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OUTSTANDING ADMIRAL BAY ZINC PROJECT PFS RESULTS

- Admiral Bay Zinc Project Pre-Feasibility Study (PFS) Stage 1 results confirms Admiral Bay has the potential to support a capital efficient, long life and low cost zinc/lead/silver operation.
- ▶ Highly capital efficient Direct Shipping Ore (DSO) starter concept incorporated into the development plan.
- Mining studies evaluated potential mining methods and their geotechnical and hydrogeological impacts, with positive initial results from within the high grade zone.
- Resource validation and definition of the high-grade zone recommended for next drilling program.
- Conventional flotation processing with high projected metal recoveries with further metallurgical testwork underway with China Minmetals to confirm international saleable concentrate.
- Admiral Bay PFS Stage 2 to be undertaken with a JV partner, discussions with multiple parties advanced.

Metalicity Limited (ASX:MCT) ("MCT" or "Company") is pleased to provide an update on the Pre-Feasibility ("PFS") for the Admiral Bay Zinc Project ("Admiral Bay"), located in the northwest of Australia. The PFS Stage 1 has been successfully completed and further confirms Admiral Bay has the potential to support a capital efficient, long life and low-cost zinc/lead/silver operation.

The PFS stage 1 work at Admiral Bay has involved the refinement of the preferred PFS pathway including the design and budgeting of drilling options, the compilation of a new Mineral Resource Estimate (MRE) for the high-grade zone (Figure 2) and testwork on various critical success factors regarding mining and processing optionality. As outlined in the Scoping Study, the development and mining of Admiral Bay has been independently reviewed as technically feasible.

To de-risk Admiral Bay through to decision to mine the PFS has been undertaken in two stages, PFS stage 1 and PFS stage 2. The PFS is being project managed by Metalicity and peer reviewed by SRK Consulting.

Metalicity Managing Director, Matt Gauci, commented:

"The Pre-Feasibility Stage 1 has delivered outstanding results for Admiral Bay and has de-risked the project in key areas that were identified from the Scoping Study and from discussions with potential JV partners.

Firstly, the company aimed to reduce the overall capital intensity of the project which has given rise to a conceptually more **capital efficient** starter mine using the DSO concept and preliminary testwork has confirmed the viability.

Secondly, preliminary geotechnical and hydrogeological assessment confirms the mining feasibility and the potential to significantly **reduce operating costs** given the mining methods contemplated.

Thirdly, metallurgical testwork studies is being undertaken by China Minmetals as part of the off-take agreement and preliminary assessment supports the view that Admiral Bay is an **international saleable concentrate**.

The company has received positive feedback from parties with whom we are in discussions with and will now undertake a global roadshow to present the PFS Stage 1 results and continue advanced discussions with potential JV partners to fund the project through to a decision to mine with a range of funding options available."

PRE-FEASIBILITY STUDY STAGE 1 SUMMARY

Highly Capital Efficient DSO Starter Mine Concept PFS Stage 1 Study

The DSO study consisted of technical and economic modelling of two conceptual alternatives and comparing them to the base case 3-5Mtpa Concentrate model over a LOM of 21 years, as outlined in the Scoping Study. The primary purpose of the study being to reduce the overall capital intensity of the project.

The first option consists of a standalone DSO operation utilising ore sorting technology to increase the metal content in the ore to a commercial DSO product. The second option was to combine the DSO and Concentrate models into one project.

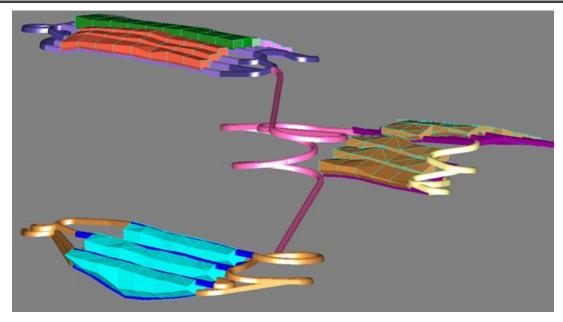
The study indicates that the concept of a standalone DSO operation would be feasible with current project knowledge and test work. The combined DSO and Concentrate model also preserves expansion optionality to a larger concentrate model (by starting with minimal infrastructure, focussing on the high grade zone, achieving payback on DSO capital invested) and is feasible. This development pathway also delivers a lower technical risk and capital intensity profile, as only a third of the capital would be required initially and any operational uncertainty can be quantified during the development and operation of the DSO concept.

