

Middle Island Resources Ltd

ACN 142 361 608

ASX code: MDI

www.middleisland.com.au

#### Capital Structure:

122 million ordinary shares22 million unlisted OOTM options

#### Cash & Investments

\$4.07 million (as of 31 March 2021) No debt

#### **Directors & Management:**

**Peter Thomas** 

Non-Executive Chairman

**Rick Yeates** 

**Managing Director** 

**Brad Marwood** 

Non-Executive Director

**Dennis Wilkins** 

Company Secretary

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## ASX Release – 26 May 2021

# Barkly Super Project - Exciting drill results released at AGES conference in NT and Middle Island secures additional ground

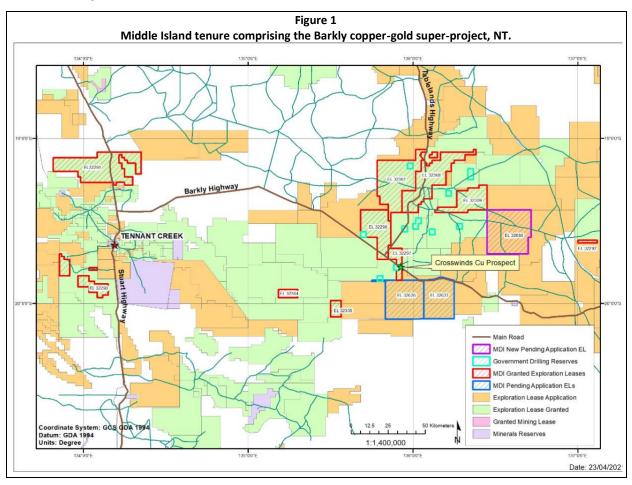
- Middle Island attended the release of the Minex CRC East Tennant drill core at the AGES conference in Northern Territory, on 22 April 2021.
- Ten deep stratigraphic holes (~4000m) were completed by Minex CRC under the National Drilling Initiative (NDI), intersecting prospective basement rocks between only 80m and 200m depth. Pre-collared diamond hole NDIBK04 intersected localised semi-massive copper mineralisation along with over 300m of disseminated to blebby sulphides to end of hole.
- The majority of the NDI holes intersected strong haematite-magnetite
  alteration within Proterozoic basement rocks beneath the Georgina
  Basin, with NDIBK10, being one of the better holes, is very exciting for
  MDI shareholders, as it's located proximal to Middle Island's Crosswinds
  copper discovery, one of the better holes in this respect.
- Middle Island has secured one new Exploration Licence Application (ELA)
  along strike to the northeast of copper-mineralised hole NDIBK04, which
  also lies along structural and stratigraphic strike from Middle Island's
  recent Crosswind's copper discovery.
- The new ELA is 809km<sup>2</sup> and brings the Barkly Super project to 13 tenements and applications covering an aggregate area of 5,220km<sup>2</sup>.
- The Northern Territory Minister for Mining and Industry announced at AGES conference the expansion of government co-funding geophysics and drilling program from \$1M per year to \$9.5M per year.
- Middle Island has submitted applications for NT Government geophysics and drilling collaboration co-funding to complete detailed magnetic and gravity surveys in the Barkly area which, along with possible electromagnetic surveys, are planned to be completed during the 2021 dry season. This planned work will refine and prioritise basement ironoxide copper-gold (IOCG) targets in advance of drilling in 2022.
- The announced plan to spin-out the Barkly assets is being simultaneously reassessed and progressed whilst shareholder and market participant support is assessed. Shareholder feedback for (or opposition to) the concept of the spinout is sought.



#### **BARKLY COPPER-GOLD SUPER-PROJECT (NT)**

WA and Northern Territory explorer, Middle Island Resources Limited (Middle Island, MDI or the Company) is pleased to announce that an application has been lodged by Barkly Operations Pty Ltd (a wholly owned subsidiary of MDI) for an additional Exploration Licence along strike from the recently completed, copper-mineralised MINEX CRC drillhole NDIBK04 and the Company's recent Crosswinds copper discovery.

The new application, EL32680, covers a further 809km<sup>2</sup>, taking MDI's aggregate 100%-owned Barkly project tenure to 13 Exploration Licences (including those in the application phase) comprising 5,220km<sup>2</sup>, as shown in Figure 1 below.

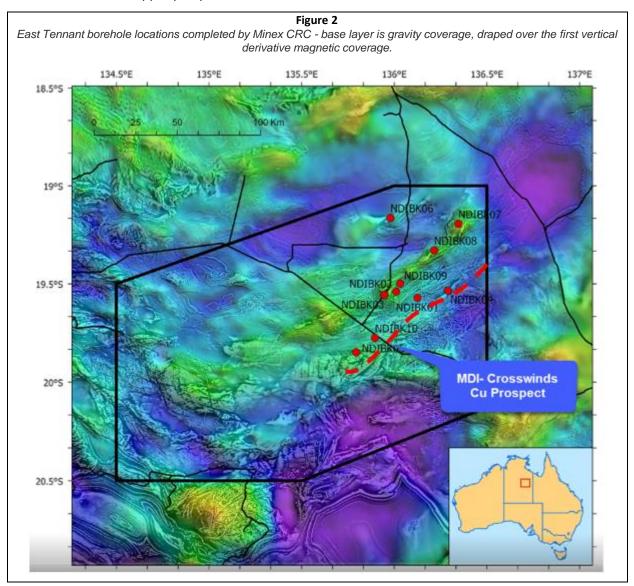




#### **AGES Conference and Minex CRC drillholes**

The AGES Conference in Alice Springs was attended by over 220 people, making it the largest AGES event to date. A feature of the conference was the research focus on the rapidly emerging East Tennant (Barkly) region for its potential to host Tier 1 iron oxide-copper-gold (IOCG) deposits.

