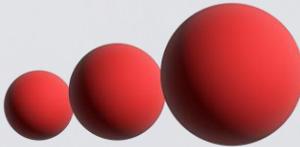


BRINGING NEW ENERGY TO EAST COAST AUSTRALIA



OMEGA
OIL AND GAS LIMITED



May 2024

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Key Risks

We recommend investors to read and consider the risks associated with Omega, its assets and the industry it is in as set out in Omega's prospectus that was lodged with the Australian Securities and Investments Commission on 22 August 2022 (Prospectus) which is available from Omega's website <https://omegaoilandgas.com.au/prospectus/>. Some of the key risks set out in the Prospectus include:

Exploration risk

Oil and gas exploration and development is speculative and involves elements of significant risk with no guarantee of success. A key to the Company's financial performance is to have success in exploring for and locating commercially exploitable hydrocarbons. Exploration is subject to technical risks and uncertainty of outcome. The Company may not find any or may find insufficient hydrocarbon reserves and resources to commercialise, which would adversely impact the financial performance of the Company. There is the risk that drilling will result in dry holes or not result in the discovery of commercially exploitable hydrocarbons. Wells may not be productive, or they may not provide sufficient revenues to return a profit after accounting for associated costs. The cost of drilling, completing, equipping, and operating wells is subject to uncertainties.

Operational risk

Gas development activities include numerous operational risks, including but not limited to, adverse weather conditions, compromised well integrity, environmental hazards, water production and unforeseen increases in establishment costs, accidents (including, for example, fires, explosions, uncontrolled releases, spills and blowouts), equipment failure, industrial disputes, technical issues, supply chain failure, labour issues, deliberate destruction, adverse production results, uncertainty in resource and reserve estimation, uncertainty in deliverability estimation, IT system failure, cyber security breaches, political opposition and other unexpected events. Drilling operations, in particular, carry inherent risk associated with, for example, unexpected geological conditions, mechanical failures, or human error.

Reserves and resources estimates

Estimating hydrocarbon reserves and resources is subject to significant uncertainties associated with technical data and interpretation of that data, future commodity prices and development and operating costs. There can be no guarantee that the Company will successfully produce the volume of hydrocarbon that it estimates are reserves or that hydrocarbon resources will be successfully converted to reserves. Estimates may alter significantly or become more uncertain when new information becomes available due to, for example, additional drilling or production tests over the life of the field. As estimates change, development and production plans may also vary. Downward revision of reserves and resources estimates may adversely affect the Company's operational and financial performance.

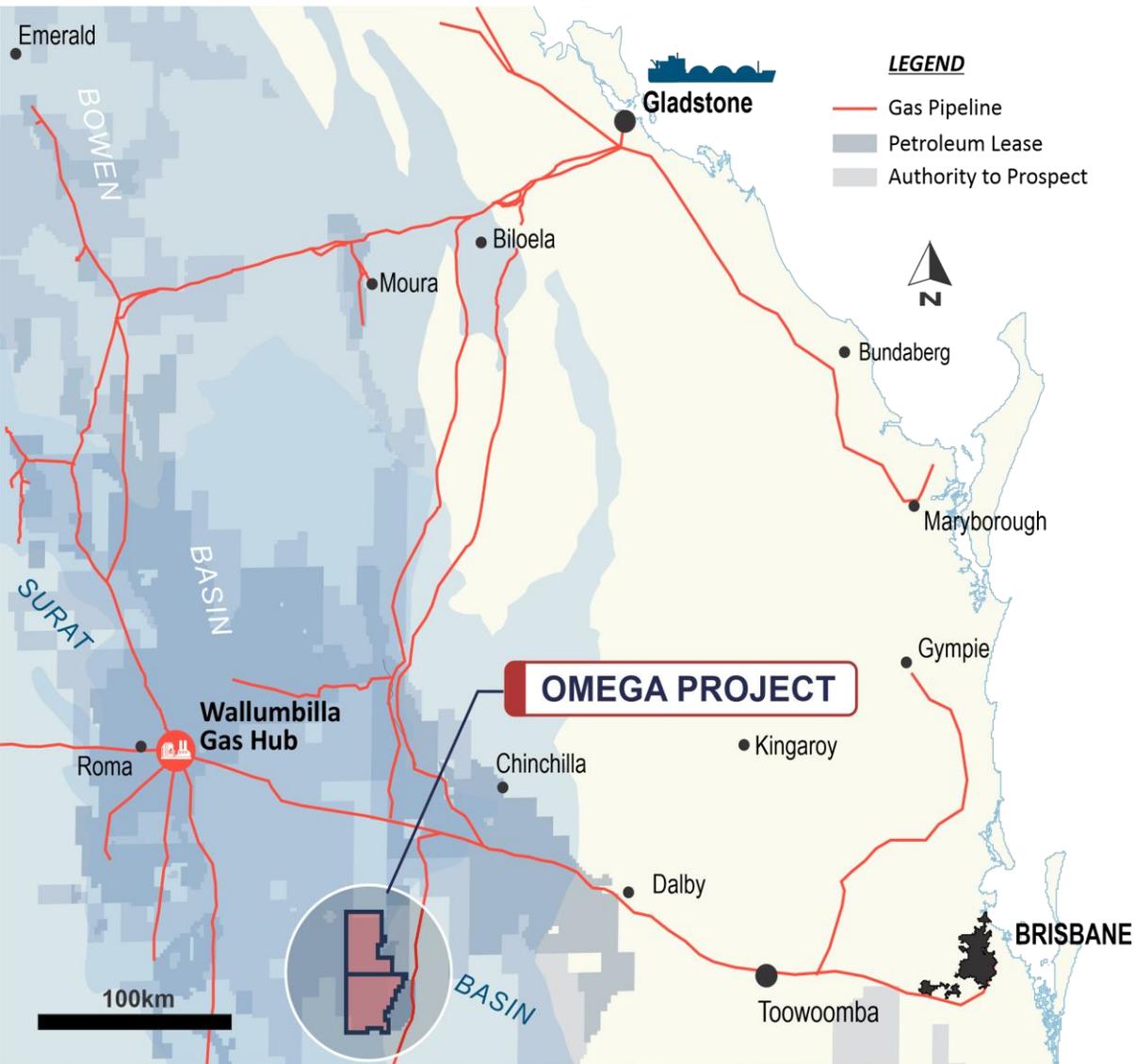
Accumulations of hydrocarbons will be classified according to the system designed by the Society of Petroleum Engineers, through the Petroleum Resources Management System (SPE-PRMS) and in accordance with ASX Listing Rules. The SPE-PRMS classifies accumulations of hydrocarbons with respect to a matrix of uncertainty and chance of commerciality. Whilst there are a multitude of pathways through this matrix from prospective resources to contingent resources and then to reserves, the process is defined by three stages of exploration, appraisal, and development. Prospective resources are defined as those quantities of gas which are estimated on a given date to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated chance of discovery and a chance of development; however, are undiscovered and as such carry significant exploration risk. There is a different process for the conversion of resources to reserves between conventional (high permeability) reservoirs and unconventional (low permeability) reservoirs. For conventional reservoirs this is done via a relatively short-term flow tests in the appraisal wells. For the unconventional reservoirs which often contain much larger accumulations covering larger areas, several longer-term production pilots may be required to demonstrate commerciality and quantification of reserves.

