

**SIRIUS RESOURCES NL**

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**Fraser Range:**

Gold, base metals

**Polar Bear:**

Nickel, gold

**Lawlers:**

Nickel

**Youanmi:**

Nickel, copper, zinc, PGM's

**Collurabbie:**

Nickel, copper, PGM's


**HIGHLIGHTS**

- **Three coincident EM and base metal anomalies identified at Youanmi**
- **Numerous EM conductors identified near disseminated nickel sulphide intersections at Polar Bear**
- **Large copper anomaly defined in soil sampling of intrusion contact target at Youanmi**
- **Mark Creasy purchases 600 million unlisted options**
- **A\$11 million capital raising and acquisition of prize gold exploration project in Tropicana belt subsequent to the end of the quarter**

The September quarter saw Sirius intensify its exploration activities and define numerous targets through a combination of electromagnetic (EM) and geochemical programs. Subsequent to the end of the quarter the Company also announced a major capital raising in conjunction with an asset purchase and a capital consolidation. The capital raising, which was oversubscribed, is subject to regulatory and shareholder approval at a general meeting of shareholders to be held in mid-December.

**CORPORATE**

Subsequent to the end of the quarter the company announced a successful A\$11 million capital raising via a private placement to institutional and sophisticated investors, together with the acquisition of a highly prospective gold exploration project from Mark Creasy in the belt that hosts the 5 million ounce Tropicana deposit. The raising and the acquisition are part of a series of interdependent transactions aimed at repositioning Sirius as a gold and base metal exploration company with a range of drill-ready targets and the means to aggressively explore these. The transaction also includes a 1 for 20 capital consolidation aimed at broadening the company's appeal to institutional and overseas investors. All of these proposals are subject to regulatory and shareholder approval at a general meeting of shareholders to be held in mid-December 2010, and they are all dependent on every resolution being approved.

During the quarter, Mark Creasy also purchased 600 million unlisted Sirius options from Apex Minerals in a private transaction. Shareholder approval is required for Mr Creasy to exercise these options without triggering the takeover provisions of the Corporations Act, and this will also be put to shareholders as an interdependent resolution at the same general meeting.

This transaction is summarised in the ASX announcements of 21<sup>st</sup> and 25<sup>th</sup>

October 2010 and will be explained in full in a Notice of Meeting scheduled for publication prior to mid-November 2010.

The services agreement with Apex Minerals was terminated on 30<sup>th</sup> September, and the Company relocated to new offices in Balcatta. The new offices include storage facilities for exploration samples and equipment and will decrease the company's overheads.

The Annual General Meeting of shareholders has been scheduled for 24<sup>th</sup> November, and the general meeting to approve the above transaction will take place in mid-December on a date to be advised.

During the quarter the company spent approximately A\$2 million on exploration, associated administration and one off payments relating to office relocation, equipment purchases and tax. Cash at the end of the quarter totalled approximately A\$1 million.

## EXPLORATION

### Youanmi

*Sirius has a 70% interest in the Youanmi Joint Venture, with Mark Creasy retaining a 30% free carried interest to the completion of a bankable feasibility study and retaining titanium-vanadium-iron rights. The project covers the Youanmi intrusive complex and the surrounding felsic stratigraphy. The intrusive complex is prospective for mafic-ultramafic intrusion hosted magmatic nickel-copper-PGM mineralisation and the surrounding stratigraphy is prospective for volcanogenic massive sulphide (VMS) copper-zinc deposits. Several shear zones with potential for gold mineralisation also occur within the project area.*

Electromagnetic (EM) surveying along strike to the north of Metals Australia's Manindi volcanogenic massive sulphide (VMS) deposit has highlighted three new EM conductors. Two of these are located beneath coincident copper-zinc-lead soil anomalies defined previously by Sirius on the interpreted continuation of the VMS trend, and are very attractive copper and/or zinc VMS targets (see Figures 1 and 2 and ASX announcement of 12<sup>th</sup> October 2010).

