

Moogie Cu-Au and Ni-Cu-PGE Project Exploration Update

- **Helicopter-borne electromagnetic (EM) & magnetics survey completed.**
- **Several new, high priority targets identified and existing target areas advanced.**
- **Moogie is located at the boundary of the Pilbara and Yilgarn Cratons, regional positions known to host deep, crustal-scale structures, considered favourable sites for potential economic mineralisation.**
- **Survey focused on priority targets associated with deep, regionally-significant Cardilya Shear Zone, being explored for Cu-Au, Ni-Cu-PGE and orogenic Au mineralisation.**
- **Follow-up ground EM surveying and field mapping being scheduled.**

A helicopter-borne EM survey has been completed by Hannans Ltd (ASX:HNR) at its 100% owned Moogie Copper-Gold and Nickel-Copper-PGE Project ("Moogie"), located approximately 260km north-west of Meekatharra and 300km east of Carnarvon in the East Gascoyne Region of Western Australia (refer Figures 5 to 7 on pages 4 and 5 for state, regional and project location maps¹).

Moogie is located within the Gascoyne Province proximal to the margin with the Yilgarn and Pilbara Cratons. Such collision belts at the margin of cratons are known to host deep crustal-scale structures, favourable target sites for mineralisation. The project hosts a significant strike length of the Cardilya Shear Zone, identified as such a deep-seated structure. The Cardilya Shear Zone is a 2-5km wide, east-west trending shear zone which buckles and thickens at its intersection with the northeast-trending Deadman Fault Zone, a second major structure transecting the project. Hannans is exploring the Cardilya Shear Zone and related structures for Cu-Au, Ni-Cu-PGE and orogenic Au mineralisation (refer to Figure 1 on page 2).

During January 2022, Hannans completed a 413 line kilometre high resolution helicopter borne EM and magnetic survey using the NRG Xcite™ system. The line spacing over the priority Mission Bore, Breccia, Minni Ritchi and Ghallangee prospects was 200m and the line spacing for the regional survey was 400m (refer Figure 2 on page 2).

Minni Ritchi & Ghallangee prospects, located in the east of the project, lie within a zone of thickening of Cardilya Shear Zone proximal to its intersection with the Deadman Fault: a zone considered prospective for intrusive-hosted Ni-Cu-PGE mineralisation. Weak multi-element soil anomalism is present over prominent magnetic anomalies and could represent the presence of a mafic-ultramafic intrusive at depth, an interpretation supported by mapping of deformed ultramafic rocks at Ghallangee.

¹ A comprehensive introduction to the Project can be found [here](#). This was released to ASX on 3 June 2020.

