ANNUAL REPORT & SUMMARY OF OPERATIONS

EP 145 Year 3

OPERATOR	Trident Energy Ltd (Subsidiary of Mosman Oil and Gas Ltd)
PERMIT YEAR	3
PERMIT	EP 145
REPORTING PERIOD	21/8/2019 TO 21/8/2023
TYPE	Annual Report

Document ID	Date	Reviewer	Comments	Signed
MOG145-23_1	04/09/2023	Julie Daws	Ok for Submission	

EXECUTIVE SUMMARY

Mosman Oil and Gas Ltd ('Mosman' or 'MOG'), acquired EP 145 via acquisition of Trident Energy Ltd in 2014, a wholly owned subsidiary. MOG completed Native Title negotiations, acquired Sacred Site Clearances ('SSC'), Government permits and approvals and conducted geological fieldwork studies to complete the year 1 and 2 programs.

Following the promising results of the field work the company made the decision to prioritize geotechnical understanding of the prospectivity by reprocessing all vintage 2D data within the permit and conducting a technical re-evaluation. This work was undertaken in addition to the permit work program commitments. The new data has highlighted additional, previously untested, prospectivity for hydrocarbons, helium and hydrogen in the deeper stratigraphy.

The year 3 2D seismic acquisition program has been designed to acquire data which will test the viability of the deeper prospectivity in EP145. The planning process has involved detailed discussions with the CLC, landowners and AAPA regarding acquisition techniques with significant delays occurring as a result of the Covid pandemic. AAPA approval for the survey was granted in December 2019 and Mosman submitted an application to the CLC to undertake a sacred site survey in early 2020 to be ready for seismic acquisition late 2020. Following this unforeseen delay MOG has restarted the approvals process for the 2D seismic acquisition program and has been granted a CLC sacred site survey (March 2023) and submitted a new application to APPA as the previous certificate expired in December 2021.

Whilst on ground activities could not be carried out Mosman has continued to undertake valuable planning and preparation for 2D seismic acquisition, which is the primary commitment for the year 3 work program. New technical evaluations have also been conducted with Amadeus Basin experts, Geognostics, using permit and regional geophysical and well data. This work has significantly improved understanding of the hydrocarbon, helium, and hydrogen prospectivity in EP145.

CONTENTS

LIST OF FIGURES

LIST OF *TABLES*

TITLE AND STATUS

EP145 is currently in year 3 of a 5-year exploration program.

The permit was formerly operated by Trident Energy Limited ('Trident') and subsequently acquired by Mosman Oil and Gas Ltd ('Mosman', 'MOG', or 'the Company') in 2014.

A suspension and extension of the permit year 3 work program has been awarded due to a series of delays to exploration activities outside of the company's control. The current permit year ends on 21st August 2024.

EXPLORATION ACTIVITY REPORT

Mosman has undertaken significant exploration work within the permit investing over $1 million to date and is committed to ongoing exploration of the permit. The company continues to actively progress the exploration work program undertaking significant technical work in addition to the original permit commitments which has significantly advanced exploration prospectivity and identified new helium and hydrogen potential. The outcomes of these additional exploration activities have been presented to representatives of NT Geoscience and are of significant value in advancing the exploration potential of the permit and Amadeus basin.

During the timeframe of permit year 3 significant setbacks to the exploration program have occurred as a consequence of COVID-19 which restricted access to the permit and delayed consultation with the CLC and traditional owners regarding seismic acquisition methodology.

A summary of exploration activities conducted by Mosman and the schedule for ongoing exploration are provided in Table 1.

Organisation	Activity	Date
AAPA	Application for Heritage Certificate	May-19
	Heritage Survey undertaken	Sep-19
	APPA certificate received	Dec-19
	APPA certificate expired	Dec-22
	Revised application submitted to AAPA	Mar-23
CLC	Meeting in Alice Springs to discuss seismic acquisition techniques including a detailed overview of the use of explosives	May-21
	Presentation of seismic stakeholder information (report sent to CLC)	May-22
	Application for sacred site survey submitted	Apr-22
	Meeting, Alice Springs to review proposed seismic program	Mar-22
	Sacred site survey undertaken	May-22
	Sacred Site approval and certificate (10 months after survey)	Feb-23
	Requests submitted Feb-Apr 2023 for meetings regarding seismic	No response
DITT	Presentation to operations and environment team (Darwin)	Aug-19
	Permit work program discussions/Meetings (online)	Oct-21
	Meeting with NT Government Petroleum tenure division (Darwin)	Aug-22
	Application and approval of extension and suspension	May-23
Seismic	Site visit by Mosman and ResourceGeo to review terrain and logistics for the 2D survey	Apr-19
	2D Seismic Design based on site visit and reprocessing review	Jun-19
	Seismic and shot-hole drilling procurement	Dec-20
	Updated 2D seismic program design as a result of AGG data	Nov-21
	Ecology Survey undertaken	Mar-22
	Seismic stakeholder consultation	May-22
	Seismic and shot-hole drilling re-procurement for updated scope & methodology	Mar-23
	Seismic stakeholder consultation	Apr-23
	Site scout by seismic & drilling contractors (ResGeo & AS Technical Drilling) to review access, line locations & camp locations.	Apr-May-23
	Ecology survey report finalised	Aug-23
	Environmental Management Plan to finalised.	Est. Sep-23
	Seismic Survey undertaken (estimated)	Est. Mar - May-24
Other Geophysical	Application for NT Government geophysical grant 2021 (not awarded)	Apr-21
	Airborne gravity and gradiometry survey (AGG) of entire EP145	Jul-21
	Satellite Gas Seep Analysis (Dirt Exploration)	Jul-21
	SEEBASE Project - Interpretation of gravity, magnetic and seismic data (Geognostics)	Dec-21
	Integrated interpretation of regional and permit data to evaluate hydrocarbon, helium and hydrogen potential (Geognostics)	Dec-22
Presentations at External conferences	AGES conference presentation	2019,21,22 & 23
	NT Government investment delegation, China	Oct-19
	SEAPEX presentation, London	Jun-22
	Central Australian basins Symposium, Darwin	Aug-22

Table 1 Exploration activities, reports and approvals associated with Wildhorse 2D seismic survey.

Airborne Gravity and Gradiometry Survey

Reprocessing and interpretation of the vintage 2D seismic in the northwest of EP145 highlighted the potential for untested prospectivity in the subsalt play. Given the sparse seismic grid and the lack of data in the central and southern parts of the permit Mosman undertook to acquire a high-resolution permit wide gravity and gradiometry FALCON® survey. The key objective of this survey was to provide an understanding of the basement geometry, structure, and composition as well as subsalt stratigraphy within the permit. Mosman contracted CGG Xcalibur to acquire and process a 800km² permit-wide Airborne Gravity Gradiometer Survey using the FALCON® surveying tool (Appendix 1).

The survey covered a total of 1181 line kilometers at a line spacing of 750m. The lines are oriented east-west, and data was acquired at a flying height of 120m (figure 1).

Figure 1 Airborne Gravity and Gradiometry Survey Area, 1181km of lines acquired at 750m line spacing (Xcalibur, 2021)

The **FALCON®** Airborne Gravity Gradiometer data were digitally recorded by the ADAS, and the raw data then copied and transferred to the Xcalibur Perth data processing centre. The transformation into G_{DD} and g_D was accomplished using the Fourrier domain transformation. The Fourrier density G_{DD} map (figure 2a) uses a density of 2.05g/cm3 to derive a vertical gravity g_D map (figure 2b). The Fourrier G_{DD} and g_D grids were conformed to a subset of the ANGG19 grid to fit regional gravity data (figure 3)

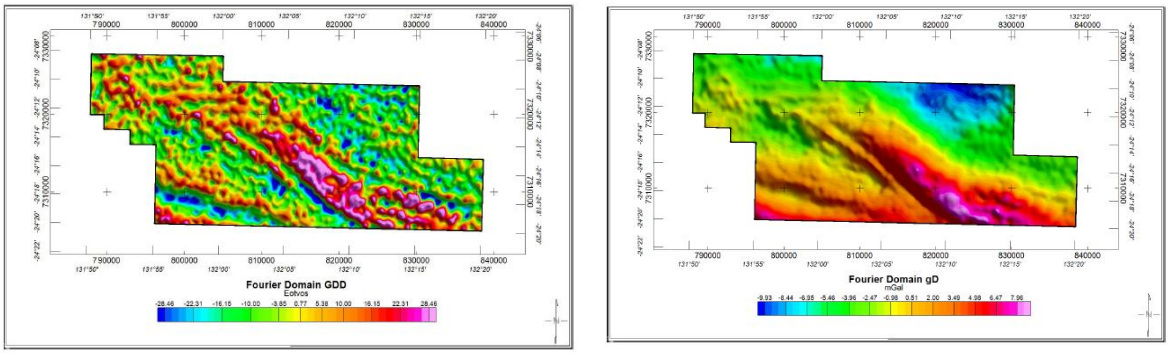


Figure 2 Fourrier Domain GDD density map (a) and Vertical gravity gD map (Xcalibur, 2021)

