ASX Announcement

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Sirius Resources NL

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Projects:

Fraser Range nickel-copper, gold

Polar Bear gold, nickel

Definitive Feasibility Study indicates Nova is a goer

Highlights

- Definitive Feasibility Study indicates the 100% owned Nova Nickel Project as a technically low risk and highly profitable project in less than two years since discovery
- Low C1 cash cost of A$1.66/lb Ni (US$1.50/lb) after by-product credits, better than the scoping study estimate and confirms Sirius in lowest quartile of nickel producers globally
- Low all-in sustaining cash cost of A$2.32/lb Ni (US$2.09/lb), substantially better than scoping study estimate
- Initial 10 year mine life subsequent to development
- Estimated capital cost of A$473 million including a 5% (A$22 million) contingency, in line with the scoping study estimate
- Capital cost now includes extra risk-mitigating measures (eg. a second mobile crusher & automated process control)
- Maiden Probable Ore Reserve of 13.1mt grading 2.1% nickel, 0.9% copper and 0.07% cobalt for a contained 273,000t nickel, 112,000t copper and 9,000t cobalt based on same pricing US$7.44/lb nickel) as used in the scoping study
- Exceptional 93% conversion rate from Indicated Mineral Resource to Probable Ore Reserve reflects the world class quality of Nova
- Probable Ore Reserve is remarkably comparable to the scoping study mining inventory which contained 276,000t nickel (99% conversion rate)
- Life of mine plan contains 285,000t nickel – a 103% conversion from the scoping study mining inventory
- Processing rate of 1.5mtpa for production of approximately 26,000tpa nickel, 11,500tpa copper and 850tpa cobalt after project ramp-up in two separate, high quality, smelter friendly concentrates
- Projected life of mine nickel revenue of A$4.53 billion and net cash flow of A$2.74 billion – both in line with scoping study forecasts and based on same US$10/lb nickel pricing
- Significant leverage to the nickel price: A$434 million net cashflow (undiscounted) per US$1/lb change in nickel price
- Approvals and permitting process commenced
- Finance and offtake discussions at an advanced stage
- Based on various permitting timeline estimates (including receipt of various approvals), development likely to commence early 2015

CAUTIONARY STATEMENT

The Definitive Feasibility Study (DFS) referred to in this announcement is based on a Probable Ore Reserve derived from an Indicated Mineral Resource, plus a small proportion of mining inventory, which comprises material that is currently classified as Inferred Mineral Resource. There is a lower level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or Probable Ore Reserves or that the production target contingent on this material will be realised. The Company advises that the Probable Ore Reserve provides 92% of the total tonnage and 96% of the total nickel metal underpinning the forecast production target and financial projections, and that the additional life of mine plan material comprises less than 8% of the total tonnage and 4% of the total nickel metal. Furthermore, in the first two years of production, 94% of the material planned to be mined is based on Probable Ore Reserves and only 6% of the material planned to be mined in the life of mine plan is based on Inferred Mineral Resources. As such, the dependence of the outcomes of the DFS and the guidance provided in this announcement on the lower confidence Inferred Mineral Resource material contained in the life of mine plan, is minimal (refer Appendix A).

Unless otherwise stated, all cashflows are in Australian dollars, are undiscounted and are not subject to inflation/escalation factors, and all years are calendar years.

The Company has concluded that it has a reasonable basis for providing the forward looking statements included in this announcement. The detailed reasons for this conclusion are outlined throughout this announcement and in particular in the Appendix headed "Forward Looking and Cautionary Statements".

All references to cash costs relate to cash costs calculated on a 100% payability basis.

DEFINITIVE FEASIBILITY STUDY SUMMARY

Sirius Resources NL (ASX:SIR) (Sirius or the Company) advises that the DFS for its 100% owned Nova Nickel Project (Nova), located in the Fraser Range, 700 kilometres east of Perth, Western Australia, has been completed.

The DFS was managed by Sirius personnel and compiled with the assistance of a number of Western Australian engineering companies, with input from a variety of industry experts. It highlights the technically low risk and economically robust nature of Nova, which is expected to become one of the world's most significant and lowest cost nickel mines.

The DFS has been completed using the same financial input criteria as the scoping study completed for Nova in September 2013 (refer to the Company's Australian Securities Exchange (ASX) release of 18th September 2013) in order to enable a meaningful comparison of the two. The outcomes of the DFS are remarkably consistent with those of the scoping study, indicating the high quality of previous work and the robust nature of the asset.

The maiden Probable Ore Reserve comprises 13.1mt grading 2.1% nickel, 0.9% copper and 0.07% cobalt for a contained 273,000t of nickel, 112,000t of copper and 9,000t of cobalt. This represents an exceptional 93% conversion of nickel metal from the Indicated Mineral Resource and 99% conversion of nickel metal from the entire mining inventory announced in the scoping study.

The Probable Ore Reserve is based on the same metal pricing as used in the scoping study (US$7.44/lb) to enable meaningful comparison, which in light of recent increases in the nickel price to >US$8/lb and forecast continued strengthening may be considered conservative.

The Probable Ore Reserve together with a small proportion of additional mining inventory material, together constituting the life of mine plan (LOMP), will underpin an initial mine life of 10 years following a two year development period. The nickel metal forecast to be mined in the LOMP is 3% greater than that estimated in the scoping study mining inventory.

Average production following project ramp-up will be 26,000tpa of nickel and 850tpa of cobalt in a nickel concentrate and 11,500tpa copper in a separate copper concentrate.

C1 cash operating costs (after by-product credits) over this period are forecast to average A$1.66/lb (US$1.50/lb) nickel in concentrate. This is better than originally estimated in the scoping study and will position Sirius in the lowest quartile of global nickel producers.

Importantly, all-in sustaining cash costs are forecast to average a very low A$2.32/lb (US$2.09/lb) nickel in concentrate. This is substantially better than estimated in the scoping study and further emphasises the world class quality of the project.

By applying the same estimated nickel and copper prices (US$10/lb and US$3.30/lb respectively) and A$/US$ exchange rate (0.90) as the scoping study, Nova is forecast to generate a net cash flow (after sustaining capex and royalties) of A$2.74 billion from a forecast nickel revenue of A$4.53 billion over the initial 10 year mine life.

Since the time of the scoping study release the nickel price has increased significantly and the nickel price used in the DFS is lower than that now forecast by Wood MacKenzie. Using the current Wood Mackenzie price forecasts, which result in a weighted average nickel price over the mine life of A$11.79/lb, the forecast nickel revenue increases to A$5.3 billion over the initial mine life with a corresponding net cashflow increase to A$3.5 billion

Whilst the low forecast cash cost of production ensures that Nova is robust in terms of nickel price downside risk, it is also strongly leveraged to any future upside, with the project cashflow changing (either up or down) by A$434 million over the life of mine for each corresponding US$1/lb movement in the nickel price.

Capital expenditure to first production is estimated to be A$473 million. This is virtually unchanged from the scoping study estimate of A$471 million but includes additional items designed to minimise production and processing risk to protect the project's cashflow. The capex also includes a contingency of 5% for unexpected costs and overruns. This has been decreased from the A$51 million (approximately 10%) contingency used in the scoping study because of the increased level of detail and confidence in the DFS costings and constraints.

Sirius' Managing Director, Mark Bennett said: "This is an exceptional result that is largely in line and in several respects better than the scoping study and has now been considerably de-risked. Metrics such as the high resource-reserve conversion rate, the very low forecast C1 cash costs and all-in sustaining cash costs and the large projected net cashflow all support the low risk and the world class nature of the project."

"To be able to deliver such an outstanding DFS result on time and in less than two years since drilling the discovery hole is a testament to the outstanding quality of the Nova asset and our people. We are now in a position to develop this project as 100% owner at a time when the nickel market is forecast to be stronger for longer. This vindicates our counter-cyclic exploration approach, our ownership consolidation strategy and our long term view of the nickel market."

DEFINITIVE FEASIBILITY STUDY TEAM

Sirius managed the DFS with investigations, testwork, analysis and review by recognised industry leading organisations with particular expertise in their specific areas of input to the DFS.

Sirius would like to acknowledge the contributors to the DFS which include Sirius' personnel, MBS Environmental, Mattiske Consulting, Rapallo Group, Optiro, Strategic Metallurgy, Groundwater Resources Management, A&A Crawford Geological Research Consultants, Geointerp, Entech Mining, Coffey Mining, Outotec, Mine and Tunnel Ventilation, Mining & Industrial Electrics, SRK Consulting, ALS Metallurgy, MicroAnalysis Australia, Ausenco, GHD, Just HR, Strategic Human Resources Management, Townsend Holdings, Cunningham & Associates, Wood Mackenzie, DDH1 Drilling and MYR Consulting.

MINERAL RESOURCE

The Nova-Bollinger Mineral Resource estimate has been updated as part of the DFS, and was completed in accordance with the guidelines of the JORC Code (2012 edition). The nickel equivalent calculation has been updated with a nickel recovery of 89% (from 95% in July 2013) based on metallurgical testwork. The basis of the new estimate is detailed later in this announcement, but there is no material change from the July 2013 Mineral Resource estimate, with contained nickel metal being unchanged. The updated Mineral Resource estimate is as follows:

- 14.3mt @ 2.4 % nickel, 0.9 % copper and 0.09 % cobalt; for
- 325,000 t nickel, 134,000 t copper and 11,000 t cobalt.

	Nova-Bollinger Mineral Resource estimate - May 2014									
DEPOSIT	Resource Category	Tonnes (Mt)	Grade				Contained Metal		
			NiEq%	Ni %	Cu %	Co %	Nickel	Copper	Cobalt
	Indicated	9.1	2.7	2.9	1.0	0.08	230	94	7.3
	Inferred	1.0	1.6	1.6	0.6	0.05	14	6	0.5
	Total	**10.1**	**2.6**	**2.7**	**1.0**	**0.08**	**244**	**100**	**7.7**
Bollinger	Indicated	2.4	2.9	3.1	1.1	0.11	64	26	2.6
	Inferred	1.8	1.0	1.1	0.4	0.04	17	8	0.7
	Total	**4.2**	**2.1**	**2.2**	**0.8**	**0.08**	**82**	**34**	**3.3**
Total	Indicated	11.5	2.7	2.9	1.0	0.09	294	120	9.8
	Inferred	2.8	1.2	1.3	0.5	0.04	31	14	1.2
	Total	**14.3**	**2.4**	**2.6**	**0.9**	**0.08**	**325**	**134**	**11.0**

Table 1 Mineral Resource estimate at 0.6 NiEq cut-off grade

The May 2014 Resource revised nickel equivalent (NiEq) calculation is as follows:

$$\mathbf{NiEq\% = ((Cu\ \%\ x\ 0.95)\ x\ (7{,}655/16{,}408)) + (Ni\ \%\ x\ 0.89)}$$

Metal prices of US$16,408/tonne (US$($7.44/lb) for nickel and US$7,655/tonne (US$($3.47/lb) for copper are based on 12 month averages (not volume weighted) of spot prices from the London Metal Exchange (July 2012 to June 2013). The metallurgical recoveries of 89% for nickel and 95% for copper are based on DFS metallurgical testing.

