

Geophysical surveys at Fraser Range

- 1st round of surface geophysical surveys (FLEM and MLEM) completed and interpreted – no bedrock targets identified in 1st round.
- 2nd round of surface geophysical surveys planned, scheduled to start on tenement grant
- Exploration being planned and managed by Newexco Exploration Pty Ltd. Geoscientists from Newexco played important roles in the discovery of "Nova".

Hannans Ltd (**Hannans** or the **Company**) announces that the 1st round of surface geophysical surveys at its Fraser Range nickel-copper project located 100km east of Norseman, Western Australia (refer Figures 1 and 2 on pages 2 and 3) have been completed and interpreted.

The two areas of interest subjected to the 1st round of EM surveying were located within tenement E63/1772 and were considered high priority areas. These were the "low hanging fruit" within the tenement areas, where there were indications of sulphide mineralisation or favourable environments for the development of such mineralisation in other datasets. With these areas now tested for massive sulphide mineralisation to a significant depth with EM (and with no bedrock targets identified), these areas are considered to have been tested and exploration focus now shifts to other parts of E63/1772 and the tenements E63/2023 through to E63/2026.

High Priority - Tenements E63/2024 and E63/2025

Recently completed petrographic work suggests the most promising samples from a nickel sulphide mineralisation perspective are from within tenement E63/2024. The mafic igneous rocks collected from within this tenement contained olivine (i.e., more primitive part of the igneous system) and traces of sulphides. While the rocks exposed at surface are not interpreted to be suitable hosts for nickel sulphide mineralisation themselves, they may indicate that the larger igneous system, of which they are a part, may be prospective. E63/2024 and E63/2025 are both single block exploration licences and can therefore be screened effectively for massive sulphides at relatively low cost with EM surveying.

Moderate Priority – Tenements E63/2023 and E63/2026

Tenement E63/2023 occurs close to the western edge of the significant strongly magnetic package – approximately along strike from Nova-Bollinger and Silver Knight (to the north). This tenement also contains elevated Ni and Cu in geochemical soil samples; however, the tenement area is mostly under cover, some of which appears to be transported. Given that this tenement is both in a promising location and appears to have an encouraging geochemical signature, EM will be used to test for conductors consistent with massive sulphides. The tenement is a single block exploration licence, so the EM surveying will be relatively fast and low-cost to complete.

Tenement E63/2026 appears to have been overlooked to a large extent by previous explorers. The regional soil and aeromagnetic surveying that is pervasive throughout much of the Fraser Range appears to have neglected the area of E 63/2026. Deep cover (possibly transported) is present over the majority of the tenement, and field inspection did not locate any significant outcrop. The lack of exposure and data in this tenement makes it difficult to assess the potential of this area.



In the regional magnetics data, the tenement appears to straddle a structure where the strike of the magnetic units changes from NE in the west, to NNW in the east. Immediately to the south of the tenement (in an area for which there are higher resolution magnetics) several intrusions (gabbro-norite) are interpreted based on the magnetics, suggesting that discrete intrusions, potentially like that which hosts Nova, are present in the area. Further exploration is justified here based on the presence of nearby intrusions, and the fact that the tenement appears to straddle a significant structure. The tenement is a single block exploration licence, so the EM surveying will be relatively fast and low-cost to complete.

Proposed Litho-Geochemical Analysis

Litho-geochemical analyses are recommended to assist in understanding magma genesis during intrusion and emplacement. Trace element and litho-geochemical analyses may assist in evaluating the potential for the rock units to host sulphide mineralisation. A selection of the rock chip samples taken during field work in 2020 will be submitted for analysis. The completion of this work will add to the overall understanding of the region and may help to further refine Hannans' interpretation of the geology and prospectivity of the project.

Conclusions

The Project area remains under-explored for nickel sulphide mineralisation, and recommendations have been made that will advance exploration in several tenements. These recommendations are based upon a mixture of historic datasets (both local and on a more regional scale) and results of recent mapping and petrographic work.

While the recently conducted EM surveying conducted at the Fraser Range Project has tested some of the Project (and uncovered no anomalies), there remains potential for nickel sulphide mineralisation in other areas of the tenure that have experienced less exploration work to date.

