

# Third Quarter Activities Report

For period ending 30 September 2014

**Santos**  
We have the energy.

17 October 2014

## Highest Santos quarterly production in seven years

Santos today announced the highest quarterly production in seven years, with production of 14.0 mmbœ – 9% above the previous quarter.

Sales revenue of \$1,060 million for the quarter increased 9% on the previous quarter and is up 16% compared to the first nine months of 2013.

Santos Managing Director and Chief Executive Officer David Knox said that the successful ramp-up of the PNG LNG project had driven the company's highest quarterly production result since 2007.

Santos also reported that the GLNG project continues to deliver key construction milestones, including commissioning of the first upstream gas hub, first gas into the gas transmission pipeline, delivery of the final train 2 module and the completion of hydro-testing of the second LNG tank.

"GLNG is approaching 90% complete, it remains on budget and we are on track to deliver first LNG in 2015," Mr Knox said.

## Comparative performance at a glance

Corresponding period	Q3 2014	Q3 2013	Change
Production (mmbœ)	14.0	13.4	+4%
Sales (mmbœ)	16.8	15.5	+8%
Sales revenue (\$million)	1,060	1,027	+3%
Quarterly comparison	Q3 2014	Q2 2014	Change
Production (mmbœ)	14.0	12.8	+9%
Sales (mmbœ)	16.8	15.1	+11%
Sales revenue (\$million)	1,060	974	+9%
Year-to-date comparison	2014	2013	Change
Production (mmbœ)	39.0	37.9	+3%
Sales (mmbœ)	45.7	42.9	+7%
Sales revenue (\$million)	2,947	2,537	+16%

## Key activities for the quarter

- PNG LNG production reached full capacity in late-July and 23 LNG cargoes were shipped during the quarter.
- First gas introduced into the GLNG gas transmission pipeline.
- Delivery of the final GLNG train 2 module to Curtis Island and successful hydro-testing of the second LNG tank.
- Significant gas-condensate discovery at Lasseter in the Browse Basin.
- First oil from the Dua project in Vietnam.
- Acquisitions of exploration acreage offshore Malaysia and Vietnam.

### Media enquiries

Rob Malinauskas  
+61 8 8116 5918 / +61 (0) 438 862 132  
robert.malinauskas@santos.com

### Investor enquiries

Andrew Nairn  
+61 8 8116 5314 / +61 (0) 437 166 497  
andrew.nairn@santos.com

### Santos Limited ABN 80 007 550 923

GPO Box 2455, Adelaide SA 5001  
T: +61 8 8116 5000 / F: +61 8 8116 5131  
www.santos.com

Sales gas, ethane and gas to LNG production of 60.4 petajoules for the quarter was 9% higher than the corresponding quarter, reflecting the successful ramp-up of PNG LNG, partially offset by lower production from the Carnarvon Basin due to extended outages at customer facilities and lower nominations, combined with the planned one-month shutdown of Darwin LNG in the current quarter. Total sales gas, ethane and LNG sales revenues jumped 37% to \$483 million for the quarter.

Quarterly crude oil production of 2.4 million barrels was 13% higher than the previous quarter, primarily due to higher production in Vietnam from Chim Sào and the start-up of Dua, combined with higher production in Western Australia. The average oil price for the quarter was A\$115 per barrel, 10% lower than the corresponding quarter reflecting lower global oil prices. Total crude oil sales revenues of \$470 million for the quarter were 3% lower than the previous quarter due to lower realised oil prices partially offset by higher sales volumes.

## 2014 Guidance

All 2014 guidance is maintained, as shown in the table below.

Item	2014 guidance
Production	52-57 mmboe
Production costs	\$820-880 million
Depreciation, depletion & amortisation (DD&A) expense	\$18.50/boe
Royalty-related taxation expense (after tax) <sup>1</sup>	\$60 million
Capital expenditure (including exploration and evaluation) <sup>2</sup>	\$3.5 billion

<sup>1</sup> Royalty-related taxation expense guidance assumes an average realised oil price of A\$110 per barrel.

<sup>2</sup> Capital expenditure guidance excludes capitalised interest, which is forecast at approximately \$250 million.

Further detail of 2014 year-to-date capital expenditure, including exploration and evaluation expenditure, is reported in the table on page 7 of this report.



