

29 October 2010

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

Dear Sir/Madam

**RE: QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDING 30 SEPTEMBER 2010**

Please find attached above referenced quarterly activity report document, including the summary of operations for the September 2010 quarter.

Yours faithfully

**SUN RESOURCES NL**



Craig Basson  
**COMPANY SECRETARY**



**QUARTERLY REPORT FOR THE PERIOD**  
**ENDING 30 SEPTEMBER 2010**

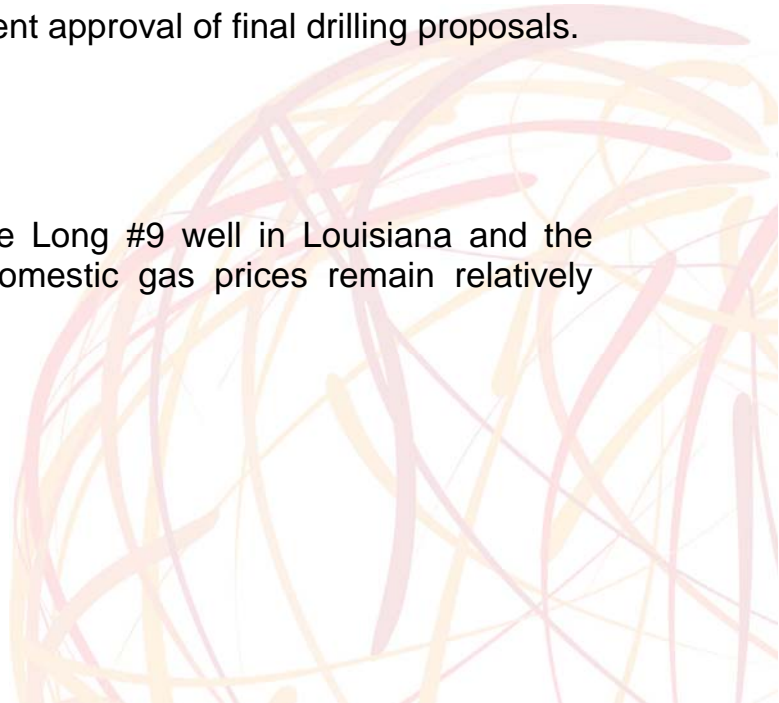
**HIGHLIGHTS**

**THAILAND L20/50 BLOCK**

- Peak Oil & Gas Ltd (Peak), a privately funded Australian energy company, has agreed to farm in to Sun's 50% working interest and will earn up to 20% by carrying up to US\$3.43 million of Sun Resources' share of well costs in the forthcoming drilling program at L20/50, onshore Thailand.
- Drilling at one firm and two contingent well locations will test in excess of 60mmbo speculative potential which is a best estimate based on gross recoverable oil.
- Permit Operator, Carnarvon Petroleum Limited, received formal government approval of Environmental Impact Assessments covering nine potential drilling locations.
- Drilling of the first Joint Venture well remains on track for late December quarter 2010, subject to government approval of final drilling proposals.

**USA**

- Production continued at the Lake Long #9 well in Louisiana and the Flour Bluff Field in Texas as domestic gas prices remain relatively stable.



## **1. THAILAND**

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

#### ***Update***

The Operator, Carnarvon Petroleum Limited (“Carnarvon”) received approval for the Environmental Impact Assessments (EIA’s) covering nine possible drilling locations during the period. Three of these drill locations have been selected from 23 leads and prospects across five play types, following the full (time and depth) interpretation of both old and new seismic data and integration of this interpretation with all other available geological data.

The three highest-ranked prospects are being considered from which one prospect will be selected as the 2010 commitment well, and two additional wells are being considered. Drilling this year will test in excess of 60mmbo of gross speculative potential recoverable resource. Planning remains on track for drilling late in the fourth quarter of 2010, subject to final government approvals of the drilling plans and a suitable rig contract.