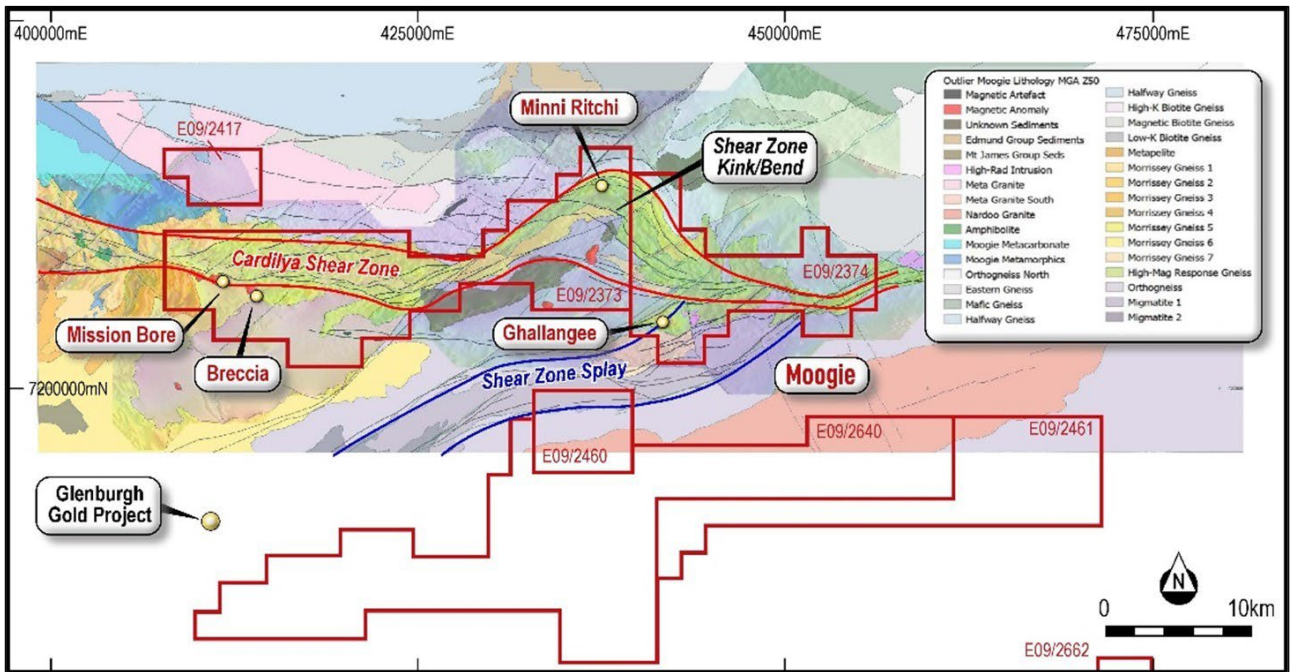


Figure 1: Structural interpretation for the Moogie Project (Modified after McCormack, B., 2020.). Mapping is planned for the southern applications in the coming field season.

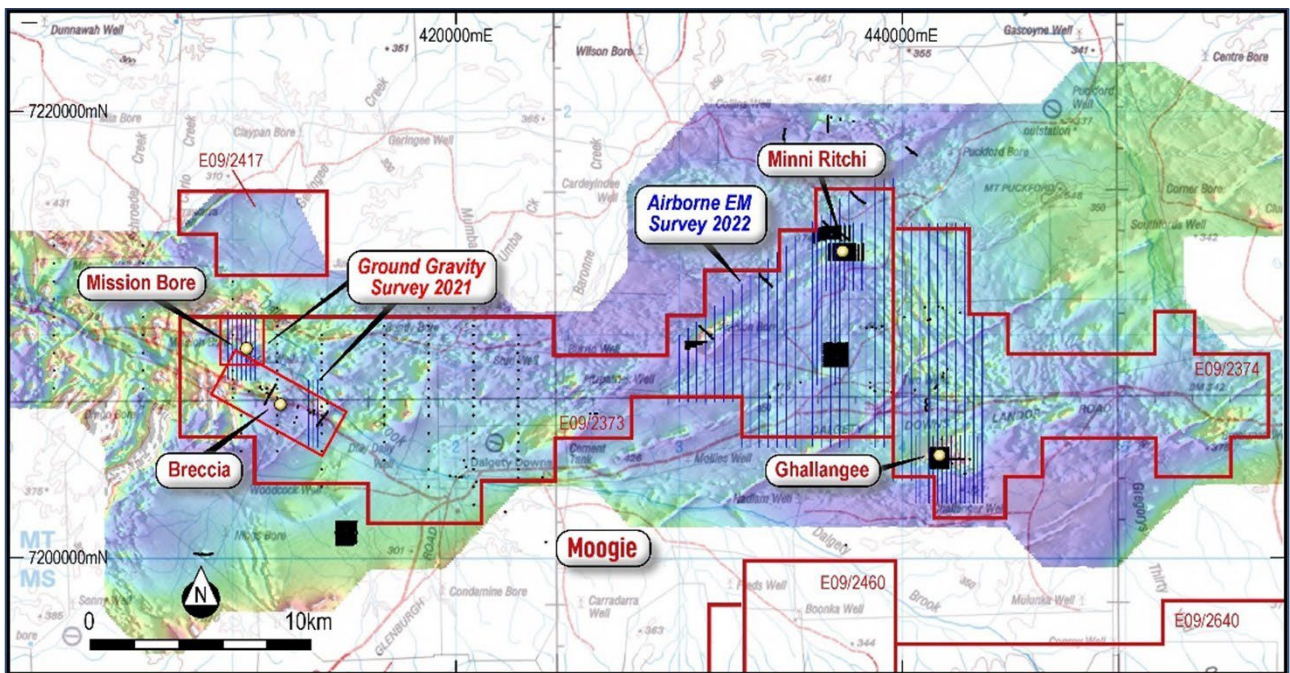


Figure 2: Helicopter-borne EM & magnetic survey flights lines covering Mission Bore, Breccia, Minni Ritchie and Ghallangee targets.