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

Damian Hicks
Executive Director
Hannans Ltd

COMPLIANCE STATEMENT

The information in this document that relates to exploration results at the Fraser Range Nickel Project 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).

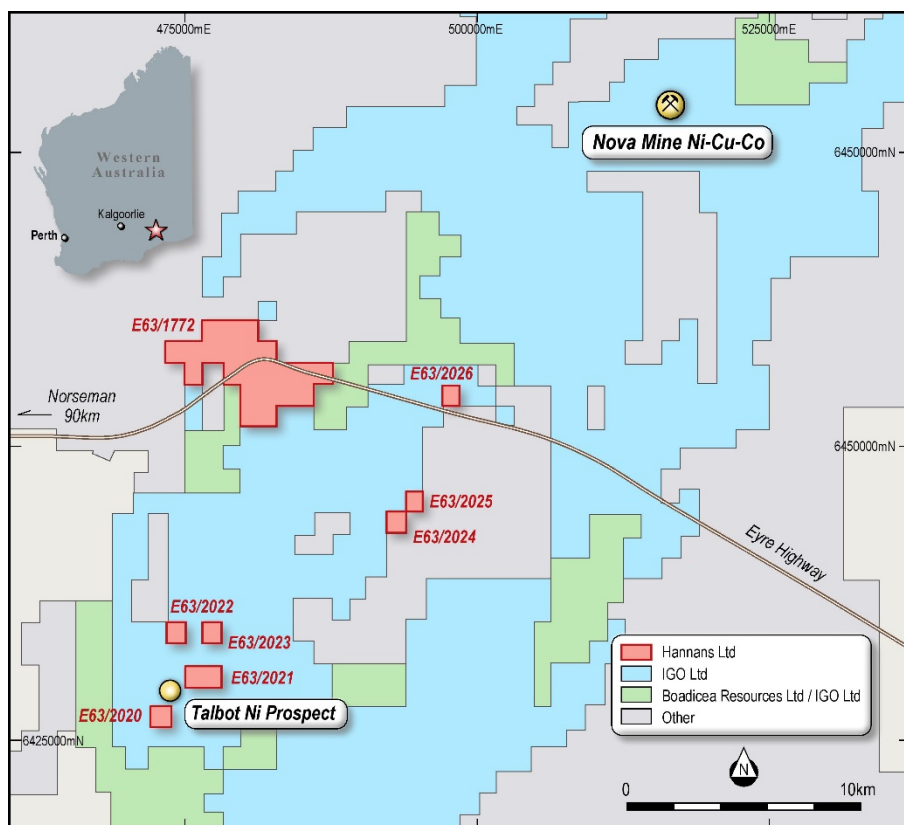


Figure 1: Plan of the Hannans tenure at the Fraser Range.

