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Sirius Resources NL

ASX code: SIR

ABN: 46 009 150 083

Head office:

253 Balcatta Road Balcatta, Western Australia 6021

Postal address:

PO Box 1011 Balcatta, Western Australia 6914

Tel: +61 8 6241 4200

Fax: +61 8 6241 4299

Email:

admin@siriusresources.com.au

Web:

www.siriusresources.com.au

Projects:

Fraser Range nickel-copper, gold

Polar Bear gold, nickel

June 2015 Quarterly

Highlights – during and subsequent to quarter's end

- Proposed merger via scheme of arrangement with Independence Group
- Proposed demerger of selected exploration assets via separate scheme of arrangement into a new entity, S2 Resources Ltd
- Nova decline development significantly ahead of schedule
- Mine optimisation indicates further improvements to Nova's economics
- Tailings dam complete and ready for near mine dewatering program to start
- Village 80% complete and on track for completion by end July
- Aerodrome nearing completion and on schedule for first aircraft in late July
- Foundations of 38km access road to Eyre Highway approximately 50% complete
- EPC contract for processing plant awarded to GR Engineering Services
- Three year copper concentrate offtake agreement signed with Trafigura
- First debt drawdown on 26th June following satisfaction of conditions precedent
- Exploration continuing at Polar Bear and Fraser Range
- Exploration commenced in Sweden and Finland

The June 2015 quarter has been a momentous time in the short history of the company. It has seen substantial progress with the development of Nova with all activities on or ahead of schedule, optimisation of the Nova DFS mine plan and economics, the award of a major EPC contract for construction of the processing plant, completion of a three year offtake agreement for Nova's copper sulphide concentrate, satisfaction of conditions precedent and first drawdown of the project finance debt facility. Sirius also announced a proposed merger via scheme of arrangement with Independence Group at a 47% premium to the Company's two month day VWAP, as well as a proposed demerger of the Company's non-Fraser Range exploration assets into a new company, S2 Resources Ltd ("S2").

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CORPORATE

Finance

During the quarter, expenditure totalled approximately A\$53.6 million, which comprised development and construction of the Nova nickel mine (A\$41.4 million), exploration (A\$7.3 million) and corporate costs (A\$1.7 million).

Following the satisfaction of all conditions precedent, the Company completed the first draw down under the Nova project debt facility of A\$57 million.

Interest income of A\$1.6 million was received. Project debt borrowing costs of A\$4.7 million were paid during the quarter, which included payment of the final instalment of the facility establishment fee.

At the end of the quarter, cash at bank totalled A\$213.6 million.

Planned expenditure for the coming quarter is anticipated to total approximately A\$103.2 million.

This includes A\$96.1 million for mine development and construction work at the Nova project, exploration expenditure of A\$3.2 million and corporate costs of A\$3.9 million.

Capital structure

During the quarter, there were no changes in the number of options or ordinary shares on issue.

As of the end of the quarter, there were 412,201,575 fully paid ordinary shares on issue of which all are now quoted due to 70, 563,306 shares being released from escrow on 30th May 2015.

As of the end of the quarter, outstanding unlisted options totalled 17.75 million, comprising 1.9 million 20 cent options, 1.95 million 60 cent options, 0.3 million \$2.80 options, 8.75 million \$3.17 options, 1.35 million \$3.50 options, 0.5 million \$3.00 options, 1 million \$3.34 options and 2 million \$3.51 options.

Offtake

During the quarter Sirius entered into a contract with commodity trading group Trafigura to sell all of the copper sulphide concentrate from Nova for the first three years of production. The commercial terms of the offtake agreement are confidential, but reflect the anticipated high quality of the Nova copper concentrate, which has very low levels of deleterious elements and is expected to average 29% copper.

Negotiations for the as yet unallocated half of Nova's forecast nickel sulphide concentrate have progressed further and are nearing conclusion. This will be concluded in the current quarter.

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Proposed merger with Independence Group and demerger of S2 Resources

On 25 May 2015, Independence Group ("IGO") and Sirius announced the execution of a binding Scheme Implementation Deed (SID) under which IGO agreed to acquire all the issued capital of Sirius by way of an Acquisition Scheme of Arrangement (the Acquisition Scheme).

Under the terms of the proposed Acquisition Scheme, Sirius shareholders will receive 0.66 IGO shares and 52 cents cash, for every Sirius share they hold. Further information in relation to the Acquisition Scheme will be set out in the Acquisition Scheme booklet, currently expected to be released around late-July. The transaction will create a leading diversified Australian mining company with a strong portfolio of high margin / long life mining assets, across a range of base and precious metals. The Boards of both IGO and Sirius believe that the combination of IGO's strong cash flow and balance sheet and Sirius' class leading Nova-Bollinger project is compelling for shareholders of both companies.

In addition, Sirius will undertake a demerger of its Polar Bear and Scandinavian exploration assets, which includes the recently discovered Baloo gold deposit, (Demerger) via a Demerger Scheme of Arrangement (Demerger Scheme), allowing Sirius shareholders to retain full exposure to the value and upside of these assets in a new listed vehicle. The vehicle will be called S2 Resources Ltd and will be led by Sirius' founding Managing Director, Mark Bennett.

Sirius and S2 have also entered into a Demerger Implementation Deed (DID), under which Sirius will demerge S2 via a capital reduction. The capital reduction to effect the Demerger will require Sirius shareholder approval, and certain other items necessary to prepare S2 for its eventual ASX listing may also be put to Sirius shareholders for approval. More information in relation to the Demerger Scheme, the capital reduction and any other resolutions in relation to S2 will be set out in the Demerger Scheme booklet, currently expected to be released around late-July.

The Board of Sirius has unanimously recommended that all Sirius shareholders vote in favour of the Acquisition scheme, the Demerger Scheme and the Capital Reduction resolution (Transaction Resolutions) in the absence of a superior proposal. Major shareholder, Mr Mark Creasy has advised Sirius that entities he controls intend to vote in favour of the Transaction Resolutions and all other resolutions put to Sirius shareholders at the meetings to implement the Demerger, in the absence of a superior proposal.

Details on S2

S2 will own the highly prospective Polar Bear gold assets located in the Norseman region of Western Australia as well as a portfolio of gold and base metal exploration assets located in Sweden and Finland. S2 will apply for listing on ASX and is expected to have ~\$22 million in cash on listing, net of listing costs. Key details of S2 are summarised below:

 A new ASX listed exploration company led by Dr Mark Bennett – Sirius' multi-award winning explorer responsible for the discovery of Nova itself, and other mines including the Thunderbox gold mine and the Waterloo nickel mine, who has led Sirius' growth and financing from inception as its Managing Director;

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- Owns 100% of Polar Bear and associated projects including the recently discovered Baloo gold deposit;
- Owns a 67% direct interest in Norse Exploration and private Finnish company Sakumpu
 Exploration Oy now one of the largest mineral title holders in highly prospective
 districts of Finland and Sweden, and led by several international award-winning explorers
 responsible for the discovery of several world class nickel, copper, zinc and gold mines;
- Approximately A\$22 million cash on listing; and
- Ready-made team built around the original Sirius exploration team, and Sirius directors Anna Neuling and Jeff Dowling.

NOVA NICKEL MINE

Mining and construction of Nova is progressing on or ahead of schedule in every area. The decline is advancing at a rate well above the estimates used for the definitive feasibility study (DFS), confirming the good mining conditions expected from geotechnical studies. A preliminary mine optimisation study has also been completed which indicates significant improvements in Nova's economics are possible. Now that the decline advance rate has confirmed that higher development rates can be achieved, this preliminary optimisation study will form the basis of a more comprehensive study to finesse the mine plan ahead of making first contact with ore early in 2016.