Northern Territory Geological Survey (NTGS) Geoscience Australia (GA) along with Minex CRC "Drilling for Future" program enabled the completion of 10 pre-collared stratigraphic diamond core holes for over 4,000m of drilling. The figure below shows the drillhole collars with respect to Middle Island's tenure and the Crosswinds Copper prospect.



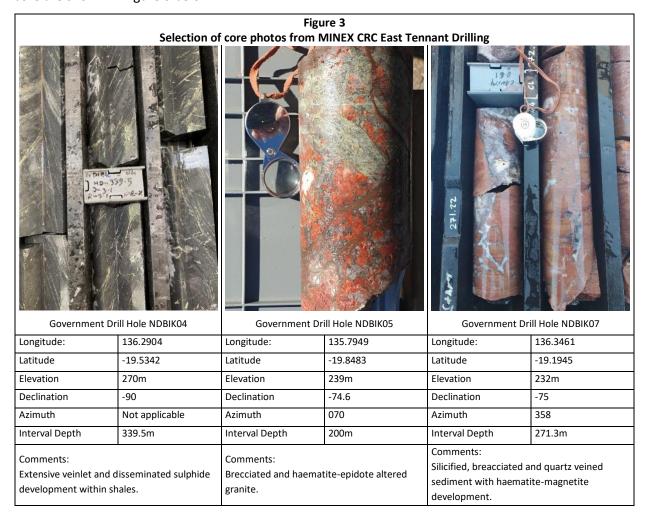
The preliminary results from the Minex CRC stratigraphic drilling program vindicate MDI's first mover status in the Barkly area. The regional scale structures identified from new geophysical data and favourable, often highly altered, basement lithologies considered by Geoscience Australia as fertile for Tier 1 IOCG and sedimentary exhalative (SEDEX) base metal deposits.



Middle Island was present for the unveiling of the MINEX CRC diamond core. All holes provide significant, and invaluable, stratigraphic information, with Proterozoic basement rocks intercepted between 80m and 200m depth, broadly consistent with modelled predictions. Although yet to be confirmed via agedating and other studies, the basement rocks have been tentatively and variously correlated with those of the Warramunga Province, South Nicholson Basin and the Lawn Hill Platform, while others remain unassigned as Alroy Formation.

Hole NDIBK04 is interpreted by Geoscience Australia to be located ~50km ENE along stratigraphic strike from Middle Island's Crosswinds copper discovery and on the same major structure. NDIBK04 includes widespread disseminated to blebby sulphides below 89.5m depth to the end of hole at 416.3m (Figure 4 below), including pyrite, pyrrhotite, marcasite, chalcopyrite (a copper sulphide) and arsenopyrite (possible pointers to mineralisation). Middle Island also identified minor galena (lead sulphide) and bornite (another copper sulphide).

The most persistent and visually evident aspect of the NDI East Tennant drill core is the widespread development of haematite and magnetite alteration within Proterozoic sediments and felsic intrusives in almost all holes. This style of alteration is a key indicator of IOCG-style mineralisation and is consistent with the gravity and magnetic signatures on which MDI's target selection will be based. Numerous sections of diamond core across multiple holes would not look out of place within BHP's core farm at the giant IOCG deposit of Olympic Dam in South Australia. Examples of mineralised and altered diamond core are shown in Figure 3 below.





The photo of the core from Government drill-hole NDIBK04, shows core at 339.5m depth from surface. The core has been cut in half and one half has been cut again. A quarter-core sample every metre has been submitted for multi-element analysis.

The photo of the core from Government drill-hole NDIBK05, shows core at 200m depth from surface.

The photo of the core from Government drill-hole NDIBK07, shows core at 271.3m depth from surface.

Significantly, all Barkly NDI stratigraphic drill holes, were directed at evincing basin wide stratigraphy. They were not designed to be discovery holes. They remain unassayed, aside from limited pXRF base metal readings of visual sulphide mineralisation and hy-logger multispectral data. No grades are inferred from this very preliminary review of core photography and visual assessment sulphide-bearing core.

All photos of drill chips and diamond core, along with provisional logging, can be accessed via the Minex CRC website at <a href="https://minexcrc.com.au/ndi-campaign-1-east-tennant/">https://minexcrc.com.au/ndi-campaign-1-east-tennant/</a>





The photo of the core from Government drill-hole NDIBK04, shows core at depth 236.2m . The core has been cut in half and one half has been cut again. A quarter-core sample every metre has been submitted for multi-element analysis.

