



20 February 2020

INCA'S EAST TENNANT IOCG EXPLORATION MODEL

IN THIS ANNOUNCEMENT

- A description of Inca's exploration model in the East Tennant region of the Northern Territory
- Information on conceptual prospect scale targeting at the Frewena Fable and Frewena Far East Iron
 Ore Copper Gold (IOCG) Projects
- Competent Person Statement, Key Words and ASX JORC 2012 Compliance Statements Appendix 1

HIGHLIGHTS

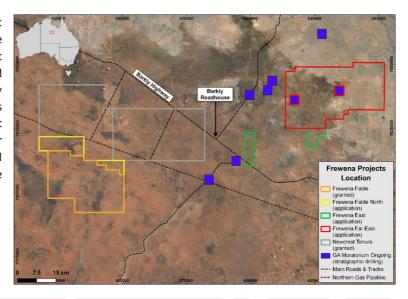
- Review of publicly available data over the East Tennant region results in development of a robust exploration model that leads to identification and securing of the Frewena Fable and Frewena Far East Projects
- Both projects host multiple, walk up targets considered prospective for Tier 1 scale IOCG mineralisation
- Innovative use of regional data positions Inca as a "first mover" in the emerging East Tennant province

Inca Minerals Limited (Inca or the Company) is pleased to provide further information on its exploration model that led to the identification and securing of the Frewena Fable and Frewena Far East Projects in the Northern Territory.

Frewena Fable and Frewena Far East form part of Inca's 1,551km² tenure holding in the emerging East Tennant region, in addition to the Frewena East Project as announced 13 February 2020. The projects consist of a granted exploration licence at Frewena Fable (EL 31974), and an additional three exploration licence applications: Frewena Fable Extension (EL 32287), Frewena East (EL 32289) and Frewena Far East (EL 32293), as shown in Figure 1.

"What is an Exploration Model and what does it do for Inca?", asks Inca's Managing Director, Mr Ross Brown. "An Exploration Model is like a business plan for a project area. The plan outlines what we believe might be found at Frewena and it outlines how we might best find it. The Exploration Model outlines that a large Iron Ore Copper and Gold deposit may be discovered at Frewena."

Figure 1 **RIGHT**: Inca's projects in the East Tennant region include the Frewena Fable (orange and yellow outlines), Frewena East (green outline) and Frewena Far East (red outline). Frewena Fable lies immediately adjacent to two granted Newcrest tenements (grey outline) with 42km of shared tenement boundary. Several areas remain under moratorium where stratigraphic drilling will be undertaken by GA/NTGS during 2020 (blue fill).

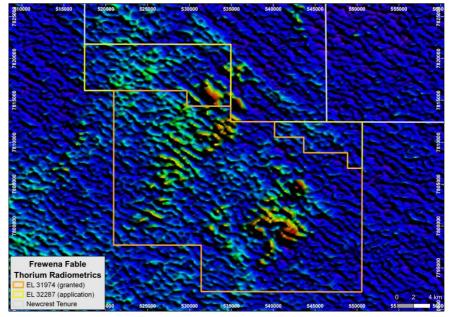




Frewena Fable was created as a project in 2018 by private company MRG Resources and Dr Jonathan West, as announced 13 August 2019, due to a personally communicated historic report of disseminated sulphides in granite in a region that is blanket mapped as sedimentary shale and limestone.

Initial investigations of radiometric data – principally thorium (Th) and uranium (U) – helped to validate the historic report and indicate that not only does the area have the potential to host granite, but that the radiometric signature suggests a cluster of intrusions could occur, as shown in Figure 2. Using this premise and review of additional regional datasets including magnetics, gravity, airborne electromagnetics, and the digital terrain model, a robust IOCG exploration model was developed to identify prospective areas within the East Tennant region.

Figure 2 **RIGHT:** Thorium radiometrics over the Frewena Fable area suggests a cluster of granitic intrusions could potentially occur within the Project area.



