Senex Energy Limited

ASX Announcement

# Monthly drilling report – April 2013

Release Date: 1 May 2013

**Key points**

- Fracture stimulation has commenced at Paning-2
- Hornet-1 has been shut in after achieving all planned objectives and flowing at an average rate of 2.2mmscfd, planning has commenced for an extended production test
- Net pay of 6.5 metres in the McKinlay confirmed at Vintage Crop-2 which has been cased and suspended as a future oil producer
- Net pay was confirmed in the successful Cuisinier-8 appraisal wells as 6.8 metres
- Cuisiner-10 appraisal well has spudded and is expected to be drilled to a depth of 1756 metres
- A remedial workover has been completed at Growler-5 which is now back on production
- Initial completion of Snatcher-9 has commenced

## UNCONVENTIONAL GAS EXPLORATION

### Paning-2 fracture stimulation has commenced

During February, Senex cased and suspended Paning-2 in northern Cooper Basin permit PEL 90 (Senex 100%) after the well intersected 117 metres of net gas pay in the tight sands and deep coals of the Patchawarra Trough.

Senex expects to fracture stimulate multiple zones within the Patchawarra, Epsilon and Toolachee Formations. The well intersected tight sands and coals of the Epsilon and Patchawarra formations, equivalent to the zones that flowed gas in Paning-1. Senex estimates potential gas in place of 2.1 trillion cubic feet (Tcf) in the deep coals with additional material gas volumes in the tight Permian sands.

Weatherford Rig 826 commenced drilling the well on 15 December 2012 and reached a total depth of 3,180 metres. Paning-2 is the first exploration well to target the unconventional gas potential of the region, specifically testing the Permian tight sand and deep coal sequences across the Patchawarra Trough. The well is located 1.2 kilometres southwest of Paning-1, which was drilled in 1980.

**Hornet-1 shut in after flowing 2.2mmscfd and achieving all planned objectives**

The Hornet-1 well has now been shut in after completing an initial production test which achieved an average gas rate of 2.2mmscfd. Hornet-1 is located in southern Cooper Basin permit PEL 115 (Senex Energy Limited (**Senex**, ASX: SXY) 80% and Operator; Orca Energy Limited (**Orca**, ASX: OGY) 20%).

During March, Senex completed a multi-zone fracture stimulation of the Hornet-1 well, targeting the tight gas sands of the Patchawarra Formation. The well was stimulated over the interval 2,484 metres to 2,678 metres and flowed gas to surface during testing. Planning has now commenced for an extended production test.

The location of Senex's unconventional gas exploration activities is shown in Figure 1.

## OIL EXPLORATION, APPRAISAL AND DEVELOPMENT

**Net oil intersection of 6.5 metres confirmed at Vintage Crop-2**

Ensign Rig 48 completed appraisal well Vintage Crop-2 to a depth of 1,708 metres on 22 March after spudding on 15 March. Vintage Crop-2 is located in southern Cooper Basin permit PPL 241 (Senex 100%), approximately 430 metres north of the Vintage Crop-1 oil discovery, which is currently producing oil with zero water cut from the McKinlay Formation.

Final logging and interpretation has confirmed that the well intersected net oil of 6.5 metres within the McKinlay formation primary objective. An estimated 7.0m net pay within the Murta Formation was confirmed by open-hole drill-stem test and an additional 8.3m net pay in the Birkhead Formation indicated by log data and oil shows awaits confirmation by cased-hole test. The well has been cased and suspended pending completion as a future oil producer.

**Net oil intersections of 6.8 metres confirmed at Cuisinier-8**

In Queensland Cooper Basin permit PL 303 (Senex 15%; Santos 45% and Operator) Santos Limited (**Santos, ASX: STO**) spudded the Cuisinier-8 appraisal well on 11 April and reached total depth of 1,756 metres on 18 April. Santos has advised that interpretation and analysis of logs has confirmed the presence of approximately 6.8 metres net pay in the Murta Formation. The well has been cased and suspended pending completion as a future oil producer.

