Sirius Resources (SIR)

Advancing the stellar Nova-Bollinger nickel deposit into production

Recommendation: Speculative BUY

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Company Information

ASX Code	**SIR**
Share Price	A$3.04
Ord Shares	227.0m
Total Options	48.0m
Diluted Market Cap A$	**A$797.6m**
Cash (Jun 13)	A$41m
Total Debt	A$0m
Enterprise Value	**A$756.3m**

Directors and Management

Non-Exec Chairman	Jeff Dowling
Managing Director/CEO	Mark Bennett
Executive Director	Jeff Foster
Non-Executive Director	Neil Warburton
Non-Executive Director	Terrence Grammer
Non-Executive Director	Anna Neuling

Substantial Share Holders

Yandal Investments	19.9%
CBA	5.0%
Tarney Holdings	2.3%
Perth Select Seafoods	2.3%
JP Morgan Nom's	0.9%

Source: Bloomberg

Company Details

Address	253 Balcatta Road, Balcatta WA 6021
Phone	+618 6241 4200
Web	www.siriusresources.com.au

1 Year Price Chart

Source: Bloomberg

Key Points

- ***Nova & Bollinger JORC Resource increased to 14.6Mt @ 2.5% NiEq***
- ***Scoping Study advancing well***
- ***Early test work indicates >90% recoveries of nickel, copper and cobalt***
- ***Geotechnical studies indicate cost effective bulk underground mining methods***
- ***Significant exploration potential still exists within 'the Eye'***
- ***Strong pipeline of nickel and gold projects with encouraging early results***

Following the discovery of the Nova and Bollinger nickel deposits, Sirius Resources has enjoyed a meteoric rise in valuation with its share price increasing a staggering +7,000% at its high. The company is now well advanced in completing a Scoping Study and is targeting first production as early as 2016. Significant exploration potential still exists within the immediate area of Nova-Bollinger as well as elsewhere within the prospective portfolio.

Company Overview

Sirius Resources' (ASX: SIR) primary focus is its 70% interest in the 'Fraser Range' project which is located in southern WA. The remaining interest is held by well-known prospector Mark Creasy who retains a 30% 'free carried' interest to completion of a BFS. Mark Creasy also owns 19.9% of SIR via Yandal Investments.

In July 2012 Sirius discovered the Nova deposit and since then the company has delineated a JORC Resource of **14.6Mt @ 2.2% Ni, 0.9% Cu and 0.08% Co** (implying a 2.5% NiEq grade) which includes the adjoining Bollinger deposit.

The Nova-Bollinger deposit is a magmatic nickel sulphide deposit which occupies part of a 3km long prospective structure known as 'the Eye'. This style of deposit is broadly analogous to very large Canadian deposits (Thompson, Raglan, Voisey's Bay) and has not been previously recognised in Australia. Significant exploration potential still exists with only ~50% of 'the Eye' adequately tested.

A Scoping Study is well advanced and due for completion in the coming weeks. Initial reports indicate high recovery rates of >90% are achievable for nickel, copper and cobalt while geotechnical studies indicate an efficient low cost 'open stope' underground mining method can be employed.

Investment Thesis

The discovery of the Nova nickel-copper deposit in July 2012 has catapulted Sirius from the modest ranks of a junior exploration company to the ranks of one of Australia's most significant nickel companies.

One of Australia's most significant Nickel companies

Since July 2012, the company's market capitalisation has increased from ~A$ 7.5m to ~A$ 797.6m (with a cash balance of A$41m) while its share price has increased by ~4,000% (at current price).

Capital Structure	**SIR: $3.04**
Shares on Issue	227.0m
MCAP	A$590.2m
Total Options	48.0m
ITM options	34.5m
Diluted MCAP	A$797.6m
Cash (end Jun '13)	A$ 41.3m
Total Debt	-
Enterprise Value	**A$756.3m**

Source: Sirius Resources

Well rewarded for patient prospecting

The Nova & Bollinger discovery has not only been a transformational event for the company, it has also been a win for the junior exploration sector as a whole. The discovery has demonstrated Australia still hosts significant rewards for patient green field explorers and it is not the "over-explored" country that many perceive.

80% of JORC Resource in 'Indicated' category

Sirius has now delivered a total JORC Resource of 14.6Mt @ 2.5% NiEq of which ~80% in the 'Indicated' category. This is a significant achievement and has been accomplished in a little over a year from when it made its first 'discovery hole'.