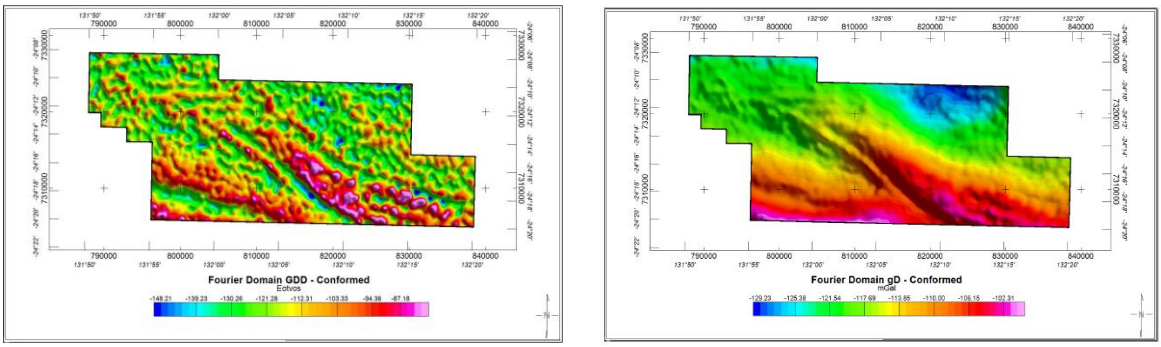


Figure 3 Fourrier Domain GDD conformed to regional gravity (Xcalibur, 2021)

Satellite Seep Mapping

Seep studies using Sentinel satellite data have become a useful tool to identify and the probability of helium presence at ground level and the bottom of the atmosphere Mosman has utilized the technique to determine if there is a strong likelihood of helium being present over the target area, EP145. The technique uses visible spectral absorption where helium is identified as having a specific "red" tinge at emission line 668nm. The visible/near infrared region of the spectrum is the part of light beam most sharply imaged by remote sensing satellite data. The Sentinel 2A and 2B satellites of the European Space Agency have a 10m spatial resolution red band centered around 665-695nm, covering the helium emission lines where helium appears anomalously bright.

The area of investigation covered EP145 and the Mereenie field to the northwest, where data from 76 wells with gas samples could be used as a control.

The area around Tent Hill-1 shows some interesting anomalies which suggest high helium probability. Similarly, the area in the far east of the permit has similar anomalies.

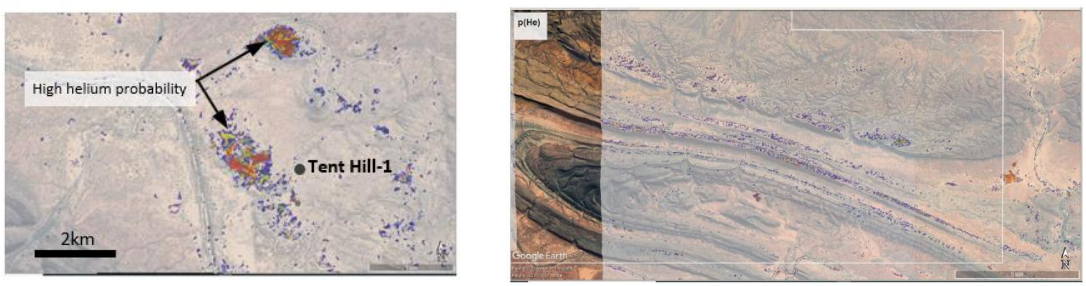


Figure 4 Probability of helium presence in gas seeps as derived from Sentinel Satellite data; Map a is located around Tent Hill-1 and map b shows the eastern edge of the permit (Dirt Exploration, 2021)

SEEBASE® Mapping and Interpretation

The encouraging results from the gravity and gradiometry survey regarding subsalt and basement potential provided an incentive for further technical evaluation which has subsequently been of significant value to the planning and refinement of the 2D seismic program.

Geognostics Australia Pty were contracted to provide an updated depth to basement SEEBASE® structural model covering permit EP145 integrating all available geophysical datasets to update the existing Northern Territory SEEBASE® model (NTGS and Geognostics, 2021). In addition, Geognostics undertook a detailed review of the tectonic and stratigraphic evolution of the basement to provide insight of play fairways and critical play elements.

SEEBASE® incorporates gravity, magnetic and seismic data from both regional and permit specific data sets to provide significant insights into the structural architecture and deformation style in the permit.

The results of the gravity gradiometry survey have improved both structural and stratigraphic modelling in EP145. The interpretation supports the presence of an extensive NW-SE basement high bounded to the south by a deep basement involved fault (Figure *).

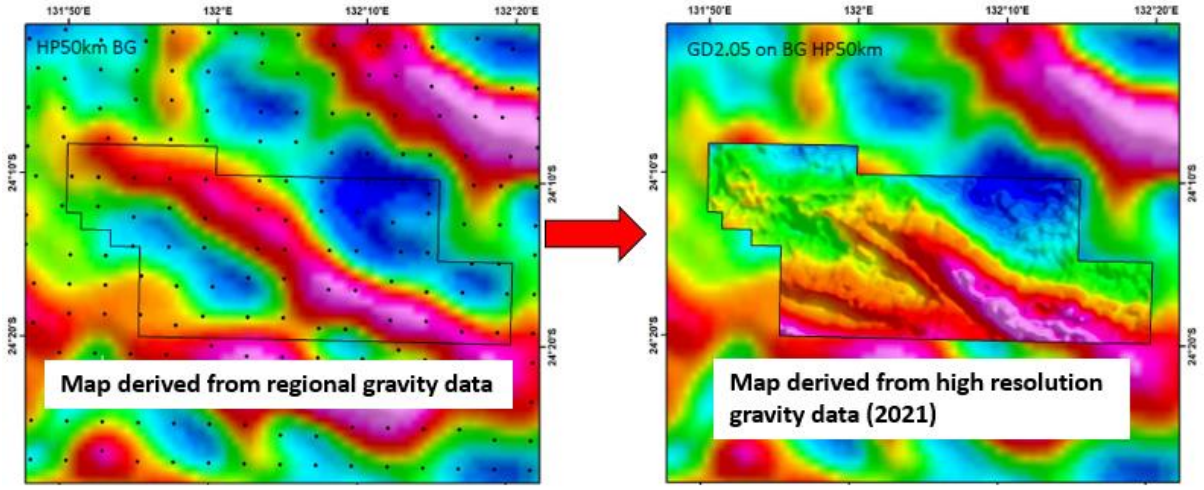


Figure 5 Comparison of regional (HP50km) Bouger Gravity to the high-resolution image derived from the Falcon® Airborne Gravity Gradiometry data (Xcalibur Multiphysics, 2021)

The SEEBASE® depth to basement surface represents the top of the metamorphic basement. The interpretation of the available data in EP145 has resulted in a much higher resolution model compared to the NT SEEBASE® model (NTGS and Geognostics, 2021) which provides only a low-resolution image of the northwest-trending Walker Creek Anticline and no details of key basement faults (figure 6).

