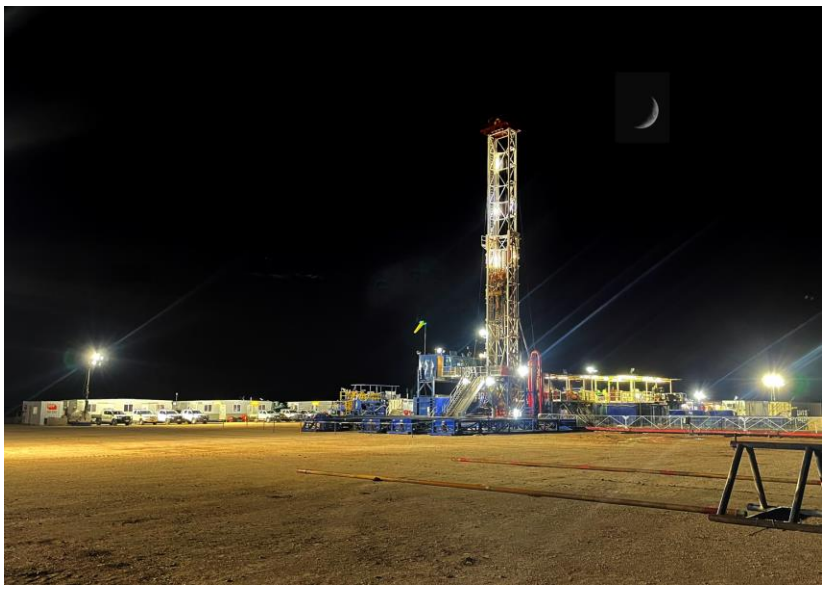
ASX Announcement

May 23, 2023

Omega's First Drilling Campaign Results Confirms Major System



- **Omega's second well, Canyon 1 was spudded on 8th May and reached TD on 21st May. Open hole wireline logging is underway.**
- **Canyon 1 intersected 424m of gas-rich zone that was greater than 293m at Canyon 2.**
- **Planning underway for Omega's hydraulic stimulation campaign later this year.**
- **The Company is funded to progress its completion and extended production testing program.**

Omega Oil and Gas Limited (ASX: OMA) is pleased to provide the following Drilling Update.

Summary

1. Canyon 1 Drilling Operation Update

As at the time of releasing this report, the rig had initiated wireline logging to the total depth (TD) of 4,000m. The well reached TD on 21st May 2023.

After running wireline logs, site operations will pull out of hole to set cement plugs and suspend the well for the future hydraulic stimulation program of Canyon 1. The location of Canyon 1 is shown in Figure 1.

