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Middle Island
RESOURCES LIMITED

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ACN 142 361 608
ASX code: MDI
www.middleisland.com.au

Capital Structure:
2,332 million ordinary shares
919 million unlisted options
(as at 30 June 2020)

Cash & Liquid Investments:
$5.19 million (as of 30 June 2020)

Directors & Management:
Peter Thomas
Non-Executive Chairman
Rick Yeates
Managing Director
Beau Nicholls
Non-Executive Director
Brad Marwood
Non-Executive Director
Dennis Wilkins
Company Secretary

Contact:
Rick Yeates
Mob: +61(0)401 694 313
rick@middleisland.com.au

ASX Release – 14 August 2020

Two Mile Hill open pit Mineral Resource up 13%; drives Sandstone total to 657,500oz

- **A 13% increase in the Two Mile Hill open pit Mineral Resource, to 1.25Mt at 1.36g/t Au for 55,000oz, within the Company's Sandstone gold project in central WA.**
- **Increases Sandstone's current total project Mineral Resources to 657,500oz gold which, importantly, does not include the five new satellite gold discoveries where resource definition drilling is being finalised.**
- **The proportion of the Two Mile Hill open pit deposit classified as an Indicated Mineral Resource also increased to 95%.**
- **Two Mile Hill is one of 10 Sandstone gold deposits the subject of Middle Island's ongoing +40,000m drilling campaign and feasibility study in 2020.**
- **The new Two Mile Hill resource upgrade closely follows a 52% increase in the Shillington Mineral Resource announced last week.**
- **Two large-diameter oxide diamond core holes, to be drilled for confirmatory bulk density and geotechnical purposes, are all that remain to be completed at Two Mile Hill.**
- **The Two Mile Hill deposit will now be re-optimised to determine Ore Reserves likely to contribute to the feasibility study.**
- **Resource estimates for the five new 2020 satellite open pit deposits, along with extensions to the Goat Farm and Twin Shafts deposits, will be progressively provided as final results from the Phase 2 drilling campaign are received and compiled.**

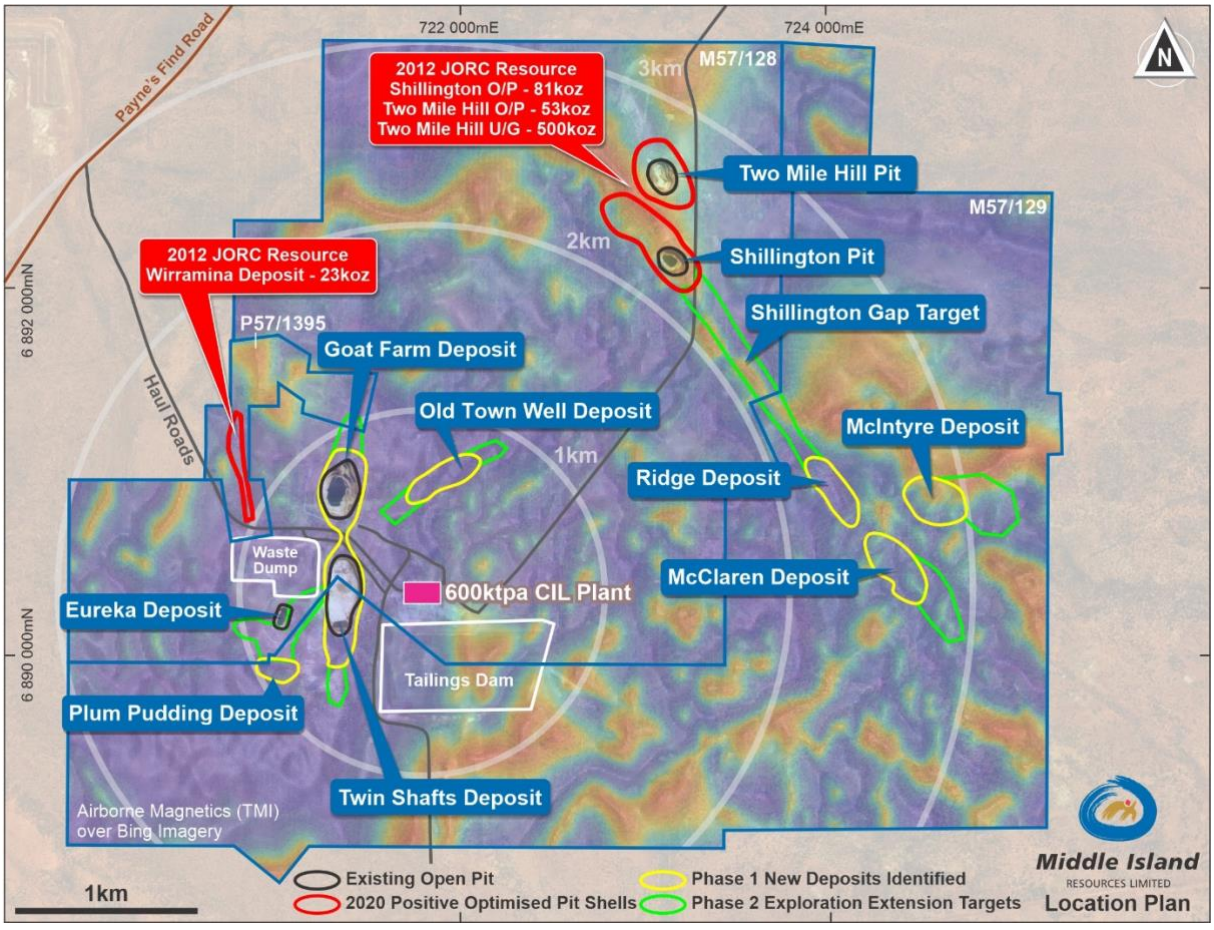
SANDSTONE GOLD PROJECT (WA)

Introduction

Explorer and aspiring gold developer, Middle Island Resources Limited (**Middle Island**, **MDI** or **the Company**) is pleased to advise that an **updated resource estimate has been completed for the Two Mile Hill open pit gold deposit** within the Company's wholly-owned Sandstone gold project in the central goldfields of WA. The updated estimate follows completion of infill and extension drilling undertaken as part of the +40,000m 2020 exploration and resource definition drilling campaign at Sandstone. The drilling, which is on-going, is exclusively focussed on the definition of additional open pit Mineral Resources prior to their inclusion for assessment as Ore Reserves in the project's 2020 feasibility study (FS).

The location of the various gold deposits (including Two Mile Hill) and prospects being assessed under the 2020 drilling campaign are shown in Figure 1 below.

Figure 1
Open pit gold deposits and prospects being assessed in the 2020 drilling campaign



Two Mile Hill Open Pit Mineral Resource Estimate

Introduction

Middle Island commissioned EGRM Consulting Pty Ltd (EGRM) to update the Mineral Resource Estimate (MRE) for the Two-Mile Hill open pit gold deposit (Two Mile Hill), which is part of the Sandstone gold project in Western Australia.

