

6 April 2011

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#### **Company Information**

ASX Code	SIR
Share Price A\$	0.17
Ord Shares	137m
Options	91m
Market Cap A\$	23.3m
Diluted Market Cap A\$	38.8m
Cash A\$	10.4m
Total Debt A\$	-
EV A\$	12.9m

Source: Sirius Resources

## **Directors**

Non-Exec Chairman	Stephen Lowe
CEO and MD	Mark Bennett
Non-Exe Director	Jeff Foster
Non-Exe Director	Terry Grammer

Source: Sirius Resources

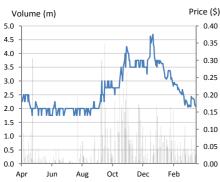
# **Company Details**

Address	5/5 Mumford Place Balcatta Place WA 6021
Phone	+618 9240 8914
Web	www.siriusresources.com.au

Source: Sirius Resources

## 1 Year Price Chart

Source: Bloomberg



# Sirius Resources (SIR)

Major drilling campaign underway for base and precious metals

Recommendation: Speculative **BUY** 

# **Key Points**

- Renowned prospector Mark Creasy vends in private landholdings
- Major new drill-ready gold project in the Tropicana Belt
- Strong team of explorers with three 'Prospector of the Year' awards
- Multiple nickel targets along strike from nickel sulphide gossans
- Large package of unexplored prospective ground
- Neighbours include BHP, Xstrata, Norilsk, Anglogold, Independence

Sirius Resources is a cashed up base and precious metals exploration company with large land holdings in key producing districts. The company has identified a number of drill-ready targets for the current drill campaign. The strength of the board and the quality of the land package bode well for the company in the longer term.

## **Company Overview**

Sirius Resources (ASX: SIR) has extensive exploration acreage over 8,500km<sup>2</sup> covering five different project areas within Western Australia.

The primary focus for the company is the exploration for nickel sulphide and gold deposits, however all five project areas also host the potential for base and precious metal mineralisation.

A drilling campaign is underway at the Fraser Range, Lawlers and Youanmi projects with results expected to be released to market by end June 2011. At Polar Bear, a number of gossans have been identified and may reflect the surface expression of significant ore bodies at depth. A second round of air core and diamond drilling will recommence once a lake rig becomes available.

Mark Creasy and the Board of Directors bring a wealth of experience and knowledge to the company. Between them, there are three 'Prospector of the Year' awards for the discovery of world class gold and nickel deposits.

## **Project summary table**

Project	Ownership	<b>Target Mineralisation</b>
Lawlers	82% and 70% Nickel Sulphide Rights Barrick Gold 18% and 30%	Nickel
Polar Bear	Sirius 100%	Nickel
Fraser Range	Sirius 70%	Nickel, Gold, Copper,
	Mark Creasy 30%	Chromite, Vanadium
Youanmi	Sirius 70%	Nickel, Copper, Gold,
	Mark Creasy 30%	Zinc, PGM's
Collurabbie	Sirius 70%	Niekal Cannor DCM
	Mark Creasy 30%	Nickel, Copper, PGM
Source: Sirius Resoul	rces	

## **Project Review**

#### Lawlers

(Sirius 84.4% and 70% Nickel Sulphide Rights, Barrick Gold 15.6% and 30%)

Two contiguous JV's with Barrick Gold

The Lawlers project comprises two contiguous nickel joint ventures with Barrick Gold known as the Lawlers 2006 and Lawlers 2008 joint ventures. Sirius has a 84.4% interest in Lawlers 2006 and is earning a 70% interest in the Lawlers 2008 JV by spending A\$1.5m within 3 years.

Major Nickel Producing district The two JV's cover 250km<sup>2</sup> and are located north of Leonora, within Australia's premier nickel producing district. Major nickel sulphide mines surrounding the project area include BHP's Leinster and Mount Keith operations, Xstrata's Cosmos, Prospero and Sinclair nickel mines, as well as Norilsk's Waterloo nickel mine.

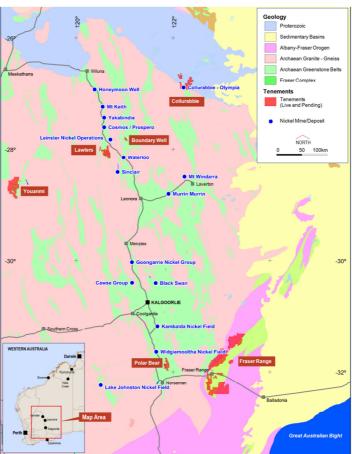
The Lawlers project area has been relatively unexplored since the discovery of the surrounding nickel operations, however it remains prospective for small high grade deposits of ~1Mt @ ~8% Ni.

Drilling results expected shortly

Sirius has carried out a first pass ground electromagnetic (EM) survey across 70% of the prospective stratigraphy and has identified 6 anomalies. The first 2 EM anomalies have now been drill tested, with both intersecting barren sulphides. The remaining EM anomalies are currently undergoing diamond drilling with assays expected to be announced to market in May 2011.

