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**ASX: NWE**

**6 September 2012**

## **Arrowsmith-2 Weekly Project Update 6**

### **Oil and gas to surface from Kockatea Shale Stage 5 of Arrowsmith-2**

- **Arrowsmith-2 declared a technical success with all five zones producing hydrocarbons to surface.**
- **Flowback and cleanup of Stage 5 – Kockatea Shale interval has now resumed.**

**Norwest Energy (ASX:NWE):** On 3 September Norwest reported very positive results from the Stage 5 frac of the Arrowsmith-2 well, with both oil and gas to surface at commencement of flow back of the **Kockatea Shale interval - 2639-2681m**.

Mr. Peter Munachen, Norwest Chief Executive said, "The presence of oil is very significant and whilst it is still early days, it is important to be aware that it is almost ten years since the last oil discovery in the Perth Basin with the nearby Hovea and Eremia discoveries. The Arrowsmith-2 well has had a 100% success rate with all five fracs producing gas to surface, culminating with oil to surface from the lower Kockatea. Current activities will lead to an extended production test on the Kockatea interval to establish the potential to produce oil and gas in commercial quantities from this zone. Commercial success at Arrowsmith -2, particularly gas production will be significant for the State of Western Australia providing a further source of energy."

The Arrowsmith-2 well was temporarily shut-in when it was discovered that oil was being produced to surface in the early stages of flow back and testing of the Kockatea Shale interval. The well remained shut-in whilst the necessary equipment was sourced and assembled on site to manage the production of oil to surface. Operations have been resumed and the well is flowing back oil, gas and injected water to surface.

The objective is to clean up the well to enable the Kockatea gas and oil flow rates to be established and will be followed by an extended production testing phase. Norwest will then make a contingent resource estimate. This zone is already a highly prospective shale gas target, and now a potential oil discovery.

The Halliburton equipment has now been de-rigged and mobilised to its headquarters. Norwest will retain adequate facilities on site to enable it to conduct continuing activities.

#### **The way forward- lower zones**

Once the Kockatea testing program is completed and subject to results, it may be proposed to the JV to re-enter the Arrowsmith-2 well to re-commence flow back and cleanup of the lower zones to

establish the flow rates for each of the respective zones. Norwest is currently considering the available options.

The lower shale zones, the Lower and Middle Carynginia and the Irwin River Coal Measures all remain highly prospective as potential shale gas producers.

The High Cliff Sandstone, a tight sandstone target is expected to deliver a significantly higher rate than the reported rate of 777Mscf/d once the zone is fully cleaned up. Again subject to the results of the Kockatea production testing it would also be likely to propose to the JV to conduct an extended flow test to establish the areal extent of this interval to assess its commercial potential.

This is the final weekly update for this phase of the project; however progressive announcements will be made as the plans outlined above are implemented.

The participants in the EP413/Arrowsmith Joint Venture are:

Norwest Energy NL (Operator)	(ASX: NWE)	27.945%
AWE Limited (via subsidiary ARC Energy Ltd)	(ASX: AWE)	44.252%
Bharat PetroResources Ltd		27.803%

**Peter Munachen**  
Chief Executive Officer/Director



*Fig 1. Collage of images from Arrowsmith-2 location, August 2012*

**For further information**

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**Media**

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