This estimate is considered to be an update of the 2016 MRE estimate completed by EGRM for the Two Mile Hill open pit deposit. This study (2016 MRE) has been described in the EGRM report titled, "Sandstone Project, Mineral Resource Estimate Study, Report the Two Mile Hill and Shillington deposits" and is summarised in an ASX Release dated 14 December 2016. Limited additional drilling has been completed by MDI post the 2016 MRE study, including RC pre-collars for deeper diamond holes within the Two Mile Hill tonalite and infill RC drilling of mineralised basalts in the northeast quadrant of the deposit.

The MRE estimate is based on reverse circulation percussion (RC) and diamond (DD) drilling variously undertaken by Sundowner Minerals NL (Sundowner), Herald Resources Limited (Herald), Troy Resources NL (Troy) and MDI. Modelling and reconciliation of the relevant geology, weathering, oxidation and alteration was undertaken by MDI personnel, while modelling of the tonnage, grade and bulk density was undertaken by EGRM.

The lithological constraints and weathering surfaces modelled by MDI technical staff were applied, after review and minor adjustment, to the grade estimation studies. The modelled lithology defines the steeply northwest plunging tonalite plug intruding moderately northeast dipping tholeiitic basalts. Weathering surfaces modelled comprise the base of laterite, base of mottled/pallid zone, base of complete weathering and base of slightly weathered.

Geology and Geological Interpretation

The Sandstone Gold Project is situated within the Sandstone greenstone belt (SSGB), which is a triangular belt interpreted as a north-plunging antiform located at the northern end of the Southern Cross province, which forms the central spine of the Archaean Yilgarn block. The SSGB consists of mafic volcanic and intrusive rocks with subordinate ultramafic, banded iron formation ("BIF") and siliciclastic sediments. Gneissic granitoids occupy the core of the belt, while occasional, smaller, syn-tectonic granitoids (such as the Two Mile Hill tonalite) intrude the greenstone belt itself. The metamorphic grade is greenschist facies, although amphibolite facies assemblages are locally developed along belt margins.

Gold deposits within the Sandstone project are typical Archaean mesothermal types that are hosted in regional structural corridors that bound the greenstone belt to the east and west, and associated with subsidiary, second and third-order, internal structures. The upper levels of the deposits may be strongly influenced by weathering, oxidation and lateritisation processes that have occurred since Tertiary times.

At Two Mile Hill, gold mineralisation is predominantly hosted by a steeply northwest-plunging intrusive tonalite plug. Gold mineralisation within the tonalite is associated with centimetric-scale sheeted to stockwork quartz veining that is sub-horizontally disposed. Additional gold mineralisation is hosted by wider, but more sparsely developed quartz veins and their alteration haloes within basalts adjacent to the tonalite, particularly in the northeast quadrant of the deposit.

Drilling Techniques

The estimates are based on good quality reverse circulation and diamond drilling data. The drill hole spacing is predominantly 20m by 20m across the breadth of the known mineralisation, with some limited infill drilling to a nominal 10m by 10m pattern. RC drilling was conducted with a 140mm face-sampling hammer and DD drilling was conducted with HQ triple tube core.

Sampling and Sub-sampling Techniques

For Sundowner, Herald and Troy drilling, RC samples were passed directly from the in-line cyclone through a multi-tier riffle splitter. Troy and Herald samples were collected at 1m intervals into bulk plastic bags and 1m calico splits. The 1m calico splits were then submitted to the laboratory for analysis. Sundowner sampling and assaying was undertaken on 2m sample intervals.

For MDI RC drilling, sampling was undertaken by collecting 2-3kg of RC chips off the drill rig's cone splitter at 1m intervals for assay submission. For diamond drilling, HQ core was cut using a diamond core saw and sampled as half core on 1m intervals. The core samples were always collected from the same side of the core for consistency. For the RC chips, the routine sampling procedure was to consistently take the primary split from the same chute. A secondary split was taken off the alternate chute for field duplicates.

Analytical Techniques

Middle Island samples were collected and taken to the Intertek lab in Kalgoorlie, W.A for sample preparation. The sample pulps were dispatched to Intertek Maddington, WA 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 and an ICP-OES finish.

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 and AAS finish. Herald samples were sent to Analabs in Mt Magnet for 50g fire assay and AAS finish, however the precise preparation procedure is undocumented. Sundowner samples were prepared and assayed by an unknown method.

All of the laboratories stated above are internationally certified and accredited.

Middle Island 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, while Troy completed duplicates on zones of visual interest within diamond core.

Sample size and assay charge size are considered appropriate for the style of mineralisation under consideration.

Estimation Methodology

The resource has been estimated using Multiple Indicator Kriging (MIK). MIK is a non-linear or 'recovered resource' grade estimation method, which estimates grades and tonnages for a targeted selective mining unit (SMU) block size, inclusive of dilution and ore loss. The grade estimate was constrained within a series of mineralisation constraints (estimation domains) defined on a notional 0.1g/t Au lower cut-off grade, while cognisant the lithology models. Separate zones were modelled for laterite, tonalite and basalt.

Multiple Indicator Kriging (MIK) grade estimates were generated within these mineralisation zone constraints, based on 3m down-hole composites of the RC and diamond drilling. High grade cuts were variously applied to the composite data to limit the influence of high grade outliers. High grade cuts of 18g/t Au and 15g/t Au were respectively applied to the main tonalite and basalt domains, while a 4g/t Au cut was applied to the laterite domain. A 4g/t Au and 3g/t Au cut was applied to the western and southern (minor) basalt estimation domains respectively.

The block model, based on a 'parent' block size of 20mE by 20mN by 5mRL was used for grade estimation, with 'sub-celling' to a block size of 5mE by 5mN by 2.5mRL. The model was constrained by a topographic survey generated using DGPS survey control and an unmanned aerial vehicle (UAV) survey to an accuracy of +/-50mm. Checks against available historic data indicate the topography, including the mined surfaces, is accurate.

The MIK estimate was generated using a multi-pass estimation approach, with the high confidence sample search parameters expanded by 50% for each subsequent pass to estimate blocks not originally estimated in prior high confidence estimation passes. The majority of categorised blocks were estimated searching to a distance of maximum 60m for data, with the sample searches optimised based on geostatistical investigations and variography generated for both gold and indicator variables.

The MIK estimate targeted selective mining, with a change of support completed using an indirect lognormal change of support correction applying an information effect correction, targeting a selective mining unit block size of 5mE by 10mN by 2.5mRL. The SMU estimate was validated against the global change of support correction, along with the discrete Gaussian method. Validation of the MIK model was undertaken both visually and statistically.

A bulk density data set of 347 determinations was available for review, which is comprised of 216 immersion tests of core billets and 132 core tray weight determinations. Limited documentation is available about the collection method and quality of this data. However, the 216 core billet immersion determinations have been completed by independent laboratory ALS using wax coating where applicable. In addition, Middle Island Resources collected a further 52 bulk density determinations from both diamond core and air pycnometer of RC samples to verify the Troy density values, with no anomalies identified.

