

# Quarterly report

For the period ended 31 December 2018

**Senex**  
Senex Energy Limited

## Highlights



Senex Energy Ltd (Senex, ASX: SXY) moved firmly into gas project execution during the quarter, with gas production continuing to increase. Highlights include:

- **Roma North gas production up 33%:** Produced gas volumes increased 33% quarter-on-quarter as well optimisations and de-watering continued; daily rates reached 5.7 TJ during the quarter
- **Half-year production up 49%:** H1 FY19 production of 557 kboe, up 49% on the prior corresponding period (374 kboe) with increases in both oil and gas production
- **\$150 million debt facility closed:** Senior secured reserve-based lending facility reached financial close, allowing immediate drawdown to progress Surat Basin gas developments
- **Final Investment Decisions for Project Atlas and Roma North:** Sanctioned projects to deliver gas production of 48 TJ/day (3 mmbob per annum) by the end of FY21, with expansion potential
- **Project Atlas satisfies federal environmental requirements:** Notification received subsequent to quarter-end that all requirements under the EPBC Act are satisfied
- **Gemba-1 gas discovery flowed at 8 mmscfd:** Gemba-1 recovered 44 million standard cubic feet of gas and 88 barrels of oil on test; extended production test to be undertaken in Q3 FY19
- **Cooper Basin oil wells online:** Breguet-1 and Snatcher North-1 exploration wells brought online; Growler-16 online subsequent to quarter-end with initial production of ~1,300 bopd (gross)

### Comments from Managing Director and CEO Ian Davies:

“Senex has achieved a successful quarter of gas production growth and project milestones.

“This progress has reinforced our confidence in successfully achieving our project delivery objectives for 2019 as we establish Senex as an important gas supplier to the east coast market.

“Our Queensland gas developments, Project Atlas and Roma North, are on track to deliver a step change in Senex’s production, cash flows and earnings in the years to come.

“At Project Atlas, Senex has passed the key milestone of satisfying environmental requirements under the EPBC Act. This achievement recognises Senex’s capabilities and removes a key schedule risk.

“We are now advancing construction of gas processing infrastructure and contracting rig and well site services to deliver our ~110-well drilling program.

“2019 promises to be a watershed year for Senex as we deliver our important gas projects.”

Key Performance Metrics	December Q2 FY18	September Q1 FY19	December Q2 FY19	Qtr on Qtr Change	FY19 YTD
Net production (kboe)	195	281	276	(2%)	557
Net sales volumes (kboe)	184	270	264	(2%)	534
Sales revenue (\$ million)	17.0	25.6	17.2	(33%)	42.8
Average realised oil price (\$/bbl)	95	114	78	(32%)	97
Net cash / (debt) (\$ million)	81.9	57.6	39.0	(32%)	39.0

# Financial



## Sales volumes and revenue

Sales volumes of 264 kboe were broadly in line with the prior quarter. Sales revenue of \$17.2 million was 33% lower than the prior quarter due to lower Brent oil prices, less oil in the sales mix and the accrual accounting impact of oil price declines. The average realised Australian dollar oil price reduced 32% to \$78/bbl (from \$114/bbl).

	December Q2 FY18	September Q1 FY19	December Q2 FY19	Qtr on Qtr Change	FY19 YTD
Net oil sales volumes (kbbbl)	179	190	170	(11%)	360
Net gas and gas liquids sales volumes (kboe)	5	80	94	18%	174
<b>Total sales volumes (kboe)</b>	<b>184</b>	<b>270</b>	<b>264</b>	<b>(2%)</b>	<b>534</b>
Oil sales revenue (\$ million)	17.0	21.7	13.3	(39%)	35.0
Gas and gas liquids sales revenue (\$ million)	-	3.9	3.8	(3%)	7.7
<b>Total sales revenue (\$ million)</b>	<b>17.0</b>	<b>25.6</b>	<b>17.2</b>	<b>(33%)</b>	<b>42.8</b>
Average realised oil price (\$/bbl)	95	114	78	(32%)	97
Average realised sales price (\$/boe)	95	95	65	(32%)	80

NB. Totals may not add due to rounding

## Capital expenditure

Gross capital expenditure of \$38.8 million was incurred, which primarily related to drilling activity in the Cooper Basin, construction activity for the Roma North pipeline and gas processing facility, and development planning for Project Atlas. Net capital expenditure incurred by Senex of \$25.7 million recognises \$13.1 million of free-carry associated with the FY19 Cooper Basin drilling campaign<sup>1</sup>.