Recommendations:

As this evaluation is conceptual in nature, the following work should be considered to support the planned study work in PFS Stage 2:

- Continue test work to understand and confirm the ore sorting rejection rates expected for DSO;
- Additional resource drilling for both the DSO conversion upgrade and the larger orebody to support expansion optionality;
- Evaluate the feasibility of a concentrator plant to increase the available tonnage to be mined post DSO;
- Evaluate a staged expansion approach from 0.5Mtpa up to a 3Mtpa operation;
- Evaluate mine design aspects; stope layouts and dimensions that will be required for initial DSO production.

Figure 1: 3D Isometric view of a preliminary mining design layout for the DSO Concept



Source: Metalicity



Ore Sorting PFS Stage 1 Study

As part of PFS Stage 1, Metalicity contracted Outotec to evaluate the potential benefits of implementing an oresorting technology. This technology allows a separation of waste material from ore material through sensors. The sensors scan the run of mine (ROM) material and segregate material based on the mineralogical composition.

Metalicity notes that clients of Outotec have reported encouraging results on Mississippi Valley Type (MVT) deposit when testing the ore-sorting technology. Low grade zinc ore, recorded results of up to 92% head grade increase.

A review on the suitability of the ore to be sorted using ore-sorting technology based on existing relevant mineralogical reports was initially carried out.

Subsequently a small amount of sample (approximately 20kg of ore drill core) was selected and a sensor selection test was performed at the TOMRA laboratory in Sydney for testing. The task was to confirm that the DE-XRT sensor was capable of detecting the density difference between the high and low grade regions in the samples received. The samples were colour photographed and imaged on TOMRA's DE-XRT sensing system. In addition, some XRF analysis was completed of various portions on the rocks, in order to gain an understanding of the XRT's sensor response to the various mineralogies (Figure 4).

Outotec reviewed available geological reports, metallurgical reports and core photos to make a preliminary evaluation of the suitability of the ore and commented as follows:

- Previously, MVT deposits have been almost universally amenable to sorting, with high recovery and moderate to high upgrade.
- In reference to possible classification of the deposit as an "Irish" type, Outotec have seen good sorting test results from Pb-Zn deposits in Ireland.
- The drill core photos, read in conjunction with geology and geotechnical information indicate some portion of internal waste is present. The waste material may be clearly identifiable by visual inspection and therefore it may be possible to have a very good idea of amenability even before assays are available.
- The significant presence of barite was considered interesting. As barite is between zinc and lead on the periodic table, it is likely that barite would be included in the high grade stream of XRT sorting.

The preliminary test work results concluded the following:

- The DE-XRT sensor is capable of detecting the density differences between the high density ore (high grade) and low density material (waste) in the samples received.
- The barite is a possible candidate for optical sorting, where the whiteness of the rock can be used to differentiate between it and other material. This will not, however be effective in identifying between the high zinc sulphide and waste areas with a similar colouring.

Recommendations:

Based on this preliminary sensor testing TOMRA recommended that Metalicity should obtain a bulk test work sample (+ 250kg), to test the effectiveness of an XRT system to produce a high density product stream (zinc + barite) from a low density waste stream, and also possibly a white barite rich product stream from a darker coloured waste stream. TOMRA believes that this material presented a strong case for further test work to determine the suitability of the sorting system.



