



## 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:*

1,765 million ordinary shares

994 million unlisted options

### *Cash & Investments*

\$2.7m (as at 21 February 2019)

### *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](mailto:rick@middleisland.com.au)

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

## ASX Release – 14 April 2020

# 500,000oz Two Mile Hill deeps Mineral Resource at Sandstone gold project, WA

- A **500,000oz gold Inferred Mineral Resource** has been estimated by independent consultants, Mining Plus Pty Ltd, for the Two Mile Hill deeps gold deposit at the Company's 100%-owned Sandstone gold project in central WA.
- The new Mineral Resource is comprised of 480,000oz associated with the tonalite-hosted portion of the deposit & 20,000oz within the banded iron formation (BIF)-hosted element.
- The addition of the Two Mile Hill deeps underground deposit brings the aggregate Sandstone project's JORC Code 2012 Mineral Resources to **624,000oz gold**, representing a **near five-fold increase in Mineral Resources**.
- The new tonalite deeps Inferred Mineral Resource is derived from a partial reclassification of the previous Exploration Target, extending from 140m below surface, the base of quantified open pit Mineral Resources, to ~500m depth.
- The new BIF deeps Mineral Resource is derived via the upgrade of a former JORC Code 2004 resource estimate to a formal JORC Code 2012 Inferred Mineral Resource.
- The remainder of the original Exploration Target, extending from 500m to 700m depth, will require re-quantification as an Exploration Target, primarily underpinned by a diamond drill intercept of **508.3m at 1.38g/t Au**, including an interval of **160m at 2.13g/t Au** from 432m depth.
- Although relatively insensitive to gold price, the Two Mile Hill tonalite deeps Mineral Resource estimate does not comprise part of the planned recommissioning inventory at Sandstone, with the present intention to only review development of the tonalite deeps deposit later in the planned on-site existing mill production schedule.
- The significant increase in aggregate Mineral Resources comprising the Sandstone gold project will **provide far greater valuation transparency of both the project and Middle Island**.

## **SUMMARY COMMENTARY**

### **Middle Island Managing Director, Mr Rick Yeates:**

*“The addition of 500,000oz of formal Mineral Resources to the Sandstone project inventory is an extremely pleasing outcome that allows a far greater degree of transparency in valuing both the Sandstone gold project and the Company.*

*“What is also pleasing is that, in the grade modelling applied by Mining Plus in resource estimation of the tonalite deeps deposit, the grade shells and distribution of gold mineralisation closely mirror MDI’s observations in logging the diamond core.*

*“Equally, Mining Plus’s application of contemporary mining and processing parameters and costs to confirm the deposit as a formal Mineral Resource, affirms the Company’s view that this substantial deposit will ultimately provide a significant complement to our planned on-site gold production profile.*

*“The lower 200m (from 500m to 700m depth) of the prior Exploration Target also remains to be confirmed as a Mineral Resource via additional diamond drilling at a later date.*

*“The current aggressive exploration and resource definition campaign, collectively comprising some 17,300m of drilling, is now well advanced and there is a high likelihood that this campaign will significantly add to or upgrade additional open pit Mineral Resources prior to completing the updated pre-feasibility study.”*

## **NEW RESOURCE UPDATE - SANDSTONE GOLD PROJECT, WA**

### **Introduction**

Explorer and aspiring gold developer, Middle Island Resources Limited (**Middle Island, MDI or the Company**) is pleased to announce a new 500,000oz JORC Code 2012 gold Mineral Resource at the Two Mile Hill deeps deposit within the Company’s 100%-owned Sandstone gold project in Western Australia. Estimation of the Two Mile Hill deeps deposit takes Middle Island’s **total JORC Code 2012 Mineral Resources to 624,000oz gold**, with further additions anticipated once the Company’s current 17,300m drilling campaign is complete.

Middle Island commissioned Mining Plus Pty Ltd to undertake an independent estimate of the Two Mile Hill deeps deposit, comprising both the tonalite deeps and BIF deeps components.

The tonalite deeps deposit was previously classified as an Exploration Target (refer ASX Release dated 29 November 2017), extending from the base of the quantified open pit Mineral Resources at 140m below surface to 700m depth, below which it remains open. The deepest diamond drillhole (MSDD156) completed to date at the Two Mile Hill tonalite deeps deposit is 713m, which generated a mineralised intercept of 508.3m at 1.38g/t Au from the commencement of coring at 83.7m depth, including 160m at 2.31g/t Au from 432m depth (refer ASX Release dated 14 November 2017).

The smaller, but immediately adjacent, BIF deeps deposit at Two Mile Hill comprises substantially higher grade mineralisation hosted by a series of moderately northeast dipping banded iron formations (BIFs) intruded by the tonalite, where gold mineralisation is associated with pyrite replacement of magnetite horizons.

### **Two Mile Hill Deeps Mineral Resource Estimation**

The Inferred Mineral Resource for the Two Mile Hill deeps gold deposit is approximately 14.2Mt at 1.1g/t gold for 500,000 ounces, reported inside an underground resource optimisation wireframe with an effective date of 31<sup>st</sup> March, 2020. The breakdown of the Mineral Resource is provided in Table 1 below.

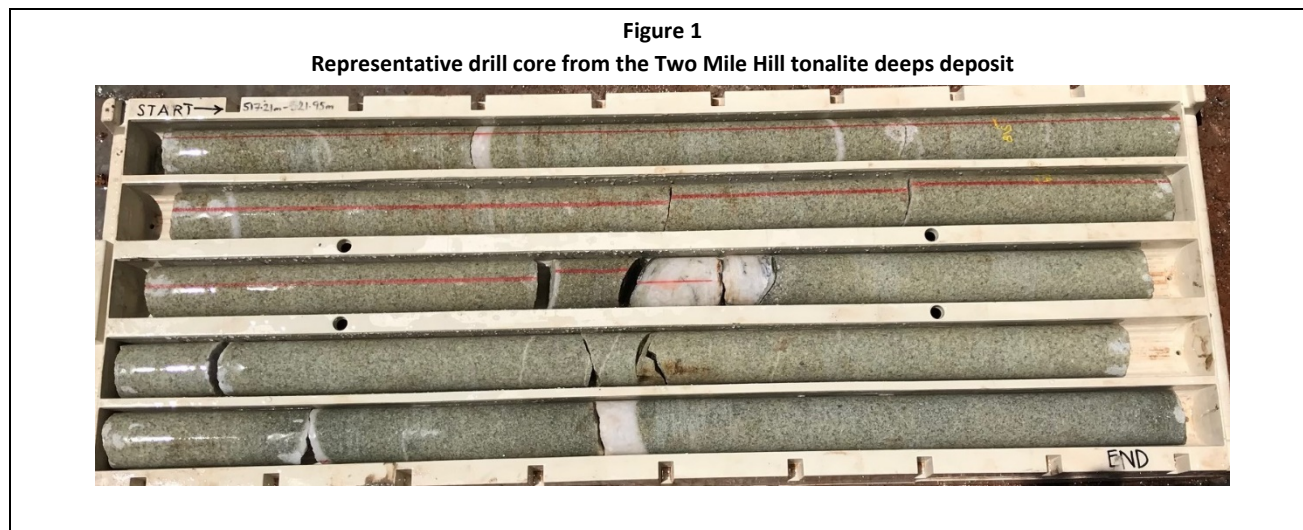
Table 1 Mineral Resource Estimate for the Two Mile Hill Deeps Deposit - March, 2020			
Domain	Inferred		
	Tonnes	Grade (g/t Au)	Gold (oz)
Tonalite	14,000,000	1.1	480,000
BIF	200,000	3.1	20,000
<b>Total</b>	<b>14,200,000</b>	<b>1.1</b>	<b>500,000</b>
The preceding statements of Mineral Resources has been prepared and reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2012 Edition. All tonnages reported are dry metric tonnes. Minor discrepancies may occur due to rounding to appropriate significant figures.			

The Mineral Resource estimate has been jointly completed by independent consultancy, Mining Plus Pty Ltd and Middle Island Resources Limited. Mining Plus assumes responsibility for the geological and mineralisation interpretation, geostatistical analysis, resource estimation and resource classification. Middle Island Resources assumes responsibility for the logging and sampling techniques, analytical and QAQC protocols and integrity of the drillhole data used in the estimation of the Mineral Resource. Details of the estimation process are provided below.

### **Geology & Geological Interpretation**

#### **Tonalite Deeps Deposit**

The Two Mile Hill tonalite deeps deposit comprises an ovoid (elongate north-south), intrusive tonalite stock or plug that measures some 250m long and up to 90m wide at surface that plunges steeply to the west. The intrusive appears to be ubiquitously mineralised to at least 713m and remains open below this depth. Gold mineralisation is associated with sheeted quartz veining comprising two, essentially sub-horizontal, vein sets. Coarse free gold is frequently evident in quartz veins, often associated with galena. Quartz veining is associated with pervasive sericite-carbonate alteration, frequently accompanied by disseminated pyrite. Typical mineralised tonalite core is pictured in Figure 1 below.



