

## Forrestania Nickel Drilling

- **Diamond drill testing of geophysical nickel targets completed.**
- **Drilling intersected iron sulphides in each hole – targets explained.**
- **Next phase of nickel sulphide exploration being planned.**

Hannans Ltd (ASX:HNR) updates shareholders on exploration at its 100% owned Forrestania Nickel Project ("FNP"), located approximately 120km south of Southern Cross and 80km east of Hyden, in the Goldfields region of Western Australia (refer page 3 for regional map and page 4 for project map).

Four diamond drill holes were recently completed to test four separate geophysical and geological targets located within the Western and Mid-Western Ultramafic sequences at the FNP<sup>1</sup>. All holes intersected iron sulphides of pyrrhotite-pyrite at the expected depths of the target horizons (refer Table 1 on page 2). Based upon geological inspection, the targets intersected are not expected to contain significant nickel grades.

The next phase of exploration planning for the FNP has commenced and shareholders will be advised when field work commences (refer Appendix 2 on page 6).

As previously advised the ultramafic belts at Forrestania host some of the most attractive nickel sulphide deposits in Australia and possibly the world. Its nickel sulphide endowment is remarkable having four mines with two open pits and nickel sulphides persisting beyond 1 km depth<sup>2</sup>. All the mineralised belts that host the mines, resources, and prospects at Forrestania are represented within the Hannans ground package, particularly the Western Ultramafic belt that contains the highest-grade nickel deposits. It is principally for these reasons that Hannans persists with its methodical exploration process targeting a new nickel sulphide discovery.<sup>3</sup>

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

For further information please contact:

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Executive Director

<sup>1</sup> Refer ASX release dated 20 April 2021 for further information.

<sup>2</sup> Refer Appendix 1 for a list of producing mines, past producers, significant resources, and significant prospects.

<sup>3</sup> Refer Appendix 2 for phases of nickel exploration completed by Hannans at Forrestania



**Table 1:** Completed 3<sup>rd</sup> Phase of Exploration

Target ID	Completed Hole ID	Hole collar coordinates	Dip / Azimuth	End of hole depth	Comment
A1	FSDD076	751507E 6420459N	-70/280	271.0m	Hole tested DHEM plate and encountered semi-massive sulphides centred at 254m. No significant nickel sulphides encountered.
C4	FSRC062	751754E 6423146N	-70/270	273.1	Hole tested surface MLEM plate encountering sulphides from 209m to 227m. No significant nickel sulphides encountered.
B3	FSRC068	751136E 6430122N	-60/250	372.8m	Hole tested basal ultramafic contact and encountered sulphides at several intervals. PVC was installed in hole to test for off-hole conductors. No significant nickel sulphides encountered.
B5	FSDD075	751507E 6420459N	-74/220	226.1m	Hole tested basal ultramafic contact and encountered semi-massive and stringer sulphides from 176m to 181m. No significant nickel sulphides encountered.