Reliance on oil and gas development and production activity

The Company is an explorer and developer of hydrocarbons. The level of activity in the oil and gas industry may vary and is principally affected by the prevailing or predicted future oil and gas prices, market demand and other factors. These other factors, including economic growth, the cost and availability of other energy sources (including renewable energy) and changes in energy technology and regulation, affect the industry. The future growth of the Company is dependent on the continued economic importance of oil and gas, development, and production industry in Australia and internationally.

Any substantive and prolonged changes to the current economic importance of the gas development and production industry in Australia would be likely to have an adverse effect on the business, financial condition, and profits of the Company.

Omega's Opportunity



High-potential, low CO₂, gas and liquids portfolio in Queensland's Taroom Trough



Two successful discovery wells in 2023
Significant appraisal tests in 2024



Favourable location means lower development costs



Strong technical and leadership team
Extensive tight-gas exploration and development expertise in Australian and US basins



Experienced, well-financed major shareholders



Strong Government support
Future Gas Strategy highlights key role for gas to 2050 and beyond

Board and Management



Stephen Harrison
Executive Chairman

Stephen brings to the Board extensive experience in ASX-listed entities. Stephen is currently Chairman of ASX-listed NobleOakLife Limited. He also has extensive experience in the Oil and Gas industry, including as a former Director of Blue Energy Limited and Exoma Energy Limited.



Trevor Brown
Interim CEO

Trevor is a geologist and executive with over 35 years' experience with oil and gas exploration, development, and production in Australia, SE Asia and USA. Trevor spent 15 years with Santos where he led the Exploration and New Ventures Business, then as Vice President Queensland, where he led the Upstream (Exploration and Production) division of the \$25bn GLNG Project through development, construction and start-up. Trevor serves as a Director on several private resource companies and advises Boards and Executive teams in the Resource, Energy and Power sectors.



Quentin Flannery
Non-Executive Director

Quentin is the Chief Investment Officer of the Flannery family office investment vehicle, Ilwella. Quentin brings more than a decade of experience in the natural resources space both as a commodity trader running a global portfolio and as an investor in numerous private and public investments. Quentin is a member of the Australian Institute of Company Directors and is a Director on several portfolio companies in the family office as well as a Director on the Flannery Foundation.



Andrew Hackwood
Non-Executive Director

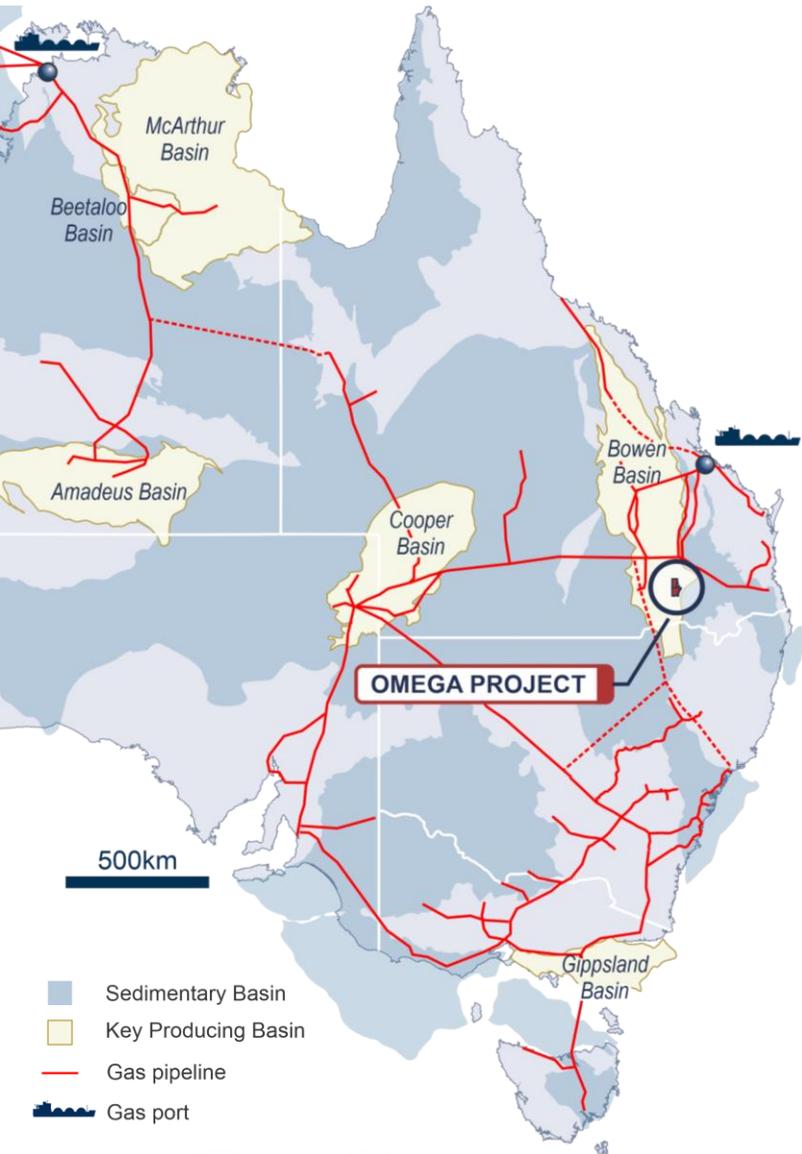
Andrew holds the executive role of Australian Country Manager with Tri-Star Group and is a NED on an unlisted minerals exploration company. Andrew has deep commercial expertise in all aspects of the east coast gas market and both domestic and international experience in principal investing in infrastructure and utilities. Andrew has held senior positions at Santos Limited, including General Manager of Commercial for the \$18.5 billion GLNG Project. Earlier in his career, Andrew was an investment banker with Macquarie Bank and a lawyer with Allens.



