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28 January 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 DECEMBER 2010

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

Yours faithfully
SUN RESOURCES NL

Craig Basson
COMPANY SECRETARY

QUARTERLY REPORT FOR THE PERIOD ENDING 31 DECEMBER 2010

HIGHLIGHTS

THAILAND L20/50 BLOCK

- Drilling program was expanded to two firm wells (Tapao Kaew #1 and Krai Thong #1) plus one contingent well (Chalawan #1) to test in excess of 90mmbo speculative potential which is a best estimate based on gross recoverable oil. The wells will test oil potential across multiple stacked targets.
- The Operator, Carnarvon Petroleum Limited, has advised that site construction and road access was continuing at year end at all three locations. Subsequent to year end the drill rig was mobilised to the Tapao Kaew #1 well site, and this well is scheduled to spud on 29 January 2011, and is expected to reach its target depth in 7-10 days.
- Peak Oil & Gas Limited will free-carry Sun Resources through its share of the first obligation well (Tapao Kaew #1) for a total cash consideration of A$1.3 million to earn a 7.5% working interest. Sun Resources will retain a material 42.5% working interest in the L20/50 block.

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.

NEW PROJECT DEVELOPMENT

- Sun Resources entered into a non-binding Term Sheet 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 mid 2011. Further details relating to this farm-in will be announced to the market following the receival of necessary local government approvals.

CORPORATE

- Sun Resources NL raised A$5.025 million through a placement to sophisticated investors and A$2.0 million through a Share Purchase Plan to existing shareholders.
- Cash on hand at 31 December 2010 was $7.1 million.

1. THAILAND
L20/50 Block, Onshore Phitsanulok Basin (Sun Resources – 42.5%)

Update

During the Quarter, Sun Resources NL ("Sun Resources") agreed with the Operator of the L20/50 Joint Venture, Carnarvon Petroleum Limited ("Carnarvon"), to increase the number of firm wells drilled in the maiden drilling programme to two (2), with one (1) additional well to be considered based on the results of the first two firm wells. The three highest-ranked prospects have been selected for drilling, which will test in excess of 90mmbo of speculative potential, which is a best estimate based on gross recoverable oil. In prioritising the well locations, the Joint Venture has utilised the results of its high quality seismic data acquired in 2009, which identified 23 leads and prospects within 5 different play types over an area of 548km^2 covered by the seismic survey. If all 3 wells are drilled, the programme will test 3 different prospect styles. Each well will take approximately two-three weeks to drill and complete, with each well testing multiple reservoir horizons where the potential for stacked oil pools exists.

Subsequent to year end the drill rig was mobilized to the first well site (Tapao Kaew #1), and is scheduled to spud on 29 January 2011.

The well locations and targets of each well are detailed below.

Well # 1 - the Tapao Kaew Prospect

The first well will be drilled on the Tapao Kaew Prospect (figure 1), a 4-way anticlinal structure with stacked targets on the western edge of the basin, immediately adjacent to the interpreted hydrocarbon kitchen. The Joint Venture estimates the Tapao Kaew Prospect to have a gross speculative potential resource of 21 million barrels. The Tapao Kaew #1 well will test up to three separate mapped horizons between 700-1,715 metres.

Well # 2 - the Krai Thong Prospect

The second well will be drilled on the Krai Thong Prospect (figure 1), a faulted anticlinal structure with multiple stacked targets. The Joint Venture estimates the Krai Thong Prospect to have a gross speculative potential resource of 37 million barrels. The Krai Thong-1 well will target two separate mapped horizons between 700-1,450 metres.

Well # 3 (Contingent) - the Chalawan Prospect

If sufficient encouragement is demonstrated by the first two wells, the Joint Venture may drill a third well on the Chalawan Prospect (figure 1) as part of this initial drilling program. The contingent well will be a shallow test, to a total depth of 950 metres, of a structure comprising of a series of tilted fault closures on the eastern edge of the basin. The Joint Venture estimates the Chalawan Prospect to have a gross speculative potential resource of 32 million barrels.

Peak Oil & Gas Farmout

Sun Resources executed a binding Participation Agreement with Peak Oil & Gas Ltd ("Peak") on December 21st 2010 to allow Peak to earn a 7.5% working interest only in the first exploration well, Tapao Kaew #1 in L20/50, onshore Thailand. Peak will free carry up to US$1.3 million of Sun Resources' share of well costs in the drilling of the first exploration well, Tapao Kaew #1. Sun Resources will retain a material 42.5% working interest in this well and a 50% interest through the remainder of the multi-well programme.

