ASX ANNOUNCEMENT **29 June 2022**

FIRST DIAMOND HOLE AT THE BANKS TARGET INTERSECTS IOCG-STYLE ALTERATION

Greenvale's 2022 field program off to a strong start with encouraging alteration observed in the first hole in the central tenement grouping at the Georgina Basin IOCG Project

Highlights:

- **First hole complete at the prospective Banks target to a depth of 550m.**
- **Hole drilled through Georgina Basin limestone to a depth of 239.5m.**
- **Encouraging IOCG-style alteration of basement rocks from 290.6m downhole.**
- **Trace chalcopyrite (copper mineral) observed at approximately 303m and 497m down-hole.**
- **Drilling has now commenced at Leichhardt West target.**

Greenvale Mining Limited (ASX: GRV, "Greenvale" or "the Company") is pleased to advise that it has completed the first hole of the Company's expanded field program at its 100%-owned **Georgina Basin IOCG Project** in the Northern Territory.

The hole forms part of a significantly expanded drill program announced at the start of the year covering multiple targets across the Company's central tenement, EL32295.

Geophysical inversion modelling of previously acquired magnetic and gravity geophysical data covering part of EL32295, together with interpretation of recently received assay results from initial drilling at the Twin Peak targets last year, led to a re-prioritisation of the Company's central tenements, particularly two targets within EL32295 – **Leichhardt** and **Banks**.

The successful completion of the first hole at Banks marks an important milestone for the Company's ongoing exploration efforts at Georgina.

The central tenement grouping was selected due to the presence of extensive coincident magnetic and gravity anomalism prospective for IOCG mineralisation, as well as its proximity to regional deep-seated faults (important for fluid flow).

Additionally, the Company's central tenement EL32295 is located approximately 9.5km along strike from Middle Island Ltd's (ASX: MDI) Crosswinds prospect, where copper oxide mineralisation has been observed at surface.

According to MDI's release dated 23 December 2020, significant surface copper oxide mineralisation was identified at the Crosswinds prospect within EL32297, the eastern neighbour to Greenvale's EL32295. MDI reported spot pXRF readings of between 24.8% and 76.2% Cu at Crosswinds, validated by composite chip sampling assays of 130m at 0.76% Cu (see Figure 1 for target locations relative to Crosswinds prospect).