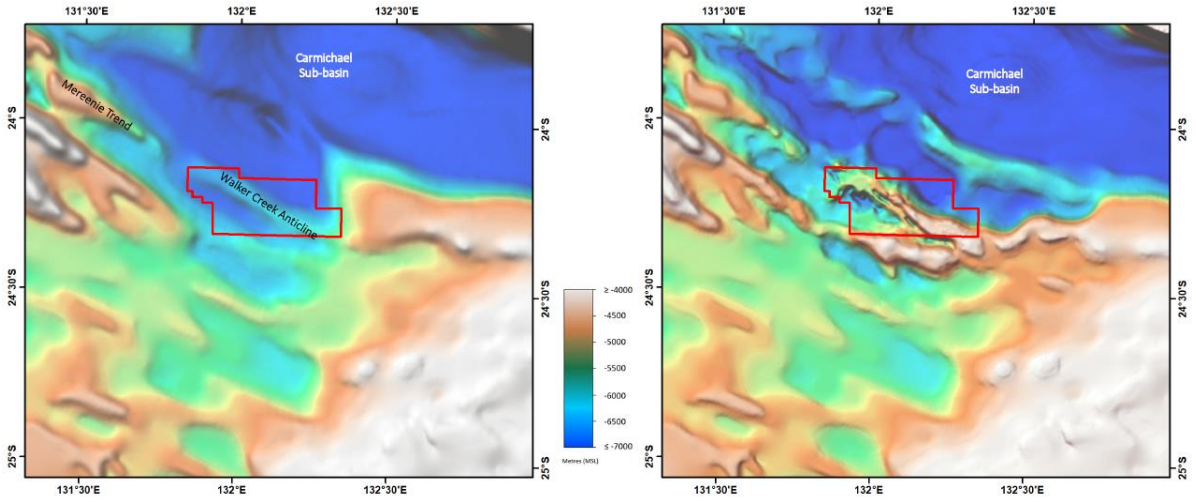


Figure 6 Comparison of NTSEEBASE® 2021 and EP145 SEEBASE® model (Geognostics, 2021)

Specific improvements to the SEEBASE® model include a shallower depth top basement in EP145 and areas directly surrounding the permit which has positive implications for basement and near basement targets. The link between the Mereenie and Walker Creek anticlines and the structural high separating the permit from the Carmichael basin to the north are better imaged. Key findings suggest that the basement in the southern part of the anticline is shallower than previous estimates (e.g., NT SEEBASE) and that it has a similar (although separate) structural profile to the Mereenie field anticline to the northwest.

The high resolution EP145 SEEBASE® model allows the recognition of multiple individual fold and fault structures whicg provide insights into the structural evolution of EP145. The basement topography indicates that the Walker Creek Anticline is composed of a series of sinistral en-echelon anticlines (figure 7).

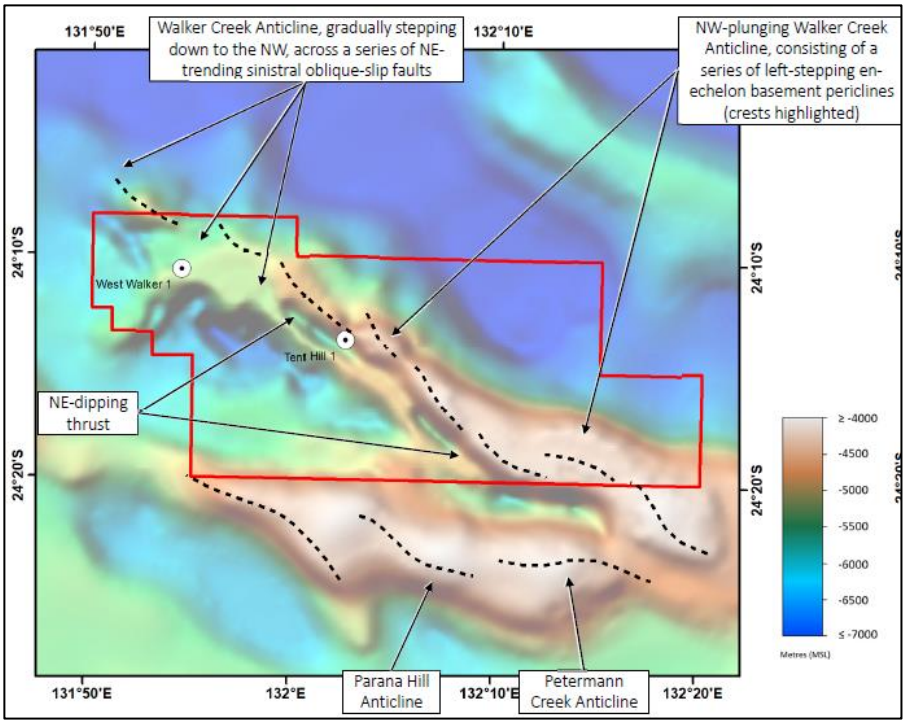


Figure 7 EP145 SEEBASE® mode, permit outline shown in red and the crests of the basement antiforms represented by black dotted lines (Geognostics, 2021)

Sediment thickness can also be modelled using the difference between the DEM surface and EP145 SEEBASE® (figure 8). The new model suggests that the sediment above basement is not as thick as was initially perceived from the NT SEEBASE® model.

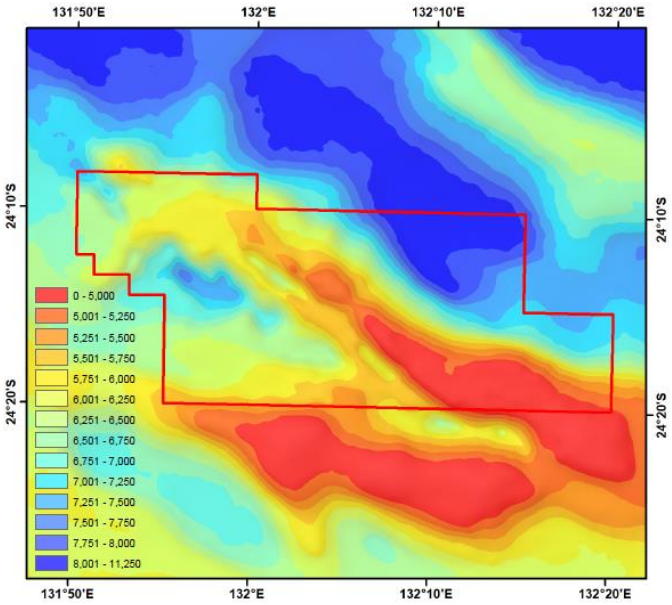


Figure 8 Image of sediment thickness in the study area (EP145 outline in red)

The new interpretation supports the presence of valid structural targets throughout the stratigraphy and basement involved faults which provide migration pathways for helium and hydrogen from the deep crust into structural targets. Interpretation of a shallower basement depth and sediment cover help to reduce the play risk.

Recommendations

The exploration work program would benefit from further work to constrain the critical play elements. Such work should include a review and reinterpretation of the reprocessed seismic data (I99 and P81 surveys) to confidently identify the age of stratigraphy between Top basement and the Petermann unconformity and linking this with the regional seismic and well data.

SEEBASE® has also provided confidence to guide the placement of new seismic lines in the southern part of the permit where there is currently no well or seismic data.

Prospectivity Review

Based on the recommendations from the SEEBASE® report and significant improvement in understanding of the basement structure and play types Mosman contracted Geognostics Australia to conduct a detailed prospectivity evaluation of all play levels within the permit. This study was completed in October 2022 and the findings have assisted in refinement of the 2D seismic program.

The prospectivity review builds on the structural framework project (Geognostics, 2021) using regional geophysical, seismic, and well data to high grade play concepts and prospective areas within EP145. In addition, previously untested helium and hydrogen prospectivity, was evaluated to better understand their nature and possible distribution. Three critical play elements were assessed as part of the study: basement composition, basement structure and

reservoir/seal facies. The key findings from this study suggest that EP145 contains the key play elements for helium and hydrogen exploration together with proven hydrocarbon prospectivity.

Basement Composition

EP145 is underlain by Mesoproterozoic basement rocks of the Areyonga Terrane (Debacker et al, 2021). Magnetic data confirms that the basement is in part composed of radiogenic felsic granites and metasediments (Figure 9). Given the age and composition it is highly likely that the felsic intrusives have generated helium through the radiogenic decay of Uranium and Thorium (Boreham et al., 2016, 2018). This concept has been demonstrated at Mt Kitty-1 which overlies felsic basin in the southern Amadeus Basin.