ORE RESERVE

The Probable Ore Reserve estimated as part of the DFS is based on, and inclusive of, the above Indicated Mineral Resources only, because Inferred Mineral Resources are not sufficiently reliable to be used in ore reserve estimates. The maiden Probable Ore Reserve, based on the same US$7.44/lb nickel price used in the Mineral Resource estimate, comprises:

- 13.1mt @ 2.1 % nickel, 0.9 % copper and 0.07 % cobalt; for
- 273,000 t nickel, 112,000 t copper and 9,000 t cobalt.

	Nova-Bollinger Ore Reserve estimate - July 2014							
Deposit	Reserve Category	Tonnes (Mt)	Grade Ni (%)	Contained Ni (Kt)	Grade Cu (%)	Contained Cu (Kt)	Grade Co (%)	Contained Co (Kt)
Nova	Probable	10.3	2.1	218	0.9	90	0.07	7.0
Bollinger	Probable	2.8	2.0	55	0.8	22	0.08	2.0
	Total	**13.1**	**2.1**	**273**	**0.9**	**112**	**0.07**	**9.0**

Table 2 Ore Reserve estimate

The Ore Reserve Estimate represents a conversion from Indicated Mineral Resource to Probable Ore Reserve of 93% of nickel metal, which is exceptionally high. This reflects the unusually favourable shape, thickness, continuity, grade distribution and metallurgical characteristics of the mineralisation.

PLANNED MINING

The life of mine plan (LOMP) comprises the following material:

- 14.2mt @ 2.0% Nickel, 0.8% Copper and 0.07% Cobalt; for
- 285,000t Nickel, 118,000t Copper and 10,000t Cobalt.

The life of mine plan material represents the combination of Probable Ore Reserves with a small proportion of Inferred Mineral Resource material. The contained nickel metal in the life of mine plan represents a 103% conversion from that in the scoping study mining inventory.

The Inferred Mineral Resources used in the life of mine plan have been subject to the same economic modifying factors as the Probable Ore Reserve.

Nova Nickel Project Life of Mine Plan								
		Tonnes (Mt)	Grade Ni (%)	Contained Ni (Kt)	Grade Cu (%)	Contained Cu (Kt)	Grade Co (%)	Contained Co (Kt)
Ore Reserves	Probable	13.1	2.1	273	0.9	112	0.07	9.0
Additional Resources	Inferred	1.1	1.0	12	0.4	6	0.04	1.0
	Total	**14.2**	**2.0**	**285**	**0.8**	**118**	**0.07**	**10.0**

Table 3 Life of Mine Plan for Nova Nickel Project

The planned mine is based on a 1.5mtpa underground operation with decline access. The principal stoping method will be sub-level open stoping (SLOS) with paste fill to maximise extraction. Approximately 83% of the planned production will be from sub-level open stoping with the remaining 17% of production from the longhole echelon retreat stoping method.

The SLOS stopes will measure up to 25 metres by 25 metres horizontally and 70 metres in height, containing up to 200,000 tonnes of ore per stope.

The life of mine plan includes 7% dilution of which 5% is modelled at a dilution grade of 0.2% Ni. Stope ore recovery is calculated to be 95% with development ore recovery being 100%. The stope dimensions, stoping methodology, mining recovery and mining dilution estimates are based on extensive geotechnical testwork, which shows the enclosing rock to be geotechnically competent and to have low mean virgin stress.

The stopes will be backfilled, and backfilling will be by paste fill produced from low-sulphur flotation tailings recycled from process plant waste material. Comprehensive paste fill testwork indicates that high-strength paste backfill material can be successfully generated using Nova process tailings and shows that a suitable paste fill can be produced to meet the requirements of the mine development.

Ore and waste will be hauled in 60 tonne underground trucks up a straight, one in seven gradient decline. The decline has been designed to allow conveyor haulage to be retrofitted at a later date if deemed appropriate.

The mining schedule has been designed to minimise ramp up time in order to fill the plant whilst also maintaining a consistent blend of material type and grade. Consequently, the majority of the capital development is scheduled to occur in the first 36 months.

Underground grade control drilling will be from a hanging wall drive established early in the development sequence. This will enable all grade control drilling for the entire mine to be completed within 24 months. This hanging wall drive will then also be used for paste fill reticulation.

Approximately 94% of material scheduled to be mined in the first two years of production is classified as Probable Ore Reserve and only 6% of material scheduled to be mined in the first two years of production is classified as Inferred Mineral Resources. As such, the dependence of the outcomes of the DFS and the guidance provided in this announcement on the lower confidence Inferred Mineral Resource material contained in the life of mine plan, is minimal.

METALLURGY, PROCESSING PLANT AND ASSOCIATED INFRASTRUCTURE

An exhaustive metallurgical testwork program involving multiple domains and material types, full variability tests and over 200 flotation tests has been performed for the DFS.

This testwork has been undertaken using site water to emulate real conditions.

The testwork results show that the ore is amenable to the production of two separate sulphide concentrates via crushing, grinding and conventional froth flotation, specifically:

- Copper concentrate – 95% recovery to produce a 29% copper concentrate with silver
- Nickel concentrate – 89% recovery to produce a 13.5% nickel concentrate with cobalt

The processing plant will have a 1.5mtpa nameplate capacity and will utilise a conventional crushing process with a primary crusher fed by a dedicated front end loader from stockpiles. A mobile crusher has also been incorporated into the design as a back-up for the primary crusher. Grinding by open circuit SAG mill will be followed by a ball mill in closed circuit with hydrocyclones.

The flotation flowsheet required to produce separate copper and nickel concentrates is an open circuit based on roughing, cleaning and cleaner scavenging. The circuit will be replicated for both copper and nickel circuits and regrinding on particular streams will be used to increase liberation and recovery for both circuits.

Low-sulphur tailings will be sent to either a high-density polyethylene (HDPE) plastic-lined tailings storage facility (TSF) or to the paste plant. The TSF has a designed storage capacity to store the process tailings not utilised as paste fill for the underground mine, and will also act as a reservoir for initial mine dewatering water. The TSF design is an above-ground impoundment with a single perimeter embankment, and will be lined with a composite liner system, consisting of a clay layer and a HDPE layer.

A detailed flow sheet and plant design have been completed with the site layout finalised. The plant layout has been designed with expansion capability should additional mineralisation be discovered or throughput be increased. The crushing, grinding and flotation circuits have been sized to allow for a range of material types with varying comminution and flotation characteristics in order to minimise the risk of bottlenecking.

Geotechnical drilling for the foundations of the plant is underway.

Groundwater exploration, pump testing and modelling simulations have been completed around the Nova-Bollinger deposits. Results indicate that some dewatering of the mine environment will be required during mine development. This water will be stored in the TSF and is expected to provide sufficient water for the first two years of mining and processing operations.

Beyond this period, process water will be sourced from three water bores identified in other aquifers within 4 kilometres of the planned mine. As a contingency, further groundwater resources exist within a 50 kilometre radius of the project and are available for development.

A reverse osmosis (RO) plant will provide desalinated water for concentrate cleaning and drinking water.

OFFTAKE

Nova, when at full production, is expected to produce an average of 26,000 tonnes of nickel and 850 tonnes of cobalt contained in a nickel concentrate and 11,500 tonnes of copper in a separate copper concentrate annually.

Both products are in high demand due to their low impurity levels and high iron to magnesium oxide ratios, which make them ideal blending feed for smelters.

Sirius has shortlisted, and is progressing negotiations with, three major global nickel producers and three copper producers as potential offtake customers. Nova is expected to come into production at a time when nickel prices are expected to have fully recovered from recent surplus supply, while copper prices are expected to start rallying by 2018.

OTHER INTRASTRUCTURE AND LOGISTICS

Power for the site will be generated from an onsite 16 megawatt diesel-fired power station provided by a specialist power generation contractor.

A 38 kilometre long sealed road will provide access from the Eyre Highway to the mine site via the airstrip and the accommodation village. This will ensure that the delivery of essential supplies and the outward shipment of product is not compromised by adverse weather events.

The road has been designed in accordance with Austroads Guide to Road Design and is suitable for concentrate and other trucks in a road train configuration of up to 36.5 metres in length.

The airstrip will be 2 kilometres long, sealed and able to accommodate jet aircraft such as the Fokker F100 or BAE146.

CAPITAL EXPENDITURE

The capital expenditure, inclusive of contingency, required for production of first concentrate is estimated to total A$473 million, itemised as follows:

Nova Nickel Project Capex Estimate	**A$M**
Processing plant (i)	169
Site infrastructure (ii)	190
Pre-production mine development costs (iii)	92
Contingency of 5%	**22**
TOTAL Project Development Capital	**473**

Table 4 Total Project Development Capital Cost

(i) Inclusive of treatment plant construction, engineering design and commissioning costs.
(ii) Inclusive of paste plant (A$13m), TSF (A$23m), camp (A$34m), airstrip (A$10m), access roads (A$24m), borefields, fuel storage and buildings (A$19m) and SIR project management costs.
(iii) Underground mine development including boxcut, decline & level development.

The estimated capex is very similar to that estimated in the scoping study but, importantly, now includes additional items to minimise production and processing risk to protect the project's cashflow. These items include a second (mobile) crusher to provide backup to the main crusher and an automated real-time analysis and process control system to maintain and optimise plant performance and metal recovery.

The capex also includes a contingency of 5% for unexpected costs and overruns. This has been decreased from the A$51 million (10%) contingency used in the scoping study because of the increased level of detail and confidence in the DFS costings and constraints.

The estimated sustaining capital expenditure over the life of mine is A$127 million and the estimated closure costs at the end of life of mine are A$25 million, excluding salvage value.

OPERATING COSTS

The DFS confirms that the estimated operating costs for the Nova Nickel Project sit firmly in the lowest quartile of global nickel producers, with estimated C1 cash costs of A$1.66/lb (US$1.50/lb) nickel in concentrate (inclusive of by-product credits) and estimated all-in sustaining cash costs of A$2.32/lb (US$2.09/lb) nickel in concentrate.

