Middle Island Resources Limited
ACN 142 361 608
Suite 1, 2 Richardson Street
West Perth WA 6005
PO Box 1017
West Perth WA 6872
Tel +61 (08) 9322 1430
Fax +61 (08) 9322 1474
info@middleisland.com.au
www.middleisland.com.au

Middle Island
RESOURCES LIMITED

Middle Island Resources Ltd

ACN 142 361 608

ASX code: MDI

www.middleisland.com.au

Capital Structure:

121 million ordinary shares

23 million unlisted options

Cash & Investments

$7.55 million (as of 30 Sept 2020)

No debt

Directors & Management:

Peter Thomas

Non-Executive Chairman

Rick Yeates

Managing Director

Beau Nicholls

Non-Executive Director

Brad Marwood

Non-Executive Director

Dennis Wilkins

Company Secretary

Contact:

Rick Yeates

Mob: +61(0)401 694 313

rick@middleisland.com.au

ASX Release – 23 December 2020

Breakthrough maiden copper discovery provides early encouragement for Barkly IOCG potential

- **Significant surface copper oxide mineralisation has been identified at the new Crosswinds prospect** within EL32297, comprising part of Middle Island's 100%-owned, 3,253km^2 Barkly copper-gold super-project in the Northern Territory (NT).
- **Maiden exploration result for Perth-based Middle Island's move into NT's exploration upside.**
- **Spot pXRF readings between 24.8% and 76.2% Cu** recorded at the Crosswinds prospect, validated by **composite chip sampling assays of 130m at 0.76% Cu.**
- Mineralisation occurs as malachite (copper carbonate) interbedded with calcrete and silcrete, representing the surface expression of limestones comprising the Georgina Basin.
- The surface copper mineralisation 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.

Comments by Managing Director, Mr Rick Yeates:

"Even disregarding the high grade copper results, the Crosswinds discovery is particularly significant in that it's interpreted to provide 'proof of concept' for the Barkly mineralised model.

"Crosswinds is an extremely exciting discovery. While there is little doubt that more such surface occurrences will be identified by on-going exploration, the focus is the potential for significant primary copper deposits within the basement."

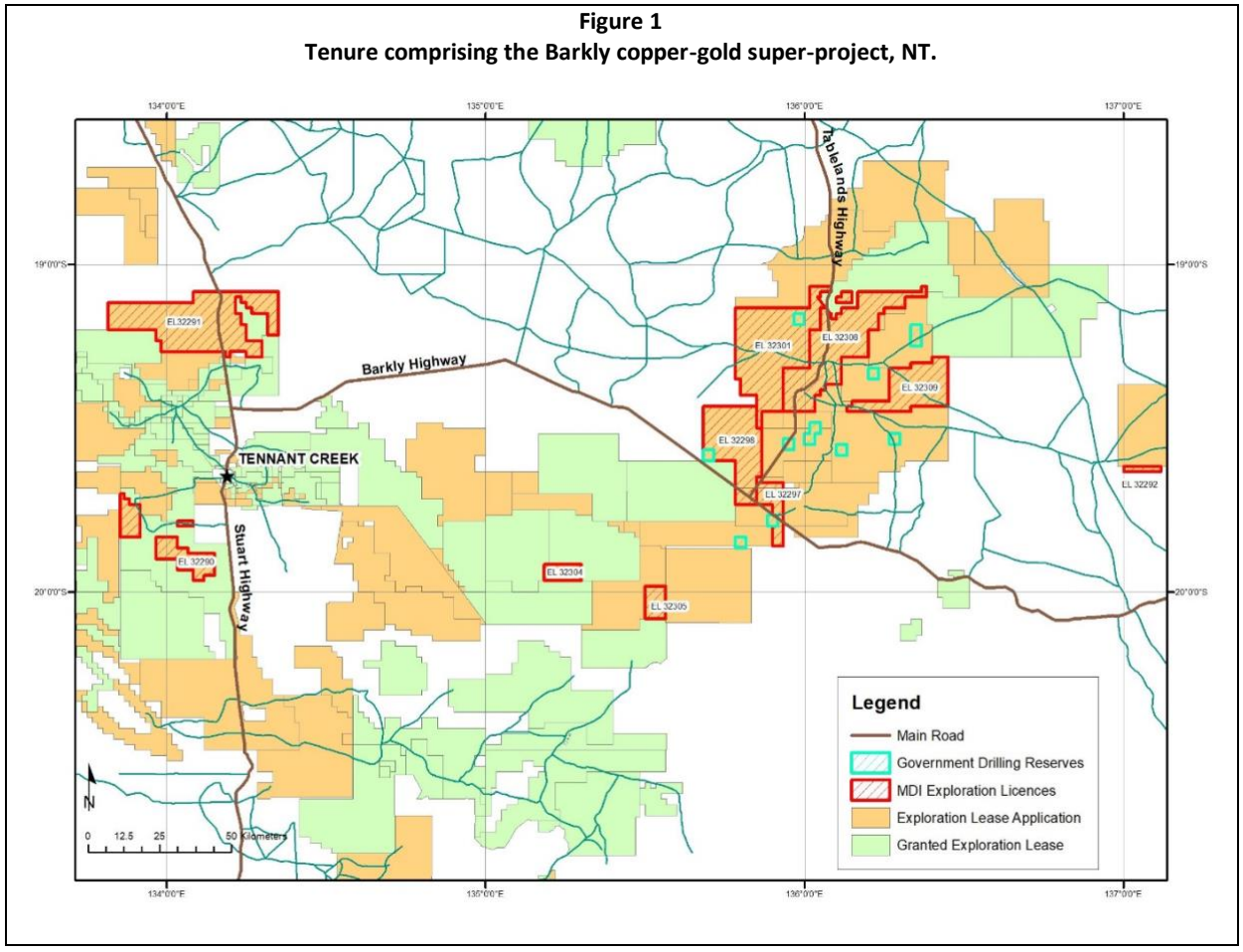
BARKLY COPPER-GOLD SUPER-PROJECT (NT)

