

29 April 2011

ASX Limited  
Company Announcements  
Level 4, 20 Bridge Street  
SYDNEY NSW 2000

Dear Sir/Madam

**RE: QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDING 31 MARCH 2011**

Please find attached above referenced quarterly activity report document, including the summary of operations for the March 2011 quarter.

Yours faithfully  
**SUN RESOURCES NL**



Craig Basson  
**COMPANY SECRETARY**



# **QUARTERLY REPORT FOR THE PERIOD**

## **ENDING 31 MARCH 2011**

### **HIGHLIGHTS**

#### **THAILAND L20/50 BLOCK**

- The Operator, Carnarvon Petroleum Limited (“Carnarvon”), completed the drilling of two exploration wells (Tapao Kaew #1 and Krai Thong #1) during February and March 2011 with neither well identifying movable hydrocarbons. Notwithstanding this outcome, encouraging new technical data was generated for the Joint Venture which will be integrated in a review of the existing seismic data, with a view to determining future exploration in the concession.
- Peak Oil & Gas Limited completed its farm-in obligations to free-carry Sun Resources through its share of the first exploration well (Tapao Kaew #1) by way of a total cash consideration of A\$1.3 million; thereby earning a 7.5% working interest. Sun Resources retains a material 42.5% working interest in the L20/50 block.

#### **USA**

- Production continued at the Lake Long #9 well in Louisiana until 12 February when the well was shut in pending a decision on a further work over. Production continued at the Flour Bluff Gas Field and JSGU#1 well in Texas.

#### **NEW PROJECT DEVELOPMENT**

- Sun Resources continued negotiations on a definitive farm-in agreement with an as yet undisclosed party (due to commercial sensitivities) to participate in the drilling of a high impact well onshore North-West Europe which will test a 720 bcf conventional gas target late 2011. Further details relating to this farm-in will be announced to the market following the receipt of necessary local government approvals.

#### **CORPORATE**

- Cash on hand at 31 March 2011 was \$6.59 million.

## **1. THAILAND**

### **L20/50 Block, Onshore Phitsanulok Basin (Sun Resources – 42.5%)**

#### ***Update***

During the March 2011 quarter, Carnarvon Petroleum Ltd completed the joint venture's drilling campaign in the L20/50 concession onshore Thailand. The drilling programme tested the hydrocarbon potential of two of the three highest ranked prospects from seismic survey data acquired in late 2009. This survey identified 23 leads and prospects within 5 different play types over an area of 548km<sup>2</sup> covered by the seismic survey. Notwithstanding the disappointing outcome of the two wells, both being plugged and abandoned after failing to encounter hydrocarbons, encouraging new technical data was generated for the Joint Venture to undertake a review of the existing seismic data with a view to determining future exploration in the concession.

The first well, Tapao Kaew #1, encountered several potential reservoir sands in the shallow section of the well. However, analysis of wireline logs, cutting samples, gas readings and other data indicated the sands are not hydrocarbon bearing at this location. The second well, Krai Thong #1, also encountered several potential hydrocarbon bearing reservoir intervals, but wireline testing proved water only as the mobile fluid in the reservoirs.

In the light of the results of the two wells drilled, drilling of the third well, Chalawan, was deferred by the joint venture pending a review of the well results and reinterpretation of the seismic data. All three sites have been retained while the joint venture considers the program going forward.

#### ***Peak Oil & Gas Farm-out***

Following the execution of the reported Participation Agreement with Peak Oil & Gas Ltd ("Peak") on 21 December 2010, Peak earned its 7.5% working interest only in the first exploration well, Tapao Kaew #1 in the L20/50 concession by free carrying US\$1.3 million of Sun Resources' share of the well costs. Sun Resources retains a material 42.5% working interest in this concession.

## **2. UNITED STATES OF AMERICA**

### **2.1 OIL AND GAS DEVELOPMENT & PRODUCTION**

The table below summarises Sun Resources' actual net working interest (W.I.%) production for the quarter and compares it with the previous quarter. Oil and gas production for the quarter fell due to lower volumes through Flour Bluff's gas plant in Texas and the unexpected shut-in of the Lake Long #9 well in Louisiana on February 12<sup>th</sup>. Net revenue received during the quarter was relatively stable due largely to improving gas prices through the quarter, plus a 60 day delay between actual production and receipt of revenues. USA oil and gas prices varied widely during the quarter and were between US\$75-92 per barrel of oil and US\$3.13-5.47 per 1,000 cubic feet for gas (mcf).