Cuisinier-10 spudded on 26 April and is the third well of five appraisal and development wells at the Cuisinier oil field in PL 303. The well is located 1.6 kilometres east north east of Cuisinier-3 and is expected to drill to a total depth of 1756 metres.

The campaign is designed to optimise field productivity and further define ultimate field size, targeting the primary Murta Formation.

**Growler-5 workover now complete** *(PPL 242: Senex 60% and Operator, Beach 40%)*

A remedial workover of the Growler-5 well has been completed and the well returned to production on 24 April.  Growler-5 has been off production for most of the last quarter.

**Snatcher-9 completion underway** *(PPL 240: Senex 60% and Operator, Beach 40%)*

Western Desert Rig-10 has moved onto oil well Snatcher-9 to undertake the initial completion. The well is expected to be brought on production at the start of the September quarter once the surface artificial lift equipment has been constructed.

The location of Senex's oil fields is shown in Figure 2.

## COAL SEAM GAS BUSINESS

Senex and its joint venture partners plan to drill a total of 11 coal seam gas wells and one ground water monitoring well during the 2013 calendar year. This includes five wells carried over from the 2012 program.

In the western Surat Basin permits ATP 593P and ATP 771P, Senex will drill four core holes in the June quarter to further test the extent of the resource and build additional proved and probable (2P) reserves.

In the eastern Surat Basin permits PL 171 and ATP 574P, QGC (as Operator) will commence drilling in May 2013.

The location of Senex's coal seam gas assets is shown in Figure 3.

## DRILLING REGISTER

Exploration, appraisal and development drilling undertaken in 2012/13 is shown below:

| Well | Location | Spud date | Type | Result |
|---|---|---|---|---|
| Cuisinier North-1* | ATP 752P | 2-Jul-2012 | Oil exploration | Successful |
| Mustang-1 | PEL 111 | 4-Jul-2012 | Oil exploration | Successful |
| Kruger-1** | PEL 516 | 23-Jul-2012 | Oil exploration | Unsuccessful |
| Indy-1 | ATP 771P | 24-Jul-2012 | CSG appraisal | Successful |
| Lawton-5*** | PL 171 | 25-Jul-2012 | CSG appraisal | Successful |
| Snatcher-6 | PPL 240 | 30-Jul-2012 | Oil development | Successful |
| Lawton-8*** | PL 171 | 4-Aug-2012 | CSG appraisal | Successful |
| Indy-2 | ATP 771P | 7-Aug-2012 | CSG appraisal | Successful |
| Skipton-1 | PEL 516 | 15-Aug-2012 | Unconventional gas exploration | Gas flow testing underway |
| Alex-10*** | PL 171 | 15-Aug-2012 | CSG appraisal | Successful |
| Tomcat-1 | PEL 111 | 16-Aug-2012 | Oil exploration | Unsuccessful |
| Snatcher-7 | PPL 240 | 28-Aug-2012 | Oil development | Successful |
| Peebs-9*** | ATP 574P | 15-Sep-2012 | CSG appraisal | Successful |
| Snatcher-10 | PPL 240 | 18-Sep-2012 | Oil appraisal | Successful |
| Peebs-11*** | ATP 574P | 21-Sep-2012 | CSG appraisal | Successful |
| Snatcher-8 | PPL 240 | 30-Sep-2012 | Oil development | Successful |
| Kingston Rule-1 | PEL 115 | 21-Oct-2012 | Unconventional gas exploration | Suspended pending further testing |
| Snatcher-9 | PEL 111 | 2-Nov-2012 | Oil appraisal | Successful |
| Spitfire-2 | PEL 104 | 17-Nov-2012 | Oil exploration | Successful |
| Paning-2 | PEL 90 | 15-Dec-2012 | Unconventional gas exploration | Cased, under taking fracture stimulation |
| Vintage Crop-2 | PPL 241 | 15-Mar-2013 | Oil appraisal | Successful |
| Cuisinier-7* | ATP 752P | 21-Mar-2013 | Oil appraisal | Successful |
| Cuisiner-8 | ATP 752P | 11-April-2013 | Oil appraisal | Successful |
| Cuisinier-10 | ATP 752P | 26-April-2013 | Oil appraisal | Drilling |

