



ASX RELEASE: 20 FEBRUARY 2018

## NAPIER RANGE ZINC PROJECT EXPLORATION COMMENCES

### HIGHLIGHTS

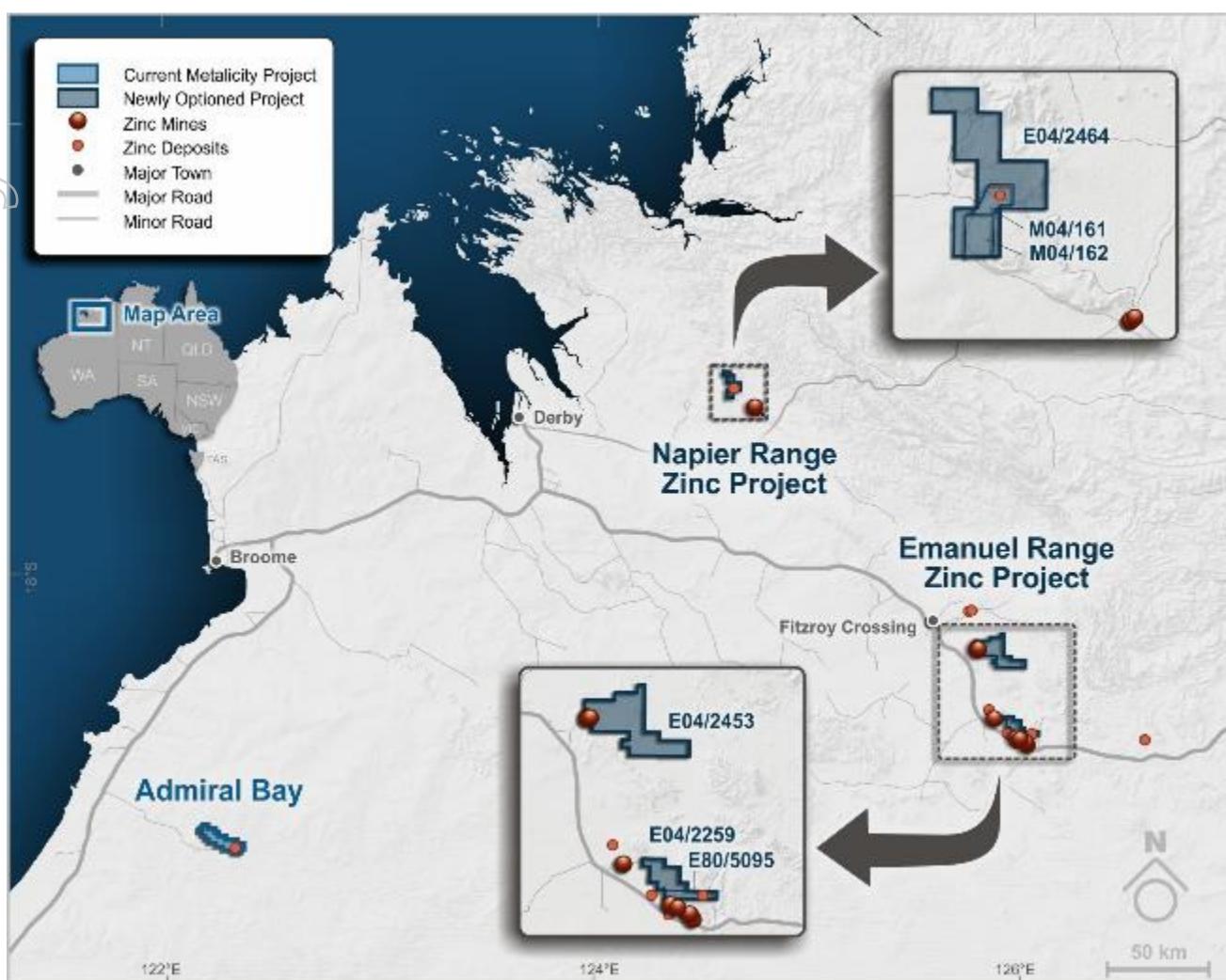
- Following completion of the acquisition of the high-grade Napier Range Zinc Project and the institutional placement, exploration has commenced along a 4km strike of zinc targets
- High priority targets are being refined from recent field mapping, rock chip sampling, drill hole database review and resource block model review for upcoming drilling program
- Remote sensing survey re-processing will include IP and gravity data re-processing utilising improved inversion algorithms and comprehensive gridding techniques
- 5,000m diamond and RC resource and exploration drilling program to commence at the Napier Range Zinc Project, with a program of works (POW) approved, targeting a June Quarter start
- Resource targets within the existing Mineral Resource Estimate (MRE) of 750Kt at 5.8% Zn, 7.2% Pb, 54g/t Ag (13.6% ZnEq) to be targeted to progress the existing Inferred MRE to the Indicated category
- Exploration targets outside of the resource along the 4km strike extent to be tested for new mineral discoveries including 3 of 9 targets defined to date
- Napier Range represents a high grade low capital and near term producing zinc project for Metalicity
- Napier Range is classed as Mississippi Valley Type (MVT) deposit which typically demonstrate simple and conventional process flowsheet design, high metal recovery and excellent clean concentrate quality
- Metalicity is uniquely positioned to explore, develop and mine the projects, given its extensive knowledge gained via the exploration and development of the nearby Admiral Bay Zinc Project
- JV, Offtake and investment discussions regarding the Admiral Bay Zinc Project development progressing well with positive negotiations advancing with Chinese State-Owned Enterprises (SOE's)