The available bulk density data was used in conjunction with the available historic documentation from mining operations and previous studies to determine appropriate density assignment coding for the different lithologies and modelled weathering groupings as shown in Table 1.

Table 1 – Bulk density assignment

Lithology	Weathering	Density (g/cc)
Basalt	Laterite	**2.20**
Basalt	Mottled/Pallid	**1.80**
Basalt	Weathered	**1.80**
Basalt	Slightly Weathered	**2.40**
Basalt	Fresh	**2.90**
Tonalite	Laterite	**2.20**
Tonalite	Mottled/Pallid	**1.80**
Tonalite	Weathered	**1.90**
Tonalite	Slightly Weathered	**2.50**
Tonalite	Fresh	**2.70**

Classification Criteria

The Two Mile Hill deposit grade estimates have been classified in accordance with the guidelines set out in the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code'). The assessment of confidence levels of the key categorisation criteria, including the confidence of the resource development data, geological interpretation, drilling density and grade estimation. The JORC Table 1 is provided as Appendix 1.

In summary, estimated blocks based on the approximate 20mE by 20mN drill spacing or better (generally a maximum of 25m from drillholes), are defined within high confidence mineralisation zones and are classified as Indicated Resources. Those blocks not classified as Indicated Resources, but estimated with acceptable confidence and within 40m of drilling data, are considered Inferred Resources. Only blocks above 380mRL (~140m below surface) are considered for reporting, as this RL defines the transition between the Two Mile Hill open pit and underground deposits and coincides with a reduction in drilling density with depth. Figures 2 and 3 respectively provide a representative long section and cross section through the Two Mile Hill open pit deposit showing the drill-hole data and distribution of Indicated and Inferred blocks.

Figure 2

Two Mile Hill Deposit - NS section displaying the RC and diamond drilling data and resource block model with the resource classification (Indicated – red; Inferred – green)

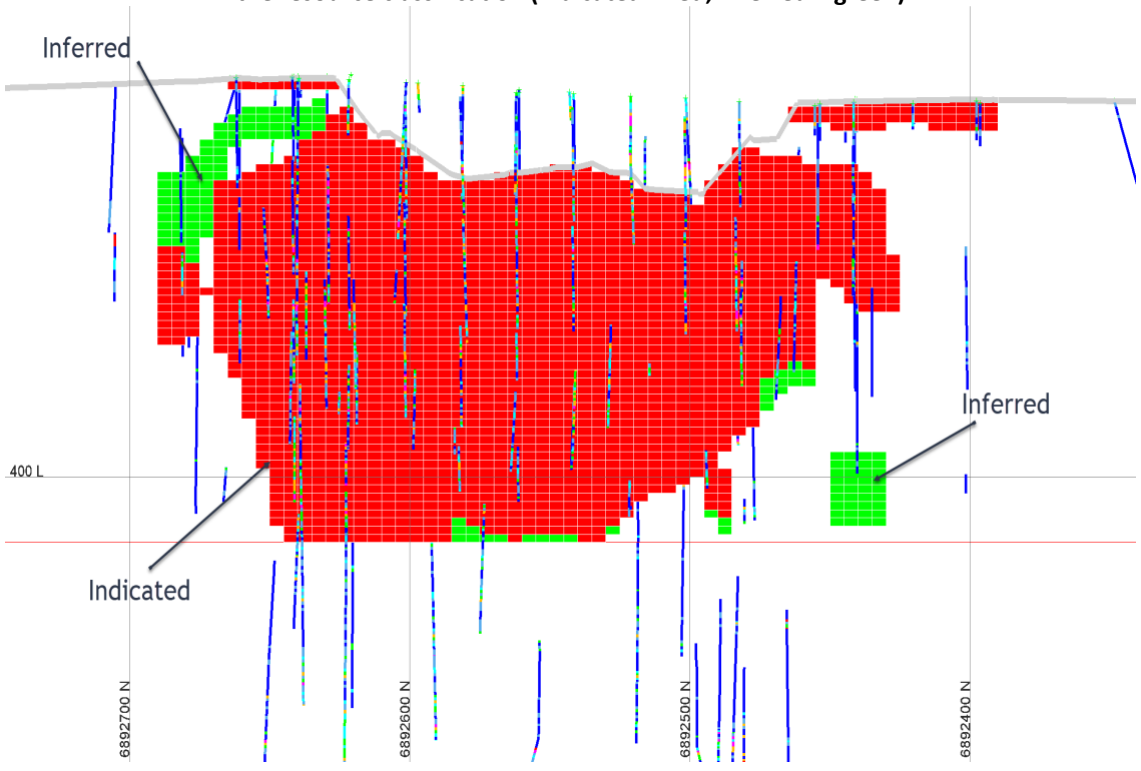
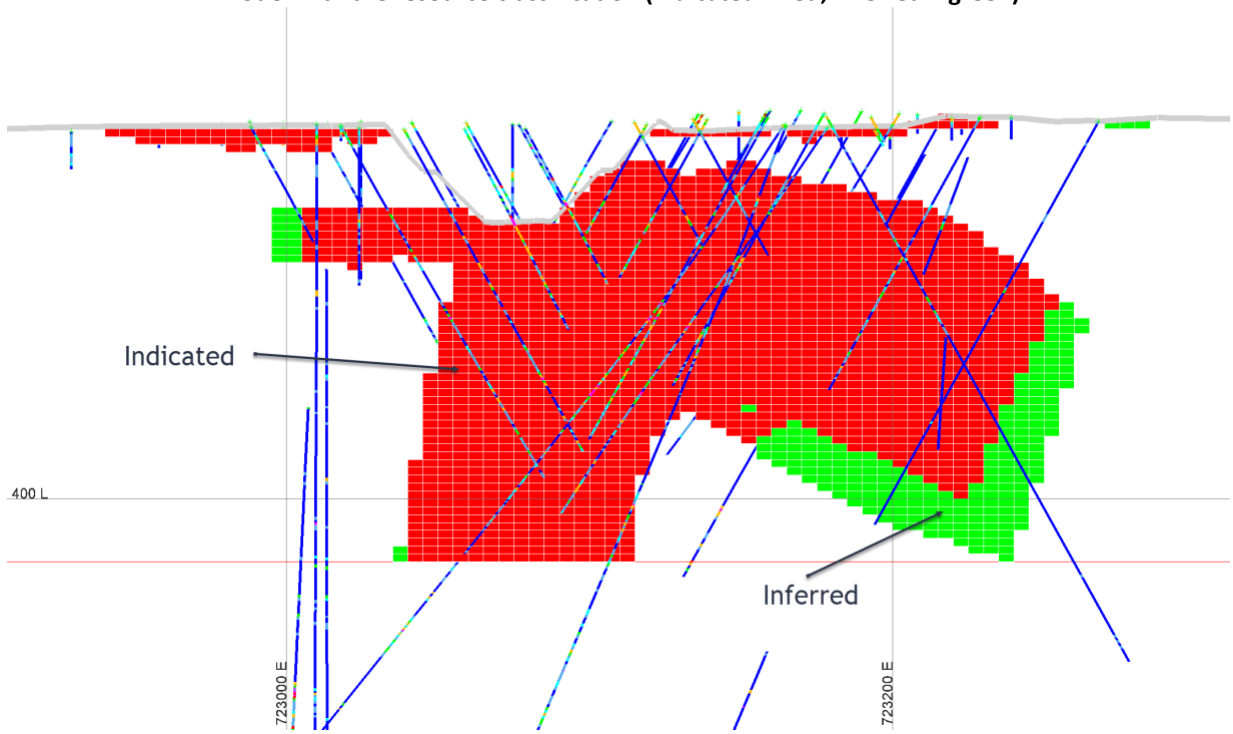


