



# Fortnightly drilling report

Release Date: 29 August 2012

Senex Energy Limited (Senex) will now distribute fortnightly drilling reports to provide shareholders with regular updates on its oil, unconventional gas and coal seam gas exploration, appraisal and development activities.

As previously announced, Senex has an extensive program of drilling across its diverse energy portfolio, including:

- more than 20 conventional oil wells in the Cooper Basin in 2012/13;
- 17 coal seam gas wells in Queensland's Surat Basin in 2012/13; and
- 12 unconventional gas wells in the Cooper Basin over the next 18 months.

Each report will summarise activity undertaken during the two-week period and provide an overview of activities planned for operated and non-operated permits.

#### **OIL BUSINESS**

## **Key points**

- The Tomcat-1 oil exploration well encountered a developed stratigraphic channel in the mid-Birkhead Formation, however did not intersect hydrocarbons.
- The Snatcher-6 oil development well encountered a developed stratigraphic channel in the mid-Birkhead Formation with interpreted net oil pay of 5.2 metres.
- The successful Mustang-1 oil exploration well is currently being completed for production in the coming week after producing at a rate of almost 2,500 barrels of oil per day during testing.
- Data capture for the 790 km<sup>2</sup> Cordillo 3D seismic survey is 68% complete.

The conventional oil exploration well Tomcat-1 in South Australian Cooper Basin permit PEL 111 (Senex 60% and Operator, Beach Energy Limited (ASX: BPT) 40%) spudded on 16 August 2012, targeting the oil bearing sands of the mid-Birkhead Formation.

Although the well encountered a developed stratigraphic channel with more than 15 metres of net sand, it did not intersect any hydrocarbons and was subsequently plugged and abandoned. Ensign Rig 48 was released on 26 August.

# **ASX Announcement**



The Tomcat-1 well followed the discovery of a new oil field at the nearby Mustang-1 exploration well (also located in PEL 111), where oil flowed to surface during testing at a rate of almost 2,500 barrels of oil per day. Mustang-1 is currently being completed for production, with Initial Production Testing expected to commence in the coming week.

Appraisal and development work at the Snatcher oil field in PEL 111 is progressing well. In early August, the Snatcher-6 development well was cased and suspended as an oil producer after successfully intersecting a 10.5 metre (vertical thickness) gross oil column in the Birkhead Formation with interpreted net oil pay of 5.2 metres (vertical thickness). Ensign Rig 48 has now mobilised back to the Snatcher oil field in PEL 111 and is currently drilling the Snatcher-7 development well.

Senex is also continuing work on the extensive Cordillo 3D seismic survey, targeting conventional oil and gas prospects on the northern extension of the western flank. Line clearance across the 790 km² work area has been completed and data capture is 68% complete. Data processing will begin shortly with the aim of identifying Senex's next generation of oil and gas targets. The Cordillo seismic program covers three South Australian permits: PEL 88 (Senex 100%), PEL 90M (Senex 100%) and the Northern Area of PEL 514 (Senex 50% and Operator, Planet Gas Limited (ASX: PGS) 50%).

#### **UNCONVENTIONAL GAS BUSINESS**

# **Key points**

- Skipton-1 spudded on 15 August 2012 and is currently setting casing at 2,000 metres before commencing a comprehensive coring program.
- Following rig release, the 1500 HP Weatherford Rig 826 will mobilise to Kingston Rule-1.
- After reaching a peak flow rate of over 200,000 cubic feet per day, Sasanof-1 has been shut in pending installation of equipment to continue well cleanout and flowback.

Skipton-1 is targeting the shale and tight gas sands of the Roseneath-Epsilon-Murteree formations as well as the tight gas sands and deep coal seams of the Patchawarra Formation in southern Cooper Basin permit PEL 516 (Senex 100%). The well will be drilled to a total depth of 3,000 metres, with over 320 metres of core to be collected from the well.