Prospect scale targeting at the Frewena Fable Project

Conceptual targeting at Frewena Fable has identified two main prospects being the **Tamborine Prospect** in the south east portion of EL 31974, and the **Alpaca Hill Prospect** in the northern part of EL 31974 that extends into EL 32287. These very large prospects measure approximately 7.5km in diameter with a number of smaller satellite anomalies, as yet unnamed, surrounding them. Prospect locations are illustrated in Figure 3 with Th anomalies over a background of regional magnetics.

To further refine targets and their prioritisation, interpretation of ASTER satellite data by an independent consultant was commissioned. While ASTER interpretation involves a degree of subjectivity, it is a useful, cost effective exploration technique to rapidly review large areas. The results generated from ASTER are presented in Figure 4 over elevation and show encouraging mineralogical zonation at both the Tamborine and Alpaca Hill Prospects.

Interpreted mineral species include sulfides (pyrite, bornite), quartz, kaolinite, magnesium chlorite, illite and potassium feldspar, as well as numerous conductive zones. While ASTER's ability to discriminate sulfides is contentious and needs to be treated with caution, taken as a whole the results are considered to support both the occurrence of granitic rocks and the presence of possible hydrothermal alteration. The strong coincidence of interpreted zoned alteration around circular features that correspond to similar sized and shaped anomalies in radiometric and topographical data provides encouragement for the IOCG exploration model.



Figure 3 RIGHT: Thorium anomalies (red dash) plotted regional over magnetics. The two currently named targets are the **Tamborine** Prospect and the Alpaca Hill Prospect.

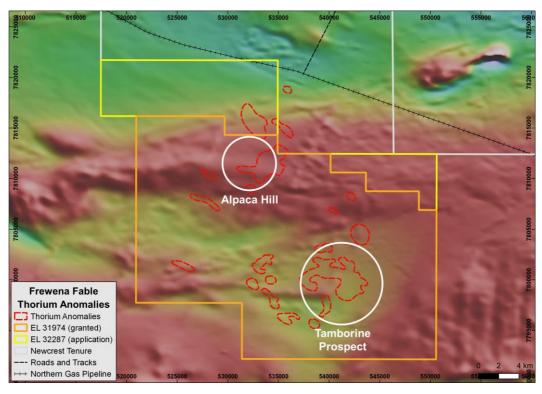
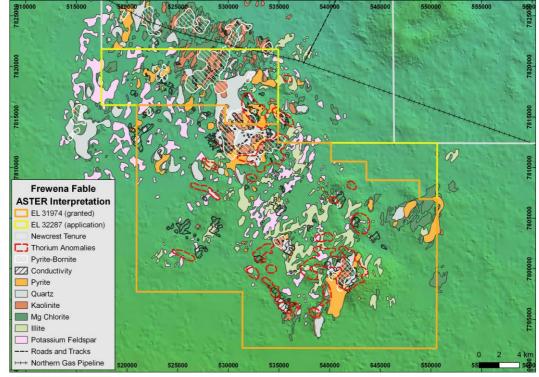


Figure 4 RIGHT: **ASTER** interpretation over elevation. Widespread occurrence hydrothermal related minerals is interpreted displaying apparent zonation and strong correlation to radiometric and elevation anomalies.





Prospect scale targeting at the Frewena Far East Project

The Frewena Far East Project, located 100km north east of Frewena Fable, was identified by extrapolating the exploration model, with EL 32293 secured through the competitive process as announced 13 February 2020. Limited exploration has been undertaken in the area apart from several 1960's drill holes targeting phosphate.

To date, conceptual targeting has largely focussed on the Western and Eastern Prospects, as shown in Figure 5, where a number coincident or near coincident features occur. Other potentially prospective areas within EL 32293 have also been noted, however, with the area displaying a high degree of structural complexity and potential intrusive bodies. These include an 18km long intense magnetic high trending north east, south west through the centre of the Project as well as additional circular, large magnetic highs in the eastern portion of the tenement.

