

SUN RESOURCES NL

ABN 69 009 196 810 (INCORPORATED IN WESTERN AUSTRALIA)

Unit 16, Subiaco Village, 531 Hay Street SUBIACO, WA 6008, Australia PO Box 1786, WEST PERTH, WA 6872, Australia Email: admin@sunres.com.au Telephone: 61 8 9388 6501 Facsimile: 61 8 9388 7991

29 April 2010

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 2010**

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

Yours Sincerely SUN RESOURCES NL

Craig Basson Company Secretary



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# QUARTERLY REPORT FOR THE PERIOD ENDING 31 MARCH 2010

# **HIGHLIGHTS**

# THAILAND L20/50 BLOCK

- Newly acquired and processed 2D seismic data totalling 550 line kilometres was integrated with previous data and interpreted by permit Operator Carnarvon Petroleum Limited ("Carnarvon") during the quarter.
- The Operator's full, in-depth interpretation of all data has identified 5 play types and 23 leads and prospects and has confirmed the exciting prospectivity of L20/50.
- The joint venture is currently selecting the well locations for the one firm plus two contingent wells from the five highest ranked prospects for drilling in the fourth quarter of calendar year 2010, subject to government approvals.
- Drilling in the fourth quarter of this year at the one firm and two contingent well locations will test up to 85mmbo speculative potential which is a best estimate based on gross recoverable oil.

# <u>USA</u>

• Oil and gas production continued at the Lake Long #9 well in Louisiana, the JSGU#1 well in the Margarita Project in Texas and the Flour Bluff Field in Texas, as oil prices continue to increase and domestic gas prices stabilise.

# **CORPORATE**

• As at 31 March 2010, Sun Resources had cash at bank of A\$4.3 million after the return of a US\$1.6 million bond, repaid to Sun Resources following completion of the seismic survey on L20/50, Thailand. In addition, Sun has a further refundable work bond of ~A\$800,000.

#### 1 THAILAND

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

#### Update

The Operator, Carnarvon Petroleum Limited ("Carnarvon") has completed the full (time and depth) interpretation of both old and new seismic data and integrated it with all other available geological data. The Operator's interpretation has identified 23 leads and prospects across five play types. The Joint Venture has developed a ranked prospect inventory, including potential volumetric analysis, to prioritize the prospect(s) to be drilled during the 2010 drilling campaign, subject to environmental approvals, government drilling approval and a suitable rig contract.

Five high-ranked prospects are being considered from which one prospect will be selected as the firm well. Two other wells are being considered by the Joint Venture. Drilling is scheduled in the fourth quarter of 2010, subject to government approvals. The five highest ranked prospects have prospective resources of 99mmbo (best estimate gross recoverable oil (speculative potential)) (Figures 2 and 3). Drilling this year will test up to 85mmbo.

The exploration program is targeting an oil resource of similar size to that of Carnarvon and Pan Orient which are producing up to 15,000 bopd (with >60 mmboe 2P reserves) from a number of new oil pools in the "volcanic play" in the adjacent Phetchabun Basin, 50 kilometres to the east.

#### 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") (figure 1). The primary exploration target is the "volcanic play"; a previously overlooked, shallow, fractured, stacked volcanic reservoir target within fault block structures, similar to those now producing up to 15,000 barrels of oil per day from Carnarvon and Pan Orient's new oil fields in the adjacent Phetchabun Basin. A second play is the traditional sandstone reservoir 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.

## 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 fell due to natural decline in the current completions within the Flour Bluff field. Well remedial works (new completions and fracture stimulations) are planned at Flour Bluff in the next quarter to remedy the situation and increase production. However, net revenue increased significantly during the quarter as gas and oil prices came off recent historical lows. Gas and oil prices increased to an average price for product during the March 2010 quarter of US\$74 per barrel of oil and US\$5.50 per 1,000 cubic feet of gas.

Production (Sun WI%)	March 2010 Quarter	December 2009 Quarter	Variance (%)
Gas (mmscfg)	47.05	49.02	-3
Oil (bo)	344	406	-15
Net Revenue (US\$)	135,689	11,201	1,211

Units: mmscfg – 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 2.9mmscgd gas and 20bopd, ie 3.0mmcfgde. 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%)

Gas production from the F1 discovery (JSGU#1) continues with an average gross flow rate of 0.16mmcfgd at the end of the quarter.

