

# Second Quarter Activities Report

For period ending 30 June 2015



17 July 2015

## Second quarter production up 12%, capex down 65%, GLNG on track

Santos today announced higher second quarter production and higher sales volumes, as well as significant reductions to both capital and operating expenditure.

Second quarter production of 14.3 million barrels of oil equivalent (mmboe) and sales volumes of 15.7 mmboe were 12% and 4% higher than the corresponding quarter.

Sales revenue fell 19% on the corresponding quarter, affected by the lower realised oil price, partially offset by higher domestic gas prices and a weaker Australian dollar.

Santos Managing Director and Chief Executive Officer David Knox said he was pleased with the production growth and the progress the company had made on taking costs out of the business.

"Santos is taking positive steps to strengthen the company's operating position in the lower oil price environment. Year to date capital expenditure is 53% below 2014 levels and our production costs for the first half are tracking below guidance at A\$14.0 per boe," Mr Knox said.

"Our flagship GLNG project is progressing well as we move toward first LNG around the end of the third quarter. All upstream facilities are commissioned and fully operational, and we are making excellent progress on Curtis Island."

All guidance for 2015 is maintained.

### Comparative performance at a glance

Corresponding period	Q2 2015	Q2 2014	Change
Production (mmboe)	14.3	12.8	+12%
Sales (mmboe)	15.7	15.1	+4%
Average realised oil price (A\$/bbl)	82.59	121.51	-32%
Sales revenue (\$million)	786	974	-19%
Capital expenditure (A\$million)	366	1,042	-65%
Quarterly comparison	Q2 2015	Q1 2015	Change
Production (mmboe)	14.3	14.0	+2%
Sales (mmboe)	15.7	15.2	+3%
Average realised oil price (A\$/bbl)	82.59	71.58	+15%
Sales revenue (\$million)	786	825	-5%
Capital expenditure (A\$million)	366	566	-35%
Year-to-date comparison	2015	2014	Change
Production (mmboe)	28.3	25.0	+13%
Sales (mmboe)	30.9	28.9	+7%
Average realised oil price (A\$/bbl)	77.26	125.09	-38%
Sales revenue (\$million)	1,611	1,887	-15%
Capital expenditure (A\$million)	932	1,986	-53%

#### 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 sales gas to LNG production of 65.2 petajoules for the quarter was 17% higher than the corresponding quarter, reflecting a full quarter of PNG LNG production and increased Cooper production. Total sales gas, ethane and LNG sales revenue increased 15% to \$409 million for the quarter due to higher LNG volumes and higher domestic gas prices. The reduction in LNG sales revenues compared to the previous quarter reflects the 3-4 month lag to the oil price in LNG contracts.

Quarterly crude oil production of 1.8 million barrels was 6% lower than the previous quarter, primarily due to lower production in Western Australia due to the Mutineer-Exeter/Fletcher Finucane FPSO being offline for the entire quarter for repairs. Repairs are now complete and production from the fields recommenced on 14 July. The average oil price for the quarter was A\$83 per barrel, 15% higher than the previous quarter but 32% lower than the corresponding quarter, reflecting lower global oil prices partially offset by a weaker Australian dollar. Total crude oil sales revenue of \$275 million for the quarter was 23% higher than the previous quarter reflecting the higher oil prices and timing of shipments.

Total exploration and evaluation costs expensed in the first half were \$207 million, which was higher than the previous half-year reflecting the front-end weighted nature of the 2015 exploration program. Six exploration wells were drilled in the first half of 2015: Hides Deep in Papua New Guinea, Gaschnitz-2 in the Cooper Basin and four wells offshore Malaysia. The program produced the significant oil discovery at Bestari-1, offshore Malaysia and the successful gas discovery at Gaschnitz-2. The other wells did not intersect commercial hydrocarbons and were expensed.

## 2015 Guidance

All 2015 guidance is maintained, as shown in the table below.

Item	2015 Guidance
Production	57-64 mmboe
Production costs	\$14.2-14.6/boe
Depreciation, depletion & amortisation (DD&A) expense	\$17.5-18.0/boe
Capital expenditure (including exploration and evaluation) <sup>1</sup>	\$2 billion

<sup>1</sup> Capital expenditure guidance excludes capitalised interest, which is forecast at approximately \$135 million.