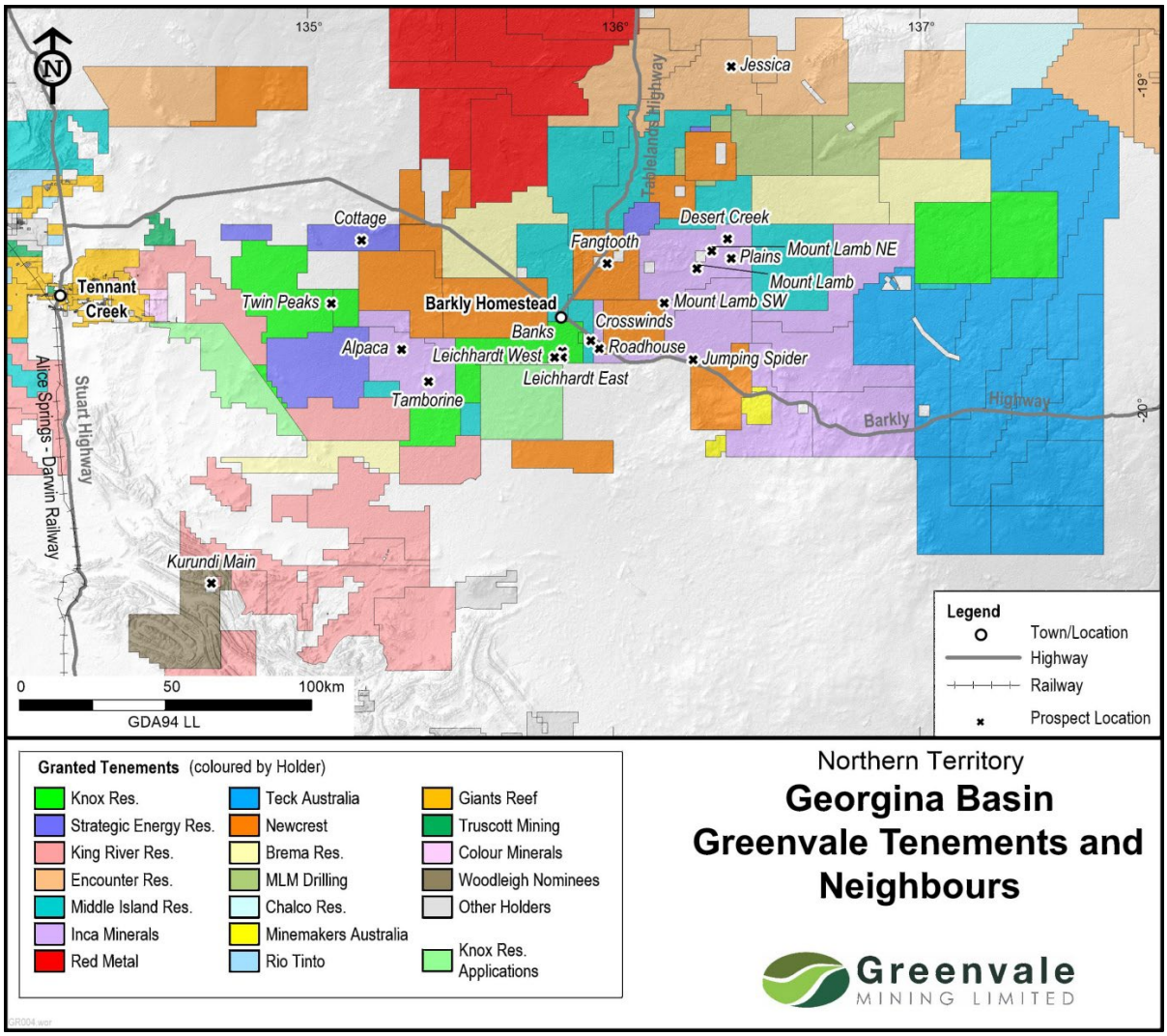

Figure 1: Georgina Basin –Greenvale's strategic exploration footprint and neighbouring tenements.

Early geological interpretations suggest that the Leichhardt and Banks targets have several favourable IOCG mineral system features, including the interpreted presence of Alroy formation (Warramunga Formation equivalents), proximal regional faults and granitic intrusive rocks, and prospective geophysical characteristics in the presence of coincident magnetic and gravity highs.

In addition, based on inverted geophysical data, the two targets are interpreted to be relatively shallower when compared to the previously drilled Twin Peaks targets.

These factors make Leichhardt and Banks not only highly prospective exploration targets but also more economic for the Company to investigate.

With the completion of the first Banks hole, drilling has now commenced at Leichhardt West, targeting a remnant magnetic high adjacent to an elevated gravity anomaly.

Interpretations of the magnetic characteristics suggest that Leichhardt could be a hematite-dominant IOCG target.

Banks Prospect

The Company is encouraged by the initial interpretations and observations from hole KNXBA001RDD, with core being processed and cut ahead of laboratory assay.

The Banks prospect overlies a near-coincident moderately magnetic and dense body to the north of a major north-east trending fault. The target area lies proximal to potential sub-surface granite interpreted at depth to the south-east.

A cross-section of the lithology of KNXBA001RDD is shown below in Figure 2.

