31 January 2023

2022 Soil Sampling Results

- **Geochemical results have been received for the 2022 regional soil sampling program at the Redbank Project.**
- **A total of 2,879 soil samples were collected in the 2022 season.**
- **Both regional 500m-spaced soils, and 250m-spaced infill over geochemical hotspots have been collected.**
- **Regionally-spaced sampling has returned a maximum value of 1209ppm copper-in-soil.**
- **Infill sampling has confirmed strong anomalism up to 1902ppm copper-in-soil.**
- **Anomalous samples have elevated bismuth, antimony, and manganese.**
- **Copper and multielement soil anomalism broadly delineates the prospective Calvert Fault corridor.**
- **Multielement anomalism at Calvert South highlights a significant target for copper mineralisation.**
- **Anomalous exposures of the McDermott Formation require priority investigation**

NT Minerals Limited (ASX: NTM) ('**NT Minerals**', '**NTM**' or 'the **Company**') is pleased to advise receipt of final geochemical results for the 2022 soil sampling at its 100%-owned Redbank Project. This announcement follows on from early season soil results reported in ASX:NTM announcement 3 October 2022.

A total of **2,879 regional soil samples** covering approximately 600km^2 have been collected at the Redbank Project in 2022, focussed on Calvert South including surrounding tenure. Both regional 500m-spaced surface soils, and 250m-spaced infill sampling over 2021 regional soil hotspots have been collected, see Figure 1.

Extension of 2021 500m-spaced, regional soil sampling has returned multielement anomalism point values **up to 1209ppm Cu** (against background values ~30ppm Cu) in prospective stratigraphy of the Calvert Fault

corridor and lesser regional locations. In addition, infill sampling has confirmed anomalous 2021 work with more coherent anomalies, returning values **up to 1902ppm Cu**. All anomalous copper in soil analyses have corresponding multielement anomalism up to **21ppm bismuth, 19ppm antimony and 4.1% manganese** (as much as 20 times background).

Dry season soil sampling was brought to an early close in response to the company's voluntary suspension (25th October 2022), over a historical environmental liability in NSW from 2005. As a result, a number of soil target areas were not completed.

Regional soil sampling is a core seasonal activity, undertaken every season since 2020 to build a foundation geochemical dataset spanning 48 elements. To date, approximately 8000 samples have been collected. The Redbank Project has historically suffered from regional exploration inactivity, highlighting the ongoing importance of this work.

Calvert South remains an excellent early-stage target that requires priority investigation through airborne geophysics, ground reconnaissance and drilling as part of the 2023 field season.