Figure 2: Sample of Admiral Bay Core used for sensor testing







Source: Metalicity

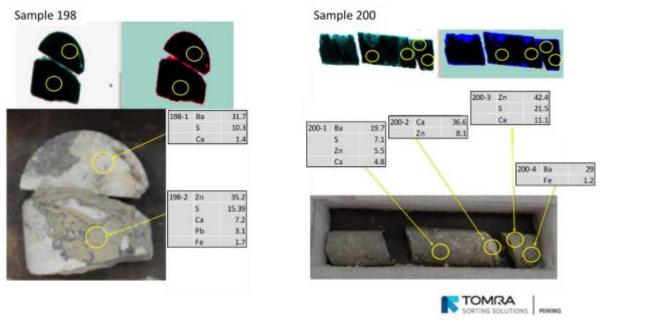
Figure 3: TOMRA – Rock Testing Laboratory (Sydney)





Source: Metalicity / TOMRA

Figure 4: Select results for tested samples (XRF Technique)



Source: Tomra (Pre-Bulk Test Report, 2017)

Geotechnical PFS Stage 1 Study

Based on discussions with SRK, a preliminary scope of work for geotechnical studies suitable to address the requirements for a PFS for the Project. The PFS will focus on a high-grade area of approximate 20 Mt along a 2.8 km strike length.

The primary objective of the geotechnical PFS is to construct a preliminary Geotechnical Domain Model (GDM) to support mine planning, using the existing data and available drill core. This will result in gaining a better understanding of the effects of mining on the surrounding rock mass, especially the rock mass between the estimated mining areas and the overlying Grant aquifer system. This will assist in the assessment of the risk related to groundwater ingress under the proposed mining methodologies, and will provide key geotechnical design recommendations.

The scope of work consisted of two phases, Phase 1 and Phase 2. Phase 1 included the initial review, data collection, construction of a geotechnical model. Phase 2 included an initial indicative numerical stress/deformation modelling of mining scenarios, and a brief presentation style reporting of preliminary findings and their potential influence on the design for underground mining.

Data provided by Metalicity was complemented with literature available on the Canning Basin, regional and local geological and geotechnical reports, maps and drill hole logs (resource, structural and geotechnical logs). Drill log data from petroleum exploration and drill core photographs from regional exploration was also considered. The data was reviewed and assessed with a particular focus on the Grant Formation and the Carribuddy Formation, the areas adjacent to the proposed mining zones.

Using the core photographs and available data, a preliminary GDM was developed. This GDM used for the preliminary analysis required significant engineering and geological judgment and is therefore regarded as semi-qualitative.

The distance from top of the orebody to base of Grant aquifer was estimated to be 150m, a conservative base case criterion for the assessment. Generic representations of longwall and open stope mining shapes were used.

Evaluation of a potential longwall layout indicated that the height of disturbed/caved zone is sensitive to horizontal stress ratio (Kh). Based on a panel height of 4 m and 150 m in cross section, the disturbed zone may extend approximately 170m above the panel (for Kh of 2), depending on stress regime and rock mass quality. The height of disturbed/caved zone increases as the longwall panel is progressively extracted. Indications are that panel strike lengths should be limited to 300 m for Kh values of 1.0 and 200m for Kh values of 1.5 (Figure 5).

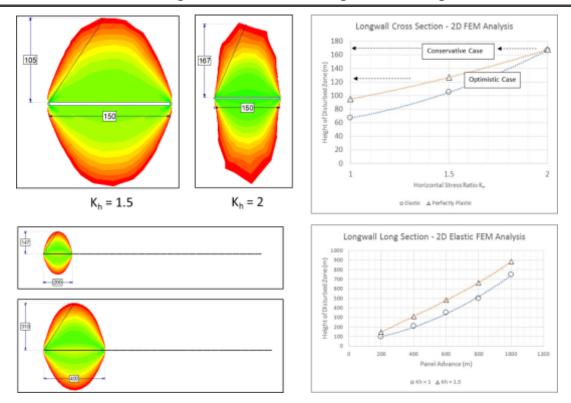
Evaluation of potential open stope layouts considered two scenarios; one with backfill and one without. Using FLAC 3D software, the model indicates potential maximum heights of the damage above the stope crowns to be 85m with backfill and up to 135m without backfill. The height of disturbed zone is again sensitive to horizontal stress ratio with the maximum height of damage occurring under anisotropic stress conditions. Preliminary results indicate that the damage zone for the stope panel will not exceed 150 m height (the expected height for the aquifer). The optionality of implementing longwall mining, is deemed geotechnically feasible based on current data and using recommended geometric restrictions (Figure 6).