<b>PRODUCTION (Sun WI% share)</b>	<b>March 2011 Quarter</b>	<b>December 2010 Quarter</b>	<b>Variance</b>
<b>Gas (mmscfd)</b>	18.2	46.3	-60%
<b>Oil (bo)</b>	112	479	-77%
<b>Net Revenue (US\$)</b>	22,544	19,647	+15%

Units: mmscfd – million cubic feet gas; bo – barrels of oil

### **Lake Long, Louisiana, USA (Sun Resources - 10%)**

The SL328 #9 (Lake Long #9) well continued to perform well until 12 February when the well was shut in due to mud in the choke. At the time the well was flowing approximately 2.5mmscfd gas with 7 bbl condensate per day. The Operator was considering work over options at the end of the quarter. Production will continue to produce from 24 feet of net pay in the Middle Hollywood Sands with contribution now from 13 feet of net pay in the Upper Hollywood Sands. Gross reserves were

originally approximately 3.5 billion cubic feet of gas equivalent (“bcfge”) with approximately 1.2bcfge (gross) remaining.

**Project Margarita, Texas, USA (Sun Resources - 37.5%)**

Gas production from the F1 discovery (JSGU#1) is being produced only intermittently due to elevated readings of hydrogen sulphide gas (H2S), above the well’s gas scrubber capability.

**Flour Bluff Gas Field, Texas, USA (Sun Resources - 20.00 to 24.1667%)**

Amalgamated gross production from the fields during the December 2010 quarter was an average 0.4 mmcfgd with 4 bopd. A program of well workovers and surface infrastructure renewal continues with a view to targeting a trebling of current production rate by year-end 2011.

**2.2 OIL AND GAS EXPLORATION**

There was no exploration drilling during the March 2011 quarter in the United States of America.

**Future Drilling Activity**

Sun Resources will have a material equity position in the following exploration wells, subject to ongoing farm-out marketing:

Project	Prospect	Interest	Potential	Comments
Margarita	TB#18	37.5%	1.7bcfe	Frio Fm.
Redback*	R-1.95	20.0%*	58 bcfe	Middle Vicksburg

\* Subject to successful farm-out negotiations

**Project Margarita, Onshore, South Texas, USA (Sun Resources - 20% to 37.5%)**

The TB #18 shallow prospect remains the subject of a leasing process. This prospect has the potential to replace declining production from the existing Frio fields in the “Margarita Shallow” inventory. The “Deep Wells Programme” will test a number of deeper, larger volume, but higher risk, Wilcox prospects in the deep gas prospect inventory having potential un-risked recoverable volumes of 15 to 200 billion cubic feet of gas (“bcfg”) (refer table below). Participation in these prospects by Sun Resources remains subject to future leasing and subsequent farm-out.

Prospect	Gross Potential	Target Formation
Cazadores	20 to 61 bcf	Upper Wilcox
W2A	100 to 200 bcf	Wilcox
Agave	67 to 208 bcf	Cook Mountain

**Project Redback, Onshore, South Texas, USA (Sun Resources - 20% to 37.5%)**

Farm-out marketing of Redback R-1.95 prospect continued during the quarter and Sun Resources expects to farm down from the current 37.5%WI to retain a 20%WI through the first well. The prospect has multiple targets in the productive Vicksburg Sands with high upside potential for both gas and oil as accompanying condensate (ie up to 58 bcfge). On trend to the Redback area are producing analogues with individual wells having initial daily well production rates of 3 to 4 mmcfgd with 100 to 140 bopd.

**3. MALTA**

**ESA Area 4, Block 3 and ESA Area 5, Offshore Malta (Sun Resources 20%)**

**Update**

Operator, Pancontinental Oil & Gas NL (“Pancontinental”) advised that during the quarter the Company continued to engage with the Ministry of Resources and Rural Affairs in Malta with a view to refreshing the ESA and restarting exploration in the licence area. Activities on the

Company's Malta areas have been suspended since September 2005 under force majeure provisions of the ESA due to border issues between Malta, Libya and Tunisia.

### ***Background***

Contiguous ESA Area 4, Block 3 and ESA Area 5, offshore Malta in the southern Mediterranean Sea, is a high impact project that awaits settlement of border issues between Malta, Tunisia and Libya. Activities on the ESA areas have been suspended since September 2005 under force majeure provisions of the ESA agreement with the Government of Malta. Pancontinental has been in discussions with the OED to refresh the ESA title under the continuing force majeure provisions of the ESA agreement to allow exploration of the area to recommence at some time in the future when the border issues are resolved. Pancontinental has also engaged a firm of Maltese lawyers to assist in this process.

