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Projects:

Fraser Range nickel-copper, gold

Polar Bear gold, nickel



MANAGEMENT AND EXPLORATION UPDATE

Sirius Resources NL (**ASX:SIR**) (“**Sirius**” or the “**Company**”) advises that it is has received encouraging results from its ongoing exploration program in the Fraser Range and has appointed Rob Dennis as Chief Operating Officer (“**COO**”) to oversee the feasibility study and development of the Nova-Bollinger nickel-copper project.

First results from the Company’s 2014 exploration program have identified a significant new soil anomaly to the south of Crux, known as Centauri and the first drill hole at Buningonia has confirmed the presence of a mafic intrusion.

Fraser Range exploration

Initial reconnaissance sampling of a nickel target 3 kilometres to the south of the Crux anomaly has identified a significant circular nickel-copper-chrome soil anomaly (“**Centauri**”) measuring 1000 metres across with peak values of 598 ppm nickel, 84 ppm copper and 1103 ppm chrome* (*see Figures 1 and 2*).

The peak levels of nickel and copper in the soil samples at Centauri are similar to those originally identified at Nova and at Crux.

Follow up prospecting has located a gossanous rock outcrop which contains 0.56% nickel, 0.11% copper and 0.5% chrome*.

(*note: these results are based on portable XRF measurements, used in conjunction with known reference standards, and not laboratory assays).

A baseline environmental survey has been completed over the Crux prospect with additional surveys planned over Centauri during the current quarter. Heritage clearance surveys are also scheduled for the current quarter.

This cluster of anomalies represents a high priority target for the Company. The next stage of exploration, comprising more detailed soil sampling followed by geophysics and ultimately drilling, will commence once weather conditions permit and appropriate approvals are obtained.

Meanwhile, a geological diamond drill hole has been completed at the Buningonia target (*see Figure 1*). The hole encountered a 450 metre thick sequence of mafic/ultramafic intrusive rocks within a meta-

sediment host sequence. A downhole electromagnetic survey is planned, once the area is accessible.