\$ million	December Q2 FY18	September Q1 FY19	December Q2 FY19	Qtr on Qtr Change	FY19 YTD
Exploration and appraisal	15.0	10.5	14.8	41%	25.3
Development, plant and equipment	2.8	13.2	24.1	83%	37.3
<b>Capital expenditure incurred (gross)</b>	<b>17.7</b>	<b>23.8</b>	<b>38.8</b>	<b>63%</b>	<b>62.6</b>
Less: Cooper Basin free-carry	-	(5.0)	(13.1)	162%	(18.1)
<b>Capital expenditure (net to Senex)</b>	<b>17.7</b>	<b>18.8</b>	<b>25.7</b>	<b>73%</b>	<b>44.5</b>

NB. Totals may not add due to rounding

1. As announced on 16 April 2018, Senex and Beach agreed the transfer of up to \$43 million (gross) of free-carry commitment from the joint venture's unconventional gas project to the Cooper Basin western flank oil assets. No additional interest in the Cooper Basin western flank oil assets will be earned by Beach through this free-carry arrangement.

# Financial



## Liquidity

Senex maintains a robust liquidity position to fund its growth objectives, with net cash reserves of \$39.0 million at quarter-end, low-cost debt funding in place, material free-cash generation from operations and an attractive hedge profile.

As announced on 29 October 2018, Senex achieved financial close of its \$150 million senior secured reserve-based lending facility. The debt facility comprises a \$125 million limit to fund development projects and a \$25 million limit to fund working capital and bank guarantee requirements. An initial drawdown of \$35 million was made during the quarter.

\$ million	December Q2 FY18	September Q1 FY19	December Q2 FY19	Qtr on Qtr Change
Cash reserves	81.9	57.6	74.0	28%
Drawn debt	-	-	35.0	
Net cash / (debt)	81.9	57.6	39.0	(32%)

## Hedging

Additional oil hedging was undertaken during the quarter to protect cash flows and liquidity during the upcoming period of increased capital investment in the Surat Basin. A total of 810,000 barrels of oil production was hedged for the period FY19 to FY21 using swaps with strike prices between A\$93/bbl and A\$98/bbl.

Additional downside protection is in place for H2 FY19 with 163,500 barrels of oil production covered by existing put options at a strike price of US\$55/bbl.

Oil swaps	Dec-18 to Jun-19	FY20	FY21
Volume (kbbbl)	310	350	150
Average swap price (A\$/bbl)	98	96	93

# Operations



## Production

Production of 276 kboe was broadly in line with the prior quarter. Natural field decline was mitigated by a 33% quarter-on-quarter increase in gas production from Roma North and initial production from the Breguet-1 and Snatcher North-1 oil exploration wells.

	December Q2 FY18	September Q1 FY19	December Q2 FY19	Qtr on Qtr Change	FY19 YTD
Oil (kbbl)	181	196	178	(9%)	374
Gas and gas liquids (kboe)	14	84	99	18%	183
<b>Total net production (kboe)</b>	<b>195</b>	<b>281</b>	<b>276</b>	<b>(2%)</b>	<b>557</b>

NB. Totals may not add due to rounding

Second-half production will be supported by further expected ramp up of Roma North gas production, a full half of production from recently connected oil discoveries, and the Growler-16 and Growler-17 horizontal oil development wells. Growler-16 was brought online subsequent to quarter-end at an initial production rate of ~1,300 bopd (gross). Growler-17 was drilled subsequent to quarter-end and will shortly commence production.

## Drilling

Senex spudded five Cooper Basin oil wells and two Surat Basin gas wells during the quarter. The Growler-16 horizontal oil development well was brought online in early January 2019 at an initial production rate of approximately 1,300 bopd (gross). The Flanker-1 oil exploration well discovered and flowed hydrocarbons but was deemed non-commercial and later plugged and abandoned. The

Huey-1, Avenger-1 and Voodoo-1 oil exploration wells did not encounter hydrocarbons and were plugged and abandoned.

