

## EXPLORATION IDENTIFIES THREE KILOMETRE NICKEL-COPPER-COBALT-PGE TARGET IN FRASER RANGE

**Constellation Resources Limited** (the "Company" or "Constellation") is pleased to report further positive results from its 16-hole air-core ("AC") drill program undertaken at one of five promising nickel-copper-cobalt-platinum group elements ("Ni-Cu-Co-PGE") targets in late 2020 on E28/2403 (70% Constellation, 30% Enterprise Metals Limited (ASX: ENT)).

### HIGHLIGHTS

- Infill results in conjunction with previously reported reconnaissance AC results define a highly promising Ni-Cu-Co-PGE geochemical anomaly that is interpreted to be over three kilometres in strike and up to 400 metres wide – named the Eyre Anomaly. The Eyre Anomaly resides within Geophysical Target 1, one of the largest mafic intrusions in the area (3.6km by 3.6km). (Refer to the Company's ASX Announcements dated 14 July 2020 and 29 October 2020).

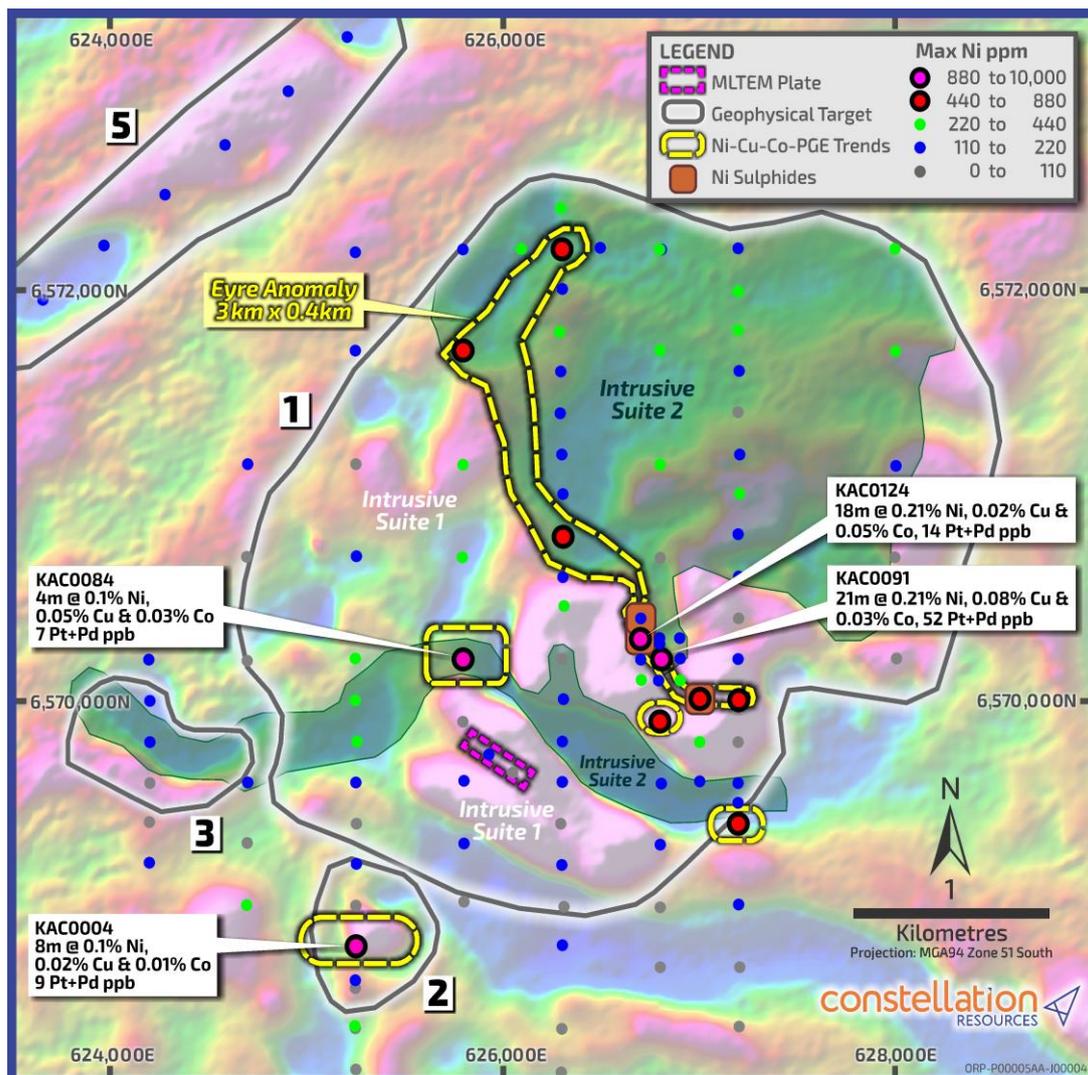


Figure 1: AC drill results including Eyre Anomaly, geochemical footprints, MLTEM anomaly over first derivative aeromagnetics.

- Infill assay results confirm further encouraging Ni-Cu-Co-PGE regolith anomalism. Key results include:
  - **KAC0124: 18m @ 0.21% Ni, 0.02% Cu and 0.05% Co, 14 ppb (Pt+Pd) from 87m including:**
    - **2m @ 0.47% Ni, 0.26% Cu and 0.08% Co, 11 ppb (Pt+Pd) from 97m**
- KAC0124 is approximately 145 metres from KAC0091 which **intersected 21m @ 0.21% Ni, 0.08% Cu and 0.03% Co, 52ppb (Pt+Pd) from 93m to bottom of hole** ("BOH") in the maiden AC program.
- The infill AC program was highly successful in validating the prospectivity of the Transline tenements, with the identification of magmatic nickel and copper sulphides within a peridotite and pyroxenite (olivine bearing) host rocks in three holes KAC0124, KAC0131 and KAC0135 (Refer to the Company's ASX Announcement dated 8 December 2020 for further information).
- Strong evidence for magmatic nickel sulphides as being the source of the Eyre Anomaly which supports the prospectivity of the other established Ni-Cu-Co-PGE anomalies as a pathfinder to nickel sulphides in the basement intrusive.