Nickel Sulphides vs. Nickel Laterite

Nickel sulphides are simpler and more cost effective to process

Nickel deposits are typically divided between nickel sulphide (such as Nova-Bollinger) and nickel (oxide) deposits. Historically, production has favoured sulphide ore as they are easier to process via conventional mining, smelting and refining methods. Laterite ores, on the other hand, typically require capital intensive hydrometallurgical processing (such as high pressure, high temperature acid leaching). This means that laterite ores tend to require substantially more energy and chemicals (significantly increasing costs) than sulphide nickel deposits.

Nova and Bollinger are sulphide ore bodies

Scoping Study – Early Indications

Scoping level studies are currently underway and due for completion in the coming weeks. The outcomes of the study will provide more clarity on possible operating scenarios and costs. These will be assessed in detail in a Definitive Feasibility Study (DFS) expected to be completed by mid 2014.

~95% recovery achievable

Early results from metallurgical studies indicate a high overall recovery rate of ~95% is achievable for both the nickel and copper into a concentrate via conventional floatation processing.

Efficient underground mining method

Geotechnical studies have also indicated a highly competent host rock which should allow for efficient 'sub-level open stope' mining methods. (a 'stope' is an underground cavity created by the removal of ore).

Large proportion of current Resource available for basis of Reserve estimate

Sirius currently has a 14.6Mt JORC Resource. Breakaway estimates at least 10Mt of this Resource will be converted to Mining Reserves. Assuming a 10Mt Reserve, Sirius would likely target a 1.0-1.5Mtpa processing plant which has potential for peak production of 24,000t-35,000tpa of NiEq (nickel equivalent takes into account by-product copper and cobalt credits). Breakaway estimates a CAPEX requirement of A$400-A$500m for an operation of this scale.

Based on peer comparisons, Breakaway estimates production costs, after by-product credits, in the order of ~A$1.50/lb (which implies ~A$3,500/t NiEq) against a current LME spot nickel price of US$13,600/t.

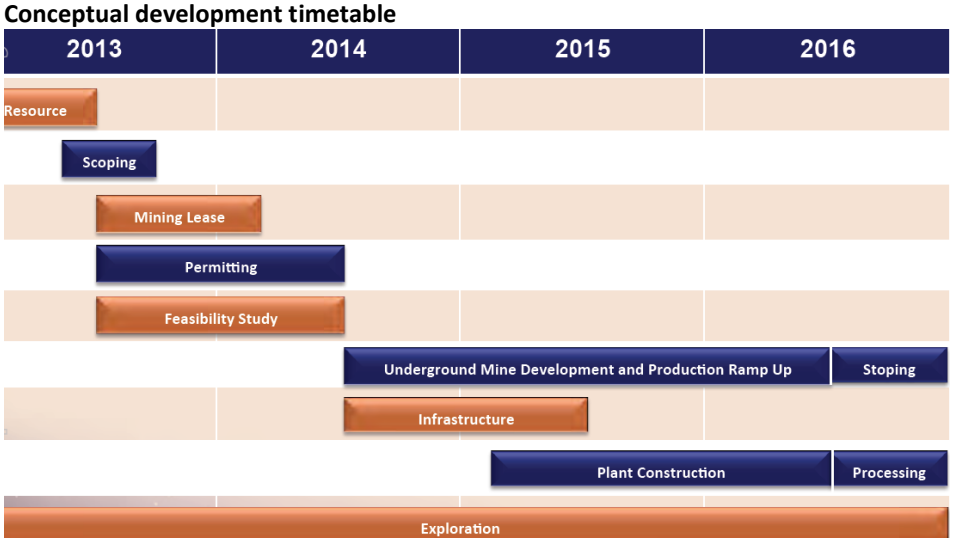
Breakaway emphasises the assumptions outlined above are based on peer comparisons and in house estimates. The soon to be announced Scoping Study outcomes will provide the next level of clarity on cost parameters.

Development Timetable

The table below shows Sirius conceptual development timeline, indicating first production as early as 2016.