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

Amalgamated gross production from the fields during March 2010 quarter declined to an average 0.74mmcfgd with 8bopd. A program of recompletions and fracture stimulations is being considered for mid 2010 to arrest natural decline in rates of individual wells. 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.

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

#### **Drilling Activity during the quarter**

There was no exploration drilling activity during the March 2010 quarter

#### **Future Drilling Activity**

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

Prospect	<b>Gross Potential</b>	Comments
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 late 2010 commenced in the March quarter 2010. 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 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 bopd. 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

Operator, Pancontinental Oil & Gas NL ("Pancontinental") advised that its representatives attended a meeting with the Oil Exploration Department ("OED") of the Ministry of Resources and Rural Affairs of Malta ("MRA") in January 2010. Pancontinental is hopeful that the MRA will approve a resolution to re-affirm title over the original area of the ESA title.

#### 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 review the exploration potential of the permit from reprocessed and new 3D seismic data and evaluate commercial development options for the Sage-1 oil discovery. 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 that contains the Sage-1 well.

#### 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

As at 31 March 2010, Sun Resources had cash at bank of A4.3 million after the return of a US1.6 million bond, repaid to Sun Resources following completion of the seismic survey on L20/50, Thailand. In addition, Sun has a further refundable work bond of ~A800,000.

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

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## M A BATTRICK, MANAGING DIRECTOR

This report is lodged on the Company's website, <u>www.sunres.com.au</u>.

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.

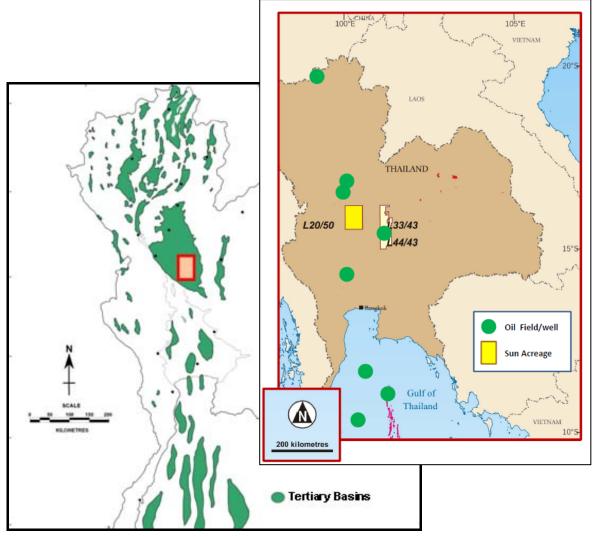
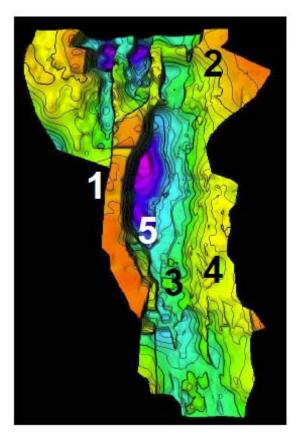


Figure 1: Location of L20/50 in the Phitsanulok Basin in the heart of Thailand's Tertiary basins



- Figure 2: Map showing structural prospects surrounding mature kitchen area. The five highest ranked prospects have prospective resources (best estimate gross recoverable oil (speculative potential)) of:
  - 1. 30mmbo
  - 2. 9mmbo
  - 3. 23mmbo
  - 4. 32mmbo
  - 5. 5mmbo

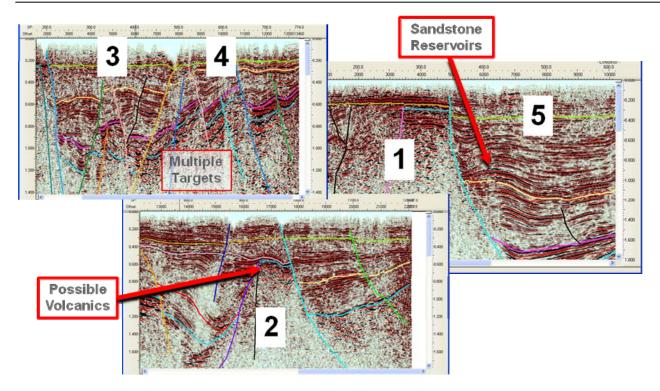


Figure 3: L20/50 seismic montage