### BIF Deeps Deposit

Gold mineralisation at the Two Mile Hill BIF deeps deposit is hosted within a series of stacked BIF units comprising the Shillington BIF package, which dip at approximately 40° towards the northeast, and are intruded by the Two Mile Hill tonalite deeps deposit. Gold mineralisation is associated with massive to semi-massive pyrite replacement of magnetite horizons within the BIF units, commonly proximal to zones of oblique quartz veining and/or brecciation. Although rarely visible, petrographic evidence indicates that the gold is relatively coarse and is developed along fractures within pyrite grains or along pyrite grain boundaries.

The disposition of thick, higher grade gold intervals within the BIF appears to be primarily controlled by proximity to the intrusive contact with the Two Mile Hill tonalite, with a subordinate control being the density of quartz veining that appears to extend from the tonalite. The balance of evidence suggests that the gold mineralising fluids were sourced from or through the adjacent tonalite.

The BIF deeps deposit is situated at approximately 200m vertical depth, lying immediately adjacent to the tonalite margins, possibly better developed along the axes of subtle northeast plunging fold hinges. Typical mineralised BIF core is pictured in Figure 2 below.

**Figure 2**  
**Representative drill core from the Two Mile Hill BIF deeps deposit**





### **Drilling, Sampling & Assaying Techniques**

The Two Mile Hill deposit is defined by 47 RC pre-collared diamond drill holes (predominantly NQ and some HQ core size) representing 14,485m and 90 RC holes representing 19,902m, or 137 drill holes comprising 34,387m in aggregate. Of this total, all 47 RC pre-collared diamond holes comprising 4,680m and 43 RC holes for 946m inform the Two Mile Hill deeps Mineral Resource estimate (**MRE**), in aggregate comprising 90 holes for 5,626m. Of the drilling metres that inform the MRE, 38% were contributed by Middle Island Resources, 49% by Troy Resources and 13% by Herald Resources. The Sundown drilling does not comprise any of the MRE database, as the integrity of the analytical information was too difficult to establish with any certainty.

MDI RC pre-collars for diamond holes were drilled with a 130mm (5 inch) face sampling hammer from surface, while the Herald and Troy RC drilling was drilled at an unknown size to return a 1m sample. The diamond cored component was completed with, in one instance HQ3 (63.5mm), but otherwise NQ2 (47.6mm) tails. Core was oriented using a Reflex ACT orientation tool.

Diamond drill core was sampled at 1m intervals and comprised half NQ2 core. Diamond core and RC chip recovery data were measured for each drill run/drillhole and captured in a digital logging software package. The data has been reviewed and the core recovery was effectively 100% throughout. Core was re-aligned prior to splitting and the right-hand side half core section (looking down the hole) was consistently sampled for assay. The half diamond core, sampled on 1m intervals (2-5kg), was sent to the laboratory.

The MDI RC sampling involved the collection of 2-3kg of RC chips off the drill rig's cone splitter at 1m intervals. RC recoveries were excellent, with dry samples being a consistent weight of 2-3kg. The primary RC sample was taken from the same splitter chute for all programs. Herald and Troy Resources RC sampling was by collecting 2-3kg of RC chips via a three-tier Jones riffle splitter at 1m intervals.

Troy and Herald half HQ and NQ diamond core samples, weighing 1-2kg, were sent to the laboratory to be crushed (-10mm), split and pulverised to produce a 300g pulp, with a 50g charge sub-sampled for fire assay analysis. MDI, Troy and Herald RC samples, comprising 2-3kg, were sent to the laboratory to be crushed (-10mm), split and pulverised to produce a 300g pulp, with a 50g charge sub-sampled for fire assay analysis.

The water table was intersected at 40–60m depth down-hole. MDI had no issues in keeping the sample dry. Herald and Troy Resources drilling also intersected the water table at 40–60m. While some wet material was sampled, this accounts for less than 1% of their total sampling.

The RC chips and diamond core were logged for lithology, weathering, structure, mineralogy, mineralisation, alteration, colour, RQD and geotechnical parameters. Logging was carried out according to internal Company protocols at the time of drilling. Diamond core was logged continuously to record all relevant features, regardless of length. Core was also photographed wet and dry within each core tray. Each metre of all drillholes was qualitatively logged from start to finish of the drillhole.

All MDI samples were collected and couriered to the Intertek lab in Maddington, W.A for sample preparation and analysis. The samples were dried and crushed to -10mm before being split and then a 300g subsample pulverized to 95% passing 75 microns. This fraction was then split again to a 50g sample charge for fire assay. The Intertek laboratories are internationally certified. A second core split was collected off the primary jaw crusher at a frequency of 1:20 samples to provide a coarse-crush (field) duplicate sample. Troy samples were dispatched to SGS Minerals for analysis. The samples were dried and crushed to -10mm before being split and then a 300g subsample pulverized to 95% passing 75 micron. This fraction was then split again to a 50g sample charge for fire assay. Herald samples were sent to Analabs in Mt Magnet for 50g fire assay, however the precise preparation procedure is undocumented. In all cases, sample size and assay charge size are considered appropriate for the style of mineralisation. MDI adopted a 50g fire assay method with either an ICP-OES or AAS finish. This assay technique is considered suitable for gold mineralisation associated with sulphides. MDI included laboratory duplicates, coarse-crush (field) duplicates and certified standards routinely in the assay batches at a 1:10 frequency, and a quartz wash was used after each sample was pulverised.

#### **Resource Estimation Methodology**

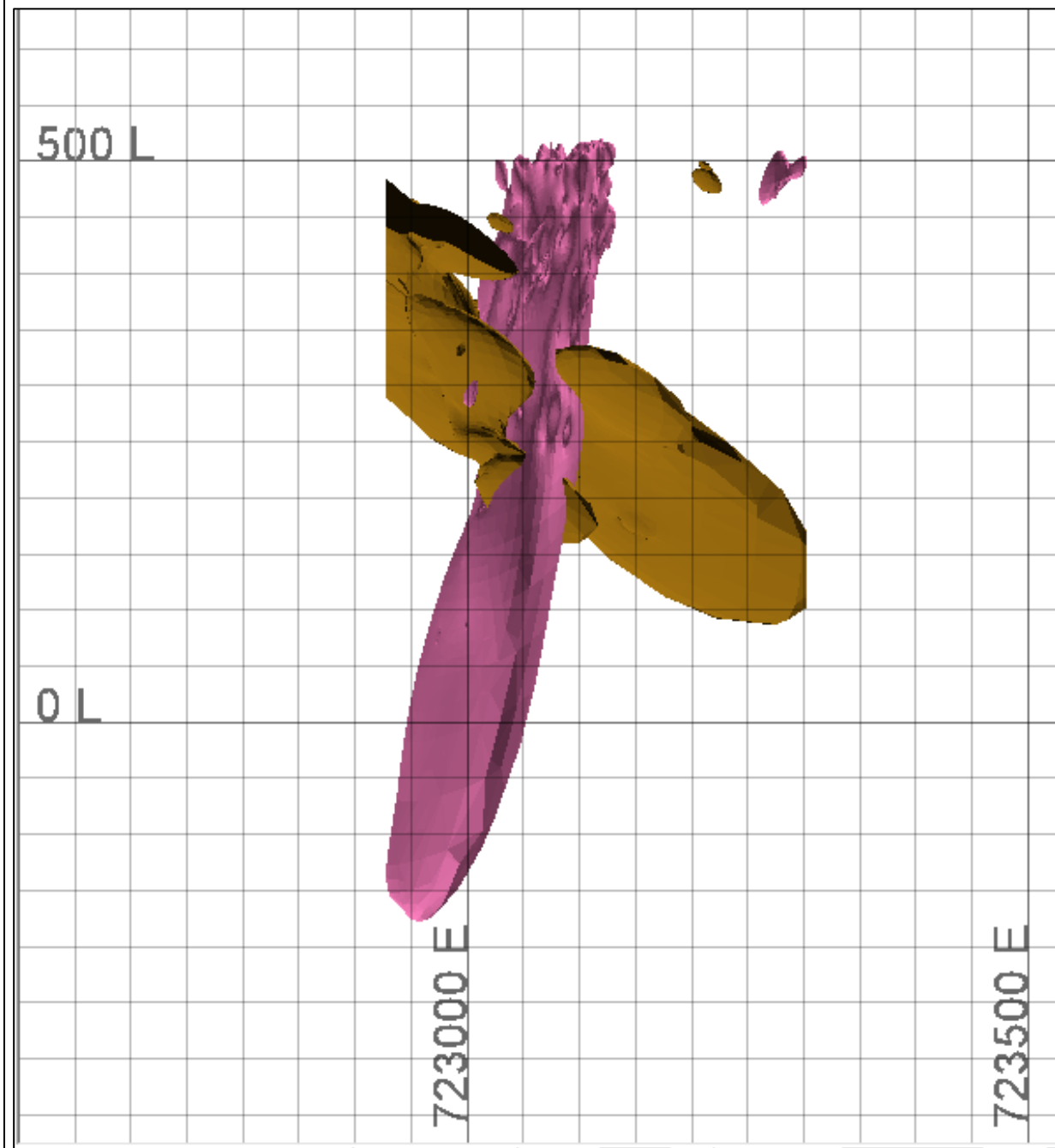
The drillhole data files contain 90 Reverse Circulation (**RC**) and Diamond (**DD**) drillholes. No Rotary Air Blast (**RAB**), Vacuum (**VM**) or Aircore (**AC**) drillholes have been utilised in estimation of the resource.