* Operated by Santos ** Funded 100% by Ambassador Oil & Gas *** Operated by QGC

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*Figure 1: Senex unconventional gas exploration activities*

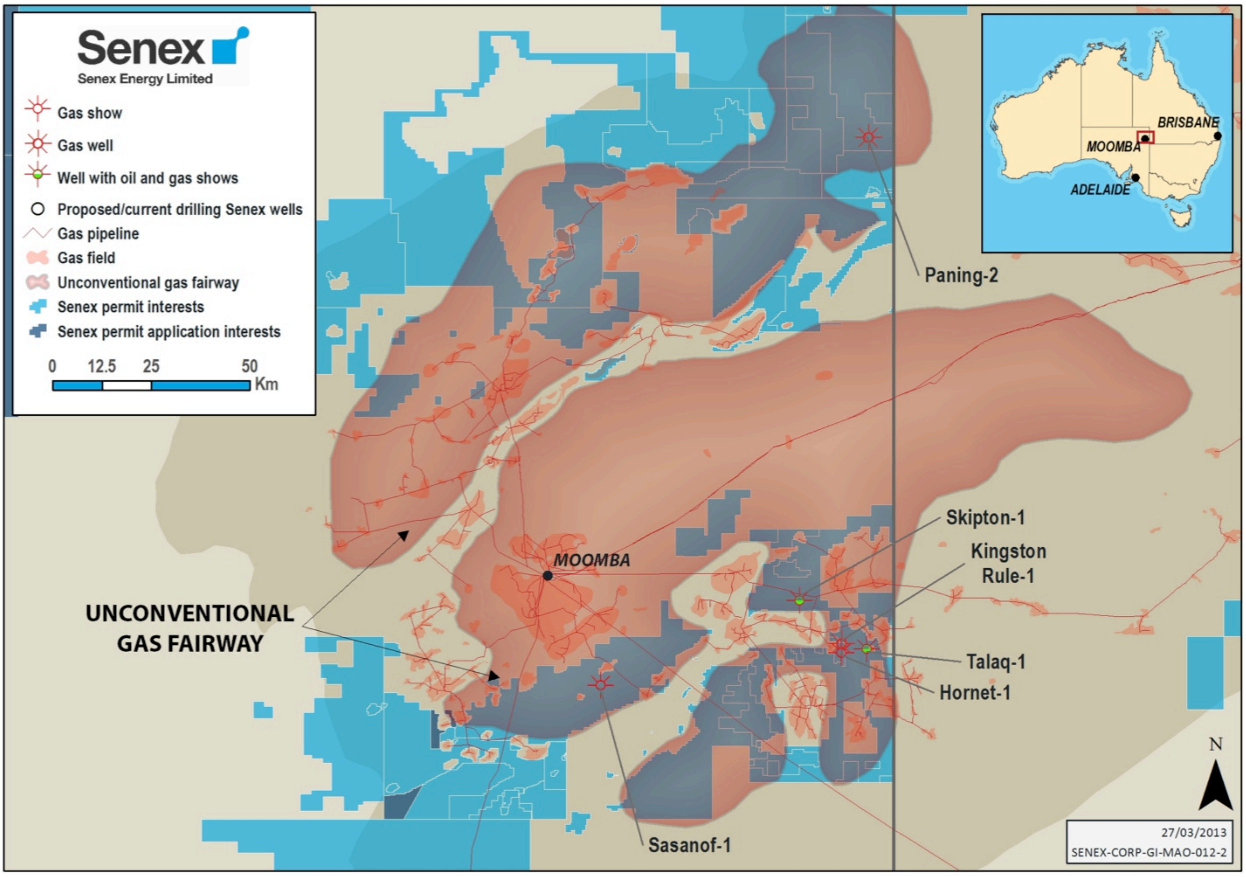


*Figure 2: Senex conventional oil fields (operated and non-operated)*

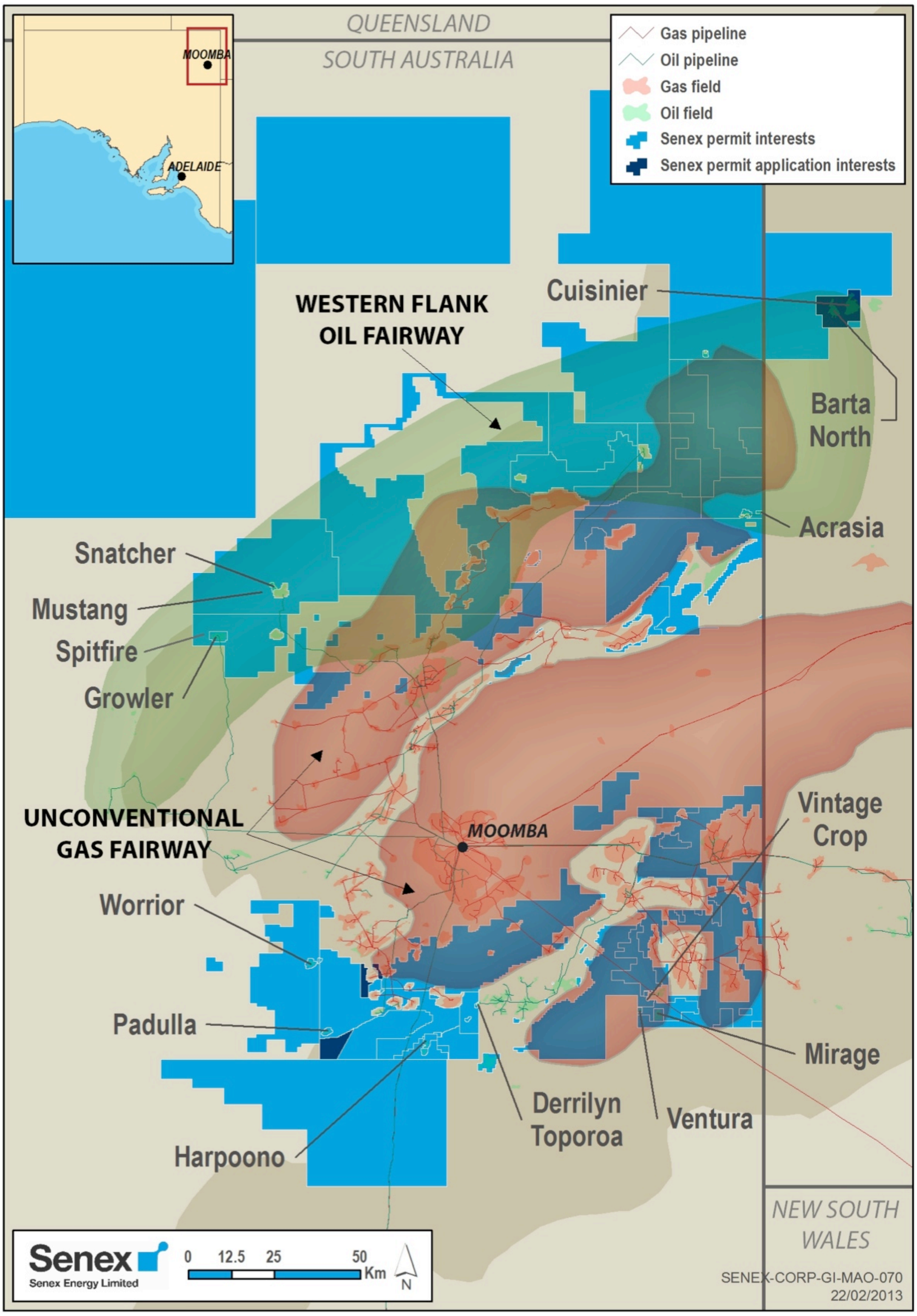