The recent airborne EM (AEM) survey showed an elevated EM response in the vicinity of the Minni Ritchie prospect (labelled B in Figure 3 on page 3) and coincident with magnetic and geochemical anomalism. Wide spaced lines of surface moving loop EM (MLEM) are recommended to test for deeper targets beyond the detection limit of the helicopter borne survey (approximately 200m from surface).

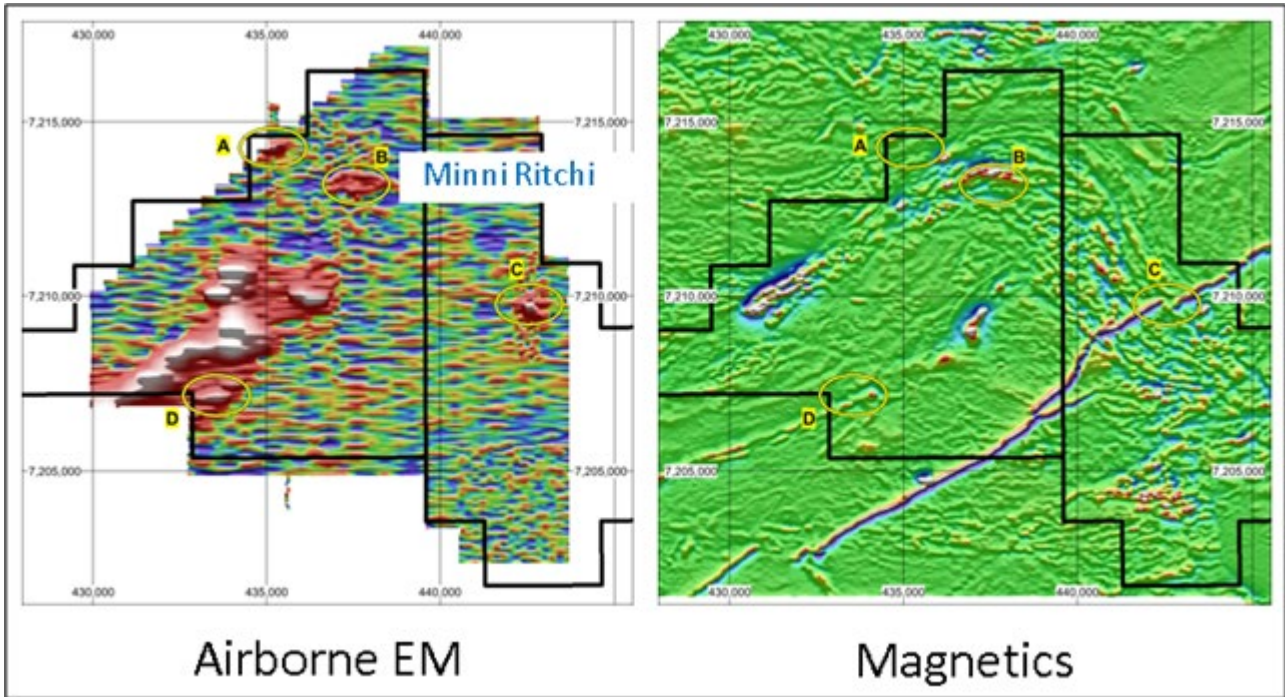


Figure 3: AEM survey area centred on Minni Ritchi prospect (noted as B).

A new target (labelled C) has been identified to the southeast of Minni Ritchi, where a well-defined AEM anomaly of moderate conductance (~100 Siemens) is spatially related to an offset in a NE-SW trending magnetic unit, parallel to the Deadman Fault. The modelled target size is approximately 200-300m and starting at only 50-100m below surface.

The Mission Bore and Breccia prospects are located in the west of the project area. At the Mission Bore prospect the recent AEM survey noted a magnetic anomaly coincident with a previously identified gravity anomaly but only weak EM anomalism, offset to the south. The AEM survey did not replicate the historic state-derived airborne EM anomaly and the prospect has been downgraded. At the Breccia prospect outcropping copper-oxide mineralisation is associated with an approximately 4km long zone of intensely altered and brecciated suite of gneissic rocks. The alteration suite of albite-silica-k-feldspar, copper-magnetite mineralisation and structural position all support a possible IOCG/ porphyry base metal deposit model. The AEM survey at Breccia noted a minor EM response approximately 500m south of copper outcrop. Follow-up mapping and reconnaissance soil sampling is recommended at both Mission Bore and Breccia prospects.