The drillhole spacing at Two Mile Hill varies with depth, from approximately 20 m (X) by 20 m (Y) at surface to approximately 40 m (X) by 40 m (Y) below 380 mRL. The deepest portions of the deposit, below 180mRL, have a drill spacing greater than 80 m (X) by 80 m (Y).

Assay intervals with null values in the gold grade field and unassayed intervals have been assigned -888 in the Mineral Resource database. Similarly, a small number of samples listed as not received (LNR) by the assay laboratory have been assigned -888 in the Mineral Resource database. A number of historical samples with a gold grade of -999 are present in the data files. Mining Plus has left these records unchanged. Below detection limit samples, identified as negative gold grades, have been set to half their value and positive by dividing the grade value by minus two.

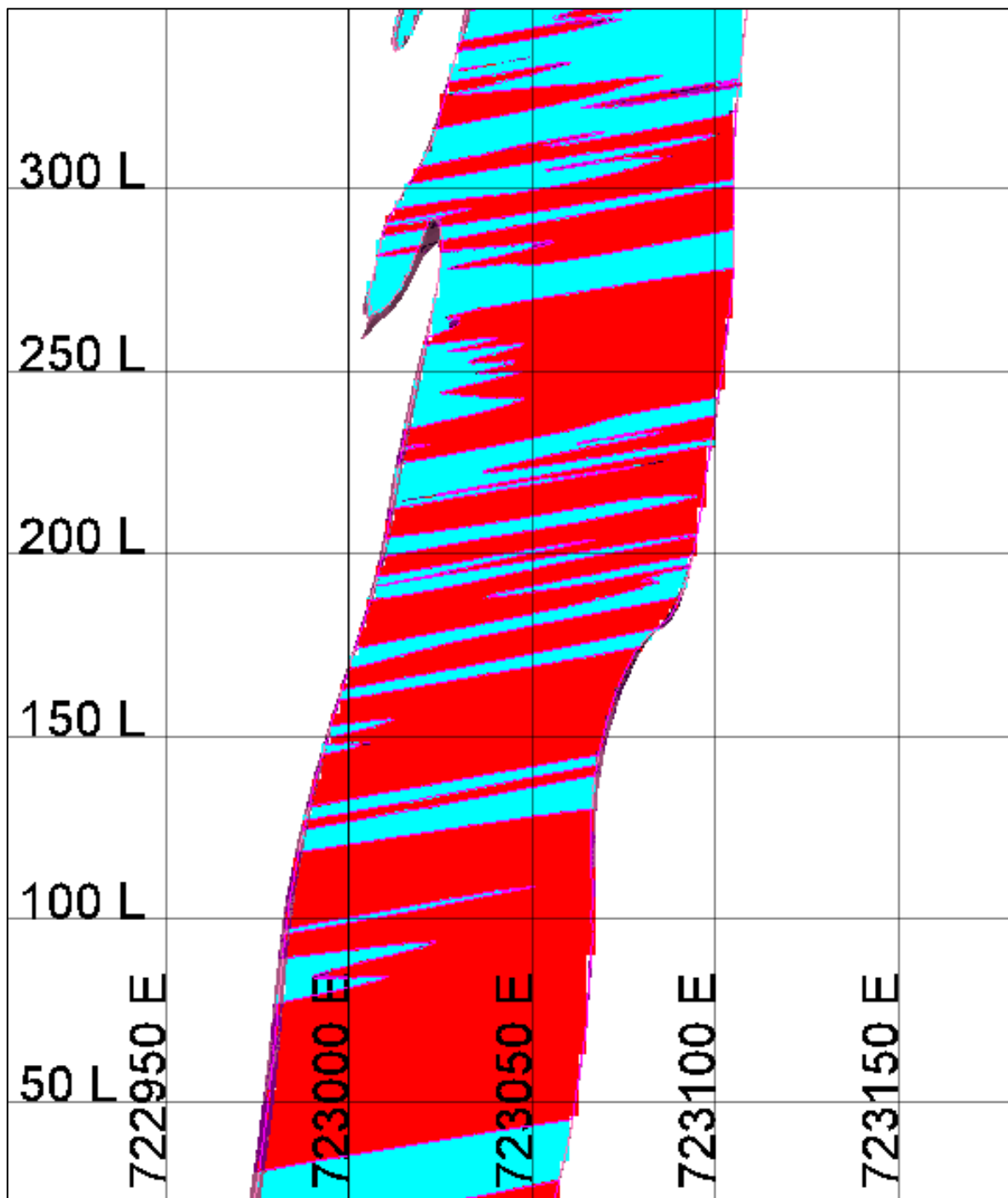
The drillhole files have been imported into Leapfrog Geo, and lithological and mineralisation wireframes generated. A tonalite and Banded Iron Formation (**BIF**) wireframe have been created using all the available drill hole data (Figure 3). Grouped lithology codes have been utilised in the generation of the tonalite wireframe due to the presence of numerous logging codes used to describe the tonalite in current and historical drill holes.

**Figure 3**  
**Two Mile Hill deeps deposit**  
**Geological model, showing tonalite (pink) & BIF (brown) wireframes**



The mineralisation wireframes have been generated in Leapfrog Geo as an Indicator interpolant at a cut-off of 0.4g/t Au using raw samples in the BIF, while the tonalite mineralisation has been generated as a grade interpolant at 0.5g/t Au using 3m composite samples (Figure 4). Both mineralisation wireframes have been constrained within their associated lithological wireframe.

**Figure 4**  
**Two Mile Hill tonalite deeps deposit**  
**Mineralised tonalite wireframe (red) & unmineralised tonalite (light blue)**



The database files, lithology and mineralisation wireframes have been imported into Vulcan 11.0.1 for use in the estimation. The resource database has been flagged with unique domain codes as defined by the lithology and mineralisation wireframes, and composited to 3m using the best fit algorithm in Vulcan. Unassayed, unsampled and null value sample intervals have been assigned a grade of 0.001g/t Au during compositing in Vulcan.



Composite samples have been analysed in Snowden Supervisor v8.12 software for the existence of extreme grades and, where present, top-cuts by domain have been applied. Three of the four domains have been top-cut.

Variography has been determined for gold in the mineralised and unmineralised tonalite. The BIF domains contain too few composites to undertake a variographic analysis.

A block model, with an upper limit of 380 mRL (~140 m below surface), above which mineralisation has already been quantified and reported as a Mineral Resource in accordance with the JORC Code 2012, has been created with a parent block size of 20 mE by 20 mN by 5 mRL and sub-blocks of 2.5 mE by 2.5 mN by 1 mRL. The block sizes are considered appropriate for the drillhole spacing in the area.

Estimation of the mineralised and unmineralised tonalite domains has been undertaken utilising Ordinary Kriging (OK), whereas the mineralised and unmineralised BIF domains have been estimated using Inverse Distance Squared (ID<sup>2</sup>) due to the low number of composites within each domain.

Estimations have been undertaken as hard boundary estimations within three passes. The first pass has utilised a minimum of three and a maximum of six composites within a search ellipse of 40 m by 40 m by 10 m. The second pass ellipse has been expanded to twice the size of the first pass, while the number of samples has remained the same. The third pass has utilised a minimum of two and a maximum of six composites into a search ellipse of 120 m by 120 m by 30 m. A high-grade yield has been applied to the mineralised tonalite domain in passes two and three in order to reduce high-grade smearing during the estimation. Un-estimated blocks have been assigned a grade of 0g/t Au and are identified as pass = 0 blocks. All sub-blocks have been estimated at the scale of the parent block.