Senex drilled two gas appraisal wells in the Don Juan acreage to collect data for reservoir characterisation and to inform potential future appraisal activity. Results were in line with expectations and will support ongoing studies in the region.

Further information on drilling results and activity is contained on the following pages.

# Operations



Well	Qtr	Type	Tenement	Result
<b>Cooper Basin (Senex 60% and operator)</b>				
Breguet-1	Q1	Oil exploration	Ex-PEL 104	<b>On production</b>
Growler Northeast-1	Q1	Oil appraisal	Ex-PEL 104	<b>Met all appraisal objectives</b>
Snatcher North-1	Q1	Oil exploration	Ex-PEL 111	<b>On production</b>
Growler-16	Q2	Oil development - Hz	Ex-PEL 104	<b>On production</b>
Huey-1	Q2	Oil exploration	Ex-PEL 111	P&A
Avenger-1	Q2	Oil exploration	Ex-PEL 111	P&A
Flanker-1	Q2	Oil exploration	Ex-PEL 111	P&A
Voodoo-1	Q2	Oil exploration	Ex-PEL 111	P&A
<b>Surat Basin (Senex 100% and operator)</b>				
Dione-10 (WSGP)	Q1	Gas appraisal	ATP 767	<b>Successful appraisal; future producer</b>
Indy East-1 (Don Juan)	Q1	Gas appraisal	ATP 771	<b>Successful appraisal</b>
Carnarvon-5 (Don Juan)	Q1	Gas appraisal	ATP 771	<b>Successful appraisal</b>
Indy West-1 (Don Juan)	Q2	Gas appraisal	ATP 771	<b>Successful appraisal</b>
Orallo South-3 (Don Juan)	Q2	Gas appraisal	ATP 771	<b>Successful appraisal</b>



Drilling at Breguet-1

# Exploration and Development



## Surat Basin: Project Atlas

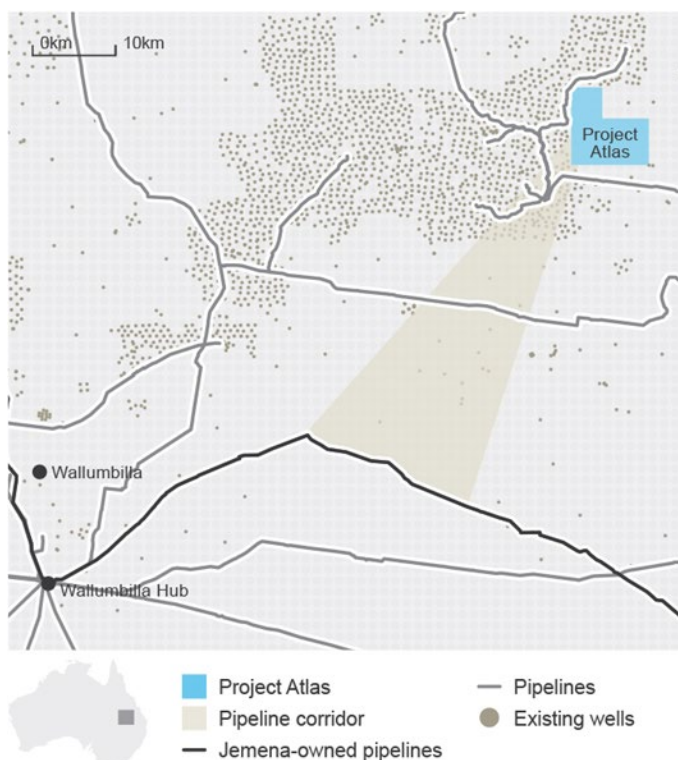
On 29 October 2018, Senex announced its Final Investment Decision for Project Atlas and sanctioning of a multi-year work program.

The work program includes a 40 TJ/day gas processing facility and a 60 kilometre pipeline connected to the Wallumbilla Hub. Jemena will build, own and operate this infrastructure, with commissioning expected by the end of 2019. Activity is on schedule with detailed design, procurement and environmental approval processes underway.

The work program also includes construction of gas and water gathering networks and water management facilities, and development well drilling and connections. Approximately 60 wells will be drilled, with an initial campaign of 15 wells. Tendering for the rig and associated well site services contract is underway. Remaining wells will be drilled post receipt of all regulatory approvals, targeted by mid-2019.

