

SIRIUS RESOURCES NL

ASX: SIR

ABN: 46 009 150 083

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

PO Box 1011
Balcatta 6914,
Western Australia

Telephone +61 8 9240 8914
Facsimile +61 8 9240 8915

Email:

admin@siriusresources.com.au

Web:

www.siriusresources.com.au

Contact

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

Collurabbbie:

Nickel, copper, PGM's

Fraser Range:

Nickel, copper, PGM's

Polar Bear:

Nickel, gold

Lawlers:

Nickel

Youanmi:

Nickel, copper, zinc, PGM's


SIRIUS IDENTIFIES DRILL TARGETS ALONG STRIKE FROM KNOWN VMS MINERALISATION AT YOUANMI
New EM conductors beneath copper-zinc anomalies

Sirius Resources (**ASX:SIR**) is pleased to advise that it has identified new volcanogenic massive sulphide (VMS) drill targets at Youanmi. Sirius has a 70% interest in 597km² of ground surrounding Metals Australia's Manindi VMS zinc deposit and the new targets are situated immediately along strike in both directions from the Manindi deposit (*see Figure 1*). The targets comprise:

- Two electromagnetic (EM) conductors beneath copper-zinc-lead anomalies delineated in previous soil sampling and RAB drilling on the prospective gabbro-felsic contact along strike to the north west of the Manindi VMS deposit.
- Two EM conductors and gossans identified in an earlier survey associated with the same prospective gabbro-felsic contact along strike to the south east of the Manindi VMS deposit.

EM is commonly used in exploration for VMS deposits as it is designed to detect massive sulphide bodies at depth beneath the oxidised zone of weathering. The EM survey to the north west of Manindi was designed to detect any such massive sulphide zones beneath a 500 metre long copper-zinc-lead anomaly originally identified in soil sampling (*see Figure 2 and Sirius' ASX announcement of 15th March 2010*) and coincident copper-zinc anomalism subsequently confirmed in two reconnaissance traverses of RAB drilling (*see Figure 3 and Sirius' ASX announcements of 8th June 2010*).

The confirmation of EM conductors beneath these copper-zinc anomalies is considered very encouraging, especially as they also occur at the prospective stratigraphic level and in close proximity to a known cluster of VMS deposits.

EM is continuing to test extensions of the prospective stratigraphic horizon to the north west of Manindi. Once this survey is complete, the EM anomalies identified in previous data to the south east of Manindi will be resurveyed to allow better delineation and modelling as a prelude to drilling.

The EM survey will also be extended to cover a nickel-copper soil anomaly situated to the east of the VMS targets at the contact of the adjacent Youanmi layered igneous complex, which Sirius is also exploring for magmatic nickel-copper sulphides (*see Figure 1*).

It is anticipated that Sirius will have several targets ready for drilling over the next few months.

A handwritten signature in black ink that reads "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. In the case of soil samples, PGM assays are based on an aqua regia digest and Inductively Coupled Plasma (ICP) finish, and base metal assays are based on a four acid digest and inductively coupled plasma mass spectrometry (ICPMS), inductively coupled optical emission spectrometry (ICPOES) or atomic absorption spectrometry (AAS) finish. In the case of rockchip samples, PGM assays are based on lead or nickel sulphide collection fire assay digests and an ICP finish, base metal assays are based on a four acid digest and inductively coupled plasma mass spectrometry (ICPMS), inductively coupled optical emission spectrometry (ICPOES) and atomic absorption spectrometry (AAS) finish, and 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 accuracy and precision of analytical results is monitored by the use of internal laboratory procedures and, where appropriate, certified standards, and subsequent statistical analysis to ensure that results are representative. 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 have not necessarily been independently verified because original samples and/or data may no longer be available.