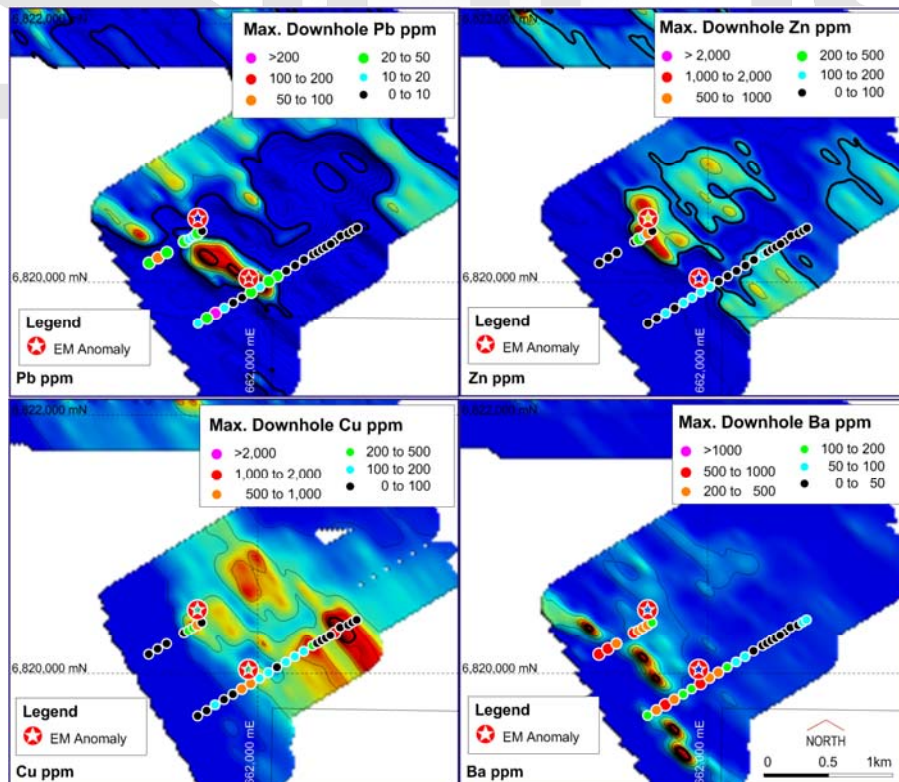


Figure 1. Manindi North VMS targets: coincident EM conductors, RAB intersections and soil anomalies