Near term production potential

Conceptual development timetable



Source: Sirius Resources

Peer Comparison

ASX Listed Peer Comparison

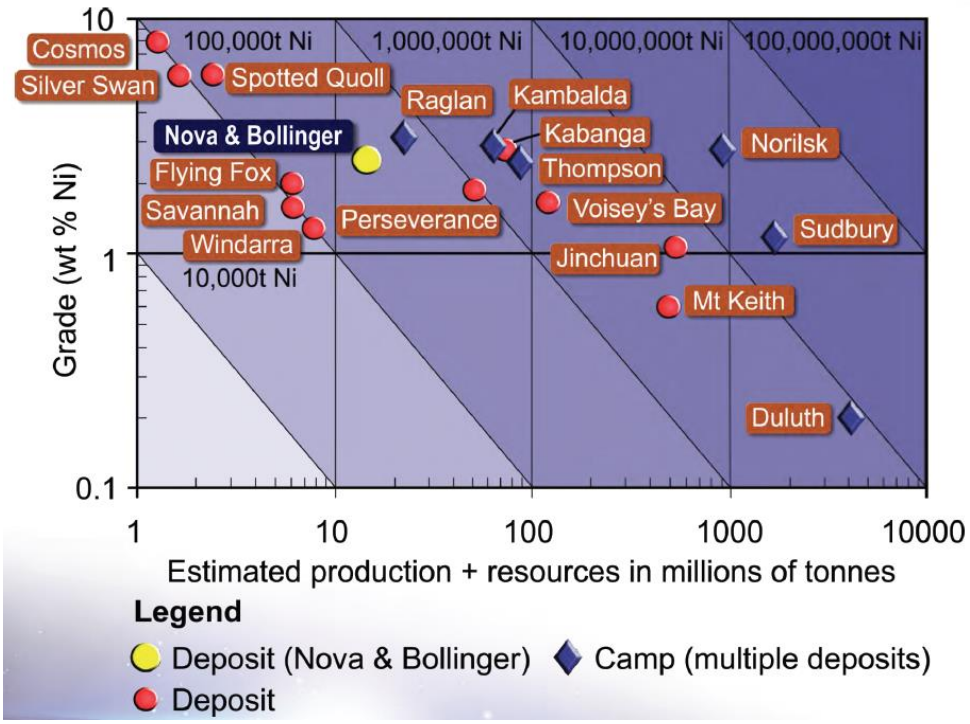
		Reserves					Resources							EV Comparisons	
ASX Code	EV* A$m	Mt	Ni %	Cu %	Ni kt	Cu kt	Mt	Ni %	Cu %	Ni kt	Cu Kt	NiEq %	NiEq kt	EV/Reserve Ni lb	EV/Resource Ni lb
WSA	847	6.8	3.3	-	223	-	22.6	2.0	-	456.6	-	2.0	452	1.72	0.85
IGO	713	1.1	3.7	-	42	-	1.3	5.9	-	76.6	-	5.9	77	7.72	4.20
MBN	425	159	0.52	0.13	830	207.1	361	0.57	0.14	2046	510	0.6	2200	0.23	0.09
MCR	32	0.8	3.5	-	26	-	3.6	3.7	-	133.3	-	3.7	132	0.56	0.11
PAN	27	5.5	1.5	0.5	85	25.1	11.5	1.7	0.4	193.5	41.9	1.8	206	0.14	0.06
SIR	**527**	**-**	**-**	**-**	**-**	**-**	**14.6**	**2.2**	**0.9**	**325**	**134**	**2.5**	**365**	**-**	**0.65**
POS	86	1.7	1.44	-	25	-	10.1	1.55	-	156.6	-	1.6	156	1.57	0.25
CZN	14	-	-	-	-	-	1.8	0.8	0.4	14.4	7.2	1.0	17	-	0.38

Source: Breakaway Research and Company Reports **EV's as at end July 13'*

The table above shows a peer comparison of ASX listed companies with a nickel project as the primary focus albeit IGO has a major gold project entering the production phase, skewing the result. Companies above the red line are in production while those below are still in the assessment phase. WSA is the closest comparable company in terms of scale and quality of its assets.

WSA is closest comparable to Sirius Resources

Nickel Deposit: Peer comparison – Tonnage, grade and contained metal



Source: Sirius Resources

Exploration Potential

While the focus is clearly on advancing Nova & Bollinger into production, the immediate footprint over 'the Eye' still hosts numerous high priority targets. These will be followed up in due course.

Highly prospective portfolio of early stage projects

Additional High Priority Prospects

Sirius also has numerous other 100% owned and (70%-30% Mark Creasy JV) exploration licences within the Fraser Range. The Yardilla prospect (located 20km west of Nova) covers a strong EM conductor and has returned anomalous Cu values in shallow RAB drilling. A diamond drilling campaign will commence shortly.