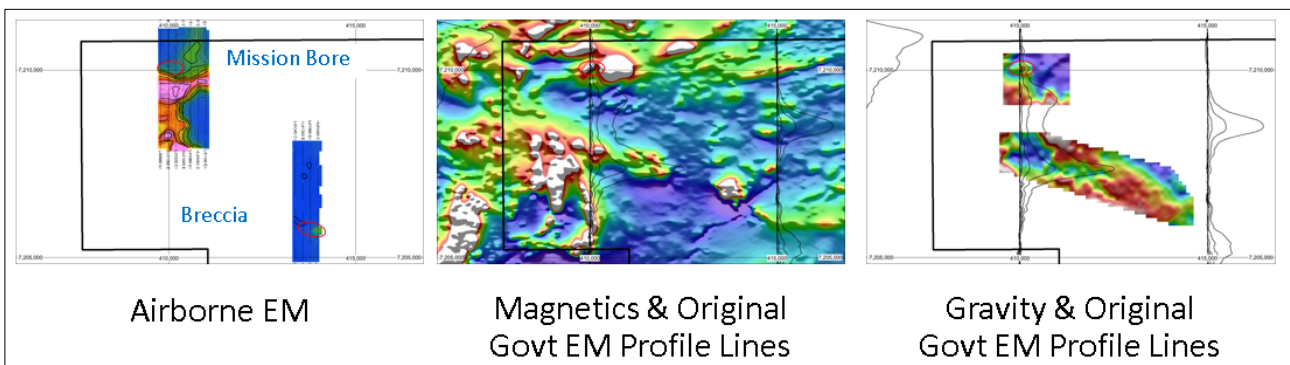


Figure 4: AEM survey area centred on Mission Bore and Breccia Prospects.

