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28 October 2013

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 2013**

Please find the Quarterly Activities Report for the period ended 30 September 2013 for Sun Resources NL (ASX: SUR).

Yours faithfully SUN RESOURCES NL

Dr Govert van Ek Managing Director



# **QUARTERLY ACTIVITIES REPORT**

## FOR THE PERIOD ENDING 30 SEPTEMBER 2013

# **HIGHLIGHTS**

### **Corporate**

- Sun Resources NL ("Sun" or "the Company") (ASX:SUR) announced on 8 August 2013
  the successful capital raising of \$13.5 million via a placement to a wholly-owned subsidiary
  of Hancock Prospecting Pty Ltd, representing an 18.48% interest in Sun Resources' share
  capital upon completion of the placement.
- The placement of 450 million new shares was undertaken at an issue price of A\$0.03 per share pursuant to the Company's placement capacity in accordance with ASX Listing Rule 7.1 and 7.1A.

### **Woodbine Tight Oil Play - Recent Events**

• Recent successes in the Lower Woodbine by Sun's peers include excellent oil flow results after fraccing, with 30 day IPs of at least 609 barrels oil equivalent per day ('Boepd') and up to 835 Boepd, and 90 day oil production per well of up to 50,000 barrels of oil ('Bo')

### Normangee Oil Project (Sun: 50%WI & Operator)

- Subsequent to the end of the Quarter, Sun reached agreement with Amerril Energy LLC ("Amerril") to become the Operator of the Normangee Oil Project. Sun will now operate the first vertical pilot well and lateral in the Normangee Oil Project on behalf of Sun and Amerril.
- The Jack Howe #1H well will target the Lower Woodbine interval that has tested successfully in leases immediately to the west, operated by the USA-based independent EOG and also the El Halcon area in Brazos County, operated by Halcon.

### **Delta Oil Project (Sun: 100%WI)**

- Petro-Hunt LLC ("Petro-Hunt") is continuing with planning and preparation for a well in the Area of Mutual Interest (AMI) it has with Sun, consisting of approximately 7,832 acres in northern Leon County.
- The combined total of land leased now exceeds 3,240 acres, with the ownership split between Petro-Hunt 75%WI and Operator, and Sun 25%WI.
- The first well in this AMI will target the Lower Woodbine (also referred to as the "C" or "Dexter" sands by industry) and is currently planned to be spudded in mid-December 2013.

### **Amerril Oil Project (Sun: 50%WI)**

- Sun and its joint venture partner and Operator, Amerril Energy LLC ("Amerril"), continue to monitor flow back from the Seale #1H and T. Keeling #1H horizontal wells.
- The flow back of the Seale #1H well continues from seven available stages at the heal of the well. The current daily oil flow rate recorded from the restricted flow back period at Seale #1H is 30-35 bopd.

- During the Quarter, Amerril completed a 5-stage fraccing operation across approximately 1,500 feet of the toe of the T. Keeling #1H horizontal well, with a period of flow back to recover fraccing fluids continuing.
- The flow rates at T. Keeling peaked at between 63 104 barrels per day with the oil cut increasing to between 11 and 19%, with the support of the recently installed jet pump, but rates have since declined.
- An additional 5,500 feet of the T. Keeling #1H lateral remains available for fraccing and at the time of this report, operations to improve production rates were continuing, while the multi-stage frac design was being refined further and evaluated.

## Beeler Oil Project (Sun: 13.54-16.67%WI)

- Production continued during the Quarter from the three lateral wells: Ellis #1H, CW Brown #1H and John Beeler #1H.
- Ellis #1H continues to be the best performer with daily production rates varying between 120-140 bopd (gross 100%WI).

# **UNITED STATES OF AMERICA**

### **OIL AND GAS EXPLORATION AND DEVELOPMENT**

During 2013, a number of oil companies, including Halcon, EOG and ZaZa Energy, have delivered successful horizontal wells drilled into the same stratigraphic horizon as Sun's Seale #1H and T.Keeling #1H horizontal wells, being the "Lower Woodbine" or "Woodbine C". Industry participants are using a range of names to describe this same target horizon, such as the "Eagle Ford", "Dexter", "Maness Shale", "Lower Woodbine" or the "Woodbine C". These various names all refer to the same stratigraphic horizon for which Sun uses the term "Lower Woodbine" or the "Woodbine C".