WA and Northern Territory explorer and near-term gold developer, Middle Island Resources Limited (**Middle Island**, **MDI** or **the Company**) is pleased to announce a significant surface copper discovery within EL32297 at its 100%-owned Barkly copper-gold project in the Northern Territory (NT).

The discovery, named the 'Crosswinds prospect', follows a reconnaissance site visit to better understand the physiography and logistic considerations in advance of a planned 2021 'dry season' (April-October) exploration campaign.

The Company's 100%-owned Barkly copper-gold project is shown in Figure 1 below.

Figure 1
Tenure comprising the Barkly copper-gold super-project, NT.



Crosswinds Copper Prospect

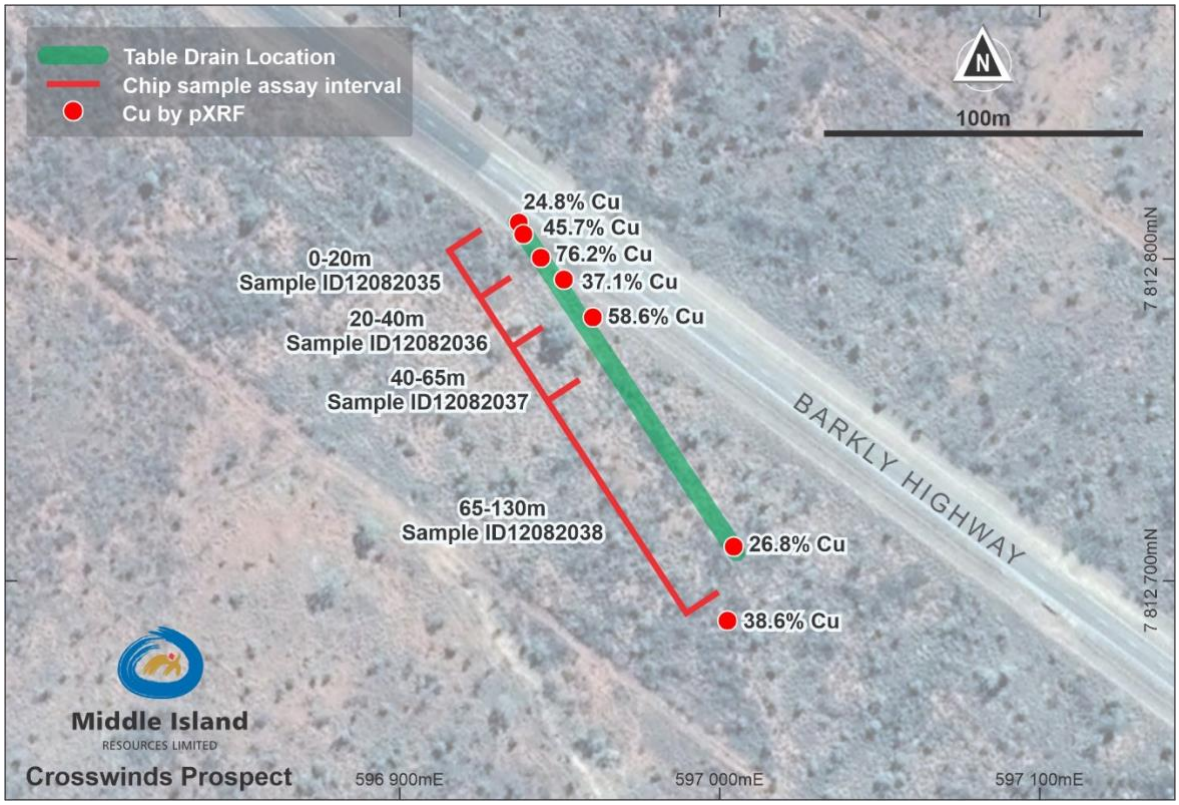
The newly discovered Crosswinds copper prospect is located immediately adjacent to the sealed Barkly Highway, approximately 13km southeast of Barkly Homestead, within EL32297, which represents one of 10 exploration licences comprising the 3,253km^2 Barkly copper-gold super-project.