Numerous conductor zones could represent addition massive sulphide lenses

Elsewhere, Sirius is advancing exploration at the Polar Bear gold project where the company recently intersected shallow supergene gold mineralisation with highlights including **8m @ 3.96g/t Au from 36m** and **8m @ 2.07g/t Au from 44m**. Drilling will commence in late August.

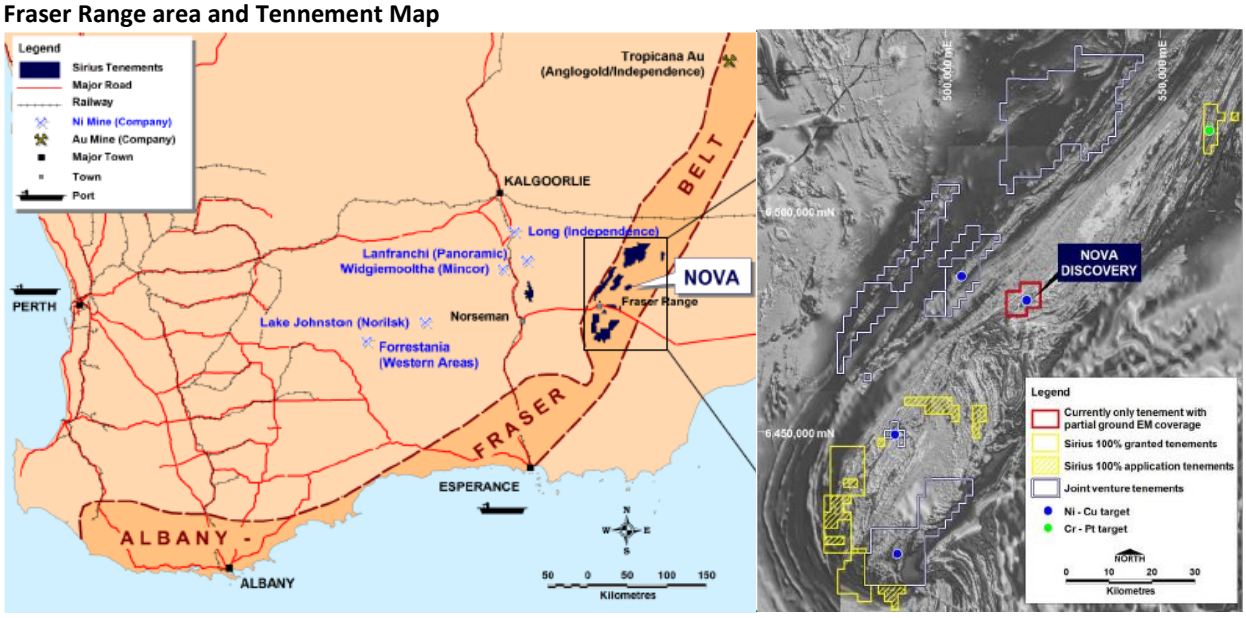
Project Review

Fraser Range Joint Venture

(SIR 70% - Mark Creasy 30% free carried to completion of a BFS)

The Fraser Range project covers an area of over 1,400km^2 and includes over 100km of strike length of the Proterozoic Albany-Fraser mobile belt on the south-east margin of the Yilgarn Craton.

Fraser Range area and Tennement Map



Source: Sirius Resources

Large tenement position

Sirius has numerous quality prospects within its large tenement package, however the licence receiving the most attention is E28/1724, which hosts the Nova and Bollinger deposits.

The Nova Deposit

The Nova nickel-copper deposit was discovered in July 2012 and since then, the company has undertaken an aggressive drill out program, completing over 200 diamond drill holes to prove up a **maiden JORC Resource 10.2Mt @ 2.4% Ni, 1.0% Cu and 0.08% Co cobalt**. Encouragingly, 90% of this Resource is in the 'Indicated' category.