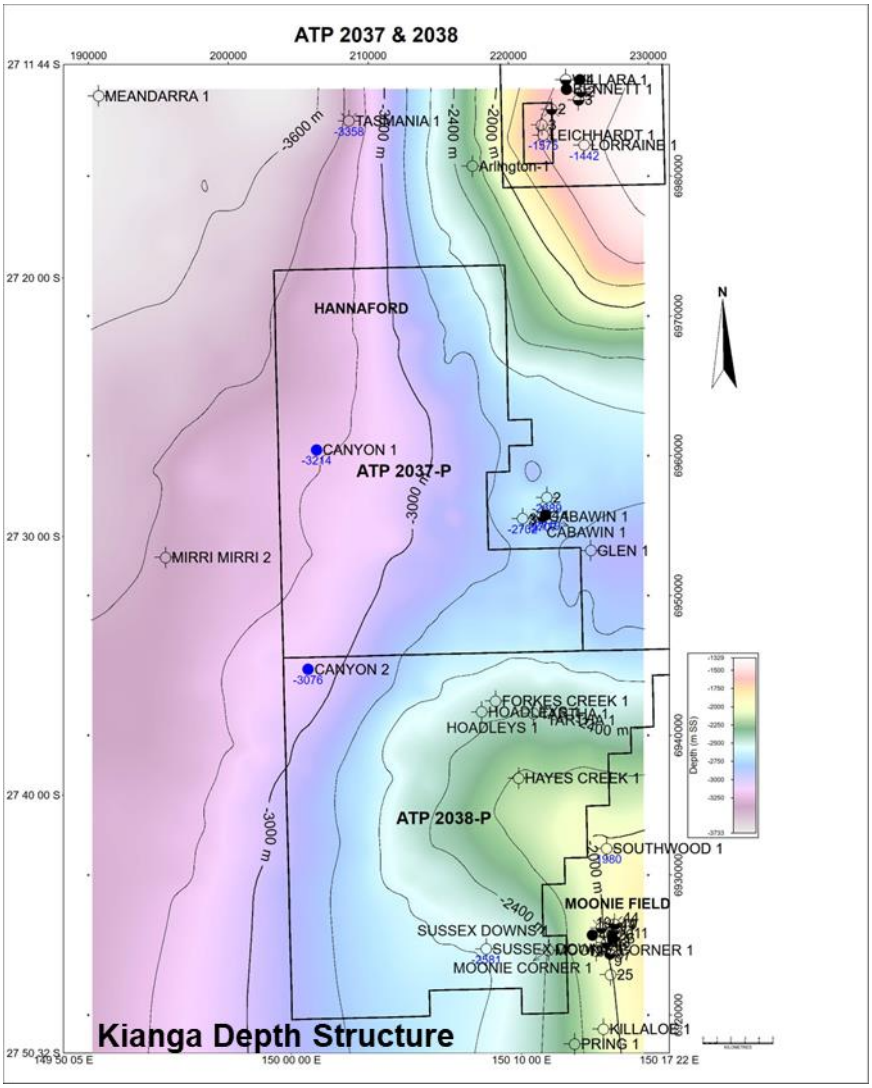


Figure 1: Well Locations on Top Kianga Depth Structure (metres subsea) (post the drilling of Canyon 1 and -2)

Omega's Managing Director Lauren Bennett commented:

"The results from Canyon 1 are even more exciting than the results from Canyon 2. Our expectation was a continuation of the same results from Canyon 2. However, drilling has shown an even greater thickness of hydrocarbon-rich zones in the Kianga and upper Back Creek Formations, demonstrating that the gas play at both target formations is extensive.

The successful completion of Omega's initial drilling campaign has demonstrated the company's ability to drill deep wells safely and efficiently. The program was completed on schedule and ahead of budget further demonstrating the operational competency of the team to undertake this ambitious exploration program to unlock a significant gas resource in QLD.

Results to date have meant that management will now shift its focus to future hydraulic stimulation of the deep reservoirs.

We expect that these operations will be carried out later this year with extended flow testing continuing into 2024."

2. Initial Preliminary Results

The Kianga Formation was the primary target of the current exploration program. Canyon 1 intersected 234m of the Kianga Formation and encountered significant gas shows from 3,506m down. Encouraging gas shows continued into the upper Back Creek Group.

Gas shows were previously reported in Omega's Canyon 2 well over two large intervals within the Kianga Formation and Back Creek Group (Tinowon Sandstone equivalent) just as they were in Tasmania 1 and other basin centred gas exploration wells like Fantome 1, Daydream 1 and Dunk 1 (Figure 2). Hydrocarbon shows were observed throughout both the Kianga and upper Back Creek, which was consistent with the shows in Canyon 2. However, the formation thickness in Canyon 1 were thicker than what was intersected in Canyon 2. In comparison to Canyon 2 which intersected 293m of Kianga and upper Back Creek, Canyon 1 has intersected 424m.

As evidenced by the current Omega program and surrounding wells, significant overpressure is present and is an important drive mechanism for this tight gas play.

Canyon 1 and 2 confirm the continuation of the Kianga and upper Back Creek Basin-Centred-Gas play from Shell's Tasmania 1 gas discovery well. This is shown by the presence of gas bearing sandstones and coals through the Kianga Formation and upper Back Creek. Canyon 1 and 2 are also a continuation of the oil discovery well, Cabawin 1, which was cased, completed and put on production from the upper part of the Kianga Formation in the 1960s (Cabawin Field, Figure 1).

Omega has engaged specialist engineers and petrophysicists to analyse all of the data acquired on Canyon 1 and 2. This will be combined with the large data sets that QGC acquired at the offset wells. These specialists are designing the upcoming hydraulic stimulation testing where the option remains to complete either a horizontal or vertical hydraulic stimulation program, or both. This optionality is critical to Omega's future appraisal program and understanding of the potential commercialisation pathways for the play. Having drilled two successful wells which have both exceeded expectations, this has presented the opportunity to potentially re-purpose Canyon 1 as a candidate for a future horizontal well. This has the potential to not only keep well costs low (compared to drilling a new horizontal well), but also accelerate learnings across the Company's extensive acreage.

Also, a heavier mud weight was used in this well to cope with expected higher pressures – and as heavier mud can suppress gas shows, the presence of significant gas shows was another positive result.

