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**Fraser Range:**

Gold, base metals

**Polar Bear:**

Nickel, gold

**Youanmi:**

Zinc, copper, nickel, PGM's

**Lawlers:**

Nickel

**Collurabbie:**

Nickel, copper, PGM's


**EXPLORATION UPDATE**

- Narrow zones of low grade copper and silver mineralisation intersected in first two drillholes at Youanmi
- Broad zone of disseminated to blebby sulphides intersected in fourth hole at Youanmi (assays awaited)
- Drilling underway on additional EM anomalies
- Assays awaited for 173 RAB holes drilled at Fraser Range

Sirius Resources (**ASX:SIR**) advises that it has received results from the first two holes drilled at its 70 per cent owned Youanmi project in Western Australia and that it has also intersected a zone of sulphides in the fourth hole. Assays have not yet been received for this hole so it is not possible to comment on its significance. These holes were drilled to test three EM conductors (*see Figure 1*).

The first two holes of the program (SYMD0001 and 2), testing two separate EM conductors (MNC01 and 2), only intersected narrow zones of weak copper and silver mineralisation (*see Table 1*). Assays are awaited for the third hole (SYMD0004), which intersected narrow zones of sulphide in EM conductor MNC02, 200m along strike from SYMD0002.

Results are also awaited for drill hole SYMD0005, testing EM conductor MNC03. This hole lifted and did not hit the centre of the conductor, but did intersect a zone containing variable trace, disseminated, blebby and breccia sulphides over a down hole interval of 29 metres (*see Figure 2*). The sulphides occur within a mafic-ultramafic rock near to the interpreted base of the Youanmi layered intrusion, locally mixed with banded iron formation close to the footwall contact.

The predominant sulphide mineral is pyrrhotite (iron sulphide) although local zones of minor pyrite (iron sulphide) and chalcopyrite (copper sulphide) have also been observed (*see Figure 3*). Until assays have been received it is not possible to comment on its significance.

A further two EM anomalies (conductors MSC01 and MSC02) are also being tested as part of this drilling program and the strategy for future drilling will be reviewed once all assays have been received and downhole EM completed.

Meanwhile, assays are awaited from the second stage of drilling at the Fraser Range project where Sirius recently completed 173 RAB holes. Most of this drilling was undertaken to follow up anomalous gold intersections of up to 7m @0.31g/t Au in initial wide spaced

reconnaissance drilling at the Brookman prospect. Some of this drilling was a first pass test of other gold anomalies along strike from Brookman. These results are expected by late May.



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Prospect/ conductor	Hole number	North	East	Azim	Dip	From (m)	To (m)	Width (m)	Comment/grade
MNC01	SYMD0001	13100	9340	239	-60	64.8	65.55	0.75	@ 0.27% Cu, 2.0g/t Ag
					and	67.9	68.9	1.00	@ 1.65g/t Ag
MNC02	SYMD0002	12500	9480	239	-60	147.50	149.60	2.10	@0.23% Cu, 1.7g/t Ag
	SYMD0003	12400	9480	239	-60	n/a	n/a	n/a	Not drilled
	SYMD0004	12300	9480	239	-60	119.00	122.00	3.00	Zone containing sulphide stringers
MNC03	SYMD0005	12300	9970	239	-60	105.00	121.00	16.00	Disseminated sulphide in pyroxenite
					and	121.00	123.00	2.00	Blebbly sulphide in pyroxenite
					and	127.50	134.00	7.50	Breccia sulphide in mixed rocks

Table 1. Assay results (where received) or visual descriptions (where assays are awaited). Co-ordinates are in local grid.

### Competent Persons statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Dr Mark Bennett, who is an employee of the company. Dr Bennett 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. Dr Bennett consents 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. 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. Sample preparation and analysis is undertaken at Genalysis Intertek and Ultratrace laboratories in Perth, Western Australia. 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. The quality of analytical results is monitored by the use of internal laboratory procedures 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. 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. Where quoted, nickel-copper intersections are based on a minimum threshold grade of 0.3% Ni and gold intersections are based on a minimum gold threshold grade of 0.1g/t Au unless otherwise stated. All sample and drill hole co-ordinates are based on the GDA/MGA grid and datum unless otherwise stated.

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.

