

Level 2, 30 Richardson Street
West Perth, WA 6005
PO Box 1786, West Perth WA 6872
T+61 8 9321 9886 F+61 8 9321 8161

31 January 2019

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 2018**

Please find the Quarterly Activities Report for the period ending 31 December 2018 for Sun Resources NL (ASX: SUR).

Yours faithfully SUN RESOURCES NL

Jo-Ann Long

**Company Secretary** 



# **QUARTERLY ACTIVITIES REPORT**FOR THE PERIOD ENDING 31 December 2018

# **HIGHLIGHTS**

- Bowsprit's first well location has been selected by Sun
- Sun has commenced First Well Site Permitting and Environmental Surveys
- Sun's Internal estimate of Prospective Resource volumes has increased through geological modelling of the field

# OIL AND GAS EXPLORATION AND DEVELOPMENT

Bowsprit Oil Project ("Bowsprit") (Lease No. 21754 & 21787) - Sun 50% working interest.

The leases are located approximately 70km southeast of New Orleans in approximately 3m of water. There are 16 historical wells, drilled between 1952 and 1982, within the lease and extensive existing 2D and 3D seismic over the lease. The leases are near the boundary of St Bernard and Plaquemines Parishes that covers the transition zone from onshore to the federal waters offshore Louisiana. The two Parishes have produced a combined 1.2 billion barrels of oil and 5.2 trillion scf of gas since 1978. The area is a prolific hydrocarbon province with over 1,800 wells drilled in the St Bernard parish alone.

Bowsprit is assessed to contain an undeveloped conventional Miocene aged oil sand at a depth of approximately 7,400ft (2,255m) that is located above a deeper, 9,500ft gas field that was developed in 1960s by Shell and produced through to 1980s. Consequently, the Bowsprit field contains 14 vertical well penetrations and has demonstrated producible oil. The 20 to 50ft thick oil sand was flowed successfully from four wells and produced approximately 75,000 bbls of oil, but was not of commercial significance at the time (~200bopd declining to 40 bopd / well). The deeper gas field was abandoned and the area relinquished by the former owner in the 1990s prior to the advent of horizontal drilling.

Sun has determined that the Bowsprit structure can be developed with up to five horizontal wells and could potentially be produced through a simple unmanned production platform.

Sun has a 50% working interest and is Operator of the Leases.

# 3D Modelling process

During the quarter considerable effort has been made to make the most of the existing data set. The available well logs were digitised and interpreted to determine exact intervals of sand, shale and silt. Concurrently the purchased 3D seismic has been revisited and the mapping of the key horizons refined, intra-field faults identified and incorporated into the model. The modelling of the sand, shale and silts in the field, consistent with the seismic interpretation and depositional environment, has demonstrated segregated sand bodies which explain the multiple oil water contacts that were interpreted in the 1960's well logs. These multiple sand bodies can be readily produced from horizontal wells (Fig 1).

A primary well location has now been selected and permitting of the site has commenced.

A vertical pilot hole will be drilled in the centre of the field to maximise data gathered and then a horizontal section will be drilled towards the south-east area of the field, across the crest of the four-way dip structure where the best sand previously produced approximately 50,000 bbls of oil.

It is the company's intention to flow test the horizontal well for a short period to prove a commercial flow rate. Assuming the results are satisfactory, the well will be suspended as a future producer.

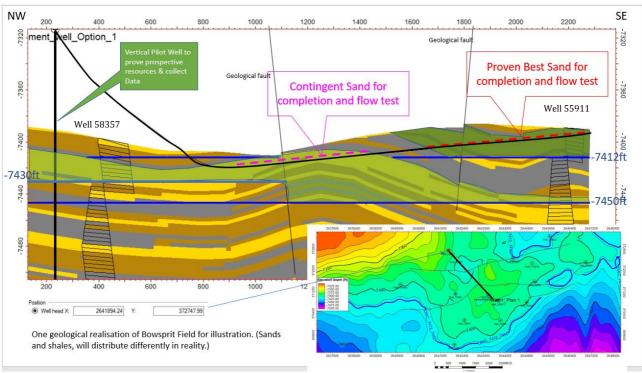


Figure 1 - Vertical Pilot hole and Horizontal Well Path

# STOIIP increase for Prospective Resources Area of the Field

The 3D model was primarily constructed for well planning purposes, however the enhanced understanding of the field geometry has resulted in Sun increasing our internal estimate of oil potentially in place in the structure. Sun's internal estimate for STOIIP in the part of the field designated as "Prospective Resources" by RISC falls towards the upper end of the RISC probabilistic range<sup>1</sup>.