### Metalicity Managing Director Matthew Gauci commented:

"We are very excited to commence exploration including an aggressive drill program at the Napier Range Zinc Project which already contains a high grade near surface resource as well as 3 of 9 excellent high-grade exploration targets identified to be drill tested along a 4km strike extent."

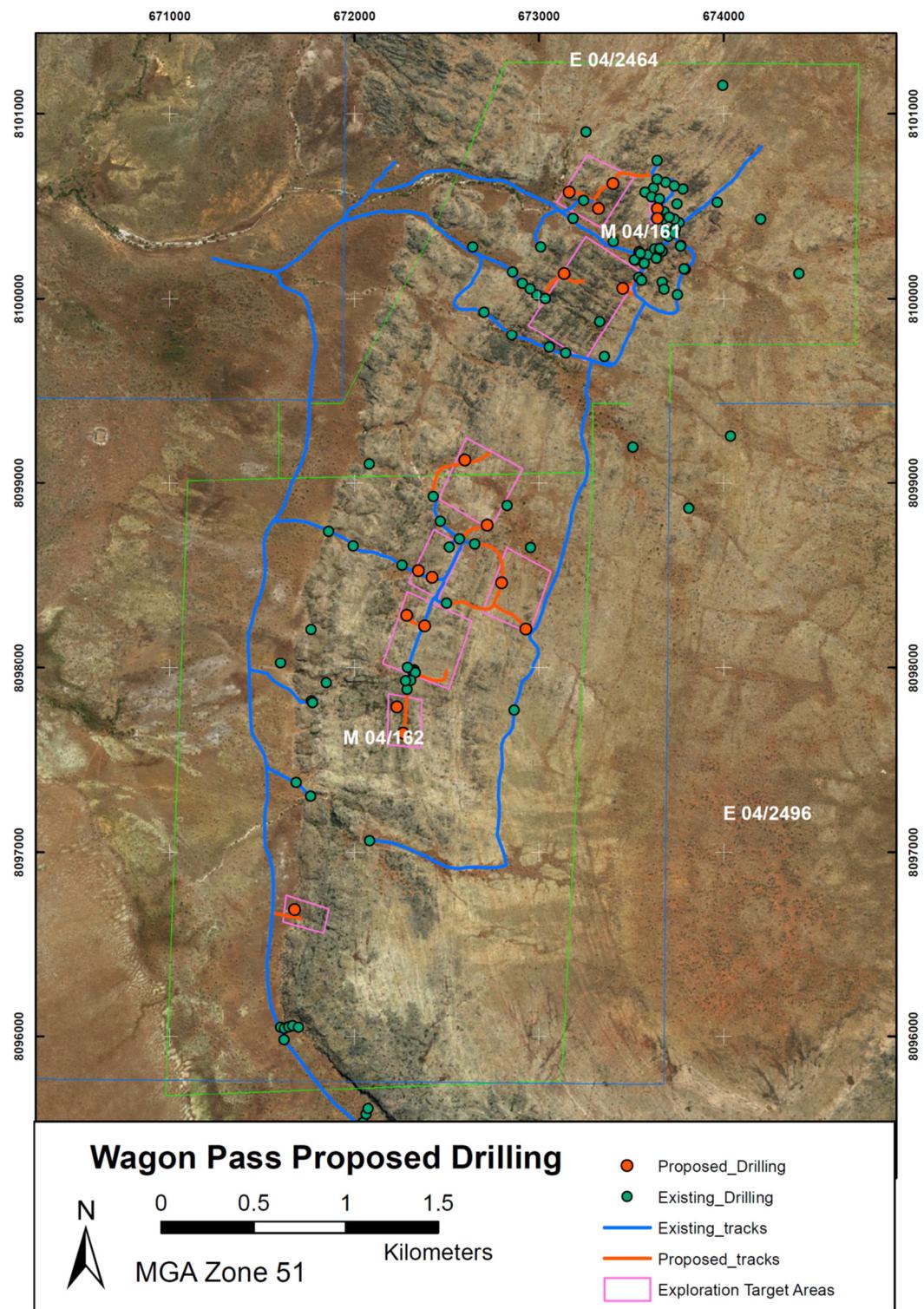
A POW has been approved by the Department of Mines (DMP) and, weather permitting, we aim to be drilling during the June Quarter to increase the inferred resource category to indicated while, importantly, testing some high grade exploration targets which have not been the subject of systematic exploration, and bodes well for new high grade zinc discoveries."