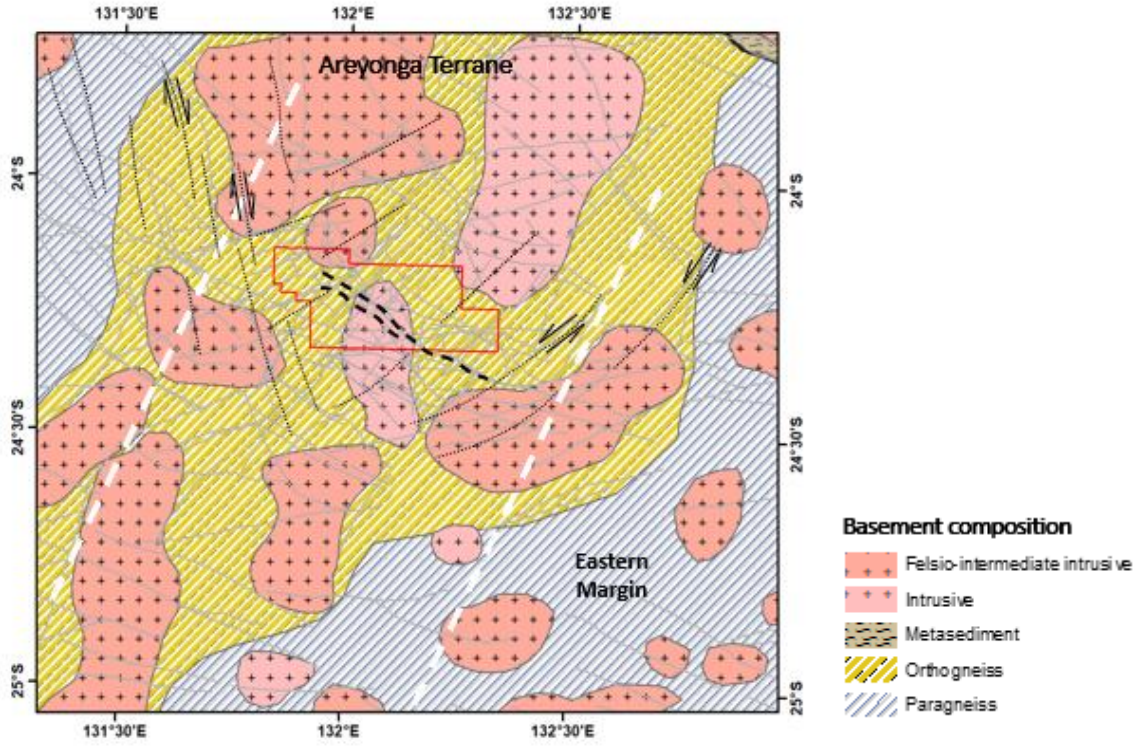


Figure 9 Basement faults (grey) and basement composition in the vicinity of EP145

Basement Structure

Three simplified models of deep faults have been developed for EP145 (Figure 10). A basement detached system (a), basement involved system (b) and a mixed system (c). The mixed, basement detached and basement involved model is the preferred interpretation for EP145 (Geognostics, 2022) based on the data available. A well-defined NE-SW structural trend is observed, however the detailed geometry and fracture systems within the Walker Creek Anticline are currently poorly understood.

Seismic and gravity data over the Walker Creek Anticline demonstrates shared common structural features with other wells in the basin, Mt Kitty-1, Magee-1 and Dukas-1. These wells all overlie major basement-controlled structures cored by felsic granite and contain confirmed helium and hydrocarbon shows.

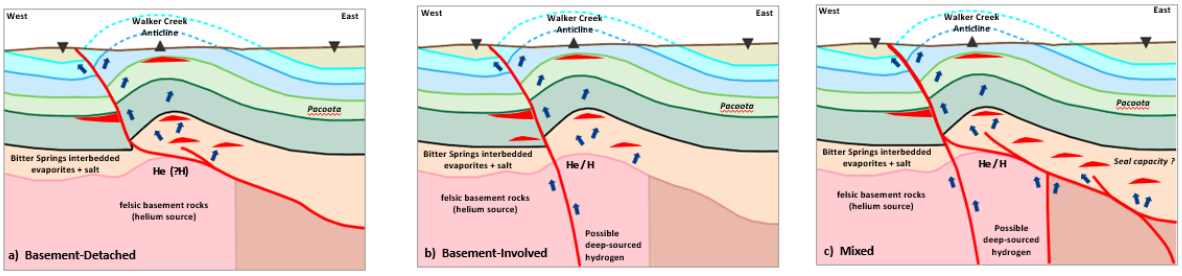


Figure 10 Basement faults Models generated for EP145 (Geognostics, 2022)

Seal facies

Evaporitic facies (carbonaceous mudstones, dolomites, anhydrites, etc.) with thin interbeds of salt are interpreted on the available seismic across the Walker Creek Anticline however, the massive, mobile salt bodies observed around Dukas-1 and Magee-1 in the southern Amadeus basin are not present. The thick salts comprise the seal for gas accumulations in the Heavitree quartzite and basement at Magee-1 and Mt Kitty-1 but, whilst untested, it is also thought that the interbedded evaporites in EP145 will provide a viable seal. In addition, a thinner evaporite/salt unit will reduce risks associated with drilling.

New Play Concepts

The post Petermann (Larapinta) play, which has been the primary target in the basin, is best illustrated on seismic line P81-WC3 (figure 11) which covers the West Walker-1 discovery and shows the full geometry of the Walker Creek Anticline.

This updated interpretation has identified the potential for stacked plays in both the pre and post Petermann succession with key basement involved faults providing migration conduits for the different gases. Line P81-WC3 shows that initial fault movement occurred during the Petermann orogeny with both basement involved faults and detachment faults which sole-out in the evaporite bearing Gillen Fm. Some of these faults were reactivated in the Alice Springs Orogeny.

Disruption of seismic reflectors at the crest of the anticline support likely fracturing which could enhance porosity and permeability in deeper reservoirs below the Petermann Unconformity, this concept is in part supported by field mapping (Dyson, 2017). Deep structural plays at or near basement could include stacked fault slivers of Heavitree quartzite, these are not readily visible on this line but have been observed on seismic in other parts of the basin. Potential hydrocarbon source rocks include black shales of the Gillen or Pertatataka and Araika Formations which have been proposed as the source rock for the Dingo, Orange and Ooaramina fields and are most likely to have sourced gas accumulations at Mt Kitty-1 and Magee-1.

The deep gas play is untested in the northern Amadeus basin, but the critical play elements have been interpreted in EP145. The interpretation of basement involved faults supports a scenario where non hydrocarbon gases, helium and hydrogen can migrate from the lower crust. Later tectonic activity during the Alice Springs orogeny could also have remobilized the gases with possible upward migration into shallower reservoirs.

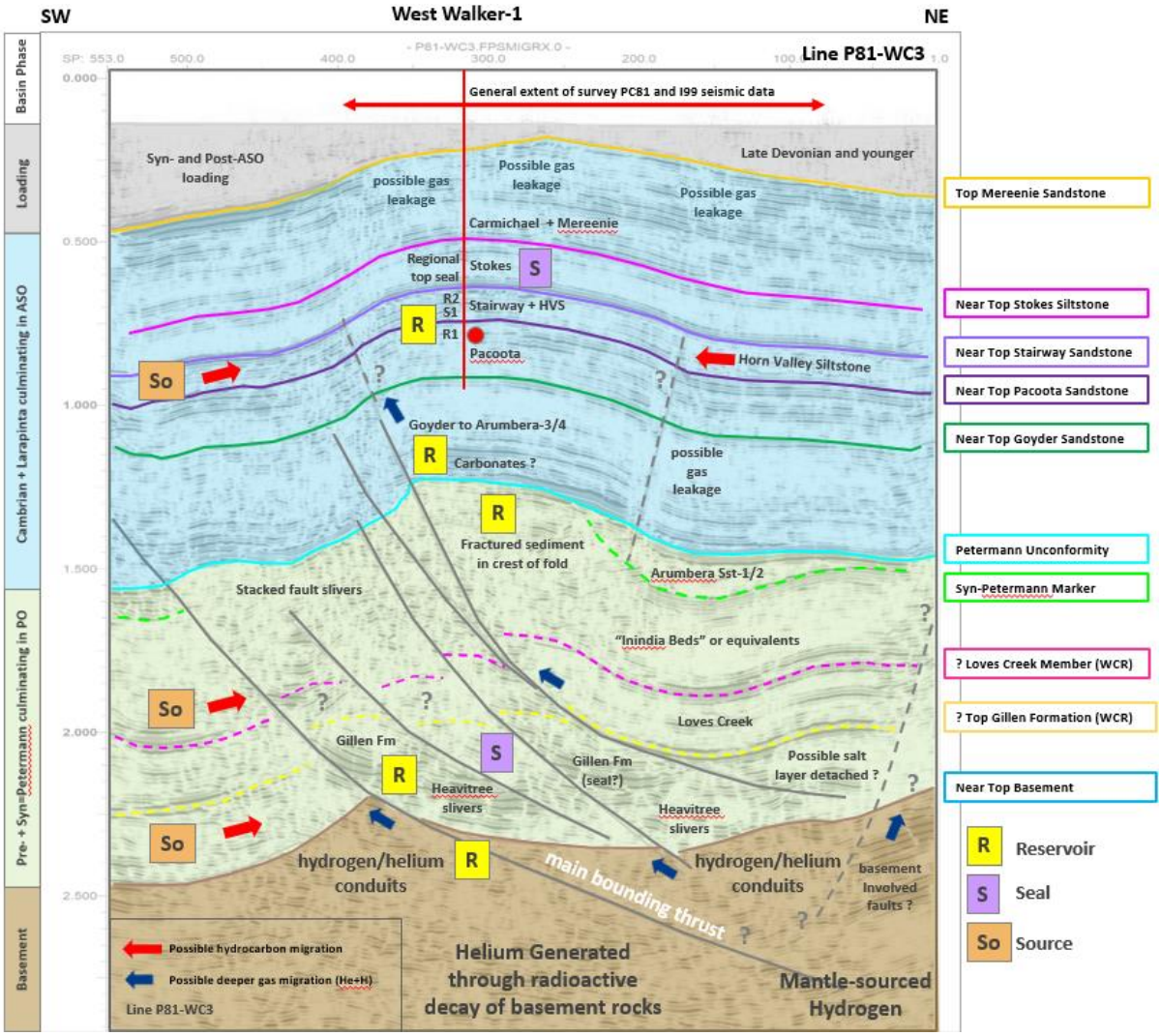


Figure 11 Interpretation of reprocessed seismic line P81-WC3 (Geognostics, 2022).

