June 2010 Quarterly Production Report

Origin Energy Limited: Exploration and Production business report for the Quarter ended 30 June 2010

Comparative performance at a glance – Origin's total proportional interests			
Year Comparison	**2009/2010**	**2008/2009**	**Change %**
Production (PJe)	104	104	-
Revenue (A$m)	632	572	10
Quarterly Comparison	**Jun Quarter 2010**	**Mar Quarter 2010**	**Change %**
Production (PJe)	31	24	28
Revenue (A$m)	203	142	43
Corresponding Period Comparison	**Jun Quarter 2010**	**Jun Quarter 2009**	**Change %**
Production (PJe)	31	25	22
Revenue (A$m)	203	135	50

Note: Information presented in the table above and throughout this report relates only to hydrocarbon exploration and production activities undertaken by Origin Energy Limited (Origin), its subsidiaries and the incorporated joint ventures in which it has interests. The report does not cover other business activities of Origin such as electricity generation or energy retailing.

Highlights

- Annual production of 104 PJe in line with prior year
- Record annual sales volumes of 117 PJe, up 5%
- Record annual sales revenues of $632 million, up 10%
- Kupe Gas Project fully commissioned; initial 2P reserves increased 11%
- Equity interest in the Otway Gas Project increased to 67%
- Australia Pacific LNG continues to meet major milestones; EIS well progressed, FEED on schedule, 2P reserves up 40% year on year and new domestic contracts commenced
- Strong exploration portfolio created over the year: 4 of 6 offshore or international wells encountered hydrocarbons and Anadarko farmed in to the Canterbury Basin

Annual Production and Sales: Origin's production of 104 PJe for the year ended 30 June 2010 was in line with the prior year, also at 104 PJe. The commencement of the Kupe Gas Project, an increased equity interest in the Otway Gas Project and higher production from the Surat Basin all made positive contributions to production. These were partially offset by the dilution of Origin's interest in Australia Pacific LNG and lower production levels from the Cooper Basin, the BassGas Project, the Perth Basin and the onshore Taranaki Basin. Sales volumes were up 5% boosted by higher third party sales. Sales revenues increased by 10% to $632 million reflecting the higher sales volumes and higher product prices.

Quarterly Production and Sales: A strong performance in the June Quarter 2010 resulted in production increasing 28% compared with the March Quarter 2010. During the Quarter the BassGas Project recommenced production, Origin reported a full quarter with its increased equity interest in the Otway Gas Project and CSG production increased to meet customer demand. Sales revenues also increased 43% to $203 million reflecting the higher sales volumes and prices.

Production in the June Quarter 2010 had increased by 22% compared with the June Quarter 2009 as a result of the Kupe Gas Project which commenced during the 2010 financial year, Origin's increased equity interest in the Otway Gas Project and increased CSG production. Sales revenues grew by 50% to $203 million due to higher sales volumes and product prices.

Significant events and influences during the Quarter included:

- **Australia Pacific LNG:**
  - Production was 23% higher than the March Quarter 2010 as major domestic customers such as the Darling Downs Power Station increased demand.
  - APLNG lodged its Environmental Impact Statement (EIS) with the Queensland Coordinator General's office in the March Quarter 2010. Public submissions on the EIS closed on 4 May 2010. Responses to these submissions are being prepared and reviewed with Government agencies.
  - Drilling activity accelerated with a strong emphasis on exploration/appraisal objectives to prove up reserves. Proved plus Probable (2P) reserves have increased by 40% to 10,143 PJ over the year to 30 June 2010.
  - FEED studies are progressing in conjunction with the Early Works contractors to define the wells, gathering systems, facilities, pipelines and LNG liquefaction facilities required for the proposed CSG to LNG project.
- **Kupe Gas Project:** The project recorded a full quarter of commercial production and produced its one millionth barrel of light crude oil or condensate.
- **Otway Gas Project:** Increased equity in the project resulted in Origin's take of production increasing 50% to 8.1 PJe. Origin assumed the operatorship of the project from Woodside Energy on 1 July 2010.
- **Bass Basin:** Production at the BassGas Project recommenced on 2 April 2010 following an extended shut-down for workovers and plant maintenance. Production since the shut-down has been restricted to the Yolla 4 well only. The Yolla 3 well will remain off-line until an isolation plug installed in the well to ensure safe operation during the shut-down can be retrieved. The project commenced supplying CO_2 under commercial arrangements to the Air Liquide CO_2 recovery unit adjacent to the Lang Lang processing plant.

  Evaluation of the results of the Trefoil 2, Rockhopper 1 and Rockhopper 1 ST1 wells drilled earlier in the year continued.
- **Ironbark Project (ATP788P):** An appraisal drilling program was commenced late in the Quarter which will include pilot production wells to mature reserves in ATP 788P.
- **Cooper Basin:** The wet weather and flooding events in the March Quarter 2010 continued to have serious impacts on production levels, with crude and condensate production declining a further 9% compared to the March Quarter 2010.
- **International:** The first two wells of Origin's South East Asian farmin arrangements with Salamander Energy were drilled. One well in Lao PDR encountered hydrocarbons and is awaiting further testing. Acquisition of a 1965 kilometre 2D seismic survey in Block 121, offshore Vietnam, was completed.

- **Drilling Activities:**

  - **Australia Pacific LNG:** Australia Pacific LNG participated in 99 wells including 34 development wells and 65 exploration/appraisal wells.

  - **Cooper Basin:** Floods restricted activity to the completion of two gas development wells and the spudding of one other development well.

  - **Perth Basin:** A fresh round of drilling commenced with a new field gas discovery at Redback 2. The well will be tied into the Beharra Springs facility.

  - **Khorat Basin (Thailand and Lao PDR):** Bang Nouan-1, a farmin well under the agreement with Salamander Energy, was suspended pending testing of the gas encountered in the Triassic Kachanarai sands.

  - **Vinh Chau Graben (Vietnam):** DBSCL01-TSL-1X (Tom Su Lua), the first farmin well to be drilled in the Vinh Chau Graben region, encountered reservoir sands and seals but the objectives were water bearing. The well was subsequently plugged and abandoned as a dry hole.

Post Report Date Events:

- **Perth Basin:** Following the completion of Operations to case and suspend the Redback 2 discovery well, the Weatherford Rig 826 relocated to drill the Wolf 1 gas appraisal well. The well is designed to appraise the 2009 Redback South 1 gas discovery.

- **Vinh Chau Graben (Vietnam):** A second farmin well was drilled in the Vinh Chau Graben under the agreement with Salamander Energy. The well, Tom Hum Xanh 1X, which was drilled in the offshore Block 31, failed to encounter any significant hydrocarbons in the target reservoir sections and was plugged and abandoned.