Notably, two areas within EL 32293 are excised from the licence and remain under moratorium while GA and the NTGS undertake stratigraphic drilling. Results from this work are expected to be made public during the first half of 2020. Additionally, the Company is also awaiting the public release of data from a GA funded deep seismic survey line (19GA-B1) that passes through the eastern portion of the tenure as shown in Figure 5.

Similar to Frewena Fable, ASTER interpretation at Frewena Far East has been useful to rapidly advance prospect scale vectoring and prioritisation. ASTER results displayed in Figure 6 show a diverse assemblage of interpreted mineral species that tend to correlate well with radiometric and topographical anomalies. Interpreted mineral species include those that often form in hydrothermal systems and some that are documented to occur IOCG deposits. The range of minerals potentially present is also considered positive given that large mineral systems tend to host complex mineral assemblages.

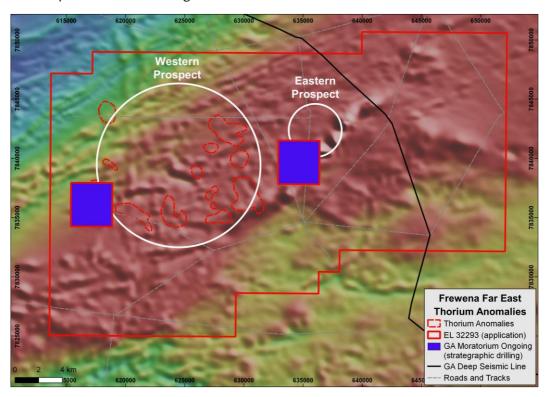


Figure 5 **ABOVE**: Thorium anomalies (red dash) plotted over regional magnetics. The two named targets are the Western and Eastern Prospects. Magnetics at Frewena Far East suggest a high degree of structural complexity. Inca is awaiting public release of data from GA/NTGS stratigraphic drilling and deep seismic surveying.



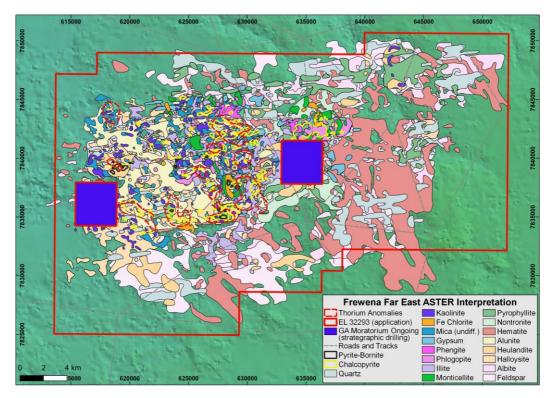


Figure 6 **ABOVE**: ASTER interpretation over elevation. A diverse range occurrence of hydrothermal related minerals is interpreted displaying strong correlation to radiometric and elevation anomalies.

Next Steps

While results of ASTER interpretation should be treated with a degree of caution due to their subjectivity, the correlation seen between different datasets is encouraging. Conceptual targeting, to date, has identified prospective areas that potentially host granitic intrusions, possible mineralisation centres and zoned alteration with complex mineralogical assemblages. These interpretations, taken together with the emerging profile of the East Tennant region to host Tier 1 scale IOCG mineralisation, strongly suggest exploration is warranted at the Frewena Projects.

Now that the Northern Territory Department of Primary Industry and Resources has provided notice to successful exploration licence applicants, the new applications – including Frewena Fable Extension and Frewena Far East – will progress through the regular application process with formal granting expected during H2 2020.

Interpretation of results from a successful reconnaissance field program to Frewena Fable and Frewena Far East in December 2019 are nearing completion and the Company looks forward to announcing these in the near future.

Government approval is currently being sought to construct access tracks to priority areas within the granted Frewena Fable tenure to facilitate soil sampling and geological mapping during the coming field season. Additionally, opportunities to undertake airborne magnetic-radiometric surveying are being investigated for both Frewena Fable and Frewena Far East.

The Company plans to fast track exploration throughout 2020, with the ultimate intention of attracting potential partners to these assets, as quickly as possible.