THE CORE IN THE PICTURES ABOVE ARE FROM GOVERNMENT DRILL HOLES. THEY ARE NOT PROPERTY OF THE COMPANY – PENDING ASSAYS, BEING CONDUCTED BY THE GOVERNMENT, WILL BE PROVIDED TO THE PUBLIC VIA GOVERNMENT AGENCY WEBSITES.



#### **Planned Exploration**

Following the release of pre-competitive government drilling data and the AGES Conference in April 2021, Middle Island has submitted NT Government co-funding applications to complete detailed airborne magnetic and ground gravity surveys, along with possible airborne electromagnetic surveys, during the 2021 dry season. This exploration is planned refine and prioritise basement IOCG targets in advance of drilling in 2022.

#### Planned spinout

The Company refers to the announced proposal (ASX: 9 March 2021) to spinout the holder of the Barkley Super Project. The holder is MDI's subsidiary, Barkley Operations Pty Ltd. Opposing views as to the desirability of that proposal have been put to the Company by both shareholders and a market participant. Those views are the subject of ongoing consideration and further reasoned views of shareholders are encouraged.

The record date has not been set for the determination of rights to receive the bonus distribution to MDI shareholders of shares in Barkley Operations (should the spinout be implemented). No assurance is given at this time that the spinout will be implemented. Absent significant shareholder support for the plan, it will be abandoned.

RELEASE AUTHORISED BY:

THE BOARD

WEBSITE: www.middleisland.com.au

#### **Competent Persons' Statement**

Information in this release that relates to new Exploration Results is based on, and fairly reflects, information and supporting documentation prepared by Mr Beau Nicholls. Mr Nicholls is a Member of the Australian Institute of Geoscientists and a consultant to Middle Island Resources Limited. Mr Nicholls 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 Nicholls 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.

#### **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.

## **Appendix 1**

## The following Table is provided in compliance with the JORC Code

• Whether a relationship exists between sample recovery and grade and

## **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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> </ul>	
	• 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.	
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.).	intervals as a pre-collar then Diamond Core tail to basement. Operator was
Drill sample recovery		<ul> <li>Drill sample recoveries are provided in detail on the Minex CRC website, and are reported as &gt;95%.</li> </ul>
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<ul> <li>Drillcore has been cut in half and quarters for various testwork by Geoscience Australia (with half core remaining in trays).</li> <li>Sample recovery is &gt;95%</li> </ul>

Criteria	JORC Code explanation	Commentary
	whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
Logging	<ul> <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> </ul>	<ul> <li>Core was logged in detail by Omni GeoX consultants. A link to all logging is <a href="https://minexcrc.com.au/ndi-campaign-1-east-tennant/">https://minexcrc.com.au/ndi-campaign-1-east-tennant/</a></li> </ul>
Sub-sampling	<ul> <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> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	<ul> <li>Quarter and half core taken by Geoscience Australia; half core remains in</li> </ul>
techniques and sample	• If non-core, whether riffled, tube sampled, rotary split, etc., and whether sampled wet or dry.	trays.
preparation	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	Lab methodology for analysis is not available as yet as has not been completed
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	
	<ul> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second- half sampling.</li> </ul>	
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	
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.	
	<ul> <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 (ie lack of bias) and precision have been established.</li> </ul>	

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	Omni GeoX undertook all sampling independently.
Location of data points	<ul> <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> <li>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.</li> </ul>	<ul> <li>Collars were analysed by DGPS to &lt;1m accuracy.</li> </ul>
Data spacing	<ul> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> <li>Data spacing for reporting of Exploration Results.</li> </ul>	Holes are 5 to 20km apart
and distribution	<ul> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	
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.	Downhole surveys were undertaken as defined on Minex CRC website
	<ul> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	
Sample security	The measures taken to ensure sample security.	<ul> <li>Core was kept secure under Northern Territory Geological Survey facilities in Darwin and Alice Springs</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No independent audits or reviews of sampling techniques and data has been conducted.</li> </ul>

## **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  Exploration done by other parties	<ul> <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> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Georgina Basin is interpreted to overlie (at circa 80-200m depth)         Proterozoic basement (possibly chloritic siltstones of the Warramunga             Formation of equivalent) that has been identified by collaborative pre-             competitive government research as prospective for IOCG mineralisation.      </li> <li>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.</li> </ul>
Drill hole Information	<ul> <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> <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>	
Data aggregation methods	<ul> <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> </ul>	

Criteria	JORC Code explanation	Commentary
Relationship	<ul> <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> <li>These relationships are particularly important in the reporting of Exploration</li> </ul>	
between	Results.	No results have been reported
mineralisation widths and intercept	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	
lengths	• 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').	
Diagrams	<ul> <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>	See table, map, photos and diagrams within the release.
Balanced reporting	<ul> <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 to avoid misleading reporting of Exploration Results.</li> </ul>	
Other substantive exploration data	<ul> <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>	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).	<ul> <li>The Company intends to commence more systematic research and exploration in the 2021 dry season.</li> <li>A selection of photos, maps and a diagrammatic interpretation are included</li> </ul>
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	within the release.