- **APLNG supply to domestic contracts:** With the Darling Downs Power Station now in commercial production, APLNG is supplying gas at the full contractual rates. APLNG also commenced supplying gas to Rio Tinto Aluminium's Yarwun refinery from 6 July 2010.

- **Annual Reserves Report:** On 30 July Origin released its Annual Reserves Report which is available from the ASX and from Origin's website. The 2P reserves attributable to Origin across its areas of interest at 30 June 2010 totalled 6,207 petajoules equivalent (PJe), an increase of 1,723 PJe or 38% from 30 June 2009.

1. PRODUCTION, SALES AND REVENUE

In the tables below Origin's historical production from its CSG and Denison Trough assets to the end of October 2008 is included in the lines *Coal Seam Gas* and *Denison Trough* respectively. In late October 2008 Origin completed a transaction with ConocoPhillips whereby Origin diluted its interest in all the CSG exploration and production tenements it held at that time, together with its interests in conventional oil and gas tenements in the Denison Trough by 50%. From November 2008 Origin's 50% proportional interest in production from those assets is reported in the line *APLNG (CSG and Denison Trough)*. A separate table (Table 1.3.3) is also provided which shows the aggregated production, sales and revenue across all products for Origin's proportional interest in Australia Pacific LNG.

1.1 Production by Product and Area (including 50% interest in APLNG)

Natural Gas and Ethane	Unit	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	2009/10	2008/09
Natural Gas	**PJ**						
Coal Seam Gas		-	-	-	-	-	17.0
Denison Trough		-	-	-	-	-	1.6
APLNG (CSG and Denison Trough)		10.3	8.3	23	8.8	35.5	20.5
SA Cooper & SWQ		3.4	3.4	0	4.3	14.9	18.3
Otway Basin (offshore)		7.2	4.8	50	4.9	20.9	17.6
Bass Basin		1.8	-	100	2.1	5.3	7.5
Surat Basin		0.4	0.4	2	0.2	3.5	1.4
Perth Basin		0.4	0.5	(22)	0.8	2.2	3.5
Taranaki Basin (onshore)		0.2	0.2	0	0.4	0.9	1.6
Taranaki Basin (offshore)		2.2	2.2	0	-	4.8	-
Otway Basin (onshore)		-	-	-	-	-	0.1
Ethane	**PJ**						
SA Cooper & SWQ		0.3	0.2	39	0.3	1.0	1.2
Total Production		26.2	20.0	31	21.8	89.0	90.3
Total Sales Volume		30.9	21.9	41	24.1	98.7	94.9
Total Sales Revenue	**$M**	117.1	77.0	52	83.3	358.3	327.4
Average Gas Price	**$/GJ**	3.79	3.52	8	3.47	3.63	3.45

Crude Oil	Unit	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	2009/10	2008/09
Crude Oil	**kbbls**						
SA Cooper & SWQ		56.7	62.5	(9)	106.4	313.2	441.4
Surat Basin		8.8	8.1	9	6.8	35.7	37.5
Perth Basin		34.6	45.3	(24)	61.0	185.7	307.0
Taranaki Basin (onshore)		18.6	30.1	(38)	27.1	113.3	98.2
Total Production		118.7	146.0	(19)	201.3	647.9	884.1
Total Sales Volume		284.7	230.2	24	353.3	1209.4	1357.9
Total Sales Revenue	**$M**	24.9	19.4	28	27.8	107.3	118.5
Average Crude Price	**$/bbl**	87.46	84.42	4	78.69	88.72	87.27

Condensate/Naphtha	Unit	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	2009/10	2008/09
Condensate/Naphtha	**kbbls**						
Denison Trough		-	-	-	-	-	1.0
APLNG (Denison Trough)		0.3	0.2	51	0.3	1.1	1.3
SA Cooper & SWQ		46.8	51.2	(9)	63.8	219.2	276.8
Otway Basin (offshore)		83.2	59.8	39	52.0	229.3	190.0
Bass Basin		65.0	-	100	83.9	206.7	308.7
Surat Basin		6.0	5.8	3	9.7	28.4	45.7
Perth Basin		0.5	1.2	(54)	0.8	2.9	4.0
Taranaki Basin (onshore)		-	-	-	-	-	4.6
Taranaki Basin (offshore)		227.8	248.2	(8)	-	522.7	-
Otway Basin (onshore)		-	-	-	-	-	0.9
Total Production		429.6	366.4	17	210.5	1210.3	833.0
Total Sales Volume		473.3	344.9	37	186.1	1245.4	820.7
Total Sales Revenue	**$M**	39.8	28.0	42	11.6	97.1	59.3
Average Condensate Price	**$/bbl**	84.09	81.18	4	62.33	77.97	72.26

LPG	Unit	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	2009/10	2008/09
LPG	**Kt**						
SA Cooper & SWQ		6.8	7.1	(4)	8.7	30.9	35.2
Otway Basin (offshore)		8.7	6.2	40	6.3	25.7	22.0
Bass Basin		3.0	-	100	6.3	13.5	21.1
Surat Basin		1.3	1.2	7	2.2	5.9	9.1
Taranaki Basin (onshore)		0.4	0.3	37	0.4	1.7	2.0
Taranaki Basin (offshore)		9.3	6.1	52	-	15.9	-
Total Production		29.5	20.9	41	23.9	93.6	89.4
Total Sales Volume		28.5	22.0	30	26.5	92.3	96.7
Total Sales Revenue	**$M**	21.5	18.0	19	12.7	69.1	66.7
Average LPG Price	**$/t**	754.4	819.5	(10)	479.2	748.6	689.8

1.2 Production by Basin (including 50% of APLNG production)

Production by Basin (All products, PJe)	Unit	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	2009/10	2008/09
Production by Basin	**PJe**						
Coal Seam Gas		-	-	-	-	-	17.0
Denison Trough		-	-	-	-	-	1.6
APLNG (CSG and Denison Trough)		10.3	8.3	23	8.8	35.5	20.5
SA Cooper & SWQ		4.6	4.6	-	6.0	20.5	25.3
Otway Basin (offshore)		8.1	5.4	50	5.4	23.4	19.7
Bass Basin		2.3	-	100	2.8	7.1	10.2
Surat Basin		0.6	0.6	3	0.4	4.2	2.3
Perth Basin		0.6	0.7	(14)	1.2	3.3	5.3
Taranaki Basin (onshore)		0.3	0.4	(23)	0.5	1.7	2.3
Taranaki Basin (offshore)		3.9	3.9	-	-	8.5	-
Otway Basin (onshore)		-	-	-	-	-	0.1
Total		30.7	23.9	28	25.1	104.2	104.3