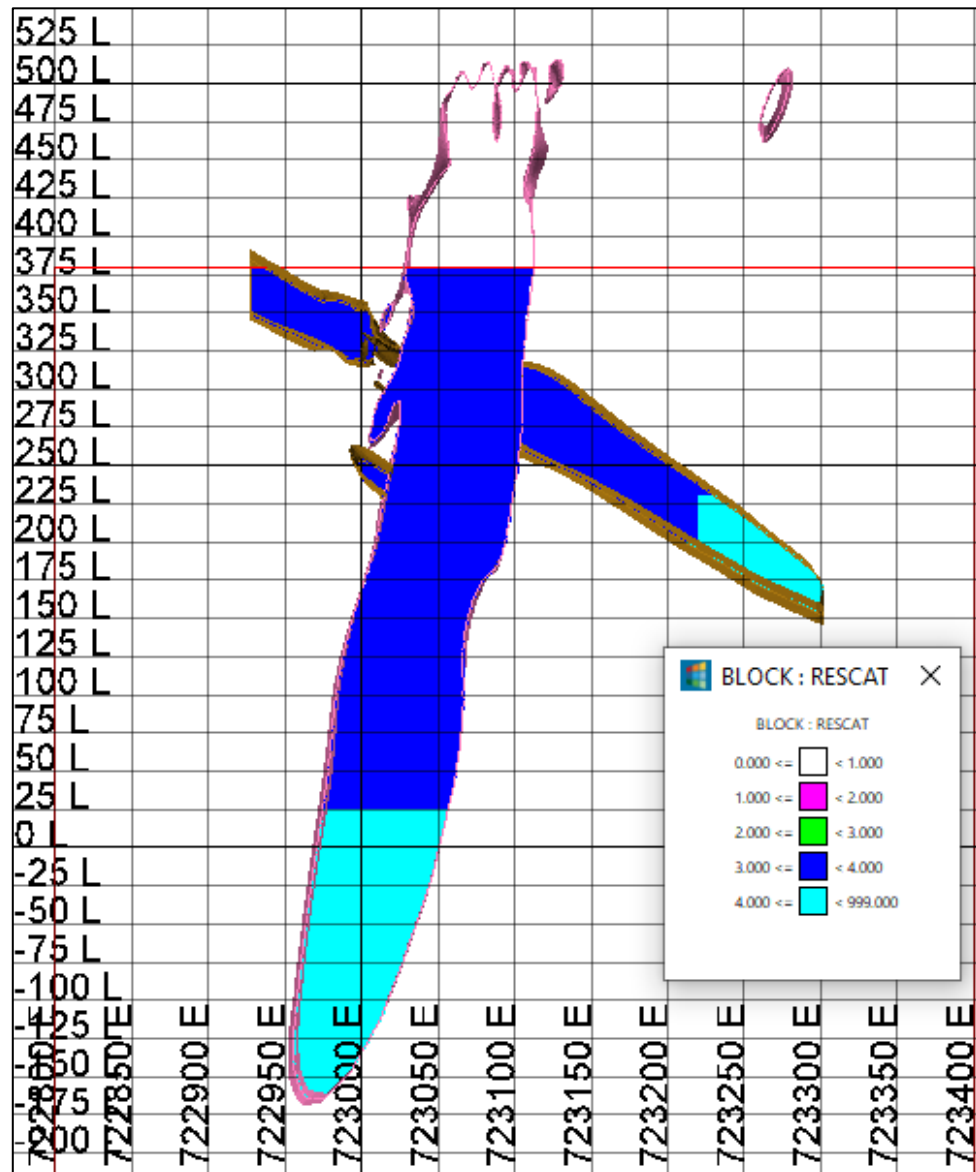
Final grade estimates have been validated by statistical analysis and visual comparison to the input composite data. No depletion for mining has occurred, since no underground mining has taken place to date at the deposit.

Bulk density values have been assigned to the block model on the basis of lithology and weathering state, (Table 2).

Table 2 Bulk Density Values Assigned to the Block Model		
Lithology	Weathering State	Bulk Density (g/cm <sup>3</sup> )
Basalt	Fresh	2.9
Tonalite	Fresh	2.7
BIF	Fresh	3.0

The block model has been classified on the following basis. Portions of the block model which have estimated within one of the three estimation passes, with drillhole spacing of 40 m (X) by 40 m (Y) to 80 m (X) by 80 m (Y), and which lie above 25 mRL (~500 m below surface) have been classified as **Inferred Mineral Resources** (Figure 5). Areas of grade extrapolation, below 25 mRL, where drillhole spacing is greater than 80 m (X) by 80 m (Y) remain unclassified. All un-estimated blocks remain unclassified.

**Figure 5**  
**Two Mile Hill deeps deposit (Section 6,892,570mN)**  
**Mineral Resource coloured by category; Inferred (dark blue), unclassified (light blue)**



### **Reasonable Prospects for Eventual Economic Extraction**

In order to meet the JORC Code 2012 criteria that all reported Mineral Resources satisfy the requirement for reasonable prospects for eventual economic extraction (**RPEEE**), Mining Plus has undertaken a series of resource stope optimisations in Datamine. The optimisations have been undertaken based on mining by a Sub-Level Cave (**SLC**) mining scenario at a minimum stope size of 10 m (X) by 10 m (Y) by 25 m (Z). The optimisation has been applied to Inferred material only, and the tonalite and BIF mineralisation have both been included in the optimisation runs. The Mineral Resource has been reported within an optimised underground wireframe, generated using mining costs, processing costs, recoveries and a gold price detailed below. The mining and processing costs applied to the optimisation are detailed in Table 3.

<b>Table 3</b>	
<b>Mining and Processing Costs Applied to the Stope Optimisation</b>	
Mining	A\$25
Ore Sorting	A\$3
Processing	A\$30

The Western Australian State gold royalty (WASG) and the World Gold Council (WGC) levy have been included in the optimisation, Table 4.

<b>Table 4</b>	
<b>WASG and WGC Royalty and Levy Applied to the Stope Optimisation</b>	
WGC Levy	A\$3.25
WASG Royalty	A\$81.25

A program of crushing testwork, undertaken by Australian Laboratory Services Pty Ltd (ALS) and Nagrom, has been followed by two campaigns of commercial ore sorting trials using both Steinert and Tomra ore sorters, under the supervision of MDIs project metallurgist, Hugo Viviani, and Nexus Bonum Pty Ltd (Nexus). The two commercial ore sorting campaigns determined that ore sorting is likely to upgrade the tonalite mineralisation in grade and reduce the tonnes by at least 50%. As a consequence of ore sorting, the tonnes of mineralisation expected to be processed has halved. This tonnage reduction through the process plant has been accounted for in the optimisation runs.

A gold recovery of approximately 96% has been determined by metallurgical testwork on the primary tonalite mineralisation completed by ALS in 2017, under the supervision of Hugo Viviani, and has been applied to the optimisation. A gold recovery of 96% has been applied during the stope optimisation process.

The stope optimisation process has been undertaken at a commodity price of A\$3,250/ounce gold. This price represents an increase of approximately 25% on the current gold price of A\$2,650/ounce of gold and is considered appropriate for use in the determination of RPEEE by the Competent Person.

