

SIRIUS RESOURCES NL

ASX: SIR

ABN: 46 009 150 083

Level 1, 10 Ord Street,
West Perth 6005,
Western Australia

PO Box 682
West Perth 6872,
Western Australia

Telephone +61 8 6311 5554
Facsimile +61 8 6311 5556
admin@siriusresources.com.au
www.siriusresources.com.au

Contact

Mark Bennett, Managing Director
+61(0)407 470 648

Projects

Collurabbbie:

Nickel, copper, PGM's

Fraser Range:

Nickel, copper, PGM's

Polar Bear:

Nickel, PGM's

Lawlers:

Nickel

Youanmi:

PGM's, copper, zinc, gold

Lake Wells:

Uranium, iron, gold


YOUANMI EXPLORATION UPDATE

- **Copper-zinc-lead-barium soil anomaly defined over VMS target**
- **Copper-nickel-cobalt soil anomaly defined over adjacent contact zone of Youanmi intrusion**
- **RAB drilling various gold and base metal targets**

Sirius Resources (ASX:SIR) advises that its first soil geochemical sampling program at Youanmi has defined a distinct copper-zinc-lead-barium anomaly along strike from Metals Australia's Manindie zinc deposit and a copper-nickel-cobalt anomaly at the nearby contact zone of the Youanmi layered intrusion. Reconnaissance rotary air blast (RAB) drilling has also commenced testing several gold and base metal targets.

Copper-zinc-lead-barium soil anomaly

Geochemical sampling over the first of several volcanogenic massive sulphide (VMS) base metal targets has defined a distinct copper-zinc-lead-barium soil anomaly. This is situated along strike from the Manindie zinc resource - a known VMS deposit owned by Metals Australia. The anomaly comprises a 400m long zone of elevated zinc and a semi-coincident 600m long zone of elevated lead situated on the projected strike extension of the prospective stratigraphic horizon. A copper anomaly partially coincides with this trend but also occurs over a broad zone largely to the east of it, and a distinct barium anomaly also occurs as a narrow but laterally extensive (1.5km long) zone immediately to the west of the zinc-lead trend (Figure 1).

The distribution of copper, zinc, lead and barium anomalism is consistent with the interpreted geology of the area – namely a mafic footwall to the east, a felsic volcanic hangingwall to the west, and the potentially mineralised VMS horizon at the interface between the two. This is also consistent with the expected location of metals in a VMS system, where copper is often focused in stringer zones in the mafic footwall rocks, zinc occurs in massive sulphide lenses on or close to the mafic-felsic interface, and barium is enriched in laterally extensive haloes and blankets above and along strike from massive sulphide zone.

Copper-nickel-cobalt soil anomaly

The same geochemical sampling program also covered the nearby contact zone of the Youanmi layered intrusion, which is prospective for the magmatic copper-nickel-platinum group metal (PGM) style of

mineralisation. Sampling has defined a coincident Cu-Ni-Co anomaly in a position consistent with the interpreted contact zone, over a strike length of approximately 500m (Figure 2).

Reconnaissance RAB drilling

A reconnaissance rotary air blast (RAB) drilling program has also commenced testing several additional areas. These include several shear zone-hosted gold targets in areas where transported alluvium may have masked the surface geochemical signature, selected drill traverses across the margins of the Youanmi layered intrusion to confirm the location and nature of the contact, and reconnaissance drilling to confirm the presence of VMS-prospective stratigraphy.

Forward program

An electromagnetic (EM) geophysical survey, aimed at defining zones of sub-surface conductivity that may be related to massive sulphides, has been scheduled for this area within the next two months.

The first geochemical survey only covers a fraction of the overall project area (Figure 1) and geochemical sampling of a further three VMS target areas and several magmatic sulphide and PGM targets will continue throughout the next two quarters as and when other drilling programs permit.

Project background

The Youanmi project comprises four large exploration licences which cover the majority of the Youanmi layered intrusion and the surrounding felsic volcanic stratigraphy. The district is prospective for a variety of commodities including nickel, copper, zinc, gold and PGM's within a variety of deposit styles as evidenced by the presence of the 1moz Youanmi gold mine, the Just Desserts Cu-Au VMS resource, the Manindie Zn VMS resource and the Currans Find PGM mineralisation. The project is a joint venture in which Sirius has a 70% interest, with Mark Creasy retaining a 30% free carried interest to the completion of a bankable feasibility study, and retaining full rights to vanadium, titanium and iron (V-Ti-Fe).

A handwritten signature in black ink, appearing to read "Mark Bennett".