90% of Nova Resource is 'Indicated'

Nova JORC Resource

	Tonnes	Grade				Contained Metal		
	(Mt)	Ni %	Cu %	Co %	NiEq %	Nickel (Kt)	Copper (Kt)	Cobalt (Kt)
Measured	-	-	-	-	-	-	-	-
Indicated	9.2	2.5	1	0.08	2.8	227	94	7.2
Inferred	1.1	1.4	0.6	0.05	1.6	14	7	0.5
Total	**10.2**	**2.4**	**1**	**0.08**	**2.7**	**242**	**100**	**7.7**

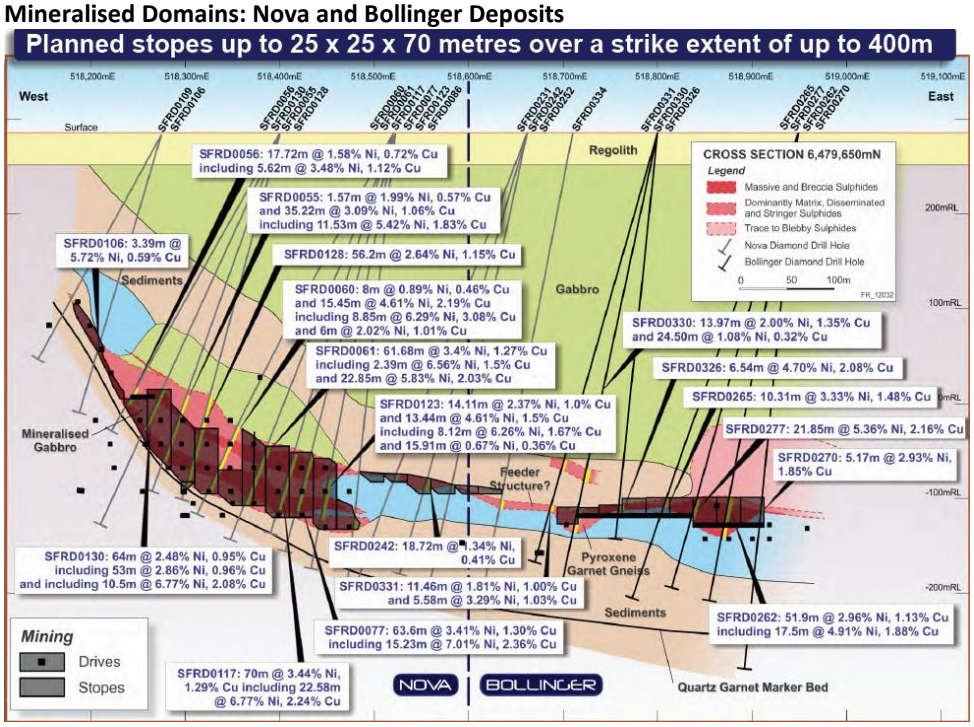
**Resource estimate based on a 0.6% NiEq cut-off*
Source: Sirius Resources

Soon after the discovery of Nova, Sirius began the drilling of a prospect called Bollinger, located immediately east of the Nova deposit. Further high grade, broad widths of nickel mineralisation were intersected including the 'discovery hole' which intersected **102.82m @ 1.0% nickel, 0.43% copper and 0.04% cobalt from 361m**, which included 62.82m @ 1.41% nickel, 0.57% copper and 0.06% cobalt from 401m.

Interpretation of the Bollinger deposit indicates that it is connected to Nova by a feeder zone (a relatively narrow conduit through which magma once flowed).

Nova and Bollinger connected via 'feeder zone'

Mineralised Domains: Nova and Bollinger Deposits



Source: Sirius Resources

Following further drilling campaigns, Sirius released a maiden JORC Resource for the Bollinger deposit of **4.4Mt @ 1.8% nickel, 0.7% copper and 0.07% cobalt for a contained 81,000t nickel, 33,000t copper and 3,300t cobalt**.

14.6Mt @ 2.5% NiEq

The combined Nova-Bollinger Resource is now estimated at 14.6Mt @ 2.5% NiEq. Approximately 80% of the Resource is in the higher JORC confidence level of 'Indicated', which can be used as the basis for estimating a Probable Ore Reserve.

Combined Nova and Bollinger JORC Resource

	Tonnes (Mt)	Grade				Contained Metal		
		Ni %	Cu %	Co %	NiEq %	Nickel (Kt)	Copper (Kt)	Cobalt (Kt)
Measured	-	-	-	-	-	-	-	-
Indicated	11.7	2.5	1	0.08	2.8	294	120	9.8
Inferred	2.9	1.1	0.5	0.04	1.2	31	14	1.2
Total	**14.6**	**2.2**	**0.9**	**0.08**	**2.5**	**325**	**134**	**11**

Source: Sirius Resources

As highlighted in the table above, Nova and Bollinger host a total of 325,000t of contained Nickel plus a further 134,000t of copper and 11,000t of cobalt. To put these numbers into perspective, the current "in-ground" value of the Nova & Bollinger deposits is **~US$5.7Bn.** (assuming current commodity pricing of US$ 14,099/t (Ni), US$ 6,997/t (Cu), US$ 28,171/t (Co)).