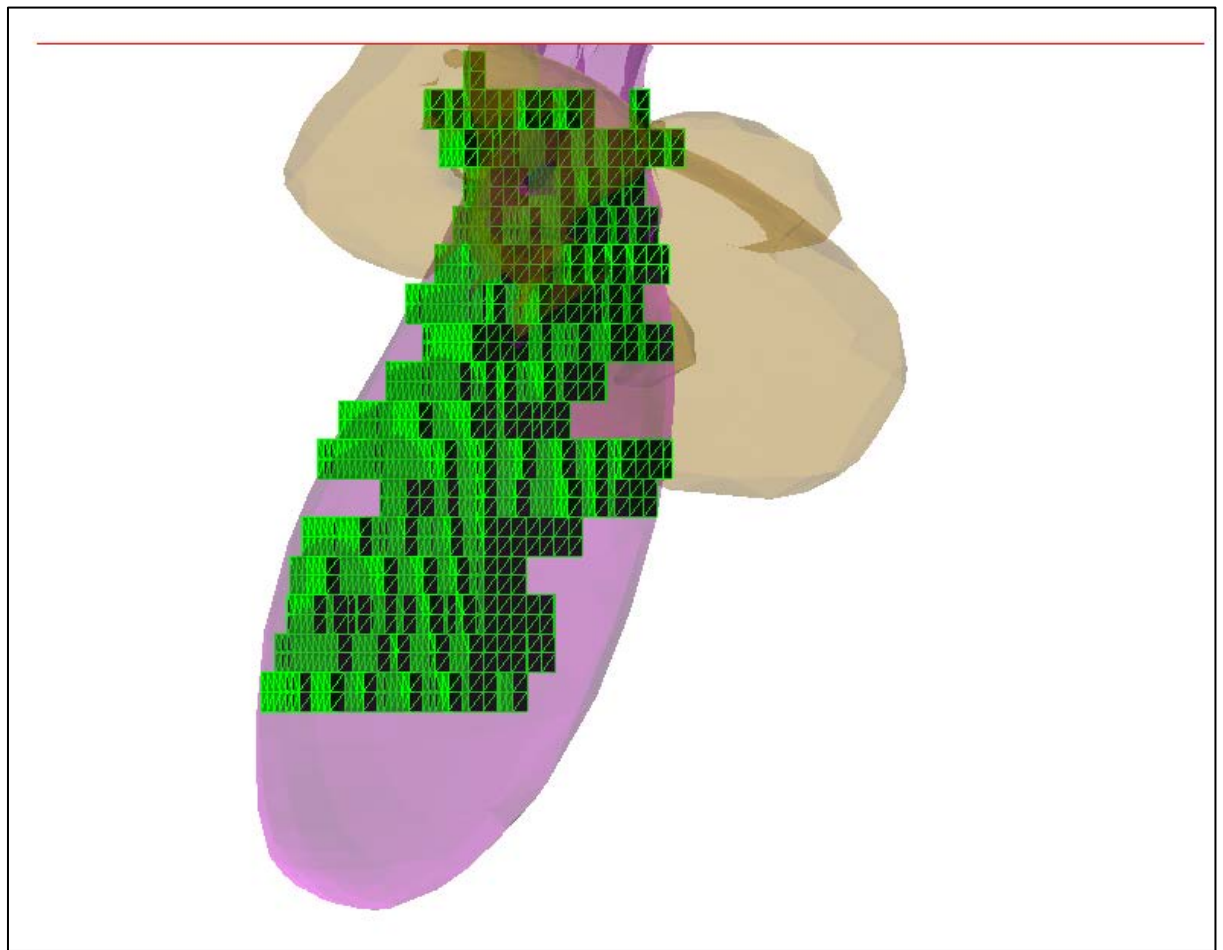
The in-situ cut-off grade applied to the stope optimisation process in Datamine has been generated by applying the costs and parameters detailed above. A dilution factor of 20% has been included in this calculation in order to anticipate the inclusion of waste incurred whilst mining an SLC. Due to the mining method, a mining recovery of 100% has been assumed, therefore no ore loss has been included.

The in-situ cut-off grade applied in Datamine, in order to generate the optimisation wireframes, is 0.64 g/t Au. Therefore, all individual wireframes created during this process contain material at or above the cut-off of 0.64 g/t Au. Waste material below the cut-off may be included within individual wireframes, however the total aggregated grade of all wireframes must be at or above the 0.64 g/t Au cut-off.

It is important to note that these wireframes should not be described as “mineable shapes”. Mining factors excluded in this analysis include, but are not limited to, capital costs (non-mining, access and footprint establishment), regional pillars, footprint geometries, unplanned dilution and the time value of money. However, the wireframes do enclose a contiguous and appropriately diluted Mineral Resource. As such, the Competent Person considers that the reported Mineral Resource has reasonable prospects for eventual economic extraction by the sub-level cave underground mining method. An assessment of whether the project as a whole is economically viable has not been made under this analysis.

Numerous stope wireframes have been generated in Datamine by applying the cut-off of 0.64 g/t Au to the MRE block model during the optimisation (Figure 6). These wireframes maximize the tonnes above the cut-off while ensuring that all material is part of a minimum mining unit with geometry appropriate for a sub-level cave.

**Figure 6**  
**Stope optimisation wireframes (in green) versus tonalite wireframe (in pink) and BIF wireframe (in brown), generated at a cut-off of 0.64 g/t Au, looking northeast**



The individual stope wireframes have been amalgamated to create one large valid MRE optimisation wireframe for reporting purposes, within the Vulcan block model.

The inclusion of waste material during the stope optimisation process precludes the requirement to apply a cut-off grade to the reporting of the Mineral Resource within Vulcan, since the application of the 0.64 g/t Au cut-off has been applied within Datamine and the creation of the wireframe solids.

To the best of Mining Plus's knowledge, at the time of estimation, there are no known material modifying factors such as permitting, legal, title, taxation, socio-economic, marketing, political or other relevant material modifying factors that could materially impact on the eventual extraction of the Mineral Resource.

### **Two Mile Hill Tonalite Deeps Metallurgy**

Initial metallurgical testwork on the tonalite deeps deposit indicates that overall gold recoveries of ~96% can be anticipated at a 125um grind size, with >58% recoverable via gravity concentration prior to leaching. Testwork exhibits rapid leach kinetics, with 90% of total gold extraction achieved within the first two hours on run-of-mine (ROM) composite samples following gravity gold recovery.

A moderate Bond ball mill work index of 16.4kWh/t, low reagent consumptions and the absence of deleterious elements confirms technical amenability for treatment through the Company's Sandstone gold processing plant, located 4km to the south of Two Mile Hill.

Details of the metallurgical testwork are provided in the Company's ASX release dated 6 September 2017.

### **Two Mile Hill Mineralogy & Ore Sorting Trials**

Initial mineralogical testwork on separate composite samples of quartz veining and tonalite from the Two Mile Hill tonalite deeps deposit indicates that 99.6% of the gold is hosted by the quartz veins. The composite sample of quartz vein material averaged 34.8g/t Au, while tonalite-only composites averaged 0.15g/t Au (refer ASX release dated 11 October 2017).

Two commercial-scale ore sorting campaigns demonstrate that the Two Mile Hill tonalite deeps deposit is amenable to pre-concentration sorting, with a high selectivity of gold mineralisation using X-ray and optical sensors. Scoping level testwork indicates that sorting can deliver a 185%-257% increase in grade with gold recoveries in excess of 93%, with up to 64% of the sorter feed material being rejected. This delivers significant operational benefits, including reduced haulage and process operating costs, and tailings disposal and water requirements.

**Ore sorting has the potential to provide a mill feed grade at least double, and potentially triple, the mined grade and at a feed rate compatible with the available capacity of the Company's 100%-owned 600,000tpa Sandstone processing plant. Validation of ore sorting would likely lead to a significant positive impact on project economics.**

Details of the ore sorting campaigns are provided in the Company's ASX releases dated 15 January and 30 July 2018.



### **Sandstone Gold Project - Resources and Reserves Statement**

Updated Mineral Resources applicable to the Sandstone Gold Project as at 9 April 2020 are provided in Table 5 below.

<b>Table 5</b> <b>Sandstone Gold Project Mineral Resource Statement</b>						
<b>Deposit</b>	<b>COG (g/t Au)</b>	<b>Tonnes</b>	<b>Grade (g/t Au)</b>	<b>Contained Gold (oz.)</b>	<b>JORC Classification</b>	<b>JORC Classification</b>
+Two Mile Hill – Open Pit	0.7	1,012,000	1.36	44,000	Indicated	2012
+Two Mile Hill – Open Pit	0.7	114,000	1.10	4,000	Inferred	2012
Two Mile Hill – Tonalite Deeps	NA*	14,000,000	1.10	480,000	Inferred	2012
Two Mile Hill – BIF Deeps	NA*	200,000	3.10	20,000	Inferred	2012
+Shillington – Open Pit	0.7	1,015,000	1.33	43,000	Indicated	2012
+Shillington – Open Pit	0.7	272,000	1.17	10,000	Inferred	2012
#Wirraminna – Open Pit	0.5	307,000	1.50	14,600	Indicated	2012
#Wirraminna – Open Pit	0.5	243,000	1.10	8,400	Inferred	2012
<b>Total Indicated</b>		<b>2,334,000</b>	<b>1.37</b>	<b>101,600</b>	<b>Indicated</b>	<b>2012</b>
<b>Total Inferred</b>		<b>14,829,000</b>	<b>1.09</b>	<b>522,000</b>	<b>Inferred</b>	<b>2012</b>
<b>Total Resource</b>		<b>17,163,000</b>	<b>1.13</b>	<b>623,600</b>		<b>2012</b>

\*The Two Mile Hill Tonalite Deeps and BIF Deeps have been reported within optimised wireframes. All wireframes include waste and have an aggregate grade at or above the cut-off of 0.64g/t Au.

This Statement includes information that relates to the Two Mile Hill open pit, Shillington and Wirraminna Mineral Resources which were prepared and first disclosed under the JORC Code 2012. The information was extracted from the Company's previous ASX announcements as follows:

+ ASX Release dated 14 December 2016.

# ASX Release dated 8 December 2017,

which are available to view on the Company's website.

Notwithstanding the significant increase in gold price since these Mineral Resource estimates were prepared, and recognising that the current 17,300m drilling campaign is anticipated to result in increases and/or upgrades to these Mineral Resources, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material and assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcements.

The Sandstone Gold Project Mineral Resource Statement has been updated to reflect the partial conversion of the Two Mile Hill tonalite deeps deposit from an Exploration Target to an Inferred Mineral Resource. The Statement has also been updated to reflect the conversion of the Two Mile Hill BIF deeps deposit from JORC Code 2004 compliance to a JORC Code 2012 Inferred Mineral Resource.