Life of Mine Operating Cost Estimates	Material mined (A$/tonne)	Material mined (US$/tonne)
Mining	54.97	49.48
Processing	35.64	32.08
Administration	10.83	9.74
Transport	23.20	20.88
TOTAL	**124.64**	**112.18**

Nickel in Concentrate on 100% basis Life of Mine Operating Cost Estimates	(A$/lb)	(US$/lb)
Mining	1.41	1.27
Processing	0.92	0.82
Administration	0.28	0.25
Transport	0.60	0.54
By-product credits	(1.55)	(1.38)
TOTAL	**1.66**	**1.50**

Table 5 Operating Cost Estimates

The estimated C1 cash cost of A$1.66/lb Ni (US$1.50/lb) is lower than that originally estimated in the scoping study, and the estimated all-in sustaining cash cost of A$2.32/lb Ni (US$2.09/lb) is substantially lower than that originally estimated in the scoping study.

PROJECTED REVENUE

The revenue and cash flow projections cited in the DFS are based on the same nickel, copper, cobalt and forex estimates used in the scoping study, which were the weighted average of independent consensus forecasts at that time (September 2013). The commodity price and forex assumptions are shown in Table 6.

Key Assumptions (i)			
Commodity Price Assumption (US$/lb)			FX Assumption
Nickel	Copper	Cobalt	A$/US$
10.00	3.30	12.00	0.90

Table 6 Key Commodity Price and Forex Assumptions

(i) The DFS commodity price and forex assumptions are the same as the scoping study assumptions previously stated to enable meaningful comparison.

On this basis, the Nova Nickel Project is forecast to yield a nickel revenue of A$4.53 billion and net cash flow of A$2.74 billion over its initial 10 year mine life. The life of mine net cash flow also varies (either up or down) by A$434 million for each corresponding US$1/lb change in the nickel price.

Since the scoping study was published, the world nickel market has improved considerably and a number of current independent price forecasts are significantly higher than those being used by Sirius. An example of life of mine nickel revenue and net cash flow scenarios using such forecasts is shown in Table 7, below. If the higher nickel price forecasts are realised, there is considerable potential for Sirius' revenues and net cash flow to be substantially higher than our base case.

	Commodity Price Assumption	Life of mine nickel revenue	Life of mine net cashflow
	Nickel	A$ billion	A$ billion
DFS	10.00	4.53	2.74
Wood Mackenzie (i)	11.79	5.30	3.50

Table 7 Life of mine revenues and net cashflows using nickel pricing assumptions

(i) This is a weighted average of Wood Mackenzie pricing as per their Q2 2014 forecast. This does not factor in the positive impact of higher payabilities likely to be achieved at a higher nickel price.

DEVELOPMENT SCHEDULE

After the final Native Title Agreement is signed by Sirius and the Ngadju people, a recommendation will be made by the Department of Mines and Petroleum with regards to the granting of the Nova Mining Lease (M28/276). This is likely to take one month from the finalisation of the Native Title Agreement.

The Environmental Protection Agency (**EPA**) Part 4 Referral has been submitted in July 2014 and depending on the level of assessment by the EPA, a Department of Environment Regulation (DER) Works Approval, Department of Mines and Petroleum (DMP) Mining Proposal, Clearing Permit and Project Management Plan would all be submitted in Q3 2014. No issues are expected from any of the above approvals and processes.

Initial site works are expected to commence early in 2015 and will comprise concurrent construction of the accommodation village, the access road, the airstrip and the TSF, commencement of mining of the boxcut (a small excavation through weathered rock to enable the establishment of the decline portal in fresh rock), followed by the start of decline tunnelling and mine dewatering.

The Nova project implementation schedule is dictated by the development of the decline to the ore body and the development of production stopes to sustain a consistent 1.5Mtpa rate of ore feed to the process plant.. First ore is expected to be extracted in Q2 2016, with initial ore from underground stored on a run of mine (ROM) stockpile.

The process plant will commence processing when the ROM stockpile contains sufficient ore feed, which is scheduled for Q4 2016.

First concentrate production is expected to be in Q4 2016 and the first nickel and copper concentrate shipment is expected to occur in Q1 2017.

Milestone	Estimated Timing
Commence Site Construction	Early 2015
First Ore from Development	Q2 2016
First Ore Feed to the Processing Plant	Q3 2016
First Concentrate Production	Q4 2016
First Nickel Concentrate Shipment	Q1 2017
First Copper Concentrate Shipment	Q1 2017

Table 8 Milestones and Estimated Timing

Appropriate financing, final development approvals, signing of the final Native Title Agreement, the grant of a mining lease and a number of other environmental and other regulatory approvals and permits will be required before mine development and production can commence. The schedule shown above is subject to satisfying those requirements.

MINERAL RESOURCE UPDATE DETAIL

Sirius' geological model was audited by specialist consultants Optiro, who also estimated the Mineral Resource, as described in the JORC (2012 edition) "Table 1 Checklist of Assessment and Reporting Criteria" at the back of this announcement.

A summary of the information used in the May 2014 Nova-Bollinger Mineral Resource estimate is as follows:

A range of lower cut-offs was used to report grades and tonnages, as shown in Figure 1. The robustness of the mineralisation is clearly demonstrated by the fact that elevated cut-off grades have minimal effect on the contained metal – ie, even using a 1.0% nickel equivalent lower cut-off, the resource still contains 295,000 tonnes of nickel, 116,000 tonnes of copper and 9,900 tonnes of cobalt (Table 9).

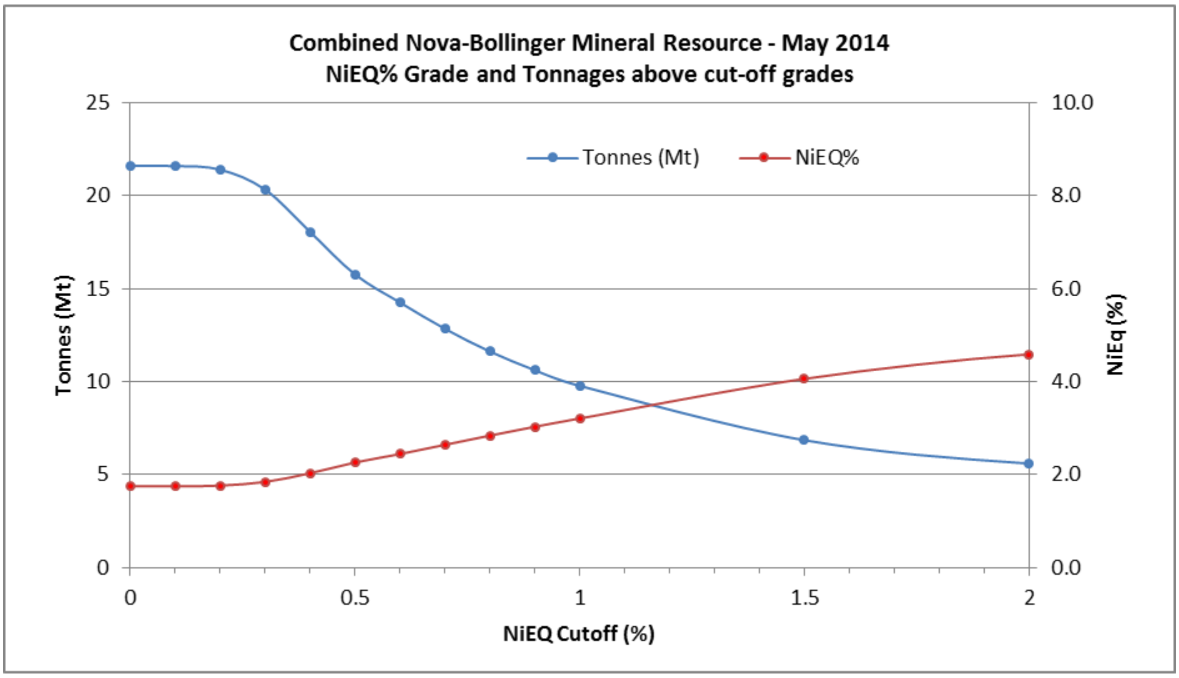

Figure 1 Tonnage grade curves for the Nova-Bollinger May 2014 Mineral Resource

NiEq% cut-off	Category	Tonnes (Mt)	Grade				Contained metal		
			NiEq%	Ni%	Cu%	Co%	Nickel (kt)	Copper (kt)	Cobalt (kt)
0.4	Indicated	13.5	2.4	2.5	0.9	0.08	303	125	10.2
	Inferred	4.6	0.9	1.0	0.4	0.03	39	18	1.6
	Total	**18.1**	**2.0**	**2.1**	**0.8**	**0.06**	**341**	**143**	**11.7**
0.5	Indicated	12.4	2.6	2.7	1.0	0.08	299	123	10.0
	Inferred	3.4	1.1	1.2	0.5	0.04	34	15	1.3
	Total	**15.8**	**2.3**	**2.4**	**0.9**	**0.07**	**332**	**138**	**11.3**
0.6	Indicated	11.5	2.7	2.9	1.0	0.09	294	120	9.8
	Inferred	2.8	1.2	1.3	0.5	0.04	31	14	1.2
	Total	**14.3**	**2.4**	**2.6**	**0.9**	**0.08**	**325**	**134**	**11.0**
0.7	Indicated	10.6	2.9	3.1	1.1	0.09	290	117	9.6
	Inferred	2.2	1.4	1.4	0.5	0.05	28	12	1.1
	Total	**12.8**	**2.6**	**2.8**	**1.0**	**0.08**	**317**	**129**	**10.7**
0.8	Indicated	9.8	3.1	3.3	1.2	0.10	284	114	9.4
	Inferred	1.8	1.5	1.6	0.6	0.05	25	11	0.9
	Total	**11.6**	**2.8**	**3.0**	**1.1**	**0.09**	**309**	**124**	**10.4**
0.9	Indicated	9.1	3.3	3.5	1.2	0.10	279	110	9.2
	Inferred	1.5	1.6	1.7	0.6	0.06	23	10	0.9
	Total	**10.6**	**3.0**	**3.2**	**1.1**	**0.10**	**302**	**120**	**10.1**
1.0	Indicated	8.5	3.4	3.6	1.3	0.11	274	108	9.1
	Inferred	1.3	1.7	1.8	0.7	0.06	21	8	0.8
	Total	**9.8**	**3.2**	**3.4**	**1.2**	**0.10**	**295**	**116**	**9.9**

Table 9 Consolidated tonnage-grade results for Nova-Bollinger, May 2014

The Nova-Bollinger deposit geological setting is of a gabbroic intrusion(s) within metasediments within a high grade metamorphic terrane. The sulphide mineralisation is related to, and part of, the intrusive event. The Bollinger deposit appears to be intimately related to the Nova deposit and represents part of a number of intrusive events that transgress sedimentary layers to the immediate east of Nova.