Sirius also holds an exclusive option to acquire 70% of the Mt Margaret nickel-cobalt laterite deposit at Lawlers.

# **Project Locations - Premier Nickel exploration acreage**



Source: Sirius Resources



## Polar Bear (Sirius 100%)

The Polar Bear project area covers an area of 190km<sup>2</sup> over the southern continuation of Kambalda and Widgiemooltha ultramafic stratigraphy, which hosts significant nickel sulphide mines along strike to the north. The area also straddles the trend between Higginsville and Norseman which hosts several shear zones and Avoca's (now Alacer Gold) 1.5Moz Trident gold deposit.

Previous exploration is limited

The project area is largely concealed beneath shallow salt lake sediments of Lake Cowan and the sand dunes of the Polar Bear peninsula. Previous exploration has been limited over the past 20 years due to complex JV's and ownership structures.

8 high priority targets identified by gossans

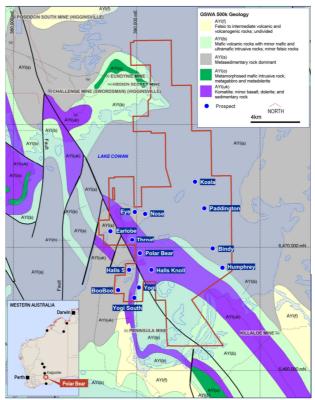
The company has identified 8 high priority targets identified by gossans within the area. A 'gossan' is an exposed weathered and oxidised portion of a mineral vein which overlays a sulphide deposit. It is formed by the oxidation of sulphides and the leaching out of the sulphur and most metals and thus may be used as a clue to the existence of subsurface ore deposits.

First round of drilling was successful

Sirius has completed the first round of drilling consisting of ~100 air core holes across a 500m strike length surrounding the area of a gossan known as 'Halls Knoll'. The results define several discrete intersections of disseminated nickel sulphides with associated PGM's.

The results confirm the presence of a mineralised sulphide system and are encouraging given the shallow nature of the holes. Sirius will now continue reconnaissance drilling to scope out the extent of the disseminated zone in an effort to further define targets for diamond hole drilling.

## **Polar Bear Geology**



Highlights of shallow air core drilling from Halls Knoll

- 9m @ 1.02% Ni and 0.22% Cu from 2m to end of the hole
- 12m @ 0.71% Ni and 0.32% Cu from 16m to the end of the hole
- 20m @ 0.56% Ni and 0.07%Cu from 3m to the end of the hole

Source: Sirius Resources



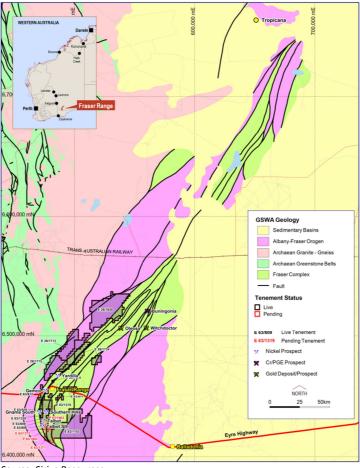
## **Fraser Range**

(Sirius 70% – Mark Creasy 30% free carry)

World class gold district

The Fraser Range project area covers a previously unexplored area of 2,200km<sup>2</sup> and over 100km strike length of the south western end of the Tropicana gold belt. This formation hosts the world class Tropicana gold discovery owned by the Independence/ Anglogold JV and the Tropicana East gold prospect owned by Beadell Resources.

### **Fraser Range Project Tenements**



Large tenement position

Source: Sirius Resources

Towards the southern end of the project area, adjacent to the Eyre Highway, previous drilling campaigns recorded intersections of 1.8% Ni and 1.2% Cu, however much of the Fraser Range remains totally unexplored.

Sirius has identified a 2km long soil anomaly which contains up to 568ppm Ni and 303ppm Cu, which is situated in the centre of a broader magnetic feature. Initial interpretation suggests this feature may represent a dome or plug of nickel-bearing ultramafic rocks, or it may be a previously unknown layered intrusion. Both situations are prospective for nickel, copper, PGM's, chromite or vanadium.

Prospective 2km target zone identified

Deeper drilling to commence imminently

Reconnaissance aircore drilling undertaken by Sirius across the Brookman target has identified anomalous gold in several holes. Although the intercepts are of low grade (~0.3g/t Au) the results are considered significant as the holes were drilled at 80m spacing and to an average depth of just ~30m. This broadly spaced shallow drilling is designed as the first of several stages prior to undertaking closer spaced, deeper drilling which should commence in April 2011.



## Youanmi

(Sirius 70% - Mark Creasy 30% free carry)

Sirius has a 70% interest in the Youanmi JV with Mark Creasy retaining a 30% free carried interest to the completion of a BFS and retaining titanium-vanadium-iron rights.