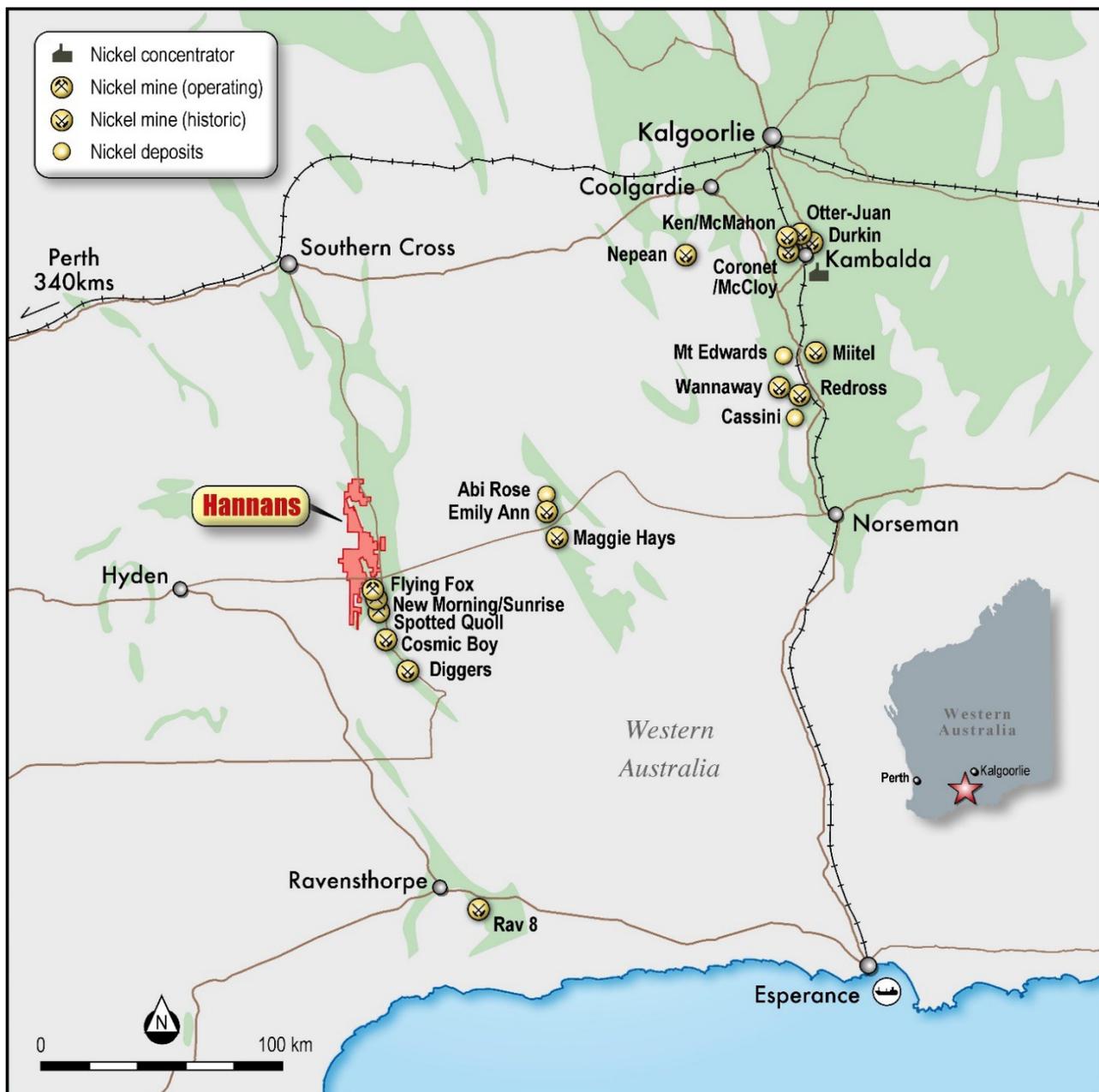
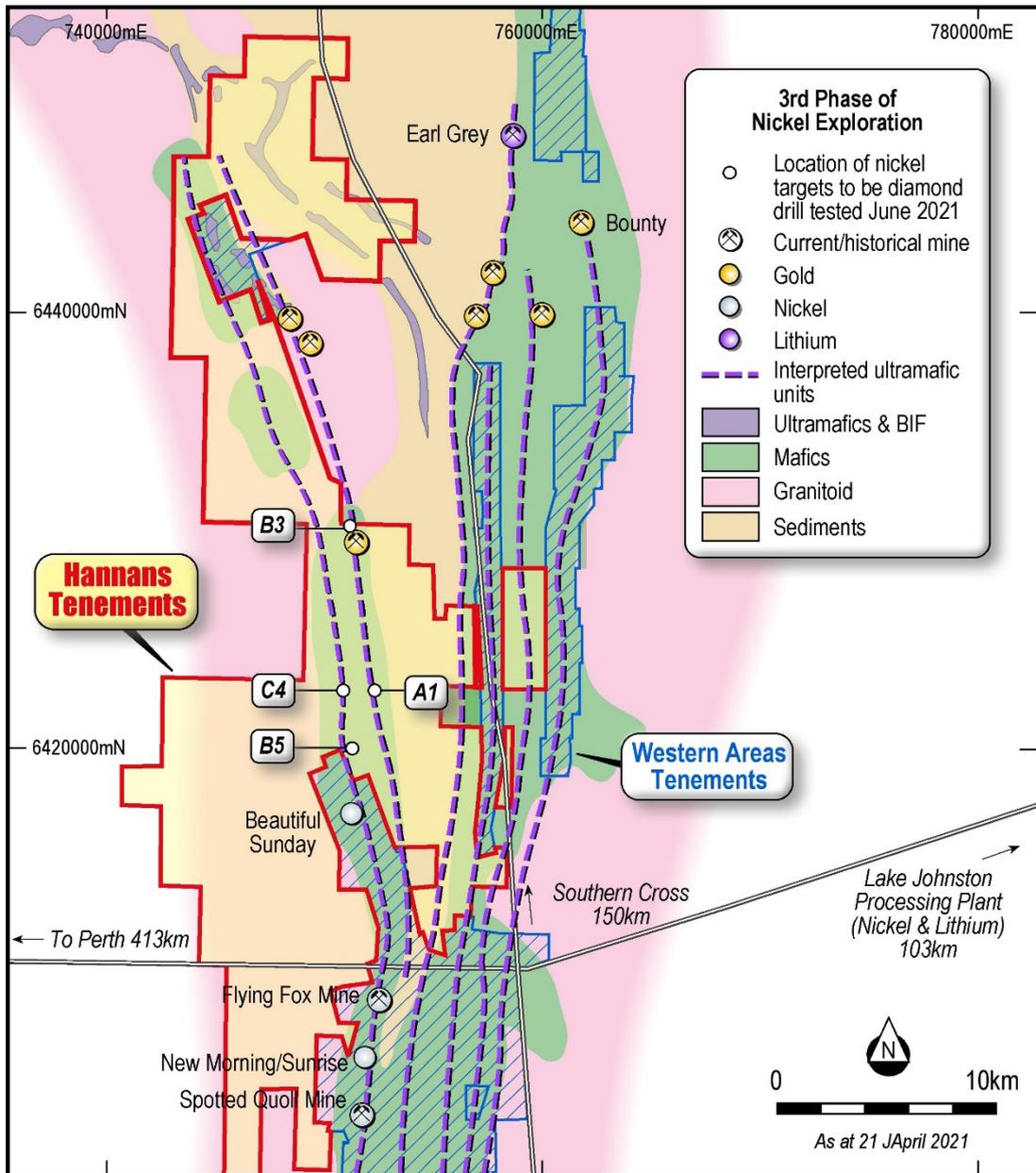