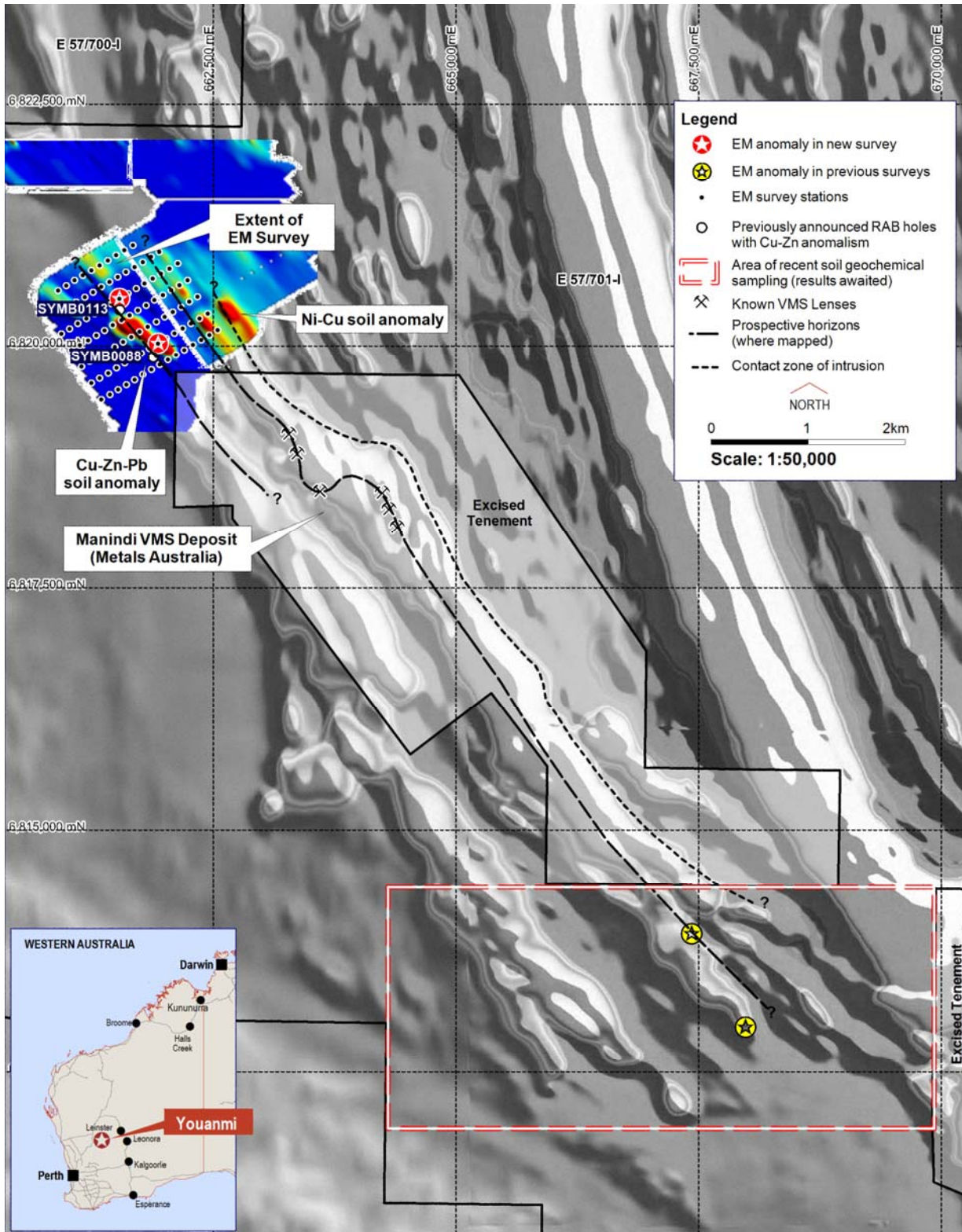


Figure 1. Location of EM conductors, Cu-Zn intersections in RAB drilling, Cu-Zn-Pb and Ni-Cu anomalies in soil sampling, gossans, extent of recent soil sampling, extent of EM to date, and the Manindi VMS deposit.

