Project overview

Mosman Oil and Gas’ 100% owned acreage in the prospective Amadeus Basin in central Australia comprises one granted exploration permit (EP145) and one application (EPA155), covering a total of 1183 km². Both tenements are in close proximity to existing producing oil and gas fields.

The Amadeus Basin is one of the most prospective onshore areas in the Northern Territory for conventional and unconventional oil and gas and helium. It is home to three commercial petroleum fields (operated by Central Petroleum Ltd) at Mereenie, Palm Valley and Dingo. However, despite more than thirty years of conventional petroleum production history the Basin remains very underexplored by world standards.

In 2016 SRK Consulting prepared a report for Mosman Oil and Gas into the prospective resources contained in permit E145 which is on trend with the existing producing Mereenie oil and gas field. The report highlights the potential for both conventional and unconventional oil and gas resources in proven reservoirs within two plays - the West Walker Anticline and unconventional gas resources in the Horn Valley Siltstone.

SRK Consulting calculated unrisked P50 prospective resources of 12.44 Bcf conventional recoverable gas and 1456 Bcf unconventional recoverable gas within both the West Walker Anticline and the Horn Valley Siltstone.

Geology and exploration activity to date

Petroleum exploration began in the Amadeus Basin in the 1950s and hydrocarbons were first discovered in the 1960s.

The Amadeus Basin is an east-west trending sedimentary basin extending across the southern part of the Northern Territory and into Western Australia. The basin covers an area of approximately 207 000 km² and contains up to 9100 m of late Proterozoic and Palaeozoic sediments. The Amadeus Basin has organically rich source rocks, reservoirs with effective vertical seals at a number of stratigraphic levels and a wide variety of potential stratigraphic and structural traps. Five petroleum systems have been identified, at least three of which are proven. There are numerous examples of salt-related hydrocarbon plays.

Of the five historic wells drilled within Mosman’s tenements in the 1980s, two wells (West Walker-1: 2,010m depth and Tent Hill-1: 1,387m depth) showed gas, and another (Mount Winter 1: 2,650m depth) showed minor oil. Since acquiring the acreage in 2014, Mosman Oil & Gas has employed a methodical and cost-effective exploration approach.

It undertook field mapping and reconnaissance surveys on EP145 in 2015 and 2016, and since 2018 has been using contemporary technology and techniques to reprocess extensive seismic data from the 1980s and 1990s. Results from seismic reprocessing are promising, improving technical understanding of prospective plays, including salt-related structures, and confirming similarities with the nearby Mereenie oil and gas field.
Infrastructure

Mosman Oil and Gas's tenements are located on sparsely populated land near several oil and gas producing fields and key infrastructure. The tenements are based around the town of Alice Springs, which is connected to the capital cities of Darwin and Adelaide by a rail, highway and gas pipeline corridor. The same gas pipeline network also connects the region to gas markets in eastern Australia.

Business overview

- Mosman Oil and Gas believes that the Amadeus Basin could one day be a potentially important strategic source of gas production for the east coast of Australia, taking advantage of existing gas pipeline networks connecting the Northern Territory to eastern gas markets.
- The Northern Gas Pipeline connects gas fields in the Northern Territory with gas markets in eastern Australia. The Pipeline runs between Tennant Creek in the Northern Territory and Mount Isa in north-west Queensland. The pipeline commenced operation in January 2019 and access is available to all shippers on commercial terms designed to incentivise the future development of Northern Territory’s gas resources.
- Conventional reservoirs in the Amadeus Basin have produced continuously since the 1980s. Modest total historic production to 2017 of 400 Bcf of gas and 17 mmbbl of oil reflect the constrained access to market prior to the 2019 commencement of operations from the Northern Gas Pipeline.

Project status and development timeline

- Mosman Oil and Gas is advancing plans for a seismic program in EP145 in early 2020.
- Subject to finance and ongoing technical studies, the company anticipates drilling one well on EP145 in 2021 and a second well in 2022.
- A Native Title Agreement is being sought with traditional owners prior to the grant of EPA155.

Investment sought

Mosman Oil and Gas is pursuing farm-in discussions with potential joint venture partners in order to progress its current and ongoing work program in the Amadeus Basin.

Resource Estimates

A 2016 report by SRK Consulting into the prospective resources contained in permit E145 calculated the following unrisked prospective resources:

<table>
<thead>
<tr>
<th>Resource type</th>
<th>P50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional recoverable gas (Bcf)</td>
<td>12.44</td>
</tr>
<tr>
<td>Unconventional recoverable gas (Bcf)</td>
<td>1456</td>
</tr>
</tbody>
</table>