The Bollinger Mineral Resource abuts the Nova Mineral Resource and has dimensions of 300 m (north) by 400 m (east) and 125 m (elevation). The Bollinger resource has a maximum depth of 450 m below surface. The Nova and Bollinger deposits are joined by a feeder zone, and the resource areas are arbitrarily split along a North-South line defined by the 518,600 mE MGA grid line. The Nova Mineral Resource area has dimensions of 450 m (north) by 550 m (east) and 400 m (elevation). The total extent of the combined Nova-Bollinger deposit is therefore 750 m (north) by 950 m (east) and 450 m (elevation).

The Bollinger deposit was sampled using diamond drill holes (DD) only on a nominal 25 m by 25 m to 50 m by 50 m grid spacing. A total of 72 DD holes were drilled for 35,935 m. Holes were generally angled towards grid west between -60^0 and -90^0 to optimally intersect the mineralised zones. Drilling at the Nova deposit comprised diamond drill holes (96%) consisting of NQ2 and HQ (metallurgical) diameter core totalling 163 holes for 63,099 m. The remaining 15 holes for 2,910 m comprises Reverse circulation (RC) drillholes employing a 140 mm face sampling hammer drilling. The nominal drillhole spacing is 25 m (northing) by 25 m (easting). Diamond core recoveries for all holes are >95% overall. Drillhole collar locations were surveyed using RTK GPS, and all holes were downhole surveyed using high speed gyroscopic survey tools.

Sampling of diamond core was based on geological intervals (length 0.2 m to 1.3 m). The core was cut into half (NQ2) or quarter (HQ) to give sample weights around 3 kg. Reverse circulation drilling was used to obtain 1m samples by cone or riffle splitter from which 3 kg was pulverised to produce a sub sample for assaying. Field quality control procedures involved assay standards, along with blanks and duplicates. These QC samples were inserted at an average rate of 1:15, with an increased rate in mineralised zones.

The sample preparation of diamond core involved oven drying, coarse crushing of the half core sample down to ~10 mm followed by pulverisation of the entire sample to a grind size of 85% passing 75 micron. The sample preparation for RC samples was identical, without the coarse crush stage. A pulp sub-sample was collected for analysis by four acid digest with an ICP/OES, ICP/MS (Ni, Cu, Co) finish. Independent checks for Bollinger using 201 pulp samples and standards were sent to ALS (Nova had 2,590 samples sent to two other laboratories) and showed good precision with the primary lab.

Detailed geological studies (petrography and lithogeochemistry) identified key relationships of controls such as lithology, sulphide content, form and multi-element geochemistry. These allowed interpretation of robust 3D geological and mineralisation wireframe domains that are considered to be analogous in deposit style to other mafic hosted, nickel and copper deposits worldwide, such as Voisey's Bay and Raglan in Canada. The wireframes were used to code the drilling and select samples within each domain. A nominal grade cut-off of 0.4% Ni appears to be a natural grade boundary between disseminated and trace sulphides. This cut-off grade was used to define the mineralised envelope within which the higher grade sub domains were interpreted.

Samples were composited to one metre lengths, and adjusted where necessary to ensure that no residual sample lengths were excluded (best fit method). Statistical analysis showed the populations in each domain to generally have a low coefficient of variation but it was noted that some estimation domains included outlier values that required top-cut values to be applied.

The Massive domain at Bollinger was modelled using an unfolding technique after the definition of sub-domains (representing massive and low grade mineralisation) by use of a categorical indicator model. Other domains requiring various degrees of categorical sub-domaining and unfolding were modelled in flattened space or using Dynamic Anisotropy to optimise the grade estimation. The Lower Massive domain at Nova, which contains the bulk of the mineralisation, was modelled using an unfolding technique followed by definition of mineralisation sub-populations (representing a combination of massive, breccia and low grade mineralisation) by a categorical indicator model. No other domains at Nova required unfolding. Directional variograms and Ordinary Kriging were used to estimate grades in all domains. Estimation searches for all elements (Ni, Cu, Co, Fe, Mg and S) were set to the ranges of the nickel variogram for all domains. Density was estimated using 12,429 samples taken by Sirius.

A single block model to encompass the Nova-Bollinger Mineral Resource was constructed using an 8 mE by 12 mN by 4 mRL parent block size with sub-celling to 1 mE by 1 mN by 0.25 mRL for domain volume resolution. All estimation was completed at the parent cell scale. Kriging neighbourhood analysis was carried out for the Nova March 2013 Mineral Resource in order to optimise the block size, search distances and sample numbers used, and these were considered appropriate for Bollinger. Due to the moderate-strong correlation of nickel with the other elements the size of the search ellipse per domain was based on the nickel variography. Three estimation search passes were used for each domain. Hard boundaries were applied between all estimation domains in the majority of cases, apart from the alteration envelope at Nova where a soft boundary with the disseminated domain was used. The validation of the block model shows good correlation of the input data to the estimated grades.

The Nova and Bollinger mineralised domains have demonstrated sufficient continuity in both geological and grade continuity to support the definition of Mineral Resource and Reserves, and the classifications applied under the JORC Code (2012 edition). The Bollinger resource classification criteria used drilling density of 25 m by 25 m and high confidence of geological and grade continuity to define Indicated Mineral resources. In the case of Inferred Mineral Resources the criteria used were nominal drilling density of 50 m by 50 m and lower geological confidence of grade continuity or geometry/extents. The Nova resource classification considered a nominal drillhole spacing of 25 m (northing) by 25 m (easting) to provide sufficient geological and grade continuity definition to assign an Indicated Mineral Resource classification to the majority of the deposit. The drilling density between areas defined as Indicated Mineral Resources and Inferred Mineral Resources is nominally the same, however the Inferred Mineral Resources are defined on the margins of the deposit where the final extent of the resource boundary is less confident and they make up only 10% of the reported resource (see Figure 1).

The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. Geological control at Nova-Bollinger consists of a primary mineralisation event modified by structural events. The definition of mineralised zones is based on a high level of geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the initial interpretation.

Optiro carried out a site visit to the Nova deposit on the 21st of February, 2013. Mark Drabble (Principal Consultant), who is acting as Competent Person, inspected the deposit area, the core logging and sampling facility and density measurement area. A second visit took place where he viewed metallurgical PQ and HQ core at AMMTEC in Balcatta on the 28th June 2013. Optiro examined core samples as part the interpretation process of both resource estimates at the Sirius office in Balcatta.

NEXT STEPS

Financing and offtake discussions have progressed significantly and it is anticipated that these will be finalised prior to receipt of all necessary statutory approvals, and therefore the key determinant of the development timetable will be government approvals.

In the meantime, the Nova exploration camp will be partially expanded to facilitate pre-construction readiness.

While the Company's immediate focus is on the permitting and development of the Nova nickel mine, it is also well placed to continue with an aggressive exploration program to build on this foundation. To this end, exploration is continuing around Nova, elsewhere in the Fraser Range and at the Polar Bear project.

On the Nova tenement, a deep-penetration electromagnetic (DPEM) survey is underway with the aim of identifying additional "near mine" mineralisation.

Elsewhere in the Fraser Range, regional nickel prospects have progressed to the initial reconnaissance drilling stage.

Gold and nickel drilling is also underway at the Polar Bear project, approximately 100 kilometres to the west of Nova.

Infill drilling of existing Inferred Mineral Resources and follow up drilling of adjacent mineralised zones around the Nova and Bollinger deposits will also be undertaken as soon as underground drill positions are established for the purposes of the grade control drilling program.

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Appendix A – further information

Forward looking statements

This announcement contains certain forward looking statements. The words "expect", "forecast", "should", "projected", "could", "may", "predict", "plan" and other similar expressions are intended to identify forward looking statements. Indications of, and guidance on, future earnings, cash flow costs and financial position and performance are also forward looking statements. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results or trends to differ materially. These variations, if materially adverse, may affect the timing or the feasibility of the development of the Nova Nickel project.

The Company notes that an Inferred Resource has a lower level of confidence than an Indicated Resource and that the JORC Code (2012 Edition) advises that to be an Inferred Resource it is reasonable to expect that the majority of the Inferred Resources would be upgraded to an Indicated Resources with continued exploration. Based on advice from relevant Competent Persons the Company has a high degree of confidence that the Inferred Resources for the Nova-Bollinger deposit will upgrade to Indicated Resources with further exploration work. The Inferred Resources have not been extrapolated past the last drill hole and therefore only been extrapolated to the last data point. The drillhole density was only reduced once there was evidence of reducing mineralisation.

The Company believes it has a reasonable basis for making the forward-looking statements in this announcement, including with respect to any production targets, based on the information contained in this announcement and in particular the JORC 2012 Mineral Resource for Nova-Bollinger as at July 2013, independently compiled by Optiro, together with independent geotechnical studies, determination of mining inventory, mine design and scheduling, metallurgical testwork, external commodity price and exchange rate forecasts and worldwide operating cost data.

Cautionary Statement

The Definitive Feasibility Study (DFS) referred to in this announcement is based on a Probable Ore Reserve derived from an Indicated Mineral Resource, plus a small proportion of mining inventory, which comprises material that is currently classified as Inferred Mineral Resource. There is a lower level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or Probable Ore Reserves or that the production target contingent on this material will be realised. The Company advises that the Probable Ore Reserve provides 92% of the total tonnage and 96% of the total nickel metal underpinning the forecast production target and financial projections, and that the additional life of mine plan material comprises less than 8% of the total tonnage and 4% of the total nickel metal. Furthermore, in the first two years of production, 94% of the material planned to be mined is based on Probable Ore Reserves and only 6% of the material planned to be mined in the life of mine plan is based on Inferred Mineral Resources. As such, the dependence of the outcomes of the DFS and the guidance provided in this announcement on the lower confidence Inferred Mineral Resource material contained in the life of mine plan is minimal (refer Appendix A).

Unless otherwise stated, all cashflows are in Australian dollars, are undiscounted and are not subject to inflation/escalation factors, and all years are calendar years.

The Company has concluded that it has a reasonable basis for providing the forward looking statements included in this announcement. The detailed reasons for this conclusion are outlined throughout this announcement and in particular in the Appendix headed "Forward Looking and Cautionary Statements".

