



## Middle Island RESOURCES LIMITED

**Middle Island Resources Ltd**

ACN 142 361 608

ASX code : MDI

[www.middleisland.com.au](http://www.middleisland.com.au)

### Capital Structure:

122,418,222 ordinary shares

20,307,314 unlisted options

(exercisable at \$0.1771 to \$0.1817  
expiring 31 January 2022)

### Cash & Investments

\$1.7 million (as of 20 December 2021)

No debt

### Directors & Management:

**Peter Thomas**

Non-Executive Chairman

**Brad Marwood**

Executive Director

**Bruce Stewart**

Non-Executive Director

**Rudolf Tieleman**

Company Secretary

### Contact:

Brad Marwood

Office: +61(8) 9322 1430

[brad@middleisland.com.au](mailto:brad@middleisland.com.au)

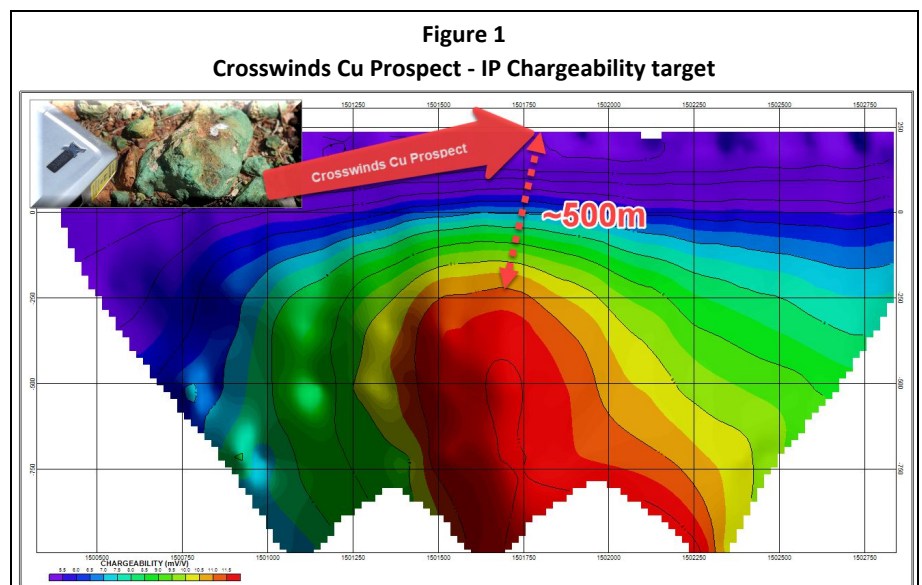


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## IP Survey defines highly prospective drill target

- A 2.65km Induced Polarisation (IP) line has been completed over the Crosswinds Copper Prospect in the Barkly Super Project, Northern Territory.
- The Crosswinds Copper Prospect (ASX release – 23 December 2020) represents the first discovery of copper in the region with 130m @ 0.75% Cu defined in a Table drain cutting.
- The surface copper mineralisation was and is interpreted to reflect the secondary migration of copper along growth faults that extend from primary mineralisation within the Proterozoic basement rocks, through the otherwise barren, younger Georgina Basin cover.
- The IP line is interpreted to delineate a chargeable target starting at ~500m depth presenting an exciting drill target for massive and disseminated sulphides reflecting IOCG “Olympic Dam” type copper gold deposits.
- Additional IP lines are planned in early 2022 to enable 3D targeting for drilling.
- On completion of the Aurumin transaction, more than \$12m in cash and liquids will be available to fund aggressive exploration at Barkly.





**Crosswinds Copper Prospect**

The Crosswinds copper prospect is located immediately adjacent to the sealed Barkly Highway, approximately 13km southeast of Barkly Homestead, within EL32297 (ASX release – 23 December 2020).

The surface mineralisation comprises malachite (copper carbonate) exposed in a table-drain adjacent to the Barkly Highway (Figure 2).