1.3 Production, Sales Volumes and Revenue Summaries

1.3.1 Origin including 50% interest in APLNG

Total All Products	Unit	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	2009/10	2008/09
Production (all products)	**PJe**	30.7	23.9	28	25.1	104.2	104.3
Sales (all products)	**PJe**	36.5	26.3	39	28.5	117.1	112.0
Total Revenue	**$M**	203.4	142.4	43	135.3	631.8	571.9

1.3.2 Origin excluding 50% interest in APLNG

Total All Products	Unit	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	2009/10	2008/09
Production (all products)	**PJe**	20.4	15.6	31	16.3	68.7	83.8
Sales (all products)	**PJe**	24.5	18.5	32	18.7	78.6	89.3
Total Sales Revenue	**$M**	162.9	118.8	37	104.4	507.3	500.0

1.3.3 Origin's 50% interest in APLNG

Total All Products	Unit	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	2009/10	2008/09
Production (all products)	**PJe**	10.3	8.3	24	8.8	35.5	20.5
Sales (all products)	**PJe**	12.0	7.8	54	9.8	38.5	22.6
Total Sales Revenue	**$M**	40.5	23.7	71	30.9	124.6	71.9

1.4 Internal and External Purchase and Sales Summary

1.4.1 Internal and External Sales (Origin excluding 50% interest in APLNG)

Internal & External Sales Volumes	Unit	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	2009/10	2008/09
Total Sales Volume	**PJe**						
Internal		12.3	7.1	72	7.3	37.1	37.7
External		12.2	11.3	8	11.3	41.6	51.7
Total		24.5	18.5	32	18.7	78.7	89.3

1.4.2 External Purchases

Product Purchases included in above sales	Unit	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	2009/10	2008/09
Origin (excluding 50% interest in APLNG)	**PJe**	3.6	1.3	177	1.2	7.9	4.1
Origin's 50% interest in APLNG	**PJe**	1.8	0.2	749	0.9	3.9	2.4
Total	**PJe**	5.4	1.5	260	2.1	11.8	6.5

Note: Current Quarter production figures for some non-operated areas may include preliminary production data for the last month of the Quarter. Where actual production volumes only became available after the report date for that Quarter, previous Quarter figures have been amended to reflect this.

1.5 Production and Sales Summary

2009/2010 performance compared with 2008/2009

- Annual production of 104 PJe in line with prior year
- Record annual sales volumes of 117 PJe, up 5%
- Record annual sales revenues of $632 million, up 10%

On a proportional basis, total production of the upstream ventures in which Origin has an economic interest was 104.2 PJe for the year ended 30 June 2010, in line with that in the prior year, at 104.3 PJe. The commencement of production from the Kupe Gas Project in December 2009 (+8.5 PJe), an increased equity share in the Otway Gas Project following completion of the transaction with Woodside Energy in March 2010 (+3.7 PJe) and sales of stored gas in the Surat Basin (+1.9 PJe) added to Origin's annual production.

Gross CSG production continued its strong growth increasing to 66.4 PJ from 55.0 PJ in the prior year. This partially offset the impact of the dilution of Origin's interest in Australia Pacific LNG. As a consequence Origin's effective share of production from CSG and related assets declined by 3.6 PJe from 39.1 PJe to 35.5 PJe.

Production was also lower from the BassGas Project (-3.1 PJe) as a result of an extended shut-down for maintenance and workovers, the Cooper Basin (-4.8 PJe) due to extensive flooding, the Perth Basin (-2.0 PJe) due to natural decline and lower gas market demand and the onshore Taranaki Basin (-0.6 PJe).

Sales volumes and revenues increased by 5% and 10% respectively reflecting increased third party sales and improved product prices for all commodities.

June Quarter 2010 compared with June Quarter 2009

- June Quarter production of 31 PJe up 22% compared with prior correpsonding Quarter
- Sales volumes of 36.5 PJe, up 28%
- Sales revenues of $203 million, up 50%

The increase in production of 5.6 PJe or 22% reflected the reasons outlined in the annual comparative discussed previously. This resulted in increased contributions from the Kupe Gas Project (+3.9 PJe), Otway Gas Project (+2.7 PJe), Australia Pacific LNG (+1.5 PJe) and the Surat Basin (+0.2 PJe) which more than offset lower production from the BassGas Project (-0.5 PJe), the Cooper Basin (-1.4 PJe), the Perth Basin (-0.6 PJe) and onshore Taranaki Basin (-0.2 PJe).

Sales volumes and revenues increased by 28% and 50% respectively reflecting higher production, increased third party sales and improved product prices for all commodities.

June Quarter 2010 compared with March Quarter 2010

- June Quarter production of 31 PJe up 28% compared with the previous Quarter
- Sales volumes of 36.5 PJe, up 39%
- Sales revenues of $203 million, up 43%

Total production reflected the recommencement of BassGas production (+2.3 PJe) after the extended shut-down for maintenance and workovers, Origin's increased share of production from the Otway Gas Project (+2.7 PJe) and increasing CSG production (+2.0 PJe) as the Darling Downs Power Station was commissioned. Production levels from the remaining assets changed only marginally.

Increased third party sales together with increased production resulted in the significant increase in sales volumes. Higher prices for natural gas, oil and condensate further boosted revenue.

2. <u>DEVELOPMENT</u>

2.1 Coal Seam Gas (Interests held through Australia Pacific LNG)

During the Quarter, total production averaged 212 TJ/d in a demand constrained market. At the end of the period, the production capacity exceeded 300 TJ/d. As the Darling Downs Power Station continued its commissioning phase, the supply of gas from the CSG fields progressively increased. At the end of the Quarter, the Darling Downs Power Station had been fully commissioned and was in commercial production.

Submissions on Australia Pacific LNG's Environmental Impact Statement (EIS) for its CSG to LNG project closed on 4 May 2010. Responses to those submissions are being prepared and issues raised are being addressed through workshop sessions with relevant Government agencies.

FEED studies are progressing in conjunction with the Early Works contractors to define the wells, gathering systems, facilities, pipelines and LNG liquefaction facilities required for the proposed CSG to LNG project. Procurement activity to secure vendors for long lead equipment has begun with enquiries for large diameter line pipe and compression equipment in the market. Pipeline route surveys are underway and geotechnical analysis of prospective facility sites is ongoing.

Australia Pacific LNG opened a project centre in Gladstone on 26 May 2010 with the dual purpose of an office for employees and an education centre for the Gladstone section of the CSG to LNG project. Similar centres have also been opened in Roma and Chinchilla to service the CSG field areas.