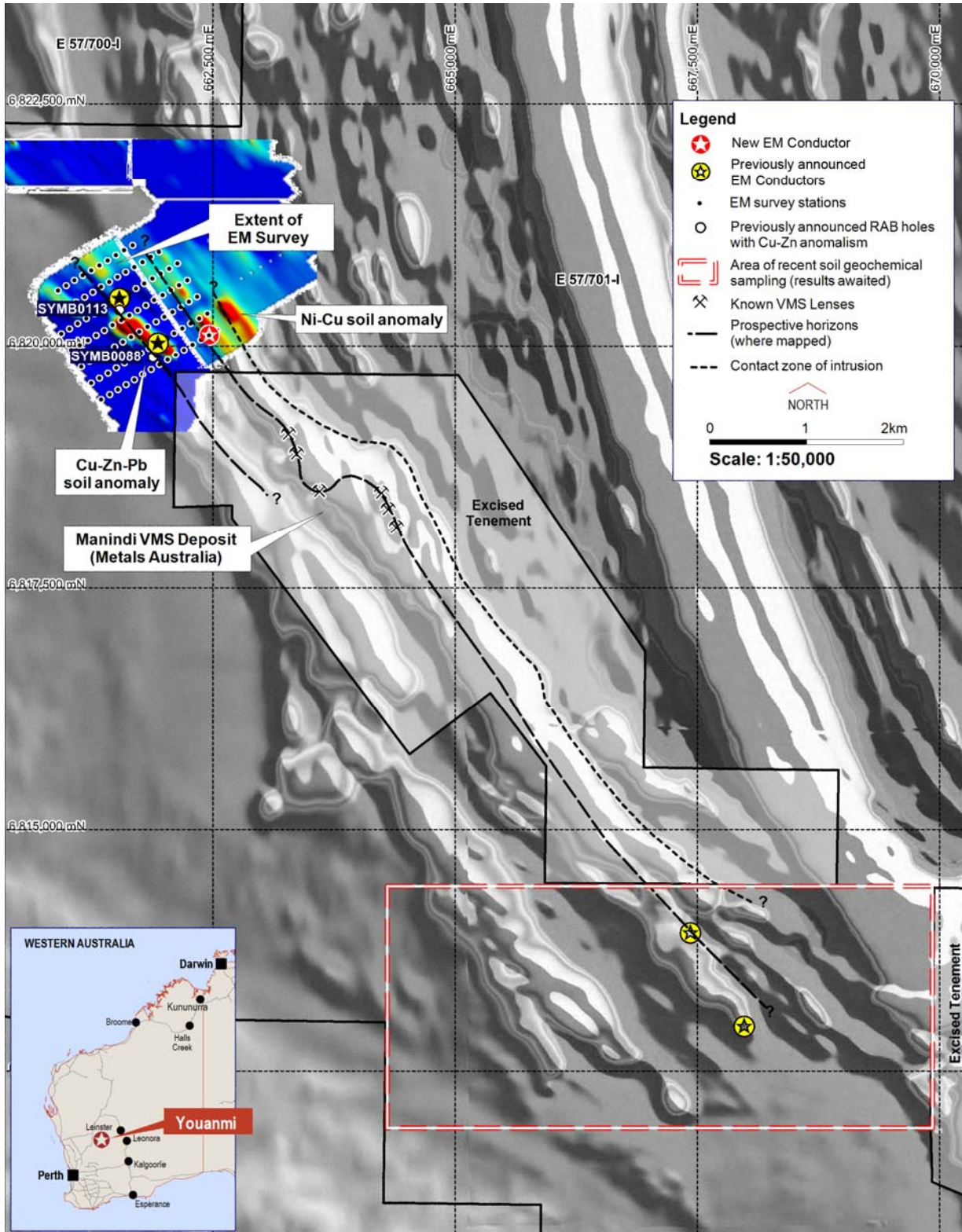


Figure 2. Location of new targets with respect to known VMS deposits, and new survey area south of Manindi.

The third and most recently defined EM conductor is located to the east of this trend beneath a coincident nickel-copper-cobalt soil anomaly on the interpreted basal contact of the Youanmi layered intrusion (see Figure 3 and ASX announcement of 20<sup>th</sup> October 2010). It is a very strong conductor and an attractive magmatic nickel-copper target. Additional EM is being undertaken to enable final modelling of this conductor.