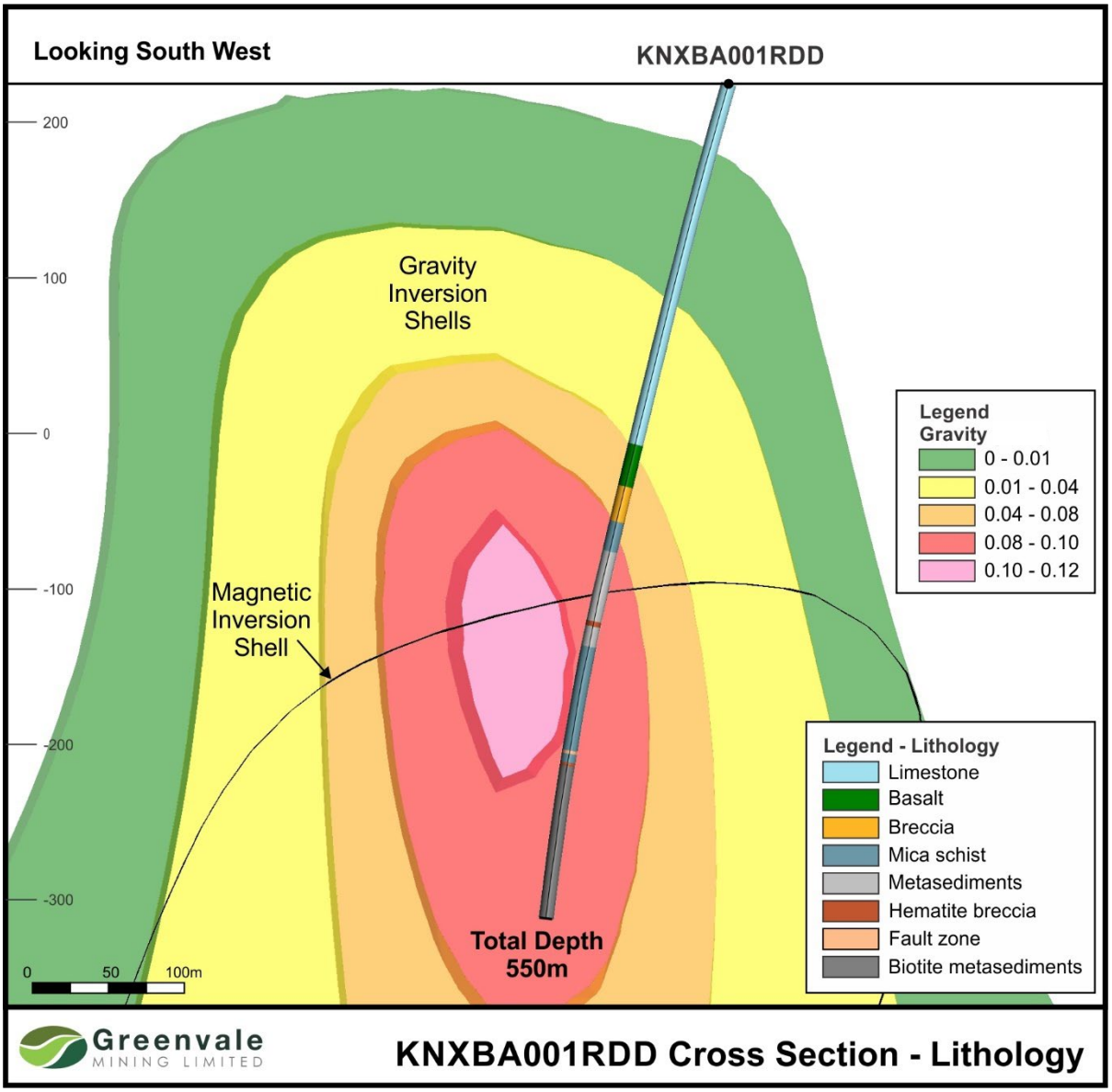

Figure 2: KNXBA001RDD lithology.

Table 1: Drill hole details

Hole ID	East (MGA)	North (MGA)	Elevation	Azimuth	Dip	Depth (m)
KNXBA001RDD	588116	7809650	225	127°	-75°	550

KNXBA001RDD was drilled to a total depth of 550m, with the hole intersecting Georgina basin limestone and Helen Springs' volcanics above a depth of 267.3m and Paleoproterozoic basement metasedimentary rocks through to the end-of-hole. Basement rocks intersected micaceous meta-sediments, foliated, folded and brecciated, with variably patchy to pervasive hematite alteration.

Other alteration recorded in preliminary logging includes sericite, K-spar and chlorite, all of which have been observed in association with IOCG systems.