**Figure 2**

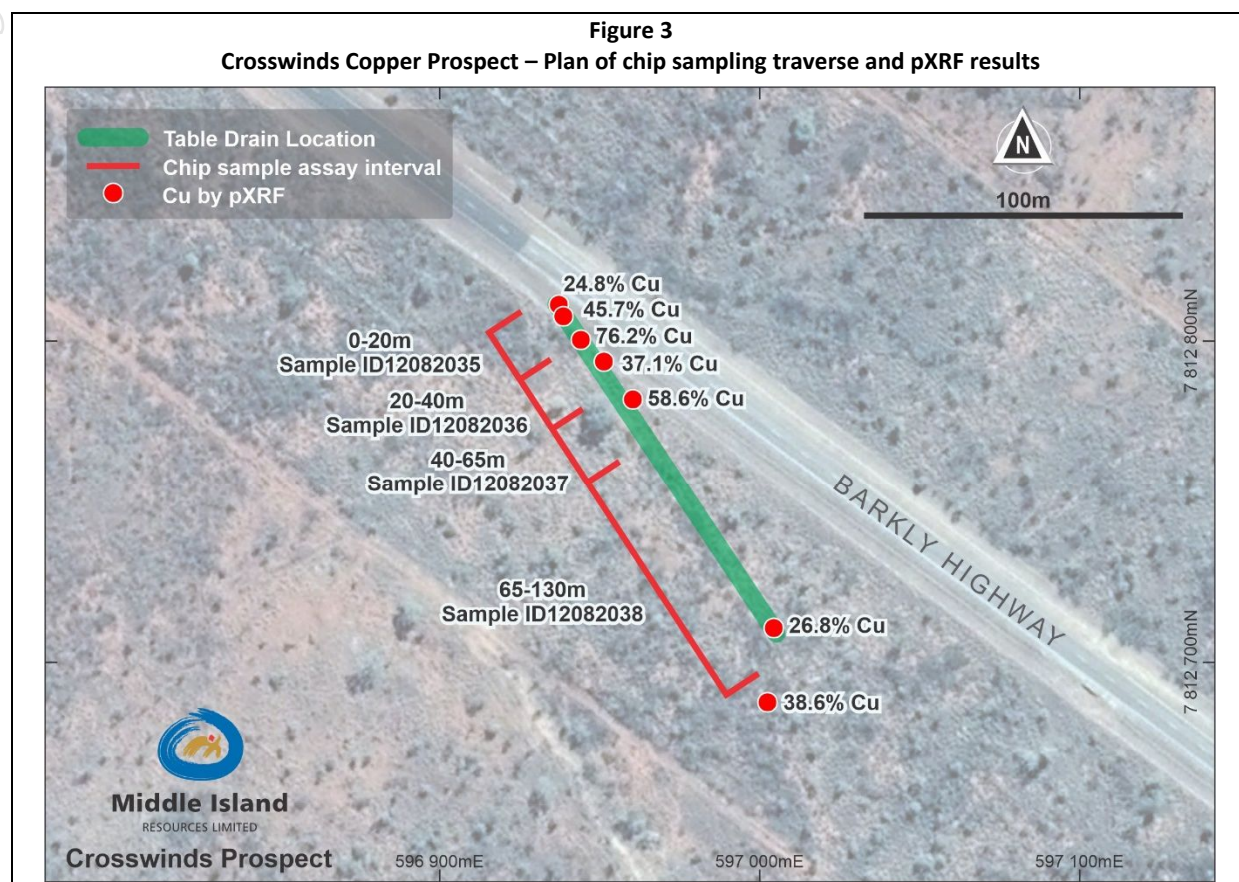
**Crosswinds Copper Prospect - Malachite (copper carbonate) mineralisation exposed in table drain**







Mineralisation is exposed over an interval of 130m along a table drain, as shown in Figure 3 below.