*LNG tanks and jetty, GLNG, October 2014.*

## 1. Production (Santos share)

	Q3 2014	Q3 2013	Q2 2014	2014 YTD	2013 YTD	Full-year 2013
<b>Sales gas and ethane (PJ)</b>						
Cooper	16.8	16.8	14.5	45.8	44.9	61.0
Carnarvon	11.9	16.3	13.2	39.7	48.3	64.9
Indonesia	6.1	6.7	6.3	18.6	20.6	26.9
Otway	4.5	4.8	4.2	12.5	13.7	18.4
Denison/Scotia/Spring Gully	3.3	3.1	3.0	9.3	8.8	12.0
GLNG	1.7	2.4	1.9	6.2	7.3	9.6
Vietnam	0.6	0.4	0.7	2.3	1.3	1.5
Bangladesh	-	0.2	-	-	1.9	1.9
<b>Total production (PJ)</b>	<b>44.9</b>	<b>50.7</b>	<b>43.8</b>	<b>134.4</b>	<b>146.8</b>	<b>196.2</b>
<b>Total production (mmboe)</b>	<b>7.7</b>	<b>8.7</b>	<b>7.5</b>	<b>23.1</b>	<b>25.3</b>	<b>33.7</b>
<b>Sales gas to LNG (PJ)</b>						
PNG LNG	12.5	-	6.7	19.4	-	0.1
Darwin LNG	3.0	4.6	5.2	12.9	13.0	16.7
<b>Total production (PJ)</b>	<b>15.5</b>	<b>4.6</b>	<b>11.9</b>	<b>32.3</b>	<b>13.0</b>	<b>16.8</b>
<b>Total production (mmboe)</b>	<b>2.7</b>	<b>0.8</b>	<b>2.1</b>	<b>5.6</b>	<b>2.2</b>	<b>2.9</b>
<b>Condensate (000 barrels)</b>						
Cooper	274.5	283.7	222.7	760.7	782.4	1,043.0
Bayu-Undan	137.7	236.1	245.0	617.1	786.6	967.5
PNG LNG	347.5	-	180.5	532.7	-	-
Carnarvon	120.6	162.5	135.6	392.0	478.3	627.5
Amadeus	11.5	6.2	9.6	30.8	20.5	28.4
Other <sup>1</sup>	6.0	5.7	4.7	15.2	18.6	25.4
<b>Total production (000 barrels)</b>	<b>897.8</b>	<b>694.2</b>	<b>798.1</b>	<b>2,348.5</b>	<b>2,086.4</b>	<b>2,691.8</b>
<b>Total production (mmboe)</b>	<b>0.8</b>	<b>0.6</b>	<b>0.8</b>	<b>2.2</b>	<b>1.9</b>	<b>2.5</b>
<b>LPG (000 tonnes)</b>						
Cooper	32.2	33.7	32.3	93.5	93.0	125.7
Bayu-Undan	7.7	14.1	13.7	34.3	46.0	55.9
<b>Total production (000 tonnes)</b>	<b>39.9</b>	<b>47.8</b>	<b>46.0</b>	<b>127.8</b>	<b>139.0</b>	<b>181.6</b>
<b>Total production (mmboe)</b>	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>	<b>1.1</b>	<b>1.2</b>	<b>1.6</b>
<b>Crude oil (000 barrels)</b>						
Cooper	795.2	818.4	811.4	2,410.7	2,255.7	3,104.4
Vietnam	756.2	571.3	566.9	2,051.2	1,979.2	2,658.5
Fletcher Finucane/Mutineer-Exeter	257.8	815.3	243.7	988.8	1,273.6	2,167.9
Stag	323.3	329.8	240.6	814.4	860.8	1,124.3
Barrow/Thevenard	126.3	189.3	130.4	406.8	555.2	740.4
Amadeus	63.1	44.5	49.3	156.5	135.0	173.1
Indonesia	39.8	54.5	47.2	120.5	152.8	203.1
Queensland	12.3	13.5	13.0	36.5	36.8	49.9
PNG	12.5	10.2	10.3	35.9	40.0	49.8
<b>Total production (000 barrels)</b>	<b>2,386.5</b>	<b>2,846.8</b>	<b>2,112.8</b>	<b>7,021.3</b>	<b>7,289.1</b>	<b>10,271.4</b>
<b>Total production (mmboe)</b>	<b>2.4</b>	<b>2.9</b>	<b>2.1</b>	<b>7.0</b>	<b>7.3</b>	<b>10.3</b>
<b>Total</b>						
<b>Production (mmboe)</b>	<b>14.0</b>	<b>13.4</b>	<b>12.8</b>	<b>39.0</b>	<b>37.9</b>	<b>51.0</b>

<sup>1</sup> Other includes production from Otway, Indonesia, Queensland and Bangladesh.