Major contracts, including the ECP contract for the processing plant, were awarded during the quarter, and several additional contracts were awarded subsequent to the quarter's end.

Mine development and optimisation

Mine development continued at a rapid pace during the quarter. The Box Cut for the decline was completed in early May and by the end of the quarter the decline had advanced 296 metres laterally (42 metres vertically) from the portal. As of Tuesday 14th July 2015, the decline had advanced approximately 475 metres laterally from the portal to a vertical depth of 90 metres below surface. Overall development including stockpile sumps and cuddies has now exceeded 570 metres, and the overall advance rate is averaging more than 280 metres per month to date, with current rates being greater than 300 metres per month equivalent. This unusually high rate of advance reflects the extremely good ground conditions encountered so far, and is significantly quicker than the estimates used for the DFS.

A mine optimisation study was undertaken during the quarter with the aim of scoping potential improvements to the original DFS mine plan to further improve the mine's forecast economics. This optimisation was predicated on good development rates being achievable. The actual development rate achieved to date, which is approximately 30% better than that assumed in the DFS, has provided the Company with confidence that this can be achieved and, subject to further finessing, is now the preferred development scenario for Nova.

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The optimisation involves:

- accelerated development (at a rate now proven to be feasible from the performance achieved to date in the decline);
- rescheduled mining sequence to prioritise development of higher grade stopes earlier in the mining schedule; and
- minor modifications to the plant design to remove bottlenecks created by the processing of higher grade material, including a larger concentrate filter press to ensure concentrate production is not limited by these measures as a result the optimised ore grade changes.

This optimisation work indicates that the Nova production ramp up may be improved by approximately twelve months when compared to that planned in the DFS. The conservative design used in the DFS indicated the full name plate 1.5 million tonnes per annum production rate would be achieved in the 4th quarter of 2018 as a result of mine constraints, whereas the optimisation study work has indicated that the full production rate of 1.5 million tonnes per annum could now be achieved by the 4th quarter of 2017.

It is anticipated that this optimisation, if implemented, could also significantly reduce working capital requirements and increase the net present value (NPV) of Nova.

Construction

At the end of June 2015 the Nova aerodrome was 70% complete. It is currently nearing completion and asphalt sealing of the runway is scheduled for completion by the end of July, weather permitting.

Work on the site's main access road is progressing satisfactorily with the road alignment now cleared over the full 38 kilometre length from the mine site to the Eyre highway and road foundations completed over approximately half this distance.

The tailings dam is scheduled for completion by the end of July, with earthworks completed during the quarter and plastic lining completed in early July. The tailings dam will initially act as a reservoir to contain groundwater from the mine dewatering program, which is anticipated to commence before the end of July.

Village construction is 80% complete and ahead of schedule. 270 rooms, together with the dining room, tavern, gym and administration area are now fully functional. An additional 200 rooms have been installed and the village will be complete by the end of July. A 10 megabyte communications and IT services link has been established with full Telstra 3G mobile phone service now operational.

Contracts

The contract for the engineering procurement and construction (EPC) of the processing plant and paste fill plant was awarded to GR Engineering Services during the quarter. Work on detailed engineering has commenced and it is expected on site works will commence in September.

Tenders for Power generation at Nova are currently being evaluated and it is expected this contract will be awarded in the near future.

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The contract to install the overhead high voltage power lines has been awarded to Future Power and work will commence onsite in July.

Bulk earthworks and non-process infrastructure contracts will be finalised in July.

EXPLORATION

Exploration continued during the June quarter with drilling at the Baloo gold deposit, the Yogi South and Nanook gold prospects, and the Halls Knoll and Throat nickel prospects at Polar Bear, together with drilling at the Crux, Centauri, Talbot East and Canopus nickel prospects, as well as geophysics on regional targets in the Fraser Range (see Figure 1).

Polar Bear (100% Sirius)

Sirius owns 100% of the Polar Bear project. The project covers the southern continuation of the ultramafic stratigraphy which hosts the Kambalda and Widgiemooltha nickel deposits. It is largely concealed beneath the salt lake sediments and sand dunes of Lake Cowan. It also covers approximately 130 square kilometres of underexplored ground located between the world class gold producing centres of St Ives and Norseman – both ~10 million ounce camps – and southeast of the 2 million ounce Higginsville gold operations of Metals X Limited.

Baloo gold prospect

At Baloo, diamond drilling continued during the quarter, focussing on the southern plunge extension of mineralisation in the primary (fresh rock) zone (see Figure 2, Table 1). Key intercepts, which are considered to be close to true width, are as follows:

- 2.5m @ 10.85 g/t Au from 157.4 metres in SPBD0122
- 28.3m @ 0.86 g/t Au from 214.1 metres, including 1.25m @ 9.52 g/t Au from 216.6 metres in SPBD0117
- 0.6m @ 13.95 g/t Au from 188.6 metres and 0.3m @ 62.5 g/t from 252.6 metres in SPBD0120

The gold mineralisation in the primary zone is associated with narrow but high grade quartz veins not unlike those seen to the south at Norseman, and the two highest grade quartz veins intersected to date are from the two southernmost holes drilled down plunge at Baloo.

In addition to the drilling of the primary zone, diamond hole SPBD0107, drilled in the oxide zone at the north end of the deposit, intersected 36.5m @ 4.36 g/t Au from 7.5 metres, including 15.3m @ 8.48 g/t Au from 14.1 metres and 2.5m @ 10g/t Au from 56.5 metres (see Figure 3). The results of this drill hole confirm the results received in earlier aircore drilling.

Fifteen individual samples that comprised the previously reported high-grade gold intercept of 9.8m @ 4.97 g/t Au from 111.5m in drillhole SPBD0101 were submitted for cyanide leach testwork in order to assess the metallurgical recovery characteristics of the gold mineralisation at Baloo. The cyanide extractable gold

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recovery in these samples averages 89.3%. This is an encouraging result as it indicates the gold is free milling and not refractory, and therefore amenable to conventional processing.

A reverse circulation (RC) drill rig will commence drilling at Baloo during the September quarter with the aim of replicating the original aircore drilling to provide the basis for a JORC resource estimate of the oxide zone.

Yogi South gold prospect

At Yogi South, a total of 17 RC drill holes were completed along four lines over a strike of 600m to test for gold mineralisation within fresh bedrock to a vertical depth of about 100m (see Figure 4, Table 1).

Previous exploration has outlined a zone of supergene and bedrock gold anomalism extending over a strike length of more than 850 metres within up to three probable trends along the contacts within a sequence of ultramafic, mafic and sedimentary rocks (see ASX announcement dated 9 February 2011).

Assay results from 4m composite samples from 16 of the 17 RC holes demonstrate widespread elevated gold associated with quartz-arsenopyrite veining and alteration. Better results include:

- 16m @ 2.14g/t Au from 108m in SPBC0133
- 24m @ 0.73g/t Au from 40m in SPBC0134
- 4m @ 1.77 g/t Au from 152m in SPBC0140

Nanook gold prospect

During the quarter, 12 RC drillholes for 1,147m were completed along two lines over a strike of 500m at Nanook where previous aircore drilling by Sirius has outlined several zones of hydrothermal alteration and associated bedrock gold anomalism over a strike length of more than 1,500 metres (see ASX announcement dated 5 November 2013, Table 1). Assay results for these samples are currently pending.

Nickel Exploration at Halls Knoll and Throat

Two diamond holes were drilled at the Throat prospect to test a series of MLEM conductors immediately to the south of Taipan (see Figure 4, Table 1). Both holes intersected prospective ultramafic stratigraphy, however no mineralisation or conductive rocks that may explain the conductor were intersected. Both holes have been cased and DHEM is planned for the coming quarter.