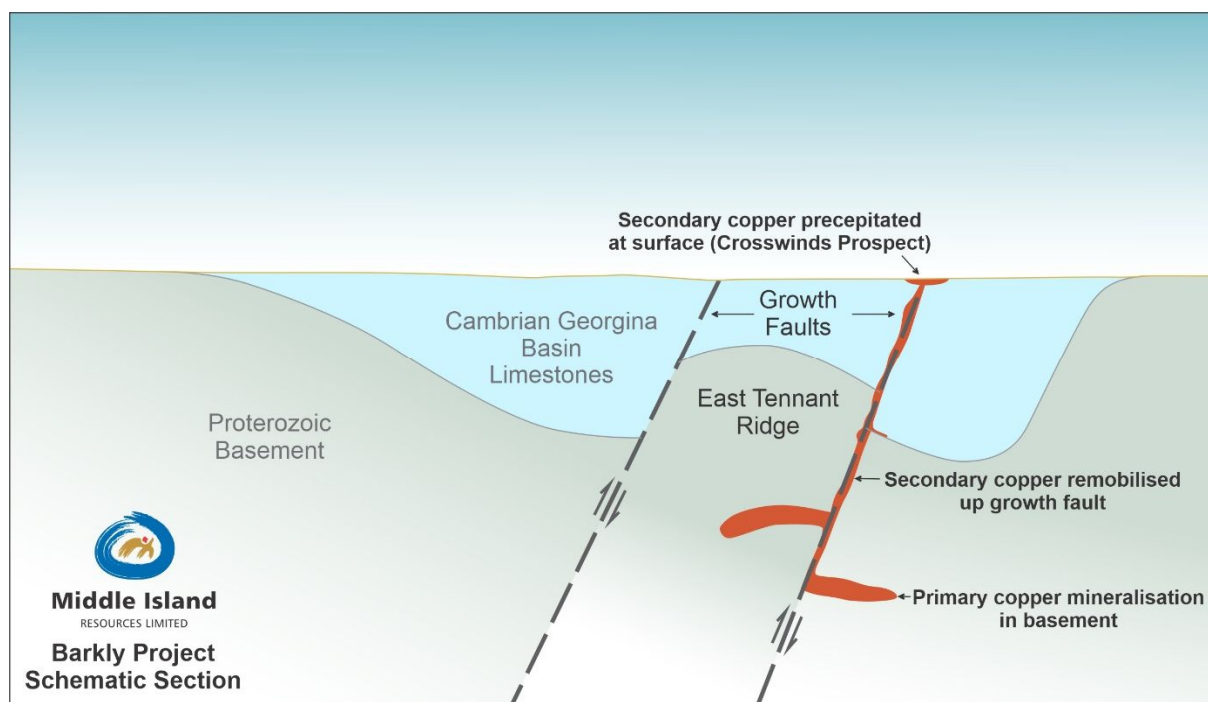


#### **Mineralised Setting & Interpretation**

The Crosswinds prospect is interpreted to represent secondary copper mineralisation that has migrated up growth faults that extend from primary copper-gold mineralisation within the Proterozoic basement rocks, through the otherwise unmineralised Cambrian Georgina Basin sediments to precipitate at surface, as shown diagrammatically in Figure 4.



