# **ASX Announcement**

10 September 2020



# **Operations Update**

- Next Ungani oil lifting expected in late September
- Marketing agreement executed with BP Singapore for Ungani oil sales
- Balance sheet remains strong with \$25.4 million cash on hand as at 30 June 2020
- Ungani 7 ESP installation successfully completed
- Ungani Far West 1 Reeves Formation recompletion and test program to commence shortly
- Preparations for extensive 2021 exploration program advancing
- New impetus for Canning Basin unconventional gas and oil activity
- Buru enters into Canning Basin hydrothermal mineral exploration agreement

### **Executive Chairman's comments:**

"We are now in good shape after being hit by a double blow from the onset of the COVID-19 pandemic, followed by the collapse in global oil prices. We have worked hard to ensure we have a healthy balance sheet and a range of exciting prospects to target next year. We have a leaner, fitter organisation with sharpened and internalised operational capability. There are still some pieces of the puzzle to put in place, but we are close to finalising these. We have also made a synergistic exploration move with our core geological and geophysical capabilities being brought to bear on mineral exploration targets that are complementary to our oil and gas targets."

# **Ungani Oilfield production and operations**

The Ungani Oilfield is subject to a process of continuous improvement both for the surface production facilities and the downhole well configurations. This has the aim of continuous process improvement, maintenance of production, and optimisation of oil recovery. Recent activity has included upgrades to instrumentation and controls and the installation of an electric submersible pump (ESP) in the Ungani 7 well. The ESP will allow higher fluid rates than were possible with the beam pump that was initially installed. The operation has now been completed and the pump is producing in line with design parameters. The other wells in the field are producing at stable rates within their predicted decline envelopes for a combined total field oil rate of an average 1,250 bopd.





Buru Jacking Platform at Ungani 7

The installation of the ESP with Buru's jacking platform was undertaken by Buru personnel in a cost effective manner, notwithstanding the fact that some issues were encountered with contractor supplied equipment that caused a number of delays to the project.

### Oil sales

The Buru-ROC Joint Venture has now entered into a longer term marketing agreement with BP Singapore Pte Limited (BP) through to 30 June 2021. BP will market the Ungani crude by offtaking the crude from Wyndham Port on an FOB basis and on-selling the oil into the appropriate market. The first oil lifting under the new BP marketing agreement is expected to be in late September 2020.

## **Further development of Ungani**

The Ungani Joint Venture is currently undertaking technical and commercial analysis of the feasibility of further development well drilling on the Ungani Oilfield during the 2021 drilling season.

Factors being considered include rig availability and suitability, bottom hole location for the well, well design and associated long lead items, and the commercial drivers for additional wells at this stage of the field's development. It is anticipated a decision will be made on the program by the end of the year to allow adequate planning and approval time for a 2021 drilling program, if this is agreed by the Joint Venture.

# Ungani Far West 1 - Reeves Formation production test

**Background -** The Ungani Far West 1 was drilled in late 2015/early 2016 to test an Ungani Dolomite target some 3.3 kilometres to the east of the Ungani Oilfield. The well was a discovery at the Ungani Dolomite level at some 2,400 metres depth and was completed for production from that level. The well also encountered a potential oil pool in a shallower sandstone horizon (Reeves Formation) at some 1,500 metres depth which is interpreted as a potential future producing horizon.

The well has subsequently produced ~85,000 barrels of Ungani crude from the Ungani Dolomite oil pool, which is within the predicted recovery volumes from the pool, and oil production has now declined to low rates, although production is still economically viable. It is therefore an appropriate time to recomplete the well to allow a test of the Reeves Formation.

Reeves oil pool - As set out in the quarterly report of the Company for the guarter ended 31 March 2016: "Wireline logs over the drilled interval identified a five metre sandstone interval at the top of the Anderson Formation at a depth of some 1,560 metres which appeared to be oil bearing. Wireline logs and pressure data indicated the section was oil saturated with good permeability (~450md), and an oil sample was recovered during the logging program. Oil was subsequently recovered at surface from the well bore from this zone. Interpretation of pressure data indicates a potential oil column of at least 14 metres of which some five metres is net pay."



Ungani FW1 drilling operation

Subsequent geological interpretation identified that the sand interval was part of the Reeves Formation rather than the Anderson Formation, and also established that the recovered oil was very close in composition to crude from the Ungani Dolomite.

There is no distinct seismic reflector associated with the sand but seismic form mapping suggests a commercially viable resource could be present.