Competent Person Statement

The information in this report that relates to exploration results and mineralisation for the Frewena Fable and Frewena Far East Project areas, located in Australia, is based on information reviewed and compiled by Mr Rob Heaslop BSc (Hons), MAusIMM, Regional Exploration Manager, Inca Minerals Limited, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Heaslop has sufficient experience, which is relevant to exploration results, the style of mineralisation and types of deposits under consideration, and to the activity which has been 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". Mr Heaslop is a consultant to Inca Minerals, and consents to the report being issued in the form and context in which it appears.

Selected Key Words Used in this Announcement (order of appearance and cross reference)

<u>Tier-1 (Deposit)</u> A broadly used, loosely defined term to describe a large tonnage <u>deposit</u> (or mine) typically

operated by major mining houses with a long life-of-mine. Inca defines a <u>Tier-1</u> <u>deposit</u> as

one greater than 200million tonnes in size.

<u>IOCG (Deposit)</u> A type of <u>deposit</u> containing ore-forming minerals occurring as disseminations and veinlets

in a large volume of rock. The rock is typically iron rich (a distinction from porphyry

deposits). IOCG deposits are economically very significant.

<u>Deposit</u> A [mineral] <u>deposit</u> is a naturally occurring accumulation or concentration of metals or

minerals of sufficient size and concentration that might, under favourable circumstances, have economic value (Geoscience Australia). It is not a defined term in the JORC Code 2012 for Australasian Reporting of Exploration Results, Mineral Resources and Ore Reserves

(JORC 2012).

<u>Geophysics</u> An exploration method using instruments to collect and analyse properties as magnetics,

radioactivity, gravity, electronic conductivity, etc. Instruments can be located on surface

(ground survey) or above the ground (airborne survey).

<u>Magnetics</u> A measurement of the intensity of the earth's magnetic field caused by the contrasting

content of rock-forming magnetic minerals in the Earth's crust. This allows sub-surface mapping of geology, including structures. An airborne survey is flown either by plane or

helicopter with the magnetometer kept at a constant height above the surface.

<u>Blind Deposit</u> A <u>deposit</u> that does not occur at the surface. It has no or virtually no geochemical signature

and may only be indicated by geophysics that indicates potential mineralisation at depth. BHP's Oak Dam discovery and Rio Tinto's discovery near Telfer are examples of blind

deposits.

Radiometrics A measurement of the intensity of radio-elements potassium (K), uranium (U) and thorium

(Th), specifically the gamma rays emitted by isotopes of these elements. All rocks and soils contain radioactive isotopes and almost all gamma-rays detected at surface are the result of radioactive decay of K, U and Th. Radiometrics is therefore capable of directly detecting potassic alteration which is associated with hydrothermal processing and formation of

deposits.

<u>Gravity</u> A measurement of a rock's, zone of mineralisation's, etc... gravity (or density).

<u>Conductivity</u> A measurement of a rock's, zone of mineralisation's, etc... ability to conduct electricity.

Metal <u>deposits</u> can be highly conductive.





Appendix 1

The following information is provided to comply with the JORC Code (2012) exploration reporting requirements.

SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria: Sampling techniques

JORC CODE Explanation

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 hand-held XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.

Company Commentary

This announcement refers to desk-top literature research conducted by MRG Resources Pty Ltd in relation to new projects acquired by the Company. The research results are of geophysical data including magnetics, radiometrics, conductivity, gravity and ASTER. No sampling or assay results are referred to in this announcement.

JORC CODE Explanation

Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.

Company Commentary

N/A – No sampling or assay results are referred to in this announcement.

JORC CODE Explanation

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 1m 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 a coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.

Company Commentary

N/A – No sampling or assay results are referred to in this announcement.

Criteria: Drilling techniques

JORC CODE Explanation

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.).

Company Commentary

N/A - No drilling results are referred to in this announcement.

Criteria: Drill sample recovery

JORC CODE Explanation

Method of recording and assessing core and chip sample recoveries and results assessed.

Company Commentary

N/A - No drilling results are referred to in this announcement.

