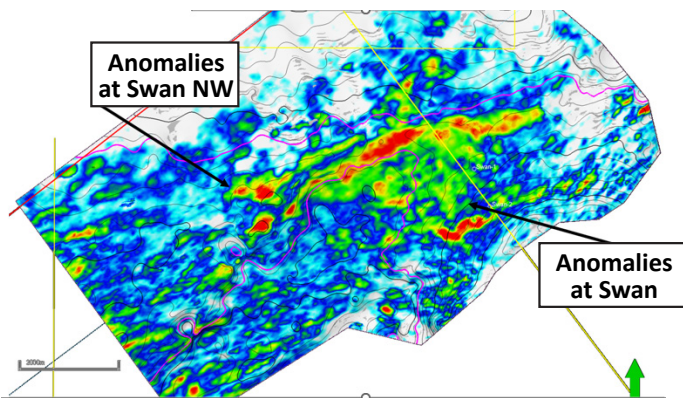
Cross Section Trough East Swan Deep

Seismic Reprocessing

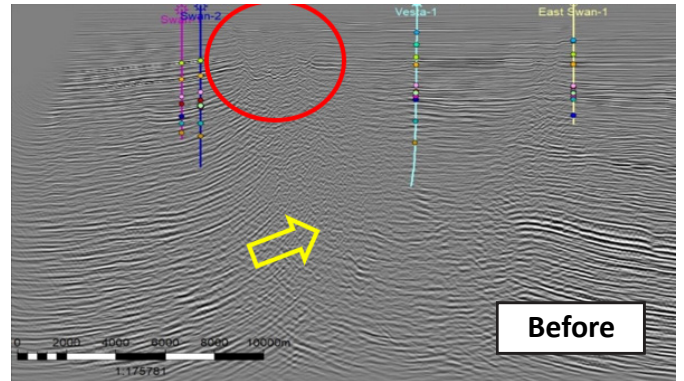
Shearwater was contracted to reprocess the entire 660 sq km of the Pantheon 3D MSS. The objective was primarily to improve imaging of depositional geometries of reservoir sections at Vesta and Swan and facilitate QI studies that might assist with characterising fluid content as well as reservoir distribution. Reprocessing and QI studies are now complete and interpretation of the results are underway.

The 'Before and After' comparison to the right showcases the improvements in imaging of faults in the shallow section, deep reservoir units and seismic geometries. These observations open up potential new play types at depth as well as improve our understanding of Vesta.

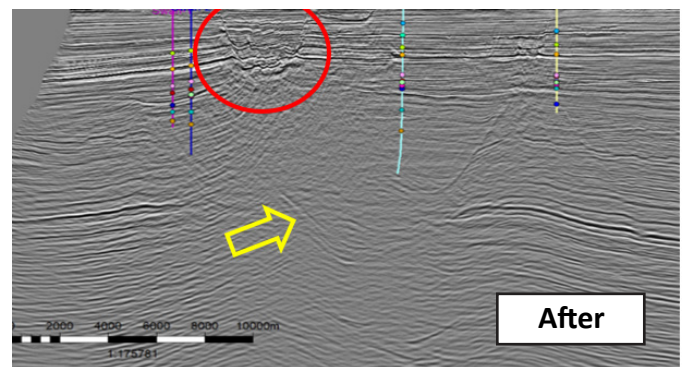
Inversion results based on the reprocessed seismic data shown below indicate anomalies consistent with gas bearing sandstones at the Swan NW lead hosted by the Puffin sandstone.



Anomalies Consistent with Gas at the Swan Discovery and Swan NW Lead



Most Recent Processing Results - Before



Most Recent Processing Results - After

Data Room & Timing

Melbana Energy invites expressions of interest from a suitably qualified company, or group of companies. Potential farminees will be granted access to a VDR upon signing of a Confidentiality Agreement and will be invited to an online Management Presentation. Workstation projects will be made available for review in a physical data room upon request by potential farminees.

Contact

If you would like more details and visit the dataroom please get in touch with Moyes & Co. Details can be found below.

For more info or to request a confidentiality agreement, please contact :



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