

24 OCTOBER 2022

# HIGH GRADE NICKEL AND COPPER ON NEW ANDOVER TENEMENTS

**Up to 3.75% Nickel & 25.4% Copper plus highly anomalous Palladium**

## HIGHLIGHTS

- **Outcropping gossans on new Andover tenements contain high grade nickel and copper plus highly anomalous palladium**
- **Discovery is first evidence of significant Platinum Group Elements (PGEs) at Andover**
- **All seven samples collected during first reconnaissance visit returned significant assay results:**

<b>Sample Number</b>	<b>Nickel (%)</b>	<b>Copper (%)</b>	<b>Palladium (ppb)</b>
<b>ANDLG167</b>	<b>1.44</b>	<b>12.9</b>	<b>60</b>
<b>ANDLG168</b>	<b>0.38</b>	<b>1.60</b>	<b>20</b>
<b>ANDLG169</b>	<b>3.75</b>	<b>25.4</b>	<b>120</b>
<b>ANDLG170</b>	<b>0.37</b>	<b>1.71</b>	<b>210</b>
<b>ANDLG171</b>	<b>1.73</b>	<b>3.43</b>	<b>40</b>
<b>ANDLG172</b>	<b>0.19</b>	<b>0.12</b>	<b>20</b>
<b>ANDLG173</b>	<b>1.01</b>	<b>3.79</b>	<b>180</b>

- **Strong bedrock-hosted electromagnetic (EM) conductors also present, indicating potential for massive nickel and copper sulphide deposits**
- **Nickel-focused team is continuing surface exploration on the new ground while drilling is ongoing at the Seaview and Pipeline Ni-Cu-Co prospects**
- **Lithium-focused team is exploring the swarm of lithium-rich pegmatites and old mine workings throughout the Andover area**

Azure Minerals Limited (ASX: AZS) ("Azure" or "the Company") is pleased to announce that the first field reconnaissance to the new Exploration Licence Applications ("ELAs") (E47/4700 and E47/4701) has identified outcropping nickel-rich and copper-rich gossans.

These new ELAs (ASX: 6 October 2022) added an additional 38.4km<sup>2</sup> to the Andover Joint Venture (Azure 60% / Creasy Group 40%), which is located near the town of Roebourne in the West Pilbara region of Western Australia.

Commenting on this latest discovery, Azure's Managing Director, Mr. Tony Rovira said: "Our regional exploration program on Andover continues to deliver outstanding outcomes. The first visit to one of our new tenements to assess the potential for nickel-copper sulphides and pegmatite-hosted lithium mineralisation was no exception, with field geologists observing outcropping gossans that visually contained significant quantities of copper mineralisation. This was supported with high copper and nickel readings by handheld portable (pXRF) and later confirmed by laboratory analysis.

*“It is also pleasing that we have, for the first time, identified significant grades of PGE’s at Andover, in particular the high value metal palladium. Obviously, this is an exciting start to our exploration in the new area and work is continuing.”*

### EXPLORATION DETAILS

Azure’s geologists have carried out field visits to the new tenements recently added to the Andover Joint Venture. The purpose of this reconnaissance surface exploration was to explore for outcropping nickel and copper sulphide mineralisation within the north-eastern extension of the nickel-rich Southern Mineralised Corridor (see **Figure 2**) and also assess the numerous pegmatites present in this area for their lithium potential.

In the north-western part of E47/4700, outcropping gossans and loose gossan float was identified. Visually, these gossans were observed to contain significant quantities of copper minerals such as malachite and azurite (see **Figure 1**). These observations were supported by high readings of copper from the pXRF that also returned strongly anomalous levels of nickel.