Mark Bennett
Managing Director and CEO
Sirius Resources NL

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 and rotary air blast (RAB) drilling samples are collected as 1 metre samples and composited where stated. Core samples are taken as half core sampled to geological boundaries where appropriate. All samples are prepared using four acid digest, lead collection or nickel sulphide collection fire assay, and assayed using inductively coupled plasma mass spectrometry (ICPMS), inductively coupled optical emission spectrometry (ICPOES) or atomic absorption spectrometry (AAS) at reputable laboratories in Perth, Western Australia. The accuracy and precision of analytical results is monitored by the use of internal laboratory procedures and certified standards and subsequent statistical analysis to ensure that results are representative.

Figure 1. Zn-Pb-Ba soil anomaly over VMS target along strike from the Manindie zinc deposit.

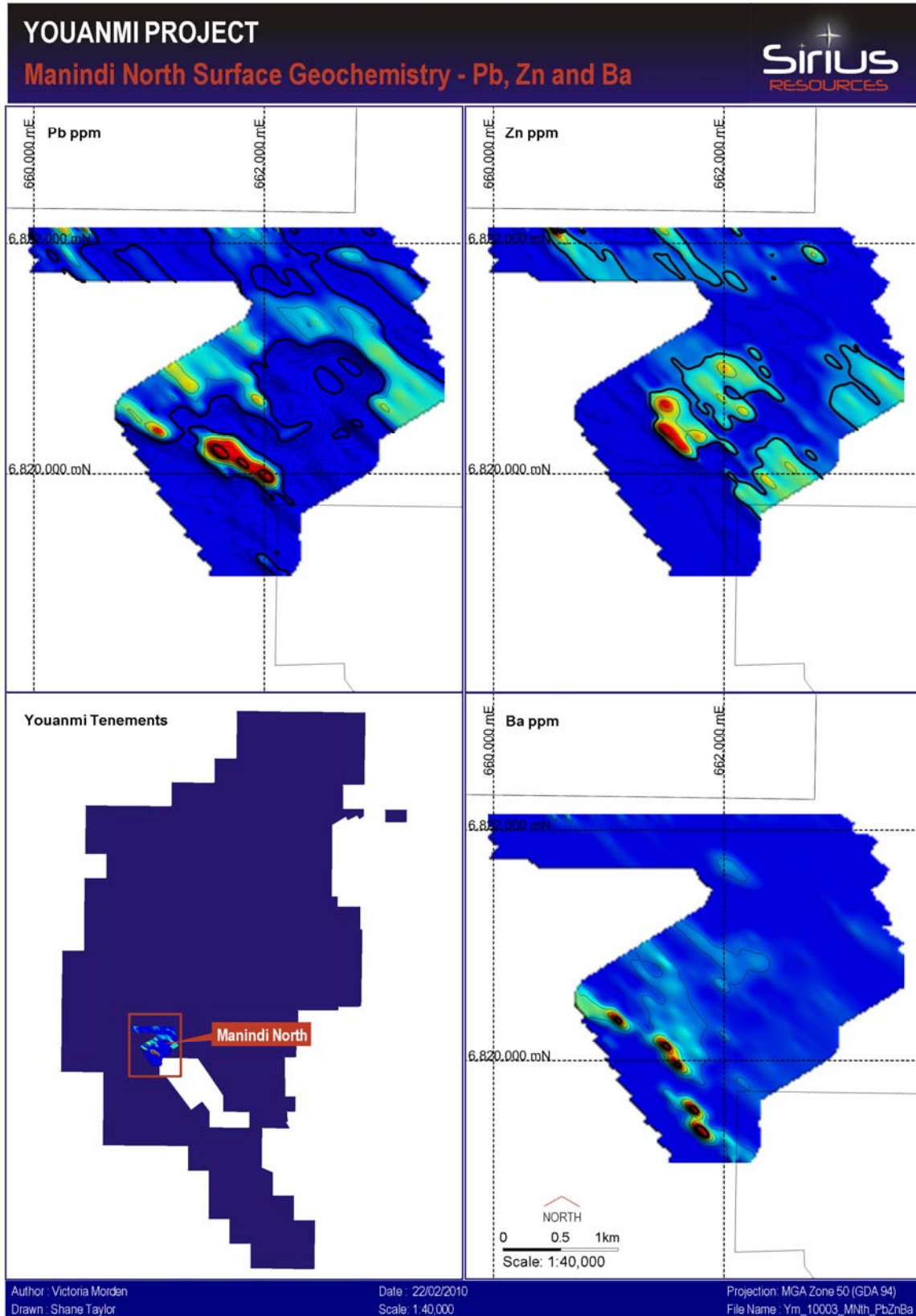


Figure 2. Cu-Ni-Co soil anomaly over margin of Youanmi intrusion.