Recommendations

Collection of fresh geotechnical data during the drilling campaign (to be carried out in PFS Stage 2) will allow for updates to the GDM. Drilling will present the opportunity to obtain fresh drill core and undertake downhole testing of rock mass. At this current time, it was envisaged that practical and cost-efficient investigations will likely consist acoustic televiewer (ATV) logging of the holes to assess fracture density, aperture and orientation of fractures (key to understanding the rock mass properties and bulk permeability of the Carribuddy Formation).

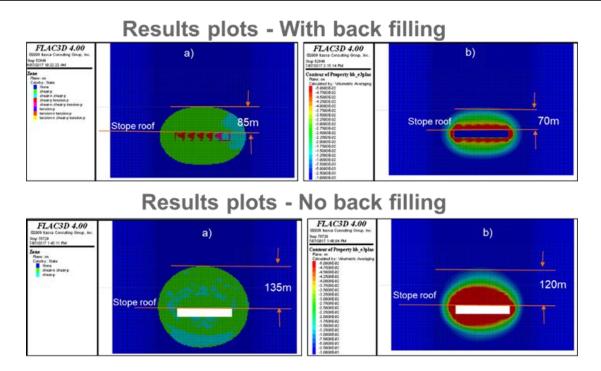


Figure 5: 2D Phase² software damage results for cross and long section on Longwall assessment



Source: SRK (Preliminary Assessment of damage zones for Longwall & Open Stope Mining, 2017)

Figure 6: FLAC 3D Open stope geotechnical model results



Long section; a) Plastic state; b) Accumulated plastic strain

Source: SRK (Preliminary Assessment of damage zones for Longwall & Open Stope Mining, 2017)



Hydrogeological PFS Stage 1

From the discussions with SRK, a scope of work for hydrogeological studies suitable to address the requirements for a PFS for the Admiral Bay Project (the Project) was developed. The PFS will focus on a high-grade area of approximate 20 Mt along a 2.8 km strike length.

The primary objective of the groundwater study was to develop an updated conceptual model of the local hydrogeology, to inform development of a PFS-level understanding of the local hydrogeology, and specifically to assess the identified risk associated with catastrophic ingress of groundwater in the mine working area.

Ultimately, the development of a Conceptual Groundwater Model (CGM) can be used to inform geotechnical modelling relating to assessing the risk of water ingress under different mining methodologies.

The scope of work consisted of two phases, Phase 1 and Phase 2. Phase 1 included the initial review, data collection, an updated the conceptual hydrogeological understanding of the deposit, provision of recommendations for gathering of additional hydrogeological data from the drilling investigation program planned by Metalicity.

Data sourced from Metalicity was complemented with literature available on the Canning Basin, regional and local hydrological and hydrogeological reports, drill log data from petroleum exploration and drill core photographs from regional exploration. The data was reviewed and assessed with the particular focus on the Grant Formation (aquifer), the underlying Carribuddy Formation (potential aquitard), and the areas including and adjacent to the proposed mining zones.

The contact between the Carribuddy and Grant formation is interpreted as unconformable. The Grant Formation is interpreted as an interlayered Sandstone/Siltstone with the primary permeability being confined to sandstone layers. In addition, the Grant Formation is not interpreted as being a uniform isotropic aquifer (i.e. Horizontal permeability (Kh) >> Vertical permeability (Kv)).

Preliminary results of the geotechnical modelling indicate that under an isolated example of conventional stope and backfill methods, disturbance of the Carribuddy Formation will not extend into the overlying Grant formation. This means the Carribuddy Formation will continue to act as an effective aquitard under these conditions, minimizing risk of catastrophic ingress of groundwater into underground workings. For the cases reviewed, it may eliminate the requirement for dewatering the Grant Aquifer.