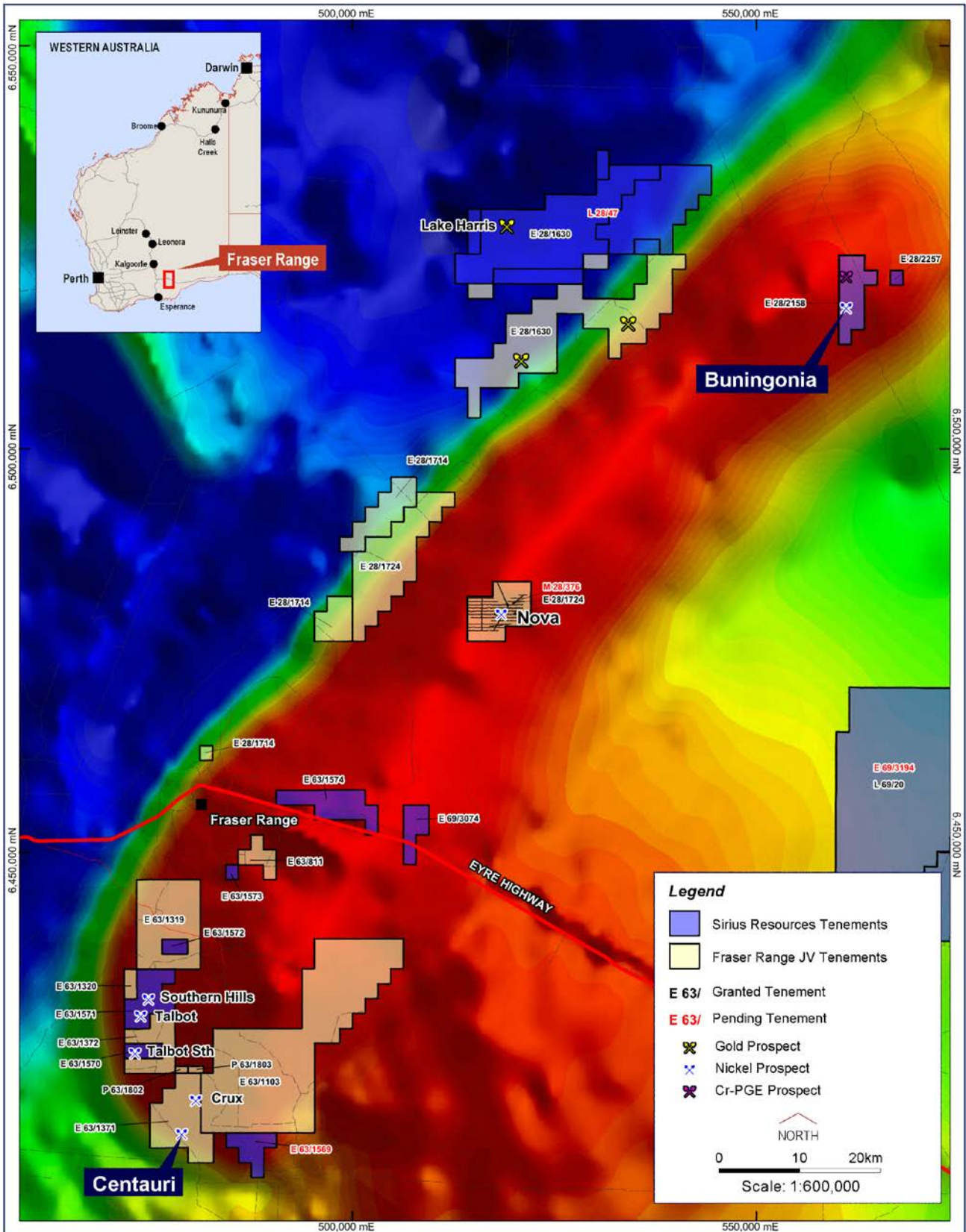


Figure 1. Location of the Centauri soil anomaly relative to Crux and and Buningonia relative to Nova.