All references to cash costs relate to cash costs calculated on a 100% payability basis.

The following section is provided to ensure compliance with the JORC (2012) requirements for the reporting of the Mineral Resource estimates for the Nova and Bollinger nickel deposits on mining tenement E28/1724:

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The Nova-Bollinger deposit was sampled using Reverse Circulation (RC) and diamond drill holes (DD) on a nominal 25 m x 25 m grid spacing. A total of 15 RC and 235 DD holes were drilled for 2,910 m and 99,034 m respectively. Holes were generally angled towards grid west at varying angles to optimally intersect the mineralised zones.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	The drill hole locations were picked up and downhole surveyed by survey contractors. Initial RC drilling identified the Nova target and diamond core was used to delineate the resource. The RC samples were collected by cone or riffle splitter. Diamond core was used to obtain high quality samples that were logged for lithological, structural, geotechnical, density and other attributes. Sampling was carried out under Sirius protocols and QAQC procedures as per industry best practice.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	Diamond core is HQ (metallurgical holes) or NQ2 size, sampled on geological intervals (0.2 m to 1.3 m), cut into half (NQ2 or quarter (HQ met) core to give sample weights under 3 kg. Samples were crushed, dried and pulverised (total prep) to produce a sub sample for analysis by four acid digest with an ICP/OES, ICP/MS or FA/AAS (Au, Pt, Pd) finish. Reverse circulation drilling was used to obtain 1m samples from which 3 kg was pulverised (total prep) to produce a sub sample for assaying as above.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Diamond drilling accounts for 98% of the drilling in the resource area and comprises NQ2 or HQ sized core. Pre-collar depths range from 6 m to 150 m and hole depths range from 144 m to 667 m. The core was oriented using a Camtech orientation tool with 71% of orientations rated as "good". RC drilling accounts for 2% of the total drilling and comprises 140 mm diameter face sampling hammer drilling. Hole depths range from 90 m to 280 m.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed*	Diamond core and RC recoveries are logged and recorded in the database. Overall recoveries are >95% and there are no core loss issues or significant sample recovery problems.
	Measures taken to maximise sample recovery and ensure representative nature of the samples	Diamond core at Nova -Bollinger is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. RC samples were visually checked for recovery, moisture and contamination.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	The bulk of the Nova Bollinger resource is defined by diamond core drilling, which has high recoveries. The massive sulphide style of mineralisation and the consistency of the mineralised intervals are considered to preclude any issue of sample bias due to material loss or gain.

Criteria	JORC Code explanation	Commentary
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Geotechnical logging at Nova - Bollinger was carried out on all diamond drillholes for recovery, RQD and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is stored in the structure table of the database.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of diamond core and RC samples at Nova - Bollinger recorded lithology, mineralogy, mineralisation, structural (DDH only), weathering, colour and other features of the samples. Core was photographed in both dry and wet form.
	The total length and percentage of the relevant intersections logged	All drillholes were logged in full, apart from rock roller diamond hole pre-collar intervals of between 20 m to 60 m
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Core was cut in half (NQ2) and quarter core (HQ) onsite using an automatic core saw. All samples were collected from the same side of the core.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were collected on the rig using cone splitters. All samples in mineralised zones were dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation of diamond core for Nova - Bollinger follows industry best practice in sample preparation involving oven drying, coarse crushing of the half core sample down to ~10 mm followed by pulverisation of the entire sample (total prep) using Essa LM5 grinding mills to a grind size of 85% passing 75 micron. The sample preparation for RC samples is identical, without the coarse crush stage.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Field QC procedures involve the use of certified reference material as assay standards, along with blanks, duplicates and barren washes. The insertion rate of these averaged 1:15 with an increased rate in mineralised zones.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Field duplicates were taken on 1m composites for RC, using a riffle splitter. One twinned diamond hole was drilled at Nova. This hole supported the location of the geological intervals intersected in the first drillhole (no assays were taken as this is a metallurgical hole).
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered to be appropriate to correctly represent the sulphide mineralisation at Nova – Bollinger based on: the style of mineralisation (massive sulphides), the thickness and consistency of the intersections, the sampling methodology and percent value assay ranges for the primary elements.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	The analytical techniques used a four acid digest multi element suite with ICP/OES or ICP/MS finish (25 gram or 50 gram FA/AAS for precious metals). The acids used are hydrofluoric, nitric, perchloric and hydrochloric acids, suitable for silica based samples. The method approaches total dissolution of most minerals. Total sulphur is assayed by combustion furnace.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were used to determine any element concentrations used in either resource estimate.

Criteria	JORC Code explanation	Commentary
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Sample preparation checks for fineness were carried out by the laboratory as part of their internal procedures to ensure the grind size of 85% passing 75 micron was being attained. One diamond hole had duplicates taken from the half core after coarse crushing and the results were within 3% of the original sample values. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in house procedures. Umpire laboratory campaigns with two other laboratories have been carried out as independent checks of the assay results using 2,791 pulp samples and standards sent to ALS, and these show good precision. Certified reference materials, having a good range of values, were inserted blindly and randomly. Results highlight that sample assay values are accurate and that contamination has been contained. The diamond drilled core pulp duplicates had more than 90% of its pairs with differences (half absolute relative differences or HARD values) below 10% (Ni, Cu, Co), which concurs with industry best practice results. Repeat or duplicate analysis for samples reveals that precision of samples is within acceptable limits
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Both the Managing and the Technical Director of Sirius have visually verified significant intersections in diamond core from Nova-Bollinger. Optiro has viewed the intersections of metallurgical core and checked core photos against the assay and geology logs. Optiro has visually verified significant intersections in diamond core as part of the resource estimation process.
	The use of twinned holes.	A HQ metallurgical hole (SFRD0438M) drilled at Bollinger in October 2013 supports the interpreted geological and mineralisation domains. Two PQ and one HQ metallurgical holes have been drilled at Nova since March 2013 and the logging supports the interpreted geological and mineralisation domains. One hole at Nova was twinned - SFRD0117 and SFRD0117W1M. The results confirmed the initial intersection geology. The twin (suffixed W1M) was used as a metallurgical hole.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data was collected for Nova - Bollinger using a set of standard Excel templates on toughbook laptop computers using lookup codes. The information was sent to ioGlobal for validation and compilation into a SQL database server.
	Discuss any adjustment to assay data.	No adjustments or calibrations were made to any assay data used in **the mineral resource** estimate.
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Hole collar locations for all holes were surveyed by Whelans Surveyors of Kalgoorlie using RTK GPS connected to the state survey mark (SSM) network. Elevation values were in AHD RL and a value of +2,000 m was added to the AHD RL by Sirius for local co-ordinate use. Expected accuracy is + or – 30 mm for easting, northing and elevation coordinates. Downhole surveys used single shot readings during drilling (at 18m, then every 30 m) and Gyro Australia carried out gyroscopic surveys using a Keeper high speed gyroscopic survey tool with readings every 5 m after hole completion. Stated accuracy is +-0.25° in azimuth and +-0.05° in inclination. QC involved field calibration using a test stand. Only gyro data is used in the resource estimate.
	Specification of the grid system used.	The grid system for Nova-Bollinger is MGA_GDA94, zone 51 (local RL has 2,000 m added to value). Local easting and northing are in MGA.
	Quality and adequacy of topographic control.	Topographic surface for Nova-Bollinger uses 2012 Lidar 50 cm contours.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	The nominal drillhole spacing is 25 m (northing) by 25 m (easting) in the core of the deposit, and is up to 50 m by 50 m on the margins.

Criteria	JORC Code explanation	Commentary
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The mineralised domains for Nova-Bollinger have demonstrated sufficient continuity in both geological and grade continuity to support the definition of Mineral Resources and Reserves, and the classifications applied under the 2012 JORC Code.
	Whether sample compositing has been applied.	Samples have been composited to one metre lengths and adjusted where necessary to ensure that no residual sample lengths have been excluded (best fit).
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The Bollinger deposit is drilled towards grid west at angles varying from -60^0 and -90^0 to intersect the mineralised zones at a close to perpendicular relationship for the bulk of the deposit. The Nova deposit is drilled to grid west, which is slightly oblique to the orientation of the mineralised trend; however the intersection angles for the bulk of the drilling are nearly perpendicular to the mineralised domains. Structural logging based on oriented core indicates that main sulphide controls are largely perpendicular to drill direction.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation based sampling bias has been identified at Nova-Bollinger in the data at this point.
Sample security	*The measures taken to ensure sample security.*	Chain of custody is managed by Sirius. Samples for Nova-Bollinger are stored on site and either delivered by Sirius personnel to Perth and then to the assay laboratory, or collected from site by Centurion transport and delivered to Perth, then to the assay laboratory. Whilst in storage, they are kept on a locked yard. Tracking sheets have been set up to track the progress of batches of samples.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	A review of the sampling techniques and data was carried out by Optiro as part of each resource estimate and the database is considered to be of sufficient quality to carry out resource estimation. An internal system audit was undertaken by Sirius in November 2012.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Nova and Bollinger are located wholly within Exploration Licence E28/1724. The project is under MLA 28/376. The tenement is wholly owned by Sirius Gold Pty Ltd, a wholly owned subsidiary of Sirius Resources NL. Sirius has 100% interest in the tenement. The tenement sits within the Ngadju Native Title Claim (WC99/002).
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is in good standing and no known impediments exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No previous systematic exploration has been undertaken at the Nova or Bollinger prospects.
Geology	Deposit type, geological setting and style of mineralisation.	The global geological setting is a Proterozoic aged gabbroic intrusion(s) within metasediments situated in the Albany Fraser mobile belt. It is a high grade metamorphic terrane. The sulphide mineralisation is related to, and part of, the intrusive event. The deposits are analogous to many mafic hosted nickel-copper deposits worldwide.