During the quarter, Senex completed all field studies and submitted environmental authority applications to the Queensland Government, and an Environmental Protection and Biodiversity Conservation (EPBC) Act referral to the Federal Government. Subsequent to quarter-end, Senex received confirmation from the Department of the Environment and Energy that all federal environmental requirements under the EPBC Act have been satisfied. This is a significant milestone which recognises Senex’s capabilities for safe and responsible development of natural gas projects. The EPBC Act confirmation also removes a key timing risk from the project execution schedule.

Senex also commenced engagement with potential domestic gas customers to understand their gas requirement needs. Signing of a first gas sales agreement is expected by mid-2019.



Key milestones	Expected timing
Financial close of debt facility	Achieved October 2018
Satisfy EPBC Act environmental requirements	Achieved January 2019
Engage with domestic gas customers / sign first GSA	Underway / mid-2019
~60-well drilling campaign	2019; currently tendering rig and well site services contract
Secure all remaining regulatory approvals	Mid-2019
Commissioning of gas processing facility and first sales gas	End 2019

# Exploration and Development



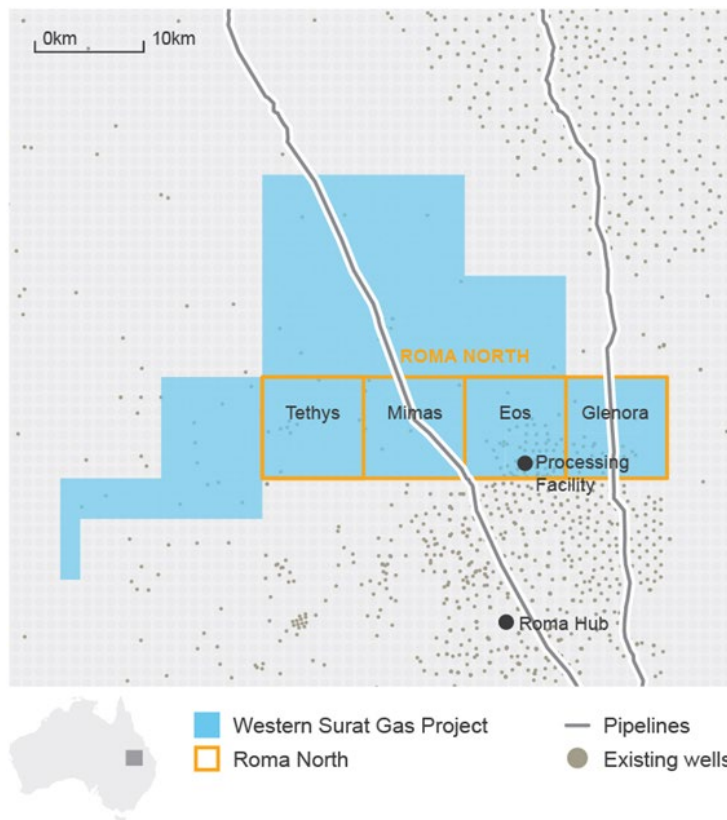
## Surat Basin: Western Surat Gas Project

On 29 October 2018, Senex announced its Final Investment Decision for Roma North, part of the Western Surat Gas Project, and sanctioning of a multi-year work program.

The work program includes construction of an initial 16 TJ/day gas processing facility, a five kilometre major pipeline connection to existing GLNG infrastructure, water management facilities and monitoring bores, and drilling and connection of approximately 50 development wells.

During the quarter, civil works and piling commenced at the processing facility site and are currently nearing completion. The underground pipeline was constructed and laid for future connection to the facility.

Well optimisation work continues with excellent well availability achieved in December 2018. Production from Roma North of 77 kboe was 33% higher than the prior quarter. A maximum daily production rate of 5.7 TJ was reached during the quarter, and subsequent to quarter-end the maximum daily production rate has exceeded 6 TJ at times.