The 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.

Figure 3
Crosswinds Copper Prospect – Plan of chip sampling traverse and pXRF results



The copper mineralisation is intimately associated with ubiquitous secondary calcrete and silcrete development, reflecting surface weathering of limestones comprising the Cambrian-age Georgina Basin.

Spot pXRF readings taken at the time of discovery range from 24.8% to 76.2% Cu, and which are confirmed by subsequent composite chip samples, collected over continuous 20m to 65m intervals, **ranging from 0.63% to 0.93% Cu and aggregating 130m at 0.76% Cu**.

The composite chip sampling results are based on ICP-OES analyses completed by Intertek Laboratories in Perth, following sample preparation in Alice Springs. The results, provided in Table 1 below, are based on 20m to 65m continuous composite chip sample intervals over an aggregate 130m traverse distance. The exploration results have been prepared and reported in accordance with the JORC Code 2012.

Table 1
Crosswinds Copper Prospect - Table Drain Composite Chip Sampling Traverse

Traverse Number	Start North (mN)	Start East (mE)	Start RL (mRL)	Azimuth (degrees)	Sample Number	From (m)	To (m)	*Sample Length (m)	Grade (% Cu)
BKTR-01	7,812,812	596,938	230	150	12082035	0	20	**20**	**0.68**
					12082036	20	40	**20**	**0.93**
					12082037	40	65	**25**	**0.63**
					12082038	65	130	**65**	**0.79**