Further detail of 2015 year-to-date capital expenditure, including exploration and evaluation expenditure, is reported in the table on page 8 of this report.

## 2015 Half-year results

Santos will release its results for the half-year ended 30 June 2015 on Friday, 21 August 2015. The half-year report (incorporating Appendix 4D) and associated investor presentation will be available on Santos' website at [www.santos.com](http://www.santos.com). A webcast briefing including investor/analyst questions will also be available on Santos' website from 11:00am AEST on 21 August 2015.

## 1. Production (Santos share)

	Q2 2015	Q2 2014	Q1 2015	2015 YTD	2014 YTD	Full-year 2014
<b>Sales gas and ethane (PJ)</b>						
Cooper	16.1	14.5	14.9	31.0	29.0	63.3
Carnarvon	13.2	13.2	13.8	27.0	27.8	54.2
Indonesia	6.2	6.3	5.6	11.8	12.5	25.1
Otway	3.4	4.1	3.5	6.9	7.9	16.0
Denison/Scotia/Spring Gully/Combabula	3.6	3.0	3.3	6.9	6.0	12.4
GLNG domestic	1.2	1.9	1.8	3.0	4.5	7.9
Vietnam	1.1	0.7	1.2	2.3	1.7	3.2
Other <sup>1</sup>	0.4	0.1	0.2	0.6	0.1	0.4
<b>Total production (PJ)</b>	<b>45.2</b>	<b>43.8</b>	<b>44.3</b>	<b>89.5</b>	<b>89.5</b>	<b>182.5</b>
<b>Total production (mmboe)</b>	<b>7.8</b>	<b>7.5</b>	<b>7.6</b>	<b>15.4</b>	<b>15.4</b>	<b>31.4</b>
<b>Sales gas to LNG (PJ)</b>						
PNG LNG	15.0	6.7	14.0	29.0	6.9	34.0
Darwin LNG	4.9	5.2	4.9	9.8	9.9	16.5
GLNG	0.1	-	-	0.1	-	-
<b>Total production (PJ)</b>	<b>20.0</b>	<b>11.9</b>	<b>18.9</b>	<b>38.9</b>	<b>16.8</b>	<b>50.5</b>
<b>Total production (mmboe)</b>	<b>3.5</b>	<b>2.1</b>	<b>3.2</b>	<b>6.7</b>	<b>2.9</b>	<b>8.7</b>
<b>Condensate (000 barrels)</b>						
PNG LNG	365.4	180.5	334.7	700.1	185.2	915.6
Cooper	225.0	222.7	243.7	468.7	486.2	1,036.9
Bayu-Undan	191.5	245.0	190.5	382.0	479.4	695.4
Carnarvon	136.3	135.6	136.6	272.9	271.4	533.4
Amadeus	10.6	9.6	9.2	19.8	19.3	41.0
Other <sup>2</sup>	3.4	4.7	4.5	7.9	9.2	19.7
<b>Total production (000 barrels)</b>	<b>932.2</b>	<b>798.1</b>	<b>919.2</b>	<b>1,851.4</b>	<b>1,450.7</b>	<b>3,242.0</b>
<b>Total production (mmboe)</b>	<b>0.9</b>	<b>0.8</b>	<b>0.9</b>	<b>1.8</b>	<b>1.4</b>	<b>3.0</b>
<b>LPG (000 tonnes)</b>						
Cooper	27.5	32.3	25.8	53.3	61.3	128.4
Bayu-Undan	10.6	13.7	10.4	21.0	26.6	39.0
<b>Total production (000 tonnes)</b>	<b>38.1</b>	<b>46.0</b>	<b>36.2</b>	<b>74.3</b>	<b>87.9</b>	<b>167.4</b>
<b>Total production (mmboe)</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.6</b>	<b>0.7</b>	<b>1.4</b>
<b>Crude oil (000 barrels)</b>						
Cooper	723.0	811.4	708.6	1,431.6	1,615.5	3,230.6
Vietnam	685.1	566.9	774.3	1,459.4	1,295.0	2,822.0
Stag	200.1	240.6	180.1	380.2	491.1	1,085.5
Barrow	122.9	130.4	117.5	240.4	280.5	526.7
Amadeus	65.8	49.3	63.6	129.4	93.4	225.6
Indonesia	44.7	47.2	32.3	77.0	80.7	168.2
Mutineer-Exeter/Fletcher Finucane	-	243.7	85.8	85.8	731.0	1,443.6
Other <sup>3</sup>	12.2	23.3	9.5	21.7	47.6	92.5
<b>Total production (000 barrels)</b>	<b>1,853.8</b>	<b>2,112.8</b>	<b>1,971.7</b>	<b>3,825.5</b>	<b>4,634.8</b>	<b>9,594.7</b>
<b>Total production (mmboe)</b>	<b>1.8</b>	<b>2.1</b>	<b>2.0</b>	<b>3.8</b>	<b>4.6</b>	<b>9.6</b>
<b>Total</b>						
<b>Production (mmboe)</b>	<b>14.3</b>	<b>12.8</b>	<b>14.0</b>	<b>28.3</b>	<b>25.0</b>	<b>54.1</b>