- High priority follow-up infill AC drilling planned to improve definition of the grade distribution at each of the established Ni-Cu-Co-PGE geochemical footprints, with the northern Eyre Anomaly being a priority.
- Company remains well-funded for all planned activities.

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## EYRE ANOMALY

The intersections from the current infill drilling program in conjunction with the previously reported reconnaissance AC hole results defines a highly promising Ni-Cu-Co-PGE geochemical anomaly that is interpreted to be over three kilometres in strike and up to 400 metres wide – named the Eyre Anomaly. The Eyre Anomaly resides in within Geophysical Target 1 (“Target 1”), one of the largest mafic intrusions in the area (3.6 kilometres by 3.6 kilometres) (Figure 1).

Early comparative geochemical analysis of key discriminator elements has indicated the presence of two separate mafic intrusions suites within the Target 1 intrusion. The two mafic/ultramafic intrusive suites suggest multiple pulses of magma in the formation of the Target 1 which is a strong indication of prospectivity for the magmatic intrusive mineralisation being explored.

Samples analysed were sourced at the blade refusal metre into the basement rocks. The BOH sample is relatively fresh, and the effects of weathering are therefore minimised in the geochemical analysis.

The comparative analysis of the BOH samples uses the same normalised discrimination plots as reported by the Geological Survey of Western Australia (“GSWA”) Record 2016/8<sup>1</sup>. The comparative analysis suggests the Intrusive Suite 1 is analogous to the main Fraser Main Gabbro Suite and Intrusive Suite 2, is interpreted to be a younger more prospective intrusive that is potentially comparable to Nova Gabbro for nickel sulphides (Figure 1). Of particular interest, is that the Eyre Anomaly location and other geochemical footprints appear to be related to the edges of the younger interpreted mafic Intrusive Suite 2 (Figure 1).

The presence of nickel sulphides in peridotite/olivine pyroxenite host rocks and pathfinder geochemistry demonstrates the nickel sulphide fertility of the intrusions and prospectivity to potentially host an economically viable deposit in tenement area.