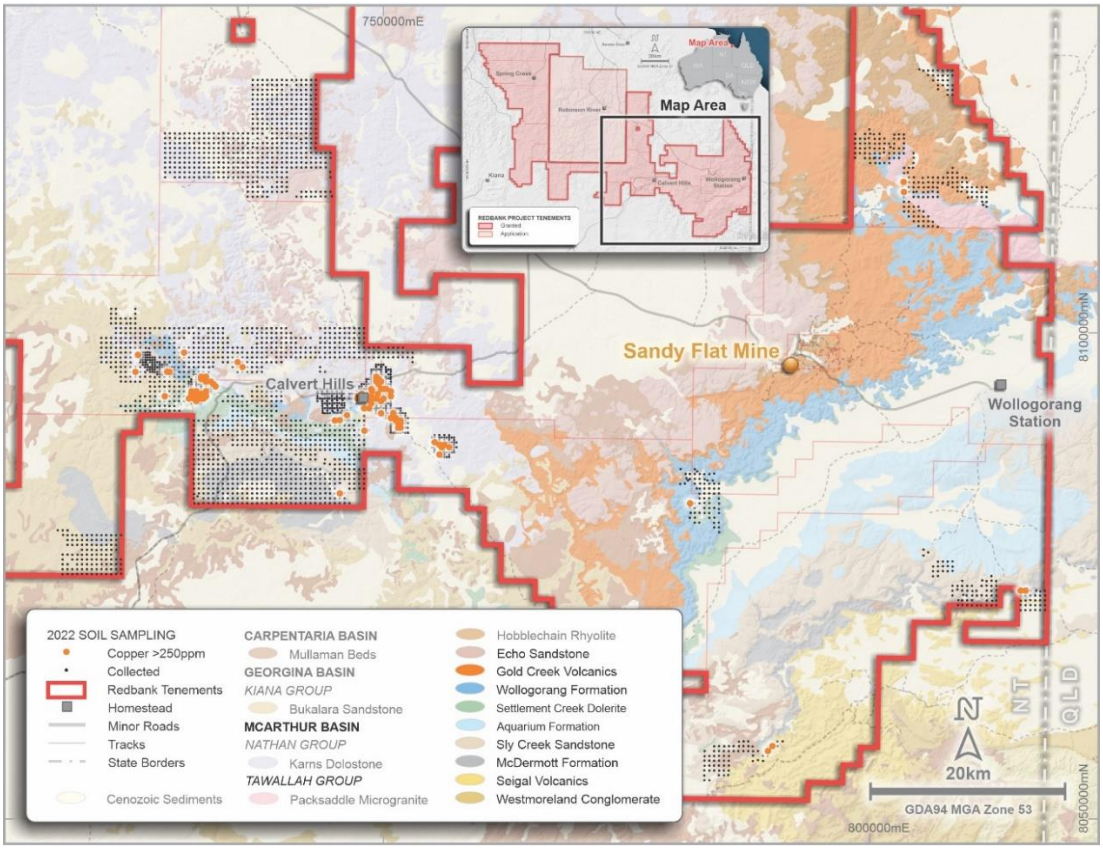

Figure 1: *2022 Soil Sampling Results (Cu > 250ppm)*

Management Commentary

NT Minerals Limited Managing Director Hugh Thomas commented:

Gaining prominence as an important stratigraphic target is the McDermott Formation, particularly where anomalous in surface sampling. Although the Wollogorang Formation is a key stratigraphic, reductant horizon proximal to known copper mineralisation, the McDermott Formation is the first reductant horizon above the basal Westmoreland Conglomerate receptive to ascending basinal brines. Soil geochemistry in 2022 confirms sporadic multielement anomalism (Cu/ Bi/ Sb/ Mn) over or near, narrow surface exposures that require urgent follow up.

Outside the anomalous Calvert Fault corridor, new anomalous spot clusters elsewhere contribute to existing regional understanding of copper and multielement dispersion. Ongoing work in 2023 will advance these areas to elevate their exploration priority.

It's pleasing have completed a solid work program in 2022 including soils, drilling and geophysics which has clearly contributed to a deeper understanding of copper mineralisation in the district, benefiting our ongoing knowledge and ability to target future exploration.

Redbank Project Summary

The Redbank Project is located in the southeast McArthur Basin and extends from the Northern Territory/Queensland border north-west to Glencore's McArthur Mine. In July 2020, NT Minerals secured a district scale tenement holding, pegging open ground following ground-breaking work by Geoscience Australia. This work highlighted the prospectivity for Tier 1 base metal deposits between the world-class deposits of McArthur River and Century. NT Minerals Limited though its 100% subsidiary Redbank Operations Pty Ltd holds the tenements with a 100% interest.

-ENDS-

For further information please contact:

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This announcement was approved and authorised for issue by the Board of NT Minerals.

Competent Person's Statement

The information that relates to Exploration Results is based on, and fairly represents, information compiled by Mr Michael Cowin, a Competent Person, who is a Member of the Australian Institute of Geoscientists. Mr Cowin is employed as a Consulting Geoscientist at NT Minerals Limited. Mr Cowin has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, 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 Cowin consents to the inclusion of the matters based on his information in the form and context in which it appears.

Disclaimer

This announcement contains certain forward-looking statements. Forward looking statements include but are not limited to statements concerning NT Minerals Limited's ('NTM's) planned exploration program and other statements that are not historical facts including forecasts, production levels and rates, costs, prices, future performance or potential growth of NTM, industry growth or other trend projections. When used in this announcement, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should", and similar expressions are forward-looking statements. Such statements are not a guarantee of future performance and involve unknown risks and uncertainties, as well as other factors which are beyond the control of NTM. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors. Nothing in this announcement should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities.

JORC Code Table 1

SECTION 1 REVERSE CIRCULATION DRILLING (RC), GROUND GEOPHYSICS AND SOIL SAMPLING

Michael Cowin, a Consulting Geologist to NT Minerals Ltd, compiled the information in Section 1 and Section 2 of the following JORC Table 1 and is the Competent Person for those sections. The following Table and Sections are provided to ensure compliance with the JORC Code (2012 edition) requirements for the reporting of Exploration Results. For further detail, please refer to the announcements made to the ASX by NT Minerals Ltd relating to the Redbank Project.

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	Soil collection procedure is to brush surface/organic material away, collect a dry sample from the base of a ~20cm hole to pass through a -2mm sieve and gain a 0.5-1kg sample for analysis.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	No measurement tools were employed to collect soil samples
	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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Not applicable, soil results only.
	In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation	Not applicable, soil results only.