At Halls Knoll, five diamond and nine RC holes were drilled to follow-up earlier drilling which intersected disseminated nickel sulphides beneath the salt lake surface, with individual metre values up to 2.5% nickel, 1.5% copper and 1-2g/t palladium and platinum.

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All drill holes intersected trace to disseminated magmatic sulphides along with minor stringers of massive sulphides in ultramafic rock at the target horizon. Mineralisation has now been intersected over a strike length of 500 metres and remains open to the north and south.

Results have been received for three diamond holes at Hall's Knoll - key intercepts are listed below:

- 23.2m @ 0.4% nickel, 0.02% copper, 0.06 g/t palladium and 0.04 g/t platinum from 131.8 metres in SPBD0123
- 1.6m @ 0.5% nickel, 0.04% copper, 0.11 g/t palladium and 0.06 g/t platinum from 141.2 metres, and 6.4m @ 0.37 g/t nickel, 0.03% copper, 0.05 g/t palladium and 0.05 g/t platinum from 150.4 meters in SPBD0119
- 3.9m @ 0.31% nickel, 0.05% copper, 0.16 g/t palladium and 0.07 g/t platinum from 87.1 metres in SPBD0118

Follow-up work during the coming quarter includes DHEM of these drill holes as well as high powered MLEM along the Halls Knoll - Taipan trend to identify conductors that may represent massive sulphide accumulations.

Fraser Range Joint Venture (70% Sirius)

Sirius has a 70% interest in the Fraser Range Joint Venture, with Mark Creasy retaining a 30% free carried interest to the completion of a bankable feasibility study. The project covers over 100 kilometres strike length of the Albany-Fraser Belt – which contains the nickel prospective Fraser Complex and also the Tropicana trend. The package is considered highly prospective for Tropicana-style gold mineralisation as well as for the now demonstrated Nova-style magmatic nickel-copper-cobalt deposit style.

Nickel Exploration at Crux and Centauri

A total of 22 reconnaissance diamond holes has now been drilled to test a small area of the Crux intrusion along with three diamond holes into the Centauri target (see Figure 5, Table 1).

Results received during the quarter included the best results to date. Key intercepts include:

- 0.65m @ 1.04% nickel, 0.42% copper and 0.03% cobalt from 556.2 metres, and 15m @ 0.27% nickel, 0.06% copper and 0.02% cobalt from 657 metres in SFRD0523 (*Crux*), and
- 3.7m @ 0.37% nickel, 0.08% copper and 0.06% cobalt from 279.7 metres, and 2m @ 0.27% nickel, 0.06% copper and 0.02% cobalt from 286 metres in SFRD0606 (*Centauri*)

The holes drilled to date together with the detection distance of associated DHEM collectively cover less than 5% of the target area. Drilling is continuing and down hole EM (DHEM) has been completed on all holes drilled to date with no conductors identified as yet.

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EM surveys on regional targets

A MLEM survey undertaken on two high priority nickel-copper soil anomalies (see ASX announcement dated 23rd January 2015) identified an EM conductor associated with an interpreted mafic intrusion.

A MLEM survey is underway at North Bore over an interpreted mafic intrusive complex where previous RAB drilling intersected rocks broadly similar to those at Nova (see ASX announcement dated 2nd December 2014).

Fraser Range (100% Sirius)

Sirius has a 100% interest in various tenements in the Fraser Range region, including the mining lease containing the Nova-Bollinger deposits. These tenements also include the Talbot and Southern Hills soil anomalies, the Canopus target and the Buningonia intrusion. All of these are located in the Fraser Complex, considered to be highly prospective for mafic-ultramafic intrusion hosted magmatic nickel-copper-platinum group metal (PGM) and chromite deposits.

Nickel Exploration at Talbot East and Canopus

At Talbot East, 3 widely spaced reverse circulation (RC) holes were drilled to test a surface nickel-copper-chromium anomaly, associated with a small (500 metre x 200 metre) aeromagnetic feature, approximately one kilometre east of the historical Talbot prospect (see Figure 6 and Table 1). Drilling identified a subsurface zone of nickel, copper and cobalt enrichment within weathered mafic and ultramafic rocks, with hole SFRC0617 intersecting 24 metres @ 0.31% nickel and 0.03% copper from 8 metres.

Drilling also intersected zones of trace magmatic nickel sulphide associated with fresh mafic and ultramafic rocks, including 3 metres @ 0.38% nickel and 0.15% copper from 151 metres in SFRC0614. These results, whilst minor, confirm the presence of magmatic nickel-copper mineralisation within prospective rocks at similar levels to the early drilling at Nova and Crux-Centauri.

DHEM has been undertaken on all three holes, with no conductors identified.

At Canopus, two widely spaced RC holes were drilled to test a strong magnetic anomaly. Drilling intersected highly magnetic mafic rocks, with no evidence of any magmatic sulphide mineralisation, which explains the magnetic anomaly.

Nova Mining Lease

Ongoing systematic testing of the thirteen untested and two unresolved DPEM conductors will continue once the initial drilling of the above targets has been completed.

Finland and Sweden (67% Sirius)

Sirius has an effective 67% interest in Sakumpu Exploration Oy, a private Finnish company that holds mineral title over large areas of prospective ground in the Central Lapland Greenstone Belt of Finland and the Skelleftea Belt of Sweden. These regions contain significant shear zone hosted gold deposits, magmatic copper-nickel-PGM deposits and volcanogenic massive zinc-copper-gold-silver sulphide deposits.

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Finland

Initial exploration in the Central Lapland Greenstone Belt of Finland has commenced with:

- Establishment of field office in Sodankyla
- Acquisition of 5,400 line kilometre airborne magnetic and EM survey
- Structural interpretation
- Planning of 600 line kilometre VTEM survey

Sweden

Initial exploration in the Skelleftea Belt of Sweden has commenced with:

- Establishment of field office in Mala
- Structural interpretation
- Planning of 1,080 line kilometre VTEM survey

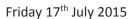
Mark Bennett, Managing Director and CEO

For further information, please contact:

Anna Neuling
Director – Corporate & Commercial
+61 8 6241 4200

Media:

Warrick Hazeldine / Michael Vaughan Cannings Purple +61 417 944 616 / +61 422 602 720