## FUTURE WORK PROGRAMS

High priority follow-up infill AC drilling will be undertaken to improve the definition of the grade distribution at each of the established Ni-Cu-Co-PGE geochemical footprints, with the northern Eyre Anomaly being a priority due to the current lack of drilling. The drill program will aim to infill each anomaly to approximately 100 metre centres in the first instance with the potential need for tighter patterns in certain areas. The Company aims to commence the infill drilling program in the current quarter, subject to rig availability.

The processed AC results will be utilised in conjunction with existing results to optimise the locations of an anticipated Reverse Circulation (“RC”) drilling program.

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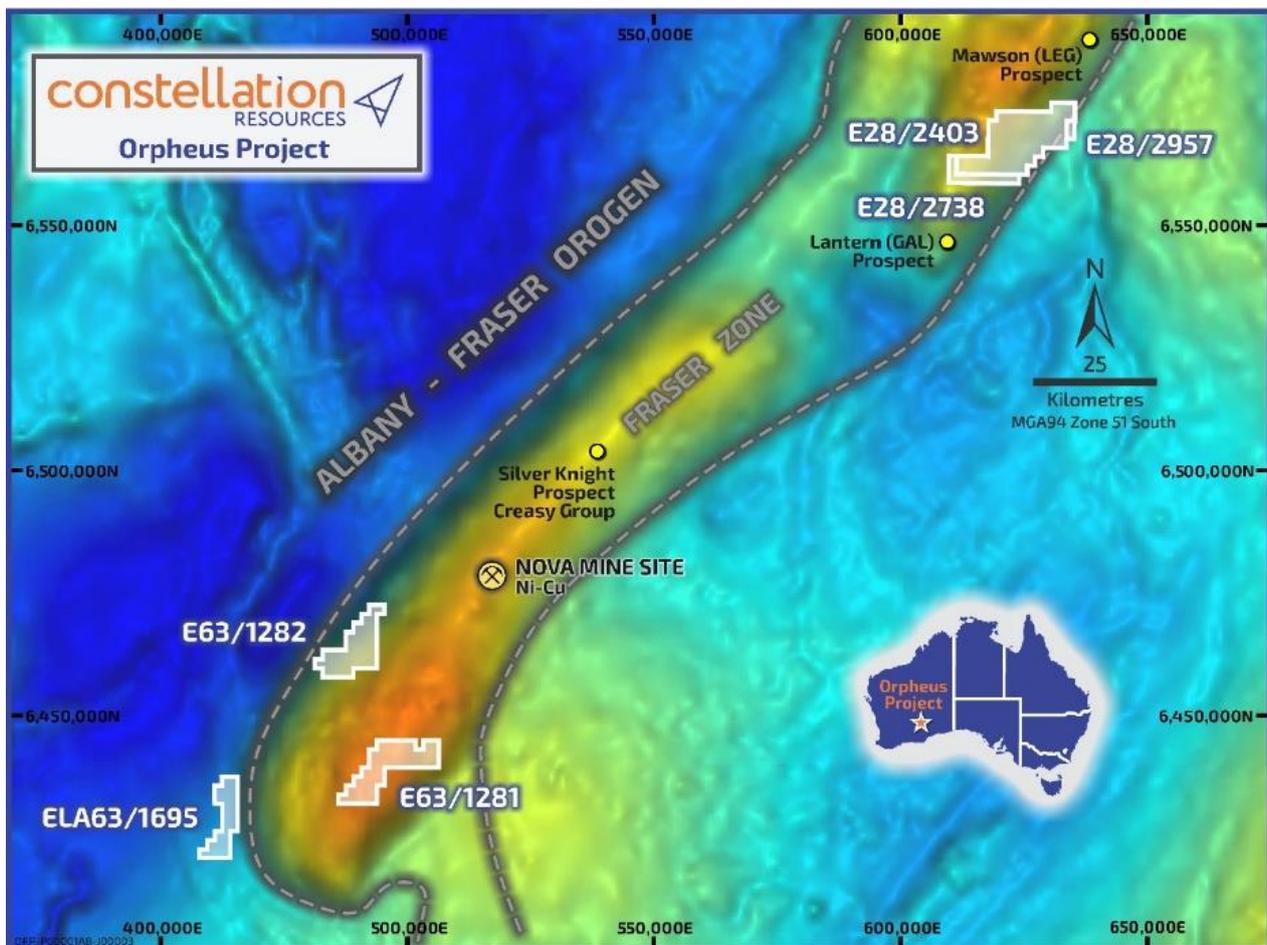
<sup>1</sup> GSWA Record 2016/8 “The Evolution of Mafic and Ultramafic Rocks of the Mesoproterozoic Fraser Zone, Albany–Fraser orogen, and Implications for Ni–Cu Sulfide Potential of the Region” By WD Maier, RH Smithies, CV Spaggiari, SJ Barnes, CL Kirkland, O Kiddie, and MP Roberts.