In the southern part of the permit, where subsurface data is limited, geological cross sections have been constructed to provide insights into play concepts (figure 12). Traditional plays of the Larapinta group are too shallow or lack sufficient sediment cover for sealing at top closure level (Play types 1 and 2 in figure 12). The pre-Petermann succession shows closure on the anticline down to basement with shows being recorded at multiple levels in the basin. Fractured basement or near basement Heavitree quartzite targeted plays are untested in EP145 and the northern Amadeus basin, however, the presence of helium in shallow reservoirs in the Mereenie and Palm Valley fields support a working play model (play types 5 and 6).

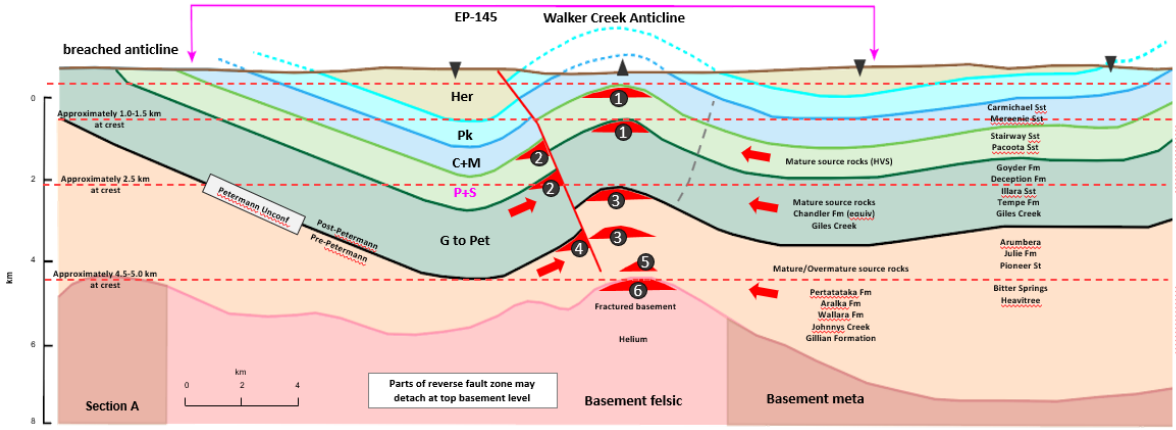


Figure 12 NE-SW Cross section A illustrating play types in EP145 (Geognostics, 2022).

Play Fairways on the Walker Creek Anticline

Prospectivity in EP145 has been divided into five key areas (Figure 13). The formation and basement compartmentalization of the anticline in EP145 occurred during the Alice Springs Orogeny. This has created a series of four-way dip closed anticlines that likely form separate closures with unique charge/migration pathways.

Areas 1 and 5 at either end of the anticline have low to moderate prospectivity in terms of trap formation, size, depth and closure. In area 5, in the southeast of the permit, the core of the anticline has been breached resulting in loss of any gas accumulations in the post Petermann stratigraphy. Prospectivity at deeper levels is high risk due the lack of seismic data. Area 2 has moderate to high prospectivity and includes the West Walker-1 well which was the first well to be drilled in the permit. The well was drilled on a broad low relief structure and in a suboptimal location. Whilst the well encountered and tested hydrocarbons the size of the mapped closure is small, and the volumes of gas are calculated as being relatively low. Additional prospectivity is likely at deeper levels based on comparison with other wells in the area but the seismic line spacing is too great to adequately define a target. Area 3 is interpreted to be the most prospective area in the permit. Closures have been interpreted at multiple levels in the stratigraphy from the tested Pacoota sandstone down to basement. Tent-Hill-1 was drilled in this area but outside of closure at Pacoota sandstone level. The well encountered good oil shows in the Horn valley siltstone, which is the primary source rock in the basin. A well drilled higher on the structure has a high probability of encountering hydrocarbons in Ordovician (Pacoota and Stairway) sandstones. The area directly overlies a felsic granite at depth which could act as a local helium source. Further southeast on the anticline area 4 has been interpreted to have moderate prospectivity in the pre-Petermann succession. The structure is almost identical to area 3 but the lack of seismic data means it has a higher risk.

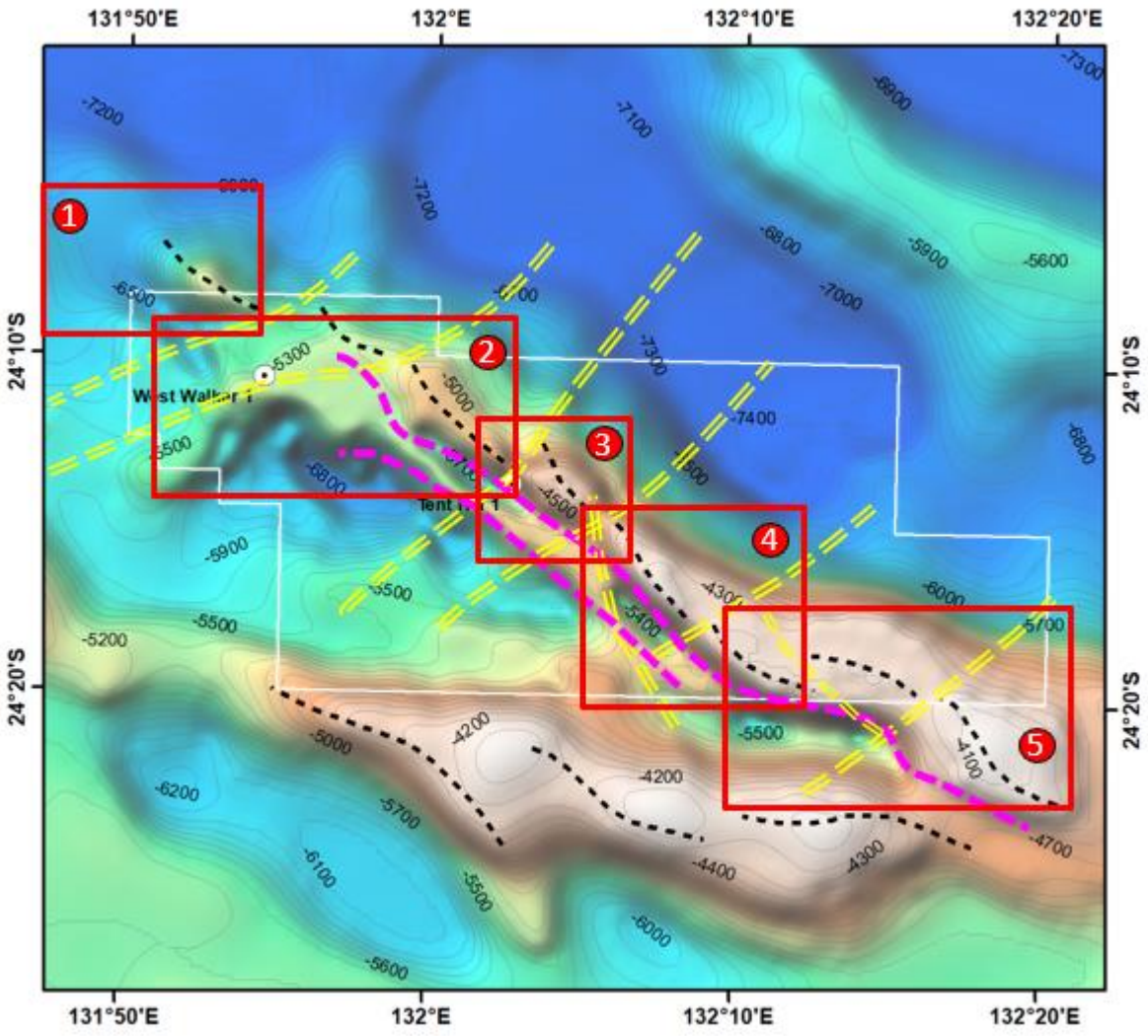


Figure 13 EP145 SEEBASE ® depth to basement map showing the five prospective areas and key tectonic features (Geognostics, 2022). Pink dashed lines indicate major basement involved faults and yellow dashed lines represent strike slip offset faults which dissect the Walker Anticlines

Migration model derived from SEEBASE®

Fluid migration pathways were modelled based on slope gradient predicted by the EP145 SEEBASE® model. It assumes a mature source rock lying at or near basement and upward migration along the steepest parts of the structure. This simple model can be applied to the migration of helium and hydrogen generated in the basement as well as hydrocarbons. It doesn't consider reservoir quality or seal capacity and gas generation estimates.