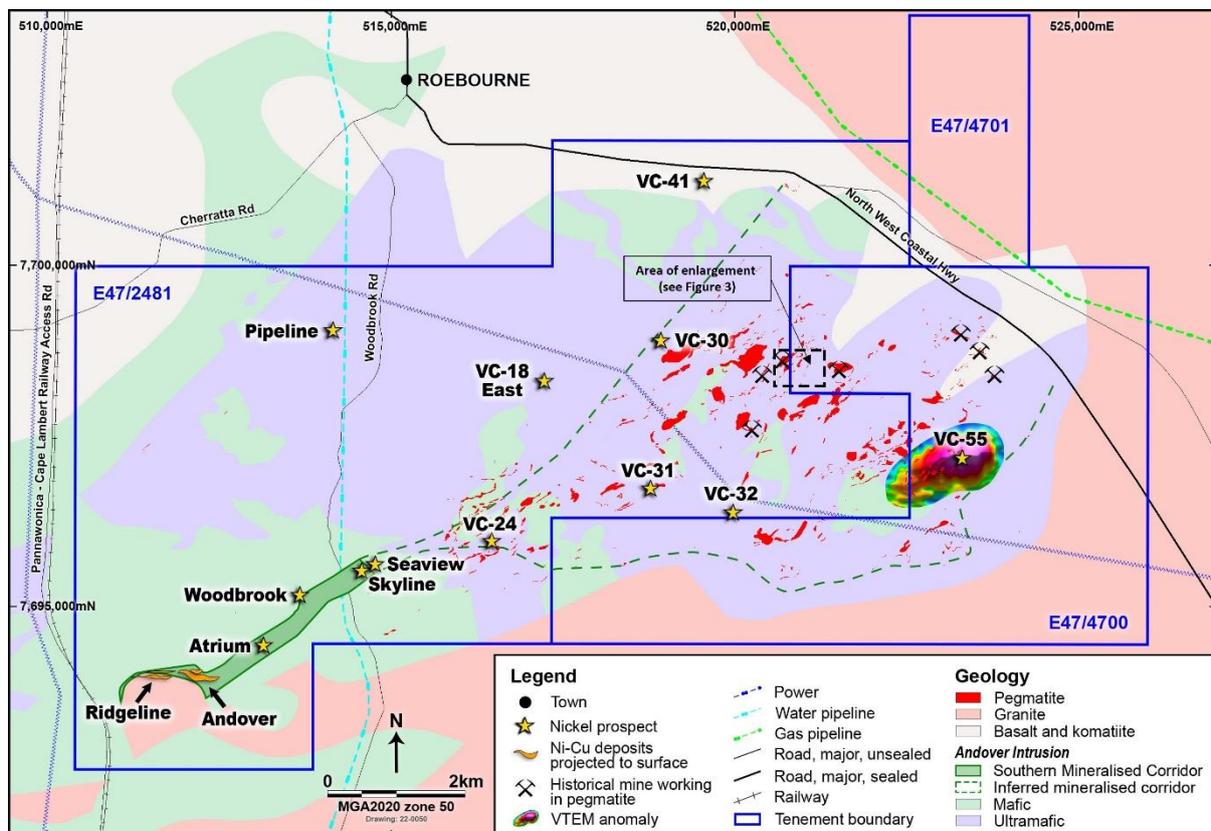
**Figure 1: Close-up of strongly mineralised outcropping gossans on E47/4700**

Seven samples of gossanous material were collected during the visit (see **Figure 3**) and submitted for analysis, with results confirming the presence of high grades of copper (up to 25.4% Cu and 12.9% Cu) and nickel (up to 3.75% Ni and 1.73% Ni) (see Table 1). These assays validated the visual observations and pXRF readings, confirming the potential of the newly acquired tenements to host nickel and copper sulphide mineralisation.

