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### **Update on Laurel Formation Tight Gas Pilot Exploration Program (TGS)**

Buru Energy Limited (Buru Energy) (ASX: BRU) is pleased to provide the following update on its TGS program in the Canning Superbasin.

**ASX: BRU** 

### **Highlights**

- Running of production tubing completed in the Asgard and Valhalla North wells
- Wells now on flowback of stimulation fluid with accompanying gas and condensate
- Fluid flowback expected to take several more weeks before gas rates and condensate content can be confirmed
- Gas composition is excellent with low inerts and high condensate content
- Excellent shut-in pressure confirming predicted formation deliverability
- Gas flows support vertical extent of the Laurel Formation tight gas accumulation of in excess of 1,500 metres
- Potential for significant resource upgrade over a large area between and surrounding the fracced wells

### **Background**

The TGS program is a proof of concept fracture stimulation of the Laurel Formation tight gas accumulation in two vertical wells, Asgard 1 and Valhalla North 1. The Laurel Formation is interpreted to contain a basin centered gas accumulation with potentially world class resources of gas and hydrocarbon liquids in the Canning Superbasin of northwest Australia.

The following TGS appraisal program objectives were defined to give confidence for proceeding to the next phase of the systematic appraisal of the accumulation.

- 1. Demonstrate well productivity from the Laurel Formation through fracture stimulation
- 2. Achieve sustained hydrocarbon production (gas and condensate)
- 3. Obtain definitive gas composition and hydrocarbon ratios
- 4. Confirm the vertical and areal extent of the accumulation

The results to date are very encouraging with all of the objectives showing very positive results so far.



### TGS program

The TGS program has the following stages

- 1. Design of the program and selection of contractors
- 2. Approvals processes
- 3. Refinement and optimisation of the program
- 4. Location and well preparation including undertaking formation integrity tests
- 5. Undertaking the stimulations and running the flowback completion strings
- 6. Initial flowback operations
- 7. Longer term Flowtest operations to confirm deliverability and decline rates

The current phase of operations is the Initial Flowback with recovery of the injected fluid from the wells.

This phase can take anywhere from weeks to months depending on the well configuration and the amount of water injected. The amount of fluid recovered can typically range from 40% to 80% of the injected water. As the fluid flows back it is accompanied by gas and condensate which is flared during this test phase. As the amount of fluid being recovered decreases the gas flow increases and the flow can be directed through a separator to separate the water, gas and condensate.

It is not possible to make estimates of flow rates that are indicative of longer term performance until the wells are flowing stable rates of gas through the separator uninhibited by fluid. This phase of the flowback is anticipated to take at least several more weeks.

### **Current operations**

Initial gas recovery from both wells is of very good quality with very low levels of inerts and significant liquid (condensate) content at or above expected levels.

### Valhalla North 1

- Four zones were stimulated. "Slickwater" fluid in three zones and "gel" in one zone with sand and ceramic proppants
- The zones reacted in line with predictions with good stimulation characteristics
- Early cleanup rate up the 7 inch casing from two zones, before the completion was run, recovered water gas
  and condensate with relatively stable three phase flow through the separator. Indicative calculations suggest a
  condensate gas ratio of ~40 barrels per million cubic feet of gas. This is in excess of estimates made from data
  from existing wells and regional data
- Prior to completion of the well the shut in well head pressure was in excess of 3,100 psi, with significant frac fluid in the well, demonstrating excellent reservoir support and desirable reservoir overpressure
- ~45% of stimulation fluid has been recovered to date





### Asgard 1

- Seven zones stimulated with slickwater and sand proppant
- Zones reacted generally as predicted
- Shut in well head pressure was in excess of 2,800 psi prior to commencing flowback, with significant frac fluid
  in the well, demonstrating excellent reservoir support and desirable reservoir overpressure
- The well is currently in early stages of cleanup and is slugging gas and water. It is expected that separator
  measurements will be achievable after more fluid is unloaded and the gas production stabilises.
- ~25% of stimulation fluid has been recovered to date

### **Data gathering**

As part of the TGS program, tracers to identify the flow contribution of each zone during the Initial Flowback and Flowtest phases were included in the treatment fluid and the proppant. Early data from this program is becoming available and is proving extremely valuable in identifying which zones are contributing both flowback water and gas.