Figure 3

Two Mile Hill Deposit - typical EW section displaying the RC and diamond drilling data and resource block model with the resource classification (Indicated – red; Inferred – green)



Mineral Resource Estimates

The Mineral Resource estimates (2012 JORC Code) are reported at a range of lower cut-off grades in Table 2 below.

Table 2 – Two Mile Hill Deposit - Updated Mineral Resource Estimate (2012 JORC Code)

Cut-off Grade	Indicated			Inferred			Total		
Gold (g/t Au)	Tonnes (kt)	Gold (g/t Au)	Gold (koz Au)	Tonnes (kt)	Gold (g/t Au)	Gold (koz Au)	Tonnes (kt)	Gold (g/t Au)	Gold (koz Au)
0.50	1,901	1.08	66	178	0.8	5	2,078	1.06	71
0.60	1,474	1.23	58	130	0.9	4	1,604	1.20	62
0.70	**1,155**	**1.39**	**52**	**99**	**1.0**	**3**	**1,254**	**1.36**	**55**
0.80	910	1.57	46	69	1.1	2	980	1.54	48
0.90	742	1.73	41	49	1.2	2	791	1.70	43
1.00	628	1.87	38	36	1.4	2	664	1.84	39

Notes:

The Mineral Resource has been compiled under the supervision of Mr Brett Gossage who is a director of EGRM Consulting Pty Ltd and a Registered Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Gossage has sufficient

experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.

All Mineral Resources figures reported in the table above represent estimates at July 2020. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.

Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).

The grade estimate is based on mineralisation constraints designed to capture all anomalous mineralisation at a nominal 0.1g/t Au lower cut-off. The estimation approach produces a selective mining estimate based on the targeted SMU. The model is considered valid for reporting and mine planning at a range of lower cut-off grades up to a lower cut-off grade of 1.0g/t Au.

Prospects for Eventual Economic Extraction

Pit optimisations, utilising 2020 feasibility input parameters at a range of gold prices, indicate that it is likely that the Two Mile deposit can be economically extracted via open mining pit techniques and processed through the existing 600,000tpa gold processing plant.

Metallurgical test work has been conducted by MDI at Two Mile Hill, where average open pit gold recoveries of 95.3% at a grind size of 106µm are demonstrated.

The Two Mile Hill open pit deposit lies within granted Mining Lease, M57/128. The Two Mile Hill and adjacent Shillington deposits are also covered by an existing approved Mining Proposal. However, existing environmental studies are now more than 10 years old and, as such, will require updating. This aspect is already accommodated within the 2020 feasibility study.

Similarly, a possible extension of the approved waste dump may be required to accommodate the anticipated increased mining inventory. An RC sterilisation drilling programme was completed by MDI in 2016 to allow for extensions to the existing Two Mile Hill waste dump, but the greater inventory, primarily a result of the significant gold price increase since 2016, may require that the sterilised area now be extended. Additional sterilisation drilling is planned as part of the 2020 feasibility study to address this aspect.

Although the existing tailing facility is already permitted, the anticipated increased inventory will also require an expansion of the tailings capacity, which aspect is also being addressed by MDI as part of the 2020 feasibility study.

The Mineral Resource is considered to be of sufficient local confidence to allow mine planning studies to be completed. The estimate has been classified as a combination of Indicated and Inferred Resource with the Indicated Resource of a sufficient local confidence to allow optimisation studies and mine scheduling.

Comments by Managing Director, Mr Rick Yeates:

"The updated Mineral Resource estimate at the Two Mile Hill open pit gold deposit results in a marginal increase in tonnage and grade, primarily derived from infill drilling of the basalt-hosted mineralisation in the northeast quadrant of the deposit. This outcome represents an increase of ~7,000oz (or 13%) to the Two Mile Hill open pit Mineral Resource, with some 95% now classified in the higher confidence Indicated category.

"This is a very pleasing outcome, which when re-optimised, will make a further meaningful contribution to open pit Mineral Resources contributing to the feasibility study, the outcome of which is looking increasingly positive.

"Resource estimates for the five new satellite open pit deposits have commenced which, along with extensions to the Goat Farm and Twin Shafts deposits, will be progressively provided as final results from the Phase 2 drilling campaign are received and compiled."

AUTHORISED FOR RELEASE BY:

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Forward Looking Statements

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

Competent Persons' Statements

The reported Mineral Resources for the Two Mile Hill open pit deposit are based on, and fairly represent, information and supporting documentation prepared by Mr Brett Gossage, a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Gossage has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Gossage is a director of EGRM Consulting Pty Ltd ("EGRM"). EGRM and the Competent Person are independent of the Company and, other than being paid fees for services in compiling this report, neither has any financial interest (direct or contingent) in Middle Island Resources Limited. Mr Gossage has provided his prior written consent as to the form and context in which the Mineral Resources estimate and the supporting information are presented in this announcement.

Exploration Results informing Mineral Resource estimation of the Two Mile Hill open pit deposit is based on, and fairly reflects, information and supporting documentation prepared by Mr Rick Yeates. Mr Yeates is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and a fulltime employee of Middle Island Resources Limited. Mr Yeates has sufficient experience, which is relevant to the nature of work and style of mineralisation under consideration, to qualify as Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Yeates has given his prior written consent to the inclusion in the release of the statements, based on his information, in the form and context in which they appear. Mr Yeates is a shareholder in the Company and entities associated with Mr Yeates hold unlisted options in the capital of the Company as disclosed in Appendix 3Y notices released to ASX.

Resource Statement

Mineral Resources applicable to the Sandstone gold project as at 14 August, 2020 are provided in Table 3 below.