#### ***Peak Oil & Gas Farmout***

Sun Resources NL executed a binding Term Sheet with Peak Oil & Gas Ltd (“Peak”) on August 21<sup>st</sup> 2010 to allow Peak to earn up to a 20% working interest in L20/50, onshore Thailand. Peak will free carry up to US\$3.43 million of Sun Resources’ share of well costs in the drilling program. Peak will earn its interest, in three stages, subject to the number of wells ultimately drilled, as specified below:

1. Peak has committed to contribute US\$1.3 million from existing cash reserves toward Sun Resources’ share of the costs of the first L20/50 well to earn a 7.5% working interest in L20/50.
2. Subject to Peak completing its initial public offering and being admitted to the ASX on or before 14 December 2010, Peak will contribute US\$0.98 million toward Sun Resources’ costs of a second well to earn an additional 7.5% working interest in L20/50.
3. Peak also has an option to contribute US\$1.15 million toward Sun Resources’ share of the costs of a third well to earn an additional 5% working interest in L20/50. Peak must exercise its option within 7 days of the completion of the second well.

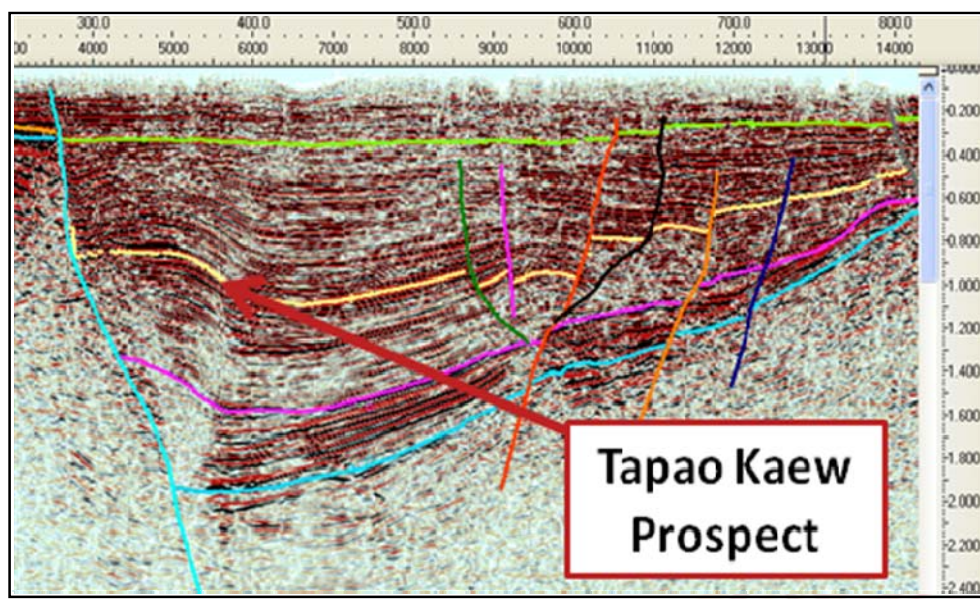
Sun retains the option to deal with other parties in respect of wells two and three until Peak completes its initial public offer and ASX listing, and should Peak fail to contribute to the costs of wells two and three. Government approvals of the transfer of interest are to be received by 3 October 2011. The transaction was originally subject to Joint Venture (JV) approval by 27 August 2010 but the period was extended by mutual agreement and JV approval was received on 22 September 2010. Due diligence was originally to be completed by 10 September 2010 but both parties have subsequently extended the due diligence period, by mutual agreement, to 15 October 2010. Peak has formally advised Sun that due diligence is now complete such that all conditions precedent to the first well obligation have now been met.

#### ***Background***

L20/50 lies in the onshore Phitsanulok Basin and is 20 kilometres to the south of and adjacent to the largest onshore oil and gas accumulation in onshore Thailand, the Sirikit Field, with original reserves of 200+ million barrels of oil equivalent (“mmboe”). The L20/50 Joint Venture exploration program is targeting an oil resource of similar size to that of Carnarvon and Pan Orient who are producing up to 15,000 bopd (with > 60 mmboe estimated gross ultimate recovery) from a number of new oil pools in the “volcanic play” in the adjacent Phetchabun Basin, 50 kilometres to the east. The primary reservoir target is the “volcanic play”; a previously overlooked, shallow, fractured, stacked volcanic reservoir target within fault block structures, but a second, equally important target is the traditional sandstone reservoirs that produces most of the oil from the prolific Sirikit Oil Field and is present in multiple levels in the Nong Bua-1 well within L20/50.