# **Progress Toward Drilling**

Following selection of the well location, Sun has commissioned FensterMaker one of the leading independent environmental consultancy groups in Louisiana, to commence the site surveying and permitting of the well. The environmental approval and permitting of the well is expected to take between 4 and 6 months at a cost of US\$45,000.

The well path has been endorsed by Brammer Engineering as "drillable". It is Sun's intention to drill the first well in Q2 2019, prior to commencement of the hurricane season in July. In the interim, Sun will prepare a detailed drilling program (the initial well is estimated to cost approximately US\$3.5 million) and seek a farm in partner or other source of financing to fund the drilling.

#### **Forward Plan**

In order to prove commerciality of the contingent resources in the 7400' sand and discover and appraise the resource in the 7400' Deep sand, Sun intends to drill and test an appraisal well. This

<sup>&</sup>lt;sup>1</sup> See ASX release 5 April 2018.

will most likely include drilling a near vertical pilot hole through the entire reservoir to collect data and a horizontal well section to prove well deliverability.

The initial site survey has now been completed. The permitting process has now commenced and will take approximately 12-15 weeks. The hurricane season runs from July to October and the target is to drill the first well before July 2019.

During the interim, Sun will prepare the detailed drilling program (the initial well is estimated to cost approximately US\$3.6 million) and seek a farm in partner or other source of financing to fund the drilling.

# Land Status (net acres of mineral leases)

Below is a table showing Sun's net acres of oil and gas mineral leases in the project area.

Oil Project Area	Sun's Working Interest (%WI)	Sun's Net Revenue Interest (%NRI)	Project area Gross Acres (1ha = 2.471ac)	Sun's Net Acres (1ha = 2.471ac)
Bowsprit SL21754	50%	39.5%	1,000	500
Bowsprit SL21787 <sup>1</sup>	50%	39.5%	154	77
TOTAL	-	-	1,154	577

(Total acres as at 31 December 2018)

# OIL AND GAS PRODUCTION - ONSHORE USA

There was no oil production for the December 2018 Quarter.

# <u>CORPORATE</u>

Sun held net cash of \$115,626 at the end of the December 2018 Quarter.

On the 28 December Sun announced the closure of the Share Purchase Plan ("SPP") The SPP Offer was in addition to a successful A\$222,000 placement to existing shareholders ("Placement"). The Company received valid applications for 31,750,000 New Shares from Eligible Holders, raising A\$127,000 before costs. The shares were issued on 3 January 2019.

Following shareholder approval at the AGM held on 28 November 2018, Director Loans totalling \$100,000 were converted into shares at \$0.004 per share. The Directors also took up their full entitlement in the SPP.

Sun is in discussion with financiers, potential farminees and JV partner Pinnacle regarding the optimum funding method for the Bowsprit Oil Project appraisal drilling.

#### BY ORDER OF THE BOARD

Jo-Ann Long,

**Company Secretary** 

Telephone: +61 (08) 9321 9886 Email: admin@sunres.com.au

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

# **Forward-looking Statements**

This document may contain certain statements that may be deemed forward-looking statements. Forward-looking statements reflect Sun's views and assumptions with respect to future events as at the date of the Announcement and are subject to a variety of unpredictable risks, uncertainties, and other unknowns that could cause actual events or results to differ materially from those anticipated in the forward-looking statements. Actual and future results and trends could differ materially from those set forth due to various factors that could cause results to differ materially include but are not limited to: industry conditions, including fluctuations in commodity prices; governmental regulation of the oil and gas industry, including environmental regulation; economic conditions in the US and globally; geological technical and drilling results; predicted production and reserves estimates; operational delays or an unanticipated operating event; physical, environmental and political risks; liabilities inherent in oil and gas exploration, development and production operations; fiscal and regulatory developments; stock market volatility; industry competition; and availability of capital at favourable terms. Given these uncertainties, no one should place undue reliance on these forward-looking statements attributable to Sun, or any of its affiliates or persons acting on its behalf. Although every effort has been made to ensure this Announcement sets forth a fair and accurate view, we do not undertake any obligation to update or revise any forward looking statements, whether as a result of new information, future events or otherwise.