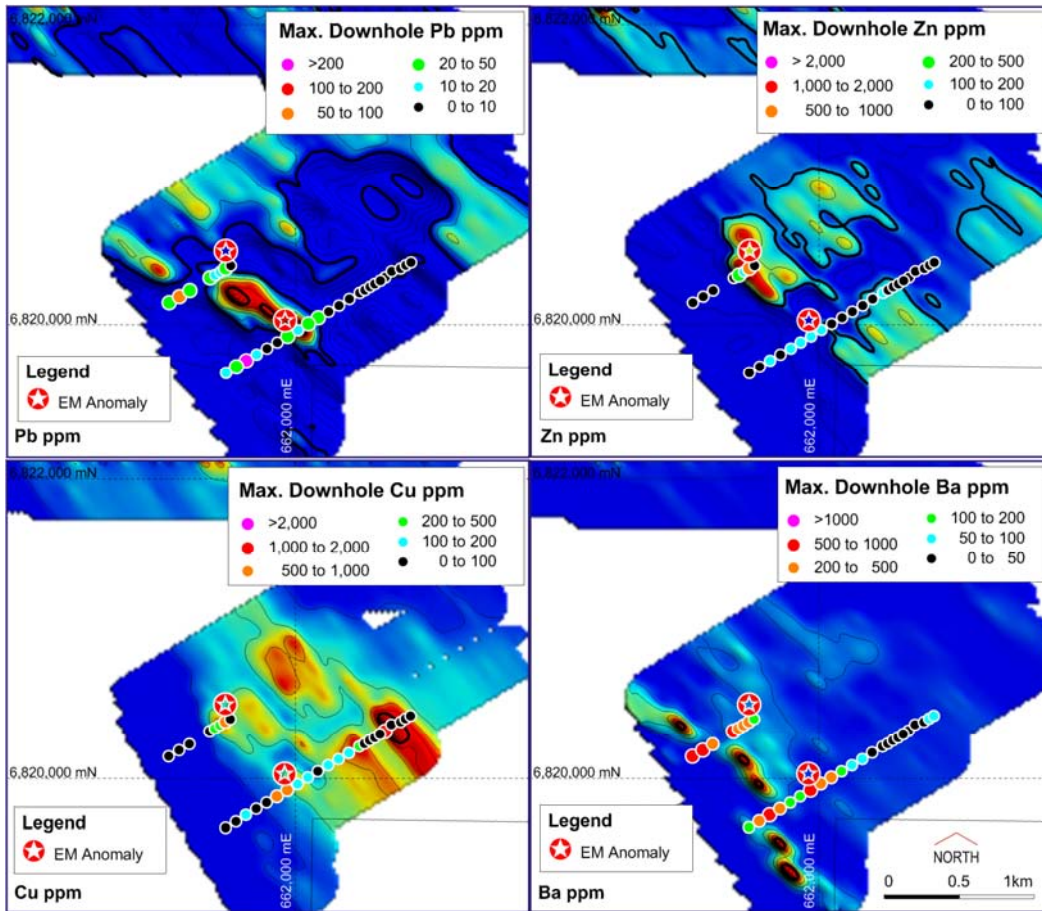


Figure 2. Cu-Zn-Pb soil anomaly, Cu-Zn anomalous RAB drillholes and associated EM conductors north west of Manindi.

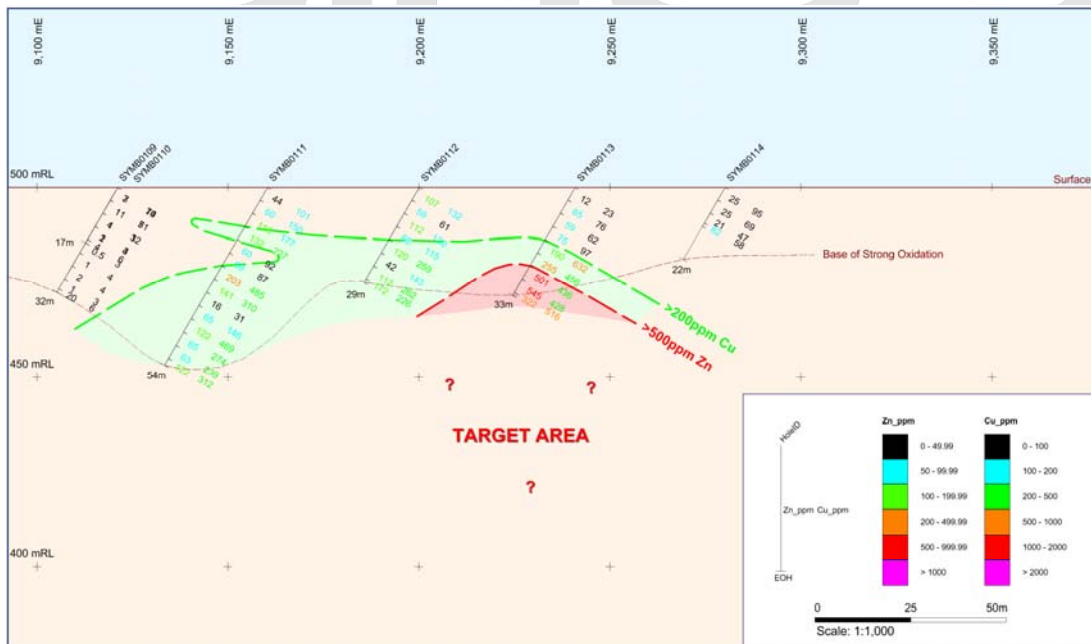


Figure 3. Cross section of RAB drilling traverse showing Cu-Zn anomalism centred on drillhole SYMB113 (refer to previous ASX releases for tabulated intersections).