**Figure 4**  
**Crosswinds Copper Prospect – Diagrammatic cross-section of interpreted setting**

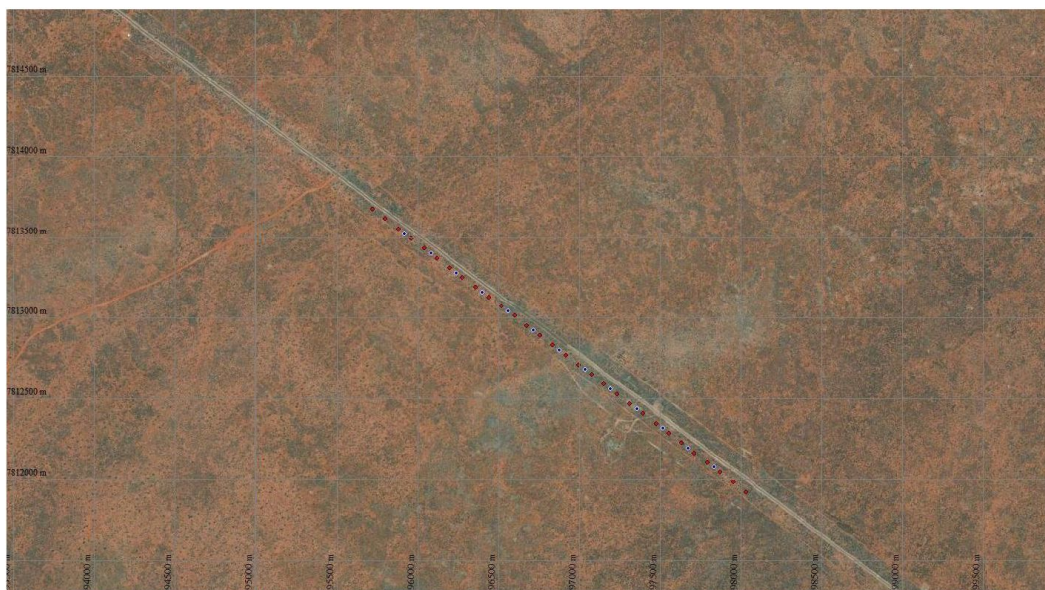


### **IP Survey Results**

Planetary Geophysics Pty Ltd. ([www.planetarygeophysics.com](http://www.planetarygeophysics.com)), completed one single 2.65km long 2D Induced Polarization (IP) /Resistivity line over a period of 3 days in December 2021.

Rx Dipole Spacing was 200m apart with Tx Injection Spacing 100m apart. The location is shown in Figure 5.

**Figure 5**  
**Crosswinds Copper Prospect - IP/Resistivity line 400000E completed (GDA94, Zone 53)**







A photo of the IP equipment used by Planetary Geophysics and Crosswinds Prospect terrain is shown in Figure 6

**Figure 6**  
**Crosswinds Copper Prospect - IP/Resistivity line – Collection Photo**



Figure 7 shows the gridded chargeability results with a significant chargeable target defined approximately 500m below surface. The top of the Georgina basin is interpreted to be ~250m depth from a MinexCRC hole drilled in 2020 and around 800m from the Crosswinds Prospect.

The materials that are most chargeable and likely to explain the anomaly include sulphide minerals (both massive and disseminated), clay-rich materials, and graphite.