3. Kianga Formation and Back Creek Group Basin Centred Gas Play

Figure 2 shows the interpretation of the seismic packages[1] of the Kianga Formation and the upper Back Creek Group sandstone and coal interval. This line and the interpretation of the geological horizons demonstrate the connection between Canyon 2 and Tasmania 1 at the Permian Kianga and Back Creek reservoir levels. These large gas shows are not within a structural closure and are instead a Basin-Centred-Gas play. Hydrocarbons have been generated from the organic material of the Kianga Formation (coals mainly) and the very thick Back Creek Group (marine sediments mainly and coals). The formations are collectively self-charged by hydrocarbons in a near basin-wide trap. The formations are usually greater than 2,500m deep, (over 3,300m deep at Canyon 1 and 2). The target reservoirs are characterised by low permeability sandstones, lesser siltstones and about 4% coal and overpressure (pressure above a normal water gradient).

[1] Seismic is a principal tool to map out the distribution, thickness and character (such as coal signature) of the geologic formations.

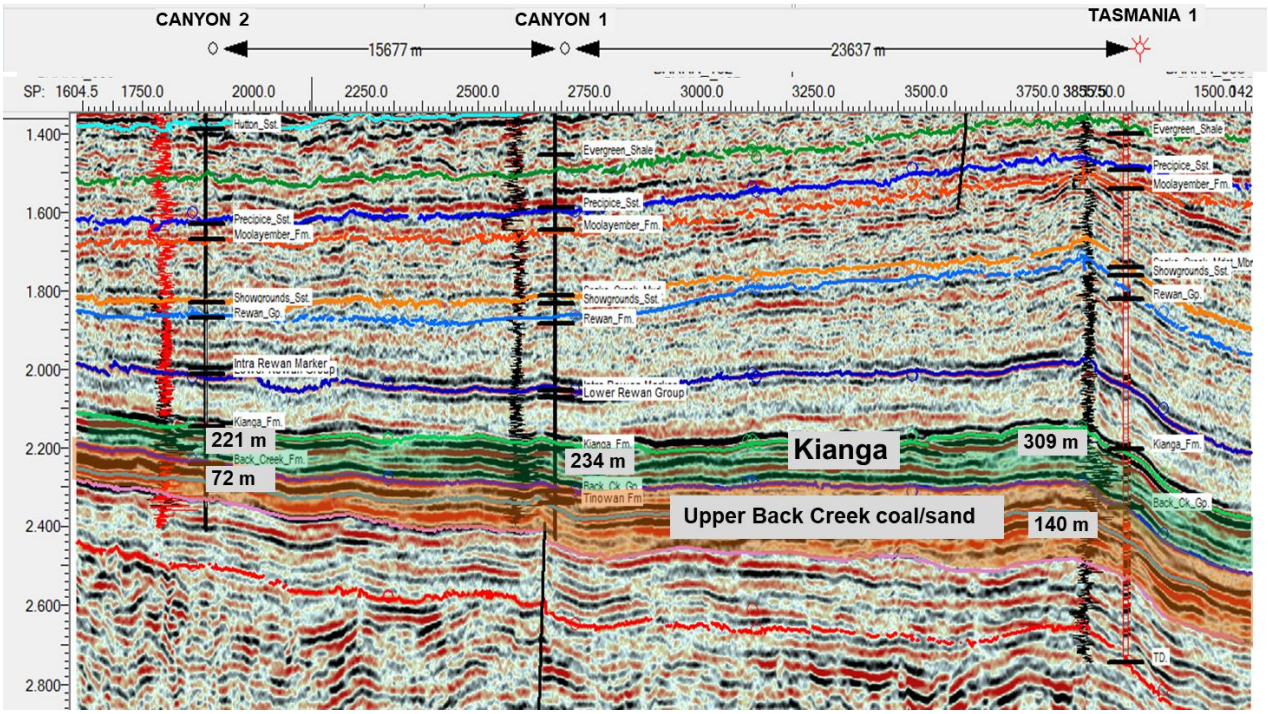


Figure 2: Seismic line through Canyon 2 and Tasmania-1, Canyon 1 is projected

4. Forward Information Flow

As with Canyon 2, we expect results on wireline logs and hydrocarbon composition shortly. Omega will continue to progress this play towards showing commercial viability in the future with the results to date exceeding expectations of our largest and most supportive shareholders.

This release has been authorised on behalf of the Omega Board by Ms Lauren Bennett, Managing Director.

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