2.1.1 *Spring Gully*

The Spring Gully gas plants achieved gross peak gas sales of 138 TJ/d (averaging 112 TJ/d) during the Quarter with 151 wells contributing to production. Sales from the field have been limited by market constraints.

All remaining wells were brought online during the Quarter which finalises the Spring Gully Phase 5 development. Current capacity is 150 TJ/d.

The Phase 6 development of the Spring Gully field which is designed to increase the overall Spring Gully capacity to 180 TJ/d is progressing. Construction of a new export gas pipeline is also underway and commissioning is expected in the September Quarter 2010. Development drilling is scheduled to commence in December 2010.

2.1.2 *Fairview*

The field has achieved gross peak sales of 123 TJ/d (Australia Pacific LNG share 30 TJ/d). Eleven development wells were drilled in the Fairview field during the Quarter.

2.1.3 *Peat*

The Peat gas plant was shut down for five days in late April to conduct a routine inspection and maintenance programme.

2.1.4 *Talinga/Orana*

Peak gas sales from Talinga have reached 74 TJ/d and averaged 48 TJ/d for the Quarter.

A further 16 development wells were brought online during the Quarter bringing the total wells on line to 56. With the drilling of a further 20 development wells, a total of 76 wells of the 98 well program have been drilled to date.

The Talinga gas sales plant is fully commissioned with sales gas exported directly to the Wallumbilla pipeline. The Talinga gas plant now has a sales capacity of 90 TJ/d which will be fully utilised once the remaining development wells are tied in. A reverse osmosis water treatment plant capable of processing 20 megalitres of water per day is scheduled to be online in the September Quarter 2010.

2.1.5 *Argyle/Kenya/Lauren/Bellevue*

Three development wells were drilled in the non-operated ATP620P fields during the Quarter. The Kenya sales gas plant achieved gross peak sales of around 59 TJ/d (Australia Pacific LNG share 24 TJ/d).

2.2 Denison Trough (Conventional) (Interests held through Australia Pacific LNG)

Processing equipment failures at the Yellowbank Central treatment plant in March have resulted in a loss of production from the Springvale gas field. It is estimated the Springvale field will be back online in August 2010.

Well workovers that were delayed due to heavy rain and subsequent flooding earlier in the year are now scheduled for the September Quarter 2010.

Trials to improve well deliverability at Merivale and Yellowbank have commenced. Results to date are encouraging.

2.3 Cooper/Eromanga Basin (South Australia/Queensland)

Several major wet weather and flood events which occurred in the March Quarter 2010 have continued to significantly impact Cooper Basin activities and hydrocarbon production during the Quarter. The impact has been geographically widespread with a majority of field infrastructure and leases inundated by water.

As flood waters receded, access was regained to two gas wells isolated since the March Quarter. Drilling operations recommenced on these two wells in June and a third gas development well was spudded.

Projects to arrest the natural oil decline were not able to be started until late in the Quarter.

2.4 Offshore Otway Basin (Victoria/Tasmania)

Gross natural gas production from the Otway Gas Project was 10.8 PJ which was significantly below capacity due to a combination of low gas market demand early in the Quarter and later maintenance shut-downs. Origin's lifted share of production of 7.2 PJ equates to 67.3% of total production for the period, in line with its increased participating interest (67.23%) in the joint venture.

A $9 million (100% JV) subsea work program using a remotely operated vehicle was successfully completed. The work was undertaken as part of a maintenance program to ensure the integrity of the subsea pipelines.

The inlet compression project remains on track for start up in the March Quarter 2011. Site civil works are well advanced with piling and all major equipment foundations completed. The compressor and gas turbine will be installed during the September Quarter 2010.

Operatorship of the Otway asset transferred to Origin effective 1 July 2010.

2.5 Bass Basin (Tasmania)

The BassGas facilities recommenced gas production on 2 April 2010. Production was limited to Yolla 4 at an average of 51 TJ/d.

The Yolla 3 well remains offline. A well plug inserted during the maintenance operation remains in the well and will require further work with a wireline workover unit before the well can be reopened. An LPG production constraint during the months of April and May due to issues with the turbo expander was resolved in early June 2010 and LPG production yields have returned to normal levels.

In April 2010, the Lang Lang plant began supplying raw CO_2 to a $20 million Air Liquide CO_2 recovery unit for commercial use. The CO_2 recovery unit will re-use up to 69,000 tonnes of CO_2 per year which previously would have been released into the atmosphere.

Planning work for the Yolla Mid-Life Enhancement (MLE) project is continuing following a reassessment of the optimal sequencing and timing of the project's key components. The project is comprised of three parts; the installation of living quarters and upgraded safety systems on the "Yolla-A" offshore platform to improve production reliability and maintenance access; the installation of compression on the platform to maximise field recovery; and the drilling of two infill wells to augment production from the existing two wells and to maximise drainage of the field.

The accommodation modules are currently under construction and an order has been placed for the compressor package which has a 15 month delivery lead time. The timing and approach to the drilling is under review with options being considered involving drilling of the wells either before or after the other MLE components are in place. The MLE budget will be reassessed following finalisation of the revised project plans. It is presently expected that the offshore construction phase of the project will commence in late 2011 with the timing on drilling dependent on rig availability.

2.6 Taranaki Basin (New Zealand)

2.6.1 *Kupe Gas Project*

Production of sales gas, LPG and associated light crude oil or condensate continued through the Quarter. Low gas nominations early in the Quarter increased later as energy demand increased in the North Island with the onset of winter. Three tanker liftings of Kupe light crude from Port Taranaki were completed during the Quarter. The project has produced in excess of one million barrels of light crude oil.

Incorporation of all new data from the development drilling in 2008 into full field static and dynamic reservoir models, together with the early field life production data, has resulted in an upgrade of the initial field 2P reserves. Initial 2P reserves for the field have increased 11% to 431 PJe consisting of 273 PJ of sales gas (+8%), 1,114 Ktonnes of LPG (+5%) and 18.6 million barrels of light crude oil (+27%).

2.6.2 *Tariki/Ahuroa/Waihapa/Ngaere (TAWN) and Rimu/Kauri*

The Kauri F4, F5 and F6 wells were all drilled and completed during the Quarter in the Manutahi oil reservoirs. The wells were drilled from the Kauri F site with deviated well paths to different reservoir target locations. All wells have gravel pack completions for sand control.

Origin continues to provide project management and facilities operating services to Contact Energy for the development of the Ahuroa Gas Storage project.

Ahuroa wells 4 and 5 (drilled and completed during previous quarter) had their perforation deferred until the next quarter. The injection compressor on site was taken off-line to reconfigure the machine to achieve higher injection compression pressure. Injection of gas will resume following the reconfiguration. Construction of gas processing facilities has commenced on site for the next stage of the project which will enable withdrawal, and add gas processing capability to the existing injection facility.