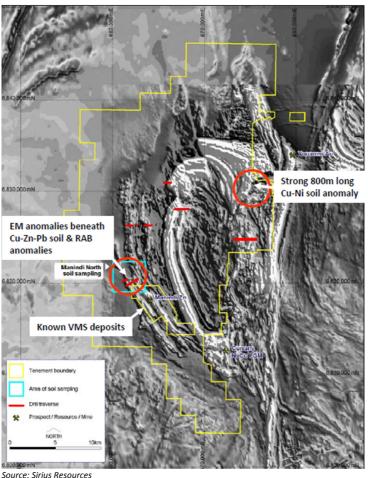
Prospective for VMS type deposits

The project covers the Youanmi intrusive complex and the surrounding stratigraphy. The intrusive complex is prospective for magmatic nickel-copper-platinum mineralisation while the surrounding stratigraphy is prospective for volcanogenic massive sulphide (VMS) copper-zinc deposits. Several shear zones with the potential for gold mineralisation also occur within the project area.

Project area already hosts a defined resource

Metals Australia's 'Manindie' zinc resource (lies within the project area) comprises 1.35Mt @ 6% Zn, while nearby Empire Resources 'Just Desserts' copper gold resource of 1.07Mt @ 1.8% copper and 0.8g/t Au is testament to the prospectively of the area.

#### Youanmi intrusive complex



in May and June 2011.

Manindi North. Sirius has defined a ~400m long Cu-Zn-Pb anomaly along strike from the known Manindi VMS zinc deposit and has carried out initial RAB drilling over the target area. Drilling confirmed the presence of zinc and copper within the weathered rock formations, whilst a subsequent EM survey defined several deeper anomalies. Diamond drilling has commenced with assays expected to be announced to market

There are several targets within the project area, however the most advanced is

Diamond hole drilling underway with assays pending



## Collurabbie

(Sirius 70% - Mark Creasy 30% free carry)

The Collurabbie project lies 12km along strike to the north of Falcon's 'Olympia' nickel-copper-platinum group metals discovery

Mineralisation similar to that of the nearby 'Olympia' discovery The area is predominantly covered by younger rocks and as such has been largely unexplored. An EM and an ultra-detailed aeromagnetic survey has identified a number of ultramafic pods which have been interpreted to be similar to those known to host the mineralisation at Olympia.

Sirius has commenced additional aeromagnetic surveys to define further targets for drill testing.

# **Directors and Management**

**Mr Stephen Lowe** is a taxation specialist consulting to a wide range of corporate and private clients. He is a director of the Perth-based specialist taxation firm MKT - Taxation Advisors and has been a director of several other public unlisted companies.

Mr Lowe is also business manager for Mark Creasy.

CEO and Managing Director

**Non-Exec Chairman** 

**Dr. Mark Bennett** is a geologist with over 20 years' experience in gold, nickel and base metal exploration and mining. He has worked in Europe, West Africa, and Australia, predominantly for WMC Resources, LionOre and Apex Minerals. He has held the position of Executive Director, Exploration Manager and Chief Geologist, and has worked at WMC's Kambalda Nickel Operations, Gold Fields' St. Ives Gold Mines, and Forrestania Gold's Bounty Gold Mine.

Dr Bennett led the successful LionOre exploration team and in 2002 received Australia's Association of Mining and Exploration Companies (AMEC) Prospector of the Year Award in recognition of his discovery of the Thunderbox Gold Mine and the Waterloo nickel mine.

Non-Executive Director

Ass.Prof. Jeff Foster is a geologist with over 20 years worldwide experience in various roles for WMC and BHP, and as a director of the Brisbane-based consultancy Geodiscovery group. He holds BSc and MSc degrees and is also Associate Professor at the ARC Centre of Excellence in Ore Deposits at the University of Tasmania. Prof. Foster is a renowned authority on nickel deposits, having advised several multinational mining companies and published numerous papers on the subject

Non-Executive Director

**Terry Grammer** is a geologist with a distinguished career in exploration. He is a corecipient of the **Prospector of the Year Award** for his role in the discovery of the Cosmos nickel deposit - a discovery that underpinned the growth of Jubilee Mines prior to its takeover by Xstrata. Terry was also a founder of successful mid-tier nickel miner Western Areas and is currently non-executive chairman of South Boulder Mines, the owners together with Independence Group, of the new Rosie nickel sulphide discovery in the Duketon belt.

Major shareholder and JV partner

Mark Creasy is a renowned prospector and mining entrepreneur. He holds the inaugural Prospector of the Year Award for his role in the Yandal Belt discoveries and holds ~25% equity in the company



#### **Analyst Verification**

We, Gavin Wendt and Andrew McLeod, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

#### Disclosure

Breakaway Investment Group (AFSL 290093) may hold direct and indirect shares in the Sirius Resources. It has also received a commission on the preparation of this research note.

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