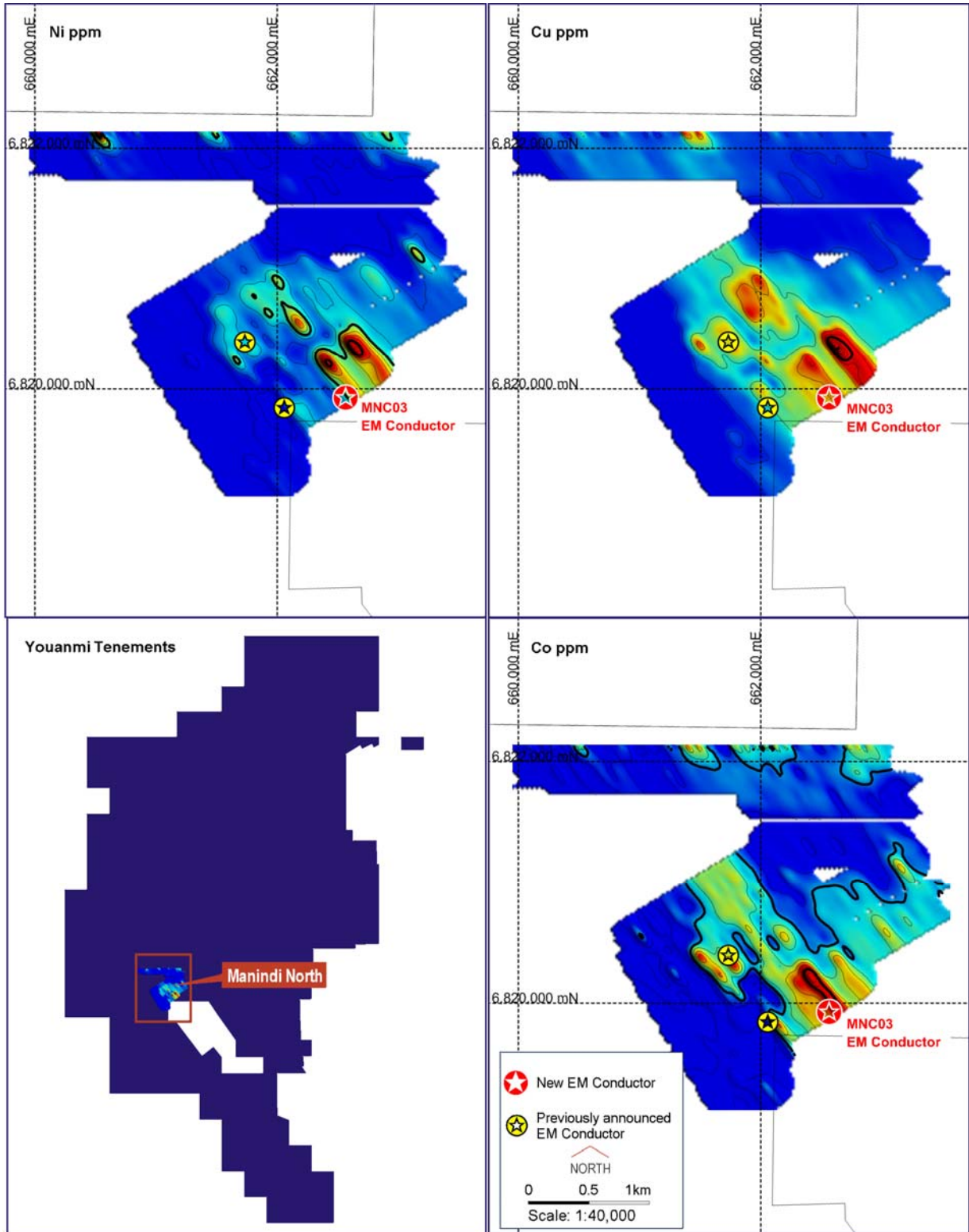


Figure 3. Location of magmatic nickel-copper target, showing coincident EM conductor and Ni-Cu-Co soil anomaly.

EM surveying is also ongoing to the south of Manindi, covering the VMS prospective stratigraphy and the contact of the intrusion, where gossans and two EM conductors have been identified in previous exploration (see Figure 2).

Soil sampling of a target thought to represent a feeder zone to the Youanmi layered intrusion has also identified a strong (up to 800ppm) and extensive (800 metre long) copper anomaly on the interpreted basal contact of the layered intrusion at Ram Well (see Figure 4 and ASX announcement of 16<sup>th</sup> August 2010). A gravity survey has been undertaken to identify any dense buried bodies associated with this which might help focus drilling. Results for this are expected in the near future.