Figure 1 Regional location map showing major nickel mines and nickel deposits. Hannans Forrestania Nickel Project shaded in red.



**Figure 2** Project location map showing major nickel mines and nickel deposits (owned by Western Areas Ltd). The approximate location of Hannans four diamond drill holes are shown by the tags B3, C4, A1 and B5.

## Appendix 1

### Producing mines\*

Flying Fox	Producing mine (WSA) and past producer (Outokumpu), several million tonnes of high grade and significant tonnes of disseminated nickel sulphides in Western Ultramafic Belt. Ore grade material is more than 100,000 nickel metal tonnes.
Spotted Quoll	Producing mine (WSA), high grade nickel sulphides in Western Ultramafic Belt. Ore grade material is more than 100,000 nickel metal tonnes.
Cosmic Boy:	Past producer with high grade disseminated and matrix nickel sulphides in the Eastern Ultramafic belt, Outokumpu mined 1.8 Mt @ 2.0% Ni from two mineralized horizons.
Digger Rocks	Past producer in the Eastern Ultramafic belt, Outokumpu mined 1.3 Mt @ 1.5% Ni from the open pit and 380,000 tonnes @ 2.0% Ni from underground. Diggers South remains unmined containing 3.0 Mt @ 1.5% Ni

### Significant resources\*

New Morning	Massive and disseminated sulphides in Western Ultramafic Belt under evaluation by WSA. Massive sulphides 481kt @ 3.4% Ni and lower grade including disseminated of 5.1Mt @ 1.3% Ni.
Beautiful Sunday	Matrix and disseminated sulphides in Western Ultramafic Belt just south of Hannans Tenements. The resource here is 480,000 tonnes @ 1.4% Ni.
Purple Haze	Disseminated sulphides in Eastern Ultramafic Belt Resources of 560,000 tonnes @ 0.9% Ni
Seagull	Disseminated and matrix sulphides in Eastern Ultramafic Belt, Outokumpu estimated resources of 200,000 tonnes @ 2.0% Ni.

### Significant prospects\*

South Ironcap	Disseminated and cloud sulphide in Eastern Ultramafic Belt. Intersections of 35m @ 0.7% Ni.
Liquid Acrobat	Disseminated and matrix to semi-massive sulphide in Eastern Ultramafic Belt, best intersection is 54m @ 0.85% Ni.
Fireball	Disseminated and semi massive-sulphide in Eastern Ultramafic Belt. Intersections of 3m @ 4.5% Ni and 25m @ 0.9% Ni.
Mount Hope	Disseminated and cloud sulphide in Eastern Ultramafic Belt, no known resource.