Michael Sandy
Non-Executive Director

Michael is a geologist with over 40 years' experience in the resources industry, in Australia and internationally. He has been involved in setting-up and taking energy companies to IPO (Novus Petroleum, Hot Rock Limited and Burleson Energy) and has held various roles. Michael has also held Non-Executive Director roles with eight ASX listed companies, including Tap Oil, and currently is a NED with Melbana Energy. Michael has an exploration geotechnical background with extensive experience in business development, asset management and investor relations.

Taroom Trough – Next Generation East Coast Gas Supply



1

Gas supply deficit forecast from 2028¹.

2

Taroom Trough - several operators (including Majors) are actively de-risking the play

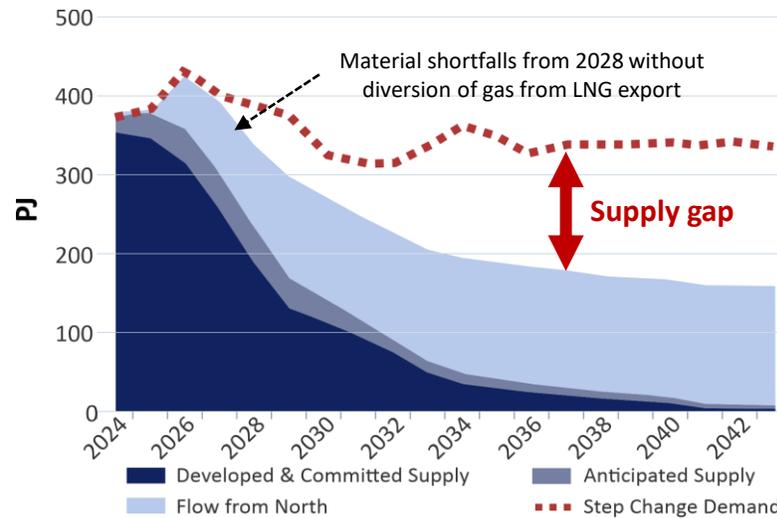
3

Proven, large-scale tight-gas play with multi-TCF potential

4

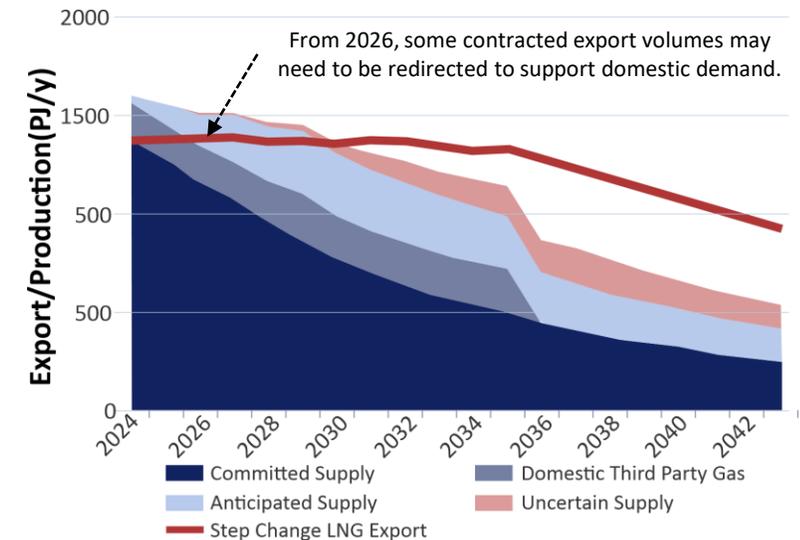
Near-term production potential with low-cost access to domestic or export markets.

Southern Domestic Market Supply/Demand Balance



Note: 1 - AEMO 2024 Gas Statement of Opportunities.

