

ASX ANNOUNCEMENT

28 FEBRUARY 2013

SIRIUS RESOURCES NL

ASX: SIR

ABN: 46 009 150 083

Street address:

Unit 5, 5 Mumford Place, Balcatta 6021, Western Australia 6021

Postal address:

PO Box 1011, Balcatta, Western Australia 6914

Tel: +61 8 9240 8914

Fax: +61 8 9240 8915

Fmail:

admin@siriusresources.com.au

Web:

www.siriusresources.com.au

Projects:

Fraser Range nickel-copper, gold

Polar Bear gold, nickel

Youanmi nickel, copper, PGM's



NEW NICKEL DISCOVERY EAST OF NOVA

First drill hole into gravity anomaly intersects broad zone of mineralisation

Sirius Resources NL (ASX:SIR) ("Sirius" or the "Company") advises that it has discovered a thick new zone of sulphide mineralisation located approximately 200 metres east of the Nova deposit, which it has today named "Bollinger".

Hole SFRD0167 has intersected **125 metres of mineralisation** so far and is still in mineralisation at the time of writing:

- 80 metres of mainly disseminated sulphide, followed by;
- 28 metres of mainly stringer sulphide, followed by;
- 5 metres of mainly massive sulphide, followed by;
- 12 metres of matrix, net and breccia sulphide (to the end of the hole)

Although laboratory assays will not be available for some time, the mineralisation is visibly similar to that at Nova, with coarse grained pentlandite (nickel sulphide) and chalcopyrite (copper sulphide) as shown in Figures 1 to 3.

This hole is located a further 200 metres east of the holes announced on 25th February (that intersected a sulphide breccia zone thought to be a potential feeder zone), and 200 metres southeast of the centre of conductor 5. It is open in all directions (*see Figures 4 and 5*).

It is the first hole drilled to test a large gravity anomaly defined in the recent gravity survey (see Figure 6) — the centre of which is situated in completely unexplored territory in the centre of the Eye to the east of the current hole.

As foreshadowed in the announcement of 25th February, Sirius has now completed the infill resource drilling at Nova and resumed exploration. The resumption of exploration is having immediate success, and three drill rigs will commence following this up immediately and also continue to explore the large gravity anomaly located in the centre of the Eye.



Sirius' Managing Director Mark Bennett said "although it is early days and we do not yet know the size of this new zone, the fact that this is the thickest intersection yet encountered and that it is in an unexplored area on the edge of a large gravity anomaly within the centre of the Eye is very encouraging. This could add an entirely new dimension to the Nova project".

Mark Bennett, Managing Director and CEO

Competent Persons statement

The information in this report that relates to Exploration Results is based on information compiled by Mark Bennett and Andy Thompson who are employees of the company. Dr Bennett is a member of the Australasian Institute of Mining and Metallurgy, a fellow of the Australian Institute of Geologists and a fellow of the Geological Society of London. Mr Thompson is a member of the Australasian Institute of Mining and Metallurgy. Dr Bennett 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 2004 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Bennett and Mr Thompson 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 coordinates 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. The information in this report that relates to Mineral Resources is based on information compiled by Andrew Thompson who is an employee of the company. Mr Thompson is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2004 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Thompson consents to the inclusion in this report of the matters based on information in the form and context in which it appears. Mineral Resources, if stated, have been estimated using standard accepted industry practices, as described in each instance. Top cuts have been applied to the composites based on statistical analysis and consideration of the nature and style of mineralization in all cases. Where quoted, Mineral Resource tonnes and grade, and contained metal, are rounded to appropriate levels of precision, which may cause minor apparent computational errors. Mineral Resources are classified on the basis of drill hole spacing, geological continuity and predictability, geostatistical analysis of grade variability, sampling analytical spatial and density QAQC criteria, demonstrated amenability of mineralization style to proposed processing methods, and assessment of economic criteria.





Figure 1. Photo of strong stringer sulphides in hole SFRD0167, immediately above the massive sulphides shown in Figure 2.



Figure 2. Photo of massive sulphides in hole SFRD0167, showing coarse grained pentlandite rims around pyrrhotite crystals.



Figure 3. Photo of matrix and net textured sulphides in hole SFRD0167.