<sup>1</sup> Amadeus and Gunnedah

<sup>2</sup> Otway, Indonesia and Queensland

<sup>3</sup> Queensland and PNG

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

	Q2 2015	Q2 2014	Q1 2015	2015 YTD	2014 YTD	Full-year 2014
<b>Sales gas and ethane<sup>1</sup></b>						
Sales – own product (PJ)	40.2	41.7	39.4	79.6	81.5	171.1
Sales – third party (PJ)	4.9	7.9	6.0	10.9	15.0	35.9
Total sales (PJ)	45.1	49.6	45.4	90.5	96.5	207.0
Average gas price (A\$/GJ)	5.23	4.93	5.38	5.31	4.91	4.97
<b>Total sales revenue (\$million)</b>	<b>237</b>	<b>244</b>	<b>244</b>	<b>481</b>	<b>473</b>	<b>1,028</b>
<b>LNG<sup>2</sup></b>						
Sales volumes (000 tonnes)	348.0	139.3	332.4	680.4	224.3	766.5
Total sales volumes (mmbœ)	3.3	1.3	3.2	6.5	2.1	7.3
Average LNG price (A\$/tonne)	495.27	797.22	829.03	658.33	777.47	859.21
Average LNG price (US\$/tonne)	387.30	743.41	647.56	514.48	711.77	778.18
<b>Total sales revenue (\$million)</b>	<b>172</b>	<b>111</b>	<b>276</b>	<b>448</b>	<b>174</b>	<b>659</b>
<b>Condensate</b>						
Sales – own product (000 barrels)	907.3	797.9	872.7	1,780.0	1,272.1	2,991.1
Sales – third party (000 barrels)	24.6	44.0	20.1	44.7	71.4	136.3
Total sales (000 barrels)	931.9	841.9	892.8	1,824.7	1,343.5	3,127.4
Average condensate price (A\$/bbl)	78.19	100.05	65.46	71.96	101.26	101.39
Average condensate price (US\$/bbl)	61.15	93.29	51.13	56.24	92.70	91.83
<b>Total sales revenue (\$million)</b>	<b>73</b>	<b>84</b>	<b>58</b>	<b>131</b>	<b>136</b>	<b>317</b>
<b>LPG</b>						
Sales – own product (000 tonnes)	45.2	53.6	35.0	80.2	82.5	163.8
Sales – third party (000 tonnes)	1.4	3.1	2.5	3.9	4.4	8.8
Total sales (000 tonnes)	46.6	56.7	37.5	84.1	86.9	172.6
Total sales volumes (mmbœ)	0.4	0.5	0.3	0.7	0.7	1.5
Average LPG price (A\$/tonne)	620.28	867.93	637.71	628.05	932.91	897.20
Average LPG price (US\$/tonne)	485.06	809.34	498.12	490.82	854.08	812.60
<b>Total sales revenue (\$million)</b>	<b>29</b>	<b>49</b>	<b>24</b>	<b>53</b>	<b>81</b>	<b>155</b>
<b>Crude oil</b>						
Sales – own product (000 bbls)	2,025.7	2,160.2	1,975.4	4,001.1	4,881.0	10,363.0
Sales – third party (000 bbls)	1,304.6	1,839.0	1,139.2	2,443.8	3,294.4	6,083.1
Total sales (000 bbls)	3,330.3	3,999.2	3,114.6	6,444.9	8,175.4	16,446.1
Total sales volumes (mmbœ)	3.3	4.0	3.1	6.4	8.2	16.4
Average crude oil price (A\$/bbl)	82.59	121.51	71.58	77.26	125.09	114.21
Average crude oil price (US\$/bbl)	64.58	113.31	55.91	60.38	114.52	103.44
<b>Total sales revenue (\$million)</b>	<b>275</b>	<b>486</b>	<b>223</b>	<b>498</b>	<b>1,023</b>	<b>1,878</b>
<b>Total</b>						
Sales – own product (mmbœ)	13.5	11.8	13.0	26.5	22.9	51.3
Sales – third party (mmbœ)	2.2	3.3	2.2	4.4	6.0	12.4
<b>Total sales volume (mmbœ)</b>	<b>15.7</b>	<b>15.1</b>	<b>15.2</b>	<b>30.9</b>	<b>28.9</b>	<b>63.7</b>
Third party product purchases (\$million)	128	207	111	239	387	786
Sales – own product (\$million)	644	700	704	1,348	1,382	3,105
Sales – third party (\$million)	142	274	121	263	505	932
<b>Total sales revenue (\$million)</b>	<b>786</b>	<b>974</b>	<b>825</b>	<b>1,611</b>	<b>1,887</b>	<b>4,037</b>