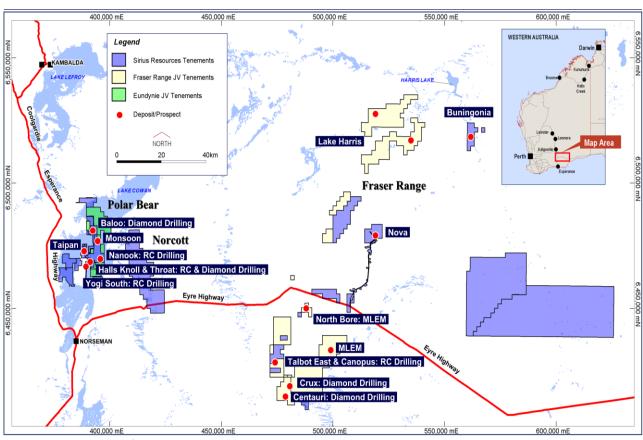


Figure 1. Summary of work programs during quarter

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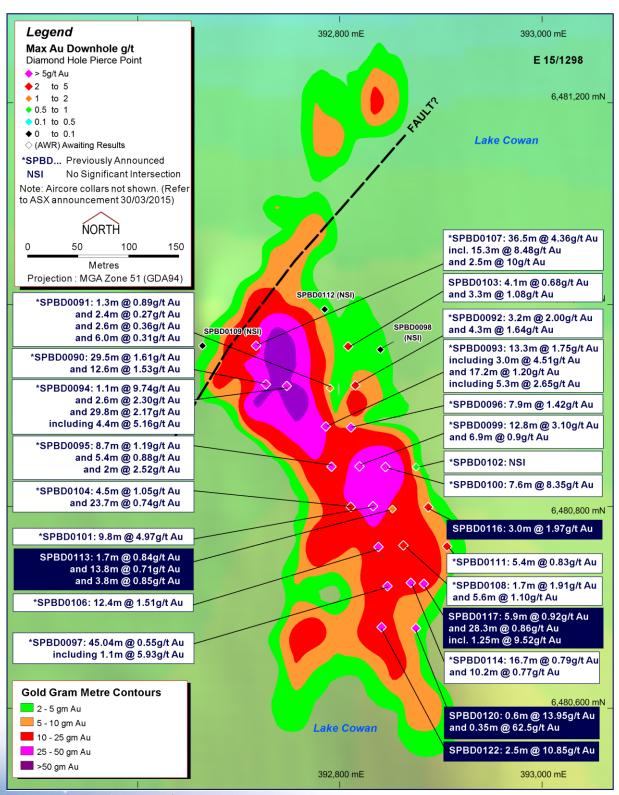


Figure 2. Plan Projection of Baloo







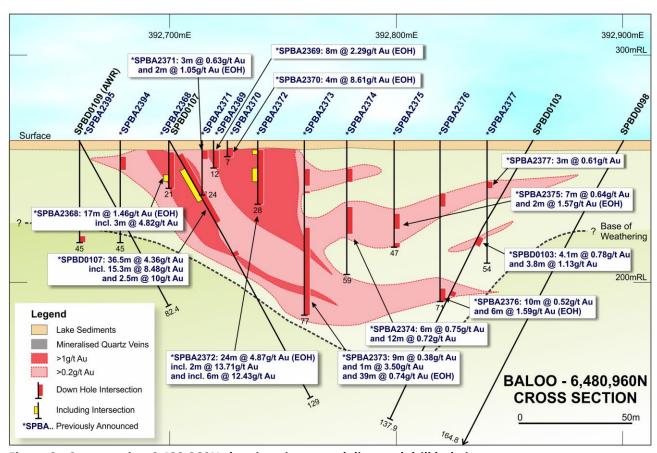
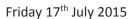


Figure 3. Cross section 6,480,960N showing aircore and diamond drill hole intercepts







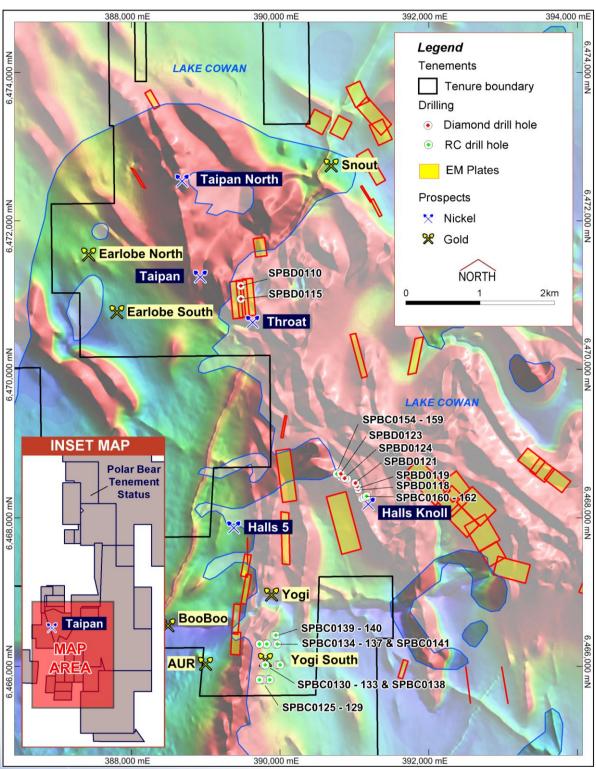


Figure 4. Halls Knoll and Yogi South plan showing RC and diamond collar locatons and EM plates

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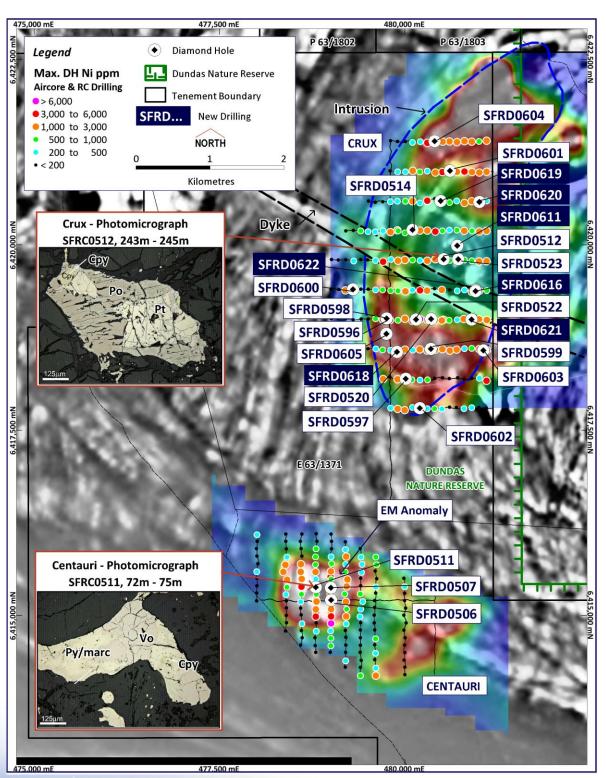


Figure 5. Plan of Crux and Centauri, showing diamond drill holes, max downhole nickel in aircore drilling and EM anomalies







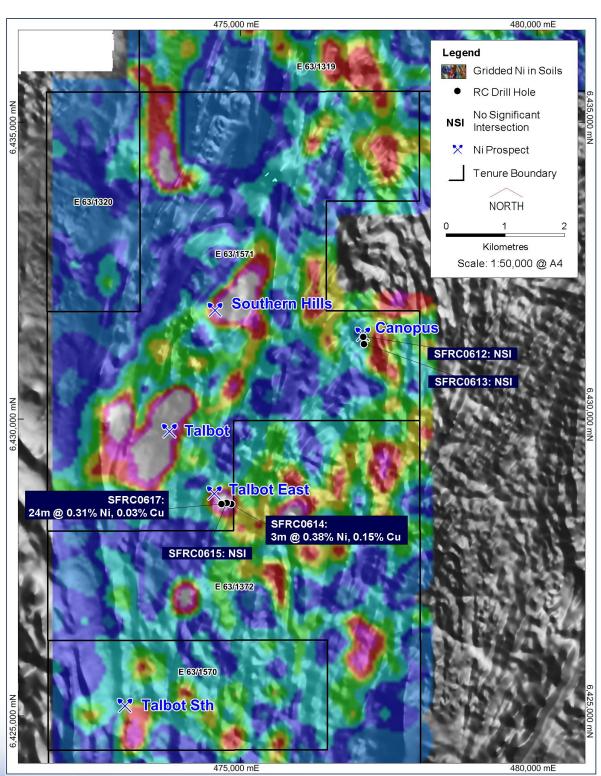


Figure 6. Plan of Southern Hills area including Talbot East and Canopus showing RC drilling and gridded nickel in soil

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Forward looking statements

This announcement contains certain forward looking statements. The words "expect", "forecast", "should", "projected", "could", "may", "predict", "plan" and other similar expressions are intended to identify forward looking statements. Indications of, and guidance on, future earnings, cash flow costs and financial position and performance are also forward looking statements. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results or trends to differ materially. These variations, if materially adverse, may affect the timing or the feasibility of the development of the Nova Nickel project.