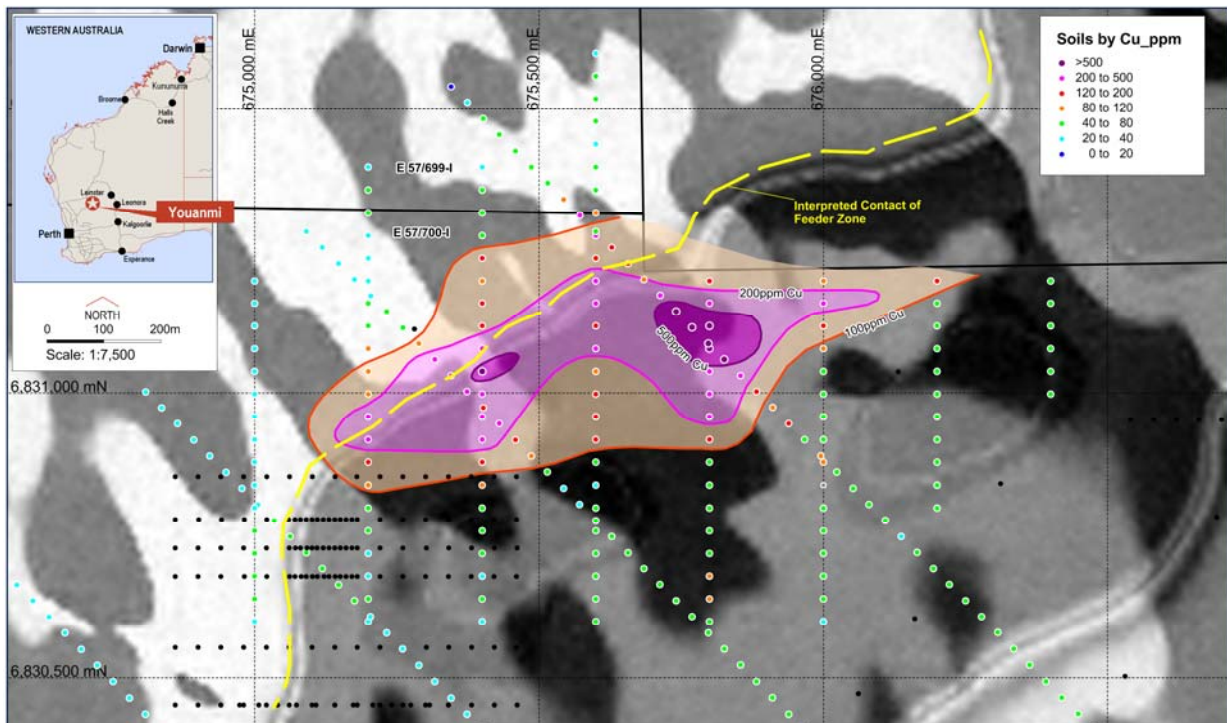


Figure 1. Ram Well soil anomaly showing copper values over greyscale magnetic image. The marked change in magnetism from strongly magnetic (pale grey, top) to weakly magnetic (dark grey, bottom) defines the contact between the magnetite-rich zone and the underlying contact zone of the intrusion.

## Polar Bear

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, and the southern continuation of the trend which hosts Avoca's Higginsville gold mine. It is largely concealed beneath the salt lake sediments and sand dunes of Lake Cowan.

Over 40 electromagnetic (EM) conductors have been defined beneath the thin salt lake sediments and marginal sand dunes of Lake Cowan (see Figure 5 and ASX announcement of 22<sup>nd</sup> September 2010). The majority of these are associated with a thick sequence of ultramafics, and several also occur in association with interpreted prospective basal contacts of ultramafics.

The presence of multiple EM conductors in the same sequence of rocks as those which contain the Halls Knoll nickel sulphide gossan and intersections of disseminated nickel sulphides in historic drilling (as reported in previous ASX announcements) is considered highly encouraging.

Drilling of some of these conductors is scheduled to commence in November.

A geological mapping program has also been scheduled to commence in November.