Table 3
Sandstone Gold Project Mineral Resource Statement

Deposit	COG (g/t Au)	Tonnes	Grade (g/t Au)	Contained Gold (oz)	JORC Classification	JORC Code
+Two Mile Hill – Open Pit	0.7	1,155,000	1.39	52,000	Indicated	2012
+Two Mile Hill – Open Pit	0.7	99,000	1.00	3,000	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	0.5	1,230,000	1.30	50,200	Indicated	2012
#Shillington – Open Pit	0.5	840,000	1.10	30,600	Inferred	2012
#Wirraminna – Open Pit	0.5	300,000	1.30	12,100	Indicated	2012
#Wirraminna – Open Pit	0.5	280,000	1.10	9,700	Inferred	2012
Total Indicated		**2,685,000**	**1.32**	**114,300**	**Indicated**	**2012**
Total Inferred		**15,419,000**	**1.10**	**543,300**	**Inferred**	**2012**
Total Resource		**18,104,000**	**1.13**	**657,600**	**Ind. & Inf.**	**2012**

*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 0.64^{o}g/t Au.

This Statement includes information extracted from the Company's previous ASX announcements, which are available to view on the Company's website, as follows:

+ ASX Release dated 14 August 2020.

^ ASX Release dated 14 April 2020.

ASX Release dated 24 July 2020.

Notwithstanding the significant increase in gold price since some of these Mineral Resource estimates were prepared, and recognising that the substantial 2020 drilling campaign is anticipated to result in increases and/or upgrades to project 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.

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, with further drilling, a Mineral Resource.

There are no Ore Reserves currently reported in relation to the Sandstone gold project.

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.

JORC Table 1

Section 1 - Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• The results are derived from RC sampling by Middle Island Resources Middle Island) and Sundowner Minerals (Sundowner). RC and diamond sampling completed by Herald Resources (Herald) and Troy Resources (Troy). Middle Island 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. • Core recovery was excellent. Core was re-aligned prior to splitting and the right-hand side half core section was consistently sampled. Middle Island Resource's 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. • Troy Resources and Herald Resources half HQ and NQ diamond core samples, weighing 1-2kg, were 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. • Middle Island, Troy and Herald RC samples, comprising 2-3kg, were 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.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter,*	• The oriented diamond drill core is HQ (63.5mm) and NQ (47.6mm) in diameter. The Middle Island RC rig used a 5-inch bit to return a 1m

Criteria	JORC Code explanation	Commentary
	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).	sample. The Herald and Troy RC drilling was drilled at an unknown size to return a 1m sample.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Diamond core and RC chip recovery data was measured for each drill run/drill hole and captured in a digital logging software package. The data has been reviewed and the core recovery was effectively 100% throughout. • The water table was intersected at 40–60m hole depth. Middle Island 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. • No relationship between sample recovery and grade has been established
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• The diamond core and RC chips were logged for lithology, weathering, structure, mineralogy, mineralisation, alteration, colour, RQD and geotechnical features. Logging was carried out according to Herald Resources, Troy Resources and Middle Island Resources internal protocols at the time of drilling. Sundowner's geology logs are not present in this dataset. • Each metre of all drill holes except for the 10 Sundowner RC holes was qualitatively logged from start to finish of the hole. All core was photographed within each core tray.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• The diamond core was cut by diamond saw and half core was left in the core trays for reference purposes. Half core samples were bagged in 1m intervals. • Middle Island 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. • Middle Island samples were collected and taken to the Intertek lab in Kalgoorlie, W.A for sample preparation. The sample pulps were

Criteria	JORC Code explanation	Commentary
	• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	dispatched to Intertek Maddington, WA 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. 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. Sundowner samples were prepared and assayed by an unknown method. All of the laboratories stated above are internationally certified and accredited. • Middle Island 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. For the diamond core the routine sample procedure was to consistently cut the core along the core axis 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. • Sample size and assay charge size are considered appropriate for the style of mineralisation under consideration.
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.* • *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.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether*	• Middle Island adopted a 50g fire assay method with an ICP-OES finish. Herald and Troy Resources adopted a 50g fire assay method with an AAS finish. The Sundowner method for gold analysis is undocumented. These techniques are considered suitable for gold mineralisation associated with sulphides and oxidised sulphides. • No other measurement tools/instruments were used to derive assays. • Middle Island included laboratory duplicates, field duplicates and certified standards routinely in the assay train at a 1:9 frequency, and a quartz wash used after each sample pulverised. Troy and Herald

Criteria	JORC Code explanation	Commentary
	acceptable levels of accuracy (ie lack of bias) and precision have been established.	included standards and blanks inserted into each sample batch submitted.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Sampling was undertaken by experienced geologists from Middle Island, Herald and Troy who confirmed the intersections as prospective for gold mineralisation. • No twinned holes were used as part of this programme, however sufficient infill drilling has been undertaken by MDI to confirm the veracity of previous results. • Sampling data were imported and validated using a GBIS database software system by an experienced database consultant. • Assay data were not adjusted, however re-assays were requested on the single inconsistent result.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Surface collar coordinates were surveyed via DGPS. Previous collar survey data in the database was verified by a survey pick up in 2012. A high quality downhole gyro survey instrument was used to determine the dip and azimuth of the diamond holes at 5m intervals. RC drilling used a downhole camera tool, with adjustments made for magnetic intensity readings being out of specification for the tool. • MGA94 Zone 50. • The topographic surface was derived from a UAV digital terrain model (+/-50mm accuracy), verified by previous mine survey pickups and DGPS collar surveys.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Results being reported are comprised of 1m sample/assay intervals, with holes drilled on a minimum 20m x 20m pattern. • The data spacing is adequate to provide continuity of geology and grade for the Mineral Resource, and any subsequent Ore Reserve, reported. • No composting of samples was adopted for Middle Island, Troy and Herald drilling. Sundowner adopted 2m composites for its assay sampling.

Criteria	JORC Code explanation	Commentary
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.* • *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.*	• Drilling orientations were appropriate to intersect the mineralisation more or less orthogonal to provide a representative sample of essentially true width. • The company does not believe that any sample bias has been introduced which could have a material effect on the results.
Sample security	• *The measures taken to ensure sample security.*	• Middle Island, Herald and Troy procedures ensured individual samples were given due attention. The samples were taken by experienced company geologists and sample batches collected by the laboratory's designated driver. • Intertek, SGS Minerals and Analabs are all internationally accredited laboratories.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The historic database and current database were independently validated and audited by Expedio database consultants.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• The sampled diamond core and RC chips are derived from Mining Lease M57/128, which is 100% owned by Sandstone Operations Pty Ltd, a wholly-owned subsidiary of Middle Island Resources Limited. • As at the time of reporting Sandstone Operations Pty Ltd was the sole owner of the project, including Mining Lease M57/128.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Drilling was undertaken and reported by Herald Resources Limited and Troy Resources Limited during their respective tenure of the Sandstone Gold project, which work appears to be consistent with

Criteria	JORC Code explanation	Commentary
		industry standards.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Two Mile Hill gold deposit comprises mineralised sheeted to stockwork quartz veining, developed within a late stage, near-vertical intrusive tonalite stock, which cuts the local stratigraphy of mafic volcanics and BIF. Basalts intruded by the tonalite are similarly mineralised, particularly in the northeast quadrant of the deposit.