JORC CODE Explanation

Measures taken to maximise sample recovery and ensure representative nature of the samples.

Company Commentary

N/A - No drilling results are referred to in this announcement.





JORC CODE Explanation

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.

Company Commentary

N/A - No drilling results are referred to in this announcement.

Criteria: Logging

JORC CODE Explanation

Whether core and chip samples have been geologically and geo-technically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.

Company Commentary

N/A - No drilling results are referred to in this announcement.

JORC CODE Explanation

Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography

Company Commentary

N/A - No drilling results are referred to in this announcement.

JORC CODE Explanation

The total length and percentage of the relevant intersections logged.

Company Commentary

N/A - No drilling results are referred to in this announcement.

Criteria: Sub-sampling techniques and sample preparation

JORC CODE Explanation

If core, whether cut or sawn and whether quarter, half or all core taken.

Company Commentary

N/A - No drilling results are referred to in this announcement.

JORC CODE Explanation

If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.

Company Commentary

N/A - No drilling results are referred to in this announcement.

JORC CODE Explanation

For all sample types, the nature, quality and appropriateness of the sample preparation technique.

Company Commentary

N/A - No drilling results are referred to in this announcement.

JORC CODE Explanation

Quality control procedures adopted for all sub-sampling stages to maximise "representivity" of samples.

Company Commentary

N/A - No drilling results are referred to in this announcement.

JORC CODE Explanation

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.





Company Commentary

N/A - No drilling results are referred to in this announcement.

JORC CODE Explanation

Whether sample sizes are appropriate to the grain size of the material being sampled.

Company Commentary

N/A - No drilling results are referred to in this announcement.

Criteria: Quality of assay data and laboratory tests

JORC CODE Explanation

The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.

Company Commentary

N/A - No assay results are referred to in this announcement.

JORC CODE Explanation

For geophysical tools, spectrometers, hand-held XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.

Company Commentary

N/A - No assay results are referred to in this announcement.

JORC CODE Explanation

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.

Company Commentary

N/A - No assay results are referred to in this announcement.

Criteria: Verification of sampling and assaying

JORC CODE Explanation

The verification of significant intersections by either independent or alternative company personnel.

Company Commentary

N/A - No drilling results are referred to in this announcement.

JORC CODE Explanation

The use of twinned holes.

Company Commentary

N/A - No drilling results are referred to in this announcement.

JORC CODE Explanation

 $Documentation\ of\ primary\ data,\ data\ entry\ procedures,\ date\ verification,\ data\ storage\ (physical\ and\ electronic)\ protocols.$

Company Commentary

N/A - No assay results are referred to in this announcement.

JORC CODE Explanation

Discuss any adjustment to assay data.

Company Commentary

N/A - No assay results are referred to in this announcement.





Criteria: Location of data points

JORC CODE Explanation

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.

Company Commentary

Location of geophysics data were obtained with reference to open file information in the relevant NT Mining Department databanks.

JORC CODE Explanation

Specification of the grid system used.

Company Commentary

GDA94, zone 53

JORC CODE Explanation

Quality and adequacy of topographic control.

Company Commentary

Location of geophysics data were obtained with reference to open file information in the relevant NT Mining Department databanks.

Criteria: Data spacing and distribution

JORC CODE Explanation

Data spacing for reporting of Exploration Results.

Company Commentary

N/A – No sampling or assay results are referred to in this announcement.

JORC CODE Explanation

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.

Company Commentary

N/A - No grade, grade continuity, Mineral Resource or Ore Reserve estimations are referred to in this announcement.

JORC CODE Explanation

Whether sample compositing has been applied.

Company Commentary

N/A - No sampling or assay results are referred to in this announcement.

Criteria: Orientation of data in relation to geological structure

JORC CODE Explanation

Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.

Company Commentary

N/A – No sampling or assay results are referred to in this announcement.

JORC CODE Explanation

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.

Company Commentary

N/A – No drilling results, sampling or assay results are referred to in this announcement.





Criteria: Sample security

JORC CODE Explanation

The measures taken to ensure sample security.