LNG Export Supply Position



Taroom Trough – Next Generation East Coast Gas Supply

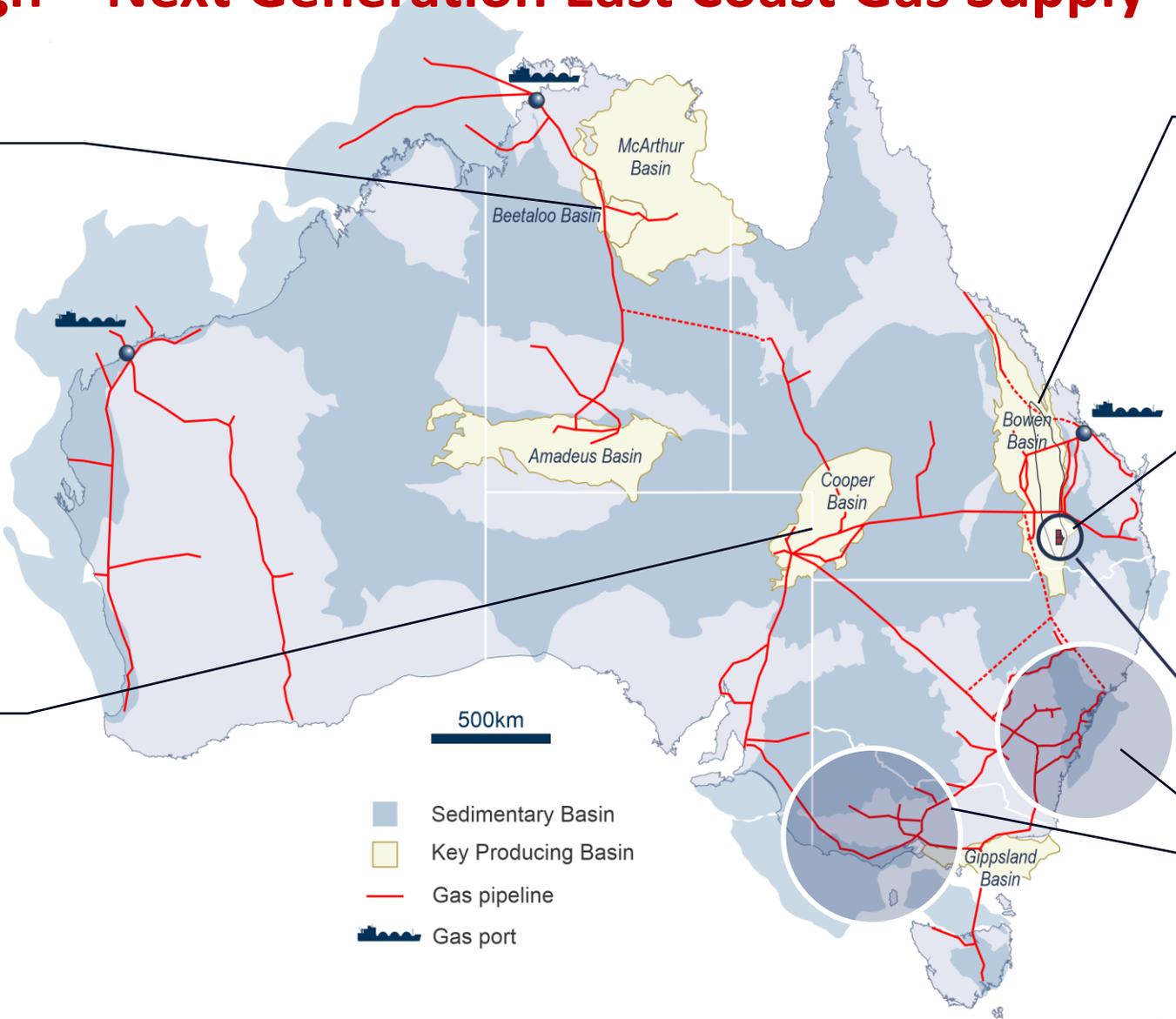
Beetaloo Basin – potential future gas producer – remote, with costly, major new pipeline infrastructure required to reach Eastern Australian demand centres

Bowen Basin - producing basin - vast majority to LNG export



Omega is perfectly positioned in the **Taroom Trough** with:

- proven large-scale tight-gas play with multi-TCF potential
- Near-term, low cost, low CO₂ production potential
- Low-cost access to domestic & export markets



Cooper Basin – producing basin with limited upside to meet increasing Eastern Australia market demand