## **4. AUSTRALIA**

### **WA-254-P, Offshore Carnarvon Basin, W. Australia (Sun Resources 7.86% to 9.25%)**

The Operator of WA-254-P, Apache Northwest ("Apache"), awaits a response to its Retention Lease (RL) application, covering the Sage-1 oil discovery, from the Designated Authority. The remainder of the block's exploration commitments have been suspended pending the RL application. Apache continues to review development options including tie-back scenarios to adjacent fields in an effort to monetize the oil accumulation. Sun Resources and two other joint venture parties are continuing a divestment process of their combined 24.8% to 29.8% working interest in the permit that contains the Sage-1 well.

## **5. NEW PROJECT DEVELOPMENT – NW Europe**

### ***Update***

Negotiations by the Operator were continuing at the end of the quarter with local government on the approval process of the well. A further extension to the end of July 2011 has been agreed between Sun Resources and the Operator to allow the Operator time to complete the well approval process with the local authorities which is an important condition precedent in the executed Term Sheet. Further details relating to this farm-in will be announced to the market following the receipt of necessary local government approvals and the execution of a definitive Farm-in Agreement.

### ***Background***

Sun Resources announced on 10 November 2010 that a non-binding Term Sheet with an as yet undisclosed party (due to commercial sensitivities) had been executed for Sun Resources to participate in the drilling of a high impact well onshore North-West Europe which will test a 720 bcf conventional gas target late Q3 2011. Sun Resources will fund €1.645m (A\$2.3m) of past and future drilling costs to earn a 15% working interest in the farm-in concession. The planned well and equity assignment in the permit to Sun Resources is subject to approval by local authorities. The principle terms of the Farm-in are:

- Sun Resources will pay €1.51m (approximately \$2.1m) of the dry hole costs based on a €5.33m estimate (A\$7.48m);
- Sun Resources will pay 15% of total past auditable costs estimated at up to €900,000 (i.e. Sun Resources will pay approximately €135,000 (A\$190,000));
- Sun Resources will execute, subject to due diligence, a Definitive Farm-in Agreement by 28 February 2011, or if a rig contract is to be executed prior to that date, immediately prior to execution of the rig contract.

Sun Resources will then maintain its interest in the project on a heads-up (15%) basis. Drilling is currently expected to commence late in the third quarter of 2011. The Term Sheet to participate in the drilling of this large gas target meets Sun Resources' new venture strategy to explore for high

impact, onshore oil or high-rate gas prospects, close to market and infrastructure. The primary play is Triassic sandstone reservoirs charged with gas (and/or oil) from older Permian-Carboniferous shales and coal, which is the principal play in the offshore Southern Gas Basin of the North Sea. Geological modeling, based on 2D seismic and recent interpretation, indicates that gas (with gas liquids) is the most likely hydrocarbon to be found within the prospect, which has a gross target of 720 billion cubic feet of gas (bcf) (Operator's estimate), with upside in excess of 1tcf. The prospect lies on trend with oil and gas fields and adjacent to old wells with oil and gas shows, around oil seeps.

In Europe the gas market is robust due to the lack of alternative supplies, and as a result, the strong gas prices (US\$7-9/mcf compared with US\$4/mcf in the USA) are expected to continue into the foreseeable future. This significant price advantage is one of the key reasons that Sun Resources has targeted this concession in North-West Europe that is prospective for hosting large gas accumulations. The farm-in concession is also considered to have potential to offer an unconventional gas play within the older Permian-Carboniferous source rocks. Permitting of the well is ongoing and is expected to be completed in Q3 2011 to allow drilling to commence soon after. The non-binding Term Sheet is subject to the completion of due diligence, the execution of a Definitive Farm-in Agreement, and receipt of relevant statutory approvals and governmental consents.

## **6. MINERAL EXPLORATION/INVESTMENT**

No activity for the Quarter. The Joint Venture on the Butterfly gold tenement in the North Coolgardie Mineral Field, Western Australia in which the Company has a 5% NPI interest remains current.

## **7. CORPORATE**

As at 31 March 2011, Sun Resources had cash at bank of A\$6.59 million.

## **BY ORDER OF THE BOARD**



**MATTHEW A BATTRICK, MANAGING DIRECTOR**

This report is lodged on the Company's website, [www.sunres.com.au](http://www.sunres.com.au).

Information contained in this report was sourced from the Operators of various Joint Ventures in which the Company has interests and was compiled by the Managing Director of Sun Resources, Matthew Battrick, BSc (Geol), MPESA, MPESGB, MAAPG, GAICD who has had 30 years experience in the practice of geology and more than 25 years experience in petroleum geology.