Trace chalcopyrite (copper mineral) was observed in quartz, carbonate, hematite, chalcopyrite-pyrite veinlets at 303.4m down-hole, indicating the presence of copper as part of the system.

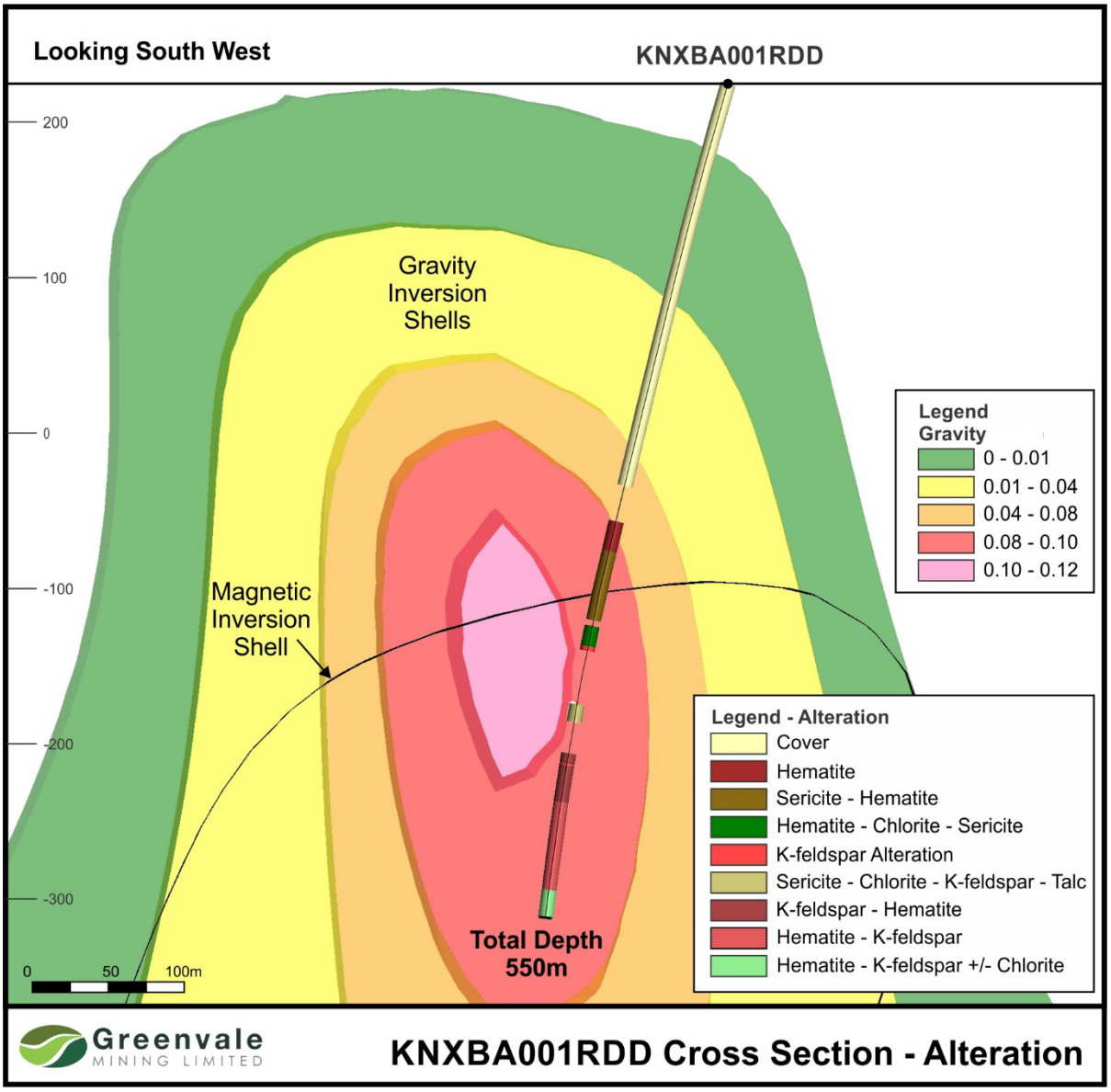

Figure 3: KNXBA001RDD alteration intersected.