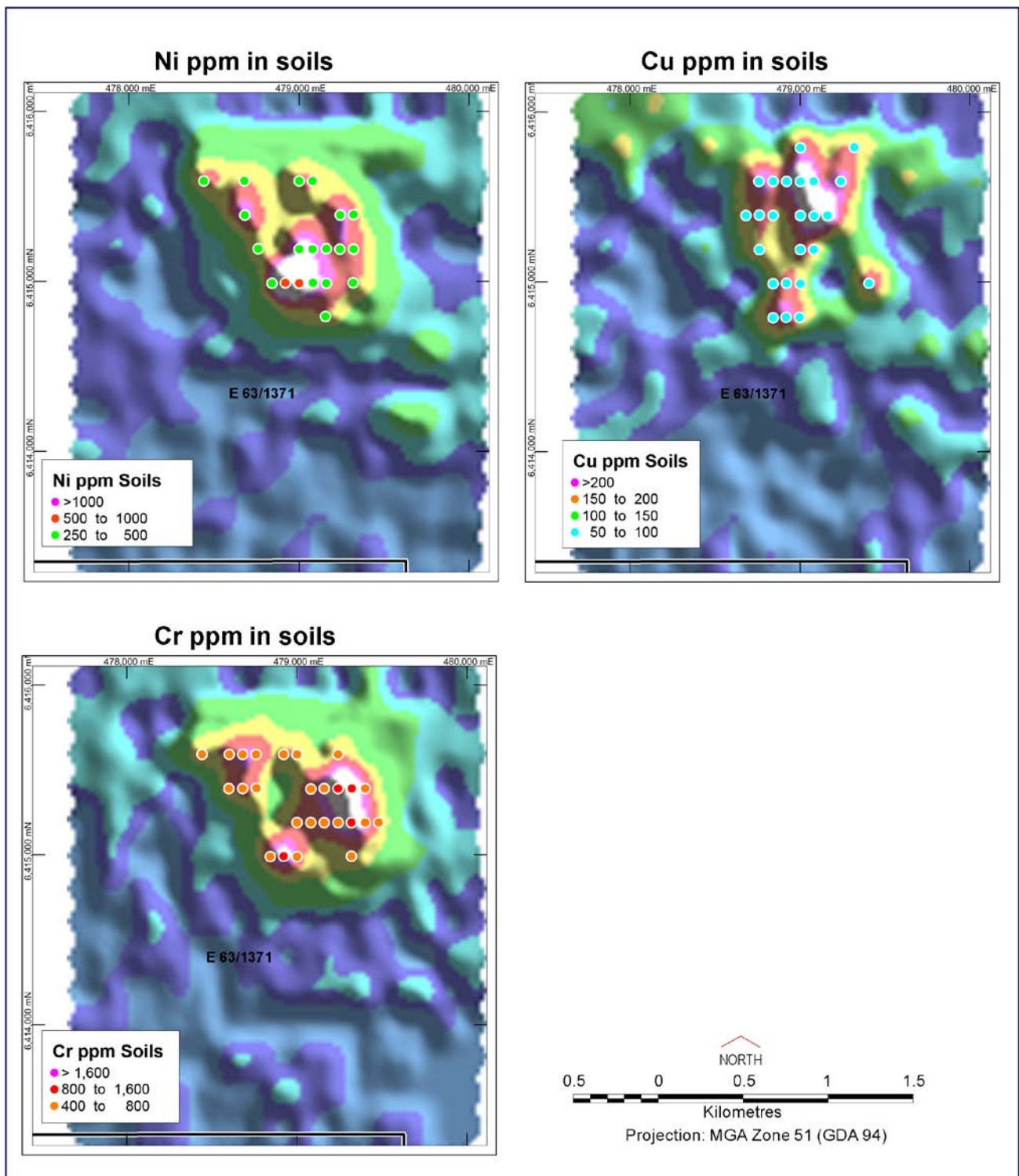


Figure 2. Nickel, copper and chrome in soil sampling at the Centauri anomaly.

Nova-Bollinger feasibility study

The feasibility study for the Nova-Bollinger nickel-copper mine is proceeding as planned, and remains on schedule for completion in mid-2014.

Native title negotiations are continuing. The conclusion of these negotiations is a prerequisite to the granting of the Nova mining lease, which in turn is a prerequisite for the environmental permitting process to proceed. The exact timing of approvals is therefore subject to the rate of progress with these negotiations.

Chief Operating Officer appointment

The Company has appointed Rob Dennis to the position of Chief Operating Officer (“COO”) effective immediately. Mr Dennis is a mining engineer with over 35 years’ experience in the nickel, copper, gold and alumina industries.

Over the course of his career, Rob has held the position of COO at various ASX-listed nickel and copper producers. He has also served as General Manager Project Development for Lionore Australia, General Manager Operations for Great Central Mines and Chief Mining Engineer for Western Mining Corporation.

Rob’s experience includes being underground mine manager at WMC’s Windarra nickel mine, managing the Bronzewing and Jundee gold mines, managing the feasibility study, construction, development and operation of LionOre’s Thunderbox gold mine, and in the position of COO managed the development of Aditya Birla’s Nifty underground copper mine and ore processing facilities.

Rob will lead the Sirius project team, which comprises in-house management personnel, external consultants and various engineering companies. The team is progressing a definitive feasibility study on the Nova-Bollinger nickel-copper project, which is scheduled for completion by mid-2014.

Sirius Managing Director Mark Bennett said: “Rob is a great fit and we are delighted to welcome him to the team, where his extensive operational experience will be a great asset in the development of Nova-Bollinger”.

Mark Bennett
Managing Director and CEO

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Competent Persons statement

The information in this report that relates to Exploration Results is based on information compiled by Jeffrey Foster and John Bartlett who are employees of the company and fairly represents this information. Mr Foster and Mr Bartlett are members of the Australasian Institute of Mining and Metallurgy. Mr Foster and Mr Bartlett 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 Bartlett consent to the inclusion in this report of the matters based on information in the form and context in which it appears. Exploration results are based on standard industry practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures. Reverse circulation (RC), aircore (AC) and rotary air blast (RAB) drilling samples are collected as composite samples of 4 or 2 metres and as 1 metre splits (stated in results). Mineralised intersections derived from composite samples are subsequently re-split to 1 metre samples to better define grade distribution. 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. For soil samples, PGM and gold assays are based on an aqua regia digest with Inductively Coupled Plasma (ICP) finish and base metal assays may be based on aqua regia or four acid digest with inductively coupled plasma optical emission spectrometry (ICPOES) or atomic absorption spectrometry (AAS) finish. In the case of reconnaissance RAB, AC, RC or rock chip samples, PGM and gold assays are based on lead or nickel sulphide collection fire assay digests with an ICP finish, base metal assays are based on a four acid digest and inductively coupled plasma optical emission spectrometry (ICPOES) and atomic absorption spectrometry (AAS) finish, and where appropriate, oxide metal elements such as Fe, Ti and Cr are based on a lithium borate fusion digest and X-ray fluorescence (XRF) finish. 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, and gold intersections are based on a minimum gold threshold grade of 0.1g/t Au unless otherwise stated. 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. Exploration results obtained by other companies and quoted by Sirius have not necessarily been obtained using the same methods or subjected to the same QAQC protocols. These results may not have been independently verified because original samples and/or data may no longer be available.

