Senex Energy Limited

ASX Announcement

Preliminary results from Sasanof-1 confirm excellent prospects for unconventional gas in the southern Cooper Basin

Release Date: 11 April 2012

Significant gas shows and the presence of liquids-rich gas during drilling and coring of the Sasanof-1 exploration well in South Australian permit PEL 516 are among several indicators that suggest the southern Cooper Basin could host a world-class unconventional gas resource according to Operator Senex Energy Limited (Senex).

Key Points

- Significant gas shows evident across Epsilon and Patchawarra tight sands
- Chromatographic analysis suggests the presence of heavy gases and condensate
- Desorption testing of shale and coal samples has shown positive gas content
- Sasanof-1 cased and suspended
- Hydraulic fracture stimulation and flow testing to commence in early May 2012
- Century Rig 3 spudded Senex's second unconventional gas well, Talaq-1 on 10 April 2012

Sasanof-1 delivers exciting preliminary results

Exploration data extracted to date suggests that Sasanof-1 exhibits many of the attributes typically associated with successful unconventional gas fields.

During drilling and coring of Sasanof-1, Senex observed significant gas shows across the Epsilon and Patchawarra tight sand reservoirs of the Permian section. Subsequent chromatographic analysis suggests the presence of 'wet gas' (i.e. heavy gases and condensate). In addition, initial desorption testing of Roseneath and Murteree shale samples and Toolachee and Patchawarra coal samples has delivered positive gas content.

Senex Managing Director Ian Davies said the results were very exciting for the company's plans to establish a large scale, cost competitive unconventional gas resource.

"Successful exploration at Sasanof-1 is the first major step in unlocking a globally significant unconventional gas resource in the southern Cooper Basin. These initial results confirm that PEL 516 shares many of the characteristics of successful US unconventional gas plays," he said.

Sasanof-1 is the first of three dedicated unconventional gas exploration wells to be drilled as part of Senex's current campaign in southern Cooper Basin permit PEL 516. The well was spudded on 4 January 2012 and reached a total depth of 3,102 metres on 28 March. Century Rig 3 was released on 4 April after cementing 4 ½ inch casing to a depth of 2,988 metres.

As part of the Sasanof-1 exploration program, Senex successfully completed an extensive wireline logging program through the Permian section. In addition to the standard log suite normally used on conventional gas wells, a specialised shale log suite was run for Sasanof-1. This encompassed magnetic resonance, formation lithology and circumferential borehole imaging logs. Petrophysical interpretation of the wireline logs is currently underway, along with comprehensive analysis of mechanical rock properties on six shale intervals (from three Roseneath and three Murteree core samples). Further petrographic analysis of shale and tight sand intervals is also underway.

Senex will conduct an extensive hydraulic fracture stimulation program at Sasanof-1 to evaluate the potential for commercial production of unconventional gas. Senex is currently finalising the design of the program, which will draw on data gathered from successful "mini fracs" at the neighbouring Allunga Trough-1 well during January. The program will commence in early May 2012.

Senex's second unconventional gas exploration well, Talaq-1, spudded

Senex's second unconventional well, Talaq-1, spudded on 10 April 2012 and is presently drilling to a surface casing depth of 800 metres. Talaq-1 is located approximately 70 kilometres north east of Sasanof-1 in PEL 516. Talaq-1 will investigate the unconventional potential of the Permian Roseneath Shale, Epsilon Formation, Murteree Shale and Patchawarra Formation. The entire section from the top of the Roseneath Shale to the base of the Murteree Shale, over 230 metres, will be cored as well over 90 metres of tight sands and coals in the Patchawarra Formation. This well will also be cased and suspended to enable the most prospective intervals across the four target formations to be fracture stimulated and flow tested.

Skipton-1 to evaluate unconventional gas potential in the north of PEL 516

Senex plans to drill its third unconventional gas well, Skipton-1, in PEL 516 in June 2012. Skipton-1 is located approximately 50 kilometres north east of Sasanof-1. As with the Sasanof-1 and Talaq-1 wells, Skipton-1 will be extensively cored and logged in the Permian section and will undergo hydraulic fracture stimulation and flow testing in all gas bearing formations to evaluate the potential for commercial production of unconventional gas.

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Fourth unconventional gas well to be drilled in neighbouring PEL 115

In early February, Senex and joint venture partner Orca Energy (Orca, ASX:OGY) announced they would drill a dedicated unconventional gas exploration well in southern Cooper Basin permit PEL 115 in late 2012. This well will be the fourth unconventional gas well for Senex and will be extensively cored and logged in the Permian section and will undergo hydraulic fracture stimulation and flow testing in all gas bearing formations.

By committing to fund Orca's remaining 20% share of the cost of the well, Senex will earn a further 22% interest in the permit, increasing its holding to 55%.

Senex holds 100% of PEL 516 and is Operator in both PEL 516 and PEL 115 (Senex 55%, Orca, 20%, Lion Petroleum Pty Ltd 25%).

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Figure 1: Stratigraphic column showing target formations for unconventional gas

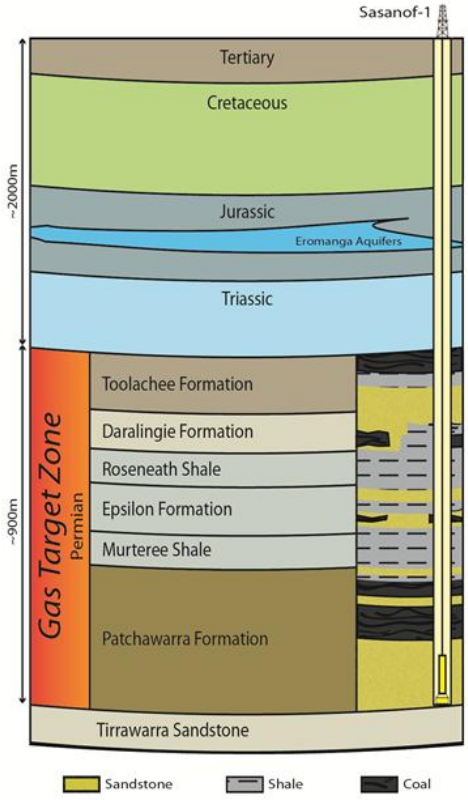

Figure 2: Location of unconventional gas exploration wells and depth to the top of the Patchawarra Formation

This map illustrates the position of Senex's unconventional gas exploration wells in PEL 516 in the southern Cooper Basin. The coloured background shows the depth to the top of the gas rich Patchawarra Formation in the Permian section of the Cooper Basin (refer Figure 1).