



# SUN RESOURCES NL

ABN 69 009 196 810  
(INCORPORATED IN WESTERN AUSTRALIA)

Unit 16, Subiaco Village, 531 Hay Street  
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28 October 2009

Australian Securities Exchange  
Company Announcements  
Level 4, 20 Bridge Street  
SYDNEY NSW 2000

Dear Sir/Madam

**RE: QUARTERLY REPORT FOR THE PERIOD ENDING 30 SEPTEMBER 2009**

Please find attached above referenced quarterly report document.

Yours sincerely  
**SUN RESOURCES NL**

A P Woods  
**COMPANY SECRETARY/DIRECTOR**

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## **QUARTERLY REPORT FOR THE PERIOD ENDING 30 SEPTEMBER 2009**

### **HIGHLIGHTS**

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

- A 2D seismic survey totalling 548 line kilometres was completed on 28 August 2009 to detail several large mapped leads (the largest up to 150 million barrels of oil in place).
- 2D seismic survey extended by 48 line kilometres after early results identified a deeper than expected southern extension to the central graben of the Phitsanulok Basin.
- Strong potential identified for prospects containing fractured volcanics which are analogous to Carnarvon Petroleum's Phetchabun Basin oil fields. Previous drilling has demonstrated that oil has been generated within the L20/50 concession.

#### **USA**

- Testing completed on the Meek Prospect well (AHGU#1) after installation of production equipment. Testing failed to deliver sustained commercial flow rates and the well has been plugged and abandoned.
- Stable production continued at the Lake Long #9 well in Louisiana and the JSGU#1 well in the Margarita Project, Texas.

#### **CORPORATE**

- The Company received approval for the balance of a A\$5 million equity placement at a general meeting on 8 July 2009, primarily to fund ongoing Thailand exploration including seismic and drilling. The Company also received A\$32,700 through the conversion of 59,455 convertible notes.

Sun Resources NL (“Sun Resources”) is continuing its strategy of building cash flow in the USA Onshore Gulf Coast and applying this revenue to capture and participate in larger scale, high impact exploration projects, particularly in South East Asia.

## **1 THAILAND**

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

#### ***Update***

The Year 2 2D seismic survey commenced on 14 July 2009 and was completed on 28 August 2009. A total of 548 kms of good quality seismic data was acquired to mature and rank thirteen significant structural leads for drilling in 2010. An additional 48 kms was acquired above the budget of 500 kms after early results identified a deeper than expected southern extension to the central graben of the Phitsanulok Basin. Processing of the data at a processing centre in Perth had commenced by the end of the September 2009 quarter. Final results of this data processing are expected late December quarter 2009. Conditional on results, 1 to 4 prospects could be the subject of drilling during 2010.

This exploration program is targeting an oil resource of similar size to that of Carnarvon Petroleum Limited (“Carnarvon”) and Pan Orient who are producing from the adjacent Phetchabun Basin. The string of discoveries by Carnarvon and Pan Orient has seen this field deliver average production of around 12,000 bopd, and the reporting of-recoverable resources in excess of 40 million barrels from a number of new oil pools in the volcanic play.

#### ***Background***

Sun Resources and Carnarvon accepted the L20/50 block award from the Thai Government at the official signing ceremony in Bangkok on 21 January 2008 and Carnarvon, as Operator, commenced exploration activities on the concession. 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, which to date has produced ~180 million barrels of oil equivalent (“mboe”) and currently has reserves in excess of 100 million barrels. L20/50 has only been lightly explored with the last effort some 25 years ago, in a time of much lower oil prices. The primary exploration play is previously overlooked, shallow, fractured volcanic reservoirs within fault block structures, similar to those now producing up to 12,000 barrels of oil per day in the adjacent Phetchabun Basin where Carnarvon is also active. A secondary play is the deeper sandstone reservoir that produces most of the oil from the prolific Sirikit Oil Field, 20 kilometres northwest of L20/50.

Carnarvon, the operator of L20/50, has evaluated the petroleum system within the L20/50 Block by utilising recently digitized 2D seismic data, resulting 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 are the focus of the Year 2 seismic survey, aimed at better defining the size and potential oil resource contained within each lead. This seismic programme will be utilised to target 1 to 4 prospects for drilling during 2010. Good quality seismic data was the key to Carnarvon unlocking the potential of its adjacent Phetchabun Basin Oil Fields in the fractured “volcanic play”, 50 kilometres to the east.