OMEGA PROJECT

Major domestic gas market demand on eastern seaboard

Gippsland Basin – in rapid decline

Numerous Operators currently exploring and appraising

Exploration and Appraisal

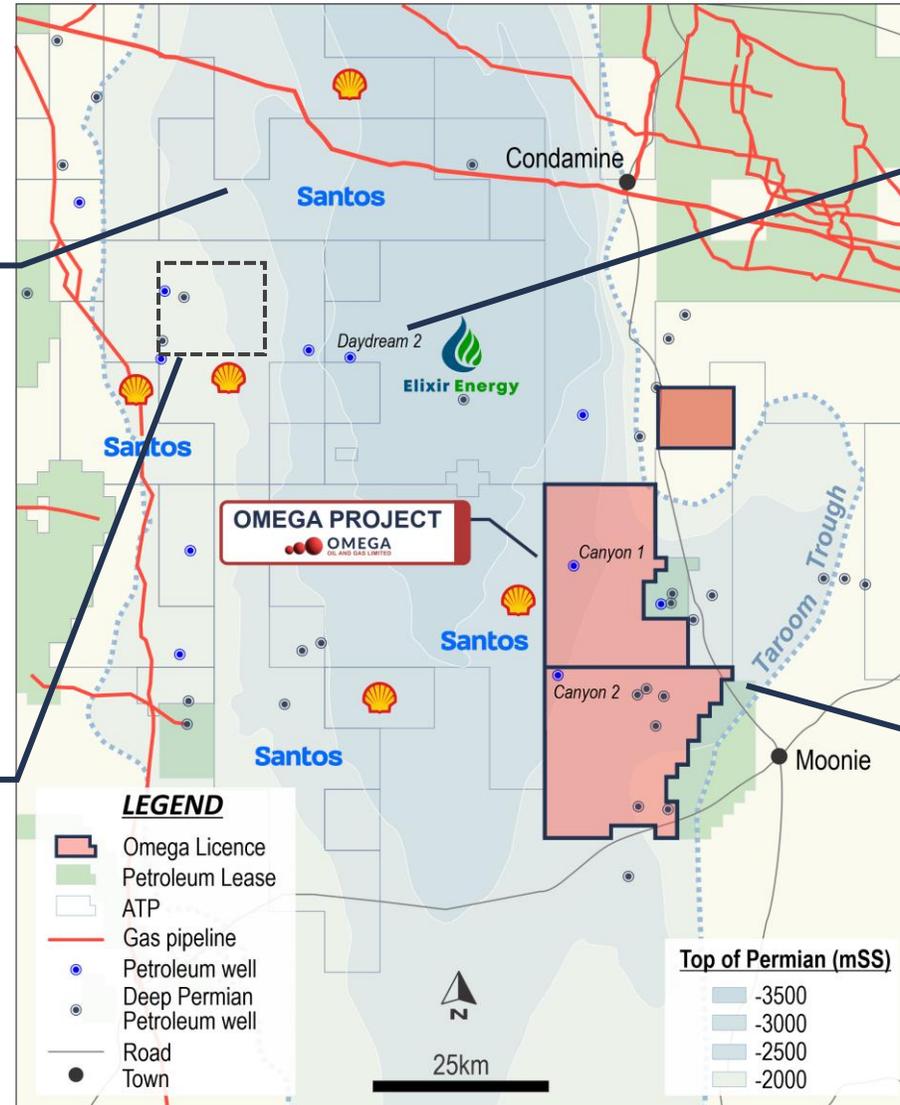
- Maintains licences in the basin centred fairway
- Have previously explored and appraised deeper Permian targets (Tinowon 2) up dip of the Basin Centred Play.
- Appraisal included multi-stage stimulation program
- Seismic and drilling anticipated in coming years

Santos

Tight Gas Sands Project

- Appraisal drilling campaign following the results of QGC / British Gas original program
- Currently drilling horizontal wells targeting tight sands within Permian Reservoirs
- Wells to be fracture stimulated and production tested

Shell



Grandis Project

- Daydream 2 (vertical well) drilled to 4,300m
- Targeting tight sands and coals in Permian Formations
- Intersected permeable reservoir in the lower Lorelle Sandstone at 4,200m.
- Completing a multi-strata hydraulic fracture stimulation program.

Elixir Energy

Canyon Project

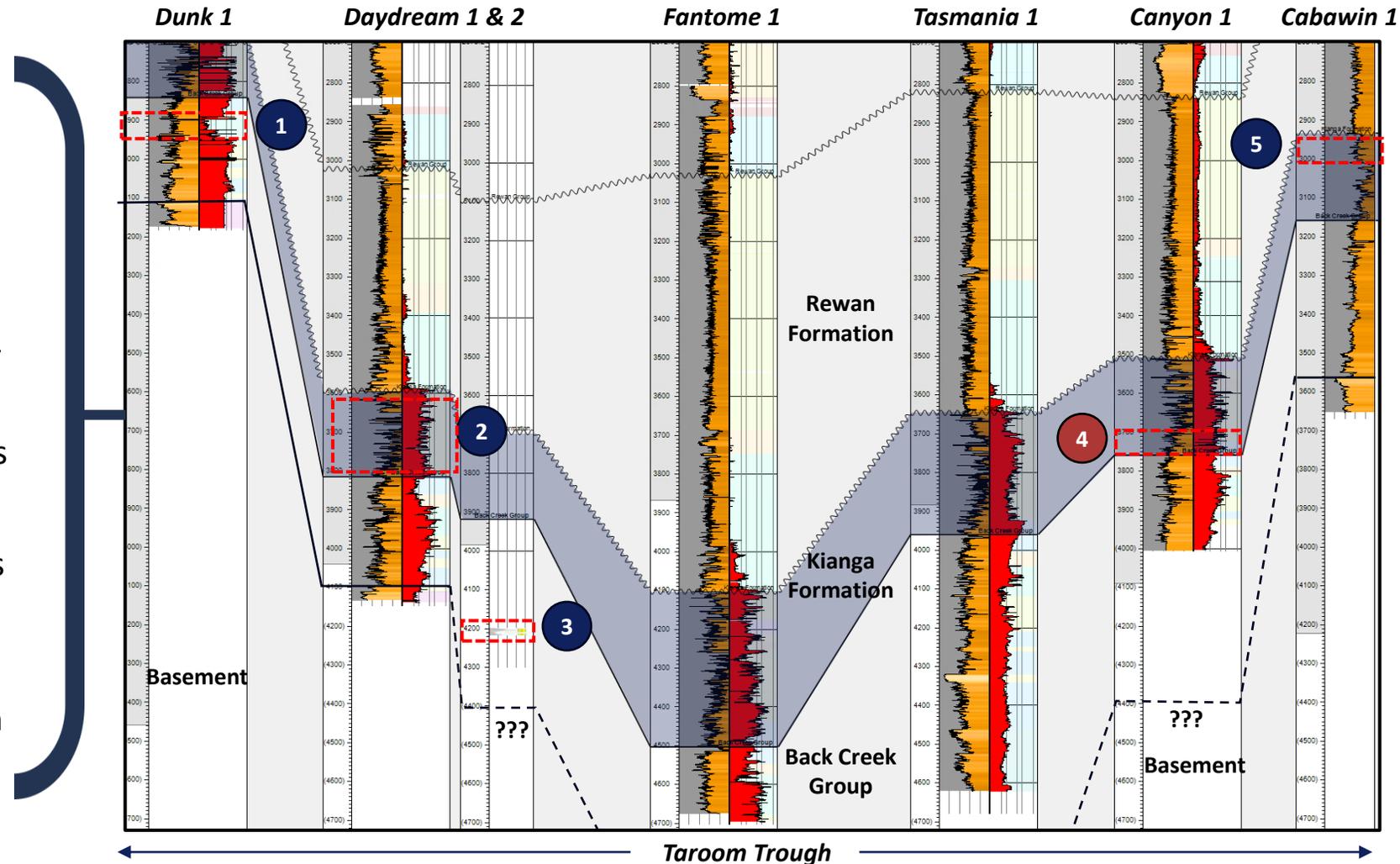
- Canyon 1 drilled to 4,000m, Canyon 2 drilled to 3,806m
- Intersected thick section of Permian sediments with high gas readings
- Decision made while drilling Canyon 1 to suspend in open hole to allow re-entry.
- Canyon 1H (horizontal well) targeting tight gas sands in the Lower Kianga Formation (Canyon Sandstone)
- Multi-stage stimulation program planned