The recent successes in the Lower Woodbine by Sun's peers achieved excellent oil flow results after fraccing, with 30 day IPs of at least 609 barrels oil equivalent per day ('Boepd') and up to 835 Boepd, and 90 day oil production per well of up to 50,000 barrels of oil ('Bo'). Those reported by Halcon Resources Corporation (Halcon), in the Lower Woodbine in Brazos County, Texas (the El Halcon area, south-west along geological strike of Sun's Seale #1H and T. Keeling #1H wells) have resulted in average cumulative production of 40,000 Bo per well over the first 90 days of oil flow. Halcon's reported economic production 'type-curve' shows an estimated gross estimated ultimate recovery ("EUR") per well of 371,000 Boe and Internal Rates of Return ("IRR") exceeding 50% at current oil pricing. Sun believes these recently reported horizontal well results into the Woodbine "C" achieved by other oil companies has significantly de-risked the Lower Woodbine play from a financing and investment perspective (both debt and equity).

Through extensive discussions with frac design consultants and various frac completion contractors focused on exploitation of the Woodbine "C" horizon, a consensus view as to the "recipe" of an optimal frac design for a Lower Woodbine horizontal well is rapidly taking shape. This progression in the optimal frac design is also what occurred in the Eagle Ford Shale in locations such as Karnes, Live Oak and Atascosa Counties in Texas, in previous years. What is abundantly clear is that oil flow results from later horizontal wells are materially superior to earlier wells as more appropriate frac designs are used and superior frac completions occur. Sun has been gathering this knowledge and is now preparing to deploy a newly-refined fraccing design in the next round of horizontal wells that are currently planned.

### Delta Oil Project, Onshore, East Texas (Sun: 25 - 100% WI)

As reported in the June 2013 Quarterly report, Sun executed a binding agreement with Petro-Hunt LLC ("Petro-Hunt") to jointly explore and develop an Area of Mutual Interest (AMI) consisting of approximately 7,832 acres in Northern Leon County, Texas. Sun and Petro-Hunt have each contributed oil and gas leases that now total in excess of 3,240 gross acres with working interests and all costs going forward (including but not limited to exploring, drilling, production and additional lease acquisitions within the AMI) shared by Petro-Hunt (75%) and Sun (25%). The total area of the AMI is 7,832 acres so there is the capacity for the Joint Venture to expand in size by way of additional lease acquisitions. Under the Joint Operating Agreement ("JOA"), the AMI area shall remain in force and effect for a period of three (3) years from the date of the executed JOA.

Petro-Hunt, based in Dallas, Texas, is one of the largest privately held oil companies in the world, and remains active in the onshore and offshore oil and gas sectors. Petro-Hunt is the Operator of the Joint Venture and they continue with planning for the first horizontal well into the Lower Woodbine ("C" or "Dexter Sand") to be drilled in the final Quarter of 2013. Sun retains a further 11,010 net acres elsewhere in the Delta Oil Project that will be the subject of future activity, by way of farm-out, joint venture or direct drilling activity in the coming months.

### Amerril Oil Project, Onshore, East Texas (Sun: 50% WI)

During the Quarter, the Operator, Amerril, continued with flow back operations at Seale #1H after the successful 23-stage frac operation. The flow back operations incorporated only 7 stages of the multi-stage frac near the heel of the well after the shaft of the drill bit drilling out the plugs sheared off and left the drill bit in the hole. The flow rate recorded at the end of the Quarter was approximately 33 bopd. Further attempts to recover the drill bit are being considered by the Operator.

Also during the Quarter, in July 2013, Amerril, conducted a test fraccing operation on the T. Keeling #1H horizontal well. The fraccing operation consisted of an initial 5 stages across the first 1,500 feet of the 'toe' of the lateral section of the well. A period of flow back to recover fraccing fluids is continuing, with maximum rates achieved being approximately 6-20 bopd recorded from a frac fluid recovery flow of between 11-19% oil cut. The results of these first 5 stages are now being analysed to further refine the frac design, prior to returning to the well to complete the fraccing program across the remaining 5,500 feet of the well lateral.

#### Normangee Oil Project, Onshore, East Texas (Sun: 50% WI Operator)

Sun and its partner Amerril, continued with planning for the first pilot well and lateral in the Normangee Oil Project, a 3,952 gross acre package of oil and gas leases located on the Leon County-Madison County border, Texas, USA. Sun has a 50% working interest in the lease tracts and the balance of the working interest (50% WI) in the Normangee Oil Project is held by Amerril. The well is likely to be designated Jack Howe #1H and the operations will involve a vertical pilot hole through the Woodbine and deeper targets, followed by a lateral multi-stage frac well - most likely into the Lower Woodbine.