**ABOUT THE FRASER RANGE TENEMENTS**

The Company manages the Orpheus Project (Figure 2), comprising six tenements covering approximately 558km<sup>2</sup> in the Fraser Range province of Western Australia. In the Fraser Range, certain Proterozoic mafic/ultramafic intrusion suites are prospective to host nickel-copper sulphide mineralisation. The region is currently experiencing high levels of exploration activity for nickel following the Nova, Silver Knight, Mawson and Lantern discoveries.

The Orpheus Project includes a 70% interest in three mineral exploration licences (E28/2403, E63/1281 and E63/1282) and one mineral exploration licence application (ELA63/1695). The granted exploration licences form part of a joint venture between the Company (70%) and Enterprise Metals Limited (“Enterprise”) (30%, ASX: ENT). Pursuant to the joint venture agreement, the Company is responsible for sole funding all joint venture activities on the tenements, which form part of the joint venture, up to completion of a bankable feasibility study.

Additionally, the Company has further 100% interests in two exploration licences (E28/2738 and E28/2957).



**Figure 2: Tenement Plan - Orpheus Project.**

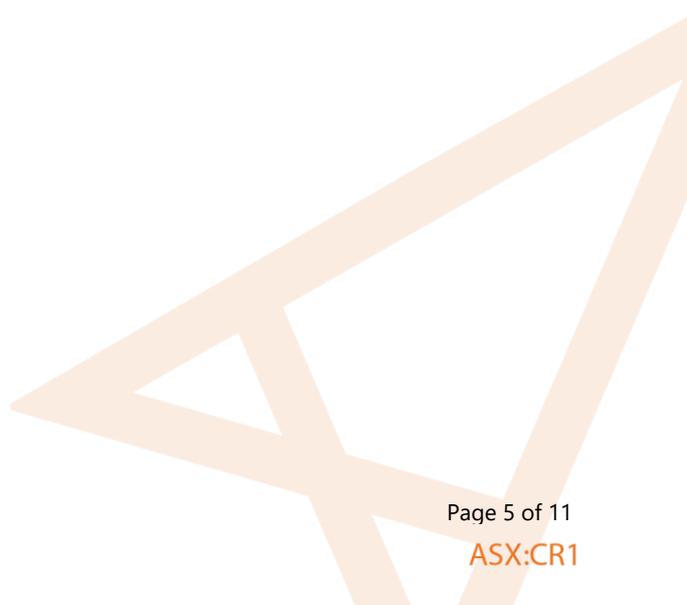
## **COMPETENT PERSONS STATEMENT**

The information in this report that relates to Exploration Results is compiled by Peter Muccilli, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Muccilli is a Technical Director of Constellation Resources Limited and a holder of options in Constellation Resources Limited. Mr Muccilli has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity being undertaken, 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 Muccilli consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## **FORWARD LOOKING STATEMENTS**

Statements regarding plans with respect to Constellation's project are forward-looking statements. There can be no assurance that the Company's plans for development of its projects will proceed as currently expected. These forward-looking statements are based on the Company's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of the Company, which could cause actual results to differ materially from such statements. The Company makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of that announcement.