Criteria	JORC Code explanation	Commentary
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length.	The complete drillhole summary for the Nova-Bollinger July 2013 Mineral Resource is contained in ASX announcement 15 July 2013 Maiden Bollinger Resource and Scoping Study Update.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	No new exploration results are announced within this report.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No new exploration results are announced within this report.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No new exploration results are announced within this report.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The Nova deposit is moderately east dipping in the west, flattening to shallow dipping in the east. The fans of drillholes are inclined between -54^{0} and -90^{0} to the west to allow intersection angles with the mineralized zones to approximate the true width. The Bollinger deposit is dominantly flat lying and is drilled to grid west with drill holes inclined between -60^{0} and -90^{0}. The intersection angles for the drilling appear to be close to perpendicular to the mineralised zones, therefore reported downhole intersections approximate true width.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figure 1 in body of text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	No new exploration results are announced within this report.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No new exploration results are announced within this report.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	No new exploration results are announced within this report.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	Data templates with lookup tables and fixed formatting are used for logging, spatial and sampling data at Nova-Bollinger. Data transfer is electronic via e-mail. Sample numbers are unique and pre-numbered bags are used. These methods all minimise the potential of these types of errors.
	Data validation procedures used.	Data validation checks are run by database management consultancy "ioGlobal" using their proprietary software ("ioHub"). ioGlobal have their own database model with a production and quarantine database for each client. Data is validated from quarantine to upload using a set of validation rules developed by Sirius and ioGlobal. Data for Nova-Bollinger is stored in a single database.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	Optiro carried out a site visit to the Nova deposit on the 21st of February. Mark Drabble (Principal Consultant - Optiro) inspected the deposit area, the core logging and sampling facility and density measurement area. During this time, notes and photos were taken along with discussions were held with site personnel regarding the available drill core and procedures. Diamond core was also viewed in the Sirius offices in Perth on three occasions. A number of minor recommendations were made on procedures but no major issues were encountered. Mark Drabble also viewed the metallurgical drill core at AMMTEC on 28th June
	If no site visits have been undertaken indicate why this is the case.	Not applicable
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The confidence in the geological interpretation of Nova and Bollinger is considered good. The global geological setting is a gabbroic intrusion(s) within metasediments within a high grade metamorphic terrane. The sulphide mineralisation is related to, and part of, the intrusive event. The Bollinger deposit appears to be intimately related to the Nova deposit and represents part of a number of intrusive events that transgress sedimentary layers to the immediate east of Nova. The Nova-Bollinger deposit appears similar in style to many mafic hosted nickel-copper deposits.
	Nature of the data used and of any assumptions made.	Petrography and litho geochemistry has been used to assist identification of the rock type subdivisions applied in the interpretation process.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The Nova-Bollinger deposit is generally tabular in geometry, with clear boundaries which define the mineralised domains. Infill drilling has supported and refined the model and the current interpretation is thus considered to be robust.
	The use of geology in guiding and controlling Mineral Resource estimation.	Geological controls and relationships were used to define sub-domains. Key features are sulphide content, form and multi-element geochemistry relationships.
	The factors affecting continuity both of grade and geology.	The Nova lower breccia zone has mixed grade populations due to variable clast versus massive sulphide content. This can be seen in the MgO and nickel grade relationships and influences the local rather than the global grade estimate. These factors have been addressed via the resource estimation process applied. The Bollinger disseminated zone has small intervals of massive sulphide that required sub-domaining to constrain the estimation of metal around these samples.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource*	The Nova Mineral Resource starts at a depth of 40 m below surface. The Resource area has dimensions of 450 m (north) by 550 m (east) and 400 m (elevation). The Bollinger Mineral Resource area abuts the Nova area and has dimensions of 300 m (north) by 400 m (east) and 125 m (elevation). The Bollinger resource has a maximum depth of 450 m below surface. The Nova and Bollinger deposits are conjoined by a feeder zone. The two resources areas are arbitrarily split along a North-South line defined by the 518,600 mE MGA grid line.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	Grade estimation using Ordinary Kriging (OK) was completed for Nova and **Bollinger**. Nova was partially (3 domains) re-estimated for this update**.** CAE Studio 3 software was used to estimate six elements; Ni%, Cu%, Co%, Fe%, Mg (ppm) and S%, as well as bulk density. Drill grid spacing ranges from 25 m to 50 m. Drillhole sample data was flagged using domain codes generated from three dimensional mineralisation domains and oxidation surfaces. Sample data was composited per element to a one metre downhole length using a best fit-method. There were consequently no residuals. Intervals with no assays were excluded from the compositing routine. The influence of extreme sample distribution outliers was reduced by top-cutting where required. The top-cut levels were determined using a combination of top-cut analysis tools (grade histograms, log probability plots and CVs). Top-cuts were reviewed and applied on a domain basis. Due to the folded nature of the Lower Massive domain at Nova and the Massive domain at Bollinger, an industry accepted unfolding routine was carried out using CAE Studio 3 software. Variography and grade estimation of these domains was completed in unfolded space. It was noted that the Lower Massive domain at Nova and the Massive and the Carapace domain at Bollinger showed evidence of sub-populations within the domains which were not able to be wireframed separately at the available grid spacing. A categorical indicator approach using three grade bins at Nova and two grade bins within the Bollinger domains was considered appropriate to sub-domain these populations. It was interpreted that these sub-domains represented massive, breccia and/or low-grade mineralisation. Several domains which demonstrated a moderate degree of folding at Bollinger were estimated using flattening routines or Dynamic Anisotropy in order to optimise the grade estimation. Variography of these domains were completed in 2D space. For all domains, directional variograms were modelled using traditional variograms or normal scores transformations. Nugget values are moderate to high (Nova <0.5, Bollinger <0.3). Grade continuity was variable in either resource depending on mineralisation styles and ranged from 50 m to 170 m in the major direction. Small or poorly sampled domains where robust variography could not be generated used the variography of a geologically similar domain. Estimation searches for all elements were set to the ranges of the nickel variogram for each domain.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	This is an update for the Nova-Bollinger deposit. No previous mining activity has taken place in this area. Check estimates have been run by Sirius during the development drilling of the deposit and have produced very similar global estimates for the Nova-Bollinger deposit.
	The assumptions made regarding recovery of by-products.	The main by-product of the resource is cobalt and recovery will be as a by-product with the pentlandite. This is dependent on any off take agreement and may realise a credit.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	The non-grade elements estimated are Fe%, Mg% and S%.

Criteria	JORC Code explanation	Commentary
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	A single block model for Nova-Bollinger was constructed using an 8 mE by 12 mN by 4 mRL parent block size with subcelling to 1 mE by 1 mN by 0.25 mRL for domain volume resolution. All estimation was completed at the parent cell scale. Kriging neighbourhood analysis was carried out for Nova in order to optimise the block size, search distances and sample numbers used. Discretisation was set to 4 by 6 by 2 for all domains. The size of the search ellipse per domain was based on the nickel variography, due to the moderate-strong correlation of nickel with the other elements. Three search passes were used for each domain. In general, the first pass used the ranges of the nickel variogram and a minimum of 8 and maximum of 30 samples. In the second pass the search ranges were changed to double the ranges of the nickel variogram, maintaining a minimum of 8 samples. The third pass ellipse was extended to 3 times the range of the variograms for Bollinger and 5 times for Nova. A minimum of 4 and a maximum of 30 samples were applied. A maximum of 5 samples per hole were used. In the majority of domains, most blocks were estimated in the first pass (particularly for the main domains); however, some more sparsely-sampled domains were predominantly estimated on the second or third pass. Un-estimated blocks, i.e. those outside the range of the third pass, were assigned the estimated domain mean and lower resource confidence classifications. Hard boundaries were applied between all estimation domains, excluding the alteration envelope at Nova where a soft boundary with the disseminated domain was used.
	Any assumptions behind modelling of selective mining units.	No selective mining units were assumed in this estimate.
	Any assumptions about correlation between variables.	Neural networking (3D spatial analysis) was used to determine relationships between the variables at Nova in the initial estimate. These were then incorporated into the domain interpretation process. Strong positive correlation exists between nickel and all other elements estimated, with the exception of copper. The correlation between nickel and copper is variable; based on domain and mineralisation style. All elements within a domain used the same sample selection routine for block grade estimation.
	Description of how the geological interpretation was used to control the resource estimates.	The geological interpretation correlated the sulphide mineralisation to geological and structural elements at Nova- Bollinger. The structural framework and understanding of primary magmatic and remobilised mineralisation was used to refine the mineralisation domains. These domains were used as hard boundaries to select sample populations for variography and estimation.
	Discussion of basis for using or not using grade cutting or capping.	Statistical analysis showed the populations in each domain at Nova and Bollinger to generally have a low coefficient of variation but it was noted that a very small number of estimation domains included outlier values that required top-cut values to be applied.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Validation of the block model carried out a volumetric comparison of the resource wireframes to the block model volumes. Validating the estimate compared block model grades to the input data using tables of values, and swath plots showing northing, easting and elevation comparisons. Visual validation of grade trends and metal distributions was carried out. No mining has taken place; therefore no reconciliation data is available.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	The tonnages are estimated on a dry basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied*	A nominal grade cut-off of 0.4% Ni appears to be a natural grade boundary between disseminated and trace sulphides for the Nova- Bollinger mineralised system. This cut-off grade was used to define the mineralised envelope within which the higher grade sub domains were interpreted.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The selected mining methods for the Nova project is long hole sub level open stoping which is widely used in many underground mines in Western Australia and is deemed appropriate considering the nature of the ore body, and the desire to extract the maximum value from the deposit. Stope sizes are generally 25 mW by 25 mH by the orebody width or height and have been created to suit the Mineral Resource. As the resource changes in width and dip the mining method changes from large multi lift stopes to echelon retreat single access stopes. Geotechnical assessment of the mineralised zone is also favourable for the selected mining method. Minimum mining width for stoping is 4m.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	24 HQ diameter drillholes were drilling primarily for metallurgical sampling with half core used for creating representative composites for testwork. Two PQ, 1 HQ and 4 NQ wedges were also drilled to create a bulk composite and allow comminution testwork. Metallurgical testing has been completed to a Bankable Feasibility standard on composited samples considered representative of the main model domains. Metallurgical flotation testwork by ALS Ammtec and Strategic Metallurgy Pty. Ltd. indicate that split concentrates of nickel and copper sulphides will be possible with recoveries of 89% at 13.5%Ni and 95% at 29%Cu. An extensive metallurgical development program has optimised the flotation flowsheet.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made*	Sirius is currently in the process of gaining required environmental approvals for the proposed mining activities. It has been assumed that all approvals will be met. Environmental studies have been completed and it has been understood that there are no significant hurdles to the Nova Nickel Project. Waste rock and tailings characterization studies have been completed. Negligible waste rock will be disposed of on surface. Tailings are highly acid forming and the costs of appropriate impoundments have been allowed. Feasibility designs for a tailings storage facility have been completed and costing including in the evaluation of this ore reserve.
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density has been estimated from density measurements carried out on 20,379 full length core samples using the Archimedes method of dry weight versus weight in water. The use of wax to seal the core was trialled but was shown to make less than 1% difference. Density standards were used for QAQC using an aluminium billet, and pieces of core with known values. The density ranges for the mineralised units are listed below: Massive sulphides 2.0 to 4.7 g/cm^3 (average: 3.9 g/cm^3), net textured sulphides 3.0 to 4.4 g/cm^3 (average: 3.6g/cm^3) and disseminated sulphides 2.5 to 4.6 g/cm^3 (average: 3.5 g/cm^3).
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit,	The host geology comprises high grade metamorphic rocks that have undergone granulite facies deformation. The rocks have been extensively recrystallised and are very hard and competent. Vugs or large fracture zones are generally annealed with quartz or carbonate in breccia zones. Porosity in the mineralised zone is low. Sensitivity to these issues is thus low.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	The bulk density values were estimated using the nickel search parameters and 20,379 density samples taken within the geological domains.

