

## **AWE Limited Update on Perth Basin shale gas and tight gas hydraulic fracture stimulation program**

AWE provides the following update on its shale gas and tight gas hydraulic fracture stimulation programme being undertaken in the Perth Basin, Western Australia, on the Senecio-2, Arrowsmith-2 and Woodada Deep-1 wells.

### **Senecio-2**

The Senecio-2 well was successfully hydraulically fracture stimulated on 17 August over a 5 metre perforation interval within the Dongara and Wagina sandstones which extend from 2,643 to 2,685 metres.

Gas flows of approximately 0.5 million cubic feet per day were initially produced from the well and over a 10 day period the well has cleaned up, **with gas flows increasing to approximately 1 million cubic feet per day and well head pressure continuing to increase.**

Minor amounts of injection fluids are now being returned to surface and the forward plan is to shut in the well to conduct pressure build up tests and to then connect up production test equipment to enable accurate measurement of gas and fluid flow from the reservoir in addition to obtaining downhole pressure data for a full reservoir evaluation.

### **Joint venture partners in Senecio-2 are:**

<b>AWE Limited (via subsidiaries) (Operator)</b>	<b>50.0%</b>
Origin Energy Resources Limited	50.0%



## Arrowsmith-2

Following the successful hydraulic fracture stimulation of two zones in the Carynginia shale; the Lower Carynginia Formation (2,890 to 2,940 metres) and the Middle Carynginia Formation (2,824 to 2,875 metres), on 23 August, the well has been flowing back injected fluids, with gas being consistently produced to surface during this period.

Clean-up of the well is planned to continue whilst preparations are underway for the hydraulic fracture stimulation of the final zone in the well, the Kockatea shale, over the interval 2,639 to 2,681 metres.

### Joint venture partners in the Arrowsmith testing program are:

<b>AWE Limited (via subsidiaries)</b>	<b>44.252%</b>
Norwest Energy NL (Operator)	27.945%
Bharat PetroResources Ltd	27.803%

## Woodada Deep-1

Two zones in the Carynginia shale were successfully hydraulically fracture stimulated on 5 August, targeting the Middle Carynginia (2370 to 2425 metres) and Upper Carynginia (2,283 to 2,330 metres) shale, with gas flows observed from the well during initial flow back.

Clean up of the well is continuing using a combination of nitrogen lift and swabbing to return injected fluids to surface. It is planned to continue well clean up until sufficient fluids have been returned from the shale to allow accurate measurement of gas flows at surface.

### AWE holds a 100% interest in the Woodada Deep operations.

### Commenting on the results of the programme to date, AWE's Managing Director, Mr Bruce Clement said:

"The results of the programme have been very promising. We have successfully hydraulically fracture stimulated all the target zones to date and we have seen gas flows during initial flow back of injected fluids from each of the zones. While we expect the shale zones being tested in the Woodada Deep-1 and Arrowsmith-2 wells will take time to clean up, we have seen good well clean up at Senecio-2 and we are preparing to conduct well testing in the next few weeks.

At Senecio-2, the results to date have been positive. We have seen the gas flow rate and well head pressure increase steadily during well clean up, with gas flows now in excess of 1 million cubic feet per day. The performance of the well has been improved considerably by the stimulation treatment and we are now planning to install production test equipment so that we can accurately measure flow performance and complete a full reservoir evaluation as the basis for moving forward with commercialising the opportunity."

For information please see our website [www.awexplore.com](http://www.awexplore.com) or contact:

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Photo: Clean-up flow from Senecio-2 well, August 22, 2012