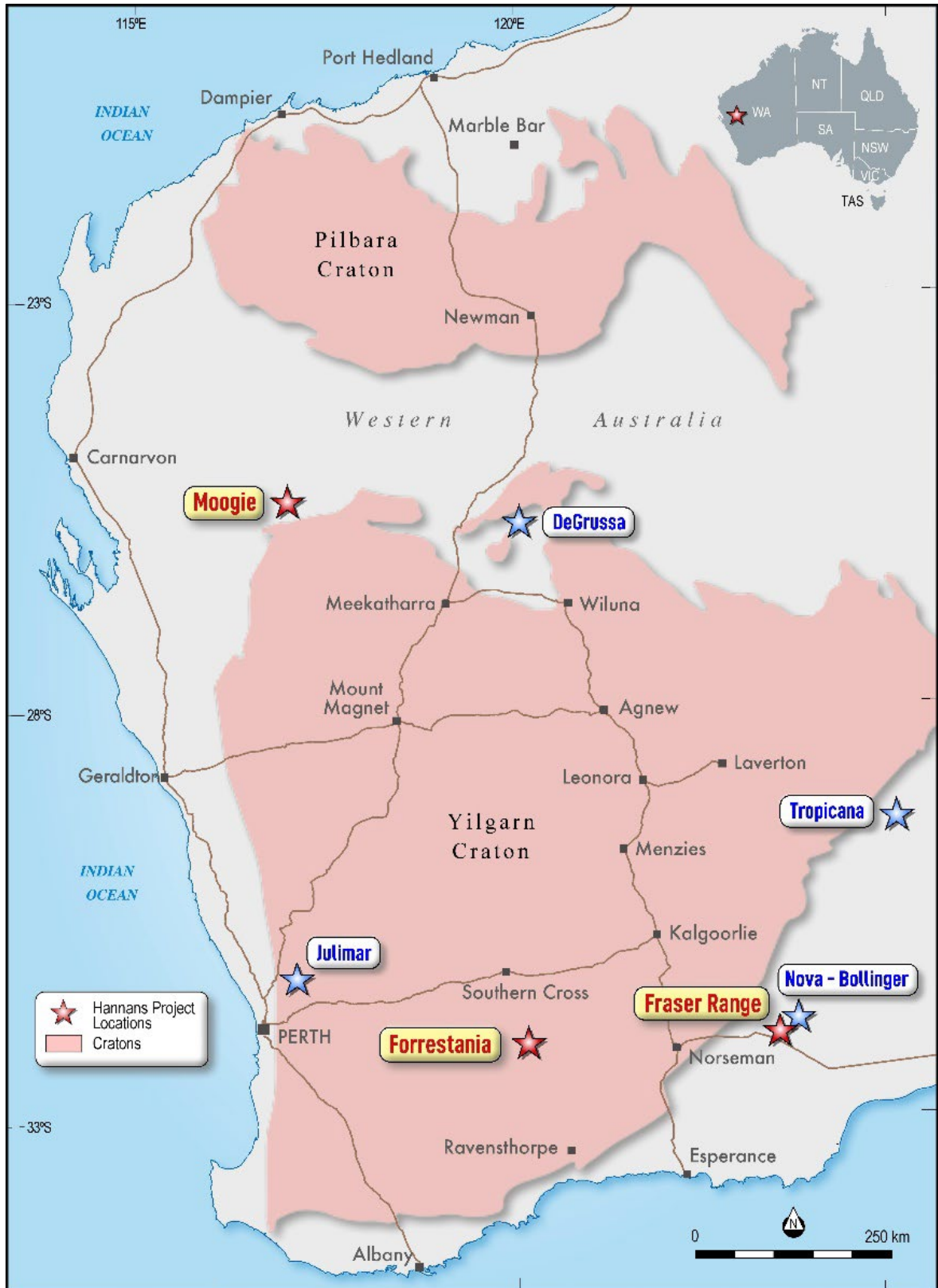


Figure 5: Hannans' Project location map

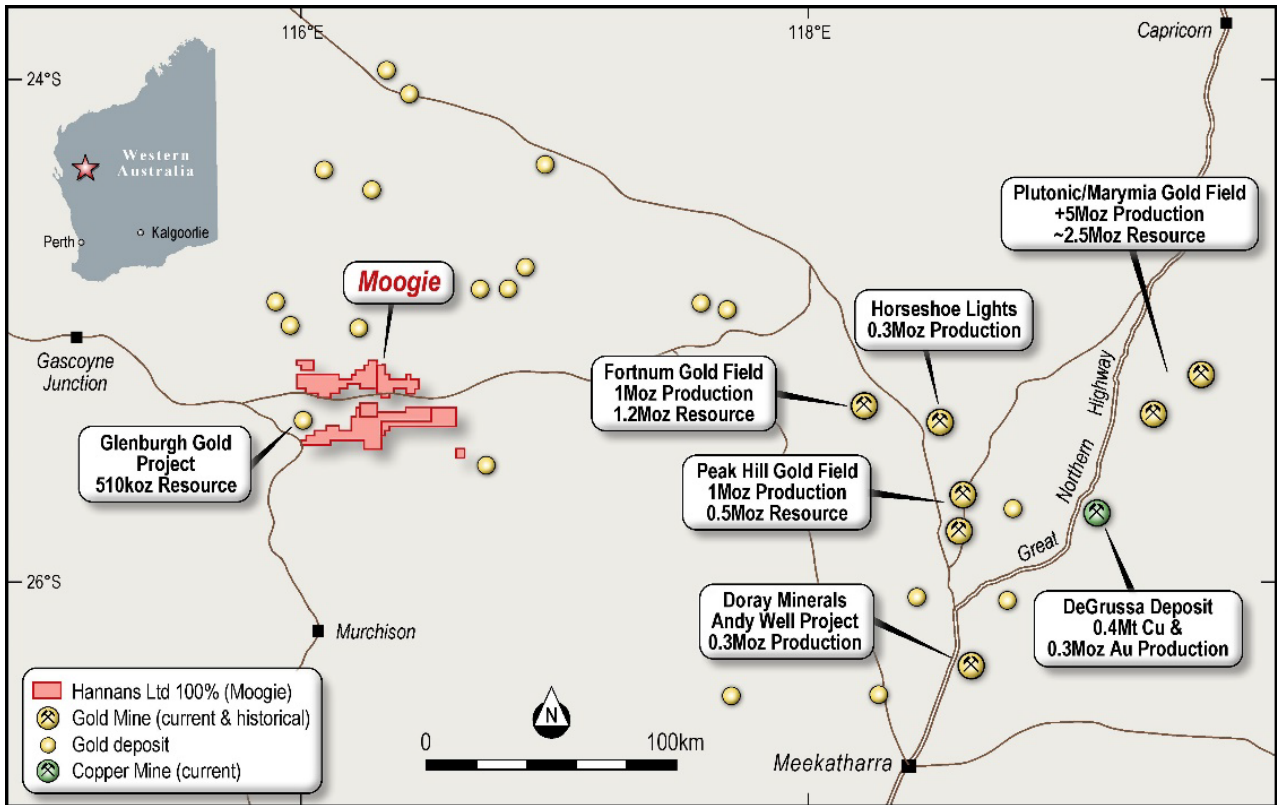


Figure 6: Regional location map showing Moogie and its proximity to several current and historic mines.