Criteria	JORC Code explanation	Commentary
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories*	The Mineral Resource classification at Nova - Bollinger is based on good confidence in the geological and grade continuity, along with 25 m by 25 m spaced drillhole density in the core and bulk of the deposit, and 50m x 50m on the margins. Estimation parameters including Kriging efficiency have been utilised during the classification process.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. Geological control at Nova-Bollinger consists of a primary mineralisation event modified by metamorphism and structural events. The definition of mineralised zones is based on a high level of geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the initial interpretation. The validation of the block model shows good correlation of the input data to the estimated grades.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the view of the Competent Persons.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	This is an update of the Nova – Bollinger Mineral Resource estimate. The Nova - Bollinger resource was reviewed by Sirius and Optiro and some improvements made to the geological domains as a result of the new information at Bollinger.
	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used	The statement relates to global estimates of tonnes and grade.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available	No production data is available.

Section 4 Estimation and Reporting of Ore Reserves – Nova Bollinger

Criteria	***JORC Code Explanation***	***Commentary***
Mineral Resource estimate for conversion to Ore Reserves	*Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Underground Ore Reserve estimate is based on the Mineral Resource estimate carried out by Optiro Pty Ltd. The Mineral Resources reported are inclusive of Ore Reserve.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	A site visit was conducted in December 2013. The visit was conducted to review surface infrastructure locations and general layout positions.
Study status	*The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	Feasibility level studies have been completed for all areas of the Nova Nickel Project. Ore Reserve estimates are based around the assumptions completed for the Nova Nickel Project Feasibility Study.
Cut-off parameters	*The basis of the cut-off grade(s) or quality parameters applied.*	In order to determine the economically mineable part of the resource, the total value of the mineralised material was calculated, including recognition of the value of nickel, copper and cobalt in the ore. This value, commonly referred to as a Net Smelter Return (NSR) is calculated in Australian dollars per ore tonne and represents the value of the products produced from one tonne of ore if sold at the mill gate. It is calculated from the revenue received from the payable metal (mill recovered) contained in the products less all costs and charges downstream of the site including transportation, smelting, refining and metal loss throughout these stages. NSR cut-off grade calculations were conducted by Entech prior to designing the underground mine, and again following completion of the design, scheduling and cost modelling. The initial estimation that was used for Feasibility Study mine design purposes was based on processing, treatment, refining, mining, administration and operating cost estimates from the Sirius Scoping Study. The operating cost generated from the Nova Underground financial model is $105/t comprising: • Mining cost of $55/t • Processing cost of $38/t • Admin cost of $12/t. Metal prices are based on 12 month averages (not volume weighted) of spot prices from the London Metal Exchange between June 2012 and July 2013 and were provided by Sirius, prices are as follows: • Nickel – US$7.44/lb • Copper – US3.47/lb • Cobalt – US$12.00/lb • Exchange rate - $A 1: $US 0.90 Three cut off grades have been generated for the Nova underground, these are: • Economic – cut-off includes all operating costs associated with the extraction and processing of ore material, • Incremental Stoping – cut-off grade applies to all material that does not require any additional development, and • Incremental Development – cut-off applies to material that will be mined in the process of gaining access to economic material.

Criteria	*JORC Code Explanation*	*Commentary*
Mining factors or assumptions	*The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* *The mining dilution factors used.* *The mining recovery factors used.* *Any minimum mining widths used.* *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* *The infrastructure requirements of the selected mining methods.*	The Ore Reserve estimate has been calculated by generating detailed mining shapes for each stoping block as well as development. Designed stope shapes include planned dilution, being waste material that is located within the minable stope shape. Additional unplanned dilution is also generally incurred from the walls of stopes due to re-distribution of stress within the rock mass as voids are created in the mine, blast damage, poor mining practice (such as poor blasthole drilling setup) this additional material is also included in Ore Reserve Estimate. A 7 % unplanned dilution factor has been calculated by Entech in consultation with SRK based on kinematic and empirical methods. Entech considers this to be appropriate given the ground conditions and proposed style of mining. A mining recovery factor of 95% has been applied post geological interrogation to generate the final diluted and recovered Ore Reserve estimate. This mining recovery is applied to allow for any ore loss due to mining related issues such as; underbreak due to poor drilling and blasting techniques, stope bridging or freezing or material being left in stopes due inaccessibility. The selected mining methods for the Nova project is long hole sub level open stoping which is widely used in many underground mines in Western Australia and is deemed appropriate considering the nature of the ore body, and the desire to extract the maximum value from the deposit. Stope sizes are generally 25 mW by 25 mH by the orebody width and have been created to suit the Mineral Resource. As the resource changes in width and dip the mining method changes from large multi lift stopes to echelon retreat single access stopes. Geotechnical assessment of the mineralised zone is also favourable for the selected mining method. Minimum mining width for stoping is 4m. In consultation with SRK geotechnical parameters have been set out for the size of the stoping blocks as well as support standards and development stand-off distances. All mining shapes included in the Ore Reserve estimate abide by the recommendations supplied by SRK. Grade control drilling is planned to be carried out from UG drill platforms to an appropriate density in order to further define the mineral resource. No Inferred Mineral Resources have been included in the Ore Reserve Estimate. Any Inferred Mineral Resource contained within a mining block (stope or development) is classified as waste and is used to dilute the overall Ore Reserve. Infrastructure required for the proposed Nova Nickel Project has been accounted for and included in all work leading to the generation of the Ore Reserve estimate. The Nova Nickel Project infrastructure includes: • All site surface infrastructure, including: o Processing facilities, including crushing, grinding, flotation and dewatering o Tailings storage facility o Offices, workshops, warehouses and associated facilities o Borefield and pipeline o Camp o Airstrip o Access Road o Power Station • Paste filling infrastructure. The backfilling of the production stopes is an integral component of the mining method at Nova for all stope sizes and configurations. Paste fill utilising classified live tailings is the nominated fill type. A Paste Plant will be located above the orebody on the surface and will comprise: tailings storage tank(s); filter; binder storage; mixer and associated facilities. Paste will be delivered underground by gravity through a reticulation system consisting of boreholes and horizontal piping. • A boxcut developed through the oxidised material near surface. • All power and pumping reticulation will be fed through decline development, ventilation rises and service holes drilled in close proximity to the decline to minimise cable and pipe runs along the decline path. • Ventilation fans will be installed underground at the base of a raisebored shaft to supply fresh air to underground workings. Return air ventilation

Criteria	JORC Code Explanation	Commentary
		system to be located on opposite side of the deposit to the decline to allow for flow through ventilation. • Caged ladderways will be installed in fresh air ventilation rises to establish a second means of egress from underground project.
Metallurgical factors or assumptions	*The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.* *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* *Any assumptions or allowances made for deleterious elements.* *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	Mineralogy shows main sulphide minerals as chalcopyrite, pentlandite and pyrrhotite. Chalcopyrite is largely liberated, however some fine pentlandite is associated with the pyrrhotite. Gangue minerals include olivine/pyroxene, amphibole, feldspars, garnets, quartz which are un-altered. The Feasibility Study contemplates a 1.5mtpa capacity plant. Processing will comprise conventional crushing, milling and classification circuits followed by dual flotation circuits to produce separate nickel(+cobalt) and copper(+silver) concentrates. The Nova/Bollinger deposit is different from other local nickel deposits of Norlisk – Lake Johnston, Western Areas – Forrestonia, Panoramic – Lanfranchi and Mincor - Widgemooltha which are near Norseman to the West and North. The nearest analogous deposits are in Canadian such as Thompson (owned by Vale), Raglan (owned by Xstrata) and Voisey's Bay (owned by Vale) who are using fresh water in the processing. The split concentrate flowsheet has achieved separation between copper and nickel for production of separate concentrates with acceptable recoveries. The results to date show a robust processing flowsheet than can consistently achieve a copper concentrate grading 27 – 31% Cu for 95% overall recovery and a nickel concentrate grading 13 - 17% Ni for 89% overall recovery. The copper concentrate is low in nickel (<0.5%) and represents <0.5% nickel recovery. The final copper and nickel flotation recovery for this flowsheet will be determined from planned locked cycle testwork. The testing is investigating two potential reagent regimes for split flotation, one using TETA (tri-ethylene-tetra-amine) with sodium sulphite and Cytec Industries polymeric depressant (7261A). These are all used in commercial flotation processes, more commonly in North America, less commonly in Australia. Selective sulphide flotation is considered a well-tested technology Flotation testing has shown the ability to produce both a combined bulk concentrate or a separate split concentrate in hyper-saline site water. Economic evaluations concluded that a split concentrate option will achieve a higher revenue than a combined concentrate, due to the increased pay-ability of the copper. Split concentrate offers flexibility, marketing options and was adopted as the preferred flowsheet for the Feasibility Study. Composite A was formulated as the main testing composite to be used in further development testwork. Composite A is based on the following criteria: • Year 1-3 stoping material • All MET holes below 2005 RL • Including mining dilution as advised by Entech, and agreed by Sirius, nominally 2.5m HW and 0.5m FW. • Every second meter from 9 holes. Composites B - P includes all major material types of Disseminated in Gabbro, Stringer in Sediment, Upper Massive, Lower massive/breccia and NET, including dilution coming from HW Waste, FW Waste and HW Gabro Disseminated. All metallurgical composites represent 83% of the known ore resource. Detailed modelling of the metallurgical recoveries by ore type and ore zones have been applied to the mining schedule to determine the overall recoveries used in the financial modelling are as follows: <table><tr><td>Metallurgical Recoveries</td><td>Copper Concentrate</td><td>Nickel Concentrate</td></tr><tr><td>Ni</td><td>1%</td><td>89%</td></tr><tr><td>Cu</td><td>95%</td><td>3%</td></tr><tr><td>Co</td><td>1%</td><td>85%</td></tr></table>Note Nickel Recoveries are based on Mill Feed Grades No deleterious elements were observed in the concentrates, with the exception of chloride from the process water. Concentrate washing has been investigated to determine required amount **Copper Concentrate specification –** Cu 27 - 31%, S 29-33%, Fe 29-30%, MgO <1%, SiO2