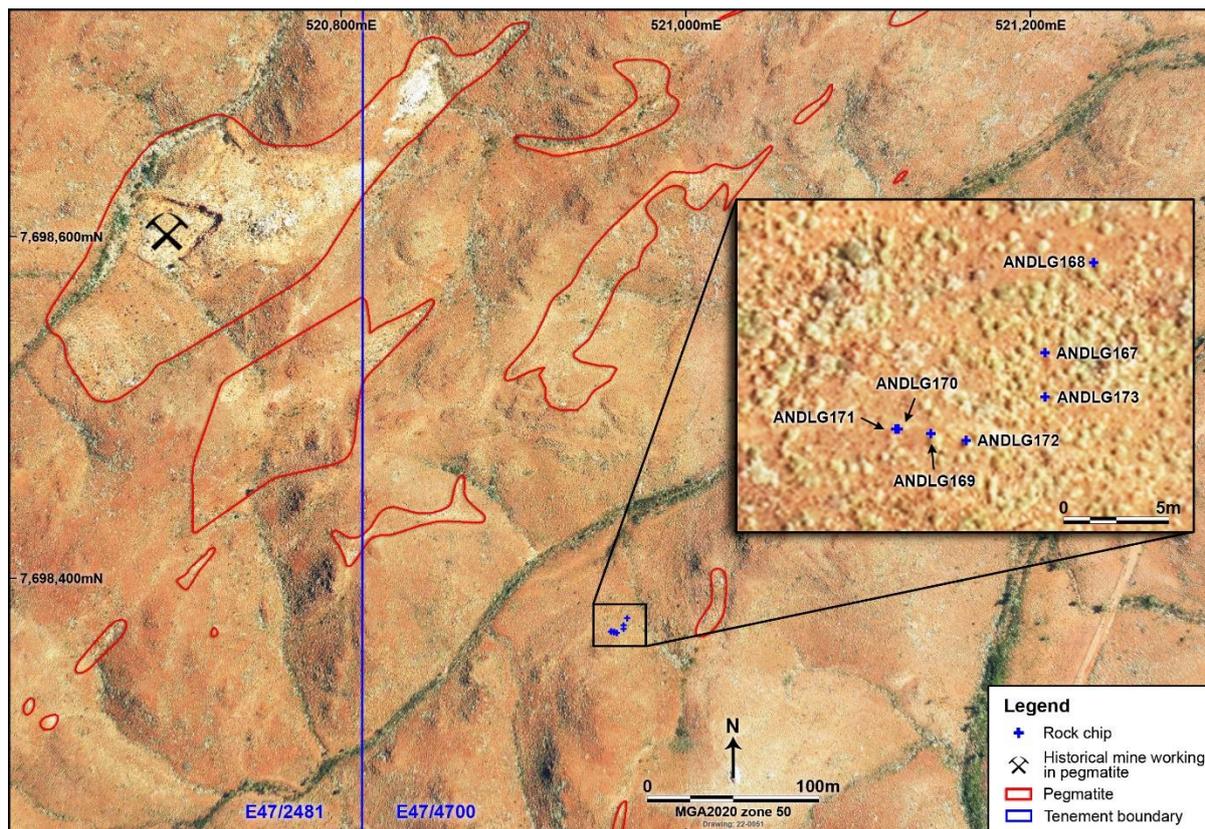
Encouragingly, laboratory analysis also confirmed that all samples contained anomalous values of palladium up to 210ppb (0.21g/t) Pd and 180ppb (0.18g/t) Pd, with two samples returning anomalous platinum up to 100ppb (0.1g/t) Pt as well, suggesting that this part of the Andover Intrusive Complex may be prospective for PGEs in association with nickel and copper sulphide mineralisation.

**Table 1: Gossan assay results from reconnaissance sampling on E47/4700**

Sample Number	East	North	RL (mASL)	Ni	Cu	Co	Pt	Pd	Ag
				%	%	%	ppb	ppb	ppm
ANDLG167	520963	7698371	38	1.44	12.9	0.081	<10	60	57.9
ANDLG168	520965	7698375	17	0.38	1.60	0.047	100	20	10.7
ANDLG169	520958	7698367	19	3.75	25.4	0.217	10	120	38.0
ANDLG170	520955	7698367	17	0.38	1.71	0.020	<10	210	1.8
ANDLG171	520956	7698367	20	1.73	3.43	0.119	<10	40	3.8
ANDLG172	520959	7698367	20	0.19	0.12	0.034	60	20	0.3
ANDLG173	520963	7698369	38	1.01	3.79	0.061	<10	180	1.6



**Figure 2: Andover Project – location of gossan sampling**



**Figure 3: Andover Project – enlargement of gossan sample locations**

**-ENDS-**

For enquiries, please contact:

**Tony Rovira**  
Managing Director  
Azure Minerals Limited  
Ph: +61 8 6187 7500

**Media & Investor Relations**  
Michael Weir / Cameron Gilenko  
Citadel-MAGNUS  
Ph: +61 8 6160 4903

or visit [www.azureminerals.com.au](http://www.azureminerals.com.au)

#### **COMPETENT PERSON STATEMENT**

Information in this report that relates to Exploration Results for the Andover Project is based on information compiled by Mr Tony Rovira, who is a Member of The Australasian Institute of Mining and Metallurgy, and fairly represents this information. Mr Rovira has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Rovira is a full-time employee of Azure Minerals Limited and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Information in this report that relates to previously reported Exploration Results has been cross-referenced in this report to the date that it was reported to ASX. Azure Minerals Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcements.

## JORC Code, 2012 Edition – Table 1

<b>Section 1: Sampling Techniques and Data</b>		
<b>Criteria</b>	<b>JORC Code Explanation</b>	<b>Commentary</b>
<b>Sampling techniques</b>	<p><i>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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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.</i></p>	<p>Samples reported in this release are surface rock chips collected from various gossans across the project area and are representative of the outcrop they were collected from. The rock samples collected were between 0.5kg and 3kg in weight.</p>
<b>Drilling Techniques</b>	<p><i>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).</i></p>	<p>Not applicable.</p>
<b>Drill Sample Recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	<p>Not applicable.</p>
<b>Logging</b>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource</i></p>	<p>Rock chips were collected as part of a detailed surface geological mapping program. Qualitative field logging of the rocks is completed in the field including assessment</p>

	<p>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>of weathering, lithology, alteration, veining, mineralisation and mineralogy.</p>
<p><b>Sub-sampling techniques and sample preparation</b></p>	<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>	<p>Field geologists selected appropriate sized samples that best represented the outcropping gossan.</p> <p>No field sub-sampling techniques were employed.</p> <p>Sample preparation following standard industry practice was undertaken at Bureau Veritas Minerals, Canning Vale laboratory, where the samples received were sorted and dried.</p> <p>All rock chips were initially crushed and then pulverize using a vibrating disc pulveriser to produce a homogenous, representative sample. Samples were placed in a barcoded packet for further analysis.</p> <p>The barcoded packet is scanned when weighing samples for their respective analysis. Internal screen QAQC is done at 90% passing 75um.</p>
<p><b>Quality of assay data and laboratory tests</b></p>	<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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</p>	<p>All rock samples were analysed by methods:</p> <ul style="list-style-type: none"> <li>• XRF202 – XRF fusion with pre-oxidation using 66:34 flux containing 10% LiNO<sub>3</sub> added, and</li> <li>• LA101 – fused bead laser ablation ICPMS</li> <li>• FA0002 – lead collection fire assay/ICP-AES for Au, Pd and Pt</li> </ul> <p>These techniques are considered a total digest for all relevant minerals</p>
<p><b>Verification of sampling and assaying</b></p>	<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>	<p>Primary data was collected by employees of the Company at the Project site. All measurements and observations were recorded digitally and entered into the Company's database. Data verification and validation is checked upon entry into the database.</p> <p>No adjustments or calibrations have been made to any assay data.</p>

<b>Location of data points</b>	<p><i>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>Sample locations are determined by handheld GPS with and accuracy of approximately 5m.</p> <p>The grid system used is MGA2020 zone 50.</p>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p> <p><i>Whether sample compositing has been applied</i></p>	<p>Sample spacing has been determined solely by geological mapping and no grade continuity is implied.</p> <p>No sample compositing has been applied.</p>
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	<p>No known sampling bias has been introduced.</p>
<b>Sample security</b>	<p><i>The measures taken to ensure sample security</i></p>	<p>Samples were placed in calico bags which were placed in a poly weave bag and cabled tied closed at the top. Poly weave bags were placed inside a large bulka bag prior to transport.</p> <p>Bulka bags were transported from the Company's Roebourne core shed to the Bureau Veritas Minerals laboratory in Perth by a freight contractor.</p>
<b>Audits or reviews</b>	<p><i>The results of any audits or reviews of sampling techniques and data.</i></p>	<p>No audits or reviews have been conducted in relation to surface rock sampling.</p>