The following Tables are provided to ensure compliance with the JORC Code (2012) edition requirements for the reporting of exploration results.

Centauri

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	The prospect is sampled by hand soil sample on a nominal 80m x 200m grid spacing. A total of 381 hand samples have been collected to an average depth of 30cm.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i>	The sample locations are picked up by handheld GPS. Samples were logged for landform, and sample contamination. Sampling was carried out under Sirius protocols and QAQC procedures as per industry best practice.

Criteria	JORC Code explanation	Commentary
	<i>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</i>	All samples are sieved through 177 μ (-80#) in order to reduce the natural inhomogeneity. Samples were analysed using portable InnovexXRF (pXRF) for a range of elements including: As, Cu, Cr, Fe, Mn, Ni, Pb, Rb, Sr, Th, Ti, Y, Zn, Zr QAQC protocols include the laboratory analysis of at least 10–20% of all samples. QAQC Samples were sieved, dried and pulverised (total prep) to produce a representative 10g sub sample for a analysis by Aqua Regia with ICP-OES finish. The following elements are included Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sc, Sr, Te, Ti, Tl, V, W, Zn. Comparison of the pXRF and laboratory results show a strong correlation (>90%) for key elements including Ni and Cu
Drilling techniques	<i>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).</i>	No drilling to date has been completed only hand soil samples.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	Overall recoveries are good and there are no significant sample recovery problems.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	Samples are collected by digging a 30cm hole and collecting sample from bottom of hole for sieving.
	<i>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.</i>	Insufficient drilling and geochemical data is available at the present stage to evaluate potential sample bias. However Sirius protocols and QAQC procedures are followed to preclude any issue of sample bias due to material loss or gain.
Logging	<i>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.</i>	The hand sampling technique does not produce chips suitable for lithological or geotechnical logging.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Not applicable as all samples are sieved soil fine fractions.
	<i>The total length and percentage of the relevant intersections logged</i>	Not applicable
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No core drilling techniques used at present.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Samples were collected directly from hand dug locations. Samples taken were dry.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	The sample preparation follows industry best practice in sample preparation involving oven drying, coarse crush, sieve -177 μ (-80#) sufficient for duplicate 10g aqua regia digestion.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	At this stage of the project field QC procedures involve the review of laboratory supplied certified reference material and in house controls, blanks, splits and replicates are analysed with each batch of samples. These quality control results are reported along with the sample values in the final analysis report. Selected samples are also re-analysed to confirm anomalous results.
	<i>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.</i>	No field duplicates have been taken. Samples are selected to weigh less than 3kg to ensure total preparation at the pulverisation stage.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes are considered to be appropriate to correctly represent the sought after mineralisation style

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	The analytical techniques used portable XRF machine and Aqua Regia digest multi element suite with ICP/OES finish, suitable for the reconnaissance style sampling undertaken.
	<i>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.</i>	No geophysical tools were used to determine any element concentrations at this stage.
	<i>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.</i>	Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in house procedures.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	The Sirius Exploration Manager has visually verified significant intersections in soil samples from the Centauri prospect.
	<i>The use of twinned holes.</i>	No holes have been drilled at Centauri.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary data was collected for drill holes 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.
	<i>Discuss any adjustment to assay data.</i>	No adjustments or calibrations were made to any assay data used in this report.
Location of data points	<i>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.</i>	Drill hole collar locations were recorded using handheld Garmin GPS. Elevation values were in AHD RL and values recorded within the data base. Expected accuracy is + or – 5 m for easting, northing and 10m for elevation coordinates. No downhole surveying techniques were used due to the drilling methods used.
	<i>Specification of the grid system used.</i>	The grid system is MGA_GDA94 (zone 51), local easting and northing are in MGA.
	<i>Quality and adequacy of topographic control.</i>	Topographic surface uses handheld GPS elevation data, which is adequate at the current stage of the project.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	The nominal drillhole spacing is 200 m (northing) by 80 m (easting).
	<i>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.</i>	The mineralised domains have not yet demonstrated sufficient continuity in both geological and grade continuity to support the definition of Mineral Resource and Reserves, and the classifications applied under the 2012 JORC Code.
	<i>Whether sample compositing has been applied.</i>	No sample compositing has been applied.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The hand sample method is used to provide a surface sample only.
	<i>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.</i>	No orientation based sampling bias has been identified in the data at this point.
Sample security	<i>The measures taken to ensure sample security.</i>	Chain of custody is managed by Sirius. Samples are stored and 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	<i>The results of any audits or reviews of sampling techniques and data.</i>	No review of the data management system has been carried out.