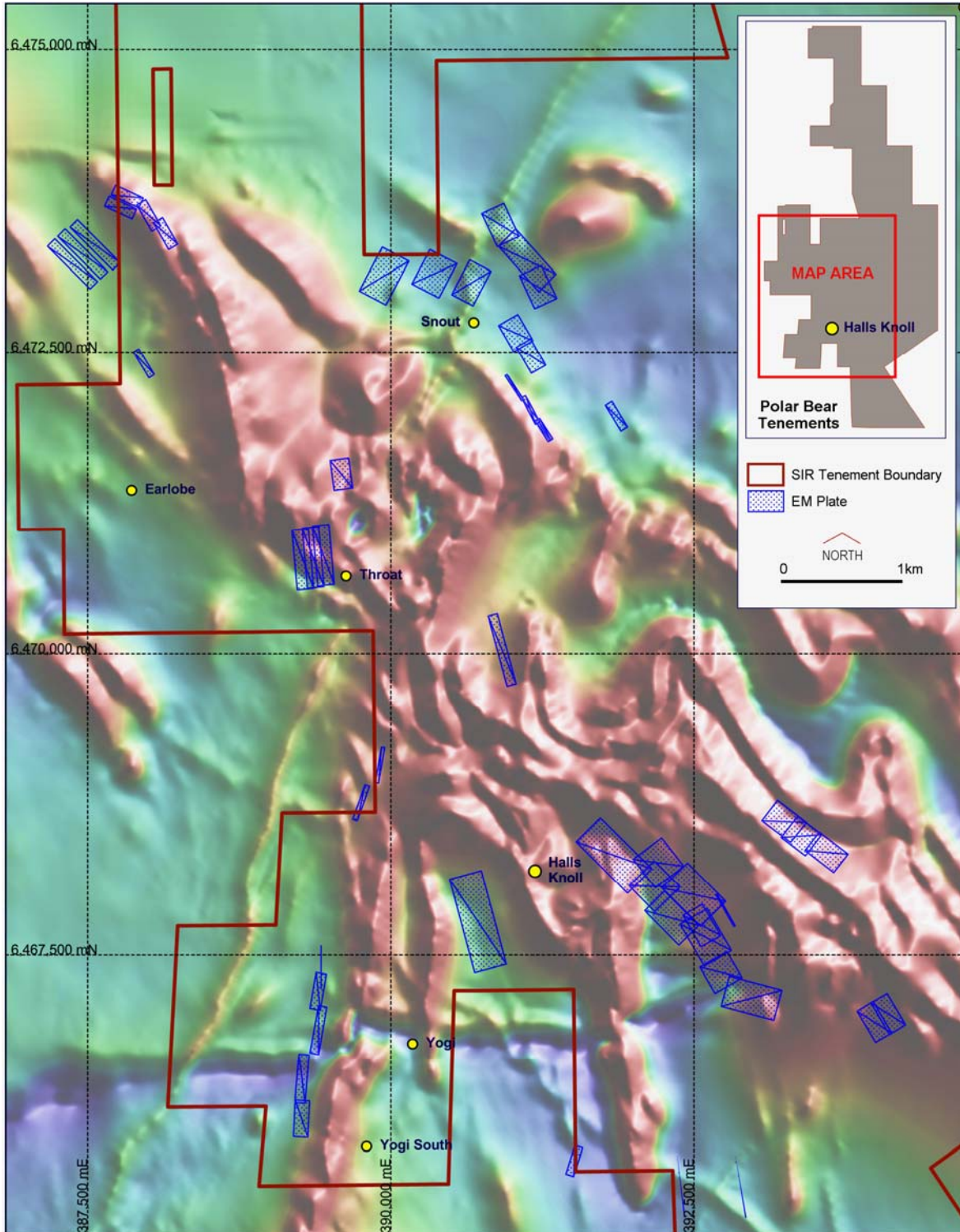


Figure 5. Location of modelled EM conductors with respect to the ultramafics (strongly magnetic units shown as red) and the nickel sulphide gossan at Halls Knoll (yellow dot).

### Fraser Range

Sirius has a 70% interest in the base metal (nickel, copper, cobalt, zinc, lead) and PGM rights 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 400 kilometres strike length of the Proterozoic Albany-Fraser Province to the south of the

Independence/Anglogold Tropicana gold discovery and is considered prospective for mafic-ultramafic intrusion hosted magmatic nickel-copper-platinum group metal (PGM) deposits of a style similar to those of the Thompson belt in Manitoba, Canada.

As part of the recently announced transaction, the existing Fraser Range base metal joint venture (FRBMJV) is to be modified to include a 70% interest in all commodities, including gold. The JV contains a number of gold anomalies in regional soil and calcrete sampling (see Figure 6). A program to infill these to a point where discrete drill targets can be defined has been planned and scheduled to commence in November.