In addition to the updated Mineral Resources reported above, the residual portion of the Two Mile Hill tonalite deeps Exploration Target, lying between 500m and 700m below surface, is not included and remains to be re-quantified as an Exploration Target or Mineral Resource.

There are no Ore Reserves currently reported in relation to the Sandstone Gold Project.

Middle Island has a firm policy to only utilise the services of external independent consultants to estimate Mineral Resources. The Company also has established practices and procedures to monitor the quality of data applied in Mineral Resource estimation, and to commission and oversee the work undertaken by external independent consultants.

In all cases, Mineral Resources are estimated and reported in accordance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Information in this release relating to Mineral Resources is based on, and fairly reflects, information and supporting documentation variously prepared by Mr Brett Gossage of EGRM Consulting Pty Ltd, Mr Shaun Searle of Ashmore Advisory Pty Ltd and Ms Lisa Bascombe of Mining Plus Pty Ltd on behalf of Middle Island Resources Limited.

The Competent Persons' are Members of the Australasian Institute of Mining and Metallurgy (AusIMM) and/or the Australian Institute of Geoscientists (AIG) and qualify as Competent Persons' as defined in the JORC Code.

**AUTHORISED FOR RELEASE BY:**

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

**MEDIA CONTACT:**

Kevin Skinner Field Public Relations +61 (0)8 8234 9555 / +61 (0)414 822 631

**WEBSITE:** [www.middleisland.com.au](http://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' Statements**

Information in this release relating to the logging and sampling techniques, analytical and QAQC protocols and the integrity of the drillhole data used in the estimation of the Two Mile Deeps Mineral Resource is based on, and fairly represents, information and supporting documentation prepared by Mr Rick Yeates who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Yeates is a fulltime employee of Middle Island and has sufficient experience which is relevant to the style of mineralisation and type of deposits 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 provided 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 substantial shareholder in the Company and entities associated with Mr Yeates hold unlisted options in the capital of the Company as disclosed in Appendix 3Y and substantial shareholder notices released to ASX.

The information in this release that relates to the Estimation and Reporting of the Two Mile Deeps Mineral Resource is based on, and fairly reflects, information and supporting documentation prepared by Ms. Lisa Bascombe BSc (Geology). Ms. Bascombe is an employee of Mining Plus Pty Ltd and has acted as an independent consultant on the Two Mile Hill Deeps Mineral Resource estimation. Ms. Bascombe is a Member of the Australian Institute of Geoscientists (#3520) and has sufficient experience with the style of mineralisation and deposit type under consideration, and to the activities 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'. Ms. Bascombe has provided her prior written consent to the inclusion in this report of the contained technical information relating the Mineral Resource Estimation in the form and context in which it appears. Ms Bascombe confirms that she has disclosed to the Company the full nature of the relationship between her and the Company, and there is no conflict of interest or any issues that could be perceived by investors as a conflict of interest.

**Previously Reported Information**

Refer to Table 5 for the compliance statement for the Two Mile Hill Open Pit, Shillington and Wirraminna Mineral Resources. This report includes information that relates to Exploration Results that were prepared and first disclosed under the JORC Code 2012. The information was extracted from the Company's previous announcements dated 14 November 2016 and 8 December 2017, which are available to view on the Company's website.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that, in the case of estimates of Mineral Resources or Ore Reserves, all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement.

# Appendix 1

The following Table is provided in compliance with the JORC Code

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<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 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.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drill core was sampled at 1m intervals and comprised half NQ2 core.</li> <li>Core was re-aligned prior to splitting and the right-hand side half core section was consistently sampled for assay.</li> <li>The half diamond core, sampled on 1m intervals (2-5kg), was sent to the laboratory to be crushed (-10mm) and pulverised to produce a 300g pulp, then split to a 50g charge for fire assay analysis.</li> <li>The results are derived from RC sampling by Middle Island Resources (MDI) and Sundowner Minerals (Sundowner). RC and diamond sampling completed by Herald Resources (Herald) and Troy Resources (Troy). MDI sampling was by collecting 2-3kg of RC chips off the drill rig's cone splitter at 1m intervals. Herald and Troy Resources RC sampling was by collecting 2-3kg of RC chips with a riffle splitter at 1m intervals. Sundowner collected 2m composites of unknown weight and unknown method. The diamond drill core samples were sampled as half HQ and NQ core at 1m intervals.</li> <li>Core recovery was excellent. Core was re-aligned prior to splitting and the right-hand side half core section was consistently sampled. MDIs RC recovery was also excellent, with samples being a consistent weight of 2 – 3kg. The primary RC sample was taken from the same splitter chute for the entire program. Herald and Troy Resources samples were collected using a 3-tier riffle splitter to split the whole RC metre sample return to a 2-3kg sub-sample.</li> <li>Troy and Herald half HQ and NQ diamond core samples, weighing 1-2kg, were sent to the laboratory to be crushed (-10mm), split and pulverised to produce a 300g pulp, with a 50g charge sub-sampled for fire assay analysis.</li> <li>MDI, Troy and Herald RC samples, comprising 2- 3kg, were sent to the laboratory to be crushed (-10mm), split and pulverised to produce a 300g pulp, with a 50g charge sub-sampled for fire assay analysis.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<ul style="list-style-type: none"> <li>Pre-collars for holes were drilled with a 130mm face sampling hammer from surface, and completed with NQ2 (50.6mm core diameter) diamond tails.</li> <li>Core was oriented using a Reflex ACT orientation tool.</li> <li>The oriented diamond drill core is HQ (63.5mm) and NQ (47.6mm) in diameter.</li> <li>The MDI RC rig used a 5-inch bit to return a 1m sample. The Herald and Troy RC drilling was drilled at an unknown size to return a 1m sample</li> </ul>
<b>Drill sample recovery</b>	<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>Diamond core and RC chip recovery data was measured for each drill run/drillhole and captured in a digital logging software package. The data has been reviewed and the core recovery was effectively 100% throughout</li> <li>The water table was intersected at 40–60m depth down-hole. MDI had no issues in keeping the sample dry. Sundowner, Herald and Troy Resources drilling also intersected the water table at 40–60m. While some wet material was sampled, this accounts for less than 1% of their total sampling.</li> <li>No relationship between sample recovery and grade has been established.</li> </ul>
<b>Logging</b>	<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>The RC chips and diamond core were logged for lithology, weathering, structure, mineralogy, mineralisation, alteration, colour, RQD and geotechnical parameters. Logging was carried out according to internal Company protocols at the time of drilling.</li> <li>Diamond core was logged continuously to record all relevant features, regardless of length. Core was also photographed wet and dry within each core tray.</li> <li>Each metre of all drillholes except for the 10 Sundowner RC holes was qualitatively logged from start to finish of the drillhole.</li> </ul>

<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc., and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Core was cut in half by diamond saw, the right hand half of the core was consistently sampled, the left hand half was retained in the core trays for reference purposes.</li> <li>• Half core samples were bagged in 1m intervals.</li> <li>• MDI RC chips were split dry using a cone splitter on the drill rig, samples were collected and bagged in 1m intervals. Troy and Herald RC chips were split dry by a 3-tier riffle splitter, samples were collected and bagged in 1m intervals. Sundowner 2m composites were collected by an unknown method.</li> <li>• All MDI samples were collected and couriered to the Intertek lab in Maddington, W.A for sample preparation and analysis.</li> <li>• The samples were dried and crushed to -10mm before being split and then a 300g subsample pulverized to 95% passing 75 microns. This fraction was then split again to a 50g sample charge for fire assay.</li> <li>• The Intertek laboratories are internationally certified.</li> <li>• The Company's routine diamond core sampling procedure is to consistently cut the core adjacent to the orientation line and collect the same side of the cut core for analysis.</li> <li>• A second core split was collected off the primary jaw crusher at a frequency of 1:20 samples to provide a field duplicate sample.</li> <li>• Troy samples were dispatched to SGS Minerals for analysis. The samples were dried and crushed to -10mm before being split and then a 300g subsample pulverized to 95% passing 75 micron. This fraction was then split again to a 50g sample charge for fire assay. Herald samples were sent to Analabs in Mt Magnet for 50g fire assay, however the precise preparation procedure is undocumented.</li> <li>• Sundowner samples were prepared and assayed by an unknown method. All of the laboratories stated above are internationally certified and accredited.</li> <li>• MDI collected an RC field duplicate (via a second split off the cone splitter) at a rate of 1:18 samples. Sundowner, Troy and Herald Resources completed no field duplicates on their RC samples, Troy completed duplicates on interesting samples within their core samples.</li> <li>• For MDI diamond core the routine sample procedure was to consistently cut the core along the bedding apex and collect the same side of the cut core. For the RC chips, the routine sample procedure was to consistently take the primary split from the same chute. A secondary split was taken off the alternate chute for field duplicates.</li> <li>• Sample size and assay charge size are considered appropriate for the style of mineralisation.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• MDI adopted a 50g fire assay method with either an ICP-OES or AAS finish. This assay technique is considered suitable for gold mineralisation associated with sulphides.</li> <li>• No other measurement tool/instrument was used to derive assays, however a gyroscopic instrument was used to monitor deviation within the diamond holes.</li> <li>• MDI included laboratory duplicates, field duplicates and certified standards routinely in the assay train at a 1:10 frequency, and a quartz wash was used after each sample was pulverised.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sampling was undertaken by experienced geologists from MDI who confirmed the intersections as prospective for gold mineralisation.</li> <li>• No twinned holes or umpire assaying were used as part of this programme.</li> <li>• Sampling data was imported and validated using a GBIS database software system by an experienced database consultancy.</li> <li>• Assay data were not adjusted.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <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>• Surface collar coordinates were surveyed via GPS.</li> <li>• Given magnetism inherent in some of the host rocks, a high quality downhole gyro was used to determine the dip and azimuth of the drillholes at 10m intervals.</li> <li>• MGA94 Zone 50.</li> <li>• The topographic surface was calculated from previous mine survey pickups</li> </ul>