**Figure 7**  
**Crosswinds Copper Prospect - IP Chargeability**

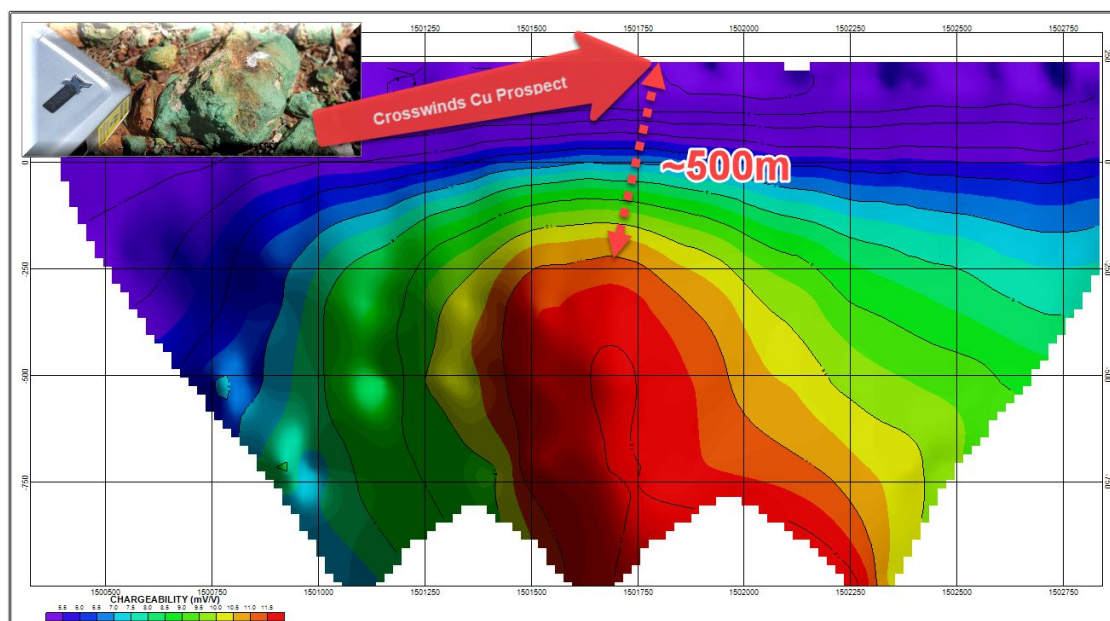
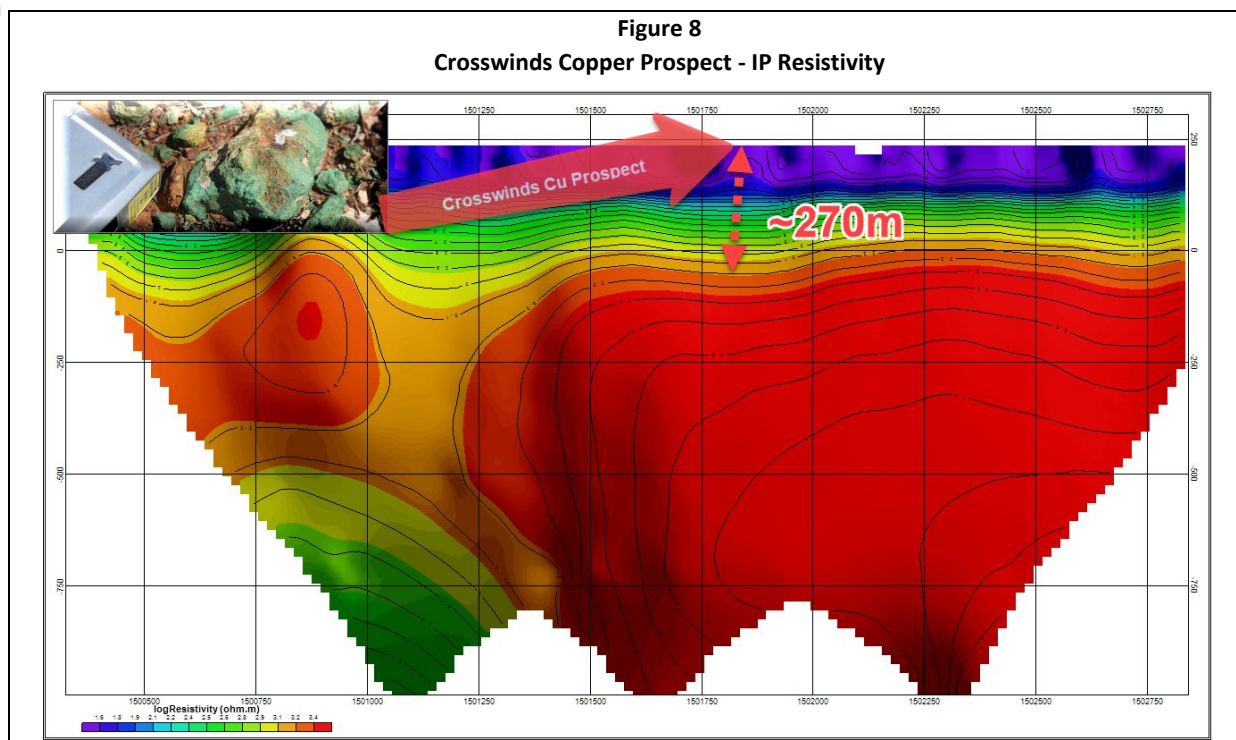




Figure 8 shows the Resistivity results with a significant resistive target defined approximately 270m below surface.