Technical studies undertaken by the Joint Venture have determined the existence of a mature oil source kitchen in the deepest basinal areas adjacent to the identified leads, and have demonstrated the potential for stacked volcanic reservoir targets in the leads as per the adjacent Phetchabun Basin where Carnarvon and Pan Orient have announced significant new oil discoveries in the “volcanic play”.

The technical studies have also confirmed that all previous exploration wells in the permit are “off-structure” mainly on deeper sandstone plays as per the Sirikit Oil Field, 20 kilometres northwest of L20/50, and are therefore not valid tests of this play. Despite the record of oil and gas shows in the Nong Bua-1 well, it too has been shown to be sufficiently beyond closure to not warrant twinning of the well at this location until further seismic has been run to further delineate the prospect’s target sandstone reservoirs.

## **2 UNITED STATES OF AMERICA**

### **A. OIL AND GAS DEVELOPMENT & PRODUCTION**

The table below summarises Sun Resources’ actual net working interest (WI%) production for the quarter and compares it with the previous quarter. Both oil and gas production for the quarter increased significantly and gas and oil prices increased slightly. The average prices received for product during the September 2009 quarter were US\$64 per barrel of oil and US\$3.68 per 1,000 cubic feet of gas. However, the significant increase in net revenue over the previous quarter was due mainly to much lower lease operating expenses at the Flour Bluff field.

<b>Production (Sun WI%)</b>	<b>September 2009 Quarter</b>	<b>June 2009 Quarter</b>	<b>Variance (%)</b>
<b>Gas (mmscfd)</b>	57.43	55.8	+3
<b>Oil (bo)</b>	653	585	+12
<b>Net Revenue (US\$)</b>	77,486	29,101	+266

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 2.93mmscfd gas and 23 bopd. Production will continue to produce from 24 feet of net pay in the Middle Hollywood Sands. At a later date, after depletion of reserves in the Middle Hollywood, the 13 feet of net pay in the Upper Hollywood Sands will be completed through tubing for further production from this level. Gross reserves at both levels are approximately 3 billion cubic feet of gas equivalent (“bcfge”).

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

The Agavero and Dona Carlota gas fields and the Milagro oilfield ceased production and all remain shut-in. New gas production from the F1 discovery (JSGU#1) continues to average 0.125 mmscfd for the quarter.

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

Amalgamated gross production from the fields during the June 2009 quarter averaged 1.257 mmscfd with 21 bod, ie 1.383 mmscfd. A 3D seismic programme is still planned over the West Flour Bluff Gas Field which will detail current reserves and target additional reserves in late 2010. Following the 3D seismic programme, development drilling will commence to further increase production rates.

## B OIL AND GAS EXPLORATION

### Drilling Activity during the quarter

#### Meek Prospect, Onshore Texas, USA (Sun Resources 12.5%)

##### *Update*

Operator, Mueller Exploration Inc (“MEI”) completed a systematic testing program on all prospective intervals in the Middle to Upper Wilcox Formations in the Ammann Heirs Gas Unit #1 well (AHGU #1) at the end of September 2009. Economic production to sales was not achieved, notwithstanding gas with some liquids flowed from all tested intervals before watering out. The well was plugged and abandoned after testing was completed.

MEI advised that the post mortem of the well demonstrated geological success. However, the inability of the sands, particularly the main target Middle Meek to flow sustained gas is probably related to a wettability issue, where water-based fracking fluids had probably damaged the near well bore reservoir so water flowed preferentially to gas on testing. Unfortunately the comprehensive remedial programs undertaken by the Operator were unable to resolve the wettability issue.

##### *Background*

During 2008, Sun Resources farmed in to take a 12.5% Working Interest (9.125%NRI) in the Meek Prospect in Wharton County of Southern Texas from MEI. The Meek Prospect targeted 16 bcfg with 269,000 bo (18 bcfe) in stacked, highly productive, Middle Wilcox (Meek) sands. The Operator, MEI spudded the AHGU #1 well on the Meek Prospect, on 6 February 2009. Three separate zones of elevated gas readings were recorded over the interval 3,530-3,613m while drilling through the primary target Meek Sands of the Middle Wilcox Formation. Two intervals of most interest from the wireline logs were a 9m interval in the Upper Meek Sands between 3,530-3,539m and a 13m interval in the Middle Meek Sands between 3,600-3,613m. In the secondary Upper Wilcox Formation target, two of eight separate zones of elevated gas readings recorded over the interval 3,176-3,399m were considered to be of most interest from the wireline logs. The first was a 30m interval between 3,198-3,223m and the second a 50m interval between 3,275-3,325m.