Based on estimated permeabilities (10⁻⁹ to 10⁻⁶ m/s), conventional dewatering via bores drilled from surface would most likely be the lowest risk option. If dewatering is required, it has been estimated that it can be accomplished through a network of 10-15 bores over the current full extension of the Admiral Bay Project (~18km strike length). High groundwater temperatures were not considered a major obstacle to the dewatering plan. Considering the likelihood of having to manage hypersaline water, the estimated capital cost is approximately \$1.5M AUD/bore.

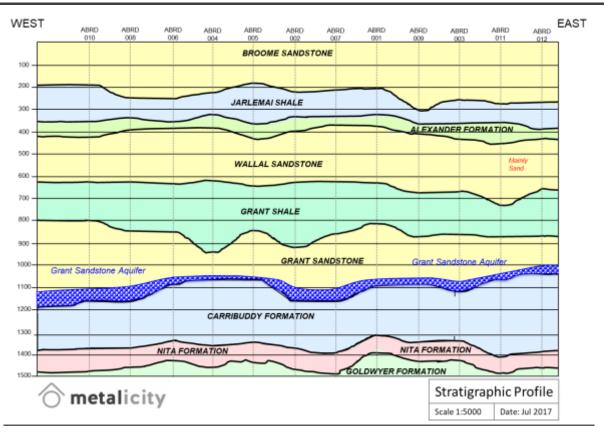
Recommendations

More information is required before determining the need to dewater the Grant Aquifer, such as aquifer permeability, storage, water quality and preferred mining methods. This information is essential before any potential design can be tested and/or modelled with certainty.

Drilling new holes, spread across the key focus (high grade) area of the deposit will present the opportunity to obtain fresh drill core and undertake downhole testing. At the time, it was envisaged that practical and cost-efficient investigations will likely consist of packer testing key hydro stratigraphic units in the hole (i.e Grant Formation and Carribuddy Formation) to develop permeabilities across the intervals.



Figure 7: Stratigraphic Profile of Admiral Bay



Source: Metalicity



Ventilation PFS Stage 1 Study

Metalicity has undertaken a review of the accuracy of the VRT (virgin rock temperature) measurements at a Scoping study level and a preliminary economic impact of the VRT on the project. The study was carried out by Metalicity.

There are three previous reports covering the ventilation requirements for Admiral Bay; (a) an order of magnitude study for CRA Exploration (CRAE, 1989), (b) a study prepared by Mining Plus Pty Ltd (Mining Plus) for the PFS document prepared by RSV Australia Pty Ltd (RSV, 2009) and (c) a review conducted by BBE Consulting Australasia (BBE) for the Scoping Study of the Project (SRK, 2016).

The current study evaluated two issues. Data from two different drilling campaigns and the published literature was reviewed with the intent of confirming the estimation of the expected VRT at target depth. In addition, a sensitivity analysis on the cost of energy consumption for the ventilation component and number of ventilation shafts on the overall project economics based on different ventilation requirements suggested for the Admiral Bay deposit by subject matter experts.

Further review of the original data confirms the estimated virgin rock temperatures within the zone of interest, to between 80° and 85°Celsius. The data showed no major differences in temperature gradient along the entire length of the project. It is suggested that the temperature gradient defined from the data points, can be extrapolated across the project area and provide the accuracy required for a pre-feasibility study (Figure 8).

Based on the preliminary economic assessment of the ventilation and associated power requirements of the project, it is suggested that incorrect estimates would not have a material impact on the Project economics. In addition, the construction of additional ventilation shafts as the mining extends along the resource outside M04/249 do not overly impact the economic viability of the project. It should however be noted that final ventilation requirements and consequent cost impact will be very dependent on the selected mining method.

Within the scope of accuracy of the current project study, additional refrigeration power requirements are not considered as a fatal flaw either from a technical or an economic perspective.

