



## Sirius Resources NL

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### Projects:

**Fraser Range** nickel-copper, gold

**Polar Bear** gold, nickel

## 2015 NICKEL EXPLORATION PROGRAM KICKS OFF WITH DRILLING AT CRUX AND POLAR BEAR

### Key points

- Extensive 2015 drilling program commenced to follow up a variety of targets at Fraser Range and Polar Bear
- Diamond drilling starting at Crux nickel prospect to follow up EM and geochemical anomalies in Nova-style intrusion
- To be followed by diamond drilling at Centauri nickel prospect
- Drilling of new nickel anomalies defined in late 2014 aircore program at Polar Bear
- Systematic drilling of untested EM conductors at Polar Bear and Fraser Range
- EM surveys on three new soil anomalies at Fraser Range

Sirius Resources NL (ASX:SIR) (“Sirius” or the “Company”) advises that it has started a major expanded nickel exploration program which will see numerous targets drilled on its 100% owned Polar Bear and Fraser Range ground and on its 70% owned Fraser Range Joint Venture. Sirius’ successful exploration team will continue an aggressive exploration program whilst the project team gears up for the start of development and construction at Nova.

A diamond drill rig has been mobilised to site to start the first diamond drillhole to test each of the Crux and Centauri nickel prospects located at the southern end of the Fraser Range Joint Venture. Crux is an intrusion of similar size and composition to Nova. Previous shallow aircore and RC drilling by Sirius identified discrete zones of magmatic nickel copper sulphide mineralisation similar to that found in the rocks peripheral to the Nova ore body but was unable to penetrate to target depth due to high water flows in porous ultramafic rock similar to that seen above the Nova mineralisation (refer to previous ASX announcements for details). A number of diamond drillholes have been planned to reach the untested basal contact over the coming weeks.

# ASX Announcement

Friday 23<sup>rd</sup> January 2015



Additional diamond holes have been planned to test the Centauri nickel prospect once the initial Crux holes have been completed. Centauri is similar to Crux and was also shown to host magmatic nickel copper sulphides in previous shallow drilling (refer to previous ASX announcements for details).

Drilling is also planned to follow up nickel-copper anomalies identified in the broad spaced reconnaissance aircore drilling program undertaken on the salt lake at Polar Bear in late 2014.

RC drilling is also planned at the Taipan North prospect at Polar Bear where drilling undertaken late in 2014 intersected further disseminated nickel mineralisation along the Taipan – Halls Knoll trend.

Systematic drilling of EM conductors at Polar Bear and Fraser Range will continue throughout the year.

Ground moving loop EM surveys have also commenced on three new nickel-copper soil anomalies identified in late 2014 on the Fraser Range Joint Venture.

Full details of the planned drilling program and targets will be provided in the December 2014 Quarterly Activities report to be released later this month.

## Mark Bennett, Managing Director and CEO

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## Competent Persons statement

The information in this report that relates to Exploration Results is based on information compiled by John Bartlett and Andrew Thompson who are employees of the company and fairly represents this information. Mr Bartlett and Mr Thompson are members of the Australasian Institute of Mining and Metallurgy. Mr Bartlett and Mr Thompson have sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bartlett consent to the inclusion in this report of the matters based on information in the form and context in which it appears. Exploration results are based on standard industry practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures. Reverse circulation (RC), aircore (AC) and rotary air blast (RAB) drilling samples are collected as composite samples of 4 or 2 metres and as 1 metre splits (stated in results). Mineralised intersections derived from composite samples are subsequently re-split to 1 metre samples to better define grade distribution. Core samples are taken as half NQ core or quarter HQ core and sampled to geological boundaries where appropriate. The quality of RC drilling samples is optimised by the use of riffle and/or cone splitters, dust collectors, logging of various criteria designed to record sample size, recovery and contamination, and use of field duplicates to measure sample representivity. For soil samples, PGM and gold assays are based on an aqua regia digest with Inductively Coupled Plasma (ICP) finish and base metal assays may be based on aqua regia or four acid digest with inductively coupled plasma optical emission spectrometry (ICPOES) or atomic absorption spectrometry (AAS) finish. In the case of reconnaissance RAB, AC, RC or rock chip samples, PGM and gold assays are based on lead or nickel sulphide collection fire assay digests with an ICP finish, base metal assays are based on a four acid digest and inductively coupled plasma optical emission spectrometry (ICPOES) and atomic absorption spectrometry (AAS) finish, and where appropriate, oxide metal elements such as Fe, Ti and Cr are based on a lithium borate fusion digest and X-ray fluorescence (XRF) finish. In the case of strongly mineralised samples, base metal assays are based on a special high precision four acid digest (a four acid digest using a larger volume of material) and an AAS finish using a dedicated calibration considered more accurate for higher concentrations. Sample preparation and analysis is undertaken at Minanalytical, Genalysis Intertek and Ultratrace laboratories in Perth, Western Australia. The quality of analytical results is monitored by the use of internal laboratory procedures and standards together with certified standards, duplicates and blanks and statistical analysis where appropriate to ensure that results are representative and within acceptable ranges of accuracy and precision. Where quoted, nickel-copper intersections are based on a minimum threshold grade of 0.5% Ni and/or Cu, and gold intersections are based on a minimum gold threshold grade of 0.1g/t Au unless otherwise stated. Intersections are length and density weighted where appropriate as per standard industry practice. All sample and drill hole co-ordinates are based on the GDA/MGA grid and datum unless otherwise stated. Exploration results obtained by other companies and quoted by Sirius have not necessarily been obtained using the same methods or subjected to the same QAQC protocols. These results may not have been independently verified because original samples and/or data may no longer be available.