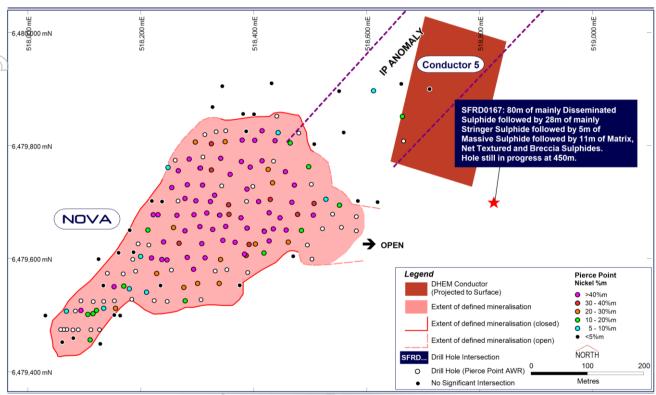


Figure 4. Plan projection showing Nova, the eastern breccia zone and the location of hole SFRD0167.

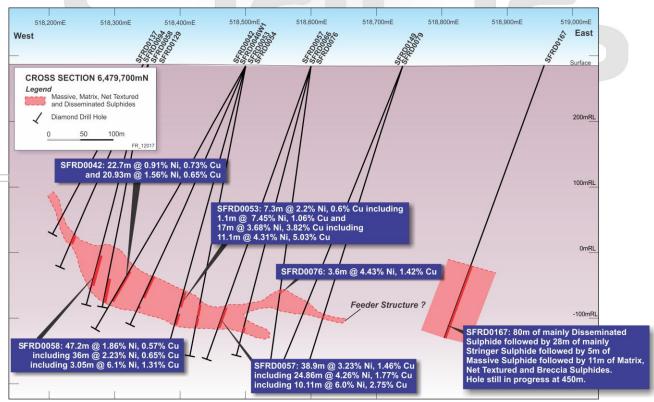


Figure 5. Cross section on line 700N showing Nova (left hand side), eastern breccia zone (centre) and the location of SFRD0167 (right hand side).



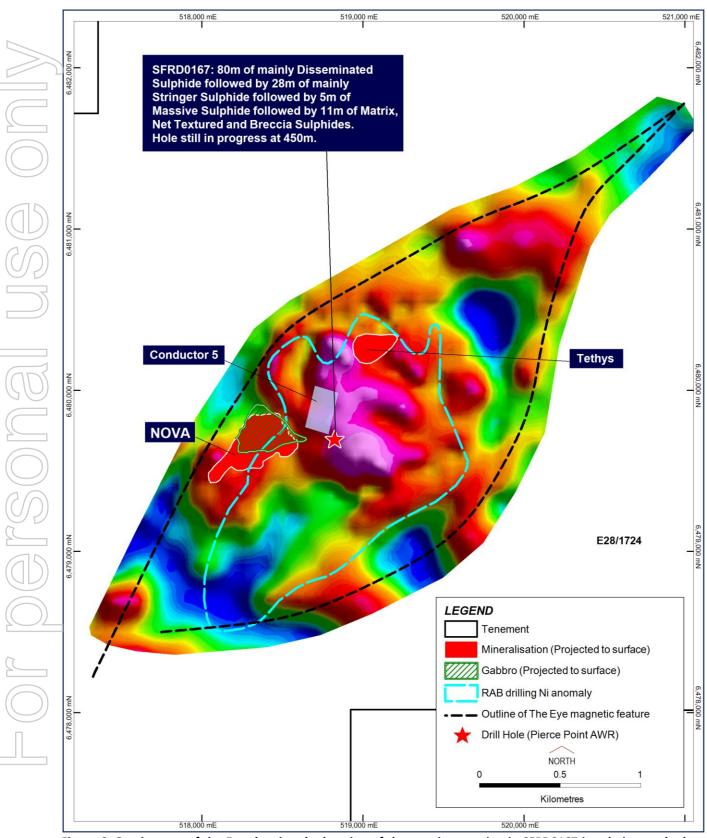


Figure 6. Gravity map of the Eye showing the location of the new intersection in SFRD0167 in relation to the large gravity anomaly in the centre of the Eye. The Nova deposit (red) and its host gabbro (green cross hache) also show up as a gravity anomaly on the western rim of the Eye.