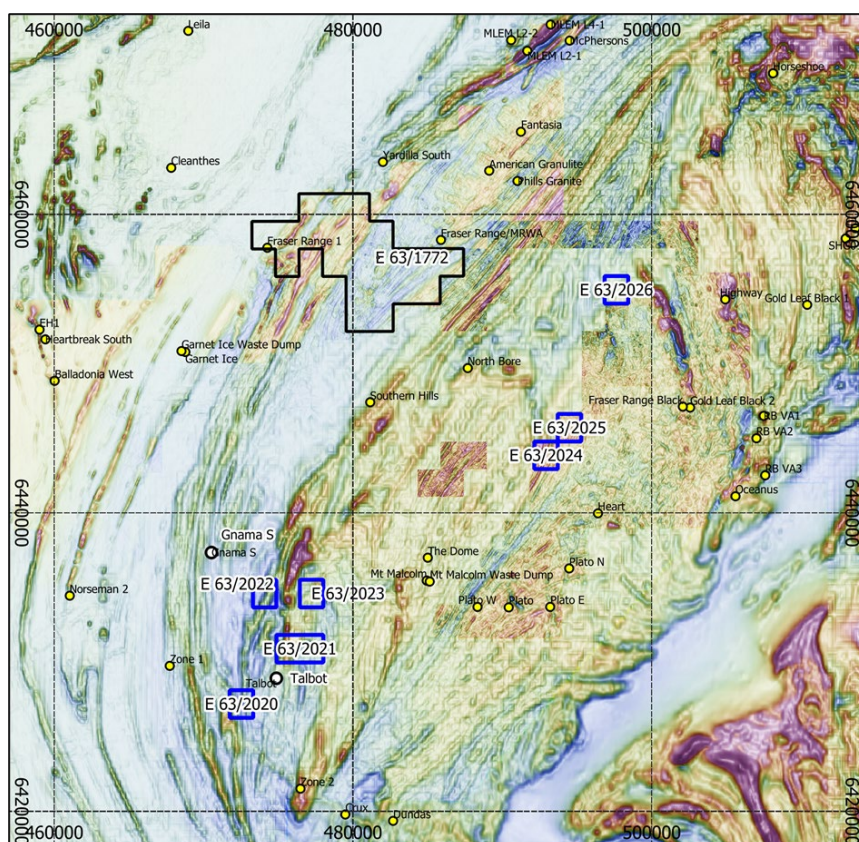


Figure 1: Plan of the Fraser Range Project tenements. Minedex locations are annotated. Background image is aeromagnetic data from various sources (TMI).

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<p>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.</p> <p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p> <p>Aspects of the determination of mineralisation that are Material to the Public Report.</p> <p>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.</p>	<p>Ground EM surveying was carried out using two separate configurations. Both surveys utilised a SMART Fluxgate B-Field sensor and SMARTem24 receiver and were carried out by Vortex Geophysics.</p> <p>EM configurations used were: Moving-Loop Slingram configuration: A 200 x 200m transmitter loop with 1 turn to generate 70amps equivalent with a base frequency of 1Hz. Receiver centre to transmitter centre separation is 300m for Slingram configuration. Measurements were taken at 100m spacing along lines 400m apart.</p> <p>Fixed Loop configuration: A series of transmitter loops measuring 400 x 600m with a single turn were used, with a current of approximately 70A at a base frequency of 1Hz. Measurements were taken at 100m spacing on lines 200m apart.</p> <p>Three consistent readings taken at each station.</p> <p>EM survey locations collected by handheld 12 channel GPS.</p>
Drilling techniques	<p>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.).</p>	<p>No drilling is being reported in this announcement.</p>
Drill sample recovery	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>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.</p>	<p>No drilling is being reported in this announcement.</p>
Logging	<p>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.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	<p>No drilling is being reported in this announcement.</p>

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<p>If core, whether cut or sawn and whether quarter, half or all core taken.</p> <p>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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.</p> <p>Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	No drilling is being reported in this announcement.
Quality of assay data and laboratory tests	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>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.</p> <p>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.</p>	No assays are being reported in this announcement.
Verification of sampling and assaying	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes.</p> <p>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</p> <p>Discuss any adjustment to assay data.</p>	No assaying is being reported in this announcement.
Location of data points	<p>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.</p> <p>Specification of the grid system used.</p> <p>Quality and adequacy of topographic control.</p>	<p>For surface electromagnetic surveys, transmitter loops and receivers were laid out using a handheld GPS with an expected accuracy of +/-5m for easting and northing.</p> <p>The grid system used is GDA94, MGA Zone 51.</p>
Data spacing and distribution	<p>Data spacing for reporting of Exploration Results.</p> <p>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.</p> <p>Whether sample compositing has been applied.</p>	<p>Surface electromagnetic surveying was carried out using two configurations (moving-loop and fixed-loop) in different areas due to the topography and access considerations.</p> <p>Moving-loop electromagnetic surveys (MLEM): survey stations were recorded at 100m centres along lines 400m apart.</p>

Criteria	JORC Code explanation	Commentary
		Fixed-loop electromagnetic surveys (FLEM): survey stations were recorded at 100m centres along lines 200m apart
Orientation of data in relation to geological structure	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</p>	Electromagnetic survey lines were designed to be oriented normal (or close to normal) to the structure of the bedrock geology, which was interpreted from the aeromagnetic and from reconnaissance mapping throughout the area. The FLEM survey was oriented with east-west lines. The MLEM survey employed lines oriented NW-SE.
Sample security	The measures taken to ensure sample security.	For the EM survey, all data were acquired by Vortex Geophysics. Newexco Services provided data analysis, which was then reported to the Company's representatives.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No drilling is being reported in this announcement.