Figure 1: Location of the Lennard Shelf Zinc Projects



Source: Metalicity

Figure 2: Resource and Exploration Target areas for drilling at Napier Range.



Source: Metalicity

## Napier Range Zinc Project

### Geology

In the Napier Range Zinc Project area, the Lennard Shelf Devonian carbonate complex rests unconformably on Proterozoic basement. Zinc-lead-silver mineralisation occurs within fore-reef and reefal slope carbonate rocks, mostly related to two stratigraphic levels: in dolomitised siltstones and limestones of the Lower Napier Formation, and at the upper levels, in limestones of the Upper Napier Formation. The Wagon Pass orebody at Napier Range is dominantly stratabound with minor fault and breccia associated ore. It is located about 12km northwest of the small but very high grade historical Narlarla zinc-lead-silver mine from which about 2,115t of lead, 2,867t zinc and 162t of silver metal were mined between 1948 and 1966. See figure 5 illustrating gossanous dolomite to the south of the Wagon Pass Deposit.

### Mineral Resource Estimate (MRE)

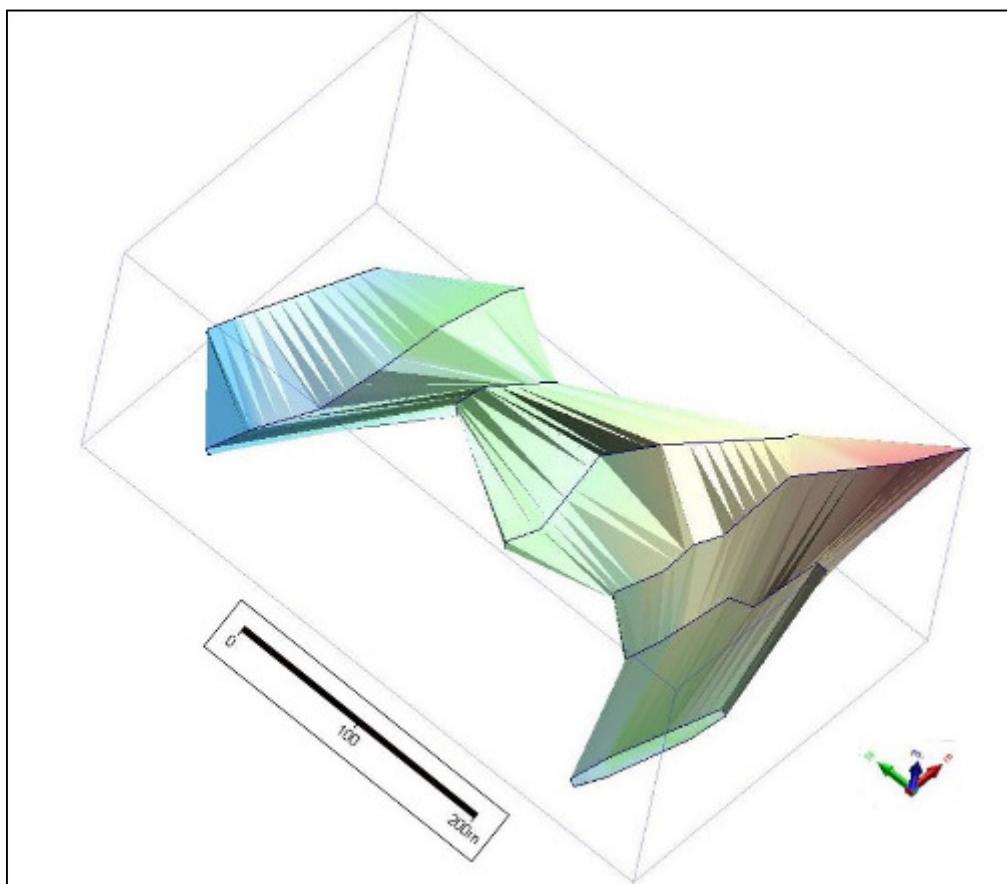
The most recent JORC 2012 Inferred MRE of 750Kt at 5.8% Zn, 7.2% Pb, 54g/t Ag (13.6% ZnEq) at Wagon Pass was completed by Cube Consulting in 2016, using a 5% Zn + Pb cut off, 2m downhole compositing, and an assumed bulk density of both waste and mineralized material of 3.0 g/cm<sup>3</sup>. The deposit is located between 150-200m depth below surface. The mineralisation wireframe is shown in Figure 2.

Key parameters of the MRE, summarised in accordance with the requirements of ASX LR 5.8.1:

- **Geology and geological interpretation:**