Ungani FW1 Reeves oil sample

**Reeves Formation recompletion operations -** The workover is scheduled to commence in late September when the required contractor wireline equipment is available from its current operation in the Perth Basin. The operation will be carried out with the Buru jacking platform and is expected to take some 10 days to complete.

The recompletion of the well is designed to allow continued production from the Ungani Dolomite but also production from the Reeves Formation if it is economically viable. The recompletion will involve the removal of the current completion from the well and the running of a dual zone completion for the Reeves and the Ungani Dolomite. The Reeves zone will be perforated for production, and the Ungani Dolomite will be recompleted over an upper zone to attempt to prolong production from the well at the Ungani Dolomite level.

The Reeves section will then be tested for flow rate and pressure response and to obtain a sufficiently large oil sample to confirm its compatibility with Ungani crude. The well will be put back onto production from the Ungani Dolomite while these analyses are carried out.

### **Exploration**

Planning for the 2021 exploration program is currently underway. It will not be possible to undertake exploration drilling during the relatively short remaining time of the 2020 Canning Basin dry season due to a combination of COVID-19 restrictions, particularly in regard to movement in the Kimberley, and the lack of availability of suitable drilling rigs. However, intensive planning is underway for at least a three well drilling program commencing in the second quarter next year. There are a number of proposed exploration drilling sites that have the requisite approvals, and the Company has an extensive inventory of well equipment that could be utilised in the program.

The significant downturn in exploration activity also means that the lead times for equipment have significantly improved and no issue is expected with being able to obtain additional long lead items. The undertaking of the program will depend on a number of factors including the availability of rigs and suitable funding structures. The form of the program may also be influenced by the introduction of a partner subsequent to the completion of the current structured farmout process for the Company's exploration areas.

Additional technical work is being undertaken on the Company's prospect portfolio with a substantial seismic program planned for the 2021 dry season to assist with identifying targets for future drilling activity.

Additional work is also being undertaken to firm up a number of shallow exploration targets that could be drilled with a smaller more mobile drilling rig, and a feasibility and planning process for a shallow drilling program during the 2021 drilling season is underway.

## Canning Basin unconventional oil and gas activity

There are a number of areas where activity is either underway or planned to further the development of the tight gas and oil resources of the Canning Basin, including Buru's Yulleroo Gasfield, the eastern Valhalla (EP371) gas areas and the Goldwyer tight oil potential areas.

Yulleroo Gasfield - The Yulleroo Gasfield is a regionally significant gas accumulation with four wells defining the field of which one has been successfully fracture stimulated and two other completed wells are available for further testing and possible production.

To further the development of this substantial resource, the Company has been investigating the potential for both the establishment of an integrated solar and gas electricity project and for the supply of gas to local industry, including to the Sheffield Resources proposed mineral sands mine.

The development of the Yulleroo gas resource will require a structured process that has several parallel work streams including the testing of the gas flow potential and certification of reserves, putting in place Native Title agreements, obtaining a production licence from the West Australian Government and confirming the commercial feasibility of the development. These initiatives are being undertaken in parallel using a staged process.

The Yulleroo Gasfield has a substantial certified tight gas resource of over 700 BCF of recoverable gas (2C Contingent Resources, refer to the ASX release dated 18 January 2018 for further information), and also has the potential for a commercially significant resource of free flow gas. Testing of the free flow gas potential is an integral part of these step wise commercialisation activities and this is being planned to be undertaken at the appropriate operational time during 2021.

## **Other Operators**

Black Mountain - It has also been recently reported that a US independent company (Black Mountain Exploration) had submitted a proposal to the EPA for the drilling and fracture stimulation of a number of wells on the EP 371 permit.

Buru was previously a participant in, and operator of, EP 371 and safely undertook extensive fracs on the Valhalla North 1 and Asgard 1 wells prior to Black Mountain acquiring its interest in the permit. Buru was therefore concerned to see that the EPA will require a full Public Environment Review of the Black Mountain proposal given the safe and environmentally benign operations previously carried out by Buru on the existing wells in the permit.

The Western Australian Government has also recently announced substantive changes to the WA Domgas policy which would effectively preclude the use of Canning Basin gas in any project outside of Western Australia, or its export as LNG. This change would have no immediate effect on Buru's plans for a staged commercialisation of the Yulleroo Gasfield but could potentially affect larger scale projects. The Company will work closely with government and other operators to understand the full implications of, and potential exemptions to, this policy.