Criteria	JORC Code Explanation	Commentary
		<2.5%, As 0.005%, Sb 0.001%, Bi 0.003%, Cd < 0.002%, Pb 0.016%, Zn 0.046%, Ni 0.64%, Co 0.02 %, Cl + F <300 ppm, Hg <1 ppm, Al_2O_3 0.56%, **Nickel Concentrate specification** – Ni 13 - 17%, Cu 0.20 – 0.6%, Co 0.43 – 0.49%, Au 0.05 gms/t, Ag 4.8 gms/t, S 31-34%, Fe 41-44%, MgO< 1.5%, SiO_2 <3.0%, As 0.002%, Pb 0.005%, Zn 0.020%, Cl + F <300 ppm, Al_2O_3 0.9% The main minerals of chalcopyrite, pentlandite and pyrrhotite can be defined by Cu, Ni, Fe and S grades. The deposit has been modelled with Ni, Cu, Co, Fe, S and MgO for all major material domains.
Environmental	*The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Sirius is currently in the process of gaining required environmental approvals for the proposed mining activities. It has been assumed that all approvals will be met. Environmental studies have been completed and it has been understood that there are no significant hurdles to the Nova Nickel Project. Waste rock and tailings characterization studies have been completed. Negligible waste rock will be disposed of on surface. The costs of appropriate impoundments have been allowed for in light the tailings characterization studies. Feasibility designs for a tailings storage facility have been completed and costing including in the evaluation of this Ore Reserve.
Infrastructure	*The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	There is currently no significant infrastructure on site developed for the Nova Nickel Project. The proposed infrastructure lies partly on Fraser Range Station (a pastoral lease administered by Pastoral Lands Board) and unallocated crown land. Some infrastructure (access road, borefield, pipeline) is located on mining tenure held by other companies. Appropriate access agreements have been entered into or are in progress. It has been assumed that all development of surface infrastructure including site facilities, camp and airstrip will be completed to enable to development of the underground resource. It has been assumed that there will be sufficient water available to develop the Nova Nickel Project.
Costs	*The derivation of, or assumptions made, regarding projected capital costs in the study.* *The methodology used to estimate operating costs.* *Allowances made for the content of deleterious elements.* *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* *The source of exchange rates used in the study.* *Derivation of transportation charges.* *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* *The allowances made for royalties payable, both Government and private.*	Capital costs used in the production of the Ore Reserve estimate have been gathered from budget pricing or from a cost database. In the case where database costs have been used, contingencies have been applied. Major capital items are based on estimates prepared by experienced independent engineers, including: • Processing Plant – Ausenco • TSF, Access Road, Aerodrome – GHD • Borefields - MSP • Underground (Fixed Plant) - Entech Operating costs for the underground operation are based on a budget estimate from a leading underground mining contractor. Major operating costs are based on estimates by Sirius owners team and experienced independent engineers, including: • Underground Contract Mining – Barminco • Processing Costs (based on Sirius reagent consumption) – Ausenco A capital and operating cost model has been developed in Excel and has been used to complete a life of mine cashflow estimate. Smelter terms have been determined from typical contracts and include: • Nickel payability and TC. • Copper payability (Ni Concentrate) • Copper concentrate copper payability and TC/RC • The presence of deleterious elements has been assessed and it has been determined that no penalties will be applied • Estimates of smelter terms have been determined in-house. The derivation of assumptions made for commodity price(s) is shown below. Product inland transport costs have been estimated by an experienced contractor, Qube Logistics. Shipping costs from the Port of Esperance have been estimated by an experienced shipping broker, Braemar Seascope. Royalty allowances are in accordance with Division 5 of the WA Mining Act and assessment of royalties payable to other parties.

Criteria	*JORC Code Explanation*	*Commentary*
Revenue factors	*The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	Revenue has been based on the commodity price and exchange rates commentated on above. Metal prices are based on 12 month averages (not volume weighted) of spot prices from the London Metal Exchange between June 2012 and July 2013 and were provided by Sirius, prices are as follows: • Nickel – US$7.44/lb • Copper – US3.47/lb • Cobalt – US$12.00/lb • Exchange rate - $A 1: $US 0.90 Head grade of the project is dependent on the material scheduled to be mined from underground. Treatment and transportation charges applied in the economic evaluation.
Market assessment	*The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* *A customer and competitor analysis along with the identification of likely market windows for the product.* *Price and volume forecasts and the basis for these forecasts.* *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	Demand for concentrate has been derived from international metals market analysts – Wood Mackenzie, who prepared a commissioned nickel & copper market study, dated 18 June, 2014. Customer and competitor analysis is based on research provided by Wood Mackenzie, plus input from Wood Mackenzie Nickel Industry Cost Service. The price and volumes forecast are based on information provided by Wood Mackenzie's Long Term Outlook Reports for Nickel and Copper, June editions, the commissioned research by Wood Mackenzie, and pricing forecasts by Consensus Economics Inc. Potential customers have received and approved representative samples, and received detailed specifications.
Economic	*The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	The Ore Reserve estimate is based on a financial model that has been prepared at a "Feasibility Study" level of accuracy. All inputs from underground operations, processing, transportation and sustaining capital as well as contingencies have been scheduled and evaluated to generate a full life of mine cost model. Economic inputs have been sourced from suppliers or generated from database information relating to the relevant area of discipline. A discount rate of 8% has been applied. The NPV of the project is strongly positive at the assumed commodity prices.
Social	*The status of agreements with key stakeholders and matters leading to social licence to operate.*	Grant of the Mining Lease and other associated tenure is pending finalization of an agreement with Native Title claimants. Key terms of the agreement have been agreed by the Native Title Claimant Group and the preparation of the detailed agreement is underway. The Company has engaged in preliminary discussions with the holders of the Fraser Range Pastoral Lease. The Company has met with and discussed the Project with: Esperance Ports Sea and Land; Shires or Esperance, Coolgardie, Dundas and Town of Kalgoorlie Boulder. None has expressed concerns with the proposed development. Apart from the Fraser Range homestead and caravan park, there are no permanent residences within the Project Area or its environs. It has been assumed that all agreements with key stakeholders including traditional owner claimants will be issued and will not affect the Ore Reserve estimate.
Other	*To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* *Any identified material naturally occurring risks.* *The status of material legal agreements and marketing arrangements.* *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There*	Groundwater exploration, pump testing and modelling simulations have been completed adjacent to the Nova-Bollinger Deposit. Results indicate that some dewatering of the mine environment will be required during mine development. This water will be stored in the TSF and is expected to provide sufficient water for the first 2 years of mining and processing operations. Beyond this period, process water will be sourced from three water bores indentified in other aquifers within 4 kms of the Nova-Bollinger Depsoti. As a contingency, further groundwater resources exist within 50 km radius of the project and are available for development. A Reverse Osmosis (RO) plant will be required to produce all potable water requirements including concentrate washing. This plant will be designed to treat

Criteria	*JORC Code Explanation*	*Commentary*
	must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	water quality expected from the borefield. The RO plant will produce the Project's potable water requirement which is then distributed across the site and to the accommodation village Sirius is currently in the process of gaining required legal and regulatory requirements. It has been assumed that all government permits and licenses or statutory approvals will be granted. Nova and Bollinger are located wholly within Exploration Licence E28/1724 and MLA28/376. Sirius has a 100% interest in the tenements. The tenement sits within the Ngadju Native Title Claim (WC99/002).
Classification	*The basis for the classification of the Ore Reserves into varying confidence categories.* *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	The Ore Reserve is based on Probable Ore Reserves. No Proved Ore Reserves are reported. No Measured Mineral resources have been modelled in the mineral resource. Indicated Mineral Resources have been converted to a Probable Ore Reserve. The Competent Person is satisfied with the classification of the Underground Mineral Resource and hence the conversion to Ore Reserve is appropriate.
Audits or reviews	*The results of any audits or reviews of Ore Reserve estimates.*	The Ore Reserve has been peer reviewed internally and is in line with current industry standards.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Ore Reserve has been completed to a Definitive Feasibility standard; hence confidence in the resulting figures is high. Confidence in the mine design and schedule are high. All modifying factors have been applied to designed mining shapes on a global scale as there is limited local data.

Competent Persons statement

The information in this report that relates to Exploration Results is based on information compiled by Jeffrey Foster and Andy Thompson who are employees of the company. Mr Foster is a member of the Australasian Institute of Mining and Metallurgy. Mr Thompson is a member of the Australasian Institute of Mining and Metallurgy. Mr Foster and Mr Thompson have sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Foster and Mr Thompson consent to the inclusion in this report of the matters based on information in the form and context in which it appears.. Core samples are taken as half NQ core or quarter HQ core and sampled to geological boundaries where appropriate. The quality of RC drilling samples is optimised by the use of riffle and/or cone splitters, dust collectors, logging of various criteria designed to record sample size, recovery and contamination, and use of field duplicates to measure sample representivity. In the case of strongly mineralised samples, base metal assays are based on a special high precision four acid digest (a four acid digest using a larger volume of material) and an AAS finish using a dedicated calibration considered more accurate for higher concentrations. Sample preparation and analysis is undertaken at Minanalytical, Genalysis Intertek and Ultratrace laboratories in Perth, Western Australia. The quality of analytical results is monitored by the use of internal laboratory procedures and standards together with certified standards, duplicates and blanks and statistical analysis where appropriate to ensure that results are representative and within acceptable ranges of accuracy and precision. Where quoted, nickel-copper intersections are based on a minimum threshold grade of 0.5% Ni and/or Cu. Intersections are length and density weighted where appropriate as per standard industry practice. All sample and drill hole co-ordinates are based on the GDA/MGA grid and datum unless otherwise stated.

The information in this report that relates to Mineral Resource Estimation is based on information compiled by Mr Mark Drabble, Principal Consultant Geologist – Optiro Pty Ltd, Mr Andrew Thompson, a full time employee and General Manager Resources and Geology of Sirius Resources NL and Mr Jeffrey Foster, a full time employee and Technical Director of Sirius Resources NL. Mr Drabble, Mr Thompson and Mr Foster are members of the Australasian Institute of Mining and Metallurgy and have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (JORC Code). Mr Drabble, Mr Thompson and Mr Foster consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

The information in this report that relates to Underground Ore Reserves is based on information compiled by Mr Shane McLeay who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr. McLeay is a permanent employee of Entech Pty Ltd and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr McLeay consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.