In addition, tracers that are visible on geophysical logs were included in the proppant. These have demonstrated conclusively that the height of the fractures is less than 150 metres, which is generally as predicted. For context, this is some two and a half kilometres below surface aguifers.

Microseismic measurements were also acquired during the fracs and these confirmed the tracer data.

In summary, the results of the fracs were technically extremely positive and the parameters were well within the predicted levels.

#### **Environmental monitoring**

The fracs were conducted under stringent environmental conditions including water and air monitoring and microseismic monitoring. No adverse environmental effects have been detected and all regulations and conditions have been fully complied with.

#### **Forward Program**

The current flowback will be continued to allow the wells to recover a sufficient amount of injection fluid to allow definitive gas rates, subsequent decline rates and gas and condensate compositions to be obtained.

The excellent results to date are being provided to an independent resource certifier to commence a review of prospective and contingent resources with a view to having a report available early in 2016.

Buru Energy's Executive Chairman, Eric Streitberg said:

"We are delighted with what we have seen from these wells to date. They are behaving as we predicted and providing confidence we have a major gas and condensate resource in the Valhalla area. It also provides confidence that the Laurel accumulation has commercial potential over a large part of the Canning Superbasin as we had expected. It also will give us fresh insights into the results from the 2010 Yulleroo 2 fracs which also flowed gas and condensate at significant rates.

We will continue with the flowback program as planned and keep shareholders informed as results come to hand."





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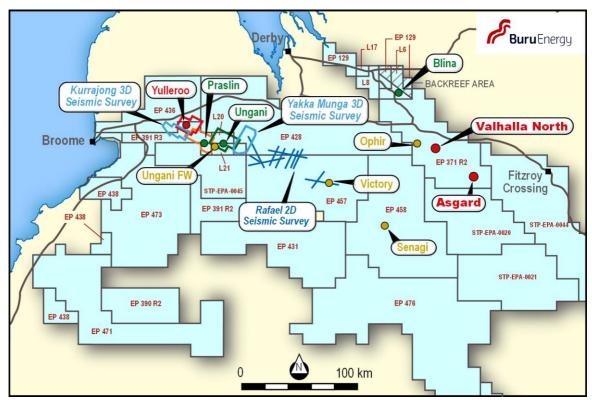
### **About Buru Energy**

Buru Energy Limited (ASX: BRU) is a Western Australian oil and gas exploration and production company headquartered in Perth with an operational office in Broome. The Company's petroleum assets and tenements are located onshore in the Canning Basin in the southwest Kimberley region of Western Australia. Its flagship high quality conventional Ungani Oilfield project is owned in 50/50 joint venture with Diamond Resources (Fitzroy) Pty Ltd. As well as Ungani, the Company's portfolio includes potentially world class tight gas resources.

The company's goal is to deliver material benefits to its shareholders, the State of Western Australia, the Traditional Owners of the areas in which it operates, and the Kimberley community, by successfully exploring for and developing the petroleum resources of the Canning Basin in an environmentally and culturally sensitive manner.

#### **Competent Persons Statement**

Information in this release related to exploration and production results and petroleum resources is based on information compiled by Eric Streitberg who is an employee of Buru Energy Limited. Mr Streitberg is a Fellow of the Australian Institute of Mining and Metallurgy and the Australian Institute of Company Directors, and a member and Certified Petroleum Geologist of the American Association of Petroleum Geologists. He has over 40 years of relevant experience. Mr Streitberg consents to the inclusion of the information in this document.



Buru Energy general operations location map