Information on these mines, resources and prospects is taken from publicly available information, and they are not owned by Hannans Ltd.

## Appendix 2

Phase	Explanation
Detailed Review	Review of all Hannans Forrestania Tenements with the emphasis on generating nickel sulphide targets. A geological-geochemical review and a geophysical review evaluated past work and recommended targeting bedrock geophysical anomalies mainly within the Western Ultramafic belts. Prospects and anomalies were visited on the ground to ground-truth geochemical and geophysical anomalies.
1	A stage-one drilling programme drilled FSRC060-FSRC066 testing these targets and intersected sulphides but no significant nickel sulphide intersections. Of the seven holes drilled, two holes were surveyed using DHEM which resulted in an off-hole anomaly warranting follow-up in one.
2	Ground geophysical surveys employing Moving Loop and Fixed Loop electromagnetics were carried out in areas previously untested. Prospects and anomalies were visited on the ground to check out geochemical and geophysical anomalies, two areas were sampled by soil sampling. Seven holes FSRC067-FSRC073 were drilled targeting bedrock geophysical conductors and one geology-geochemical target. One lithium dedicated hole FSRC074 was drilled. Encouraging nickel-copper values were intersected in ultramafic rocks along the Western Ultramafic Belts. DHEM was undertaken which confirmed that most of the geophysical anomalies were intersected by drilling and several new targets were generated that warrant further follow-up.
3	Historic results were evaluated in conjunction with recent geophysical and drilling results. Geophysical models and anomalies were reviewed and refined. Diamond drill testing of four targets within the Western and Mid-Western Ultramafic sequence was contracted to commence in June 2021. These holes were drilled, all 4 holes encountered bedrock sulphides and are reported above in Table 1.
4	A critical review of results so far at Forrestania Project is in progress. The next phase of exploration planning for the FNP has commenced and shareholders will be advised when field work commences.

### Competent Person

The information in this document that relates to exploration results at Forrestania is based on information compiled by Adrian Black, a Competent Person who is a Member of the AIG (1364). Adrian Black is a consultant to Hannans Ltd and its subsidiary companies. Adrian Black 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).