Roma North pipeline



Roma North processing facility pad

Key milestones	Expected timing
Secure all regulatory and environmental approvals	<b>Achieved August 2018</b>
Financial close of debt facility	<b>Achieved October 2018</b>
Commissioning of gas processing facility and first sales gas	Q4 FY19
~50-well drilling campaign	2019; currently tendering rig and well site services contract

# Exploration and Development



## Cooper Basin: Gas

### Gemba gas discovery

The Gemba-1 gas exploration well (PEL 516: Senex 100% and operator) is located on the southwest margin of the Allunga Trough, approximately five kilometres from existing infrastructure and approximately 37 kilometres south west of the Moomba processing facility.

Designed to evaluate gas potential of the lower-permeability intra-Patchawarra sandstones, the well was successfully drilled, cased and suspended in Q4 FY18. Gemba-1 intersected gas in the target zones, including the Dullingari group which represents a potential new gas play.

As announced on 17 December 2018, Senex successfully completed a seven-stage hydraulic fracturing program and a seven-day flow-test was subsequently undertaken. A stabilised flow rate of ~8 million standard cubic feet per day was achieved with ~20% CO<sub>2</sub> content, in line with expectations based on regional data. The test recovered 44 million standard cubic feet of gas and 88 barrels of oil.

Senex will undertake an extended production test in Q3 FY19 across each of the discovered intervals. The test will further assess the reservoir, deliverability and ultimate recovery of each zone. A development plan will be prepared based on test results, with potential for first gas sales by end of 2019.

### Vanessa contract extensions

Senex extended the Master Gas Sales Agreement with ENGIE Australia & New Zealand for the sale of gas in 2019 from the Vanessa field. The agreement provides Senex with an increased sales price relative to 2018. Under this agreement, ENGIE Australia & New Zealand is purchasing gas primarily for its Pelican Point power station, a significant generator of electricity in the South Australian market.

Senex also extended the existing agreement with the SACB JV for processing of raw gas and sale of associated liquids to the SACB JV. An amendment was made to the agreement which provides Senex with improved liquids pricing.



Gemba-1 stimulation and testing



# Exploration and Development



## Cooper Basin: Oil

Senex brought online two oil discoveries from Q1 FY19, Breguet-1 (ex PEL 104, Senex 60% and operator, Beach 40%), and Snatcher North-1 (ex PEL 111, Senex 60% and operator, Beach 40%). The wells were producing ~540 bopd (gross) at quarter-end.

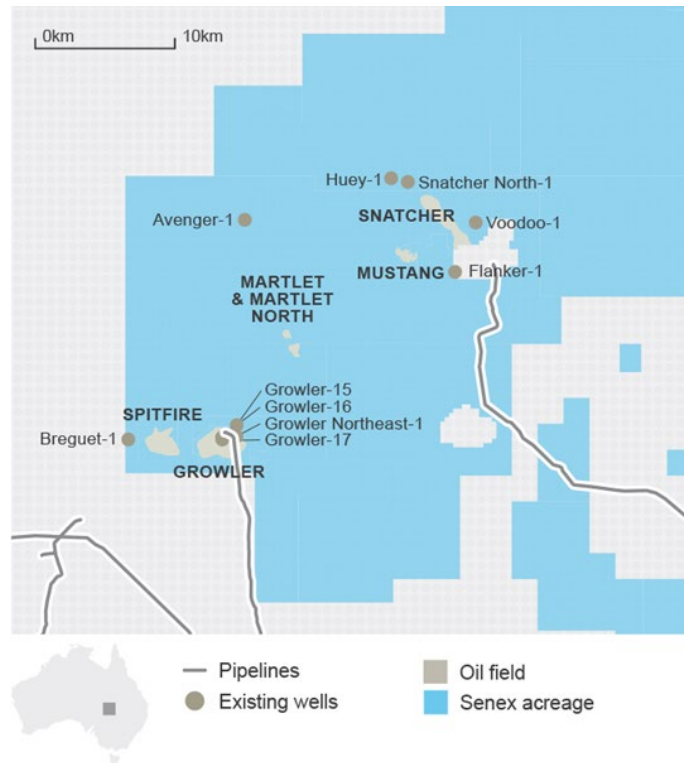
The first horizontal development well of the free-carried drilling campaign with Beach, Growler-16 (ex PEL 104, Senex 60% and operator, Beach 40%), was successfully drilled and completed during the quarter. The well was brought online in January 2019 at an initial production rate of ~1,300 bopd (gross).