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Multiple Play Types being tested in the Southern Taroom Trough

Basin Play Types

- 1 Horizontal completion in channel Sands within the Wallabella Coal Measures
- 2 Vertical completion in Tight Sands & Coals within the Kianga Formation & Back Creek Group
- 3 Vertical completion in Channel sands within the Lorelle Sandstone
- 4 Horizontal completion in Tight Sands within the lower Kianga Formation (Canyon Sandstone)
- 5 Historical (unstimulated) completion in the upper Kianga Formation that was produced conventionally

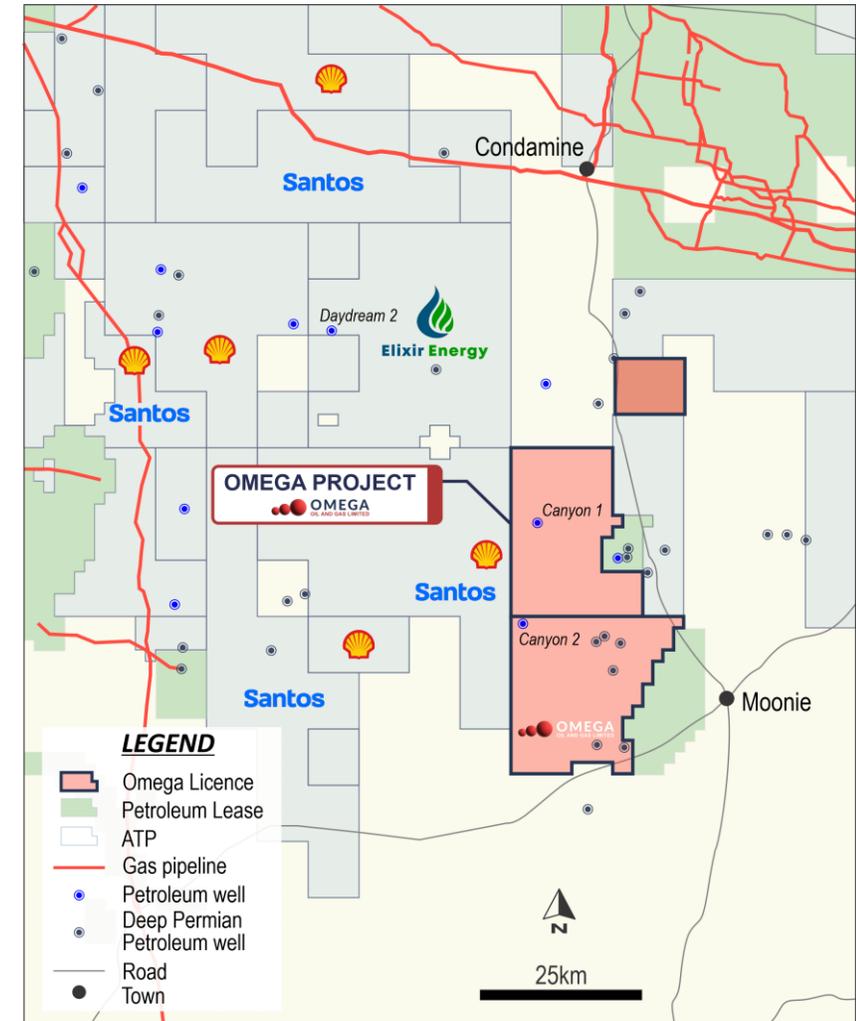


Note Daydream 2 top Kianga Formation taken from Elixir Announcement (30 November 2023): "Daydream 2 – Progress Report". Other tops presented are based on extrapolation from Daydream 1 where information is publicly available.