The model suggests that West Walker-1 and tent Hill-1 are not optimally located (at basement level) on the crest of the anticline. Figure 14 illustrates the possible gas migration routes into the Walker Creek anticline.

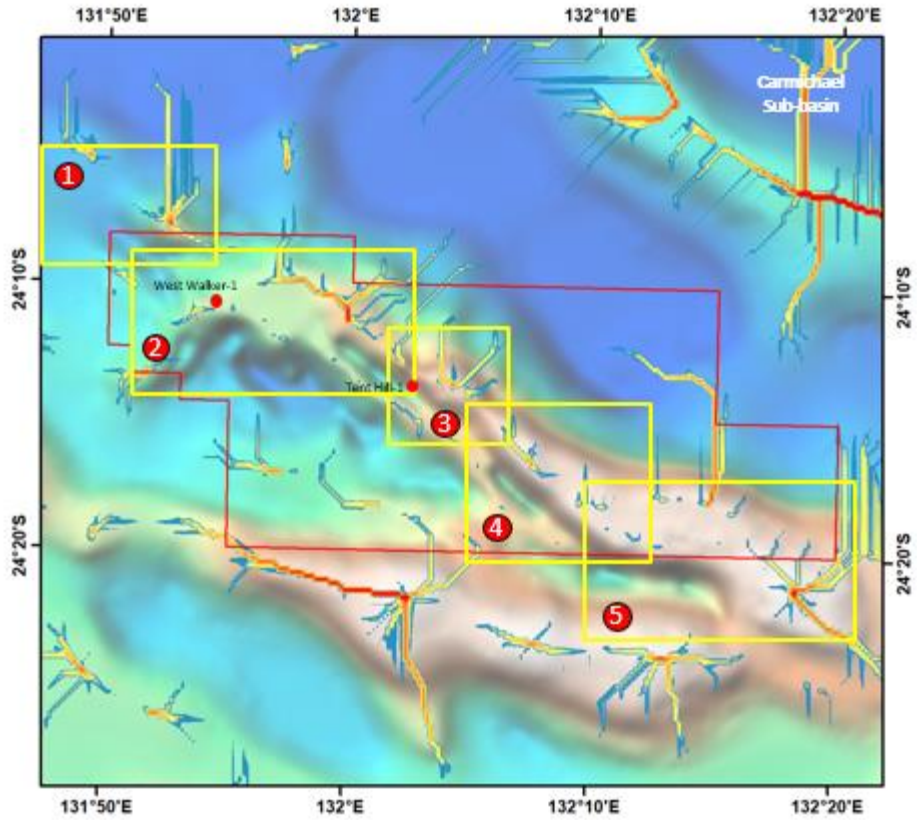


Figure 14 Upslope migration model superimposed on EP145 SEEBASE ® depth to basement map. The five structural play fairways are illustrated as yellow boxes (Geognostics, 2022).

Helium and Hydrogen Occurrences in the Amadeus Basin

The Amadeus basin contains the highest recorded helium content in Australia, with up to 10% being discovered in basement granites at Mt Kitty-1 (Boreham et al. 2016). Few wells in the basin have penetrated the helium rich subsalt succession these include Mt Kitty-1 and Magee-1 which tested 10% and 6% respectively. However, shallower hydrocarbon bearing sandstones of the Mereenie, Palm Valley, Dingo and Ooramina Fields have also recorded lower levels (0.15-0.22%) of helium mixed with natural gas (figure 15). The potential for hydrogen is more speculative as gases were not typically analysed for hydrogen during drilling or testing. The hydrogen in the Amadeus basin is believed to be sourced from the lower crust and mantle (Boreham et al. 2021) although more research is required to understand this model. To date hydrogen has only been tested at Mt Kitty-1 where it occurred in fractured granite basement at up to 11%. Gas was not analysed for hydrogen in other earlier subsalt wells.

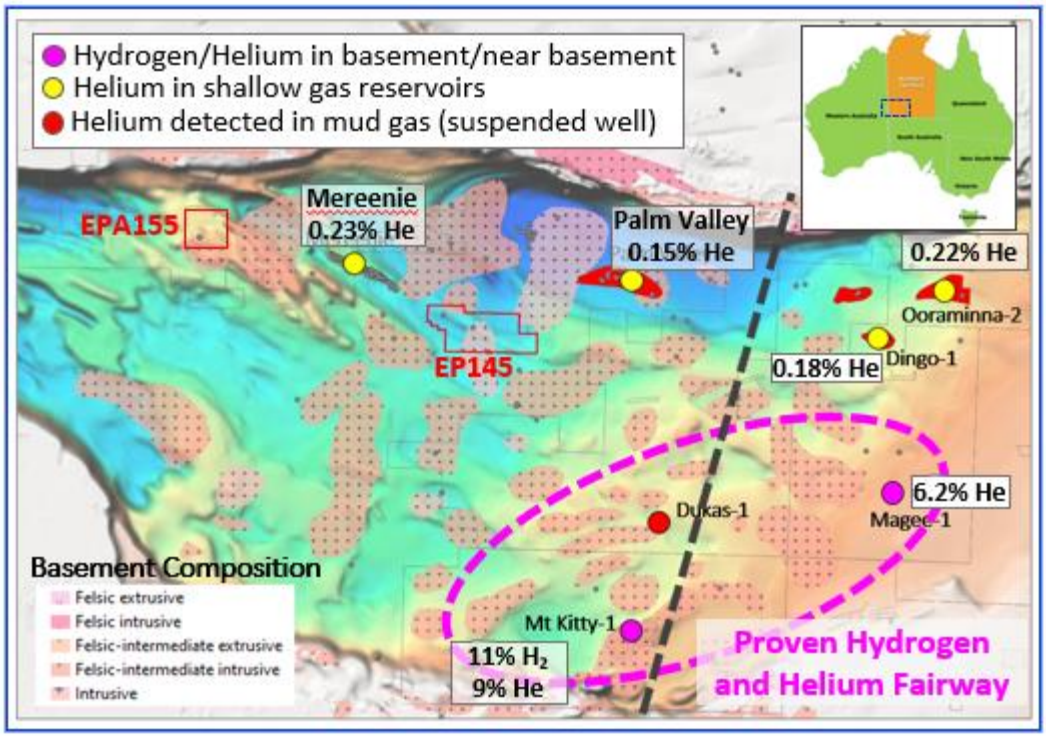


Figure 15 Hydrogen and Helium occurrences in the Amadeus Basin (modified from Boreham et al. 2022)).

EP145 Helium and Hydrogen Potential

Current results suggest that proximity to felsic granite basement and the presence of salt are important factors needed for helium and hydrogen accumulation. Basement-involved faults are conducive to providing connectivity between potential deep basement source rock and overlying traps but as basement is difficult to pick on seismic in EP145 the geometry of these faults remains uncertain. Using the data available a mixed fault model is proposed for EP145 (figure 16) which illustrates possible migration routes from basement to trap.