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	<p>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</p> <p>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</p>	<p>Tenement E 63/1772 is subject to a joint venture agreement with Kingmaker Metals Pty Ltd the details of which were announced to ASX on 30 November 2020.</p> <p>Reed Exploration Pty Ltd (REX) is a wholly owned subsidiary of Hannans Ltd, and the registered holder of the relevant tenements being E 63/2020, E 63/2021, E 63/2022, E 63/2023, E 63/2024, E 63/2025, and E 63/2026. These exploration licences are under application and not yet granted.</p>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<p>The region has been explored for Ni-Cu-PGE mineralisation sporadically since the 1960s, at which time (uneconomic) Ni-Cu sulphides were located at several prospects in the wider Fraser Range area. Reconnaissance geochemical and geophysical programs have covered much of the southern Fraser Range. More recently, significant regional airborne magnetic and electromagnetic surveys have been undertaken.</p> <p>Since the discovery of the Nova deposit in 2012, exploration interest in the area has increased dramatically, with widespread soil sampling, surface and airborne EM surveys, ground gravity surveys, and detailed aeromagnetic surveys being undertaken, with the drill testing of promising targets.</p> <p>Numerous companies have taken varying interests in the Project area over the past 50 – 60 years. Historical exploration results and data quality have been considered during the planning of current programs of exploration work at the Project.</p>

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<p>The Fraser Range Project is in the southern part of the Fraser Range. The Project area is dominated by voluminous sheets of metagabbro (Fraser gabbro) and lesser metagranitic rocks, both of which have intruded sedimentary rocks of the Snowys Dam Formation of the Arid Basin. These rocks have been deformed and metamorphosed to granulite facies, forming complex layering from both primary and secondary processes. Ultramafic rocks appear to be less common than gabbroic rocks. The Snowys Dam Formation is a sequence of upper amphibolite to granulite facies pelitic, semi-pelitic to calcic, locally iron- and locally sulphide-rich metasedimentary rocks with abundant layers and sills of Fraser gabbro.</p> <p>The target of this exploration program is massive nickel-copper sulphides analogous to the Nova-Bollinger deposit (which is located approximately 33km to the NE of the Project area). The mineralisation at Nova is an orthomagmatic deposit that is hosted within intrusive mafic igneous rocks of related to the Fraser gabbro rocks.</p>
Drill hole Information	<p>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:</p> <p>easting and northing of the drill hole collar</p> <p>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</p> <p>dip and azimuth of the hole</p> <p>down hole length and interception depth</p> <p>hole length.</p> <p>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.</p>	No drilling is being reported in this announcement.
Data aggregation methods	<p>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.</p> <p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No drilling is being reported in this announcement.
Relationship between mineralisation	These relationships are particularly important in the reporting of Exploration Results.	No drilling or assays are being reported in this announcement.

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widths and intercept lengths	<p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	
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.	Refer to figures and tables in the body of the ASX 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.	All results of the electromagnetic surveying have been presented.
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.	<p>Surface electromagnetic surveying has been carried out using two separate configurations (see diagram in the body of the announcement). This work was completed to test the survey area for bedrock conductors that may be associated with massive sulphide mineralisation. The specifications are as follows:</p> <p>Moving Loop EM (MLEM): Configuration: Slingram, 300m separation Tx loop centre to Rx Loop Size: 200m x 200m Line Separation: 400m Station Spacing: 100m Line orientation: 135° Receiver/Sensor: EMIT SMARTem24 with EMIT SMART 3-component fluxgate Current/Frequency: 70A, 1.0 Hz.</p> <p>Fixed Loop EM (FLEM): Configuration: Fixed Loop; 7 separate transmitter loops utilised which were located either side of the geology of interest. Loop Sizes: 400m x 600m Line Separation: 200m Station Spacing: 100m Line orientation: 090° Receiver/Sensor: EMIT SMARTem24 with EMIT SMART 3-component fluxgate Current/Frequency: 70A, 1.0 Hz</p> <p>The geophysical techniques used are deemed appropriate for the style of exploration and mineralisation.</p>
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or	Further work is planned as stated in this announcement.

Criteria	JORC Code explanation	Commentary
	<p>depth extensions or large-scale step-out drilling).</p> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</p>	