Theia Energy - The Company also notes that it is reported that Theia Energy has entered into a Native Title agreement with the Karajarri people for the evaluation of the tight oil potential of the Goldwyer Shale on permit EP 493. It is reported that their first activity will be to drill and fracture stimulate a well close to the location of their existing Theia 1 well. Buru's 100% owned EP 431 permit lies immediately to the north and east of this permit and includes similar geology to that on EP 493. Success in any Theia activity would have immediate benefits for Buru and we look forward to their activity, and also congratulate the Karajarri people and Theia for successfully negotiating a landmark agreement.

### **Mineral Joint Venture**

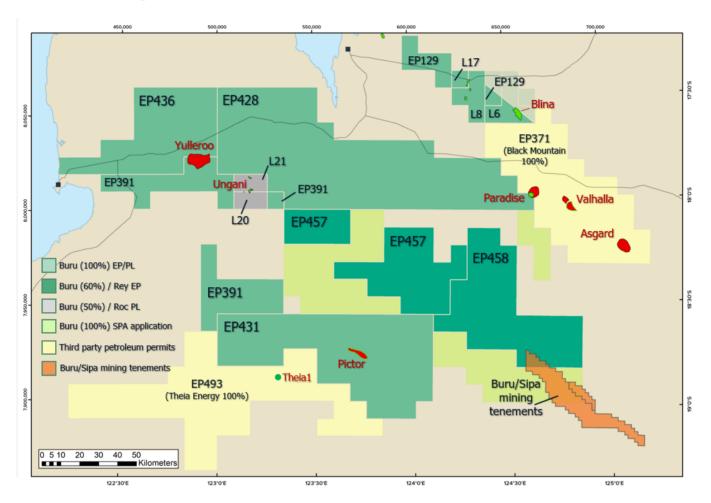
Buru has entered into a binding Heads of Agreement with Sipa Resources Limited (Sipa) for participation in two mineral exploration tenements in relation to joint exploration for hydrothermal lead/zinc deposits in the central Canning Basin. To earn its 50% interest in the existing tenements Buru will fund 100% of the first \$250,000 of on-ground exploration expenditure in the project. All expenditure in excess of \$250,000 will be funded by the Parties in accordance with their respective participating interests. The parties have also entered into an Area of Mutual Interest agreement for further exploration activity.

This initiative was a result of the intersection of substantial discrete mineralised zones in a petroleum well previously drilled by Buru. These mineralised zones were identified from drill cuttings and petroleum petrophysical logs over an aggregate of 15 metres over depths from 2,160 metres to 2,300 metres. Although these specific zones are too deep to be economically mineable, their interpreted hydrothermal origin provides a valuable insight into mineralisation in the basin and the location of much shallower targets.

Buru has an extensive geological and seismic data base in the basin, and the genesis of carbonate hosted hydrothermal lead/zinc deposits has many parallels to the genesis of oil and gas in carbonate provinces, including Buru's currently producing Ungani Oilfield. Most notably locally is the discovery in 1981 of the world class Admiral Bay lead zinc deposit in the central Canning Basin by oil exploration drilling companies, but its mineral potential was not recognised at the time. Although deeply buried and challenging to develop, Admiral Bay nevertheless confirmed the close association of mineral and petroleum accumulations in hydrothermal settings.

Consequently, Buru approached Sipa, who are already active in the basin in the search for these deposits, to co-operate in future mineral exploration activity. The joint mineral exploration initiatives within the area brings together the complementary strengths and knowledge of the two companies.

Sipa will remain the operator of the joint ventures when they are formed pursuant to the Heads of Agreement, and Buru will supply geological, geophysical and logistical support and input to the exploration program which is planned to include the drilling of mineral holes in the 2021 Canning Basin field season.



#### **Corporate**

The recently released half yearly report of the Company has confirmed that the early and decisive actions taken by the Board and management to preserve the Company's balance sheet and its operational capability have been effective, with cash on hand at the end of the half year at 30 June 2020 of \$25.4 million. These actions have entailed substantial sacrifices by staff and unfortunately a number of redundancies, which the Board acknowledges.

Given the planned level of activity, staffing is gradually being returned to full operational capability levels with core staff salary levels being normalised at between 80% and 100%. However, the Executive Chairman and the Independent Directors will remain on 45% and 60% remuneration levels respectively, subject to further review in the fourth quarter.

This ASX announcement has been authorised for release by the Board of Buru Energy. For further information, visit <a href="https://www.buruenergy.com">www.buruenergy.com</a> or contact:

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