2.7 Surat Basin (Queensland)

The majority of the gas produced from Origin's Surat Basin fields continues to be re-injected to storage reservoirs after stripping of gas liquids.

2.8 Onshore Perth Basin (Western Australia)

2.8.1 *Beharra Springs*

Gas production during the Quarter averaged 5 TJ/d gross (3.4 TJ/d net to Origin). The current low gas market demand has impacted gas sales. Commencement of Redback South 1 production was delayed due to a downhole completion complication.

2.8.2 *Hovea/Eremia/Xyris/Corybas*

Production averaged 340 bopd gross for the Quarter (170 bopd net to Origin). The Hovea 8 well was shut-in through the majority of the Quarter due to tubing corrosion. It is expected to be brought back into production in the September Quarter 2010 following a planned workover.

Gas production has been shut-in at the Xyris plant since 1 April 2010 due to low gas demand and maintenance requirements.

Gas production for the Corybas well commenced late April 2010 and to the end of the Quarter the well had produced a total of 151 TJ (75.5 TJ net to Origin).

2.8.3 *Jingemia*

Jingemia produced at an average of 430 bopd (211 bopd net to Origin) and continued to experience natural production decline during the Quarter.

3. EXPLORATION

3.1 Coal Seam Gas (Interests held through Australia Pacific LNG)

3.1.1 *Surat Basin CSG (Walloons)*

Twenty three exploration/appraisal wells were drilled in Australia Pacific LNG's operated Walloons permits during the Quarter to continue to mature reserves across the Walloons project area. The program consisted of 12 pilot wells, 8 production/DST wells and 3 core wells.

In addition to drilling, Australia Pacific LNG's pilot production testing programme continued throughout the Quarter within several of the operated Walloons permits.

The Ramyard six-well pilot (ATP 972P) and the Pine Hills six-well pilot (ATP 606P) remained on production during the Quarter with dewatering ongoing.

Facilities for the Horse Creek 2, Horse Creek 4 (ATP 972P) and Kainama 6 (PL 225) single-well pilots were also completed with the three projects commissioned and performance being monitored.

Work is continuing on the water handling and gathering systems for the Gilbert Gully, Zig Zag (ATP 663P) and Lucky Gully (ATP 606P) multi well pilots, whilst approval is being sought for the production facilities for the Reedy Creek, Combabula Expanded (ATP 606P) and Waar Waar (ATP 663P) multi well pilots.

Drilling of the Southern Condabri (PL 265) and Combabula Expanded multi well pilots is continuing and is forecast to be completed during the September Quarter 2010.

Fracture stimulation activities were performed on three wells in ATP 973P, two wells in ATP 972P and 3 wells in ATP 663P to evaluate production enhancement in low permeability areas. These wells are yet to be put on production. Early production results from the Dalwogan pilot (PL 216(A)) are encouraging but inconclusive at this stage. Continuation of the fracture stimulation program is planned to continue across all of Australia Pacific LNG's Walloons permits throughout the remainder of 2010 and into 2011.

In Australia Pacific LNG's non-operated Walloons ATP 648P permit area, twenty three pilot wells and 3 core wells were drilled. In addition, in ATP 620P (PLA 180) one appraisal well was drilled and in PL 228 a corehole.

Planning continued on some 2D and 3D seismic acquisition across a number of permits in the Walloons project area.

3.1.2 *Bowen Basin CSG*

One exploration core hole, Durham Deep 1, was drilled in the APLNG's operated permit, ATP 592P. A water injection appraisal well and an observation appraisal well were also drilled in PL 195 during the Quarter.

In APLNG's non-operated Comet Ridge permits, five exploration/appraisal core holes and 6 production pilot wells were drilled.

3.1.3 *Denison Trough CSG*

No significant exploration activity to report in the Quarter.

3.1.4 *Galilee Basin CSG*

Desorption and coal analysis work continued on cores obtained during previous drilling activity.

3.2 CSG – Interests held directly by Origin (ATP 788P) – Ironbark

The drilling and production testing of 3 multi-well pilots and one single-well pilot across the permit commenced in late May 2010 with the drilling of two core holes, Duke-26C and Duke-27C.

3.3 Cooper/Eromanga Basin (South Australia/Queensland)

No significant exploration activities were undertaken in the Quarter due to the flood situation.

3.4 Offshore Otway Basin (Victoria/Tasmania)

Origin assumed the operatorship of the offshore Otway exploration permits (T/30P, T/34P and Vic/P43P) on 1 July 2010.

3.5 Bass Basin (Tasmania)

Post well analysis on Trefoil 2, Rockhopper 1 and Rockhopper 1/ST1 continued in the Quarter. All data gathered and analysed in these wells are being integrated with seismic mapping to derive volumes of oil and gas contained in the structures. It remains too early to comment on the commercial significance of the Rockhopper field discovery.

The T/44P Joint Venture has agreed to drill the Silvereye 1 gas exploration well using the Kan Tan IV semi-submersible drilling rig. Subject to rig schedules it is anticipated the well will be drilled during the December Quarter 2010.

3.6 Taranaki Basin (New Zealand)

A comprehensive seismic reprocessing project consisting of 93 square kilometres of 3D seismic data and 584 line kilometres of 2D seismic data covering the TAWN fields in PMLs 38138, 38139, 38140 and 38141 is nearing completion. This new data will be used to better define the fields and to assess the near-field opportunities.

In Kupe (PML 38146), a seismic interpretation on regional fault structure and horizons from the Cretaceous to the Palaeocene has been completed and depth converted.

3.7 Surat Basin (Queensland)

During the Quarter, depth structure maps incorporating the Mardi 2D seismic survey data in the Mardi-Eluanbrook area of ATP 754P were finalised to delineate possible drilling opportunities.

Evaluation of the greater Myall Creek field area continues.

3.8 Onshore Perth Basin (Western Australia)

Redback 2 was drilled during the Quarter, encountering gas over a 14m pay interval in the Wagina Sandstone. The well has been cased and suspended prior to completion and tie-in to the Beharra Springs Gas Facility. A 46m core was also cut in the Lower Kockatea Shale to investigate the potential for shale gas in this unit.

Weatherford Rig 826 is expected to spud Wolf 1, a down-dip appraisal of the 2009 Redback South 1 gas discovery, in July 2010. A possible third well on the Redback Terrace may be drilled later in the year.

3.9 Bonaparte Basin, Western Australia/Northern Territory

No significant activity to report.

3.10 Offshore Northland Basin (New Zealand)

Preparations for a drilling campaign in PEP 38619 continued. Various delays in the drilling campaign by the Kan Tan IV semi-submersible drilling rig means that the two wells are now scheduled to be drilled in August 2010.