Style of Mineralisation

Similarities to the significantly larger Canadian nickel sulphide deposits

The Nova-Bollinger deposit is a magmatic sulphide deposit which has been emplaced within (intruded into) the surrounding rocks and then strongly metamorphosed and partially deformed. It has many features in common to the significantly larger Canadian deposits (such as Thompson, Raglan, Voisey's Bay and Falconbridge) such as the age of rocks, the degree of metamorphism and deformation, the association with a (once) mafic intrusive rock, the presence of copper and cobalt (in addition to nickel), and the ratios at which these metals exist in the ore body.

The comparison of the Nova-Bollinger deposit to the Canadian 'style' of mineralisation is highly relevant as the Canadian deposits are frequently an order of magnitude larger than Australian nickel sulphide deposits, leading to larger and longer life operations. The presence of significant quantities of by-products such as copper, cobalt and platinum group metals (usually less significant in Australian nickel deposits) also makes these mines low cost operations.

Scoping Study

Metallurgy

Coarse grain size allows for less grinding and higher recoveries

Mineralisation at Nova-Bollinger has a very coarse grain size which is highly favourable when it comes to processing as it reduces the energy consumption required during crush/grind whilst also aiding recovery in the floatation.

Preliminary flotation test work indicates that recoveries of 99% are achievable in Ni and Cu massive-breccia mineralisation and 93% Ni and 96% Cu in disseminated mineralisation when using fresh water for processing. Sirius estimates an overall recovery rate of ~95% for both nickel and copper to a bulk concentrate with no arsenic contaminants.

Geotechnical and Mining Studies

Efficient bulk underground mining envisaged

The host rock around the ore body has a competent crystalline structure making it amenable to bulk mining methods. With much of the deposit situated at ~400m below surface, underground mining is proposed. Studies indicate +90m high stopes may be achievable.

Ongoing studies

Applied for Mining Licence

Sirius has already applied for a Mining Licence over the E28/1724 project area and is quickly advancing the various other studies required to take the project into production. These studies include:

Scoping study outcomes due soon

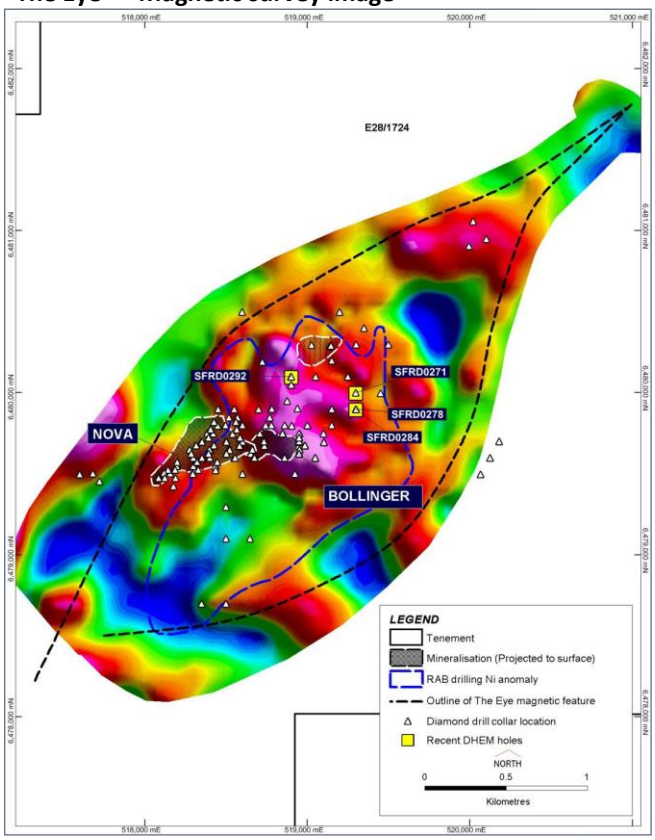
- Baseline environmental surveys and studies – surveys underway;
- Hydrogeological investigations aimed at sourcing suitable water supplies for the project – water drilling and testing underway;
- Large diameter core drilling for further metallurgical test work to support process plant design - ~5t of sample recovered for ongoing testing
- Infrastructure - Access road, aerodrome and accommodation village locations advancing;
- Design of the proposed underground mine: Conceptual designs completed;
- Geotechnical studies - Special purpose holes drilled and studies underway;
- Consideration of logistics options for product export.