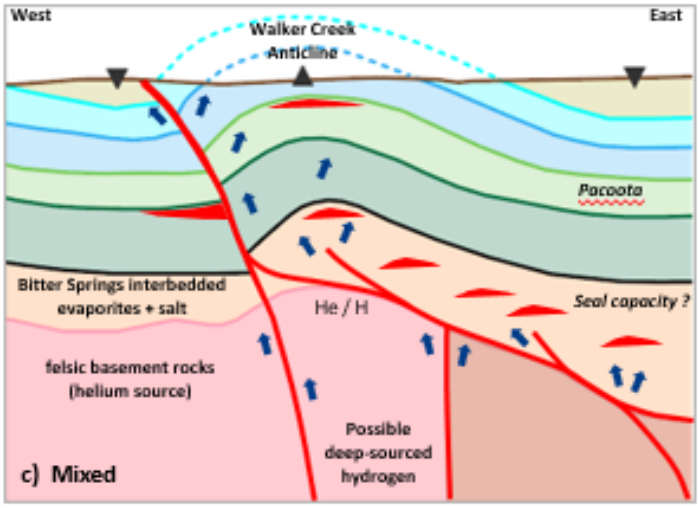


Figure 16 Mixed fault model demonstrating helium and hydrogen migration for the Walker Creek Anticline (Geognostics, 2022).

2D Seismic Planning and Fieldwork

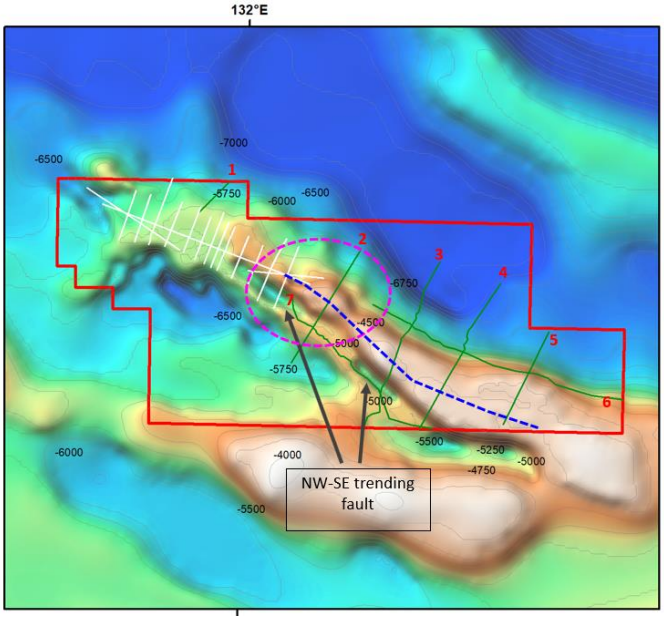
Planning and Activity Overview

Mosman engaged Resource Geosolutions Australia Pty Ltd (ResourceGeo) to manage the planning and acquisition of the 2D seismic data which is the exploration work commitment for permit year 3. The initial seismic line design was determined based on technical work and accessibility. Onsite field reconnaissance was conducted in 2019 to review logistics for the seismic program and determine viability of acquisition techniques; vibroseis versus dynamite source. The terrain in the area of interest comprises flat sandy valleys cut by dry creek beds and steep rocky hills presenting feasibility challenges to the seismic program. The seismic line locations were modified to account for the accessibility and acquisition challenges.

The reconnaissance work highlighted that a dynamite source would be required for many of the lines as the terrain was too steep and rocky for vibroseis trucks to access. The use of dynamite also reduces damage to the environment caused by heavy trucks. The use of dynamite as a source was discussed with the CLC and other stakeholders. Mosman has also continued to liaise with other operators in the area who also plan to use dynamite for 2D surveys.

Mosman obtained approval from AAPA for the seismic acquisition program in December 2019. This certificate was valid for 24 months and has recently expired. A new AAPA request was submitted in March 2023 and is pending approval.

During the period extending from March 2020 to mid-2021 access to the permit was denied by the CLC and thus the ability to continue planning for seismic acquisition was restricted. During this period Mosman undertook various technical projects (see above) to gain a deeper understanding of the geological history of the permit with the aim of ensuring the best possible seismic line locations. The technical evaluation and identification of a possible hydrogen and helium play in the permit necessitated minor changes to some of the seismic lines, specifically an east-west strike line that was previously positioned along the trend of a major basement fault (figure 17).



White lines = existing 2D seismic

Green lines = Initial 2D line locations

Blue line = proposed new strike line to avoid basement fault

Figure 17 Map of proposed seismic lines moved to avoid basement fault

The updated and finalised seismic line location was submitted to the CLC in May 2022 as part of the sacred site certificate application. At this time Mosman also conducted an ecological field study for the seismic program in preparation for seismic acquisition.

Work is continuing to finalise seismic acquisition. The CLC report and approval was received in February 2023 and a new request has been submitted to AAPA for their approval. Contractors have been selected for key activities associated with seismic acquisition and further field reconnaissance work was conducted to prepare for the seismic program.

Providing all approvals are met in a timely manner Mosman anticipates that the 2D seismic acquisition could be achieved in the first half of 2024 (Table 2). A full interpretation of the seismic data and integration with existing geophysical and well data would then be required to select the best possible drill locations prior to progressing into permit year 4.

Mosman Oil & Gas
Wild Horse 2D Seismic
Milestone Schedule

ID	Task Name	Start	Finish
1	AMA1824MOG Wild Horse 2D Seismic	Sun 1/01/23	Mon 24/06/24
2	Planning	Sun 1/01/23	Sat 18/11/23
3	Scope/Budget	Sun 1/01/23	Wed 1/11/23
4	Line Design	Sun 1/01/23	Sun 1/01/23
5	Budget	Wed 1/11/23	Wed 1/11/23
6	Procurement	Sat 18/11/23	Sat 18/11/23
7	Civils	Sat 18/11/23	Sat 18/11/23
8	Drilling & Loading	Sat 18/11/23	Sat 18/11/23
9	Explosives	Sat 18/11/23	Sat 18/11/23
10	Acquisition	Sat 18/11/23	Sat 18/11/23
11	HeliSupport	Sat 18/11/23	Sat 18/11/23
12	Processing	Sat 18/11/23	Sat 18/11/23
13	Environmental, HSE, Approvals	Thu 16/02/23	Thu 1/02/24
14	CLC Certificate	Thu 16/02/23	Thu 16/02/23
15	AAPA Certificate	Fri 12/01/24	Fri 12/01/24
16	HSE & Ops Scout	Wed 10/05/23	Wed 10/05/23
17	Ecology Report	Fri 11/08/23	Fri 11/08/23
18	Environmental Management Plan	Fri 15/09/23	Fri 15/09/23
19	HSE Pre-Qual	Sun 12/11/23	Sun 12/11/23
20	Risk Assessment	Sun 29/10/23	Sun 29/10/23
21	HSE Bridging Document	Sun 12/11/23	Sun 12/11/23
22	Emergency Response Plan	Sun 12/11/23	Sun 12/11/23
23	Safety Management Plan	Sun 12/11/23	Sun 12/11/23
24	EMP Regulator Approval	Thu 25/01/24	Thu 25/01/24
25	Planning Checklist	Thu 1/02/24	Thu 1/02/24
26	Execution	Mon 25/03/24	Sat 8/06/24
27	Commence Civils	Mon 25/03/24	Mon 25/03/24
28	Complete Civils	Mon 8/04/24	Mon 8/04/24
29	Commence Drilling	Mon 8/04/24	Mon 8/04/24
30	Complete Drilling	Thu 23/05/24	Thu 23/05/24
31	Commence Acquisition	Sat 18/05/24	Sat 18/05/24
32	Complete Acquisition	Sat 8/06/24	Sat 8/06/24
33	Close	Sat 25/05/24	Mon 24/06/24
34	Rehab Assessment	Sat 25/05/24	Sat 25/05/24
35	Seismic Operations Report	Mon 24/06/24	Mon 24/06/24