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.	Centauri prospect is located wholly within Exploration Licence E63/1371. The tenement is part of the Fraser Range JV between Sirius Gold Pty Ltd, a wholly owned subsidiary of Sirius Resources NL, and Free CI Pty Ltd. Sirius has a 70% interest in the tenement. The tenement sits within the Ngadju Native Title Claim (WC99/002). E63/1371 is within the 'B' class Dundas Nature Reserve.
	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.	Newmont Pty Ltd carried out exploratory activities between 1960's and 1970's through the western regions of the Fraser Range Complex. To the best of Sirius' knowledge no known historical drilling has occurred over the Centauri prospect. Multiple generations of historical soil/calcrete sampling on various grid spacings occur through the tenements. The locations and results cannot be verified, and are not included in the results.
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 deposit style sought after is analogous to the recent Nova Ni-Cu-Co mafic hosted nickel-copper deposits.
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: <ul style="list-style-type: none"> • 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. 	Sample locations are shown in Figure 2 in body of text.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	No length weighting has been applied due to the nature of the sampling technique. No top-cuts have been applied.
	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.	Not applicable for the sampling methods used.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used for reporting exploration results.
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 (eg 'down hole length, true width not known').	The sampling technique used defines a surficial geochemical expression. No information is attainable relating to the geometry of any mineralisation based on these results.
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 Figures 1 and 2 in body of text.

Criteria	JORC Code explanation	Commentary
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.	All results are reported.
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.	Not applicable
Further work	The nature and scale of planned further work (eg 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	Future work at Centauro will include re-submitting a selection of sample pulps for Au, Pt, Pd by Fire Assay analysis. Moving Loop Electromagnetics will then be used over the main geochemical anomaly to identify any potential bedrock conductive sources that may be related to mineralisation. RAB/AC drilling will be used to further define the nature and extent of the geochemical anomalism, and to gain lithological information.



Buningonia

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	Exploration of the Buningonia area is sampled by a both a single RC and diamond drill hole. The RC drill hole was drilled vertical to a maximum depth of 51m, whilst the diamond drill hole was drilled towards 300° at -55° to a maximum depth of 549.3m.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i>	The drill hole collar locations are picked up by handheld GPS. Drill samples were logged for lithological, weathering, wetness and contamination. Sampling was carried out under Sirius protocols and QAQC procedures as per industry best practice.
	<i>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 30g 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</i>	Diamond core is HQ and NQ2 size, sampled on geological intervals (0.2 m to 1.2 m), cut into half (NQ2) or quarter (HQ) core to give sample weights under 3 kg. Samples were crushed, dried and pulverised (total prep) to produce a subsample for analysis by four acid digest with an ICP/OES, ICP/MS or FA/AAS (Au, Pt, Pd) finish.
Drilling techniques	<i>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).</i>	Drilling to date includes a single reverse circulation and a single diamond drill hole. Diamond drill core is fully orientated
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	Diamond core recoveries are logged and recorded in the database. Overall recoveries are >95%. Drill sample recoveries are recorded as an average for each individual lithological unit logged and recorded in the database. Overall recoveries are good and there are no significant sample recovery problems.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	Diamond core 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 Samples are collected by bucket directly from the rig-mounted cyclone and laid directly onto the ground in rows of 10, with sufficient space to ensure no sample cross-contamination occurs.
	<i>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.</i>	Insufficient drilling and geochemical data is available at the present stage to evaluate potential sample bias. However Sirius protocols and QAQC procedures are followed to preclude any issue of sample bias due to material loss or gain.
Logging	<i>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.</i>	Geological logging of drill chip samples has been recorded for each drill hole including lithology, grain size, texture, contamination, oxidation, weathering, and wetness. Geotechnical logging was carried out on drill core 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.