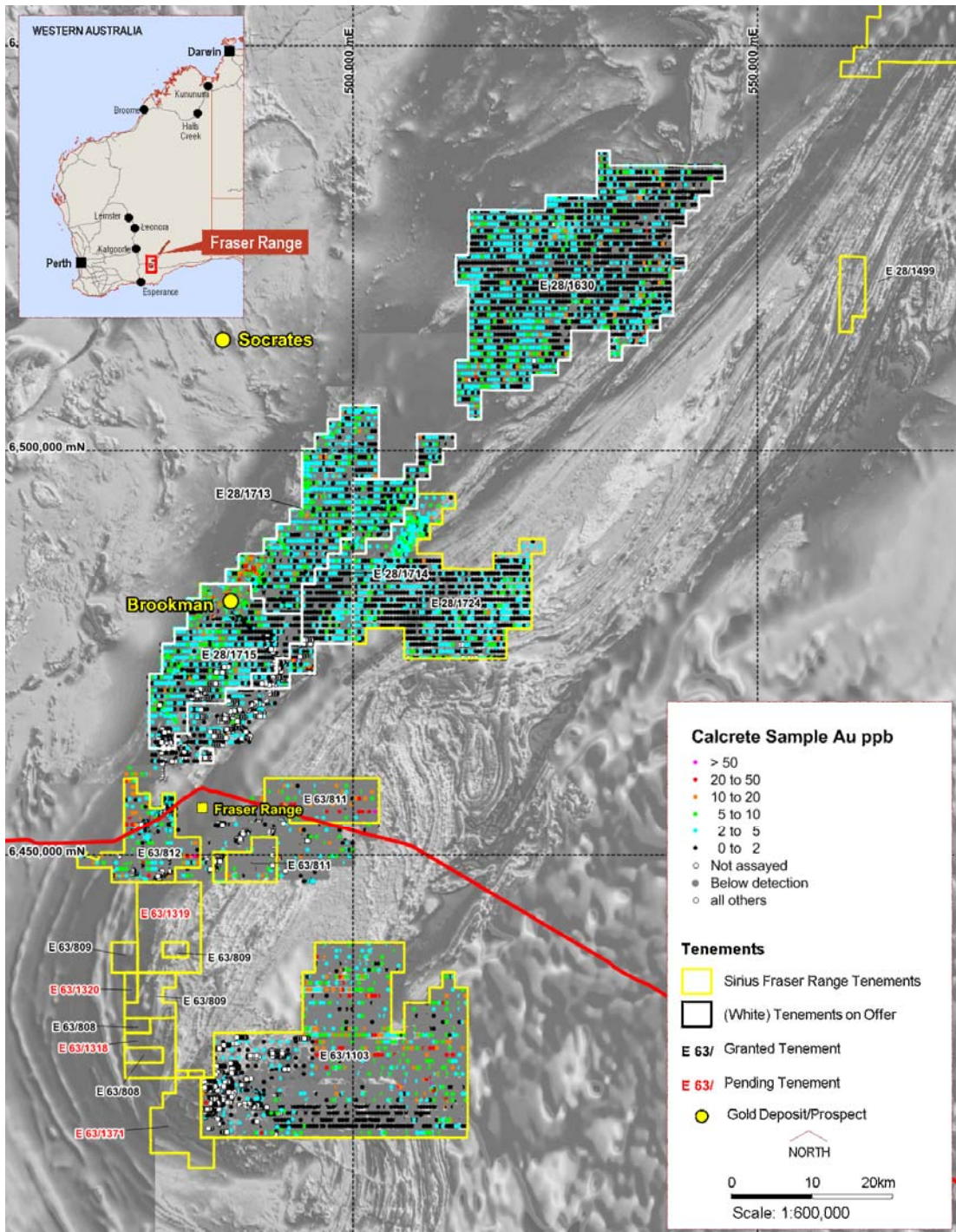


Figure 6. Regional gold anomalies on the existing and new Fraser Range JV tenements.

## Collurabbie

*Sirius has a 70% interest in the Collurabbie Joint Venture, with Mark Creasy retaining a 30% free carried interest to the completion of a bankable feasibility study. The project is located along strike from Falcon's Olympia nickel-copper-platinum group metal (PGM) discovery and is concealed by more recent rocks, and is effectively unexplored. The area is considered prospective for mafic-ultramafic intrusion hosted magmatic nickel-copper-platinum group metal (PGM) deposits of a style similar to those of the Raglan belt in Quebec, Canada.*

Two EM conductors have been defined at Collurabbie and a heritage survey is scheduled to take place in November to enable proposed drill sites to be accessed.

## Lawlers

*The Lawlers project comprises two joint ventures with Barrick. Sirius has a 70% interest in the nickel sulphide rights on the Lawlers Nickel Joint Venture (2006), and is earning a 70% interest in the nickel sulphide rights on the Lawlers 2008 Nickel Joint Venture. Sirius also has an exclusive option to purchase 70% of the Mt. Margaret nickel laterite deposit. The project is located in the heart of Australia's premier nickel producing district, being surrounded by BHP's Leinster and Mt. Keith nickel mines, Xstrata's Cosmos and Prospero nickel mines and Norilsk's Waterloo nickel mine.*

Two of the eight known EM anomalies at Lawlers were tested as described in the previous quarterly report. Assays received from these holes confirmed the initial opinion that these holes intersected barren sedimentary sulphides.

Another drilling program has been planned for November, subject to availability of drill rigs.



**Mark Bennett**  
**Managing Director and CEO**

## 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. 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, and these results may not be independently verified because original samples are no longer available.