## 2. Sales volumes and sales revenue (Santos share)

	Q3 2014	Q3 2013	Q2 2014	2014 YTD	2013 YTD	Full-year 2013
<b>Sales gas and ethane<sup>1</sup></b>						
Sales – own product (PJ)	45.3	45.2	41.7	126.8	138.2	182.0
Sales – third party (PJ)	9.1	9.5	7.9	24.1	20.0	28.7
Total sales (PJ)	54.4	54.7	49.6	150.9	158.2	210.7
Average gas price (A\$/GJ)	4.87	4.97	4.93	4.89	4.87	4.87
<b>Total sales revenue (\$million)</b>	<b>265</b>	<b>271</b>	<b>244</b>	<b>738</b>	<b>770</b>	<b>1,025</b>
<b>LNG<sup>2</sup></b>						
Sales volumes (000 tonnes)	247.4	81.2	139.3	471.7	233.7	300.5
Average LNG price (A\$/tonne)	879.06	1,007.00	797.22	830.76	861.22	853.95
Average LNG price (US\$/tonne)	814.27	921.61	743.41	764.71	838.75	821.93
<b>Total sales revenue (\$million)</b>	<b>218</b>	<b>82</b>	<b>111</b>	<b>392</b>	<b>201</b>	<b>257</b>
<b>Condensate</b>						
Sales – own product (000 barrels)	771.2	792.9	797.9	2,043.3	1,854.1	2,664.8
Sales – third party (000 barrels)	28.8	60.8	44.0	100.2	84.7	155.4
Total sales (000 barrels)	800.0	853.7	841.9	2,143.5	1,938.8	2,820.2
Average condensate price (A\$/bbl)	98.20	112.34	100.05	100.12	103.98	110.09
Average condensate price (US\$/bbl)	90.97	102.82	93.29	92.16	101.27	105.96
<b>Total sales revenue (\$million)</b>	<b>78</b>	<b>96</b>	<b>84</b>	<b>214</b>	<b>202</b>	<b>310</b>
<b>LPG</b>						
Sales – own product (000 tonnes)	30.3	47.3	53.6	112.8	133.4	176.3
Sales – third party (000 tonnes)	1.4	4.0	3.1	5.8	7.1	10.5
Total sales (000 tonnes)	31.7	51.3	56.7	118.6	140.5	186.8
Average LPG price (A\$/tonne)	902.15	945.57	867.93	924.69	881.44	939.56
Average LPG price (US\$/tonne)	835.66	865.38	809.34	851.18	858.43	904.33
<b>Total sales revenue (\$million)</b>	<b>29</b>	<b>49</b>	<b>49</b>	<b>110</b>	<b>124</b>	<b>176</b>
<b>Crude oil</b>						
Sales – own product (000 bbls)	2,690.7	2,607.3	2,160.2	7,571.7	7,076.8	9,830.3
Sales – third party (000 bbls)	1,394.1	1,550.8	1,839.0	4,688.5	3,416.1	5,333.1
Total sales (000 bbls)	4,084.8	4,158.1	3,999.2	12,260.2	10,492.9	15,163.4
Average crude oil price (A\$/bbl)	115.12	127.31	121.51	121.77	118.20	120.96
Average crude oil price (US\$/bbl)	106.63	116.51	113.31	112.08	115.12	116.43
<b>Total sales revenue (\$million)</b>	<b>470</b>	<b>529</b>	<b>486</b>	<b>1,493</b>	<b>1,240</b>	<b>1,834</b>
<b>Total</b>						
Sales – own product (mmboe)	13.8	12.2	11.8	36.7	35.9	48.0
Sales – third party (mmboe)	3.0	3.3	3.3	9.0	7.0	10.5
<b>Total sales volume (mmboe)</b>	<b>16.8</b>	<b>15.5</b>	<b>15.1</b>	<b>45.7</b>	<b>42.9</b>	<b>58.5</b>
Third party product purchases (\$million)	225 <sup>3</sup>	234	207	612	496	745
Sales – own product (\$million)	848	766	700	2,230	2,004	2,772
Sales – third party (\$million)	212	261	274	717	533	830
<b>Total sales revenue (\$million)</b>	<b>1,060</b>	<b>1,027</b>	<b>974</b>	<b>2,947</b>	<b>2,537</b>	<b>3,602</b>

<sup>1</sup> Domestic sales gas and ethane.