The Growler-16 horizontal section appraised the field limit, with a lateral length of ~1,300 metres. The well intersected ~450 metres of net pay and was brought online within 25 days of spud.

Subsequent to quarter-end, the second horizontal development well of the campaign, Growler-17, was drilled and will shortly commence production.

Senex drilled four oil exploration wells during the quarter, Huey-1, Avenger-1, Flanker-1 and Voodoo-1 (ex PEL 111, Senex 60% and operator, Beach 40%). Flanker-1 discovered and flowed hydrocarbons but was deemed non-commercial and later plugged and abandoned. The remaining wells did not encounter hydrocarbons and were plugged and abandoned.

During the quarter, Senex progressed preparations for the ~600 km<sup>2</sup> Westeros 3D seismic survey, with acquisition to commence in Q3 FY19. The survey will address the highly prospective Namur Sandstone and support testing a southern extension of the western flank.



# Glossary



<b>\$</b>	Australian dollars	<b>kboe</b>	Thousand barrels of oil equivalent
<b>ASX</b>	Australian Securities Exchange operated by ASX Ltd	<b>mmboe</b>	Million barrels of oil equivalent
<b>ATP</b>	Authority to Prospect - granted under the Petroleum Act 1923 (Qld) or the Petroleum Gas (Production and Safety) Act 2004 (Qld)	<b>mmbbl</b>	Million barrels of oil
<b>bbl</b>	Barrels - the standard unit of measurement for all oil and condensate production. One barrel = 159 litres or 35 imperial gallons	<b>mmscfd</b>	Thousand standard cubic feet of gas per day
<b>Bcf</b>	Billion cubic feet	<b>mmscfd</b>	Million standard cubic feet of gas per day
<b>Beach</b>	Beach Energy Ltd	<b>P&amp;A</b>	Plugged and abandoned
<b>boe</b>	Barrels of oil equivalent - the volume of hydrocarbons expressed in terms of the volume of oil which would contain an equivalent volume of energy	<b>PEL</b>	Petroleum Exploration Licence granted under the Petroleum and Geothermal Energy Act 2000 (SA)
<b>bopd</b>	Barrels of oil per day	<b>PJ</b>	Petajoule
<b>C&amp;S</b>	Cased and suspended	<b>PL</b>	Petroleum Lease granted under the Petroleum Act 1923 (Qld) or the Petroleum Gas (Production and Safety) Act 2004 (Qld)
<b>EPBC</b>	Environment Protection and Biodiversity Conservation Act	<b>PPL</b>	Petroleum production licence granted under the Petroleum and Geothermal Energy Act 2000 (SA)
<b>FY</b>	Financial year	<b>PRL</b>	Petroleum retention licence granted under the Petroleum and Geothermal Energy Act 2000 (SA)
<b>GJ</b>	Gigajoule	<b>Q, Qtr</b>	Quarter
<b>GLNG</b>	Gladstone Liquefied Natural Gas, a JV between Santos, PETRONAS, Total and KOGAS	<b>SACB JV</b>	South Australia Cooper Basin JV, which involves Santos (as operator) and Beach
<b>GSA</b>	Gas sales agreement	<b>Senex</b>	Senex Energy Ltd
<b>JV</b>	Joint venture	<b>TJ</b>	Terajoule
<b>kbbbl</b>	Thousand barrels of oil	<b>WSGP</b>	Western Surat Gas Project
		<b>YTD</b>	Year to date

# Further Information

## Conference call

Senex Managing Director and CEO Ian Davies and Chief Financial Officer Gary Mallett will hold a conference call to discuss these quarterly results.

Date: Wednesday, 30 January 2019

Time: 10.00am AEDT (Sydney, Melbourne) /  
9.00am AEST (Brisbane)

The conference call will be streamed live and can be accessed via the Senex company page on the Open Briefing website:  
<http://www.openbriefing.com/OB/3187.aspx>

A recording of the conference call will be available from 5.00pm AEST via the same link.

## About Senex

Senex is an ASX-listed, growing and independent Australian oil and gas company with a 30-year history. We manage a strategically positioned portfolio of onshore oil and gas assets in Queensland and South Australia, with access to Australia's east coast energy market. Senex is focused on creating sustainable value for shareholders by leveraging our capability as a low cost, efficient and safe explorer and producer.

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## Share Registry

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