Company Commentary

N/A – No sampling or assay results are referred to in this announcement.

Criteria: Audits and reviews

JORC CODE Explanation

The results of any audits or reviews of sampling techniques and data.

Company Commentary

No audits were required in relation to information subject of this announcement.

SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria: Mineral tenement and land tenure status

JORC CODE Explanation

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.

Company Commentary

Tenement Type: For the Frewena Fable Project: Two Northern Territory Exploration Licences (EL): EL 31974 (granted) and EL 32287 (application). For the Frewena East Project: One Northern Territory EL: EL 32289. For the Frewena Far East Project: One Northern Territory EL: EL 32293.

Ownership: EL 31974 and EL 32287 (applications in the name of Inca, MRG, West) with MOU for Inca to acquire 90%. 1.5% NSR payable to MRG and West.

Ownership: EL 32289 (application in the name of Inca, MRG, West) with MOU for Inca to acquire 90%. 1.5% NSR payable to MRG and West.

Ownership: EL 32293 (application in the name of Inca, MRG, West) with MOU for Inca to acquire 90%. 1.5% NSR payable to MRG and West.

All other above-named tenements are currently applications, except for EL 31974 which is granted.

JORC CODE Explanation

The security of the land tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.

Company Commentary

The MOU's and all tenements and tenement applications are in good standing at the time of writing.

Criteria: Exploration done by other parties

JORC CODE Explanation

Acknowledgement and appraisal of exploration by other parties.

Company Commentary

This announcement refers to regional geophysical data collected by Geoscience Australia and the Northern Territory Geological Survey as recorded in Mines Department databanks which was reviewed by MRG Resources Pty Ltd. No reported exploration has been conducted over Frewena Fable however a 1960's report of copper mineralisation in granite was personally communicated. Limited exploration has occurred at Frewena Far East apart from a single 1960's drill hole that targeted phosphate.

Criteria: Geology

JORC CODE Explanation

Deposit type, geological setting and style of mineralisation.



Company Commentary

The geological setting falls within the Palaeozoic Georgina Basin that is regionally mapped as shales and limestones of varying thickness. Local geology, however, is inferred from radiometric and ASTER data to be dominated by outcropping or near surface granitic lithologies. These older granitic lithologies are considered prospective to host IOCG mineralisation.

Criteria: Drill hole information

JORC CODE Explanation

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.

Company Commentary

N/A - No drilling results are referred to in this announcement.

JORC CODE Explanation

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.

Company Commentary

N/A - No drilling results are referred to in this announcement.

Criteria: Data aggregation methods

JORC CODE Explanation

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. 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 shown in detail

Company Commentary

N/A - No drilling results are referred to in this announcement.

JORC CODE Explanation

The assumptions used for any reporting of metal equivalent values should be clearly stated.

Company Commentary

N/A - No drilling results are referred to in this announcement.

Criteria: Relationship between mineralisation widths and intercept lengths

JORC CODE Explanation

 $These\ relationships\ are\ particularly\ important\ in\ the\ reporting\ of\ Exploration\ Results.$

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.')

Company Commentary

N/A - No drilling results are referred to in this announcement.

Criteria: Diagrams

JORC CODE Explanation

Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not limited to a plan view of drill hole collar locations and appropriate sectional views





Company Commentary

Several diagrams are provided that shows location of the new projects and the location of the geophysics anomalies mentioned in text

Criteria: Balanced reporting

JORC CODE Explanation

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.

Company Commentary

The Company believes this ASX announcement provides a balanced report of the exploration results referred to in this announcement.

Criteria: Other substantive exploration data

JORC CODE Explanation

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.

Company Commentary

This announcement makes references previous ASX announcements dated 13 August 2019 and 13 February 2020.

Criteria: Further work

JORC CODE Explanation

The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).

Company Commentary

This announcement presents two new projects recently acquired by the Company. Exploration work conducted by the Company is necessary to progress the understanding of the economic potential of both projects.

JORC CODE Explanation

Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.

Company Commentary

Refer above.