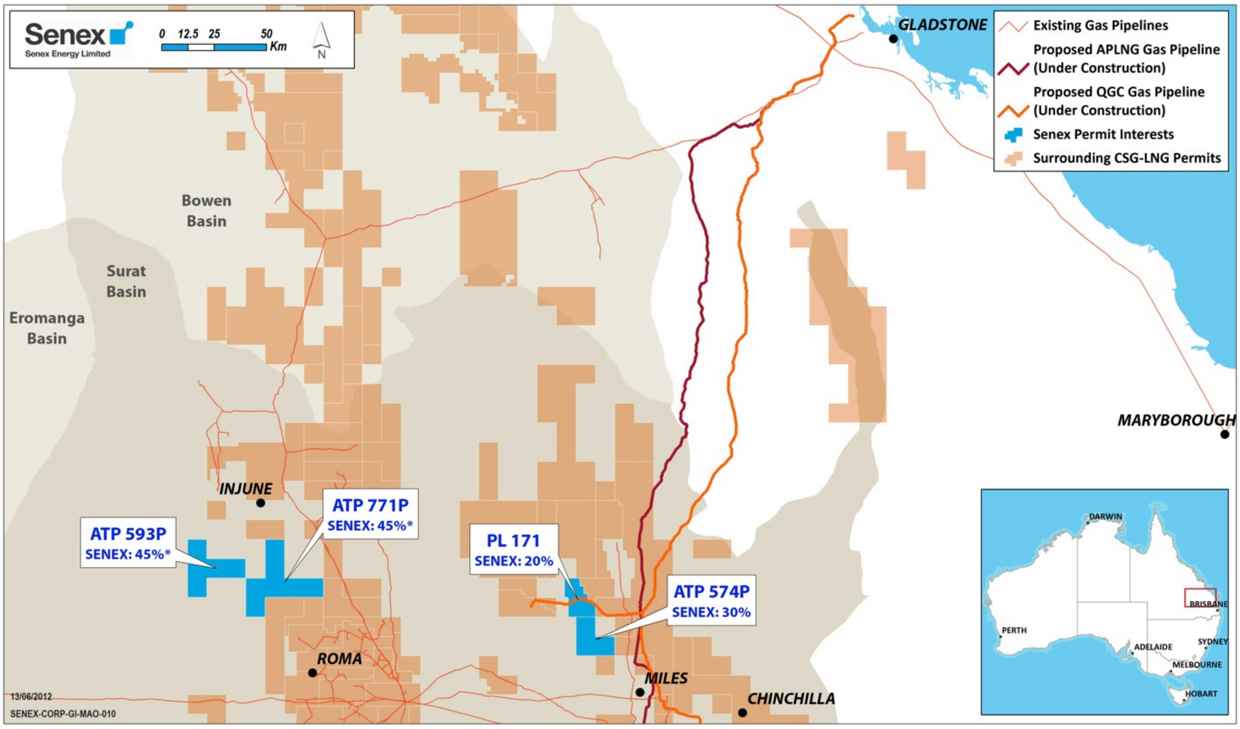


*Figure 3: Location of Surat Basin permits*




*Senex is the Operator

**Competent person's statement**

Unless otherwise indicated, the statements contained in this drilling report about Senex's reserves estimates have been compiled by Mr James Crowley BSc (Hons), who is General Manager – Exploration and Development, a full time employee of Senex, in accordance with the definitions and guidelines in the 2007 Petroleum Resources Management System approved by the Society of Petroleum Engineers (SPE PRMS). Mr Crowley consents to the inclusion of the estimates in the form and context in which they appear. Senex's reserves and resources are consistent with the SPE PRMS.