Early interpretations of the alteration and mineralogy intersected in KNXBA001RDD indicate that a hydrothermal system may have been intersected.

Figure 4: Crackle breccia with matrix of Qtz, Feld, Carb & Hem – Hole Depth: 277.7m

Figure 5: Hematite alteration in quartz crackle breccia – Hole Depth: 293.1m

Figure 6: Ductile deformation in veined, hematite-altered metasediments – Hole Depth: 321.8m

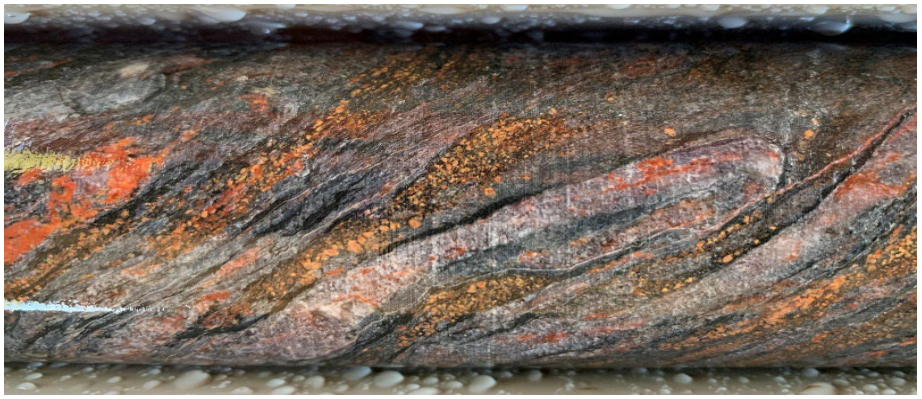

Figure 7: Ductile deformation (folding) in hematite altered biotite-rich metasediments – Hole Depth: 323.5m

Figure 8: Pyrite-chalcopyrite (copper mineral) mineralisation within a siderite-albite vein within biotite schist – Hole Depth 497m

Figure 9: Hematite alteration developed within fold axes (marked in red) between 530-540m – a structural configuration observed in Tennant Creek ironstone deposits

Initial interpretations of the alteration and lithology intersected in KNXBA001RDD are extremely positive and the Company is looking forward to the results from drilling at the Leichhardt target, where Greenvale will drill two holes testing both the western and eastern boundaries of the identified anomalous zone.

The deeper of the two holes at Leichhardt East will be co-funded by the Northern Territory Geological Survey under Round 15 of the Geophysics and Drilling Collaborations Program as a part of Resourcing the Territory Initiative.

The Georgina Basin Project is held by Knox Resources Pty Ltd ("Knox"), a wholly owned subsidiary of Greenvale. As announced to the ASX on 1 June 2022, Greenvale has entered into a conditional agreement to sell 80% of the issued capital of Knox to Astro Resources NL (ASX:ARO).

MANAGEMENT COMMENT:

Greenvale Mining CEO, Matthew Healy, commented:

"Completing our first hole of the 2022 exploration field season in the East Tennant region is an exciting milestone and we are very encouraged by what we have observed at the Banks prospect. All of the indications from this hole suggest we are in a prospective environment for IOCG deposit formation, and the presence of trace chalcopyrite in the hole indicates the potential for more substantial copper mineralisation to occur in the vicinity.

"Evidence of a large hydrothermal system, together with the other geophysical and geological indicators shows that our hunt for a large IOCG deposit in this new mineral frontier is very much on track. We are now looking forward to seeing what drilling at the Leichhardt target will reveal."

AUTHORISED FOR RELEASE:

This announcement has been approved by the Board for release.

Alan Boys
Company Secretary

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COMPETENT PERSON'S STATEMENT:

The information in this report that relates to Exploration Results is based on information compiled by Mr Matthew Healy, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM Member number 303597).

Mr Healy is a full-time employee of the company and is eligible to participate in a performance rights incentive plan of the Company.