From a MinexCRC hole drilled in 2020 located ~800m from the Crosswinds Prospect, the Georgina basin cover is interpreted to be ~250m thick. The IP low Resistivity (Blue) suggests <150m of cover at Crosswinds. The thinning Georgina basin cover as you move from the MinexCRC hole to the Crosswinds Prospect is good news as the depth of dead head drilling is less than half anticipated based on the MinexCRC hole.

Comments from the Executive – Brad Marwood

*The early-stage IP results are very encouraging for this very exciting new region. The anomalies defined are coincident with the geological model defined by MDI. Additional IP lines will be undertaken north and south of Crosswinds in early 2022 to allow 3D modelling and allow targeted drilling to be completed. MDI has identified a preferred drilling contractor and proposals are in place to commence drilling in May 2022.*

**RELEASE AUTHORISED BY THE MDI BOARD:**

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#### Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of Middle Island, industry growth or other trend projections are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.

#### Competent Person Statement

The reported Exploration Results were compiled by Beau Nicholls, a Member of the Australian Institute of Geoscientists. Mr. Nicholls has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Nicholls is a principal Consultant with Sahara Natural Resources (Sahara), and the Competent Person is independent of the Company and other than being paid fees for services in compiling this report, neither has any financial interest (direct or contingent) in MDI.

## Appendix 1

The following Table is provided in compliance with the JORC Code

### 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 1m 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>• Not applicable</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>• Not applicable</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>• Not applicable</li></ul>