*This ASX Announcement has been approved in accordance with the Company's published continuous disclosure policy and authorised for release by the Company's Managing Director, Peter Woodman.*



## Appendix 1: Drill Hole Data

**Table 1: Aircore Drilling Collar Details**

Hole ID	MGA51East	MGA51North	MGARL	Dip	EOH Depth
KAC0122	626704	6570101	190	-90	84
KAC0123	626702	6570199	190	-90	87
KAC0124	626700	6570298	190	-90	112
KAC0125	626797	6570303	190	-90	81
KAC0126	626794	6570098	190	-90	93
KAC0127	626904	6570097	190	-90	87
KAC0128	626904	6570204	190	-90	88
KAC0129	626900	6570305	190	-90	86
KAC0130	626799	6570275	190	-90	85
KAC0131	627001	6570006	190	-90	104
KAC0132	627002	6569799	190	-90	113
KAC0133	627001	6569605	190	-90	114
KAC0134	627196	6569500	190	-90	114
KAC0135	626701	6570400	190	-90	107
KAC0136	625929	6569737	190	-90	102
KAC0137	626049	6569650	190	-90	95

**Table 2: Summary of Aircore Drill Results (>0.1%Ni)**

HoleID	Dfrom	Dto	Interval	Ni %	Cu %	Co %	Pt Ppb	Pd Ppb	Interpreted BOH Geology
KAC0124	87	105	18	0.21%	0.02%	0.05%	9	5	Peridotite
including	97	99	2	0.47%	0.03%	0.08%	6.5	4	

Refer to Company's ASX Announcement dated 14 July 2020 for its maiden reconnaissance program drilling results.

## Appendix 2: JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>Nature and quality of sampling (eg 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></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>Aircore (AC) drilling was undertaken to generate representative metre samples from the surface to the bottom of hole.</p> <p>The non-transported portion for each hole was spear sampled to create a 1 metre representative sample.</p> <p>All samples weighed between 2-3kg. Samples had generally minimal dampness with isolated wet samples encountered.</p> <p>Samples were sent to an independent commercial assay laboratory.</p> <p>All assay submitted for sample preparation comprised oven drying, jaw crushing, pulverising and splitting to produce a representative assay charge pulp. Samples to be analysed using four Acid digest and read by ICP-OES/ ICP-MS, reporting 48 elements including Ag, Al, As, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn and Zr.</p>
<b>Drilling techniques</b>	<p><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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></p>	<p>Aircore drilling was undertaken by Raglan Drilling using a 90mm drill bit.</p>
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><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></p>	<p>Poor sample recoveries were visually estimated and recorded on sample log sheets.</p> <p>The sample cyclone is routinely cleaned at the end of each rod run (3m) or when deemed necessary.</p> <p>There is insufficient data to determine if there is a sample bias between sample recoveries and assay grades.</p>
<b>Logging</b>	<p><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></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>Geological logging of air core drill spoils was done on a visual basis for lithology, grainsize, mineralogy, colour and weathering.</p> <p>Logging was further aided with the collection of 1m chip trays.</p> <p>All drill holes were logged in their entirety.</p> <p>Petrological analysis and descriptions were undertaken by independent petrological consultant Minerex Services Pty Ltd.</p>

Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><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></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>All aircore drill samples were collected using a spear or scoop (2-3kg). Both damp and dry samples were collected.</p> <p>QAQC reference samples and duplicates were routinely submitted with each sample batch.</p> <p>The size of the sample is considered appropriate for the mineralisation style sought and for the analytical technique used.</p>
<b>Quality of assay data and laboratory tests</b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><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></p> <p><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></p>	<p>Aircore samples will be analysed for a multi-element suite by ICP-MS following a four-acid digest.</p> <p>These assay methods are considered appropriate.</p> <p>QAQC standards and duplicate samples were included routinely (approximately 1 for every 40 samples). In addition, internal laboratory batch standards and blanks were also undertaken adding to reliance is placed on laboratory procedures adding to the assurance of the reported results.</p> <p>All samples submitted to NATA accredited provider - Minanalytical Laboratory Services Australia Pty Ltd, located in Perth using methods; MA4020; 48 Elements ICP-OES / ICP-MS Package (multi-elements).</p>
<b>Verification of sampling and assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>Field data is collected on site using a standard set of logging. Data is then upload into the access database.</p> <p>Assays are as reported from the laboratory and stored in the Company database and have not been adjusted in any way.</p> <p>Significant intersections were verified by senior exploration personnel.</p>
<b>Location of data points</b>	<p><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>The drillhole collar was surveyed with a handheld GPS unit with an accuracy of <math>\pm 5\text{m}</math> which is considered sufficiently accurate for the purpose of the reconnaissance drill hole program.</p> <p>All co-ordinates are expressed in GDA94 datum, Zone 51.</p> <p>Regional topographic control has an accuracy of <math>\pm 2\text{m}</math> based on detailed DTM data collected in 2019 aerial surveys.</p>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><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></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>Aircore drilling spacing was at a nominal 500m x 400m with latest infill holes to 100m spacings on selected traverses.</p> <p>Drillholes were sampled in the residual portion of the hole with the occasional need to sample into the transported cover if the regolith profile was not well developed.</p>