The next planned unconventional gas well is Kingston Rule-1 in PEL 115 (Senex 55% and Operator, Orca Energy Limited (ASX: OGY) 20%). Upon its release from Skipton-1, Weatherford Rig 826 is scheduled to commence drilling at Kingston Rule-1 in October 2012.

# **ASX Announcement**



Following drilling of these wells, Senex plans to undertake a large-scale fracture stimulation program to test gas deliverability and gas composition across the Permian section.

Skipton-1 and Kingston Rule-1 are located approximately 50 kilometres north east of Senex's first dedicated unconventional gas exploration well, Sasanof-1, which flowed at a peak rate of more than 200,000 cubic feet per day during production testing in July 2012. The well has been shut in temporarily pending the installation of equipment to continue well cleanout and flowback.

Analysis is continuing on cores and wireline logs from Sasanof-1 and Senex's second dedicated unconventional gas well, Talaq-1, which was completed in June 2012.



Liquids rich gas flare at Sasanof-1

## **COAL SEAM GAS BUSINESS**

### **Key points**

- Four of 11 coal seam gas wells planned for Senex's two eastern Surat Basin permits in 2012 have been drilled by Operator QGC a BG Group business (QGC).
- The fourth well, Alex-10, spudded on 15 August 2012 and has been cased and suspended after reaching a total depth of 573 metres.
- Senex has drilled two of six coal seam gas wells scheduled for its two western Surat Basin permits during 2012/13, with good results.

During 2012/13, Senex and its joint venture partners will drill 17 coal seam gas wells in the Surat Basin, including core and pilot wells, to increase Proved and Probable (2P) gas reserves. To date, drilling results have indicated good coal and carbonaceous shale thickness with good permeability (refer Table 1).

In eastern Surat Basin permits PL 171 and ATP 574P, Operator QGC has advised that four of 11 planned coal seam gas wells have now been drilled: core well Lawton-9M and appraisal wells Lawton-5, Lawton-8 and Alex-10. Two further appraisal wells are scheduled for this quarter. Senex holds a 20% interest in PL 171 and a 30% interest in ATP 574P.

In western Surat Basin permits ATP 771P and ATP 593P, Senex has now drilled two of six planned wells for 2012/13. Indy-1 and Indy-2 were drilled in ATP 771P to confirm the coal seam gas potential of the Walloon Coal Measures.





Table 1 - Results to date from coal seam gas exploration and appraisal

Well name/type	Permit	Spud date	Total depth	Result
Lawton-9M core hole	PL 171	2 April 2012	677 m	36.9 m of coal 20.4 m of carbonaceous shale
Indy-1 core hole	ATP 771P	24 July 2012	351 m	7.3 m of coal 5.3 m of carbonaceous shale
Lawton-5 appraisal well	PL 171	25 July 2012	663 m	41.9 m of coal 22.4 m of carbonaceous shale
Lawton-8 appraisal well	PL 171	5 August 2012	648 m	36.2 m of coal 16.9 m of carbonaceous shale
Indy-2 core hole	ATP 771P	7 August 2012	381 m	12.6 m of coal 7.3 m of carbonaceous shale
Alex-10 appraisal well	PL 171	15 August 2012	573 m	37.2 m of coal 18.2 m of carbonaceous shale

The location of exploration, appraisal and development activities undertaken during the last fortnight and planned for the coming month is shown in the attached Figures.