3.11 Offshore Canterbury Basin (New Zealand)

No significant activity was undertaken during the Quarter.

3.12 Offshore Lamu Basin (Kenya)

Processing of the 800 square kilometres Mbawa 3D marine survey, which was acquired in December 2009, has continued.

3.13 Block 121 - Song Hong Basin (Vietnam)

The acquisition of the planned 2D seismic program was completed during the Quarter with a toal of 1,965 kilometres of new data acquired which is now undergoing processing. Planning is continuing for the acquisition of a 3D survey in December Quarter 2010.

3.14 Vinh Chau Graben (Vietnam)

DBSCL01-TSL-1X (Tom Su Lua), the first farmin well to be drilled in the Vinh Chau Graben region, was drilled in June and reached a total depth of 1,380m TVDSS. The well encountered reservoir sands and seals but the objectives were water bearing. The well was subsequently plugged and abandoned as a dry hole.

The rig moved to Block 31 to commence drilling the second of the Vietnam farmin wells planned for mid-2010 under the previously announced agreement with Salamander Energy.

3.15 Khorat Basin (Thailand and Lao PDR)

Bang Nouan-1, a farmin well under the agreement with Salamander Energy, reached a total depth of 2,893m during the Quarter and was suspended pending testing of the gas encountered in the Triassic Kachanarai sands. The testing is expected to be undertaken in the September Quarter 2010.

Interpretation of 3D seismic data is in progress in Block L15/50 (Thailand) and it is anticipated that two farmin wells will be drilled in late 2010/early 2011.

4. DRILLING ACTIVITY

4.1 Exploration/Appraisal

The tables below summarises the exploration and appraisal drilling undertaken during the Quarter:

Exploration/Appraisal Wells	Basin/Area	Target	Origin effective Interest %	Well Status
Redback 2	Perth Basin – WA	Gas	67.00	C&S, Gas
Bang Nouan 1	Khorat Plateau – Lao PDR	Gas	30.00	Suspended, Gas
DBSCL01-TSL-1X	Vinh Chau Graben - Vietnam	Oil	25.00	P&A
Duke-26C	Surat Basin - Qld	CSG	100.00	Core
Duke-27C	Surat Basin - Qld	CSG	100.00	Core
Byme Creek 1	Surat Basin - Qld	CSG	50.00	DST
Byme Creek 2	Surat Basin - Qld	CSG	50.00	Core
Byme Creek 3	Surat Basin - Qld	CSG	50.00	DST
Carinya South 3	Surat Basin - Qld	CSG	50.00	DST
Combabula 12	Surat Basin - Qld	CSG	46.36	Pilot
Combabula 13	Surat Basin - Qld	CSG	46.36	Pilot
Combabula 14	Surat Basin - Qld	CSG	46.36	Pilot
Combabula 15	Surat Basin - Qld	CSG	46.36	Pilot
Combabula 19	Surat Basin - Qld	CSG	46.36	Pilot
Combabula 20J	Surat Basin - Qld	CSG	46.36	Pilot
Combabula 20T	Surat Basin - Qld	CSG	46.36	Pilot
Combabula 21J	Surat Basin - Qld	CSG	46.36	Pilot
Combabula 21T	Surat Basin - Qld	CSG	46.36	Pilot
Combabula 8	Surat Basin - Qld	CSG	46.36	Pilot
Condabri 16	Surat Basin - Qld	CSG	50.00	Pilot
Condabri 17T	Surat Basin - Qld	CSG	50.00	Pilot
Gilbert Gully 16	Surat Basin - Qld	CSG	50.00	Core
Gilbert Gully 18	Surat Basin - Qld	CSG	50.00	DST
Noonga Creek 5	Surat Basin - Qld	CSG	50.00	DST
Noonga Creek 6	Surat Basin - Qld	CSG	50.00	DST
Ramyard 8	Surat Basin - Qld	CSG	46.36	DST
Waar Waar 2	Surat Basin - Qld	CSG	50.00	Core
Zig Zag 8	Surat Basin - Qld	CSG	50.00	DST
Durham Deep 1	Bowen Basin - Qld	CSG	47.25	Core
Durham Ranch Precipice WI 1	Bowen Basin - Qld	CSG	47.25	Injection
Durham Ranch Precipice Obs 1	Bowen Basin - Qld	CSG	47.25	Monitor
Cattle Creek 3	Bowen Basin - Qld	CSG	11.925	Pilot
Cattle Creek 4	Bowen Basin - Qld	CSG	11.925	Pilot
Cattle Creek 5	Bowen Basin - Qld	CSG	11.925	Pilot
Clematis Creek 5	Bowen Basin - Qld	CSG	11.965	Pilot
Clematis Creek 6	Bowen Basin - Qld	CSG	11.965	Pilot
Fairview 149 OB2	Bowen Basin - Qld	CSG	11.965	Core/Monitor
Fairview 186 OB1	Bowen Basin - Qld	CSG	11.965	Core/Monitor
Fairview 189 OB1	Bowen Basin - Qld	CSG	11.965	Core/Monitor

Exploration/Appraisal Wells	Basin/Area	Target	Origin effective Interest %	Well Status
New Country 2	Bowen Basin - Qld	CSG	11.965	Core
Spring Rock 2	Bowen Basin - Qld	CSG	11.965	Core
Yebna 2	Bowen Basin - Qld	CSG	11.965	Pilot
Barney 2 RE	Surat Basin - Qld	CSG	15.625	Pilot
Barney 3 RE	Surat Basin - Qld	CSG	15.625	Pilot
Celeste 2	Surat Basin - Qld	CSG	15.625	Pilot
Celeste 3	Surat Basin - Qld	CSG	15.625	Pilot
Celeste 4	Surat Basin - Qld	CSG	15.625	Pilot
Celeste 5	Surat Basin - Qld	CSG	15.625	Pilot
Celeste 6	Surat Basin - Qld	CSG	15.625	Core
Celeste 7	Surat Basin - Qld	CSG	15.625	Pilot
Celeste 8	Surat Basin - Qld	CSG	15.625	Pilot
Celeste 9	Surat Basin - Qld	CSG	15.625	Pilot
Celeste 10	Surat Basin - Qld	CSG	15.625	Pilot
Celeste 11	Surat Basin - Qld	CSG	15.625	Pilot
Cougals 1	Surat Basin - Qld	CSG	15.625	Core
Glendower 8	Surat Basin - Qld	CSG	15.625	Pilot
Isabella 7	Surat Basin - Qld	CSG	15.625	Core
Jen 12	Surat Basin - Qld	CSG	15.625	Pilot
Jordan 1 RE	Surat Basin - Qld	CSG	15.625	Pilot
Jordan 2 RE	Surat Basin - Qld	CSG	15.625	Pilot
Kenya 36	Surat Basin - Qld	CSG	20.3125	Core
Kenya East 26	Surat Basin - Qld	CSG	15.625	Pilot
Kenya East 27	Surat Basin - Qld	CSG	15.625	Pilot
Kenya East 29	Surat Basin - Qld	CSG	15.625	Pilot
Kenya East 8	Surat Basin - Qld	CSG	15.625	Pilot
Lauren 62	Surat Basin - Qld	CSG	20.3125	Prod
Margaret 1 RE	Surat Basin - Qld	CSG	15.625	Pilot
Poppy 7	Surat Basin - Qld	CSG	15.625	Pilot
RubyJo 10	Surat Basin - Qld	CSG	15.625	Pilot
RubyJo 9	Surat Basin - Qld	CSG	15.625	Pilot