Criteria	JORC Code explanation	Commentary
<b>Orientation of data in relation to geological structure</b>	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>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.</p>	The relationship between drill orientation and mineralisation is unknown.
<b>Sample security</b>	The measures taken to ensure sample security.	<p>Each sample was put into a prenumbered draw string calico bag, tied off and then several placed in a polyweave bag which was zip tied closed.</p> <p>The polyweave bags were delivered directly to the assay laboratory in Kalgoorlie by company personnel.</p>
<b>Audits or reviews</b>	The results of any audits or reviews of sampling techniques and data.	The Company carries out internal audits/reviews of procedures, however no external reviews have been undertaken.

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<p>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.</p> <p>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.</p>	<p>The exploration results in this report relate to Exploration Licenses E28/2403 (under renewal application). Tenure in the form of Exploration Licenses with standard expiry conditions and options for renewal.</p> <p>E28/2403 forms part of a joint venture between Constellation Resources Limited (70%) and Enterprise Metals Limited (30%, ASX: ENT).</p> <p>Under the terms of the JV agreement, Constellation Resources is required to sole fund all activities on these tenements until completion of a Bankable Feasibility Study.</p> <p>There are no Native Title Claims north of the Transline for tenements E28/2403 and ELA28/2957. South of the Transline, tenements E28/2403 and E28/ 2738 are covered by the Ngadju Native Title Claim.</p> <p>Tenement E28/2403 and ELA28/2957 are on vacant ground north of the Transline. South of the Transline, a portion of tenement E28/2403 and all of tenement E28/2738 are within the Boonderoo Pastoral Station</p> <p>The tenements are in good standing and there are no known impediments.</p>
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	<p>Limited regional exploration on E28/2403, E28/2738 was undertaken by previous companies and included, geophysical, geochemical surveys and limited drilling.</p> <p>Historical geophysical surveys included an airborne magnetic and isolated ground electromagnetic traverses. Geochemical surveys included soil and auger sampling.</p> <p>WAMEX Open file search of historic drilling indicate two RC holes were completed in the area. Both holes are located</p>

Criteria	JORC Code explanation	Commentary
		outside current target areas.
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	The targeted deposit types and styles of mineralisation are nickel- copper-cobalt (Ni-Cu-Co) magmatic sulphide systems such as the Nova-Bollinger deposit and Tropicana style gold mineralisation.
<b>Drill hole Information</b>	<p><i>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:</i></p> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> <p><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></p>	Refer to table of drillhole collars in Appendix 1.
<b>Data aggregation methods</b>	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	The weighted averages of individual drill holes are presented.
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>	Drillhole intercepts/intervals are measured downhole in metres.
<b>Diagrams</b>	<i>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.</i>	Project and drillhole location maps have been included in the body of the report.
<b>Balanced reporting</b>	<i>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.</i>	All available relevant information is presented.

Criteria	JORC Code explanation	Commentary
<b>Other substantive exploration data</b>	<i>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.</i>	Detailed 50m line spaced aeromagnetic data and semi regional gravity geophysical datasets has been used for interpretation of 10 initial intrusion targets in the underlying geology. Technical details on these geophysical datasets and targets are disclosed in the Company's ASX release on the 20/01/2020.
<b>Further work</b>	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<p>High-priority follow up AC drilling as mentioned in the announcement.</p> <p>Process results of high-powered moving loop electromagnetic survey over geophysical Targets 6-10.</p> <p>Further reconnaissance aircore drilling over Targets 6-10 which are located south of the Transline as part of the EIS grant.</p> <p>Further aircore program aims to identify concealed mafic-ultramafic complexes and potential pathfinder geochemical anomalism in regolith.</p>