Drill hole information	• *A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes:*
	  • *easting and northing of the drill hole collar*
	  • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  • *dip and azimuth of the hole*
	  • *down hole length and interception depth*
	  • *hole length*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• See tables and sections within the release. All drill-hole information has been previously reported to the market by the respective entities.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable, as Mineral Resources are being reported. • No internal intercepts are reported. • Not applicable, as no metal equivalent values are reported.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• Holes have been drilled more or less orthogonally to the general dip and strike of the mineralised vein sets within the tonalite and basalt, As such, down-hole intercepts broadly approximate true widths. Gold mineralisation within the vertically disposed 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.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See tables and figures within the release.
Balanced Reporting	• *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.* • *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.*	• The topographic surface was derived from a UAV digital terrain model (+/-50mm accuracy), verified by previous mine survey pickups and DGPS collar surveys. A high quality downhole gyro survey instrument was used to determine the dip and azimuth of the diamond holes at 5m intervals. RC drilling used a downhole camera tool, surveying at 25m increments, with adjustments made for magnetic intensity readings being out of specification for the tool. • Not applicable, as a Mineral Resource is being reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Geochemical data highlighted anomalous readings over the prospects which lead to Herald to drill the first exploration holes. Aeromagnetic, FLEM and DHEM geophysical surveys over Shillington and Two Mile Hill identified regional structures and sulphide mineralisation. Troy collected 132 representative bulk density determinations from diamond core to generate density

Criteria	JORC Code explanation	Commentary
		values for mineralised and unmineralised material associated with the Shillington and Two Mile deposits. In addition, Middle Island Resources collected a further 52 bulk density determinations from both diamond core and air pycnometer to verify the Troy density values, with no anomalies identified.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Two further oxide diamond core holes are planned at Two Mile Hill to confirm bulk density and geotechnical parameters. The deposit will be re-optimised for consideration as an Ore Reserve in the 2020 feasibility study. • Refer to diagrams in the body of text within the Mineral Resource report.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	*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.*	The historic database and current database were validated and audited by Expedio database consultants. Expedio manage the current database on behalf of MDI. All geological and field data is currently entered using data-loggers and OCRIS software that includes lookup tables and fixed formatting (protected from modification) thus only allowing data to be entered using the MDI geological coding system and sample protocols. 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, but the quantum of drilling included is immaterial. The database is yet to be fully rationalised and therefore the different logging schemes persist in the database. Data is loaded and managed by independent database consultants in the Datashed database, which was managed by consultants Expedio with access to Middle Island personnel. Middle Island technical personnel validated the database using Micromine software. The ORCIS database is then reviewed against the original logging spreadsheets and the assay data checked against the supplied assay certificates.
	Data validation procedures used.	Following importation the data goes through a series of digital checks for duplication and non-conformity, followed by validation by the relevant project geologist who manually checks the collar, survey, assay and geology entries for errors against the original field data and final paper copies of the assays. The process is documented, including the recording of holes checked, errors found, corrections made and the date of database update.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	Senior MDI management have completed numerous site visits and 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. 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 drill-hole collar surveys were confirmed by DGPS surveys, with the drill collars well preserved.

Criteria	JORC Code explanation	Commentary
		In addition to the site visit observations, the majority of assay data (>90%) were checked against the original laboratory supplied assay certificates. Brett Gossage, Principal for EGRM Consulting Pty Ltd, has not completed a site visit.
	If no site visits have been undertaken indicate why this is the case.	Explanation provided above.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The Two Mile Hill deposit is hosted within a late stage, near vertical intrusive tonalite stock which cuts the local stratigraphy of mafic volcanics and BIF. The confidence in the geological interpretation is considered high, based on the majority of the resource area being drill tested to at least 20m by 20m drill spacing and knowledge gained through mining by previous operators. A model of the lithology and weathering was generated prior to the mineralisation domain interpretation commencing. This work was completed by MDI technical staff based review of the available geological logging and selective re-logging of archived diamond core and RC chip trays. The overlying laterite also hosts gold mineralisation. The saprolite mineralisation is generally hosted within sub-horizontal to shallow dipping sheeted quartz veins within the tonalite and adjacent basalts. The sheeted veins form broad, gradational zones of mineralisation with variable continuity that are defined by the application of a lower cut-off grade. Gold mineralisation within the tonalite and basalt is variously accompanied by silica-sericite-carbonate-pyrite alteration, much of which is completely or partially oxidised within the deposits limits.
	Nature of the data used and of any assumptions made.	The geological data used to construct the geological model includes regional and surface mapping, logging of RC and diamond core drilling, down-hole and surface geophysical surveys, and knowledge from previous production records. A nominal 0.1g/t Au lower cut-off grade was applied to the mineralisation model.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The geology of the deposit is relatively simple, and the interpretation is considered robust. There is no apparent alternative to the interpretation in the company's opinion at this point, and previous mining activities support the current interpretation.
	The use of geology in guiding and controlling Mineral Resource estimation.	At Two Mile Hill the mineralisation geometry has a strong relationship with the interpreted lithology, alteration and structure. The lithology controls the tenor and nature of mineralisation and has been considered when interpreting the mineralisation constraints. Weathering does not appear to materially impact the mineralisation with no sharp

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		grade changes across the weathering boundaries, although there is a hint of variable supergene enrichment and depletion within the oxide profile that is accommodated by the modelling approach. The grade estimates are based on a gold grades and the mineralisation package defined above a 0.1g/t Au lower cut-off grade. These estimation domains have been interpreted considering the lithology and are generally constrained by the lithology interpretation. The tonalite is considered a hard boundary and truncates the mineralisation zones, ensuring only tonalite coded composites are used to estimate tonalite estimation domains and basalt composites the basalt domains.
	The factors affecting continuity both of grade and geology.	A broad zone of anomalous mineralisation is interpreted in the tonalite at a lower cut-off of 0.1g/t Au which includes arrays of sub-horizontal sheeted veins that can be variably interpreted at higher cut-off grades. The grade continuity at lower cut-off grades is good, however this grade continuity is materially reduced at higher cut-off grades above 0.6g/t Au. The basalt mineralisation generally has reduced widths relative to the tonalite mineralisation and is often less continuous. The laterite mineralisation represents a laterally extensive flat zone of mineralisation above and immediately peripheral to the primary mineralisation. At Two Mile Hill it was considered appropriate to generate broad mineralisation zone constraints using a 0.1g/t Au lower cut-off grade and apply the non-linear multiple indicator kriging approach to account for the local spatial variability identified.
Dimensions	*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.*	The approximate dimensions of the deposit modelled are 280m along strike (N-S), 250m across (E-W), and 140m below surface, Although the mineralisation extends to considerable depth, this has been separately estimated as an underground Mineral Resource referred to as the Two Mile Hill tonalite deeps deposit. The majority of mineralisation is hosted within the tonalite body which is approximately 80m in width, some 250m in length and variably mineralised.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and*	The resource estimate has been generated via Multiple Indicator Kriging (MIK) with a change of support. The MIK estimation was constrained within the 0.1g/t Au mineralisation zone interpretation. MIK is considered an appropriate grade estimation method given the high degree of spatial variability of the gold assay data (relative to the data spacing) present within the mineralisation zones. The grade estimate is based on 3m down-hole composites of the resource development drilling data. High grade cuts (as described below) have been applied to composites to limit the influence of higher grade data.