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

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

### 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 16.1 PJ was 11% higher than the corresponding quarter reflecting higher well capacity combined with lower planned downtime. 23 new gas wells were brought on-line in the quarter. Condensate and LPG production was broadly in-line with the corresponding quarter.

In South Australia, pad drilling activity continued with Narie-4 successfully drilled, cased and suspended as a future producer, while drilling of a three well pad in the Coonatie field was completed with the final well Coonatie-23 successfully drilled, cased and suspended as a future producer.

The Swan Lake five-well campaign targeting the Patchawarra Formation continued in the second quarter, comprising three crestal development wells and two down-dip appraisal wells. Swan Lake-13, -14 and -16 (development wells) were all cased and suspended as future producers. The appraisal well, Swan Lake-15 was also cased and suspended. The campaign will continue into the third quarter, with the final appraisal well Swan Lake-12.

Non-pad development drilling also continued with Tirrawarra-84 successfully drilled, cased and suspended as the first of a five-well Tirrawarra campaign.

In Queensland, Barrolka-16 and Barrolka-17 were successfully drilled, cased and suspended as future producers, completing the four well campaign in the Barrolka field. The 2015 Windorah-Marama program commenced during the quarter, comprising of five development and five appraisal wells. The first three wells in this campaign, Whanto-2, -3 and Toby-2 were drilled during the quarter and were all cased and suspended as a future producers.

Spinel-1, Emery-1 and Moonanga South-1, the final three wells in an eight well exploration program with the SWJV (Drillseach farm-in acreage) campaign, were cased and suspended for future production from conventional sands and unconventional deep coal zones. These wells concluded a highly successful exploration campaign within the Patchawarra wet gas fairway with seven discoveries out of eight wells. Work is underway to complete and connect selected wells and bring onto production before the end of the year.

The Cooper Basin's first stand-alone Deep Coal producer, Tirrawarra South 1, was successfully brought online in May and is flowing wet gas in-line with forecast. The well will provide important long-term dynamic performance data from the Deep Coal zone which is the single producing interval in the well.