Recommendations

Further work is required once a more definitive mine design is tabled, included but not limited to a 4D Ventilation simulation.

Kagara drill holes temperature logs

ABRD001

ABRD002

ABRD003

ABRD003

ABRD006

ABRD006

ABRD008

ABRD008

ABRD009

Figure 8: Admiral Bay Zinc Project: Temperature logs

Source: Metalicity



High Grade Mineral Resource Estimation PFS Stage 1 Study

Metalicity commissioned SRK to carry out a technical review on the Geology and Mineral Resource aspects of the Admiral Bay deposit. The Geological and Mineral Resource review focussed on M04/249, and evaluated the previous geological and grade estimation models, specifically on M04/249 where most of the drilling has been completed. SRK's review was informed by the latest Mineral Resource estimation by Ridley (2016).

The work program involved SRK reviewing all of the exploration data and Ridley's mineralisation domains. Seismic data for relevant lines were extracted and examined to provide guidance for the development of surfaces of important stratigraphic contacts. SRK then developed new mineralisation domains that broadly following Ridley's interpretation.

Some core (DD86SS02, DD89SS15 and DD89SS16) was inspected at the Geological Survey of Western Australia (GSWA) core library in Carlisle to provide a better understanding of the facies and lithological logging used in the modelling, and give an overview of the mineralisation.

Since the acquisition of the Admiral Bay deposit by Metalicity, CSA Global has reviewed the geological data, relogged core and developed a Mineral Resource estimate of 111 Mt @ 2.3% Zn, 2.7% Pb and 15 g/t Ag (Reynolds, 2016). Subsequently, Ridley Mineral Resource Consulting (Ridley) provided a Mineral Resource estimate of 170 Mt @ 4.1% Zn, 2.7% Pb, 25 g/t Ag and 10% Ba (Ridley, 2016), with an additional exploration target of 160 - 210 Mt at 4.4% - 4.8% Zn, 2.2% - 2.4% Pb, 23 g/t Ag and 7.2% - 7.8% Ba (effective date 4 July 2016). SRK did not review the Exploration Target inventory or the inventory within the Ridley Mineral Resource Estimate that was external to M04/249.

The Admiral Bay mineralisation is hosted in Ordovician calcareous units, situated along the northern margin of the Willara sub-basin (Canning Basin). The mineralisation is spatially linked to the Admiral Bay Fault Zone (ABFZ), which controlled the development of the Willara sub-basin to the south and the Broome Platform to the north, and the Great Sandy Accommodation Zone (GSAZ), which appears to have formed a local basement palaeo-high. Circulation of brines, derived from abundant evaporitic units within the sequence, allowed the extraction of metals from within the sedimentary pile, and perhaps (to a lesser extent) from basement rocks. Mobilisation of these metal-bearing fluids, possibly triggered by mild compression during the Prices Creek Movement, into the GSAZ and the ABFZ, where thick permeable units in the Goldwyer and Nita formations provided effective host rocks, while the muddy facies and evaporitic units in the Bongabinni Formation provided an effective seal. Ferroan dolomitisation further enhanced permeability, and together with the large source reservoir, and effective fluid focusing mechanism, explains the large lateral extent of the mineralising system.

Ridley (2016) used a nearest neighbour style thickness accumulation approach to the estimation of resource grades within the modelled mineralised zone domains. SRK agrees with the Inferred Mineral Resource classification applied by Ridley within M04/249, and considers it appropriate for the drill density employed. Documentation and Mineral Resource reporting follows JORC Code (2012) guidelines. While this approach is valid globally, SRK suggests that vertical grade variability is reduced and the local variability, important in drill hole targeting, is smoothed in the resource model. SRK recommends a more local approach to grade estimation that may achieve better local definition of the higher-grade zones suitable for future drill planning and resource delineation.

Recommendations

The geological modelling relies on a limited set of drilling data, and is therefore poorly constrained at present. Reprocessing of the existing seismic datasets and integration of these 2D data into a 3D geological model may help refine the geological model. Acquisition of a new 3D seismic dataset across M04/249 should also be considered in order to improve the 3D geological models and assist drill targeting.