Cautionary Statement

Unless otherwise stated, all cashflows are in Australian dollars, are undiscounted and are not subject to inflation/escalation factors, and all years are calendar years.

The Company has concluded that it has a reasonable basis for providing the forward looking statements included in this announcement.

All references to cash costs relate to cash costs calculated on a 100% basis.

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 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 agua 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

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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 Bureau Veritas laboratories in Perth and Kalgoorlie, 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 0.25% 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.

Annexure 1

The following Tables are provided to ensure compliance with the JORC code (2012) edition requirements for the reporting of exploration results.

Baloo Diamond Drilling

Hole No.	Zone	Total Depth	North	East	RL	Dip	Azim	From, m	To, m	Width, m	Au g/t	Comment
SPBD0090	Baloo	174.1	6480920	392710	262	-60	090	4.5	34.0	29.5	1.61	
			and					48.15	60.8	12.6	1.53	
SPBD0091	Baloo	310	6480920	392815	262	-60	270	52.0	53.3	1.3	0.89	
SPBD0092	Baloo	146.9	6480920	392870	262	-60	270	63.4	66.6	3.2	2.00	
			and					113.9	118.2	4.3	1.64	
SPBD0093	Baloo	143.8	6480880	392820	262	-60	270	15.5	28.8	13.3	1.75	
			including					20.8	23.8	3.0	4.51	
			and					65.2	82.4	17.2	1.20	
			including					72.7	78	5.3	2.65	
SPBD0094	Baloo	122.7	6480920	392770	262	-60	270	20.6	21.7	1.1	9.74	
			and					27.7	30.3	2.6	2.30	
			and					33.7	63.5	29.8	2.17	
	including								42.4	4.4	5.16	
SPBD0095	Baloo	144.7	6480880	392860	262	-60	270	5.4	14.1	8.7	1.19	
			and					75.9	81.3	5.4	0.88	
+									112.5	2.0	2.52	

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Hole No.	Zone	Total Depth	North	East	RL	Dip	Azim	From, m	To, m	Width, m	Au g/t	Comment
SPBD0096	Baloo	140.8	6480880	392860	262	-60	270	100.6	108.5	7.9	1.42	
SPBD0097	Baloo	175.3	6480720	392920	262	-60	270	113.8	158.8	45.0	0.60	
	including									1.1	5.93	
SPBD0098	Baloo	164.8	6480960	392900	262	-60	270				NSI	
SPBD0099	Baloo	150.7	6480840	392870	262	-60	270	95.8	108.6	12.8	3.10	
			including					103.4	104.7	1.3	15.8	
			and					117.4	124.3	6.9	0.90	
SPBD0100	Baloo	175.6	6480840	392910	262	-60	270	125.2	132.8	7.6	8.35	
			including					131.5	132.6	1.1	32.2	
SPBD0101	Baloo	173.9	6480800	392890	262	-60	270	111.5	121.3	9.8	4.97	
SPBD0102	Baloo	183.7	6480840	392950	262	-60	270				NSI	
SPBD0103	Baloo	137.9	6480960	392860	262	-60	270	48.4	52.5	4.1	0.68	
			and					74.2	77.5	3.3	1.08	
SPBD0104	Baloo	170.5	6480800	392930	262	-60	270	50	54.5	4.5	1.05	
			and				•	68.1	91.8	23.7	0.74	
SPBD0105	Baloo	150.9	6480840	392990	262	-60	270				NSI	
SPBD0106	Baloo	199.3	6480760	392900	262	-60	270	116	128.4	12.4	1.51	
SPBD0107	Baloo	129	6480960	392700	262	-60	270	7.5	46.7	36.5	4.36	
	•	•	including	•	•	•	•	14.1	29.4	15.3	8.48	
			and					56.5	59.0	2.5	10.54	
SPBD0108	Baloo	218.5	6480760	392940	262	-60	270	146.8	148.5	1.7	1.91	
			and					153.4	157.4	5.6	1.10	
SPBD0109	Baloo	82.4	6480960	392660	262	-60	90				NSI	
SPBD0111	Baloo	233.6	6480760	392980	262.75	-60	270	182.1	187.5	5.4	0.83	
SPBD0112	Baloo	113.4	6481000	392820	262	-60	270				NSI	
SPBD0113	Baloo	182.9	6480800	392930	262	-60	270	134	135.7	1.7	0.84	
			and					141	154.8	13.8	0.71	
			and					159.5	163.3	3.8	0.85	
SPBD0114	Baloo	261.2	6480720	392960	262	-60	270	167	183.7	16.7	0.79	
			and					206.8	217	10.2	0.77	
SPBD0116	Baloo	197.7	6480800	392970	262	-60	270	163.2	166.2	3.0	1.97	
SPBD0117	Baloo	287.2	6480720	393000	262	-60	270	182.9	188.8	5.9	0.92	
	•	•	and	•	•	•	•	214.1	242.4	28.3	0.86	
			including					216.6	217.85	1.25	9.52	
SPBD0120	Baloo	265.2	6480680	392960	262	-60	270	188.6	189.2	0.6	13.95	
			and	•	•	•	•	252.6	252.95	0.35	62.5	
SPBD0122	Baloo	260.2	6480680	392920	262	-60	270	157.4	159.9	2.5	10.85	

Yogi South and Nanook RC Drilling

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Hole No.	Zone	Total Depth	North	East	RL	Dip	Azim	From, m	To, m	Width,	Au g/t	Comment
SPBC0125	Yogi South	100	6465824	389840	262	-60	270	8	12	4	0.45	
SPBC0126	Yogi South	110	6465820	389860	262	-60	270			NSI		
SPBC0127	Yogi South	120	6465820	389760	262	-60	270	68	72	4	0.26	
			and					108	112	4	0.85	
SPBC0128	Yogi South	100	6465820	389740	262	-60	270	40	44	4	0.27	
			and					72	76	4	0.41	
SPBC0129	Yogi South	95	6465820	389720	262	-60	270	4	12	8	0.32	
SPBC0130	Yogi South	115	6466020	389780	262	-60	270	40	52	12	0.67	
			and					60	64	4	0.25	
			and					84	88	4	0.29	
			and					96	100	4	0.33	
SPBC0131	Yogi South	120	6466020	389800	262	-60	270	44	48	4	0.33	
			and					92	96	4	0.28	
SPBC0132	Yogi South	130	6466020	389960	262	-60	270	112	116	4	0.66	
SPBC0133	Yogi South	150	6466020	389980	262	-60	270	108	124	16	2.14	
SPBC0134	Yogi South	120	6466300	389800	262	-60	270	40	64	24	0.73	
SPBC0135	Yogi South	120	6466300	389820	262	-60	270	0	12	12	0.32	
SPBC0136	Yogi South	120	6466300	389940	262	-60	270	56	64	8	0.47	
SPBC0137	Yogi South	120	6466300	389960	262	-60	270	12	16	4	0.32	
								20	24	4	0.29	
								80	84	4	0.90	
SPBC0138	Yogi South	180	6466020	390000	262	-60	270			NSI		
SPBC0139	Yogi South	180	6466420	389920	262	-60	270			NSI		
SPBC0140	Yogi South	200	6466420	389940	262	-60	270	8	32	24	0.44	
								64	68	4	0.54	
								152	156	4	1.77	
SPBC0141	Yogi South	100	6466300	389720	262	-60	90			AWR		
SPBC0142	Nanook	110	6471880	396000	265	-60	270			AWR		
SPBC0143	Nanook	120	6471880	396040	265	-60	270			AWR		
SPBC0144	Nanook	110	6471880	396080	265	-60	270			AWR		
SPBC0145	Nanook	95	6471480	395520	265	-60	270			AWR		
SPBC0146	Nanook	60	6471480	395560	265	-60	270			AWR		
SPBC0147	Nanook	100	6471480	395600	265	-60	270			AWR		
SPBC0148	Nanook	115	6471480	395640	265	-60	270			AWR		
SPBC0149	Nanook	130	6471480	395680	265	-60	270			AWR		
SPBC0150	Nanook	7	6471480	395720	265	-60	270			ABD		
SPBC0151	Nanook	120	6471480	395760	265	-60	270			AWR		
SPBC0152	Nanook	135	6471480	395800	265	-60	270			AWR		
SPBC0153	Nanook	70	6471480	395840	265	-60	270			AWR		