<sup>2</sup> LNG includes PNG LNG and Darwin LNG.

<sup>3</sup> Includes \$34 million of third party product purchased that remained in inventory at the end of the quarter.

### 3. Activity by area

Comparisons between periods for gas, condensate and LPG production are made between the current quarter and the same quarter from the previous year, as production is heavily influenced by seasonal factors. Conversely, comparisons for crude oil are made with the immediate previous quarter, as oil production rates are not generally subject to seasonal variations. Both comparisons are available in the table on page 3.

#### Cooper Basin

##### Gas and gas liquids

Sales gas and ethane production of 16.8 petajoules (PJ) was 16% higher than the prior quarter reflecting the ramp up of drilling activity and the resultant increasing well capacity beyond natural field decline. Production was in line with the corresponding quarter as higher capacity offset increased downtime primarily due to planned maintenance and outages to tie in infrastructure expansions.

Condensate and LPG production was slightly lower than Q3 2013 as a result of increased downtime and natural field decline in higher yielding fields.

In South Australia, work continued on the Big Lake 30-well infill drilling program with two drilling rigs in operation. During the quarter, the remaining seven wells (Big Lake 111-114 and 117-119) of a two 5-well pad program were completed, with all wells successfully cased and suspended as future gas producers. Drilling has now commenced on two four-well pads, with two wells cased and suspended as future producers (Big Lake 124 and 125) and drilling currently underway on Big Lake 120 and 126.

Drilling was also completed at a two-well pad in the Tirrawarra North field, with the second well (Tirrawarra-83) also successfully cased and suspended as a future producer. Non-pad development drilling also continued with Tirrawarra-81, Andree-5, Andree-6, Gooranie East-1, Lake MacMillan-3, Moolion North-2 and Moolion-7 all successfully drilled, cased and suspended as future producers. Drilling is currently underway at Tallerangie-2 and Leleptian-5.

In South West Queensland, a two-well pad in the Hera field was drilled and connected successfully within the quarter. In addition, Durham Downs-6, the first of a four well campaign in the field, was successfully drilled, cased and suspended as a future producer.

##### Crude oil

Crude oil production of 795,200 barrels was 2% lower than the previous quarter due to natural field decline.

Drilling continued, with Carooinnie-2 well and Cook-28 horizontal well successfully cased and suspended as future oil producers. The Carooinnie South-1 appraisal well was also successfully drilled, cased and suspended.

#### Carnarvon

Gas production of 11.9 PJ was 27% lower than Q3 2013, due to lower customer nominations as well as several large unplanned customer outages. Condensate production of 120,600 barrels reflected the lower gas production.

Total oil production for the quarter of 707,400 barrels was 15% higher than the previous quarter, primarily due to higher production at Stag due to better uptime performance. Fletcher Finucane production was shut-in in early-September due to repairs to an FPSO anchor chain. Work has been completed and production from the fields is expected to resume in the coming week.

#### PNG LNG

Following a smooth ramp-up from first production, the PNG LNG project was producing at full capacity by late-July. Gross gas production for the third quarter was 92.3 PJ (Santos share 12.5 PJ), measured at the inlet of the LNG plant. Twenty-three LNG cargoes were shipped during the third quarter. Gross condensate production for the quarter was 2.56 mmbbls (Santos share 347,500 barrels), measured at the Kutubu entry point.

Drilling of the eight Hides development wells was completed during the quarter. The Hides produced water disposal (PWD) well was also successfully cased and completed, and work is now underway to redefine the Hides reservoir model using the results from all of the Hides wells. The Hides F1 (Hides Deep) exploration well was spudded in early-October.

### Bayu-Undan/Darwin LNG

The planned 35-day shutdown at Bayu-Undan and Darwin LNG was successfully completed at the end of the quarter, with production re-commencing in early-October. As a result of the planned shutdown, gross gas production of 33.8 PJ was lower than Q3 2013. Santos' net entitlement to production was 3.0 PJ of gas, 137,700 barrels of condensate and 7,700 tonnes of LPG. Nine LNG cargoes were shipped during the quarter.

Work progressed on the Bayu-Undan Phase 3 project during the quarter, with the first of two subsea development wells spudded and casing installed. The project is over 60% complete, and on track for first gas in 2015.