Mr Healy has sufficient experience that is relevant to the style of mineralisation and type 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'.

Mr Healy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1 Report Template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• 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. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • 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 (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.	• NQ drill core to be cut in half lengthwise and sampled on nominal 1m intervals or as determined by geological boundaries • HQ core to be quarter-cut lengthwise and sampled on nominal 1m intervals or as determined by geological boundaries
Drilling techniques	• 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).	• Mud-rotary methods employed to bit refusal, and HQ and ND diamond core drilling methods thereafter. • Drill core that has intersected basement (Proterozoic) rocks has been oriented where possible
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • 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.	• Core blocks inserted between runs by drill crew record run length and recovered core • Core recovery logged by field staff/contractors at the point of core markup
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical	• Drill core logged by field geologists to capture interpreted lithology, weathering, alteration and veining, and structure orientations where appropriate

Criteria	JORC Code explanation	Commentary
	studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged.	• Core logging is largely qualitative, with some quantitative estimates of notable minerals • Core tray photography undertaken of wet and dry drill core • All drill core logged
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • 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. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• Half-core and quarter-core samples to be crushed and pulverized to 85% passing 75 micron particle size prior to assay • Half drill core for NQ and quarter core for HQ considered representative of sample intervals
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • 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. • 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.	• NATA-accredited ALS Laboratories conducting preparation and analysis of samples • Laboratory analysis to include Fire Assay and AAS finish for Au and 4-acid digest and ICP-MS for a 48-element suite • Both techniques considered total for elements of interest • Certified reference materials (CRMs) and blanks inserted in the sample stream to monitor accuracy and potential contamination as part of Company QAQC processes • ALS in-house QAQC includes the use of CRMs, splits and duplicates to monitor accuracy and precision
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• Sample intervals assigned a unique sample identification number prior to core cutting and analysis • Significant intersections to be checked against drill core photography and QAQC results by a company geologist
Location of data points	• 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.	• Drill collar location determined using a Garmin hand-held GPS with location reported in GDA94 MGA Zone 53 • Downhole surveys determined using a Reflex north-seeking Gyro at

Criteria	JORC Code explanation	Commentary
	• Specification of the grid system used. • Quality and adequacy of topographic control.	nominal 60m depth intervals
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • 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. • Whether sample compositing has been applied.	• Drill spacing is appropriate for early exploration purposes
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • 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.	• Insufficient information available due to early exploration status
Sample security	• The measures taken to ensure sample security.	• Samples delivered from the drill site to Freight agent by Company staff/contractors for delivery to external laboratory
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• Not applicable

Section 2 Reporting of Exploration Results

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

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. • 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.	• Modelling of geophysical responses undertaken on granted EL32295 • Exploration drilling undertaken on granted EL32295 • Tenements held in 100% Greenvale subsidiary Knox Resources Pty Ltd
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Not applicable
Geology	• Deposit type, geological setting and style of mineralisation.	• The principal target deposit style is iron-oxide-copper-gold (IOCG). IOCG deposits are typically characterized by associated magnetic

Criteria	JORC Code explanation	Commentary
		and gravity responses due the prevalence of dense and often magnetic iron oxide minerals as a substantial portion of the deposit footprint mineralogical constitution. IOCG deposits are known in the Tennant Creek region and recent Geoscience Australia prospectivity analysis indicates that basement rocks east of Tennant Creek, the location of the Company tenements, are prospective for IOCG 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: ○ 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. • 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.	• Drillhole KNXBA001RDD collared at 588116 E 7809650 N and 225m RL • Collar location reported in GDA94 MGA Zone 53
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. • 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. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Not applicable
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’).	• Insufficient information available due to early exploration status

Criteria	JORC Code explanation	Commentary
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.	• See in release
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.	• This release describes all relevant information
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.	• This release describes all relevant information
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.	• Downhole geophysical surveying is planned for holes drilled as part of the EL32295 drilling campaign • Further drilling will be conducted at adjacent prospects on EL32295. • Assay work, magnetic remanence testing and petrography will be conducted on selected drill core.