Halls Knoll and Throat Diamond and RC Drilling

Halls Knoll and Throat Diamond and RC Drilling														
Hole No.	Zone	Total Depth	North	East	RL	Dip	Azim	From, m	To, m	Width m	Ni pct	Cu pct	Pt g/t	Pd g/t
SPBD0002	Halls Knoll	161.1	6468264	391085	266	-60	60	ı	-	-	NSI	-	-	-
SPBD0003	Halls Knoll	267	6468039	391216	266	-60	60	•	-	-	NSI	-	-	-
SPBD0008	Halls Knoll	171	6468019	391182	266	-60	60	62	65	3	0.55	0.11	0.12	0.33
			and					69	70	1	0.52	0.07	0.1	0.24
SPBD0009	Halls Knoll	216	6468062	391255	265	-60	60	-	-	-	NSI	-	-	-
SPBD0045	Halls Knoll	471	6468073	391274	266	-60	240	-	-	-	NSI	-	-	-
SPBD0110	Throat	381.8	6471125	389470	262	-70	270				NSI			
SPBD0115	Throat	432.5	6470950	389470	262	-60	270				NSI			
SPBD0118	Halls Knoll	243.7	6468385	391050	262	-60	240	87.1	91	3.9	0.31	0.05	0.07	0.16
SPBD0119	Halls Knoll	225.9	6468425	391035	262	-60	240	141.2	142.8	1.6	0.50	0.04	0.06	0.11
			And					150.4	156.8	6.4	0.37	0.03	0.05	0.10
SPBD0121	Halls Knoll	393.9	6468470	391010	262	-60	240				AWR			
SPBD0123	Halls Knoll	543.6	6468595	390815	262	-60	240	131.8	155	23.2	0.40	0.02	0.04	0.06
SPBD0124	Halls Knoll	261.9	6468535	390865	262	-60	240				AWR			
SPBC0154	Halls Knoll	160	6468570	390780	262	-60	240				AWR			
SPBC0155	Halls Knoll	145	6468550	390815	262	-60	240				AWR			
SPBC0156	Halls Knoll	180	6468615	390795	262	-60	240				AWR			
SPBC0157	Halls Knoll	145	6468590	390760	262	-60	240				AWR			
SPBC0158	Halls Knoll	130	6468565	390840	262	-60	240				AWR			
SPBC0159	Halls Knoll	130	6468525	390900	262	-60	240				AWR			
SPBC0160	Halls Knoll	160	6468260	391100	262	-60	240				AWR			
SPBC0161	Halls Knoll	200	6468275	391125	262	-60	240				AWR			
SPBC0162	Halls Knoll	140	6468295	391160	262	-60	240				AWR			

Crux - Centauri Diamond Drilling

CI UX - CE	itaui i Dia		711111111111111111111111111111111111111										
Hole No.	Zone	Total Depth	North	East	RL	Dip	Azi	From, m	To, m	Width, m	Ni, pct	Cu, pct	Co, pct
SFRD0506	Centauri	585.1	6415210	479003	282	-60	180	276	279.7	3.7	0.37	0.08	0.06
	And									2	0.27	0.06	0.02
SFRD0507	Centauri	551.5	6415376	478999	282	-60	180				NSI		
SFRD0511	Centauri	502.9	6415384	478796	283	-60	360				NSI		
SFRD0512	Crux	721.7	6419806	480522	314	-60	270	363.4	365.1	1.7	0.31	0.07	0.02
			And					448	455	7	0.30	0.06	0.02
SFRD0514	Crux	795.9	6420205	480100	298	-60	270				NSI		
SFRD0520	Crux	971.7	6419000	480351	306	-60	270	447	449	2	0.27	0.06	0.02
+ -		+	And					482.6	482.8	0.2	0.37	0.15	0.02







Hole No.	Zone	Total Depth	North	East	RL	Dip	Azi	From, m	To, m	Width,	Ni, pct	Cu, pct	Co, pct
		Zepui	And					494	495	1	0.29	0.07	0.02
			And					502	503	1	0.27	0.04	0.02
			And		514	515	1	0.28	0.04	0.02			
			And					575.2	576.1	0.9	0.28	0.07	0.02
SFRD0522	Crux	821.7	6418996	480148	289	-60	270	230.8	234.1	3.3	0.28	0.04	0.01
SFRD0523	Crux	826.7	6419806	480717	301	-60	270	556.2	556.85	0.65	1.04	0.42	0.03
			And					657	672	15	0.27	0.06	0.02
SFRD0596#	Crux	496.7	6419009	479751	284	-55	270	59.1	80	20.9	0.31	0.07	0.02
			and					117	120	3	0.33	0.08	0.03
SFRD0597	Crux	511.3	6418196	480010	266	-60	270				NSI		
SFRD0598	Crux	172.4	6419006	479751	284	-65	270	128	129.2	1.2	0.57	0.10	0.05
SFRD0599	Crux	523	6418600	480350	278	-60	270				NSI		
SFRD0600	Crux	518.9	6419400	479300	271	-60	270				NSI		
SFRD0601	Crux	867.9	6421000	480600	313	-60	270				NSI		
SFRD0602	Crux	545.6	6417800	480200	268	-60	270				NSI		
SFRD0603	Crux	639.9	6418577	481058	290	-60	90				NSI		
SFRD0604	Crux	606.9	6421400	480400	303	-60	270				NSI		
SFRD0605	Crux	436.1	6418800	479750	290	-60	270				NSI		
SFRD0611	Crux	737.7	6419991	480703	298	-60	270				AWR		
SFRD0616	Crux	675.8	6419390	480953	290	-55	90				AWR		
SFRD0618	Crux	582.8	6418600	479900	290	-60	270				AWR		
SFRD0619	Crux	569.3	6420592	480479	302	-60	270				AWR		
SFRD0620	Crux	541	6420600	481000	285	-60	270				AWR		
SFRD0621	Crux	664.8	6418996	480896	284	-60	270				AWR		
SFRD0622	Crux	738.6	6419379	480952	288	-60	270				AWR		

Hole No.	From, m	To, m	Width, m	Cr ₂ O ₃ pct	TiO ₂ pct	V ₂ O ₅ pct	Ni, pct	Cu, pct	Co, pct
SFRD0596#	111.8	120	8.2	9.7	1.4	0.19	0.26	0.05	0.03

Talbot East - Canopus Reverse Circulation Drilling

Turbot Eu			oc on carac					_				_	_
Hole No.	Zone	Total	North	East	RL	Dip	Azi	From,	To,	Width,	Ni,	Cu,	Co,
		Depth		1.7.		•		m	m	m	pct	pct	pct
SFRC0612	Canopus	208	6431401	477068	330	360	-60				NSI		
SFRC0613	Canopus	160	6431283	477080	330	360	-60				NSI		
SFRC0614	Talbot East	250	6428588	474840	318	270	-60	151	154	3	0.38	0.15	0.01
SFRC0615	Talbot East	250	6428608	474764	318	270	-60				NSI		
SFRC0617	Talbot East	196	6428587	474678	318	270	-60	8	32	24	0.31	0.03	0.03

AWR – results awaited, NSI – no significant intercept, ABD - Abandoned

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The following Tables are provided to ensure compliance with the JORC code (2012) edition requirements for the reporting of exploration results.