Criteria	JORC Code explanation	Commentary
	maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Detailed statistical and geostatistical investigations have been completed on the captured estimation data set. This includes exploration data analysis, boundary analysis, variography, grade estimation trials and change of support studies. These investigations have been completed on an estimation domain by domain basis (grouped like domains e.g. tonalite, basalt, laterite, etc.). Grade estimation has been completed using multiple estimation passes with expanding sample search radii. A first higher confidence estimate was completed (Indicated Resource where other criteria were met) with sample search radii of 40m by 40m by 15m and a sample search orientation consistent with the major controls interpreted for each estimation domain. Subsequent estimation passes (passes 2 and 3) were generated with expanded sample searches of 50% increase in sample search radii. A maximum of 32 and with a minimum of 24 (passes 1 and 2) and 16 (pass 3) composites have been used in grade estimation. A maximum number of 8 composites from any drill-hole have been allowed to estimate a single block. A final estimation pass with extended ranges has been completed using a sample search of 200m by 200m by 75m to ensure all un-estimated blocks are filled, noting that a very small number of blocks are estimated within this final search and only blocks within 40m of drill-holes are considered for resource reporting. The laterite estimate at Two Mile Hill is completed with an isotropic search of 30m applying the sample search constraints and expansion described above. In addition to the high grade cuts applied in grade estimation, a sample search restriction was applied where for the basalt domains data above 4g/t Au are excluded from estimating a block if those composites are located further than 20m by 20m by 10m from the block centroid. The grade estimation has been generated using a combination of mine planning and specialist geostatistical software packages. Vulcan (Version 12.0.3) has been used for geological modelling, block model construction and grade estimation. Isatis and Isatis Neo Mining software has been used for statistical and geostatistical analysis.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The deposits have been estimated multiple times by various groups, including in-house by the then operators of the project and by external consultants. Most recently EGRM estimated the resource which was reported in 2016. This estimate is considered an update of that estimate. Snowden Mining Industry Consultants estimated the Mineral Resource for both the Two Mile Hill and Shillington deposits in February 2013. The current estimates are based on additional data but globally report lower tonnes and metal at similar grades to the Snowden estimates at the 0.7g/t Au lower cut-off grade. The current resource reports more Indicated Resource relative to the previous estimate due to the infill drilling completed by MDI.

Criteria	JORC Code explanation	Commentary
		The deposits have been partially mined by previous operators, although limited production records are available to allow reconciliation of the grade estimation data and production.
	The assumptions made regarding recovery of by-products.	No by-products are present or modelled.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No deleterious elements have been identified or estimated.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The MIK estimates is based on a block (panel) size of 20m (East) by 20m (North) by 5m (Elevation), which considers the drilling density for the vast majority of the deposits which have been drilled to an approximate 20m by 20m spacing. The sample search applied is discussed above. From the MIK panel estimates, a selective mining unit (SMU) estimate has been generated based on a 5m (east) by 10m (north) and 2.5m (elevation) block size. This SMU is based on the envisaged mining practices likely to be employed at Two Mile Hill. The MIK SMU has been localised to SMU size blocks for visualisation and mine planning purposes.
	Any assumptions behind modelling of selective mining units.	A selective mining estimate has been generated for the MIK using a change of support targeting a 5m (east) by 10m (north) and 2.5m (elevation) selective mining unit. The change of support has been completed using an indirect lognormal correction. The selective mining estimate (MIK) has been compared to a global change of support analysis, completed using a discrete Gaussian change of support model as part of the validation procedure.
	Any assumptions about correlation between variables.	No correlated variables have been investigated or estimated.
	Description of how the geological interpretation was	The grade estimate is based on a nominal 0.1g/t Au lower cut-off grade mineralisation constraint, which uses lithology as the constraint.

Criteria	JORC Code explanation	Commentary
	used to control the resource estimates.	The tonalite is considered a hard boundary for the gold mineralisation captured within this lithology with basalt-hosted mineralisation interpreted separately. Separate mineralisation zones have been interpreted for laterite mineralisation which is considered a hard boundary to other zones. The composite data were reviewed based on weathering interpretations. Statistical investigations have been completed to test the change in statistical and spatial characteristics of the domains grouped by weathering. The weathering was determined to not control the distribution of the gold mineralisation and therefore have been coded to the block model but not used as hard boundaries.
	Discussion of basis for using or not using grade cutting or capping.	A review of the high grade composite data captured within the mineralisation constraints was completed to assess the need for high grade cutting (capping). This assessment was completed both statistically and spatially to determine if the high grade data are clustered or isolated. On the basis of the investigation, high grade cuts were applied to the estimation domain. The high grade cuts applied by domain are as follows: Laterite – 4g/t Au; Tonalite – 18g/t Au; western basalt domains – 4 g/t Au; eastern basalt domains – 15g/t Au, and southern basalt domains – 3g/t Au.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The grade estimate was checked against the input drilling/composite data, both visually on section (cross and long section) and in plan, and statistically by means of swath plots, global statistical checks and via comparisons with global change of support analysis. The model is considered robust. Limited open pit mining has been completed at Two Mile Hill, however no consistently reliable production records have been unearthed. Therefore, no reconciliation has been possible.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	The resource tonnage is reported using a dry bulk density and therefore represent dry tonnage excluding moisture content.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	The grade estimate is based on mineralisation constraints which are designed to capture all anomalous mineralisation at a nominal 0.1g/t Au lower cut-off. The estimation approach produces a selective mining estimate based on the targeted SMU. The model is considered valid for reporting and mine planning at a range of lower cut-off grades up to a lower cut-off grade of 1.0g/t Au.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	*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.*	The resource model assumes open cut mining is completed and a moderate level of mining selectivity is achieved in mining targeting a 5mE by 10mN by 2mRL selective mining unit. It has been assumed that high quality grade control will be applied to ore/waste delineation processes using RC drilling, or similar, at a nominal spacing of 5m (north – along strike), 10m (east – across strike, and 2m downhole or better, applying a pattern sufficient to ensure adequate coverage of the mineralisation zones.
Metallurgical factors or assumptions	*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*	Historic production records from the Two Mile Hill open pit deposits have been reviewed in detail. MDI has also undertaken further metallurgical testwork on samples derived from archived and new diamond drill core. The average metallurgical gold recoveries determined from MDI testwork at the Two Mile Hill open pit deposit, which is consistent with historic recoveries, is 95.3% at a 106 micron grind size. The metallurgical recoveries and conceptual operating costs have been incorporated in estimation to determine an appropriate range of cut-off grades for estimation and resource reporting purposes.