##### Crude oil

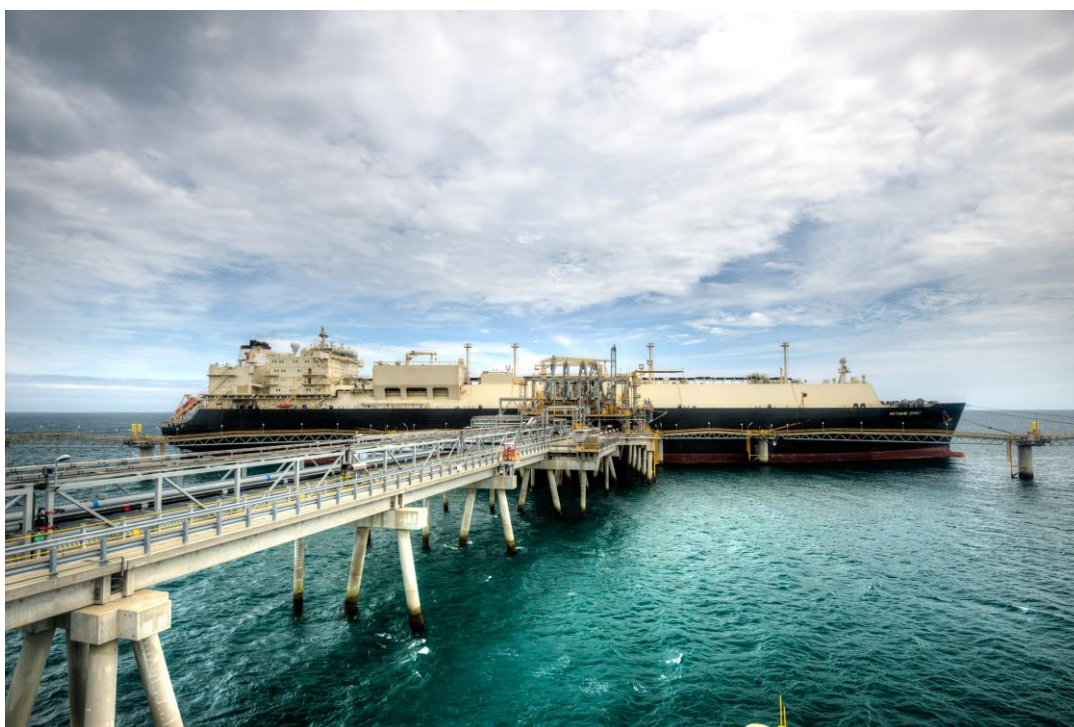
Crude production was higher than the previous quarter due to recent drill and in-wellbore projects coming online and lower downtime offsetting natural field decline. There were no oil wells drilled in the second quarter.

## Carnarvon

Gas and condensate production of 13.2 PJ and 136,300 barrels respectively were both in-line with the corresponding quarter. Total oil production of 323,000 barrels was lower than the previous quarter as the Mutineer-Exeter/Fletcher Finucane FPSO was offline for the entire quarter as a result of a slip-ring failure in the FPSO's swivel. Repairs are now complete and production from the fields re-commenced on 14 July.

## PNG LNG

The PNG LNG project continued to perform well during the second quarter, with both trains consistently operating above nameplate capacity. Gross gas production was 111.1 PJ (Santos share 15.0 PJ), measured at the inlet of the LNG plant. 25 LNG cargoes were shipped during the second quarter. Gross condensate production for the quarter was 2.7 mmbbls (Santos share 365,400 barrels), measured at the Kutubu entry point. In early June, the 100th LNG cargo was loaded from the PNG LNG project.



*Methane Spirit, 100th LNG cargo departed PNG LNG on 12 June, Papua New Guinea*

## Bayu-Undan/Darwin LNG

Gross gas production of 58.3 PJ was in-line with the corresponding quarter. Gross condensate production increased by 9% on the previous quarter, reflecting a full quarter of Bayu Undan Phase 3 production but was lower than the corresponding quarter due to declining yields.

Darwin LNG continued to perform strongly, with high operating efficiency and excellent cost performance. 15 LNG cargoes were shipped during the quarter.

Santos' net entitlement to production in the second quarter was 4.9 PJ of gas, 191,500 barrels of condensate and 10,600 tonnes of LPG, all slightly lower than the corresponding quarter primarily due to lower operating and capital expenditure delivering lower net entitlement under the PSC.

## Indonesia

Santos' net entitlement to gas production of 6.2 PJ was in line with corresponding period due to lower gross production in Maleo, Oyong and Wortel, partially offset by respectively higher contractor entitlement in all fields. Combined Oyong and Wortel gross gas production for the quarter averaged 69 TJ/day, while combined gross production from Maleo and Peluang averaged 72 TJ/day. Oyong oil production for the quarter was 44,700 barrels.

## Otway/Gippsland

Sales gas production of 3.4 PJ was largely in line with the corresponding quarter. Production from the Casino hub was 2.9 PJ of sales gas and 1,200 barrels of condensate. Minerva production was 0.5 PJ of sales gas and 1,400 barrels of condensate.