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 drillhole 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.

## Appendix 5B

### Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001, 01/06/10.

Name of entity	
Sirius Resources NL	
ABN	Quarter ended ("current quarter")
46 009 150 083	30 <sup>th</sup> September 2010

### Consolidated statement of cash flows

	Current quarter \$A'000	Year to date ( 3 months) \$A'000
<b>Cash flows related to operating activities</b>		
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for (a) exploration & evaluation	(1,430)	(1,430)
(b) development	-	-
(c) production	-	-
(d) administration	(313)	(313)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	23	23
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Other - repayment of earlier GST refund paid to Sirius by ATO in error	(295)	(295)
<b>Net Operating Cash Flows</b>	<b>(2,016)</b>	<b>(2,016)</b>
<b>Cash flows related to investing activities</b>		
1.8 Payment for purchases of: (a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	(79)	(79)
1.9 Proceeds from sale of: (a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	-	-
1.10 Loans to other entities	-	-
1.11 Loans repaid by other entities	-	-
1.12 Other (provide details if material)	-	-
<b>Net investing cash flows</b>	<b>(79)</b>	<b>(79)</b>
1.13 Total operating and investing cash flows (carried forward)	<b>(2,095)</b>	<b>(2,095)</b>

+ See chapter 19 for defined terms.

1.13	Total operating and investing cash flows (brought forward)	(2,095)	(2,095)
	<b>Cash flows related to financing activities</b>		
1.14	Proceeds from issues of shares, options, etc.	-	-
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other (provide details if material)	-	-
	<b>Net financing cash flows</b>	-	-
	<b>Net increase (decrease) in cash held</b>	(2,095)	(2,095)
1.20	Cash at beginning of quarter/year to date	3,051	3,051
1.21	Exchange rate adjustments to item 1.20		
1.22	<b>Cash at end of quarter</b>	957	957

**Payments to directors of the entity and associates of the directors**

**Payments to related entities of the entity and associates of the related entities**

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	123
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Salaries paid to directors in the quarter including superannuation

**Non-cash financing and investing activities**

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

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2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

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**Financing facilities available**

*Add notes as necessary for an understanding of the position.*

Amount available \$A'000	Amount used \$A'000
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+ See chapter 19 for defined terms.

3.1	Loan facilities	-	-
3.2	Credit standby arrangements	-	-

**Estimated cash outflows for next quarter**

		\$A'000
4.1	Exploration and evaluation	523
4.2	Development	-
4.3	Production	-
4.4	Administration	199
<b>Total</b>		<b>722</b>

**Reconciliation of cash**

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	207	1,051
5.2 Deposits at call	750	2,000
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
<b>Total: cash at end of quarter</b> (item 1.22)	957	3,051

**Changes in interests in mining tenements**

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed	E28/1499 70% of base metal rights – tenement expired	70%	0%
6.2	Interests in mining tenements acquired or increased			

+ See chapter 19 for defined terms.

**Issued and quoted securities at end of current quarter**

*Description includes rate of interest and any redemption or conversion rights together with prices and dates.*


	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 <b>Preference *securities</b> <i>(description)</i>	N/A	N/A	N/A	N/A
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 <b>*Ordinary securities</b>	1,642,680,028	1,642,680,028	N/A	N/A
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs				
7.5 <b>*Convertible debt securities</b> <i>(description)</i>	N/A	N/A	N/A	N/A
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7 <b>Options</b> <i>(description and conversion factor)</i>	5,000,000 750,000,000 12,000,000 27,000,000		<i>Exercise price</i> 3 cents 3 cents 3 cents 3 cents	<i>Expiry date</i> 31/08/2012 31/08/2014 28/09/2014 01/11/2014
7.8 Issued during quarter				
7.9 Exercised during quarter				
7.10 Expired during quarter				
7.11 <b>Debentures</b> <i>(totals only)</i>				

+ See chapter 19 for defined terms.

7.12	<b>Unsecured notes</b> <i>(totals only)</i>		
7.13	<b>Employee Shares</b>	866 Conversion price \$2.85	

**Compliance statement**

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here:  ..... Date: .....28/10/2010.....  
Director  
 Print name: Mark Bennett

**Notes**

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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+ See chapter 19 for defined terms.