Taroom Trough Permian Gas Play – Horizontal wells to test flow capacity

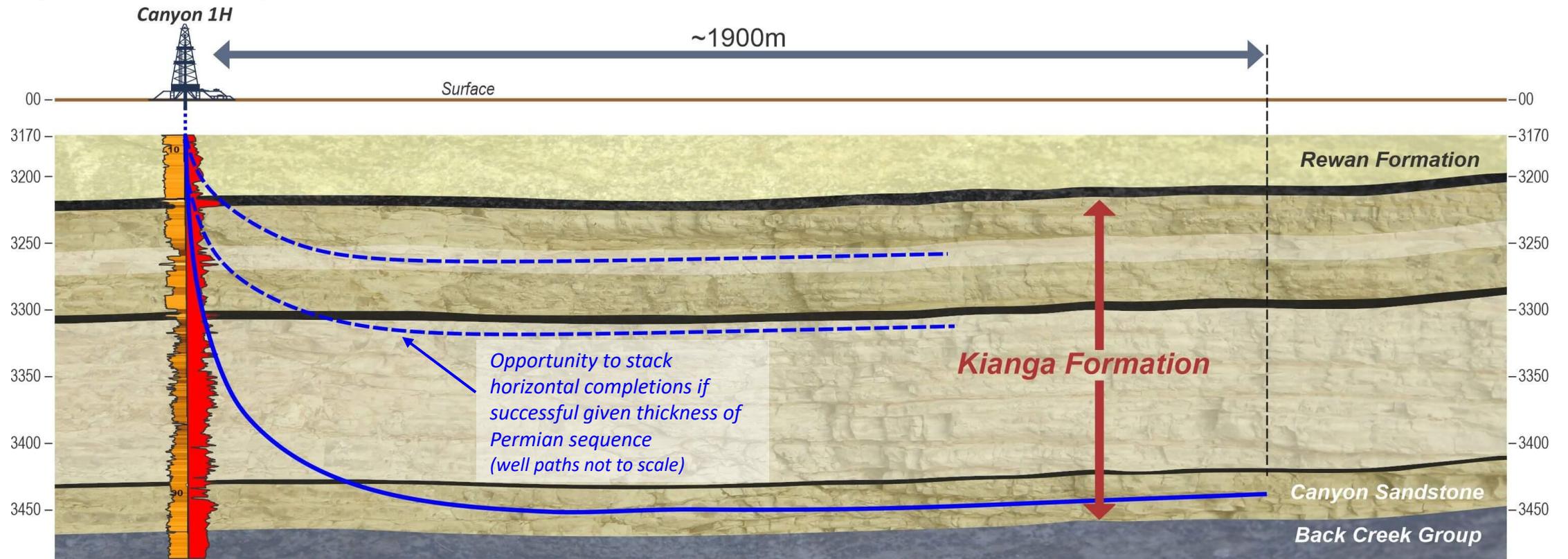
 <p>Large Continuous Unconventional Resource</p>	<ul style="list-style-type: none"> • Canyon wells prove the deep Permian play. • Multiple, thick packages of gas saturated rock. • Gross 2C contingent resources of 1.73 TCF¹ within the Kianga Formation • Net 2C contingent resources comprise 1.51 TCF Gas and 68.6 million barrels of condensate
 <p>Demonstrated flow from multiple vertical wells</p>	<ul style="list-style-type: none"> • QGC's deep wells fracture-stimulated and production tested. • Tasmania 1, Fantome 1 and Daydream 1 flowed gas and condensate. • An instantaneous rate of 3.5mmscf/d recorded at Daydream 1. • Cabawin 1 (unstimulated) produced on average 625,000scf/d gas with 80bbls/d crude oil on test.
 <p>Moderate Stress Regime Moderate to high Overpressure Moderate Temperature</p>	<ul style="list-style-type: none"> • Reservoir conducive to vertical fracture propagation when stimulated. • Overpressure observed in both Canyon wells and throughout the Permian sequence consistent with basin-centred play. • Moderate geothermal gradient.
 <p>Horizontal wells needed to test capacity of reservoir to flow at commercial rates</p>	<ul style="list-style-type: none"> • Multiple horizontal wells and multi-stage fracture stimulation programs during 2023 and 2024. • Program being designed based on analogous reservoirs. • Shell/QGC and Elixir Energy appraisal programs underway.

Taroom Trough – activity on the rise



¹Refer to Omega Oil & Gas Announcement (23 October 2023): "Maiden Gross Contingent Gas Resource of 1.73 TCF across ATP 2037 and 2038" and Listing Rule 5.43 Disclosure slide.

Canyon-1H Objective



- Objective is to drill a horizontal well in the lower Kianga Formation (Canyon Sandstone) and complete a multistage fracture stimulation and flowback program to test the deliverability of the target reservoir.
- Zone selected based on superior reservoir and completion qualities and associated drilling risks.
- Minimum horizontal planned length is **300m**, however the horizontal section may be extended to **1,600m** if conditions permit.

Ensign Rig #965 contracted to drill Omega's Canyon 1H horizontal well



Rig is warm, moving to site after being released from Shell QGC's Tight Gas Sands (TGS) project, where the same crew is drilling similar horizontal wells.



Ensign #965 rig is an ADR-1500 model rig with a hook load of 750,000 lbs.



Ensign has a proven track record of drilling wells of similar depths throughout Australia with this model rig, including recently, nearby in the Taroom Trough.



The rig has the operational capability to drill beyond the planned total depth of Canyon-1H should it be required.



Ensign Rig #965

Plan Update – What we’ve done the last 6 months

1



Resource Assessment

NSAI assessed a **1.73TJ Gross 2C Gas Resource** within the Upper & Lower Kianga Formations. Net Resources include **1.51 TCF Gas and 68.6mmbbls Condensate**

3C Resources are estimated to be **4.5TCF Gross Contingent Resources**

2



Finalise Canyon 1H Landing Zone

Canyon 1H horizontal well will be landed in the **lower Kianga Formation (Canyon Sandstone)** based on interpreted **superior reservoir and completion qualities**

3



Secure rig, major services and purchase long leads

Long lead items **ordered late 2023** ensuring availability for the Canyon 1H drill program.

All other major services have been tendered and will be **awarded imminently** now the rig contract has been executed

4



Develop Basis of Design and Well Program

The same Drilling and Completions team with **proven operational capability** at Canyon-1 and Canyon-2 have developed the draft basis of design and well program.

These operational documents will be **finalised imminently** once major services are engaged

5



Progress Tenure Retention Strategy

PCA application 342 (ATP2037) and 343 (ATP2038) were **lodged on the 20th December 2023**, the applications are currently being assessed by the State.

In support of the PCA applications a new **Later Work Program** was lodged and **approved for each ATP**.