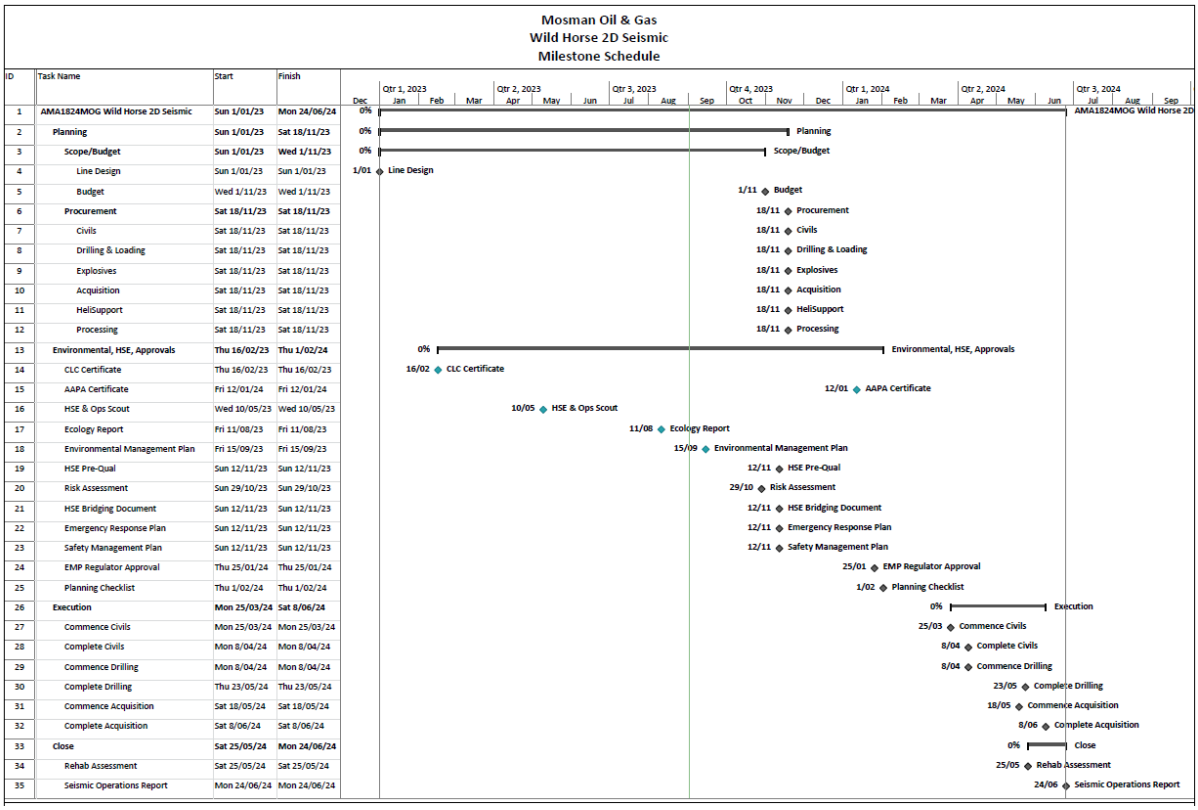


Table 2 Wildhorse 2D Seismic Survey Schedule (ResourceGeo, 2023)

Seismic Acquisition Program and Methodology

Mosman plans to acquire up to 121km of 2D seismic data (Wild Horse 2D seismic survey) to fulfill the year 3 work program commitment (figure 18).

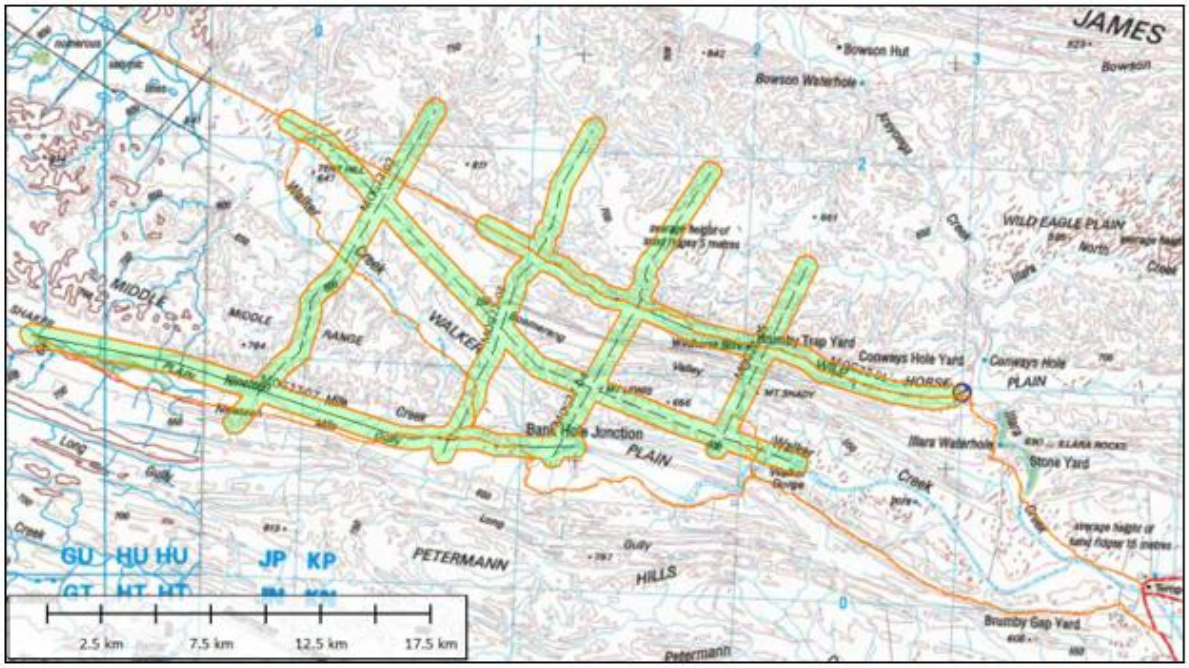


Figure 18 Map of proposed seismic lines and access tracks in EP145

The Wild Horse 2D seismic survey, operated by Mosman Oil and Gas and located in EP145 in the Northern Territory will be acquired with a dynamite source to reduce impacts on the rugged terrain it overlays. The total planned line length is 121km, consisting of approximately 800 dynamite source points to provide the energy required to image the subsurface geology. Depending on accessibility, the seismic data will be acquired by either a seismic weight drop/vibrator or explosive charge. The weight drop/vibrator is mounted on a tractor or truck is driven along the seismic line and stopped at intervals to produce sound waves. For areas where vehicle access is restricted such as ranges and rocky outcrops, seismic shots (a small explosive charge) will be used as an energy source which also generates sound waves. The shot holes will be drilled at approximately 50m or more spacings and are 0.1m wide and less than 15m deep. The explosive used will not exceed 2kg and will be handled, placed and detonated by a qualified shotfirer. Once the shots have been successfully detonated, the drillhole and surrounding area are assessed and rehabilitated if required.

Ecology Survey

SLR Consulting Australia Pty Ltd (SLR) was engaged by Enviro-Value Pty Ltd on behalf of Mosman Oil and Gas Ltd to undertake an ecological assessment in support of a proposed 2D seismic gas exploration survey located in Permit EP145. The objective was to describe ecological values and protected matters in accordance with current NT and Commonwealth legislation that occur or may occur in the study area including vegetation communities, habitats and terrestrial flora and fauna biodiversity, the potential occurrence of NT listed threatened species, water sources and sensitive and significant vegetation and the occurrence and impacts of pest flora and fauna within the study area. The Ecology Report is appended to the annual report.

Implications for future exploration in EP145

Acquisition of high-resolution gravity and gradiometry together with SEEBASE® mapping and reinterpretation has provided a major breakthrough in terms of the understanding of prospectivity in EP145. This additional work program has proven the presence of a deeper salt related and subsalt helium and hydrogen play beneath the Walker Creek anticline and provided confidence in structural mapping of potential targets.

APPENDIX 1 – LIST OF REPORTS SUBMITTED DURING THE PERMIT YEAR

Airborne Gravity and Gradiometry Processing Report

EP145 Gas Seep Report

Amadeus Basin, EP145 SEEBASE® Update

Geognostics MOS02 Amadeus Prospectivity Update

SLR Consulting Amadeus Basin Exploration Terrestrial Ecology Baseline Survey

APPENDIX 2 – SUMMARY OF ANNUAL EXPENDITURE

Mosman Oil and Gas incurred a total expenditure of A$1,407,055.37 in permit year 3 through the period 22nd August 2019 to 21st August 2023. This includes administrative costs of A$106,306.82 and Central Land Council costs of A$347,579.60 incurred during the same period.

Time Period	Techical Evaluation	Seismic Survey	Feasibility	CLC	Tenement costs	TOTAL
1 Sept 2018 to 31 Aug 2019	$ 39,117.77		$ 49,000.00	$ 41,862.34	$ 2,072.00	**$ 132,052.11**
1 Sept 2019 to 31 Aug 2020	$ 9,825.00			$ 50,322.07	$ 79,841.82	**$ 139,988.89**
1 Sept 2020 to 31 Aug2021	$ 86,093.18	$ 370,217.00		$ 153,717.48	$ 7,388.00	**$ 617,415.66**
1 Sept 2021 to 31 Aug 2022	$ 79,275.00	$ 160,515.00		$ 97,845.68	$ 7,567.00	**$ 345,202.68**
1 Sept 2022 to 31 Aug 2023	$ 135,126.00	$ 24,000.00		$ 3,832.03	$ 9,438.00	**$ 172,396.03**
Total	$ 349,436.95	$ 554,732.00	$ 49,000.00	$ 347,579.60	$ 106,306.82	**$ 1,407,055.37**