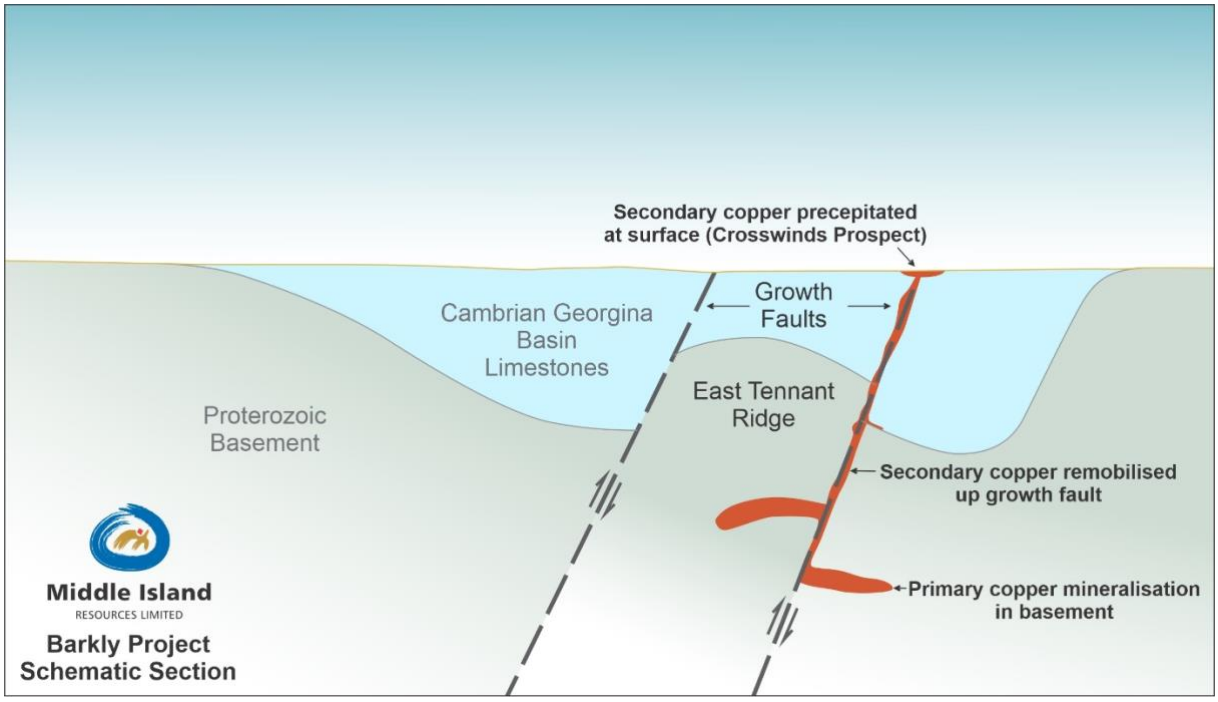
Notes: Grid MGA94_53S. *The chip sample traverse is oriented orthogonally to the general NE strike of stratigraphy and structure (including interpreted growth faults) in the underlying Proterozoic basement, where known, as interpreted from airborne magnetic data. However, beyond this, the true width of the mineralised interval is largely speculative.

Mineralised Setting & Interpretation

The Barkly iron oxide-copper-gold (IOCG) mineralised model is predicated on collaborative, pre-competitive research being undertaken by Geoscience Australia (GA) and the Northern Territory Geological Survey (NTGS) under the $100m, Exploring for the Future (EFTF) initiative. The model is predicated on the identified potential for Tier 1 IOCG deposits (with notable examples elsewhere including Olympic Dam, Oak Dam, Prominent Hill and Carrapateena, all in South Australia) occurring within the Proterozoic basement rocks extending along the East Tennant Ridge, beneath the Georgina Basin, between Tennant Creek in NT and Mt Isa in Queensland.

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 3 below. This interpretation is understood to be broadly consistent with the setting that led to discovery of the Osborne IOCG deposit, southeast of Mt Isa in Queensland.

Figure 3
Crosswinds Copper Prospect – Diagrammatic cross-section of interpreted setting



Exploration Status

Middle Island's 100%-owned Barkly Project comprises 10 Exploration Licences covering an aggregate 3,253km^2 that have been listed for grant, subject to lifting of interstate and intrastate COVID-19 travel restrictions or at the Company's earlier election.

Given the extremely encouraging results returned from the recent reconnaissance site visit, and the lifting of interstate COVID-19 travel restrictions between WA and NT, Middle Island has triggered the formal grant of EL32297, 32298, 32301, 32308 & 32309, representing the initial five Exploration Licences in the immediate vicinity of the Barkly and Tablelands highways.

Once results of the Federal and Northern Territory Government's current 12-hole stratigraphic basement diamond drilling program are released, which are anticipated to provide significant further clarification on the basement IOCG potential of the Barkly project, the Company intends to commence exploration in earnest during the next 'dry season', notionally extending from April to October 2021.