Criteria	JORC Code explanation	Commentary
	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.	
Environmental factors or assumptions	*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. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	The deposits all lie within a granted Mining Lease, M57/128. Likewise the deposits are covered by an existing approved Mining Proposal. However, existing environmental studies are now more than 10 years old and, as such, will require updating. Similarly, a possible extension of the approved waste dump may be required to accommodate the significantly greater anticipated inventory. An RC sterilisation drilling programme was completed by MDI in 2016 to allow for extensions to the existing Two Mile Hill waste dump, but the greater inventory, primarily a result of the significant gold price increase since 2016, may require the area now be extended.

Criteria	JORC Code explanation	Commentary
Bulk density	*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.*	A bulk density data set of 347 determinations was available for review, which is comprised of 216 immersion tests of core billets and 132 core tray weight determinations. Limited documentation is available about the collection method and quality of this data. The available bulk density data was used in conjunction with the available historic documentation from mining operations and previous studies to determine appropriate density assignment coding for the different lithologies and modelled weathering groupings as shown in Table 1. The bulk density values were derived from 347 measurements taken on the core, comprising 216 immersion tests of core billets and 132 core tray weight determinations. Limited documentation is available on the collection method and quality of core tray weight data. The 216 core billet immersion determinations have been completed by independent laboratory ALS using wax coating where applicable. The available bulk density data were used in conjunction with the available historic documentation from mining operations and previous studies to determine appropriate density assignment coding. The bulk density has been assigned based on a weathering and lithology groupings using the available data and knowledge of the project based on previous studies (production and resource/reserve investigations). Where insufficient bulk density data existed, the density was assumed based on like lithologies and weathering. The assigned basalt density was 2.2g/cc for laterite, 1.8g/cc for mottled/pallid and weathered material, 2.4g/cc for slightly weathered and 2.9g/cc for fresh rock. The tonalite bulk density assignment was 2.2g/cc for laterite, 1.8g/cc for mottled/pallid, 1.9g/cc for weathered material, 2.5g/cc for slightly weathered and 2.7g/cc for fresh rock. A further two large diameter oxide diamond core holes are planned for the tonalite and basalt domains to verify the applied bulk density data and determine optimum geotechnical parameters in advance of the feasibility study.
	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.	The bulk density database is comprised of two different data sets. The core immersion data determinations have been completed by independent laboratory ALS using high quality methods, including wax coating of porous oxidised samples to account for void spaces. The remaining data has been generated by weighing runs of diamond core in trays. Little documentation exists for the core tray weight data (132 measurements) collection method and therefore the quality of this data is not known. Little data or information on bulk density is provided in the majority of historic production and resource/reserve documentation reviewed that can directly inform Two Mile Hill (i.e. density testwork that is reported), however relatively consistent densities have been applied to similar lithologies and weathering subdivisions throughout the

Criteria	JORC Code explanation	Commentary
		Sandstone Project and the assigned densities are consistent with those normally expected for the modelled lithologies and weathering classifications.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Bulk density has been assigned on the basis of weathering and lithology groupings of the collected data and previous resource/reserve study reports compiled by the then operators and their consultants. Additional data collection is recommended for high confidence bulk density assignment. Particular focus should on the weathered and partially weathered zones. To this end, MDI is completing a further two large diameter oxide diamond holes, one each through all weathering profiles in the tonalite and basalt domains, including the laterite domain in each case. This should provide an abundance of representative material to verify the assigned bulk densities and where material differences are evident, the deposit will be re-estimated.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	The grade estimate has been categorised as a combination of Indicated and Inferred Resource based on an extensive review of input data quality, confidence in the geological understanding and modelling, grade estimation parameters and economic parameters (prospect of the resource blocks being economic). The grade estimation parameters include the number of data points informing the estimate, and the distance from drilling data. A cross sectional interpretation was completed using criteria listed above and a wireframe solid produced to capture those blocks that could be considered as Indicated Resource. Based on these factors, high confidence domains within the indicated solid wireframe that were drilled to a spacing of approximately 20mE x 20mN or better, as defined by a distance of 25m or less to the nearest drill-hole, and estimated with high confidence grade interpolation (estimation pass less than or equal to 3) were considered as Indicated Mineral Resource. Inferred Mineral Resource blocks represent those where estimates were not considered Indicated Resource, but still lie within the interpreted mineralisation zone, generally estimated within estimation pass 1 or 2 or 3 and within 40m of drilling data.
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values,	As described above, the Mineral Resource classification has been based on the quality of the data collected (geology, survey and assaying data), the density of data, the confidence of the geological model and mineralisation model, and the grade estimation quality. The models have been reported to a maximum 380mRL (~140m below surface) as this depth was anticipated to exceed to maximum depth of open pit mining based a range of pit optimisation studies that have been completed to ensure reasonable prospects. A range of pit shells (A$2,000, A$2,500, A$3,000 and A$3,500/oz gold price scenarios)

Criteria	JORC Code explanation	Commentary
	quality, quantity and distribution of the data).	have been reviewed by EGRM. Pit shells for A$3,000 and A$3,500/oz are noted to be constrained to the base of the open pit MIK model (i.e. a larger pit shell would be reported should an expanded model be generated) and support reporting above the 380mRL model base for open pit mining. A separate model has been generated to consider an underground scenario below 380mRL and is reported separately. MDI has high confidence in its own recently completed infill RC drilling data. The historic Troy and Herald RC and diamond drilling information is also generally considered very reliable, with strong supportive archive data, including, appropriate assaying protocols, chip trays and reference diamond core. With one or two exceptions, the limited number of older RC holes completed by Sundowner appear consistent with the remaining drilling information, however this data is not well documented in the archives. The only significant issue identified in modelling the deposits was an apparent inconsistency in the interpretation of the weathering profile between the various generations of logging. MDI technical personnel identified and re-logged the weathering from a substantial selection of historic chip trays in areas where an inconsistency was evident. MDI is confident that the final outcome is appropriate.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The reported resource is consistent with the Competent Person's view of the deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	The resource estimate has not been audited by external parties.
Discussion of relative accuracy/ confidence	*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*	The resource has been classified based on the quality of the data collected, the density of data, the confidence of the geological model and mineralisation model, and the grade estimation quality. This has been applied to a relative confidence, based on data density and zone confidence for resource classification. No relative statistical or geostatistical confidence or risk measure has been generated or applied.

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	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.	
	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.	The Mineral Resource is considered to be of sufficient local confidence to allow mine planning studies to be completed. The estimate has been classified as a combination of Indicated and Inferred Resource with the Indicated Resource of a sufficient local confidence to allow optimisation studies and mine scheduling. Statistical checks have been completed to validate the grade estimation, which have robustly reproduced the grade trends in the drilling data at the scale of the panel estimate. Neighbourhood testing and optimisation has been completed to ensure the grade estimates are of high quality. Change of support analysis has been completed to ensure the grade tonnage is also appropriate for current mining practices.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	While small scale mining and milling has been completed at Two Mill Hill, no reliable production records can be sourced to compare to the resource block.