Exploration Potential

The Nova and Bollinger deposits form part of a geological structure (represented by a large magnetic anomaly) known as "the Eye". It was this structure that originally led Sirius to drill test the target area.

"The Eye" – Magnetic survey image

Additional Resource potential in 'the Eye'



Source: Sirius Resources

Widespread Ni-Cu sulphide mineralisation outside of Nova-Bollinger area

Exploration to date has focused on the western rim of the 'The Eye' which is interpreted to represent the basal contact of a sequence of gabbroic intrusives. Outside of the Nova and Bollinger discoveries, Sirius has identified widespread magmatic nickel-copper sulphide mineralisation at multiple horizons highlighting the opportunity which still exists in the immediate footprint.

Large anomaly towards the N.E corner of 'the Eye'

Nova-Bollinger was defined as a coincident magnetic and geochemical anomaly. Encouragingly, a similar anomaly north-east of Nova-Bollinger is yet to be adequately drill tested (see above image). Sirius has indicated this anomaly "could be the central intrusive complex to what has been identified to date".

Multiple conductor zones may represent additional massive sulphide lenses

Broad spaced systematic drilling of 'the Eye' is continuing; along with down hole electromagnetic (DHEM) surveys that better define the sulphide target zones. Multiple conductor zones have already been identified which may represent additional massive sulphide lenses. Approximately 50% of the target area has been adequately tested to date, highlighting the significant exploration potential which still exists.

Directors

Non-Executive Chairman

Jeff Dowling

Jeff Dowling has held numerous leadership roles within Ernst & Young which focused on the mining, oil and gas and other industries. Mr Dowling professional expertise centres around audit, risk and financial acumen derived from acting as lead partner on large public company audits, capital raisings and corporate transactions. Mr Dowling career with Ernst & Young culminated in his appointment as Managing Partner of the Ernst & Young Western Region for a period of 5 years. Mr Dowling is also Non-Executive Director for Atlas Iron.

Managing Director

Mark Bennett

Mark Bennett is a geologist with 25 years experience in gold, nickel and base metal exploration and mining. He has worked mainly in Australia, West Africa and Canada, predominantly for LionOre and WMC at locations such as WMC's Kalgoorlie exploration division, Kambalda Nickel Operations and Melbourne head office, Gold Fields' St.Ives Gold Mines, Forrestania Gold's Bounty Gold Mine and Lionore's nickel and gold mines throughout Western Australia. Positions held include various technical, operational and executive positions including Executive Director, Exploration Manager and Chief Geologist.

Exploration Director

Jeff Foster

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.

Mr Foster is regarded as an authority on nickel deposits, having advised several multinational mining companies and published numerous papers on the subject, and has been involved in the targeting and discovery of nickel sulphides in Canada and Finland.

Non-Executive Director

Neil Warburton

Neil Warburton was the Chief Executive Officer of Barminco Limited, one of Australia's largest underground mining contractors. He successfully guided and grew the company both within Australia and Africa with revenues having more than doubled during his tenure. Prior to Barminco, he was Managing Director of Coolgardie Gold. He is also a non-executive director of ASX-listed Red Mountain Mining Limited, Australian Mines Limited and Peninsular Energy Limited.

Non-Executive Director

Terry Grammer

Terry Grammer is a geologist with a long and distinguished career in the junior exploration and mining sector. He is a co-recipient 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 the Executive Chairman of South Boulder Mines, the owners together with Independence Group, of the new Rosie nickel sulphide discovery in the Duketon belt.

Non-Executive Director

Anna Neuling

Anna Neuling has been Sirius' Company Secretary and CFO since 2009. She is a chartered accountant (UK) who has held a number of senior finance positions in the resources industry, including CFO and Company Secretarial roles at several listed companies. Anna worked at Deloitte in London and Perth prior to joining LionOre in 2005, until its takeover by Norilsk.

**Director CV's abridged from company website*

Analyst Verification

We, Grant Craighead 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 receive corporate advisory fees, consultancy fees and commissions on sale and purchase of the shares of Sirius Resources and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

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