### Indonesia

Santos' net entitlement to gas production of 6.1 PJ was lower than the corresponding period with new production from Peluang offset by lower production at Maleo and Oyong due to natural field decline. Combined Wortel and Oyong gross gas production for the quarter averaged 79 TJ/day, with combined gross production from Maleo and Peluang averaged 86 TJ/day. Oyong oil production for the quarter was 39,800 barrels.

### Otway

Sales gas production of 4.5 PJ was lower than Q3 2013, due to natural field decline at Casino. Production from the Casino hub was 3.8 PJ of sales gas and 2,700 barrels of condensate. Minerva production was 0.7 PJ of sales gas and 1,900 barrels of condensate.

### Vietnam

Oil production was higher due to improved FPSO operating efficiency and first production from the Dua field. The first Dua well was brought on line in July with the remaining two wells on line by late-September. Average gross oil production for the quarter from the combined Chim Sào and Dua fields was 25,511 barrels per day. Santos' net entitlement to oil production in the third quarter was up 33% to 756,200 barrels. Net entitlement gas production was 0.6 PJ.

### Denison/Scotia/Spring Gully

Sales gas production of 3.3 PJ was higher than Q3 2013, with higher production from the Scotia and Spring Gully fields.

### GLNG

Sales gas production of 1.7 PJ was lower than Q3 2013 due to lower domestic gas nominations. Gross average daily production from the Fairview field during the quarter was 79 TJ/day. The field was produced to meet domestic nominations with the remaining production injected into storage. First gas from the Fairview field was introduced into the GLNG gas transmission pipeline in early-October.

### Narrabri

Construction of the double lined ponds at Santos' Leewood water facility outside the Pilliga Forest is now complete and all water has been transferred from Bibblewindi Pond 3 to Leewood. The workover rig has been demobilised after completing a program of maintenance and the installation of surface facilities and monitoring bores. The Wilga Park Power station was brought back on line in the quarter, as was the Bibblewindi East Pilot. The Dewhurst 22-25 pilot was also commissioned and analysis of the recent 9-well appraisal program continued in the context of developing the work program for the proposed Narrabri Gas Project.

## 4. Capital expenditure

Total exploration, evaluation and development expenditure is summarised in the table below.

	Q3 2014	Q3 2013	Q2 2014	2014 YTD	2013 YTD	Full-year 2013
<b>Capital expenditure (\$million)</b>						
Exploration	93	118	116	272	307	391
Evaluation	61	40	63	180	129	227
Development and other PP&E	748	910	806	2,312	2,493	3,523
Capitalised interest	50	60	57	174	161	228
<b>Total capital expenditure</b>	<b>952</b>	<b>1,128</b>	<b>1,042</b>	<b>2,938</b>	<b>3,090</b>	<b>4,369</b>
<b>Exploration and evaluation expensed (\$million)</b>						
Exploration	20	19	46	93	38	135
Evaluation	21	14	6	41	43	62
Total current year expenditure	<b>41</b>	<b>33</b>	<b>52</b>	<b>134</b>	<b>81</b>	<b>197</b>
Write-off of amounts capitalised in prior years	-	-	9	9	3	3
<b>Total expensed</b>	<b>41</b>	<b>33</b>	<b>61</b>	<b>143</b>	<b>84</b>	<b>200</b>

### 4.1 Exploration activity

Well name	Basin/area	Target	Santos %	Well status
Lasseter-1	Browse – WA	Gas	30	Gas-condensate discovery
Tanumbirini-1	McArthur – NT	Gas	50 <sup>^</sup>	Acquiring wireline logs
Gaschnitz-4	Cooper – SA	Gas	66.6	C&S, gas
Gaschnitz-3	Cooper – SA	Gas	66.6	Drilling
Hides F1 (Hides Deep) <sup>#</sup>	Papuan – PNG	Gas	24	Drilling

<sup>^</sup> Santos is funding 100% of the well cost as part of farm-in obligations.

<sup>#</sup> Not operated by Santos.

#### Western Australia & Northern Territory

During the quarter, Santos announced a significant gas-condensate discovery at the Lasseter-1 exploration well in WA-274-P in the Browse Basin. The well was drilled to a total depth of 5,329 metres measured depth to rotary table (MDRT), and intersected a gross gas condensate bearing interval of 405 metres. Wireline logging confirmed 78 metres of net pay over the Jurassic-aged Lower Vulcan and Plover intervals, between 4,880 and 5,285 metres MDRT. For more information, refer to the ASX release dated 22 August 2014. Studies are underway on the commercial options for this significant discovery and the nearby Santos-operated Crown field.