6



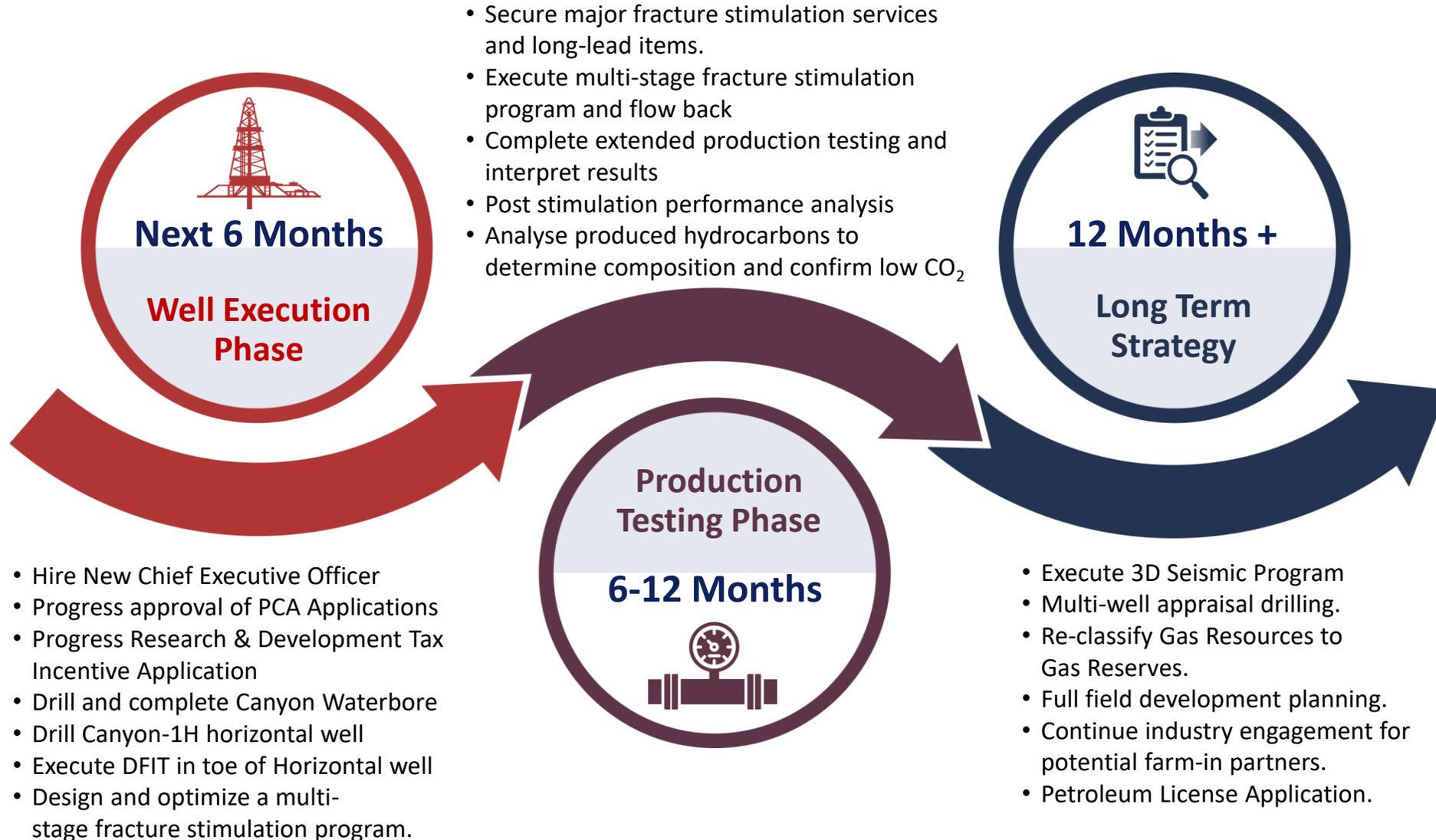
Research & Development Tax Incentive (R&DTI)

Omega intends to apply for R&DTI for its proposed core trial fracture stimulation hydrocarbon recovery program and supporting activities.

A successful claim would entitle Omega to **claim a refundable 43.5% tax offset for eligible R&D activities**.

The Frontier Gas Exploration Grant was not progressed given the Surat Basin was specifically excluded in the guidelines.

Forward Plan – Can Commercial Flow Rates be Achieved?



Listing Rule 5.43 Disclosure

SLIDE: Omega's Taroom Trough Deep Permian Gas Play

The estimates of Reserves and Contingent Resources reported in this ASX Announcement have been independently reviewed and verified by Netherland, Sewell & Associates, Inc., qualified resource evaluators and were first reported in the ASX release titled "Maiden Gross Contingent Gas Resource of 1.73 TCF" on 23 October 2023. The ASX release can be found online via https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02728452-2A1482228?access_token=83ff96335c2d45a094df02a206a39ff4 (ASX Release). The estimates in the ASX Release were prepared in accordance with the definitions and guidelines outlined in the 2018 SPE Petroleum and Resource Management System (PRMS), using deterministic methodology.

The estimates of contingent gas resources in the permits contained in the ASX Release were prepared by Netherland, Sewell & Associates, Inc., qualified resource evaluators. The resource assessment was independently carried out by Michelle L. Burnham, Vice President, and Dana D. Coryell, Vice President of Netherland, Sewell & Associates, Inc., Ms. Burnham is a Licensed Professional Engineer in the State of Texas, USA and Ms. Coryell is a Licensed Professional Geologist in the State of Louisiana and the State of Texas, USA. Ms. Burnham has over 17 years of relevant experience. Her qualifications include an MBA from the University of Texas at Austin and a Bachelor of Science in Electrical Engineering from Brigham Young University. Ms. Coryell has over 35 years of relevant experience. Her qualifications include a Master of Science in Geology from Texas A&M University and a Bachelor of Science in Geology from Oregon State University.

Omega confirms that it is not aware of any new information or data that materially affects the estimates of Reserves and Contingent Resources included in the ASX Release and set out on slide 9 of this ASX Announcement and that all the material assumptions and technical parameters underpinning the estimates in the ASX Release (and set out on slide 9 of this ASX Announcement) continue to apply and have not materially changed.



**FOR ALL ENQUIRIES
PLEASE CONTACT**

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