# For further information contact:

Ian Davies Managing Director Senex Energy Limited Phone: (07) 3837 9900



Figure 1: Senex conventional oil exploration, appraisal and development activities

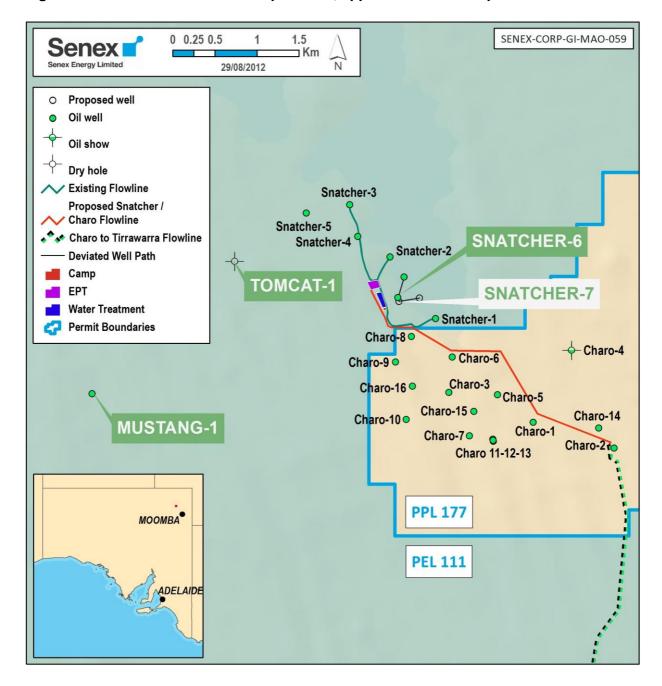






Figure 2: Senex unconventional gas exploration activities

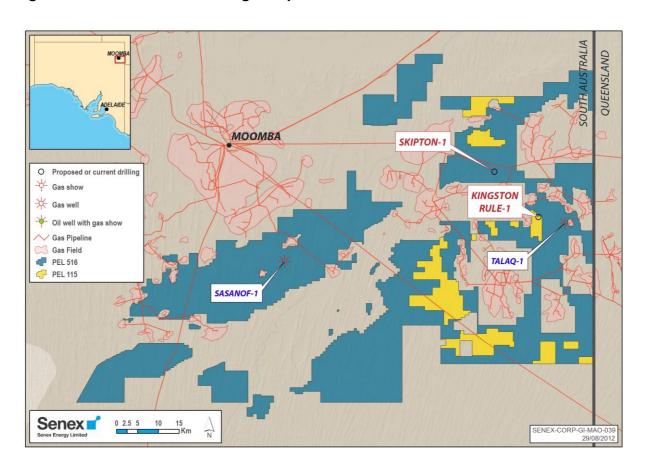
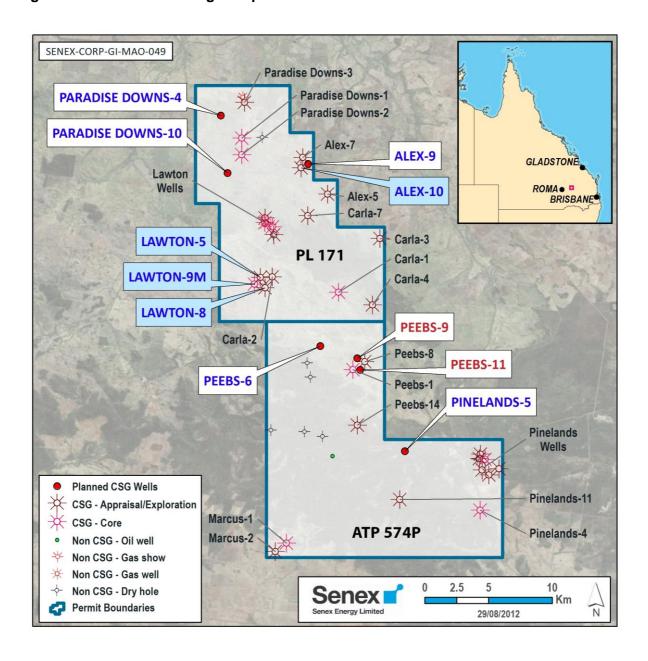




Figure 3: Senex coal seam gas exploration activities in the Eastern Surat Basin



GPO Box 2233, Brisbane Qld 4001



Figure 4: Senex coal seam gas exploration activities in the Western Surat Basin