Mineralisation is spatially controlled by the presence of the thickest part of the bioherm accumulation in the Goldwyer and Nita formations. These form an antiformal feature, with mineralisation rapidly thinning away from



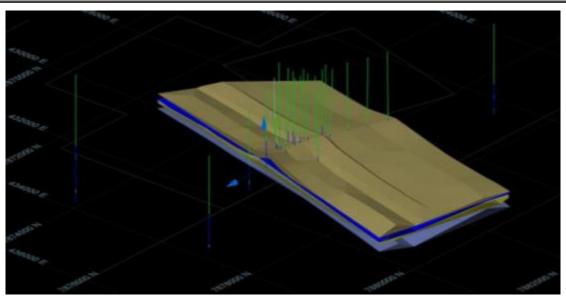
the antiformal hinge. Drilling should therefore firstly focus on the delineation of this hinge, with subsequent drilling targeting the limbs.

The GSAZ defines a zone of structural complexity, which makes prediction of the location of mineralisation east of the drill section ABRD011–ABRD003–ABRD009 more challenging. SRK therefore recommends that drilling should be focused to the west of this section, where mineralisation seems structurally less complex.

Re-estimation, using the updated geological models and mineralisation domains developed by SRK, and using a more local approach to grade, may help better define higher-grade zones to target for future drill planning.

Major and trace element geochemistry may assist in the identification of high-grade mineralisation, but for many of the existing holes, only a limited set of elements were analysed. SRK recommends analysis of all major elements by XRF throughout, and the analysis of Ba and F throughout (not just mineralised intervals), as well as assays for As, Sb and Co.

Figure 9: Antiformal geometry of Goldwyer and Nita formation within M 04/249



Source: SRK (Admiral Bay – Geological and Mineral Resource Review, 2017)



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About Metalicity Limited

Metalicity Limited is an Australian mining exploration company with a primary focus on base metals sector and the development of the world class Admiral Bay Zinc Project, located in the north west of Australia. The company is currently undertaking a Pre-Feasibility study on Admiral Bay. The Company's secondary focus is the rare metals sector where early stage exploration has commenced. The Company is supported by a management team with 300+ years collective experience in the resources sector and strong shareholder base of institutional and sophisticated investors.

Competent Person Statement

The opinions expressed in the PFS Stage Report have been based on the information evaluated by Metalicity Limited (Metalicity) and supplied to SRK Consulting (Australasia) Pty Ltd (SRK) for peer review. SRK has exercised all due care in reviewing the supplied information. Whilst SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this Report apply to the site conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which SRK had no prior knowledge nor had the opportunity to evaluate.

All parties have consented to the inclusion of their work for the purposes of this announcement. The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature for all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for absolute certainty. Any economic decisions which might be taken on the basis of interpretations or conclusion contained in this report will therefore carry and element of risks.

Forward Looking Statement

Forward-looking information is based on the opinions and estimates of management at the date the information is given, and on information available to management at such time. Forward-looking information involves significant risks, uncertainties, assumptions and other factors that could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking information. These factors, including, but not limited to, fluctuations in currency markets, fluctuations in commodity prices, the ability of the Company to access sufficient capital on favourable terms or at all, changes in national and local government legislation, taxation, controls, regulations, political or economic developments in Australia. Many of these uncertainties and contingencies can affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. Prospective investors should not place undue reliance on any forward-looking information.

Although the forward-looking information contained in this report is based upon what management believes, or believed at the time, to be reasonable assumptions, the Company cannot assure prospective purchasers that actual results will be consistent with such forward-looking information, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither the Company nor any other person assumes responsibility for the accuracy and completeness of any such forward-looking information.

The Company does not undertake, and assumes no obligation, to update or revise any such forward-looking statements or forward-looking information contained herein to reflect new events or circumstances, except as may be required by law. No stock exchange, regulation services provider, securities commission or other regulatory authority has approved or disapproved the information contained in this report.