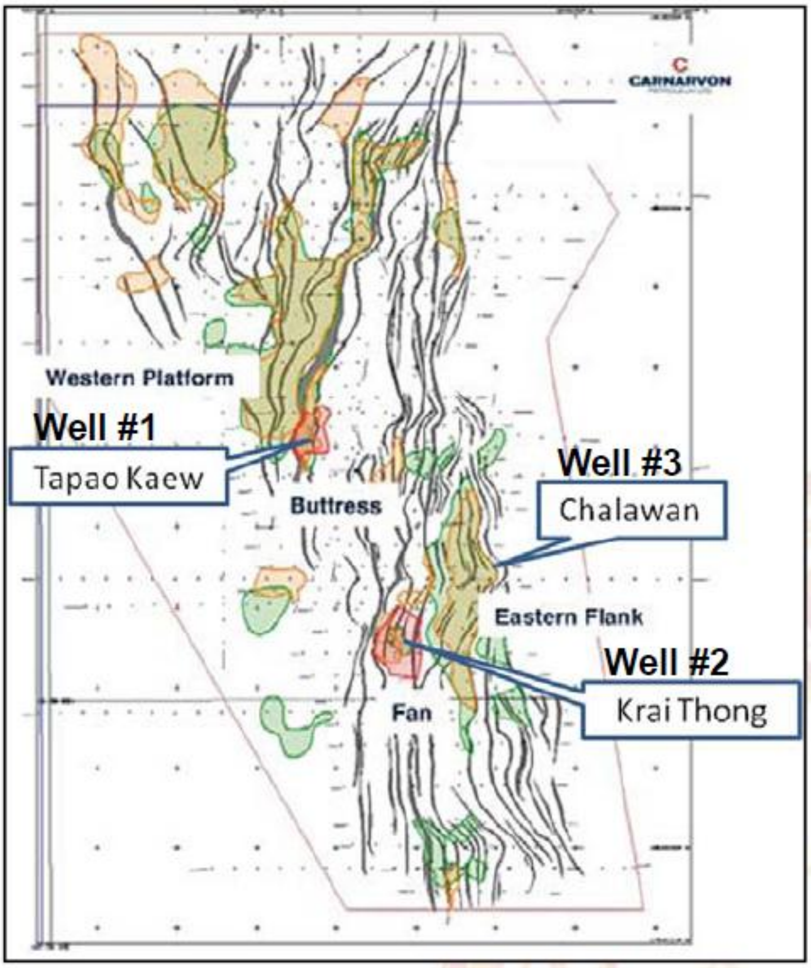

Figure 1, Prospect location map, L20/50 Permit

Background

The L20/50 permit lies on the onshore Phitsanulok Basin, located between Thailand's two largest producing onshore field complexes, being the next basin along from Carnarvon Petroleum Limited's Phetchabun Basin Oil Fields (producing up to 15,000 bopd with >60 mmboe estimated ultimate recovery) and 20 kilometres south, in the same basin as the prolific Sirikit Oil Field (producing ~20,000 bopd with >200 mmboe estimated ultimate recovery).

The L20/50 Joint Venture exploration program is targeting a 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 in the wells testing the firm prospects 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 on better defining the size and potential oil resources contained within each lead, and on its completion had achieved its objective of maturing the lead inventory to prospects for the current drilling program. Good quality seismic data was the key to Carnarvon unlocking the potential of its adjacent Phetchabun Basin Oil Fields in the fractured "volcanic play".

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. Oil and gas production for the quarter rose with stable gas rates in Lake Long #9 and the Flour Bluff field. Net revenue received during the quarter fell due largely to the low gas prices and ongoing infrastructure renewal at Flour Bluff. USA oil and gas prices varied widely during the quarter and were between US$75-83 per barrel of oil and US$3.66-5.37 per 1,000 cubic feet for gas (mcf).

Production (Sun WI%)	December 2010 Quarter	September 2010 Quarter	Variance
Gas (mmscfg)	46.3	44.5	+4%
Oil (bo)	428	398	+7.5%
Net Revenue (US$)	19,647	79,832	-75%

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 rate at the end of the quarter of 2.3 mmscgd gas and 9 bopd, i.e. ~2.1 mmcfgde. 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 1.0bcfge (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. At the end of the quarter, the operator was attempting to resolve the issue to restore the scrubber's H2S capability and return the well to steady sales.

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 0.7 mmcfgd with 12 bopd, i.e. 0.8 mmcfgde. A program of well workovers and surface infrastructure renewal continues with a view to targeting a doubling of current production rate before year-end 2011.

B. OIL AND GAS EXPLORATION

There was no exploration drilling activity during the December 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 targeted for drilling in 2011, but 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 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 Resources remains subject to farm-out.

Prospect	Gross Potential	Target Formation
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 during the quarter the Company again had a positive meeting with the Ministry of Resources and Rural Affairs in Malta. The Company is seeking a means of restarting exploration in the licence area as soon as possible. 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"), received approval to its Location Application, ahead of a review of its Retention Lease (RL) application, covering the Sage-1 oil discovery, from the Designated Authority during the Quarter. 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

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 mid year 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 will then maintain its interest in the project on a heads-up (15%) basis. Drilling is 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 will start shortly and is expected to be completed in Q3 2011. It is anticipated the well would be drilled in late Q3 2011. 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.

Negotiations were continuing at the end of the quarter, with both parties agreeing to an extension of time to 28 February 2011 to complete the Definitive Farm-in Agreement. Further details relating to this farm-in will be announced to the market following the receival of necessary local government approvals.

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

Sun Resources raised $5,025,000 through the placement of up to 75 million shares at an issue price of 6.7 cents per share, during November 2010, to sophisticated and professional investor clients of Hartleys Limited. During the quarter Sun Resources also raised $2,000,000 through a shareholder Share Purchase Plan ("SPP") at an issue price of 6.7 cents per share. The SPP closed fully subscribed on 1 December 2010, and a general meeting was held on 22 December 2010 to ratify the placement.

As at 31 December 2010, Sun Resources had cash at bank of A$7.1million.

BY ORDER OF THE BOARD

MATTHEW A BATTRICK, MANAGING DIRECTOR

This report is lodged on the Company's website, 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.