As a precursor to the recent seismic survey Carnarvon, the Operator of L20/50, evaluated the petroleum system within the L20/50 Block by utilising digitised 2D seismic data. This work resulted in the delineation of thirteen significant structural leads. The mapped leads vary in size, but preliminary calculations by Sun Resources indicate the largest of the leads could contain a speculative resource in excess of 150 million barrels of oil in place. These structural leads were the focus of the Year 2 seismic survey which was aimed at maturing the lead inventory to prospects for drilling in 2010 with emphasis on better defining the size and potential oil resource contained within each lead. Good quality seismic data was the key to Carnarvon unlocking the potential of its adjacent Phetchabun Basin Oil Fields in the fractured “volcanic play”.

Of importance are the results of technical studies undertaken by the Joint Venture that have determined the existence of a mature oil source kitchen in the deepest basin areas adjacent to the identified leads and have demonstrated the potential for stacked volcanic reservoir targets in the leads. The technical studies have also confirmed that all previous exploration wells in the permit are “off-structure” and are mainly on deeper sandstone plays as per the nearby Sirikit Oil Field and are therefore not valid tests of this play. Notwithstanding this, oil and gas shows were recorded in the off-structure Nong Bua-1 well, but it too has been shown to be sufficiently beyond closure to not warrant twinning of the well at this location. New seismic has been acquired as part of the recent seismic program to further delineate the Nong Bua-1 well’s target sandstone reservoirs in other traps to include in the prospect inventory being considered for drilling.



**Figure 1: Seismic cross-section montage showing of the structural prospect Tapao Kaew, likely to be considered for testing as the first well in the forthcoming drilling campaign.**



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

### **A. 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. Both oil and gas production for the quarter rose due in part to stable gas rates in Lake Long #9 and increased rates following re-completions within the Flour Bluff field. Net revenue received during the quarter was also higher due largely to the increase in oil sales over the previous quarter. Average USA gas prices fell during the quarter to approximately US\$4.75 per 1,000 cubic feet for gas (mcf) and average weekly product prices at the end of the September 2010 quarter were US\$75 per barrel for oil and US\$3.90 per mcf.

<b>Production (Sun WI%)</b>	<b>September 2010 Quarter</b>	<b>June 2010 Quarter</b>	<b>Variance</b>
<b>Gas (mmscfd)</b>	43.7	43.3	+1%
<b>Oil (bo)</b>	409	286	+43%
<b>Net Revenue (US\$)</b>	62,883	55,925	+12%

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

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

The SL328 #9 well has produced continuously during the quarter at a gross average of 3.0 mmscfd gas and 13 bopd, i.e. ~3.1 mmscfd. 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 ("bcfe") with approximately 1.5bcfe (gross) remaining.

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

Gas production from the F1 discovery (JSGU#1) remains shut in due to elevated readings of hydrogen sulphide gas (H<sub>2</sub>S), above the well's gas scrubber capability. At the end of the quarter, the operator was still researching ways to increase the scrubber's H<sub>2</sub>S capability so the well can return to sales.

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

Amalgamated gross production from the fields during the September 2010 quarter was an average 0.78 mmscfd with 14 bopd. A program of recompletions and fracture stimulations commenced in June 2010 has arrested natural decline in rates of individual wells as work over operations on the D-24 well and the BG Webb#1 well were successful.

### **B. OIL AND GAS EXPLORATION**

There was no exploration drilling activity during the September 2010 quarter in the United States of America.

#### **Future Drilling Activity**

Sun Resources will have a material equity position in the following exploration wells currently scheduled for drilling in 2011, but subject to farm-out marketing:

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

\* Subject in part 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 remains subject to farm-out.

<b>Prospect</b>	<b>Gross Potential</b>	<b>Target Formation</b>
Cazadores	20 to 61 bcf	Upper Wilcox
W2A	100 to 200 bcf	Wilcox
W3	15 to 38 bcf	Wilcox
Agave	67 to 208 bcf	Cook Mountain
CM1	5 to 8 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 it is still awaiting a reply from the Ministry of Resources and Rural Affairs of Malta (“MRA”) in respect of the title issue of ESA Area 4, Block 3 and ESA Area 5, offshore Malta in the southern Mediterranean Sea. Pancontinental remains hopeful that the MRA will approve a resolution to re-affirm title over the original area of the ESA title such that exploration activities can restart.

#### ***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”), received approval to its Location Application, ahead of a review of its Retention Lease application, covering the Sage-1 oil

discovery, from the Designated Authority during the Quarter. 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**

Sun Resources continued its active programme of new project generation and development. A number of high potential international projects continue to be investigated.

## **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 30 September 2010, Sun Resources had cash at bank of A\$1.98million.

### **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 Batrick, 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.