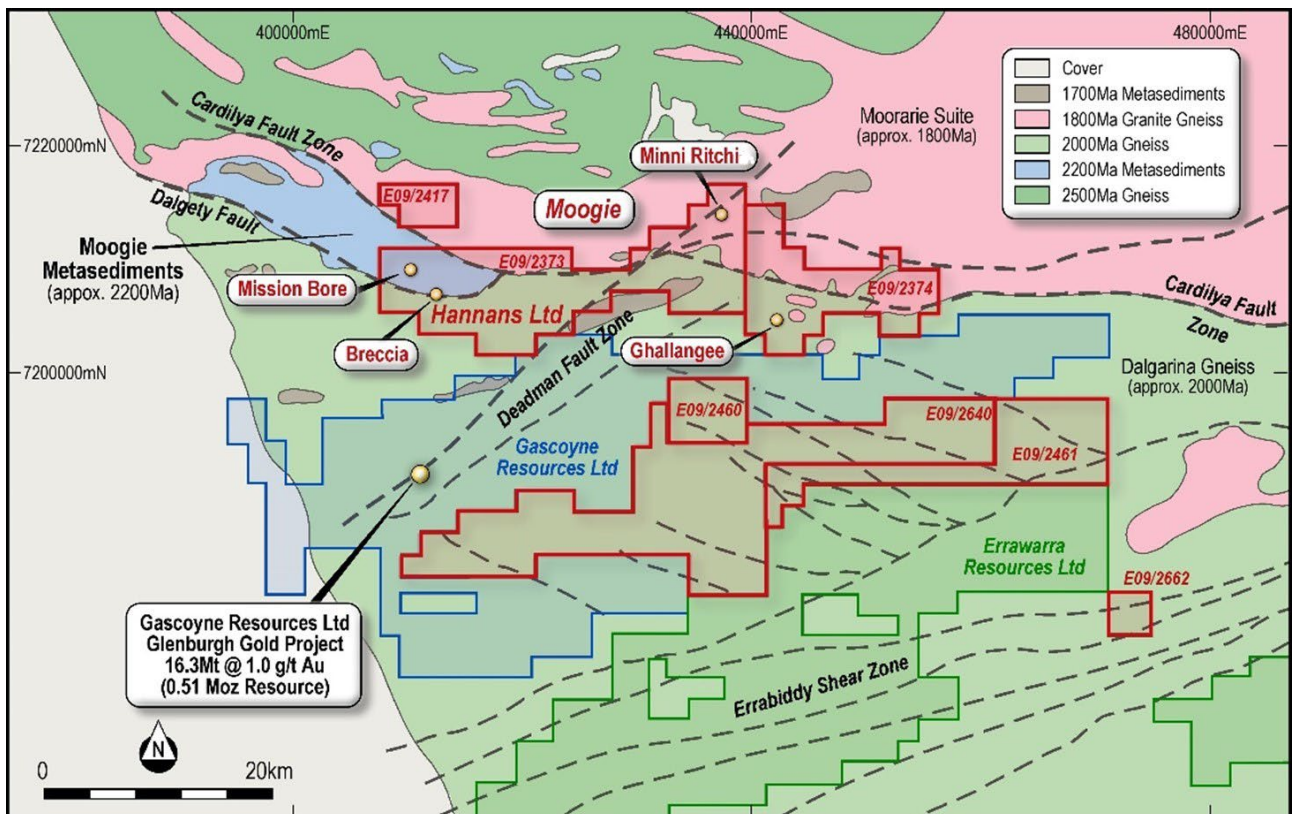


Figure 7: Project location, regional geology & priority targets.