In May, Santos completed the sale of a 50% interest in the offshore Sole gas field (VIC/RL3) and the Orbost gas plant in Victoria to Cooper Energy. Santos retains the remaining 50% interest in VIC/RL3 and the gas plant and will receive a free carry on its share of the first \$50 million of project costs. Front end engineering and design studies for a potential development have commenced.

During the quarter, gas supply to the Orbost gas plant from the Nexus-owned Longtom gas field ceased. The Orbost gas plant will be placed on care and maintenance.

## Vietnam

Gross oil production from the Chim Sào and Dua fields was 25,900 barrels per day, driven by high operating efficiency and better than predicted reservoir performance. Santos' net entitlement to oil production from the combined fields was 685,100 barrels. Net entitlement gas production was 1.1 PJ.

## Denison/Scotia/Spring Gully/Combabula

Sales gas production of 3.6 PJ was up 20% on the corresponding quarter, primarily due to Scotia field maximisation.

## GLNG

Sales gas production of 1.2 PJ was lower than the corresponding quarter primarily due to lower domestic nominations. The Fairview and Roma fields were produced to meet domestic and LNG plant nominations with the remaining production injected into storage. Santos' share of commissioning gas delivered to the LNG plant on Curtis Island was 0.1 PJ for the quarter.

## Narrabri

All five Bibblewindi appraisal pilot wells were online at the end of the quarter and delivering gas to the 12MW Wilga Park power station. Government assessment of Santos' proposed phase two work at the Leewood water facility outside the Pilliga is underway, where Santos is seeking approval to construct treatment facilities to allow produced water from the appraisal process to be reused for irrigation. Work on the Environmental Impact Statement for the proposed Narrabri Gas Project continues.

## Amadeus

In June, Santos agreed to sell a 50% operated interest in the Mereenie oil and gas field in the Northern Territory to Central Petroleum for \$45 million. In addition, Central Petroleum will free carry Santos on a \$10 million work program aimed at increasing gas reserves in the field and make further payments to Santos conditional on the proposed Northern Territory-East Coast gas pipeline proceeding. The sale transaction is subject to customary consents and regulatory approvals.

## 4. Capital expenditure

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

	Q2 2015	Q2 2014	Q1 2015	2015 YTD	2014 YTD	Full-year 2014
<b>Capital expenditure (\$million)</b>						
Exploration	80	116	132	212	179	323
Evaluation	-	63	40	40	119	292
Development and other PP&E	269	806	335	604	1,564	2,980
Capitalised interest	17	57	59	76	124	236
<b>Total capital expenditure</b>	<b>366</b>	<b>1,042</b>	<b>566</b>	<b>932</b>	<b>1,986</b>	<b>3,831</b>
<b>Exploration and evaluation expensed (\$million)</b>						
Exploration	122	46	51	173	73	162
Evaluation	4	6	9	13	20	69
Total current year expenditure	126	52	60	186	93	231
Write-off of amounts capitalised in prior years	8	9	13	21	9	25
<b>Total expensed</b>	<b>134</b>	<b>61</b>	<b>73</b>	<b>207</b>	<b>102</b>	<b>256</b>

### 4.1 Exploration activity

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

Well name	Basin/area	Target	Santos %	Well status
Ehsan-1 <sup>#</sup> *	Offshore Malaysia	Oil / Gas	25	P&A, dry hole
Lawa-1 <sup>#</sup> *	Offshore Malaysia	Oil	20	P&A, dry hole
Menawan-1 <sup>#</sup>	Offshore Malaysia	Oil	20	P&A, dry hole

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

\* Spudded during first quarter 2015

#### Malaysia

The exploration drilling campaign offshore Malaysia was completed in the second quarter. The five-well campaign delivered a significant oil discovery at Bestari in Deepwater Block R – for further information, refer to the ASX release of 25 March 2015. Santos has a 20% interest in the Block R PSC.

The final three wells in the campaign, Ehsan-1 in Block S, and Lawa-1 and Menawan-1 in Block R, were drilled in the second quarter. The wells did not intersect commercial hydrocarbons and were plugged and abandoned.



## 4.2 Seismic activity

The table below details seismic activity during the second quarter and status.