Criteria	JORC Code explanation	Commentary
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging of RC chips and diamond drill core recorded lithology, mineralogy, mineralisation, structural (DDH only), weathering, colour and other features of the samples. Core was photographed in both dry and wet form.
	<i>The total length and percentage of the relevant intersections logged</i>	All drillholes were logged in full, apart from rock roller diamond
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	All diamond 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.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	RC samples were collected on the rig using cone splitters. All samples were dry, and sampled by scoop and composited to 4m.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	The sample preparation of diamond 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.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Field QC procedures involve the use of certified reference material as assay standards, the insertion rate of these averaged 1:25
	<i>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.</i>	No field duplicates have been taken. Samples are selected to weigh less than 3kg to ensure total preparation at the pulverisation stage.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes are considered to be appropriate to correctly represent the sought after mineralisation style
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	For core samples 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.
	<i>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.</i>	Not applicable
	<i>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.</i>	Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in house procedures.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	The Exploration Manager of Sirius has visually verified significant intersections in diamond core intersections.
	<i>The use of twinned holes.</i>	No twin holes have been drilled.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary data was collected for drill holes 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.
	<i>Discuss any adjustment to assay data.</i>	No adjustments or calibrations were made to any assay data used in this report.
Location of data points	<i>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.</i>	Drill hole collar locations were recorded using handheld Garmin GPS. Elevation values were in AHD RL and values recorded within the database. Expected accuracy is + or - 5 m for easting, northing and 10m for elevation coordinates. No downhole surveying techniques were used due to the drilling methods used.

Criteria	JORC Code explanation	Commentary
	<i>Specification of the grid system used.</i>	The grid system is MGA_GDA94 (zone 51), local easting and northing are in MGA.
	<i>Quality and adequacy of topographic control.</i>	Topographic surface uses handheld GPS elevation data, which is adequate at the current stage of the project.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Not applicable, holes were primarily drilled for stratigraphic purposes and not on the basis of a nominal grid or spacing.
	<i>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.</i>	The drill holes reported have not yet demonstrated sufficient continuity in both geological and grade continuity to support the definition of Mineral Resource and Reserves, and the classifications applied under the 2012 JORC Code.
	<i>Whether sample compositing has been applied.</i>	RC drilling samples are laid directly on the ground in 1m intervals in sequence, scoop sampling each of four consecutive sample piles and compositing into a single sample
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	RC drilling was vertical which is adequate for this early stage and nature of drilling to provide initial geological control on key lithology's and potential mineralisation. The diamond hole was drilled towards 300°, approximately perpendicular to regional geology.
	<i>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.</i>	No orientation based sampling bias has been identified in the data at this point.
Sample security	<i>The measures taken to ensure sample security.</i>	Chain of custody is managed by Sirius. Samples 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	<i>The results of any audits or reviews of sampling techniques and data.</i>	No review of the data management system has been carried out.

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.	Buningonia prospect is located wholly within Exploration Licence E28/2158. The tenement is 100% Sirius Resources NL, and Lake Rivers Gold Pty Ltd. The tenement sits within the Ngadju Native Title Claim (WC99/002). E28/2158 is within the proposed 'C' class Lake Harris Nature Reserve.
	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.	Previous soil sampling and percussion drilling has been carried out private companies for Mark Creasy which has defined coincident anomalous nickel-chromium and platinum group metals (PGM).
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 deposit style sought after is analogous to the recent Nova Ni-Cu-Co mafic hosted nickel-copper deposits.

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Drill hole Information	<p>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:</p> <ul style="list-style-type: none"> • 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. 	Refer to Annexure 1 in body of text
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	The hole is for stratigraphic purposes. No mineralised zones were encountered therefore not sampled or assayed.
	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.	Not applicable
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used for reporting exploration results.
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</p>	The sampling technique used confirms the presence of mafic to ultramafic lithologies. No information is attainable relating to the geometry of any mineralisation based on these results.
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.	All results are reported.
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.	The hole is for stratigraphic purposes. Previous EM has been conducted but this hole was not designed to specifically test an EM target therefore not relevant.
Further work	<p>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</p> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive</p>	Future work at E28/2158 will consist of a review of assay and geochemical results, and petrological studies. Downhole EM to identify any potential bedrock conductive sources that may be related to mineralisation.