<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <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>	<ul style="list-style-type: none"> <li>• Core samples are reported at 1m sample/assay intervals.</li> <li>• Results being reported are comprised of 1m sample/assay intervals, with holes drilled on a nominal 20m by 20m pattern.</li> <li>• The data spacing is adequate to provide continuity of grade for exploration drilling and resource estimation purposes.</li> <li>• No compositing of samples was adopted for MDI, Troy and Herald drilling. Sundowner adopted 2m composites for its assay sampling.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <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>	<ul style="list-style-type: none"> <li>• Holes were drilled perpendicular to the long axis of the tonalite body in order to orthogonally intercept both the BIF in the hanging wall and the dominant sub-horizontal quartz vein orientation within the tonalite. As such the reported mineralised intercepts are effectively true widths.</li> <li>• The company does not believe that any sample bias had been introduced which could have a material effect on the results.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• MDI, Herald, Troy and Sundowner procedures ensured individual samples were given due attention. The samples were taken by experienced company geologists and collected by the laboratory's designated driver. Intertek, SGS Minerals and Analabs are all internationally accredited laboratories.</li> <li>• All samples were held at the MDI exploration camp in the custody of MDI employees prior to collection by the courier for transport to the laboratory in Perth.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• Field data collected was logged and validated in a custom field logging tool.</li> <li>• The database was again validated and audited by recognised external database consultants, Expedio.</li> </ul>

## Section 2 Reporting of Exploration Results

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>• The sampled diamond core and RC chips are from Mining Lease M57/128 which is 100% owned by Sandstone Operations Pty Ltd, a wholly-owned subsidiary of MDI.</li> <li>• As of 5/12/2016, Sandstone Operations Pty Ltd was the sole owner of the project, including Mining Lease M57/128.</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>• Previous exploration was undertaken and reported by Herald Resources Limited and Troy Resources Limited during their respective tenure of the Sandstone gold project.</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>• The Two Mile Hill deposit is hosted within a late stage, near vertical intrusive tonalite stock that intrudes the local stratigraphy of shallowly NE dipping mafic volcanics and BIF.</li> </ul>
<b>Drillhole 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>• See tables, plans and sections within the release.</li> <li>• All drillhole information has been previously reported to the market by the respective entities.</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 (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable with respect to the reporting of exploration results, however it is otherwise addressed in Section 3 - Estimation and Reporting of Mineral Resources.</li> <li>• No internal intercepts are reported.</li> </ul>



	<ul style="list-style-type: none"> <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>Metal equivalent values are not stated</li> </ul>
<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 (eg 'down hole length, true width not known')..</li> </ul>	<ul style="list-style-type: none"> <li>All holes were drilled perpendicular to the long axis of the tonalite body in order to orthogonally intercept both the BIF units in the hanging wall and the dominant vein orientation within the tonalite. As such the reported mineralised intercepts are effectively true widths.</li> <li>Gold mineralisation within the vertically oriented Two Mile Hill tonalite intrusive is associated with sub-horizontal quartz veins. The drilling is therefore oriented to ensure both adequate definition the tonalite contacts and an optimum angle of intersection on the mineralised quartz veins.</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 figures (plans, sections and isometric view) 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 to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</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>	<ul style="list-style-type: none"> <li>Reported within the release as appropriate and relevant.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <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>	<ul style="list-style-type: none"> <li>Some further RC drilling is contemplated in order to clarify the nature of, and controls on, gold mineralisation hosted by basalt on the eastern periphery of the Two Mile Hill deposit.</li> </ul>

## Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>The historic database and current database were validated and audited by Expedio database consultants. Expedio manage the current database on behalf of MDI.</li> <li>All geological and field data is currently entered using data-loggers and software developed by OCRIS, that includes lookup tables and fixed formatting (and protected from modification) thus only allowing data to be entered using the MDI geological code system and sample protocol. Historical logging was carried out according to Herald Resources and Troy Resources internal protocols at the time of drilling. Sundowner's geology logs are not present in this dataset. The database is yet to be fully rationalised and therefore the different logging schemes persist in the database to a limited extent.</li> <li>Data is loaded and managed by independent database consultants in the Datashed database, which was managed by Expedio with access to MDI personnel. MDI technical personnel validated the database using Micromine software.</li> <li>The OCRIS database is then reviewed against the original logging spreadsheets and the assay data checked against the supplied assay certificates.</li> <li>Following importation, the data goes through a series of digital checks for duplication and non-conformity, followed by</li> </ul>