4.2 Development

The tables below summarises the development drilling undertaken during the Quarter:

Development Wells	Basin/Area	Target	Origin effective Interest %	Well Status
Coonatie 16	Cooper/Eromanga -SA	Gas	10.536	C&S, Gas
Coonatie 17	Cooper/Eromanga – SA	Gas	10.536	C&S, Gas
Coonatie 19	Cooper/Eromanga - SA	Gas	10.536	In progress
Kauri F4	Onshore Taranaki - NZ	Oil	100	C&C, Oil
Kauri F5	Onshore Taranaki - NZ	Oil	100	C&C, Oil
Kauri F6	Onshore Taranaki - NZ	Oil	100	C&C, Oil
Talinga 15b	Surat Basin - Qld	CSG	50.00	C&S
Talinga 50	Surat Basin - Qld	CSG	50.00	C&S
Talinga 51	Surat Basin - Qld	CSG	50.00	C&S
Talinga 54	Surat Basin - Qld	CSG	50.00	C&S
Talinga 83	Surat Basin - Qld	CSG	50.00	C&S
Talinga 84	Surat Basin - Qld	CSG	50.00	C&S
Talinga 85	Surat Basin - Qld	CSG	50.00	C&S
Talinga 86	Surat Basin - Qld	CSG	50.00	C&S
Talinga 87	Surat Basin - Qld	CSG	50.00	C&S
Talinga 88	Surat Basin - Qld	CSG	50.00	C&S
Talinga 89	Surat Basin - Qld	CSG	50.00	C&S
Talinga 91	Surat Basin - Qld	CSG	50.00	C&S

Development Wells	Basin/Area	Target	Origin effective Interest %	Well Status
Talinga 104	Surat Basin - Qld	CSG	50.00	C&S
Talinga 105	Surat Basin - Qld	CSG	50.00	C&S
Talinga 106	Surat Basin - Qld	CSG	50.00	C&S
Talinga 107	Surat Basin - Qld	CSG	50.00	C&S
Talinga 108	Surat Basin - Qld	CSG	50.00	C&S
Talinga 109	Surat Basin - Qld	CSG	50.00	C&S
Talinga 112	Surat Basin - Qld	CSG	50.00	C&S
Talinga 116	Surat Basin - Qld	CSG	50.00	C&S
Lauren 29	Surat Basin - Qld	CSG	20.3125	C&S
Lauren 61	Surat Basin - Qld	CSG	20.3125	C&S
Lauren 63	Surat Basin - Qld	CSG	20.3125	C&S
Fairview 342	Bowen Basin - Qld	CSG	11.965	C&S
Fairview 499	Bowen Basin - Qld	CSG	11.965	C&S
Fairview 506	Bowen Basin - Qld	CSG	11.965	C&S
Fairview 508	Bowen Basin - Qld	CSG	11.965	C&S
Fairview 509	Bowen Basin - Qld	CSG	11.965	C&S
Fairview 510	Bowen Basin - Qld	CSG	11.965	C&S
Fairview 511	Bowen Basin - Qld	CSG	11.965	P&A
Fairview 511 ST1	Bowen Basin - Qld	CSG	11.965	C&S
Fairview 512	Bowen Basin - Qld	CSG	11.965	C&S
Fairview 513	Bowen Basin - Qld	CSG	11.965	C&S
Fairview 342	Bowen Basin - Qld	CSG	11.965	C&S

5. ACQUISTIONS/DIVESTMENTS

During the Quarter:

- The sale of Origin's 49.189% interest in EP413, onshore Perth Basin, to Norwest Energy NL for A$87,500, was completed.

- The sale of Origin's 50.00% interest in PRL13, onshore Otway Basin, to Adelaide Energy Limited for A$130,000 was completed.

- Santos, as the Operator of ATP 653P, lodged applications for two petroleum leases, PL 395(A) and PL 396(A). Australia Pacific LNG has a 11.925% beneficial interest in ATP 653P.

6. EXPLORATION AND DEVELOPMENT EXPENDITURE

E & D Expenditure Australian Operations	A$'000	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	YTD 2009/10	YTD 2008/09
Exploration/ Appraisal		31,275	37,290	(16)	2,996	123,371	40,783
Development/ Plant		32,311	21,884	48	43,830	132,498	316,009
Total		63,586	59,174	7	59,252	255,869	356,792

The above expenditure includes Origin's contribution to the exploration and development of its CSG interests up until completion of the Australia Pacific LNG transaction in October 2008. Following completion of this transaction, ConocoPhillips is funding capital expenditure within the Australia Pacific LNG joint venture up to a cumulative total of A$2.3 billion leading up to a final investment decision for the proposed LNG development.

E & D Expenditure New Zealand Operations	NZ$'000	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	YTD 2009/10	YTD 2008/09
Exploration/ Appraisal		4,192	245	1,613	6,111	5,046	65,368
Development/ Plant		25,899	18,385	41	34,514	115,233	156,008
Total		30,091	18,630	62	40,625	120,279	221,376

E & D Expenditure International #	A$'000	This Quarter	Previous Quarter	% Change	Jun Quarter 2009	YTD 2009/10	YTD 2008/09
Exploration/ Appraisal		29,531	14,606	102	1,675	51,370	1,690
Development/ Plant		0	0	0	0	0	0
Total		29,531	14,606	102	0	51,370	1,690

includes all expenditure incurred on permits outside Australia and New Zealand, including Origin's interests in Kenya and South East Asia

Note: E&D Expenditure excludes acquisitions.