  - The Wagon Pass mineralisation is hosted in the dolomitised Lower Napier Formation. Lithologies consist of red and green/grey stylo-nodular silty packstones and wackestones with interbedded cleaner, and commonly brecciated, more massive micrites/wackestones.
  - The mineralisation occurs as a north-trending lens c. 150-200 m below surface, shallowly dipping to the west and plunging to the north. The main massive sulphide mineralisation is largely stratiform in nature (parallel to rock layering).
  - A nominal 2% Zn and /or Pb cutoff was used to guide interpretation of the mineralisation envelope
- **Drilling techniques:**
  - Diamond drill cores were sampled as either ¼ or ½ core splits on 1m intervals within the mineralisation, or core fillets (smaller portion of sample than ¼ or ½ core splits) on 2m intervals within the waste intervals.
  - Drilling techniques: 49 diamond drill holes (46 vertical) - primarily NQ and BQ within the mineralised intervals. See Figure 4, showing core storage facility.
- **Classification Criteria:**
  - The entire estimate was classified as Inferred.
  - The drill spacing ranges from 40m x 40m up to 50m x 100m for the drilling material to the MRE.
  - Data was composited to 2m composites along each drill hole intersection within interpreted the mineralisation envelope
  - Despite the well understood geological setting and geological control on mineralisation, there was insufficient QAQC information to verify the accuracy of sampling and assaying, and it was only possible to classify the entire estimate as Inferred Mineral Resources.
- **Sample analysis method:**
  - Atomic absorption spectrometry (AAS) following perchloric acid digest for the majority of samples
- **Estimation methodology:**