## JORC Code, 2012 Edition – Table 1 report

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No sampling or assaying has yet been carried out on the drill core.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<ul style="list-style-type: none"> <li>4 diamond holes were completed by West Core Drilling Pty Ltd on tenements E77/2220-I and E77/2239 using an EDM2000 diamond drill rig. Core diameter was either HQ or NQ2.</li> <li>Holes were drilled at dip angles varying from -60° to -74° and azimuth angles from 220° to 280° to orthogonally intercept the interpreted favourable geological zones and to accommodate existing drill pads.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The geologist visually assessed and recorded drill sample recoveries during the program, these varied from 100% in competent ground to less than 50% in broken and weathered ultramafic ground.</li> <li>No relationship between sample recovery and grade has been recognised as no sampling or assays have been carried out yet.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All drill holes have been geologically logged for lithology, weathering, alteration, geotechnical criteria, mineralisation, and other features of the core samples.</li> <li>Data is being entered in a database appropriate for mineral resource estimation.</li> <li>All drill holes were logged in full.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The sample preparation technique carried out in the field is considered industry best standard practice and was completed by the geological consultant.</li> <li>Geological logging of drill core was completed at site with all drill core being orientated, marked up with labelled metre intervals and stacked and retained in suitable trays on site.</li> <li>No sampling has yet been carried out, this will be decided after a review of the program is complete.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No sampling or assaying has yet been carried out on the drill core.</li> <li>A Niton XRF unit was used to determine relative element concentration in spot samples on the drill core. This was used to assist in rock identification and classification and to assess trace element concentration of drill core.</li> <li>Standards were used to check and calibrate the Niton XRF device.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No sampling or assaying has yet been carried out on the drill core.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole collars were initially located and pegged using a handheld GPS with an expected accuracy of +/-4m for easting and northing.</li> <li>All drill holes were surveyed using a North seeking gyro for rig alignment and downhole records taken at the completion of each hole by the drill contractor.</li> <li>The grid system used is GDA94, MGA zone 50.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes were drilled to test selected geological and geophysical targets on tenements E77/2220-I and E77/2239.</li> <li>The spacing and distribution of holes is not relevant to this drilling program which is at the exploration stage rather than grid definition drilling.</li> <li>The completed drilling at the Project is not sufficient to establish the degree of geological and grade continuity to support the definition of Mineral Resource and Reserves and the classifications applied under the 2012 JORC code.</li> <li>No sampling of the drill core has been undertaken to date.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The drill holes were planned to intersect the modelled geological and geophysical target zones at a near perpendicular orientation.</li> <li>The orientation of key structures may be locally variable and any relationship to mineralisation has yet to be identified.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Sample security was not considered a significant risk to the project, however only employees of Newexco and Hannans were involved in the logging and sample custody in a remote area. No specific measures were taken by Hannans to ensure sample security beyond the normal chain of custody for drill core logging and secure storage.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No formal audits or reviews have been conducted on sampling technique as no sampling has yet been carried out</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Reed Exploration Pty Ltd, a wholly owned subsidiary of Hannans Ltd holds all mineral rights other than gold for exploration licenses E77/2219-I, E77/2220-I, E77/2239 and P77/4291</li> <li>The Lake Cronin Nature Reserve partly coincides with the far south-east corner of E77/2220-I. This does not impact on the drilling areas.</li> <li>All tenements are in good standing with no known impediments.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Reed Exploration Pty Ltd has held interest in the exploration tenements and Hannans previously held some of the ground since 2008 and prior to that, work has been conducted by other nickel and gold orientated parties.</li> <li>The region has a relatively long history of exploration and mining and has been explored for nickel and gold since the late 1960s, initially by Amax. Numerous companies have taken varying interests in the project area since this time.</li> <li>Historical exploration results and data quality have been considered during the planning of this drill program.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Forrestania Project is in the Forrestania Greenstone Belt which is the southern-most extension of the Southern Cross greenstone belt. It is subdivided in detail by six ultramafic belts, with tenement E77/2220-I located on the most nickel-endowed belt, the Western Ultramafic Belt.</li> <li>The project covers a moderate to steeply east dipping sequence of variably weathered, weakly to non-differentiated, komatiite and high magnesian basalt flows that host most known nickel sulphide mineralisation in the area, plus occasional intercalated BIF units.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>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"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole collar locations are shown in the maps and tables included in the body of the ASX release.</li> <li>4 holes were drilled for 705m total drilling, two holes FSDD075 and FSDD076 were cored from surface and holes FSRC062 and FSRC068 were diamond tails on existing RC holes.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No sampling or assaying has yet been carried out on the drill core.</li> </ul>
Relationship between	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its</li> </ul>	<ul style="list-style-type: none"> <li>No sampling or assaying has yet been carried out on the drill core.. Drill holes were planned as perpendicular as possible to intersect the target EM plates and geological</li> </ul>

Criteria	JORC Code explanation	Commentary
mineralisation widths and intercept lengths	<p>nature should be reported.</p> <ul style="list-style-type: none"> <li>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').</li> </ul>	<p>targets so downhole lengths are usually interpreted to be near true width.</p>
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Refer to figures and tables in the body of the ASX release.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>The exploration results reported are representative of the mineralisation style with grades and/or widths reported in a consistent manner.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Ground moving loop and downhole electromagnetic surveys were used to assist targeting drillholes</li> <li>Ground moving loop EM specifications: <ul style="list-style-type: none"> <li>Loop Size: 100m x 100m or 200 x 200m</li> <li>Line Separation: various</li> <li>Receiver: EMIT SMARTem24 with EMIT SMART 3-component fluxgate</li> <li>Current/Frequency: 100A, 0.5 Hz.</li> </ul> </li> <li>Ground moving loop EM specifications: <ul style="list-style-type: none"> <li>Receiver: EMIT SMARTem24 with EMIT SMART 3-component fluxgate</li> <li>Downhole EM surveys: <ul style="list-style-type: none"> <li>EMIT DigiAtlantis system</li> <li>Current/frequency: 125A, 0.5Hz</li> <li>Loop size: approximately 200m x 200m</li> <li>Vortex Geophysics Transmitter system</li> <li>Station spacing: 10m and infilled at 2.5m where appropriate</li> </ul> </li> </ul> </li> <li>No holes were surveyed in the present drilling campaign. Two holes were cased with PVC to facilitate follow-up down hole electromagnetic surveys.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Further work is planned as stated in this announcement.</li> </ul>