Permit	Basin/area	Survey	Type	km/km <sup>2</sup>	Status
EPP 43	Ceduna - SA	Springboard MC3D	Offshore 3D (Multiclient)	148 km <sup>2</sup>	100% complete (8,012 km <sup>2</sup> overall)
WA323P, WA330P, WA452	Carnarvon - WA	Davros MC3D – Phase 2	Offshore 3D (Multiclient)	2,164 km <sup>2</sup> (Santos licence 1,117 km <sup>2</sup> )	100% complete
WA8L	Carnarvon - WA	Davros MC3D – Phase 3	Offshore 3D (Multiclient)	522 km <sup>2</sup> (Santos licence 160 km <sup>2</sup> )	100% complete
PPL269	Papuan - PNG	PPL269 2D – Phase 2	Onshore 2D	72 km	100% complete
Block 124	Phu Khan - Vietnam	Block 124	Offshore 2D	1,550 km	100% 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 on track, within budget, with first LNG expected around the end of the third quarter.

#### Upstream

The initial upstream component of the GLNG project was completed during the quarter with the final handover of Roma Hub 2 from commissioning to operations. All hubs are commissioned and operational, and the upstream facilities are supplying commissioning gas to the LNG plant on Curtis Island via the 420-kilometre gas transmission pipeline.

In total, 478 CSG wells are on-line across Fairview and Roma. 358 Fairview wells are on-line and deliverability continues to exceed expectations. 120 Roma wells are on-line and average per-well gas capacity continues to grow in-line with expectations.

#### Downstream

Work continues to progress on the LNG plant on Curtis Island with all Train 1 piping pneumatic pressure testing now complete. Perlite insulation loading of the methane, ethylene and NRU cold boxes is complete, and absorbent loading of the dehydrator and mercury removal vessels was also completed.

Commissioning activities continue to progress well with the final alignment of all Train 1 refrigeration compressors completed and the cold crank undertaken on the first ethylene compressor. First deliveries of ethylene refrigerant were received, nitrogen leak testing of the Train 1 flare systems was completed and the water wash of the amine unit commenced in preparation for the introduction of feed gas into Train 1. All Train 1 gas turbine power generators are now fired and operational. Nitrogen purging of LNG Tank A was completed, and inert and dry atmospheres now exist inside both tanks ready to receive LNG. Construction of the LNG loading jetty is complete.

## 6. Drilling summary

### 6.1 Appraisal/evaluation wells

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

Well name	Basin/area	Target	Santos %	Well status
Emery-1	Cooper – SA	Gas	100	C&S, successful gas
Moonanga South-1	Cooper – SA	Gas	100	C&S, successful gas
Spinel-1	Cooper – SA	Gas	100	C&S, successful gas
Swan Lake-15	Cooper – SA	Gas	66.6	C&S, successful gas
Barrolka-16	Cooper – QLD	Gas	60.06	C&S, successful gas
Barrolka-17	Cooper – QLD	Gas	60.06	C&S, successful gas
Moonah East-4	Fairview – QLD	CSG	23.85	C&S, successful CSG
Tinowon-2	Roma – QLD	CSG	30	C&S, successful CSG

### 6.2 Development wells

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

Well name	Basin/area	Target	Santos %	Well status
Coonatie-23	Cooper – SA	Gas	72.32	C&S, successful gas
Narie-4	Cooper – SA	Gas	66.6	C&C, successful gas
Swan Lake-13	Cooper – SA	Gas	66.6	C&S, successful gas
Swan Lake-14	Cooper – SA	Gas	66.6	C&S, successful gas
Swan Lake-16	Cooper – SA	Gas	66.6	C&S, successful gas
Tirrawarra-84	Cooper – SA	Gas	66.6	C&S, successful gas
Whanto-2	Cooper – QLD	Gas	66.06	C&S, successful gas
Whanto-3	Cooper – QLD	Gas	66.06	C&S, successful gas
Toby-2	Cooper – QLD	Gas	66.06	C&S, successful gas
Mt Howitt-3DW1	Cooper – QLD	Gas	66.06	Drilling
FV07-11-1	Fairview – QLD	CSG	23.85	C&S, successful CSG
Angore-A1 <sup>#</sup>	Papuan – PNG	Gas	13.50	C&C, successful gas

\* Spudded during fourth quarter 2014

# Not operated by Santos

## 7. Abbreviations and conversion factors

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