<b>Section 2: Reporting of Exploration Results</b>		
<b>Criteria</b>	<b>JORC Code Explanation</b>	<b>Commentary</b>
<b>Mineral tenement and land tenure status</b>	<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>Exploration Licences E47/2481, E47/4700 &amp; E47/4701 are a Joint Venture between Azure Minerals Ltd (60%) and Croydon Gold Pty Ltd (40%), a private subsidiary of the Creasy Group.</p> <p>The tenement is centred 35km southeast of the major mining/service town of Karratha in northern WA. The tenement area is approximately 15.6km x 7.5km in size with its the northern boundary located 2km south of the town of Roebourne.</p> <p>Approximately 20% of the tenement area is subject to either pre-existing infrastructure, Class "C" Reserves and registered Heritage sites.</p> <p>The tenements are kept in good standing with all regulatory and heritage approvals having been met. There are no known impediments to operate in the area.</p>
<b>Exploration done by other parties</b>	<p>Acknowledgment and appraisal of exploration by other parties.</p>	<p>Limited historical drilling has been completed within the Andover Complex. The following phases of drilling works with results have been undertaken:</p> <p>1986-1987: Greater Pacific Investment; 6 core holes. Intersected elevated values of nickel (up to 1.0% Ni) and copper (up to 0.41% Cu). No PGEs were detected.</p> <p>1996-1997: Dragon Mining; Stream sediment sampling, 5 RC holes in the NE at Mt Hall Ni-Cu target. Zones of noted sulphides (in sediments &amp; gabbro) were selectively sampled with no anomalous results. Rare intervals of ultramafics were sampled.</p> <p>1997-1998: BHP Minerals; 2 RC/DD holes were drilled within the Andover project area. Both holes intersected strongly magnetic serpentinite containing elevated values of nickel (up to 0.29% Ni), copper (up to 0.26% Cu) and cobalt (up to 332ppm Co) but no anomalous PGE's.</p> <p>2012-2018: Croydon Gold; VTEM Survey, soil and rock chip sampling, 7 RC holes tested 4 geophysical / geological targets. Significant Ni-Cu-Co sulphide mineralisation was intersected in two locations.</p>
<b>Geology</b>	<p>Deposit type, geological setting and style of mineralisation.</p>	<p>The Andover Complex is an Archean-age mafic-ultramafic intrusive complex covering an area of approximately 200km<sup>2</sup> that intruded the West Pilbara Craton.</p> <p>The Andover Complex comprises a lower ultramafic zone 1.3 km thick and an overlying 0.8 km gabbroic layer intruded by dolerites.</p> <p>Ni-Cu-Co sulphide mineralisation occurs at lithological boundaries, either between different types of gabbro's, or between mafics and ultramafics.</p> <p>The current interpretation of the mineralized sulphides suggests a magmatic origin heavily overprinted by one or several hydrothermal events.</p>

<p><b>Drill hole information</b></p>	<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> <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> <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>	<p>Refer to tables in the report and notes attached thereto which provide all relevant details.</p>
<p><b>Data aggregation methods</b></p>	<p>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.</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>	<p>No data aggregation techniques have been applied.</p>
<p><b>Relationship between mineralisation widths and intercept lengths</b></p>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <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 (eg ‘down hole length, true width not known’).</p>	<p>Not applicable.</p>
<p><b>Diagrams</b></p>	<p>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</p>	<p>Refer to figures in the body of the text.</p>

	<i>plan view of drill hole collar locations and appropriate sectional views.</i>	
<b>Balanced reporting</b>	<i>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.</i>	The Company believes that the ASX announcement is a balanced report with all material results reported.
<b>Other substantive exploration data</b>	<i>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.</i>	Everything meaningful and material is disclosed in the body of the report. Geological observations have been factored into the report.
<b>Further work</b>	<i>The nature and scale of planned further work (eg tests for lateral 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.</i>	Further mapping and sampling of the Andover Complex will continue, with fixed loop EM surveying and drill testing following up areas of significant Ni-Cu-Co interest.