		validation by the relevant project geologist who manually checks the collar, survey, assay and geology for errors against the original field data and final paper copies of the assays. The process is documented, including the recording of drillholes checked, errors found, corrections made and the date of database update.
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Rick Yeates has completed site visits many times and has supervised recent data collection. MDI personnel have completed a review of the data quality. Drilling was in progress during each of these site visits and all work was being undertaken in a competent and appropriate manner. Observed sampling protocols were considered to meet high industry standards.</li> <li>The site visits included a review of geological logging and supervision of independent check-assaying. The check assaying confirmed the location and tenor of the assaying contained within the database. Although some minor inconsistencies in the various generations of geological logging were rectified via re-logging of archived chip trays, the logging was generally found to be consistent and no material issues noted. The drillhole collar surveys were confirmed by handheld GPS and DGPS surveys, with the drill collars well preserved.</li> <li>Lisa Bascombe, Principal Geologist for Mining Plus Pty Ltd, has not completed a site visit.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>The geological interpretation is considered robust due to the nature of the geology and mineralisation.</li> <li>Drillholes have been logged for lithology, structure, alteration and mineralisation data.</li> <li>All drillholes within the Two Mile Hill area have been utilised in the creation of the lithology wireframes.</li> <li>Lithological wireframes have been produced in Leapfrog Geo using logged lithology codes.</li> <li>RC and DD drillholes have been utilised in the creation of the Leapfrog Geo mineralisation wireframes.</li> <li>The mineralised BIF has been generated as an indicator interpolant at 0.4g/t Au in Leapfrog Geo; whereas the tonalite mineralisation wireframe has been generated as a grade interpolant at a cut-off of 0.5g/t Au.</li> <li>The lithology wireframes have been used to constrain the mineralisation wireframes in Leapfrog Geo and therefore the mineralisation is contained wholly within the lithology wireframe for each rock type.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource</li> </ul>	<ul style="list-style-type: none"> <li>The Two Mile Hill tonalite has an extent of 400 m in length, 80 m in width and over 700 m depth.</li> <li>The Two Mile Hill deeps resource has an upper elevation limit of 380 mRL.</li> <li>The Two Mile Hill tonalite deeps MRE sits directly below, but does not overlap, the Two Mile Hill tonalite open pit resource reported by MDI in December 2016.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>Grade estimation of Au ppm has been completed using Ordinary Kriging (OK) in the tonalite Domains 20 and 21 and Inverse Distance Squared (ID<sup>2</sup>) in the two BIF Domains 10 and 11.</li> <li>Compositing has been undertaken in Vulcan using the merge algorithm at a length 3 m, with a 0.3 m minimum. Composite lengths range from 0.3 to 3 m.</li> <li>Unassayed, unsampled, listed not received (LNR) and null value assay results have been assigned a grade of 0.001g/t Au during compositing in Vulcan.</li> <li>The influence of extreme sample distribution outliers has been reduced by top-cutting where required. The top-cut levels have been determined using a combination of histograms, log probability and mean variance plots. Top-cuts have been reviewed and applied on a domain by domain basis. Top-cutting has been undertaken in three of the four domains.</li> <li>Variography has been determined within Supervisor v8.12 software for the mineralised and unmineralised tonalite, where numerous samples exist; however, was not possible in the BIF domains.</li> <li>The drillhole spacing is highly variable, especially at depth.</li> <li>A block model with parent block size of 20 m (X) by 20 m (Y) by 5 m (Z) and the sub-block size of 2.5 m (X) by 2.5 m (Y) by 1 m (Z) has been generated. Sub-blocking has been used to define the mineralisation edges, with the estimation undertaken at the parent block scale. <ul style="list-style-type: none"> <li>Pass 1 estimations have been undertaken using a minimum of 3 and a maximum of 6 composites</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• Discussion of basis for using or not using grade cutting or capping.</li> <li>• The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>into a search ellipse of 40 m Dir 1 x 40 m Dir 2 x 10 m Dir 3.</li> <li>○ Pass 2 estimations have been undertaken using a minimum of 3 and a maximum of 6 composites into a search ellipse of 80 m Dir 1 x 80 m Dir 2 x 20 m Dir 3.</li> <li>○ Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 6 composites into a search ellipse of 120 m Dir 1 x 120 m Dir 2 x 30 m Dir 3.</li> <li>• A high-grade yield has been applied in Domain 21 to reduce high-grade smearing.</li> <li>• The Mineral Resource estimate has been validated using visual validation tools, mean grade comparisons between the block model and composite grade means, and swath plots comparing the composite grades and block model grades by Northing, Easting and RL</li> <li>• No selective mining units are assumed in this estimate.</li> <li>• No correlation between variables has been assumed.</li> <li>• No assumptions have been made regarding recovery of any by-products.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>• The tonnes have been estimated on a dry basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• The basis of the adopted cut-off grade(s) or quality parameters applied</li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resource has been reported within optimised wireframes.</li> <li>• All reported wireframes have been generated by applying a cut-off grade of 0.64 g/t Au within Datamine.</li> <li>• The cut-off grade has been determined using the Mining and Processing information detailed below.</li> <li>• Waste material below the cut-off may be included within individual wireframes, however the total aggregated grade of all wireframes must be at or above the 0.64 g/t Au cut-off.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>• An underground stope optimisation has been undertaken in Datamine.</li> <li>• The mining assumptions/parameters applied to the optimisation are <ul style="list-style-type: none"> <li>• Sub-level Cave</li> <li>• Minimum mining unit of 10 m X by 10 m Y by 25 m Z</li> <li>• Cost of A\$25/tonne,</li> <li>• 20% waste dilution included,</li> <li>• 100% ore recovery applied,</li> <li>• WGC Levy – A\$3.25/ounce,</li> <li>• WASG Royalty – A\$81.25/ounce</li> </ul> </li> <li>• Gold price – A\$3,250/ounce has been applied to the optimisation.</li> <li>• The resultant optimisation work has calculated a cut-off grade of 0.64g/t Au, including dilution and ore loss, as meeting the criteria for eventual economic extraction as defined by the JORC Code</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>• The metallurgical assumptions/parameters applied to the optimisation are <ul style="list-style-type: none"> <li>• Surface crushing plant,</li> <li>• Ore sorter reduces volume of mineralisation by 50%,</li> <li>• 96% gold recovery,</li> <li>• Processing costs – A\$30/tonne,</li> <li>• Ore sorting cost – A\$3/tonne,</li> </ul> </li> <li>• Gold price – A\$3,250/ounce has been applied to the optimisation.</li> <li>• Ore sorting testwork has been undertaken in two trials, using Steinert laser and optical sorters and a Tomra optical sorter. See ASX announcements dated 15th January 2018, and 30th July 2018.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported.</li> </ul>	<ul style="list-style-type: none"> <li>• No environmental factors or assumptions have been applied.</li> <li>• The Two Mile Hill deposit and surrounds comprise an historic mining area, the environmental integrity of which (notwithstanding rehabilitation), has been compromised by previous mining and exploration activity.</li> <li>• The Two Mile Hill and Shillington open pit deposits, which easily encompass the same footprint as the Two Mile Hill deeps deposit, is under an approved Mining Plan.</li> <li>• The only known environmental aspect that may impinge on development of the Two Mile Hill deeps deposit is a possible Declared Rare Flora (DRF) species that has been identified to the west of Two Mile Hill. The DRF area may require the proposed optimal waste dump extension to be slightly re-</li> </ul>

	Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made	positioned.																							
Bulk density	<ul style="list-style-type: none"><li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li><li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit,</li><li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li></ul>	<ul style="list-style-type: none"><li>Bulk density values have been calculated from 178 measurements. Data has been separated into lithological and weathering datasets for analysis.</li><li>Bulk densities have been assigned on the basis of lithology and weathering state.</li><li>The bulk densities assigned to the block model are:</li></ul> <table><tr><th>Lithology</th><th>Weathering State</th><th>Bulk Density (g/cm³)</th></tr><tr><td>Basalt</td><td>Fresh</td><td>2.9</td></tr><tr><td>Tonalite</td><td>Fresh</td><td>2.7</td></tr><tr><td>BIF</td><td>Fresh</td><td>3.0</td></tr></table>	Lithology	Weathering State	Bulk Density (g/cm³)	Basalt	Fresh	2.9	Tonalite	Fresh	2.7	BIF	Fresh	3.0											
Lithology	Weathering State	Bulk Density (g/cm³)																							
Basalt	Fresh	2.9																							
Tonalite	Fresh	2.7																							
BIF	Fresh	3.0																							
Classification	<ul style="list-style-type: none"><li>The basis for the classification of the Mineral Resources into varying confidence categories</li><li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li><li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li></ul>	<ul style="list-style-type: none"><li>The resource classification has been applied to the MRE based on the drilling data spacing, grade and geological continuity, and data integrity.</li><li>The classification takes into account the relative contributions of geological and data quality, and confidence, as well as grade confidence and continuity.</li><li>All estimated blocks above 25mRL, where the drillhole spacing ranges from approximately 40 m (X) by 40 m (Y) to 80 m (X) by 80 m (Y) and geological and grade continuity are understood, have been classified as Inferred.</li><li>Areas of grade extrapolation below 25 mRL, where the drillhole spacing is greater than 80 m (X) by 80 m (Y), and where geological and grade continuity are currently poorly defined, remain unclassified.</li><li>The classification reflects the view of the Competent Person. The input data is considered to be of good quality, there is no alternative geological interpretation postulated at this date, the geological evidence is sufficient to imply, but not verify the geological and grade continuity in areas of drilling at spacing of less than 80 m (X) by 80 m (Y).</li><li>To the best of CP's knowledge, at the time of estimation there are no known permitting, legal, title, taxation, socio-economic, marketing, political or other relevant issues that could materially impact on the eventual extraction of the mineral resource.</li></ul>																							
Audits or reviews	<ul style="list-style-type: none"><li>The results of any audits or reviews of Mineral Resource estimates.</li></ul>	<ul style="list-style-type: none"><li>This Mineral Resource estimate for Two Mile Hill deeps has not been audited by an external party.</li></ul>																							
Discussion of relative accuracy/confid ence	<ul style="list-style-type: none"><li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate</li><li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used</li><li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available</li></ul>	<ul style="list-style-type: none"><li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</li><li>The statement relates to a local estimate of tonnes and grade within the underground optimisation wireframe.</li></ul> <table><tr><th colspan="4">Mineral Resource Estimate for the Two Mile Hill Deeps Deposit - March, 2020</th></tr><tr><th rowspan="2">Domain</th><th colspan="3">Inferred</th></tr><tr><th>Tonnes</th><th>Grade</th><th>Ounces</th></tr><tr><td>Tonalite</td><td>14,000,000</td><td>1.1</td><td>480,000</td></tr><tr><td>BIF</td><td>200,000</td><td>3.1</td><td>20,000</td></tr><tr><td>Total</td><td>14,200,000</td><td>1.1</td><td>500,000</td></tr></table> <p>The preceding statements of Mineral Resources conforms to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2012 Edition. All tonnages reported are dry metric tonnes. Minor discrepancies may occur due to rounding to appropriate significant figures.</p> <ul style="list-style-type: none"><li>No production records exist</li></ul>	Mineral Resource Estimate for the Two Mile Hill Deeps Deposit - March, 2020				Domain	Inferred			Tonnes	Grade	Ounces	Tonalite	14,000,000	1.1	480,000	BIF	200,000	3.1	20,000	Total	14,200,000	1.1	500,000
Mineral Resource Estimate for the Two Mile Hill Deeps Deposit - March, 2020																									
Domain	Inferred																								
	Tonnes	Grade	Ounces																						
Tonalite	14,000,000	1.1	480,000																						
BIF	200,000	3.1	20,000																						
Total	14,200,000	1.1	500,000																						