7. ORIGIN'S INTERESTS

7.1 Origin held interests in the following permits during the Quarter:

Basin/Project Area	Permits (Origin current beneficial interest) (* Denotes Operatorship)
Australia	
Surat Basin (Qld)	PL 14 (100%*); PLs 56 and 74 (69%*);
	PL 30 (75%*); PLs 21, 22, 27 and 64 (87.5%*);
	PLs 53, 174 and 227 (100%*); ATP 470P Redcap (90%*); ATP 470P Formosa Downs (42.7192%*); PL 71 (Production) (90%*); PL 71 (Exploration) (72%*); PL 70 (100%*) and PL 264 (90%*);
	ATP 471P Weribone Pooling Area (50.64%*); ATP 336P and PLs 10W, 11W, 12W, 28, 69 and 89 (46.25%); PL 11W Snake Creek East 1 Exclusion Zone (25%); ATP 647P (Block 2656 only) (50%*); ATP 754P (50%*); ATP788P Deeps (25%*); and ATP471P Bainbilla (24.748%)
CSG (Qld)	ATP788P Shallows (100%*)
Onshore Otway Basin	
- Victoria	PPLs 6 and 9 and PRL 1 (90%*); PPLs 4, 5, 7, 10 and 12 (100%*); PPL 2 (Ex. Iona) (100%*); PPL 8 (100%*)
Offshore Otway Basin	
- Victoria	VIC/L23 and VIC/P43 (67.23%*); VIC/RL2(V) (100%*)
- Tasmania	T/L2, T/L3 and T/30P (67.23%*); T/34P (82.3%*)
Bass Basin (Tasmania)	T/L1 and T/RL1 (42.5%*); T/18P (39.0%*); and T/44P (60%*)
Onshore Perth Basin (WA)	EP 320 and L11 (67%*); L14 (49.189%*); and L1/L2 (excluding Dongara, Mondarra and Yardarino) (50%)
Offshore Bonaparte (WA/NT)	NT/RL1 and WA6R (5%)
Cooper Basin	
- Qld	SWQ Unit Subleases (16.7375%); Aquitaine A & B Blocks and associated PLs (25%); Aquitaine C Block and associated PLs (27%); and Wareena Block and associated PLs (10%)
- SA	SA Unit PPLs (13.19%); Patchawarra East Block PPLs (10.536%); Reg Sprigg West Unit (PPLs 194 and 211) (7.902%)
New Zealand	
Taranaki Basin	PMP 38151, PMP 38155, PML 38138, PML 38139, PML 38140 and PML 38141 (100%*) and PML 38140 (below base of Tikorangi Formation) and PML 38141 (below base of Tikorangi Formation) (50%*).
	PML 38146 (50%*) and PEP 38485 (33.333%)
Northlands Basin	PEP 38619 (100%*)
Canterbury Basin	PEP 38262 and 38264 (50%*) (subject to farmin agreement with Anadarko)
Kenya	
Lamu Basin	L8 and L9 (75%*)
Vietnam	
Song Hong Basin	Block 121 (100%*)
Vinh Chau Graben	Block 31 (25%) and Block DBSCL-01 (25%) (subject to farmin agreement with Salamander)
Thailand	
Khorat Plateau	L15/50 and L26/50 (40%) (subject to farmin agreement with Salamander)
Laos	
Khorat Plateau	Savannahket PSC (30%) (subject to farmin agreement with Salamander)

7.2 Australia Pacific LNG held interests in the following permits during the Quarter:

Australia Pacific LNG holds interests in the permits listed below. The interests denote Origin's effective interest in the permits – being 50% of the interest held by Australia Pacific LNG.

Basin/Project Area	Permits (Origin current effective beneficial interest) (* Denotes Operatorship)
Australia	
Denison Trough (Qld)	PLs 41, 42, 43, 44, 45, 54, 67, 173, 183 and 218 (25%*); ATP 337P (25%); ATP 337P Mahalo (15%); and ATP 553P (25%)
Galilee Basin (Qld)	ATPs 666P, 667P and 668P (50%*)
CSG (Qld)	
– Spring Gully	PLs 195 and 203 and ATP 592P (47.25%*); PL 204 (49.8625%*); and PL 200 (47.8552%*)
- Fairview	PLs 90, 91, 92, 99, 100, 232, 233, 234, 235 and 236 and ATP 526P (11.965%)
- Peat	PL 101 (50%*)
- Argyle/Kenya/Lauren/ Bellevue	PLs 179, 180, 228, 229 and 263(A) and ATP 620P Shallows (20.3125%); ATP 610P Shallows and PL 247 (14.6875%); and ATP 648P Shallows, PL 257(A), PL 273(A), PL 274(A), PL 275(A), PL 278(A) and PL 279(A) (15.625%)
- Talinga/Orana	PLs 209, 215, 226, 216(A), 225(A), 272(A) and 289(A) and ATP 692P (50%*)
- Other(Bowen Basin)	PLs 219 and 220 (50%*); ATPs 653P and 745P and PLs 395(A) and 396(A) (11.925%); and ATP 804P (14.6491%)
- Other (Surat Basin)	ATP 606P and PL 297(A)(46.3581%*); ATP 631P and PL 281(A) and PL 282(A) (9.04825%); ATP 663P (50%*); ATP 702P, PLs 265(A), 266(A) and 267(A) (50%*); ATP 972P (46.3581%*) and ATP 973P (50%*) (ATP 847P has been split into ATPs 972P and 973P, subject to EA approval)

8. CONVERSION FACTORS AND ABBREVIATIONS

8.1 Conversion Factors

Crude oil	0.00583	PJ/kbbls
Condensate	0.00541	PJ/kbbls
LPG	0.0493	PJ/ktonnes
Ethane	0.0517	PJ/ktonnes

8.2 Abbreviations

APLNG	Australia Pacific LNG – a 50:50 incorporated Joint Venture between Origin Energy and ConocoPhillips
barrels	an international measure of oil production. 1 barrel = 159 litres
bopd	barrels of oil per day
bwpd	barrels of water per day
C&C	cased and completed
C&S	cased and suspended
CSG	coal seam gas
CTU	coiled tubing unit
DA	designated authority
EA	environmental authority
GJ	Gigajoule = 10^9 joules
joule	a measure of energy
Kbbls	Kilo barrels = 1,000 barrels
Ktonnes	Kilo tonnes = 1,000 tonnes
LNG	liquefied natural gas
LPG	liquid petroleum gas
mmscfd	million standard cubic feet per day
P&A	plugged and abandoned
P&S	plugged and suspended
PCA	potential commercial area
PSC	production sharing contract
PSDM	post stack depth migration (seismic processing)
PJ	petajoule = 10^{15} joules
PJe	petajoule equivalent, a measure used to express the volume of different petroleum products on the basis of the energy contained in the product
Spudding	to commence drilling a well
TD	total depth
TJ	terajoule = 10^{12} joules
TJ/d	terajoules per day
Water Inj	water injection well