Table 1: Development and exploration timeline of Moogie Project

Phase	Explanation
Concept	Can the position and nature of the major structure at Moogie be defined, and its mineral potential explored? Hannans is targeting discovery of a large, long-life, low cost gold, copper and or nickel-copper-PGE deposits (Tier 1). The deposit models being investigated include both: orogenic Au and or Cu; and intrusion hosted Ni-Cu-PGE. (October 2019)
Proof of Concept	Detailed aeromagnetic data collection and interpretation, geochemical sampling and interpretation, mapping and thin section analysis resulted in proof of concept. (December 2019 – June 2020)
Deposit Models	Following the collection of additional geochemical data, mapping, and interpretation plus a detailed review of all historic and modern data, focus has turned to deposit models best described as: hydrothermal silica-magnetite breccia systems (Moogie Breccia); and mafic and ultramafic intrusive systems hosting magmatic sulphides (Minni Ritchi and Ghallangee) (E09/2373, E09/2374 and E09/2417). The opportunity for orogenic gold mineralisation also remains in tenements (E09/2460 and E09/2461) (July 2020 – June 2021).
Field Work	A ground gravity survey was completed over the Breccia prospect (August 2021). Airborne EM and magnetic survey over the Breccia, Minni Ritch and Ghallangee prospects (January 2022). Ground EM survey being planned (April - June 2022). Regional surface sampling and prospect scale surface sampling is scheduled (April - June 2022).

This ASX announcement has been authorised for released by Mr Damian Hicks, Executive Director.

For further information, please contact:

Damian Hicks
Executive Director

Competent Person

The information in this document that relates to exploration results is based on information compiled by Amanda Scott, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy (Membership No.990895). Amanda Scott is a full-time employee of Scott Geological AB. Amanda Scott is also a non-executive director of Hannans and holds both shares and options in Hannans. Amanda Scott has sufficient experience, which is relevant to 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 (JORC Code). Amanda Scott consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

JORC Code 2012 Edition

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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 downhole 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 (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. 	<ul style="list-style-type: none"> High resolution helicopter-borne time-domain electromagnetic & magnetic data were acquired using New Resolution Geophysics (NRG) Xcite™ system. Approximately 413 line km of data at 200-400m line spacing with 100m infill. Survey lines were oriented north-south. Xcite™ system specifications: <ul style="list-style-type: none"> Coincident Tx-Rx sensor configuration Transmitter loop diameter 18.4m (4 turns) Transmitter current ~280A Peak dipole moment ~300,000 NIA Base frequency 25Hz Transmitter pulse ~5.4msec Survey altitude 30-35m (EM sensor) dB/dt measured (X & Z coils), integrated B-field
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<ul style="list-style-type: none"> No drilling has been undertaken.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling has been undertaken.
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Not applicable, as no drilling has been undertaken.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not applicable, as no drilling has been undertaken.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Not applicable, as no drilling has been undertaken.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not applicable, as no drilling has been undertaken.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Navigation was controlled by a Novatel DL-V3L1L2 GPS. Laser altimeter type SF11/C (loop) and SF00 (helicopter). The data was collected in GDA94 / MGA50 coordinate system.
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not applicable, as no drilling has been undertaken.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The survey grid was aligned to cross the majority of the known structures, stratigraphy and mineralisation.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Not applicable, as no drilling has been undertaken.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Not applicable, as no drilling has been undertaken.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The Moogie Project comprises tenements E09/2373 and E09/2374, E09/2417, E09/2460, E09/2461, E09/2640 and E09/2662 owned 100% by Reed Exploration Pty Ltd, a wholly-owned subsidiary of Hannans. The Moogie Project is located on the Dalgety Downs pastoral station. Tenements E09/2640 and E09/2662 are currently still under application.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The Moogie Project area has received relatively little previous exploration and has largely been limited to stream sediment sampling.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Targeting orogenic lode gold and magmatic intrusion related nickel-copper mineralisation.
Drill hole Information	<ul style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> Exploration results are not being reported.
Data aggregation methods	<ul style="list-style-type: none"> 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 should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> Exploration results are not being reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> Exploration results are not being reported.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to figures in this ASX release.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All significant results have been reported.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A 11,500 line km airborne magnetic and radiometric survey was completed over the project in December 2019.

Criteria	JORC Code explanation	Commentary
<i>Further work</i>	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <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> 	<ul style="list-style-type: none"> • Follow-up surface FLEM / MLEM and reconnaissance drilling.