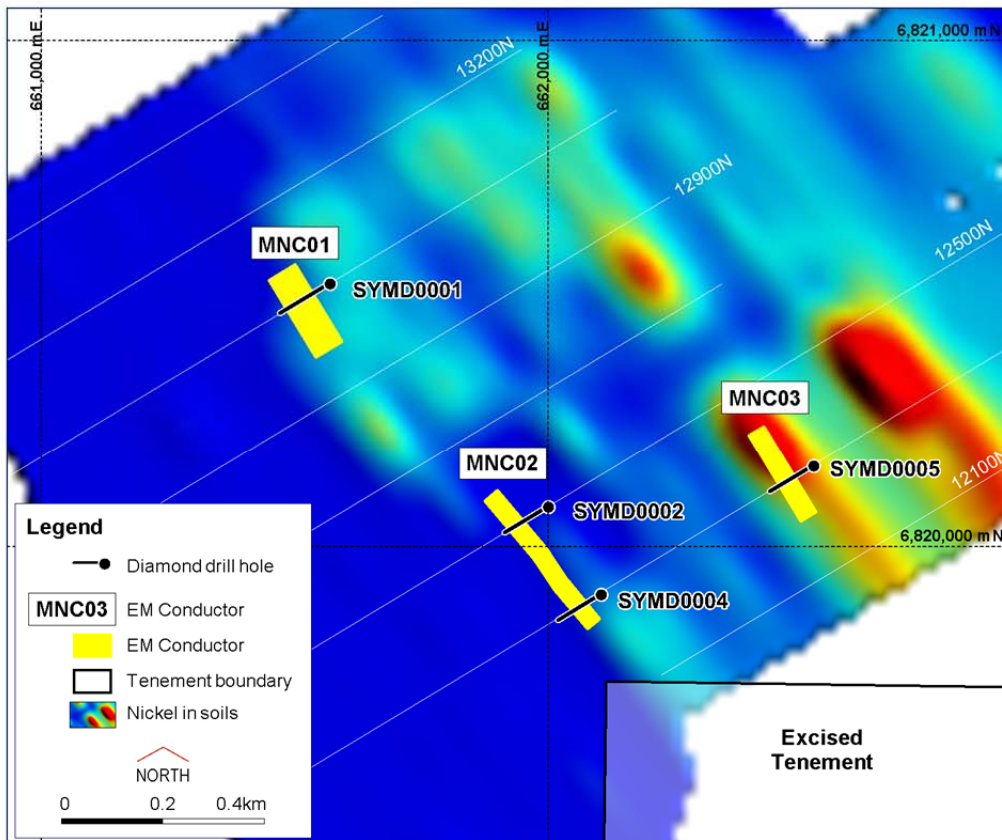


Figure 1. Location of drill holes, EM conductors and nickel soil anomaly.

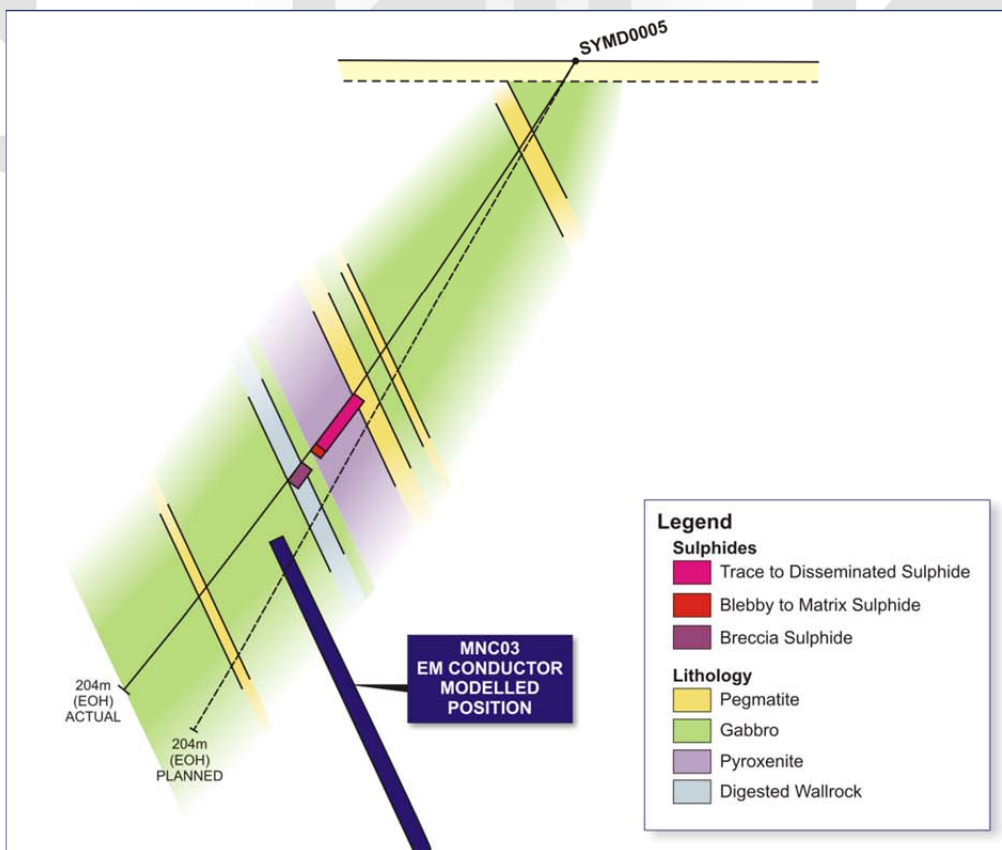


Figure 2. Schematic cross section of drill hole SYMD0005 on EM conductor MNC03.



Figure 3. Photographs of disseminated (top), blebby (middle) and breccia (bottom) sulphides in SYMD0005. The bronze coloured sulphide is pyrrhotite (iron sulphide) and the brassy yellow coloured sulphide is chalcopyrite (copper sulphide). It is not possible to comment on likely grade, width or significance until assays have been received.