Criteria	JORC Code explanation	Commentary
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>Not applicable</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 cores 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> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</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>Not applicable</li> <li>Details on IP survey are provided below</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>Not applicable</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</li> </ul>	<ul style="list-style-type: none"> <li>Lines were gridded by Planetary Geophysics using a Garmin Map 64s series GPS (<a href="http://www.garmin.com">www.garmin.com</a>).</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>Resource estimation.</i> <ul style="list-style-type: none"> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>Waypoints were recorded at every station using the UTM coordinate system in GDA 94 zone 53 South datum.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><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></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li><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></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<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>Tenure covered by MDI release. MDI has 100% interest in tenure.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>This area has no record of prior exploration.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Iron Oxide Copper Gold (IOCG) is the style of mineralisation being explored.</li> </ul>
<b>Drill hole Information</b>	<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>Not applicable</li> </ul>
<b>Data aggregation methods</b>	<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>Not applicable</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Relationship between mineralisation widths and intercept lengths</b>	<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 nature should be reported.</li> <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>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>
<b>Diagrams</b>	<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>See table, map, photos and diagrams within the release.</li> </ul>
<b>Balanced reporting</b>	<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>	
<b>Other substantive exploration data</b>	<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>	<p><u>IP Survey</u></p> <ul style="list-style-type: none"> <li>All IP/Resistivity data was acquired with V-Full Waver IP/Resistivity Receivers in a distributed Pole-dipole array and with the I-Full Waver Current Recorder. All distributed Full Waver receivers and the current recorder are manufactured by Iris Instruments of Orleans, France (<a href="http://www.iris-instruments.com">www.iris-instruments.com</a>).</li> <li>Current Injection was via one GDD TX4 5000W/20A transmitter. TX4 Transmitters are manufactured by GDD instrumentation of Quebec Canada (<a href="http://www.gddinstrumentation.com">www.gddinstrumentation.com</a>).</li> </ul> <p><u>IRIS V-FULLWAVER RECEIVER</u></p> <ul style="list-style-type: none"> <li>Channels: 2</li> <li>Input voltage: Max. input voltage: 15 V, Protection: up to 1000V</li> <li>Voltage measurement: Accuracy: 0.2 %, typical Resolution: 1 µV, Minimum value: 1 µV</li> <li>Input impedance: 100 MΩ</li> <li>Signal waveform: All IP measurements were made in the time-domain using a two second half-duty cycle (2s ON/2s OFF). An integration window of 0.5 to 1.1 seconds has been used for the final chargeability calculation.</li> <li>GPS input for coordinates and synchronisation</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Computation of apparent resistivity, average chargeability and standard deviation</li> <li>• Noise reduction: read duration manually selected in relation to apparent injection point current (mA) and power line rejection, SP linear drift correction.</li> </ul> <p><u>IRIS I FULLWAVE Current Recorder</u></p> <ul style="list-style-type: none"> <li>• Input current: +/- 25000mA (optional 6, 15 or 50A)</li> <li>• Resolution / Accuracy: 0.1mA / 0.1%</li> <li>• GPS: GPS input for coordinates and time synchronisation. Time stamps record within an absolute accuracy of 250us.</li> <li>• Readings: current value</li> <li>• Typically, three (3x), 300 second (~75x cycle stacks) reads at each injection point.</li> </ul> <p><u>GDD TX4 TRANSMITTER SPECIFICATIONS</u></p> <ul style="list-style-type: none"> <li>• Input voltage: Standard 240V 50hz</li> <li>• Output Voltage Range: 150V to 2400V</li> <li>• Output Current: 0.030A to 20A</li> </ul> <p>Transmission Cycle: ON+, OFF, ON-, OFF</p> <p><u>IP/RESISITIVITY DATA ACQUISITION</u></p> <ul style="list-style-type: none"> <li>• One (1) Pole-dipole array IP/Resistivity line was read at the Crosswinds prospect (EL32297) in the Barkly Tablelands. Line parameters are outlined in Table 1 and displayed in Figure 3.</li> <li>• Rx Line spacing: Single</li> <li>• Rx Dipole spacing: 200m</li> <li>• Tx Injection spacing: 100m</li> <li>• Remote Electrode: 593628mE, 7812868mN</li> <li>• Minimum Current (mA): 2423.461</li> <li>• Maximum Current (mA): 4285.421</li> <li>• Minimum Primary Vp (mV): 3.771</li> <li>• Maximum Primary Vp (mV): 1206.177</li> </ul> <p>All line vertices are detailed in Table 1,</p>

Criteria	JORC Code explanation	Commentary																		
		<table><tr><th>Line</th><th>Local Start</th><th>Local finish</th><th>Start GDA 94</th><th>Finish GDA 94</th><th>Length</th></tr><tr><td>400000E</td><td>400000mE, 1500400mN</td><td>400000mE, 1503050Mn</td><td>595888mE, 7813590mN</td><td>598011mE, 7812007mN</td><td>2.65km</td></tr><tr><td colspan="5">Total</td><td>2.65km</td></tr></table>	Line	Local Start	Local finish	Start GDA 94	Finish GDA 94	Length	400000E	400000mE, 1500400mN	400000mE, 1503050Mn	595888mE, 7813590mN	598011mE, 7812007mN	2.65km	Total					2.65km
Line	Local Start	Local finish	Start GDA 94	Finish GDA 94	Length															
400000E	400000mE, 1500400mN	400000mE, 1503050Mn	595888mE, 7813590mN	598011mE, 7812007mN	2.65km															
Total					2.65km															
<b>Further work</b>	<ul style="list-style-type: none"><li><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></li><li><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></li></ul>	<ul style="list-style-type: none"><li>3D IP survey will be undertaken to allow drill targeting in 3D.</li></ul>																		