In the onshore McArthur Basin in the Northern Territory, the Tanumbirini-1 exploration well was drilled in EP 161 to a total depth of 3,945 metres. Multiple thick intervals of organic-rich rock have been intersected at the primary objective Mid-Velkerrie level, accompanied by significant mud gas shows. Elevated gas readings were encountered over a total gross interval in excess of 500 metres. A 90 metre core was taken and extensive wireline evaluation conducted. The well is being cased and suspended for re-entry in 2015.

### **Cooper Basin unconventional gas**

Moomba-193, located in PPL 7, is currently in the process of being connected into Santos' existing production infrastructure and will be the first horizontal REM shale well to be connected in the Cooper Basin. This is the third successful unconventional well to be connected after Moomba-191 (PPL 7) and Moomba-194 (PPL 113).

During the third quarter, activity continued to appraise the Basin Centred Gas opportunity within the Nappamerri Trough Gaschnitz region with the successful drilling of the Gaschnitz-4 well within PPL 101. The well was drilled to a total depth of 3,129 metres and core obtained within the Toolachee Formation. Gaschnitz-3, the second well in the campaign, is currently at 3,217 metres and preparing to core. Three cores are planned for this well, targeting tight sands, hybrid shale and deep coal. Once drilling is complete, the rig will then spud the final well in this campaign, Gaschnitz-2. Fracture stimulation of all three wells is planned for the second quarter of 2015.

### **Papua New Guinea**

In PDL-1, the Hides F1 (Hides Deep) well was spudded on 8 October 2014 and is drilling ahead. This well will test the Koi Lange Formation below the existing production at the Toro reservoir interval.

In the PNG foreland, interpretation following the successful NW Koko-1 and Manta-1 wells in PPL261 and PPL426 is continuing.

### **Malaysia**

During the quarter, Santos acquired a 25% interest in the Deepwater Block S Production Sharing Contract (PSC) in Malaysia. The other participants in the PSC are INPEX (50% interest and operator) and PETRONAS Carigali (25% interest). 3D seismic has resulted in two significant drilling opportunities with the first well expected to spud in the fourth quarter of 2014.

### **Vietnam**

In early-October, Santos was awarded a 40% interest in the Block 124 PSC in the Phu Khanh Basin. The Block covers an area of 6,006 square kilometres, and is located immediately to the south of Block 123, where Santos holds a 50% equity position and is operator. Eni is the operator of Block 124 and holds a 60% equity interest. The license has a total contract term of 30 years with an initial exploration phase 1 commitment of 4 years with a work program of 2,200 km<sup>2</sup> 2D seismic, 500 km<sup>2</sup> 3D seismic and one well. There is an option to enter into a second exploration commitment phase.

In the Block 123 PSC, a 1,200 km<sup>2</sup> 3D seismic survey was acquired by the Santos-led joint venture earlier this year. Processing of the survey will continue in the fourth quarter.



## 4.2 Seismic activity

Permit	Basin/area	Survey	Type	km/km <sup>2</sup>	Status
PL 176	Scotia – QLD	North Scotia 3D	Onshore 3D	67.26 km <sup>2</sup>	Complete
PL 232	Fairview – QLD	Yebna North 3D	Onshore 3D	2.84 km <sup>2</sup>	Complete
PL's 91,92,99	Fairview – QLD	Waddy Brae 3D	Onshore 3D	63.84 km <sup>2</sup>	Complete
PL 100	Fairview – QLD	Springwater 3D	Onshore 3D	29.30 km <sup>2</sup>	Complete
PEL 513	Cooper Basin – SA	Jacenza 3D	Onshore 3D	330.0 km <sup>2</sup>	Complete

## 5. Development projects

### GLNG project (Santos 30%, operator)

Sanctioned in January 2011, GLNG includes the development of CSG resources in the Bowen and Surat Basins in south-east Queensland, construction of a 420-kilometre underground gas transmission pipeline to Gladstone, and two LNG trains with a combined nameplate capacity of 7.8 mtpa on Curtis Island. The project has an estimated gross capital cost of US\$18.5 billion from the final investment decision to the end of 2015 when the second train is expected to be ready for start-up, based on foreign exchange rates which are consistent with the assumptions used at FID (A\$/US\$ 0.87 average over 2011-15).

The project is approaching 90% complete and remains on track for first LNG in 2015, within budget.