RELEASE AUTHORISED BY:

Rick Yeates – Managing Director +61 (0)401 694 313

MEDIA CONTACT:

Kevin Skinner Field Public Relations +61 (0) 414 822 631

WEBSITE: www.middleisland.com.au

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 Persons' Statement

Information in this release that relates to new Exploration Results from the recently discovered Crosswinds copper prospect within the Barkly Project, NT, is based on, and fairly reflects, information and supporting documentation prepared by Mr Rick Yeates. Mr Yeates is a Member of the Australasian Institute of Mining and Metallurgy and a fulltime employee of Middle Island Resources Limited. Mr Yeates has sufficient experience, which is relevant to the nature of work and style of mineralisation under consideration, 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 Yeates has given his prior written consent to the inclusion in the release of the statements, based on his information, in the form and context in which they appear. Mr Yeates is a shareholder in the Company and entities associated with Mr Yeates hold unlisted options in the capital of the Company as disclosed in Appendix 3Y notices released to ASX.

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	• *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.*	• The spot pXRF results are derived from multiple readings using a Delta Olympus pXRF. The pXRF results are confirmed by random composite chip samples collected by Middle Island Resources over continuous 20 to 65m intervals, aggregating a total distance of 130m. The sampling was carried out by collecting ~2kg of rock chips over each interval, along, and immediately peripheral to, a roadside table drain.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• The samples were potentially biased towards chips with visible copper mineralisation and cannot therefore be considered entirely representative.
	• *Aspects of the determination of mineralisation that are Material to the Public Report.*	• The identified mineralisation is unlikely to be of immediate economic interest, but the demonstration of secondary copper mineralisation at surface is highly significant in that it strongly suggests 'proof of concept' for potentially more significant primary mineralisation in the basement rocks.
	• *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.*	• The composite chip sampling was undertaken over specific intervals in accordance with industry standard practices.
Drilling techniques	• *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.).*	• Not applicable. Samples were collected from surface and no drill rig was employed.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• Chip sample intervals were recorded in a field notebook, annotated with sample numbers. Samples were collected into labelled bags and the sample number tag placed in each.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• Samples of ~2kg size, comprising ~20 chips each, were collected over the full length of each marked sample interval to maximise representivity. However, there is always a natural bias towards collecting visually mineralised chips and the sample cannot therefore be considered entirely representative.

Criteria	JORC Code explanation	Commentary
	• *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.*	• Sample recovery is not applicable due to the nature of sampling, and no relationship between grade and recovery can therefore be established
Logging	• *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.*	• The chip samples comprise a mixture of calcrete, silcrete and malachite that reflect material exposed by roadworks in the table drain. The chip samples confirm the presence of secondary copper mineralisation, but it is highly unlikely that the secondary surface copper mineralisation will comprise an economic proposition. Rather, the surface mineralisation may provide a vector to primary copper mineralisation in the basement at depth that may constitute an economic proposition.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Other than noting the constituent rock types contributing to the samples, no formal logging was undertaken. • The sampling was undertaken over continuous 10m to 20m intervals along and immediately peripheral to the table drain.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc., and whether sampled wet or dry.*	• Not applicable. • Chip samples were randomly collected over 10m to 20m intervals.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• The 2kg samples were dried, crushed and pulverised to 95% passing 75 microns. A 15g fraction was subject to a four-acid digest with the solution then analysed via ICP-OES for the full suite of trace elements, including copper (Intertek Code 4AO/OM).
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Other than standard laboratory protocols, no quality control procedures were adopted, given the nature of sampling. • Composite chip sampling invariably introduces natural sampling bias towards visually mineralised chips and the samples cannot therefore be considered totally representative. No field duplicates were collected. • The ~2kg sample size is considered entirely appropriate for the style of mineralisation.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• Middle Island adopted an ICP-OES assay technique for a full trace element suite, with the detection limit on copper selected to accommodate high grades consistent with those spot results recorded via pXRF. This technique is considered appropriate for copper mineralisation of this style.