### Beeler Oil Project, Onshore, East Texas (Sun: 13.54–16.67% WI)

During the Quarter, the Operator, Amerril, continued with production activities across all three lateral Woodbine wells contributed to the quarterly production figures. Almost 14,000 barrels of oil (gross 100%WI) were produced during the Quarter. Ellis #1H continues to produce at rates between 110-140 bopd, six months after commencing production.

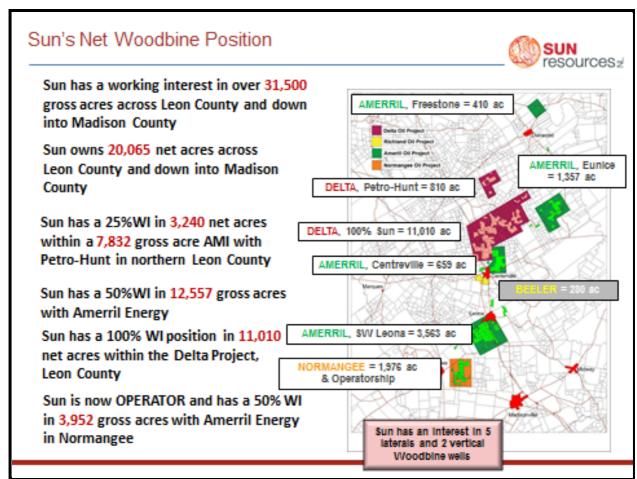


FIGURE 1: SUMMMARY MAP OF SUN'S WOODBINE PROJECT AREAS

#### OIL AND GAS PRODUCTION

Table 1 below summarises Sun's actual net working interest oil production for the September 2013 Quarter and compares it with the previous Quarter. Both gas and minor oil production derived from the Flour Bluff gas plant in Corpus Christie in South Texas ceased in early July 2013 due to the decision by Sun to exit that unprofitable field. Production for the Quarter is therefore confined to only oil production now coming from flow back phases of the Woodbine laterals in both the Beeler and Amerril Oil Projects, in Leon County, East Texas. USA oil prices improved over the September Quarter average around US\$100 per barrel for West Texas Intermediate (WTI).

PRODUCTION (Sun WI% share)	September 2013 Quarter	June 2013 Quarter
Gas (mmscfg)	0	5.2
Oil (bo)	3,106	2,670

Table 1: Quarterly Production (units: mmscfg - million cubic feet gas; bo - barrels of oil)

Margarita and Redback Projects, Onshore, South Texas (Sun: 37.5% WI)

Sun continues with its efforts to divest these projects.

# **CORPORATE**

Sun Resources announced on 8 August, 2013 the successful capital raising of \$13.5 million via a placement to a wholly-owned subsidiary of Hancock Prospecting Pty Ltd, representing an 18.48% interest in Sun Resources' share capital upon completion of the placement. The placement of 450 million new shares at an issue price of A\$0.03 per share was completed under the Company's placement capacity in accordance with ASX Listing Rule 7.1 and 7.1A.

During the Quarter, a number of changes were made to the Board of Directors of Sun to increase the diversity of skills available to the Board and to help drive the next stage of projected growth of the Company.

The Honorable Alexander Downer, AC and Professor Ian Plimer both joined the Board as Non-Executive Directors. Additionally, it was agreed that Professor Plimer will assume the Chairmanship of the Board of Sun at the AGM on 7 November 2013, and Sun's current Chairman, Dr Wolf Martinick will remain as a Non-Executive Director.

Mr Mathew Battrick, Sun's Executive Director, Technical retired as a Director, and remains with the Company as the General Manager – Technical, to continue leading the Company's technical efforts.

Sun held cash of A\$15.05 million at the end of the September 2013 Quarter.

#### BY ORDER OF THE BOARD

Dr Govert van Ek
Managing Director

This report is lodged on the Company's website, <a href="https://www.sunres.com.au">www.sunres.com.au</a>.

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 General Manager, Technical of Sun Resources, Matthew Battrick, BSc (App. Geol), MPESA, MPESGB, MAAPG, GAICD who has had more than 30 years' experience in the practice of geology generally and more than 30 years' experience in petroleum geology.