- For personal use only
- Estimation employed 2m downhole composites and ordinary kriging (OK). The 250 x 250 x 50 m search ellipse was oriented to the mineralisation envelope geometry, a minimum of 4 and maximum of 10 samples were used.
  - **Cut-off grade and basis:**
    - A nominal 2% Zn and /or Pb cutoff was used to guide interpretation of the mineralisation envelope, the estimate was reported above a Zn+Pb cutoff of 5% as a reliable predictor of massive sulphide mineralisation.
  - **Mining, metallurgical and consideration of other material modifying factors to date:**
    - Underground mining was considered to be the most applicable method of extraction, given the historical practice in the area.
    - Metallurgical tests have yet to be completed, and parameters were assumed to be similar to historical Lennard Shelf operations.
    - No assumptions were made in relation to environmental and other considerations at this early stage of the project.

**Figure 3: 3D model of the Wagon Pass mineralisation at a 1% Zn cut-off.**



(source: Metalicity)

*Note: North indicated by the green arrow. The model is colour-coded by elevation from low (blue) to high (red).*

## **Exploration Target Range (ETR)**

Metalicity have reviewed a comprehensive targeting study completed in late 2016 over the project area completed by Meridian Minerals, and have adopted this work as the basis for Metalicity's exploration programme in the Napier Range area.

To date, the area has been underexplored due to ineffective and shallow drilling. There are nine targets, one for resource extensions to the Wagon Pass deposit and eight further targets within 4km of the deposit. At Wagon Pass, potential exists to extend the resource down dip to the west of the deposit (Exploration Target 1), while regionally the Company is targeting multiple occurrences of 0.5–1Mt size (Exploration Target 2), resulting in a global ETR at Napier Range in the order of 1–4 Mt @ 10–15% ZnEq.

The grade and tonnage range are based on the grade and geometry of the Wagon Pass deposit, and the cluster-style distribution of this mineralisation type.

The Exploration Target Ranges (ETR) stated are conceptual in nature, and the potential quantities and grades are conceptual in nature. There has been insufficient exploration to estimate Mineral Resource Estimates outside that known at Wagon Pass, and it is uncertain whether further exploration will result in the estimation of additional Mineral Resources.

### **Exploration Target 1 (resource extensions to the Wagon Pass deposit)**

The Wagon Pass mineralisation is still open to the west. Two proposed holes are designed to test the N1 target area for a potential western and north-western extension of the mineralisation. The holes are vertical and designed to test the Lower Napier Dunr5 and 4 units hosting most of the Wagon Pass mineralisation. Based on the existing drilling data, modelled geometry and geological continuity of the MRE, the Exploration Target is anticipated to have a range of between approximately 100-200kt at 10-15% ZnEq.

### **Exploration Target 2**

The remaining eight targets are located further south, and along strike of the Wagon Pass deposit, mostly in analogous litho-stratigraphic settings within favourable Lower Napier stratigraphy. Metalicity believe that the area is significantly under-explored for additional deposits 0.5 to 1 Mt size, Figure 3 shows these eight areas (outlined in magenta).

These targets were selected based on having similarities with the existing Wagon Pass deposit in terms of interpreted stratigraphic position, overall geological setting, geophysical character, and proximity to exploration drilling and rock ship sampling results.

The “footprint” of the existing Wagon Pass Mineral Resource of 750 kt guided the anticipated range in size of the targeted mineralisation, of between around 0.5–1 Mt per target. The same rationale was applied to the anticipated targeted range of grade, based on the Wagon Pass grade of 13.6% ZnEq<sup>1</sup>, to derive a target grade range of 10-15% ZnEq. Finally, given that not all Exploration Targets are successfully converted into Mineral Resources of any category, a success rate of 50% was assumed for the eventual conversion of the eight targets to Mineral Resources.