#### Upstream

In line with the 2014 drilling plan, twenty-one wells were spudded in the GLNG acreage during the third quarter, which included 18 development wells (12 in Fairview and six in Roma) and three appraisal wells.

Deliverability of the existing wells in Fairview continues to exceed expectations, with total gross field well capacity in excess of 400 TJ/day at the end of August. At Roma, field dewatering continues in line with expectations and an initial development well is already producing more than 1.5 TJ/day.

Commissioning of the Fairview 5 gas processing hub was substantially completed during the quarter. The commissioning and completions workforce has now transitioned to commissioning of the Fairview 4 gas processing hub while construction of the Roma 2 gas processing hub is now complete. Commissioning of the pipeline compressor station was completed and construction of the 120-kilometre Comet Ridge to Wallumbilla pipeline loop is now over 85% complete.

#### Gas transmission pipeline

First gas was introduced into the 420-kilometre gas transmission pipeline from the Fairview field in September with gassing-up commencing in early-October. Surface reinstatement work has been completed along the entire pipeline right of way. The two QGC pipeline interconnections are complete and pre-commissioned.

## LNG plant

Construction of the LNG plant on Curtis Island continues to progress well, with commissioning gas expected to be delivered to the plant in the fourth quarter of 2014. Some commissioning works are already underway, with the emergency power generation run for the first time.

All 111 LNG plant modules have been delivered to Curtis Island from the module yard. All 82 Train 1 modules and 27 of the 29 Train 2 modules have been set on their foundations, and piping installation and cable pulling is progressing. The Train 1 utilities area is substantially complete and work continues on the Train 2 utilities.

Construction of the first LNG tank is well progressed with hydrostatic testing complete and insulation and piping installation underway. Hydrostatic testing of the second LNG tank is also complete. The LNG loading jetty is substantially complete and its subcontractor has demobilised from site.



*GLNG, Curtis Island, October 2014.*

## 7. Drilling summary

### 7.1 Appraisal/evaluation wells

The table below details wells drilled during the third quarter and their status.

Well name	Basin/area	Target	Santos %	Well status
Mount Kingsley-10	Arcadia – QLD	CSG	23.87	C&S successful CSG
Sunnyholt-7	Arcadia – QLD	CSG corehole	23.87	C&S successful CSG
Cook-29*	Cooper – QLD	Oil	55.00	C&S successful oil
Caroowinnie South-1	Cooper – SA	Oil	86.81	C&S successful oil
Arcadia Station-1	Denison – QLD	CSG corehole	50.00	P&A, core obtained
East Lynne-2	Denison – QLD	CSG corehole	50.00	P&A, core obtained
Hardenley West-1	Denison – QLD	CSG corehole	50.00	C&S successful CSG
Lynwood East-1	Denison – QLD	CSG corehole	50.00	P&A, core obtained
FV15-23-1*	Fairview – QLD	CSG water injector	23.85	C&S successful CSG
FV18-27-1	Fairview – QLD	CSG	23.85	C&S successful CSG
Ben Bow-7*	Roma – QLD	CSG	24.57	C&S successful CSG

### 7.2 Development wells

The table below details development wells drilled during the third quarter and their status.

Well name	Basin/area	Target	Santos %	Well status
Bayu Undan DS-01#	Bonaparte – NT	Gas	11.50	Drilling
Cook-28	Cooper – QLD	Oil	55.00	C&S, successful oil
Durham Downs-6	Cooper – QLD	Gas	60.06	C&S, successful gas
Durham Downs-7ST1	Cooper – QLD	Gas	60.06	Drilling
Hera-3*	Cooper – QLD	Gas	60.06	C&S, successful gas
Hera-4	Cooper – QLD	Gas	60.06	C&S, successful gas
Andree-5	Cooper – SA	Gas	66.60	C&S, successful gas
Andree-6	Cooper – SA	Gas	66.60	C&S, successful gas
Big Lake-111*	Cooper – SA	Gas	66.60	C&S, successful gas
Big Lake-112*	Cooper – SA	Gas	66.60	C&S, successful gas
Big Lake -113	Cooper – SA	Gas	66.60	C&S, successful gas
Big Lake-114	Cooper – SA	Gas	66.60	C&S, successful gas
Big Lake-117*	Cooper – SA	Gas	66.60	C&S, successful gas
Big Lake-118	Cooper – SA	Gas	66.60	C&S, successful gas
Big Lake-119	Cooper – SA	Gas	66.60	C&S, successful gas