Operator, MEI, installed production equipment to sales at the AHGU #1 well location during March and early April 2009 and conducted a systematic testing program on all prospective intervals in the Middle to Upper Wilcox Formations in the well. Tested intervals flowed intermittently. As an example the main Middle Wilcox Formation target tested in the June 2009 quarter flowed gas at rates to 850,000 scf/d, quickly dropping off to 78,000scf/d with 190-210 barrels of water. Remedial programs were undertaken unsuccessfully to resolve suspected near well bore reservoir damage by drilling fluids.

### Future Drilling Activity

Sun Resources will have a material equity position in the following exploration wells currently scheduled for drilling in 2010:

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 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. The Cazadores Prospect (20 to 60 bcfg) is the most advanced prospect with the joint venture currently generating farm-in interest for possible drilling in the first quarter of 2010.

<b>Prospect</b>	<b>Gross Potential</b>	<b>Comments</b>
Cazadores	20 to 61 bcf	Upper Wilcox
W2A	100 to 200 bcf	Wilcox
W2B	16 to 32 bcf	Wilcox
W3	15 to 38 bcf	Wilcox
Agave	67 to 208 bcf	Cook Mountain
CM1	5 to 8 bcf	Cook Mountain
CM2	4 to 9 bcf	Cook Mountain

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

Leasing is completed on the top-ranked prospect in the prospect inventory, Redback R-1.95, and farm out for drilling in 2010 is scheduled to commence in December quarter 2009. 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 production analogues of the Redback R-1.95 prospect from the same targeted stratigraphic level. Individual wells from these analogues have produced at high initial daily well production rates of 3 to 4 mmcfgd with 100 to 140 bod. Participation in these prospects remains subject to farm-out, but Sun Resources expects to farm down from the current 37.5% WI to retain a 20% WI through the first well.

## **3 MALTA EXPLORATION**

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

#### ***Update***

Pancontinental Oil & Gas NL’s (“Pancontinental”) Maltese lawyers prepared and submitted a formal letter to the Oil Exploration Department of the Ministry of Resources and Rural Affairs of Malta (“OED”) at the end of the quarter refuting the expiration of the ESA and seeking a formal meeting to resolve the matter. The letter further advised that failing a successful meeting, the Joint Venture would resort to the dispute resolution procedure as per the ESA Agreement with the Government of Malta.

#### ***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. Operatorship reverted to Pancontinental in the March 2009 quarter as Anadarko International Energy Company (“Anadarko”), who farmed in three years ago, withdrew from the permit in late December 2008 due to the lack of progress on the border issue. Since resuming operatorship, Pancontinental has been engaged 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.

In late May 2009, Pancontinental received a letter from the OED claiming that the ESA expired in August 2008. Pancontinental in a written reply to the OED disputed the expiry of the ESA and sought clarification of the reasons for the claim whilst reserving its rights and potential remedies. The OED responded in early July 2009 by stating that Pancontinental/Sun Resources/Anadarko's July 2008 request via then Operator Anadarko for the grant of a 2 year extension to the term of the ESAs was not acceded to. Pancontinental has sought legal advice about this matter from a firm of Maltese lawyers as the ESAs were under force majeure as per the provisions of the ESA agreement with the Government of Malta.

#### **4. AUSTRALIA EXPLORATION**

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

The Operator of WA-254-P, Apache Northwest ("Apache"), continues to evaluate the exploration potential of the permit from reprocessed and new 3D seismic data. Sun Resources and two other joint venture parties continue an active divestment process of their combined 24.8% to 29.8% working interest in the permit which contains the Sage-1 oil discovery.

#### **5. 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.

#### **6. CORPORATE – FUND RAISING**

The Company raised A\$5 million during the June 2009 quarter, principally through a placement of shares to various sophisticated and professional investor investors of Hartleys Limited that was completed on 8 July 2009 after approval by shareholders at a general meeting on that date. The Company also raised A\$32,700 during the September 2009 quarter from the conversion to ordinary shares of 54,455 non-secured convertible notes.

As at 30 September 2009, Sun Resources had cash at bank of A\$3.295 million and A\$2.2 million held as bonds which will be repaid to Sun Resources following completion of work programmes on L20/50, Thailand.

#### **BY ORDER OF THE BOARD**



**M 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 28 years experience in the practice of geology and more than 25 years experience in petroleum geology.