The eight target areas comprising Exploration Targets 2 to 9 collectively amount to an Exploration Target range of between 1–4 Mt, with anticipated grades ranging between 10-15 % ZnEq.

The Company reiterates that the Exploration Target Ranges (ETR) stated are conceptual in nature, and the potential quantities and grades are conceptual in nature. There has been insufficient exploration to estimate Mineral Resource Estimates outside that known at Wagon Pass, and it is uncertain whether further exploration will result in the estimation of additional Mineral Resources.

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<sup>1</sup> Inferred MRE of 750Kt at 5.8% Zn, 7.2% Pb, 54g/t Ag

**Figure 4: Core shed stored at the Napier Range Project.**



*Source: Metalicity*

**Figure 5: Gossanous dolomite outcropping south of the Wagon Pass deposit at Napier Range.**



*Source: Metalicity*

## METAL EQUIVALENCE

Zinc equivalent (ZnEq) calculation parameters are presented in Table 1. The metallurgical recoveries are extrapolated from orebodies with similar MVT characteristics. It is Metalicity's opinion that all elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold. The calculation formula is ZnEq (%) = Zn(%) + 0.92Pb(%) + 0.02Ag(ppm).

**Table 1: Zinc Equivalence parameters**

Factor	Metal		
	Zn	Pb	Ag
<b>Total recovery</b>	93%	95%	90%
<b>Total Payable</b>	85%	95%	95%
<b>Price (spot)</b>	\$1.24/lb	\$1.00/lb	\$16.5/oz.
<b>Conversion Factor</b>	<b>1.00</b>	<b>0.92</b>	<b>0.021</b>

<sup>1</sup> Approximating to head grade

Metal equivalents are highly dependent on the metal prices used to derive the equivalence formula. Metalicity notes that the metal equivalence method taken above is a simplified approach. Only estimated metallurgical recoveries are available. The metal prices are assumed indicative LME prices and do not necessarily reflect the metal prices that a smelter would pay for concentrate nor are any smelter penalties or charges included in the calculation.

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### About Metalicity Limited

*Metalicity Limited is an Australian exploration company with a primary focus on the base metals sector and the development of a pipeline of zinc projects including the high-grade Napier Range Zinc Project and the large-scale Admiral Bay Zinc Project, both located in the north west of Australia. The Company's secondary focus is the lithium and cobalt sector with early stage exploration projects located in existing world class and/or emerging districts for lithium and cobalt. The Company is supported by a management team with significant collective experience in the resources sector as well as private equity, institutional and retail funds.*

### Competent Person Statement – Exploration Results and Exploration Target Range

Information in this report that relates to Exploration results and Exploration Target Range (ETR) has been reviewed by Dr. Simon Dorling, who is a member of the Australian Institute of Geoscientists. Dr. Dorling is a consultant to Metalicity Ltd, and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr. Dorling consents to the inclusion of the data in the form and context in which it appears.

### Competent Person Statement – Wagon Pass Mineral Resource Estimate

Information in this report that relates to the Wagon Pass Inferred Resource Estimate has been compiled by Patrick Adams, FAusIMM, MAIG. Mr Adams is a Director of Cube Consulting, and consultant to Meridian Minerals Pty Ltd who commissioned the resource report in 2016, and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Adams consents to the inclusion of the data in the form and context in which it appears.

For more information on the Napier Range Zinc Project, see ASX:MCT 29/1/18 "High Grade Zinc Acquisition"

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### Competent Person Statement / Qualified Person Statement

Information in this report that relates to Mineral Resources and Exploration Target Range (ETR) has been reviewed by Mr Ian Glacken, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr. Glacken is a consultant to Metalicity Ltd, and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Glacken consents to the inclusion of the data in the form and context in which it appears.

For more information on the 4/7/16 Mineral Resource Estimate and Exploration Target Range see ASX:MCT, 4/7/16.