Criteria	JORC Code explanation	Commentary
	• *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.*	• Multiple pXRF readings were recorded in advance of chip sampling to confirm the presence of copper mineralisation, with spot readings ranging from 24.8% to 76.2% Cu.
	• *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• No quality controls protocols were utilised, other than those employed by the laboratory in assaying, given the reconnaissance nature of sampling.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	• Sampling was undertaken by two experienced geologists from Middle Island Resources. Other than an independent laboratory undertaking the assaying, the results were verified by the Company's external, independent database managers.
	• *The use of twinned holes.*	• Not applicable, as no drilling was undertaken.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• The pXRF spot assay data were collected electronically. Chip sampling data were captured manually and checked by the supervising geologists.
	• *Discuss any adjustment to assay data.*	• Assay data have not been adjusted, other than to report sample length-weighted aggregate results.
Location of data points	• *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.*	• Surface sample lengths were measured via tape and both lengths and orientations confirmed by hand-held GPS.
	• *Specification of the grid system used.*	• MGA94 Zone 53S
	• *Quality and adequacy of topographic control.*	• The topographic surface was recorded by hand-held GPS.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• Results being reported comprise continuous composite chip sample intervals ranging from 20m to 65m over an aggregate 130m length.
	• *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.*	• The data spacing is sufficient to demonstrate the continuity of grade. However, the data is unlikely to ever be applied in estimating a Mineral Resource.
	• *Whether sample compositing has been applied.*	• Individual sample interval results have been aggregated via length-weighting to report an overall contiguous mineralised interval.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• The amorphous (and generally sub-horizontal) nature of secondary calcrete and silcrete outcrops at surface preclude determination of the orientation of mineralisation, relative to the strike of underlying stratigraphy. However, the Magnetic modelling demonstrates that the basement geology and associated growth faults are oriented normal to the sampling traverse.
	• *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.*	• Insufficient evidence is available to confirm if the sampled mineralisation reflects true width and may therefore be biased.

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• The samples were collected by two experienced company geologists and personally transferred to the Intertek laboratory in Alice Springs for sample preparation. Sample receipt by Intertek was carried out in line with its internal procedures to maintain chain of custody control.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No independent audits or reviews of sampling techniques and data has been conducted.

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	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	• The chip samples are derived from EL32297, which is 100%-owned by Barkly Operations Pty Ltd (BOP), a wholly-owned subsidiary of Middle Island Resources Limited.
	• *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.*	• As of 18/12/2020 Barkly Operations Pty Ltd was the sole owner of the project, including EL32297.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No acknowledgement or appraisal has been undertaken other parties at this Crosswinds prospect is a new discovery.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Copper mineralisation at the Crosswinds prospect is hosted by calcrete and silcrete, representing the weathered expression of limestones comprising the Cambrian Georgina Basin. At this point the Georgina Basin is interpreted to overlie (at circa 200m depth) Proterozoic basement (possibly chloritic siltstones of the Warramunga Formation or equivalent) that has been identified by collaborative pre-competitive government research as prospective for IOCG mineralisation. The copper occurrence at Crosswinds is interpreted by the CP to reflect secondary copper mineralisation that has migrated up along growth faults extending from primary copper mineralisation with the basement, through the otherwise unmineralised Georgina Basin.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all*	• See Table 1 within the release.

Criteria	JORC Code explanation	Commentary
	Material drill holes: ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.*	
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• No material information has been excluded.
Data aggregation methods	• *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.*	• 20m to 65m composite chip sample intervals have been reported individually, as a range and as an aggregated length-weighted average.
	• *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.*	• Aggregated intercepts do not include reported lengths of higher grade internal intercepts.
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Metal equivalent values are not reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*	• The chip sample traverse is oriented orthogonally to the general NE strike of stratigraphy and structure (including interpreted growth faults) in the underlying Proterozoic basement, where known, as interpreted from airborne magnetic data. However, beyond this, the true width of the mineralised intervals is largely based on speculation.
	• *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').*	• The primary control on secondary copper mineralisation is believed to result from groundwater movement along growth faults through the Georgina Basin, remobilising copper from a primary mineralised source within the basement beneath. As such, the mineralisation is of significance as a possible vector to primary mineralisation within the basement, rather than being of economic interest in its own right.
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.*	• See table, map, photos and diagrams within the release.

Criteria	JORC Code explanation	Commentary
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 assay results of individual composite chip sample intervals are reported in Table 1 within the release, and the full range of spot pXRF readings are also reported within the text.
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.*	• Other than that included in the release, there is no other relevant, meaningful or material exploration data that is currently known.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth 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.*	• The Company intends to commence more systematic research and exploration in the 2021 dry season, pending the results of current pre-competitive government basement stratigraphic drilling. • A selection of photos, maps and a diagrammatic interpretation are included within the release.