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Section 1 Sampling Techniques and Data







Criteria	JORC Code explanation	Commentary
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	The drillhole locations are picked up by handheld GPS upon completion of drilling. The majority of drill holes at Baloo have subsequently been accurately surveyed using a high precision DGPS by a registered surveyor. Sampling was carried out under Sirius protocols and QAQC procedures as per industry best practice.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	Reconnaissance aircore samples are composited at 4 m to produce a bulk 3 kg sample. Samples were dried, pulverised (total prep), and split to produce a 25 g sub sample which is analysed using aqua-regia digestion with ICP-MS finish with a 1 ppb detection limit. Infill Aircore is sampled at 1m intervals with the same total prep and then fire assayed using a 50g charge. A 1m end of hole sample was collected for all aircore holes. Sample preparation was the same as above and were analysed using a four acid digest with an ICP/OES and fire assay. The following elements are included in the assay suite: Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sc, Sr, Te, Ti, Ti, V, W, Zn. RC drilling was sampled using a 4m composite sample, or where appropriate, a 1m "cone" split sample, to produce a bulk 3 kg sample. Sample preparation was the asame as for the aircore drilling. Diamond core is sampled to geological boundaries of no more than 1m and no less than 30cm. Diamond core HQ and NQ2 size, sampled on geological intervals (0.2 m to 1.2 m), cut into half (NQ2) or quarter (HQ) core to give sample weights under 3 kg. Samples were crushed, dried and pulverised (total prep) to produce a sub sample for analysis by four acid digest with an ICP/OES and fire assay (nickel exploration) or fire assay (gold exploration). At Baloo Oxide PQ3 core is whole core sampled and then dried, crushed to -2mm and then rotary split to a 3kg sample for pulverisation and 50g fire assay. The reject of the rotary split is stored for duplicate assays work at Sirius Resources warehouse facility. The following elements are included in the nickel exploration suite: Ag, Al, As, Co, Cr, Cu, Fe, K, Mg, Mn, Ni, Ti, Tl, V, Zn, Au, Pt,
		Pd.







Criteria		Commentary
Griteria	JORC Code explanation	gommonum y
Drilling techniques		Baloo Aircore drilling currently accounts for the majority of Sirius' current drilling at the Baloo and Monsoon prospect (531holes). 25 holes by diamond drilling have been completed to augment the Aircore drilling with oxide triple tube holes and deeper orientated holes into fresh primary material.
		Yogi South Aircore, RC and orientated HQ and NQ diamond drilling has been conducted at Yogi South.
	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard	Nanook Aircore, and RC drilling has been conducted at Nanook.
	tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Halls Knoll & Throat Aircore and orientated HQ and NQ diamond drilling has been conducted at Halls Knoll & Throat.
		Crux & Centauri Aircore, RC and orientated HQ and NQ diamond drilling has been conducted at Crux & Centauri.
		Talbot East & Canopus RC drilling has been conducted at Talbot East and Canopus
		North Bore Vertical aircore drilling has been conducted at North Bore
Drill sample recovery	Method of recording and assessing core and chip	Drill sample recoveries are recorded as an average for each individual lithological unit logged and recorded in the database. Overall recoveries are good and there are no significant sample recovery problems.
	sample recoveries and results assessed	Diamond core is logged for recovery percentage for each core run. Diamond core recovery in the oxide has averaged 85%. Recovery in the primary has exceeded 95%.
	Measures taken to maximise sample recovery and ensure representative nature of the samples	Drill cyclone and sample buckets are cleaned between rod- changes and after each hole to minimise down hole and/or cross- hole contamination. Triple tube diamond core through the weathered zone is too broken to allow core cutting and therefore the core is sampled whole to ensure no bias is introduced.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Baloo Aircore drilling samples were occasionally wet which may have resulted in sample bias due to preferential loss/gain of fine/coarse material. Further diamond and RC will need to be undertaken to evaluate these effects. Core drilling has short lengths of no recovery in areas of very soft clays and fault gouge within the weathered zones. These are recorded as poor or zero recovery and not assigned grade. Crux, Centauri, Talbot East, Canopus, North Bore, Yogi South, Nanook, Halls Knoll & Throat Insufficient drilling and geochemical data is available at the present stage to evaluate potential sample bias.

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Criteria	JORC Code explanation	Commentary
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Baloo The initial 4m composited sampling is not appropriate for mineral resource estimation and is considered a qualitative sampling technique. Infill aircore has been logged and sampled at 1m intervals downhole and is being assessed for suitability as part of a Resource Estimation Diamond triple tube drilling is being conducted in the oxide to determine whether the infill aircore samples are appropriate for mineral resource estimation. Crux, Centauri, Talbot East, Canopus, North Bore, Yogi South, Nanook, Halls Knoll & Throat The initial sampling is not appropriate for mineral resource estimation
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of aircore records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples.
	The total length and percentage of the relevant intersections logged	All drillholes were logged in full.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	PQ3 and HQ3 core in the weathered zone is sampled whole core. Oxide whole core is submitted to the lab in samples not exceeding 6kg and then coarse crushed to <2mm. Samples are then rotary split to provide a 3kg sub sample for pulverisation. Weakly weathered and fresh core is sawn and half core sampled. Crux, Centauri, Halls Knoll & Throat HQ and NQ core is sawn and sampled as half core.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	4 metre composite RC spoils are sampled by scoop. 1 metre samples are collected via an on-board cone splitter. Samples were collected both wet and dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation follows industry best practice in sample preparation All samples are pulverised utilising Essa LM1, LM2 or LM5 grinding mills determined by the size of the sample. Samples are dried, crushed as required and pulverized to produce a homogenous representative sub-sample for analysis. A grind quality target of 85% passing 75µm has been established and is relative to sample size, type and hardness.
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	Reconnaissance aircore samples are collected at 1 m intervals and composited into 4 m samples using a scoop to sample individual metre samples. Certified Reference Materials (CRM's) and/or in house controls, blanks, splits and replicates are analysed with each batch of samples. These quality control results are reported along with the sample values in the final report. Selected samples are also re-analysed to confirm anomalous results. Infill aircore is collected as 1m samples with regular field duplicates and CRM inserted every 15 samples
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Field duplicates are taken at regular intervals. Samples are selected to weigh less than 3kg to ensure total preparation at the pulverisation stage.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate to give an accurate indication of mineralisation given the qualitative nature of the technique.







Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Diamond and Reverse circulation samples and bottom of hole RAB/AC drill samples are analysed using four acid digest multi element suite with ICP/OES or ICP/MS finish (25 gram or 50 gram FA/AAS for precious metals). The acids used are hydrofluoric, nitric, perchloric and hydrochloric acids, suitable for silica based samples. The method approaches total dissolution of most minerals. Total sulphur is assayed by combustion furnace. 4m composite samples from RAB/AC drilling are analysed using Aqua Regia digest multi element suite with ICP/OES finish, suitable for reconnaissance. This is a partial digestion technique. Surface samples and auger soil samples are analysed by portable XRF machine and Aqua Regia digest multi element suite with ICP/OES finish, suitable for the reconnaissance style sampling undertaken. (Baloo only) The analytical technique used a 25g aqua-regia digestion with ICP-MS finish for gold only. The method gives a near total digestion of the regolith intercepted in aircore drilling. This method is appropriate to detect anomalous gold mineralisation. Infill 1m samples and samples greater than 1 g/t are re-assayed using 50 g fire-assay with AAS finish which gives total digestion and is more appropriate for high-level samples.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were used to determine any element concentrations used in this resource estimate.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Sample preparation checks for fineness were carried out by the laboratory as part of their internal procedures to ensure the grind size of 85% passing 75 micron was being attained. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in house procedures.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	The Exploration Manager of Sirius has visually verified significant intersections.
	The use of twinned holes.	No twin holes have been drilled at any of the prospects to date.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data was collected using a set of standard Excel templates using lookup codes. The information was sent to an external database consultant for validation and compilation into a Perth based SQL database.
	Discuss any adjustment to assay data.	No adjustments or calibrations were made to any assay data reported.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drillhole collars were located by GPS and DGPS. Elevation values were in AHD. Expected accuracy is +/- 0.05 m for easting, northing and 0.05m for elevation coordinates with DGPS. GPS accuracy is +/- 5m.
	Specification of the grid system used.	The grid system is GDA94 (MGA), zone 51.

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Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	A topographic surface has been created from aerial geophysical data, This has been calibrated with DGPS survey data. Drillhole collars are corrected to this surface where DGPS pickup is not available.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Baloo The nominal drillhole spacing is 40 m (easting) by 80 or 100 m (northing). Infill drilling has been conducted at a nominal 40m x 20m spacing. Crux & Centauri The nominal drillhole spacing is 200 m (northing) by 200 m (easting). Talbot East, Canopus, Yogi South, Nanook, Halls Knoll & Throat The Holes are drilled on individual single lines with drill spacing between 20 and 160 metres. North Bore The aircore holes are drilled on a nominal 200m (northing) by 80m (easting) pattern
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The mineralised domains have not yet demonstrated sufficient continuity in both geological and grade continuity to support the definition of Mineral Resource and Reserves, and the classifications applied under the 2012 JORC Code.
	Whether sample compositing has been applied.	No compositing has been applied to the exploration results.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Baloo The main mineralised structure appears to be dipping moderately to the east and hence 270 azimuth diamond drilling give approximately true width intersections. Supergene dispersion appears relatively flat lying and hence the vertical Aircore holes also approximate to true thickness. Crux, Centauri, Talbot East, Canopus, North Bore, Yogi South, Nanook, Halls Knoll & Throat The orientation of mineralised structures has not been ascertained. Drilling is mainly restricted to the overlying regolith and seldom penetrates fresh rock by more than a couple of metres.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation based sampling bias has been identified in the data at this point.
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by Sirius. Samples are stored on site and either delivered by Sirius personnel to Perth and then to the assay laboratory, or collected from site by Centurion Transport and delivered direct to the assay laboratory. Whilst in storage, they are kept on a locked yard. Tracking sheets have been set up to track the progress of batches of samples.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been conducted at this stage.

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Section 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The <i>Baloo</i> drilling is located on Exploration Licence E15/1298. The <i>Yogi South</i> drilling is located on Prospecting Licenses P 63/1593 and P63/1594. The <i>Halls Knoll</i> Drilling is located on Prospecting License P63/1591. The <i>Nanook</i> and <i>Throat</i> drilling is located on Exploration License E63/1142. All the above tenements are 100% owned by Polar Metals Pty Ltd, a wholly owned subsidiary of Sirius Resources NL. The <i>Centauri</i> prospect is located wholly within Exploration Licence E63/1371. The <i>Crux</i> prospect is located on E63/1371 & E63/1103. The North Bore prospect is located on E63/811. The tenements are part of the Fraser Range JV between Sirius Gold Pty Ltd, a wholly owned subsidiary of Sirius Resources NL, and Creasy Group (FraserX Pty Ltd, Free CI Pty Ltd & Ponton Minerals Pty Ltd). Sirius has a 70% interest in the tenements. E63/1371 is within the 'B' class Dundas Nature Reserve. Sirius has developed a conservation management plan that has been submitted and approved by DPaW to allow exploration within the Nature Reserve. The <i>Talbot East & Canopus</i> drilling is located on Exploration Licence E63/1571. The tenement is 100% owned by Sirius Gold Pty Ltd, a wholly owned subsidiary of Sirius Resources NL. All projects are situated within the Ngadju Native Title Claim (WC99/002).
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements is in good standing and no known impediments exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Baloo, Yogi South, Nanook Plutonic Operations Limited and Homestake Gold of Australia Limited conducted reconnaissance aircore drilling (PBAC prefix) over Lake Cowan on predominantly 100 m drillhole spacing and 800 m line spacing from 1997-1999. Location of these drillholes cannot be verified as the collars are now mostly obscured. Aircore sampling was done by 4 m composites with 1 m resplits on samples greater than 0.1 g/t. Samples were assayed by aqua-regia digest with AAS finish although this cannot be verified as the original laborato Crux, Centauri, North Bore, Talbot East & Canopus Newmont Pty Ltd carried out exploratory activities between 1960's and 1970's through the western regions of the Fraser Range Complex. To the best of Sirius' knowledge no known historical drilling has occurred over the Centauri or Crux prospects. Multiple generations of historical soil/calcrete sampling on various grid spacing's occur through the tenements. The locations and results cannot be verified, and are not included in the results.

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Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	Baloo, Yogi South, Nanook, Halls Knoll and Throat are situated within the Archaean Norseman-Wiluna Belt which locally includes basalts, komatiites, metasediments, and felsic volcanoclastics. The primary gold mineralisation is related to hydrothermal activity during multiple deformation events. Indications are that gold mineralisation is focused on or near to the stratigraphic boundary between the Killaloe and Buldania Formation. Nickel is related to komatiitic flows and intrusions with mineralisation located either on or near the basal contact. At Crux, Centauri, North Bore, Talbot East and Canopus the geological setting is a Proterozoic aged gabbroic intrusion(s) within metasediments situated in the Albany Fraser mobile belt. It is a high grade metamorphic terrane. The deposit style sought after is analogous to the recent Nova Ni-Cu-Co mafic hosted nickel-copper deposits.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length.	Refer to Annexure1 in body of text.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	All reported assays have been length weighted. No top-cuts have been applied. A nominal 0.2 g/t Au lower cut-off is used to report Aircore intersections and 0.5 g/t Au lower cut-off is used for the diamond intersections. For all nickel exploration, a notional lower cut-off of 0.25% Ni is used.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	High grade gold and nickel intervals internal to broader zones of mineralisation are reported as included intervals.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used for reporting exploration results.







Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The trend of mineralisation at <i>Baloo</i> appears broadly north south and dipping moderately to the east with the intervals reported near true width. All other prospects, the geometry of the primary mineralisation is not known at present due to the lack of deeper drilling and the early stage of exploration. Refer to Annexure 1 and Figures in body of text.
Diagram	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures in body of text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	At <i>Baloo</i> , <i>Yogi South</i> and <i>Nanook</i> all significant results are reported, with a 0.2 g/t lower cut-off for aircore drilling and a 0.5 g/t Au cut-off for diamond drilling. At <i>Crux</i> , <i>Talbot East</i> , <i>Canopus</i> , <i>Halls Knoll</i> and <i>Throat</i> all Ni and Cu results are reported. For RC and Diamond drilling a notional lower cut-off of 0.25% Ni is used.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Refer to figures in body of text.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	At this stage, mineralisation is only indicative and requires further infill to test for coherency. RC and Diamond drilling in the bedrock beneath anomalous zones has been started to establish the orientation and style of the mineralisation. Aircore drilling will be used to further define anomalism along strike and in similar litho-structural positions inferred from aeromagnetic interpretation.