Well name	Basin/area	Target	Santos %	Well status
Big Lake-120	Cooper – SA	Gas	66.60	Drilling
Big Lake-124	Cooper – SA	Gas	66.60	C&S, successful gas
Big Lake-125	Cooper – SA	Gas	66.60	C&S, successful gas
Big Lake-126	Cooper – SA	Gas	66.60	Drilling
Caroowinnie-2	Cooper – SA	Oil	66.60	C&S, successful oil
Gooranie East-1	Cooper – SA	Gas	66.60	C&S, successful gas
Lake MacMillan-3	Cooper – SA	Gas	66.60	C&S, successful gas
Leleptian-5	Cooper – SA	Gas	66.60	Drilling
Moolion-7	Cooper – SA	Gas	72.32	C&S, successful gas
Moolion North-2*	Cooper – SA	Gas	72.32	C&S, successful gas
Tallerangie- 2	Cooper – SA	Gas	72.32	Drilling
Tirrawarra-81	Cooper – SA	Gas	66.60	C&S, successful gas
Tirrawarra-83*	Cooper – SA	Gas	66.60	C&S, successful gas
Fairview-532*	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV13-20-1	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV13-20-2	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV13-20-3	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV13-20-4	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV13-20-5	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV13-20-6*	Fairview – QLD	CSG	23.85	Suspended for further deepening
FV13-21-1^	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV13-21-2^	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV13-21-3^	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV13-21-4^	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV13-21-5^	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV13-21-6^	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV18-02-8*	Fairview – QLD	CSG	23.85	C&S, successful CSG
FV18-03-1	Fairview – QLD	CSG	23.85	Suspended for further deepening
FV18-03-2	Fairview – QLD	CSG	23.85	Suspended for further deepening
FV18-03-3	Fairview – QLD	CSG	23.85	Suspended for further deepening
FV18-03-4	Fairview – QLD	CSG	23.85	Suspended for further deepening
FV18-03-5	Fairview – QLD	CSG	23.85	Suspended for further deepening
FV18-03-6*	Fairview – QLD	CSG	23.85	Suspended for further deepening
FV18-26-4	Fairview – QLD	CSG	23.85	C&S, successful CSG

Well name	Basin/area	Target	Santos %	Well status
FV18-26-5	Fairview – QLD	CSG	23.85	C&S, successful CSG
12W-Dua – N1P <sup>^</sup> #	Nam Con Son - Vietnam	Oil	31.875	C&C, successful oil
12W-Dua – N2P <sup>^</sup> #	Nam Con Son - Vietnam	Oil	31.875	C&C, successful oil
Hides G1 <sup>^</sup> #	Papuan – PNG	Gas	13.50	C&S, successful gas
Hides G2 <sup>^</sup> #	Papuan – PNG	Gas	13.50	C&S, successful gas
Hides PWD-1 <sup>*#</sup>	Papuan – PNG	Water injector	13.50	C&C, water disposal well
RM09-20-1	Roma – QLD	CSG	30.00	C&S, successful CSG
RM09-20-2	Roma – QLD	CSG	30.00	C&S, successful CSG
RM09-26-1	Roma – QLD	CSG	30.00	C&S, successful CSG
RM09-26-2	Roma – QLD	CSG	30.00	C&S, successful CSG
RM09-26-3	Roma – QLD	CSG	30.00	C&S, successful CSG
RM09-26-4	Roma – QLD	CSG	30.00	C&S, successful CSG

\* Spudded during second quarter 2014

<sup>^</sup> Spudded during first quarter 2014

# Not operated by Santos

## 8. Abbreviations and conversion factors

Abbreviations		Conversion factors	
PJ	petajoules	Sales gas and ethane, 1 PJ	171.937 boe x 10 <sup>3</sup>
TJ	terajoules	Crude oil, 1 barrel	1 boe
GJ	gigajoules	Condensate, 1 barrel	0.935 boe
mmbbl	million barrels	LPG, 1 tonne	8.458 boe
mamboe	million barrels of oil equivalent	LNG, 1 PJ	18,040 tonnes
mmbtu	million British thermal units		
mmscf	million standard cubic feet		
mtpa	million tonnes per annum		
t	tonnes		
P&A	plugged and abandoned		
C&S	cased and suspended		
C&C	cased and completed		
NFE	Near-field exploration		
WI	water injector		
ST	side track		
CSG	coal seam gas		
LNG	liquefied natural gas		
pa	per annum		
PSC	production sharing contract		
FPSO	floating production, storage & offloading		