Criteria	JORC Code explanation	Commentary
	types (e.g. submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Not applicable, soil results only.
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.*	Not applicable, soil results only.
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.*	Basic information was recorded for each soil sample collected including sample ID, location, grid, date, colour, type, moisture, sampler and comments. All logging was qualitative for geological data collection and quantitative for geochemical data.
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. 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.*	Soil samples are collected dry. In rare instances when samples are wet, they are segregated to be dried and sieved in the lab before standard laboratory sample prep.
Quality of assay data and	*The nature, quality and appropriateness of the assaying and laboratory*	The 2022 soil samples were submitted into Intertek in Townsville for analysis. The assay method employed is considered appropriate for

Criteria	JORC Code explanation	Commentary
laboratory tests	*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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	early-stage exploration. Any anomalous soil samples with elevated base metal values or lanthanides (REEs) may be infilled at a closer sample spacing to enable any discrete soil anomaly to be resolved. At the Townsville laboratory, the samples were dried, crushed and pulverised (90% passing 75 microns). A 100g sample was split from the pulverised sample for a four acid (complete) digest and low-level analysis of a 48 element suite in Perth on the Argilent 8800 Quadrupole ICP-MS (ICP-QQQ). Only elements of broad exploration interest are reported in the text. Samples were assayed to accepted industry standards at nationally certified laboratories. A total of 6% control samples were placed in the sampling stream for every 100 samples collected. Appropriate commercially sourced standards (2 per 100), blanks (2 per 100) and duplicates (2 per 100) were collected routinely. None of the 2022 CRM types contain enough data points to carry out a statistically significant analysis. A basic graphical assessment of the CRM assay results did not show significant bias. The laboratory blanks show no issues with contamination. The soil sample size (<1kg) is regarded as appropriate for the nature and type of material sampled. No studies have been undertaken to determine whether sample size was appropriate of the material sampled.
Verification of	*The verification of significant intersections by either independent or alternative*	No independent verification of analyses was undertaken.

Criteria	JORC Code explanation	Commentary
sampling and assaying	*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.*	Soil samples are collected and primary data logged onto a Panasonic ToughBook, recording GPS location, and a photograph of the soil sample location using OCRIS software to record meta-data. All data is verified before loading to database.
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.*	For soil sampling, a sample position is collected from a handheld GPS. Cross-checks against 50cm resolution satellite imagery and 15cm resolution airborne photogrammetry provides a good match. Samples are considered accurate to within 1 metre which is adequate for this stage of exploration. The database grid system is GDA2020 Zone53. Field data is converted where required.
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.*	Not applicable, soil results only.
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*	It is assumed from the nature of the 500m grid sampling that no bias is present.

Criteria	JORC Code explanation	Commentary
	should be assessed and reported if material.	
Sample security	*The measures taken to ensure sample security.*	Soil samples in numbered packets were dispatched to the laboratory sealed in polyweave bags tied with cable ties as soon as possible after collection. Chain of custody is assumed to have been maintained throughout the sampling and dispatch process, although not been strictly documented.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	There has been no external audit of sampling techniques and data

SECTION 2: 7 BRECCIA PIPE DEPOSITS GLOBAL ESTIMATION AND REPORTING OF MINERAL RESOURCES COMPILED BY REDBANK COPPER LTD

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

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.*	Redbank Copper Pty Ltd changed its name to NT Minerals Ltd on 10th June 2022. NTM owns 100% of the Redbank Project in the Northern Territory via its wholly owned subsidiary Redbank Operations Pty Ltd. The Redbank Project comprises the tenements in the Table below.

Table: Redbank Tenement Summary

Redbank Operations Pty Ltd Tenements				
No.	EL_ML	Area km²	Grant date	Expiry date
1	MLN634	0.1618	12-Mar-73	31-Dec-28
2	MLN635	0.1618	12-Mar-73	31-Dec-28
3	ELR94	19.05	10-Aug-89	9-Aug-24
4	EL31316	0.97	6-Feb-17	5-Feb-23
5	EL32715	715.79	18-Jun-21	17-Jun-23
6	EL24654	328.5	5-Dec-05	4-Dec-22
7	EL32323	820.51	10-Sep-20	9-Sep-26
8	EL32324	811.41	10-Sep-20	9-Sep-26
9	EL32325	704.85	10-Sep-20	9-Sep-26

Criteria	JORC Code explanation	Commentary

10	EL31236	816.98	In Application	
11	EL31237	621.67	In Application	
12	EL32460	811.91	In Application	
13	EL32461	793.47	In Application	
14	EL32462	779.64	In Application	
15	EL32463	308.06	In Application	
16	EL32807	26.62	2-May-22	1-May-28
17	EL32873	219.67	28-Mar-22	27-Mar-28
18	EL32464	706.23	30-Mar-21	29-Mar-27
19	EL32465	784.86	30-Mar-21	29-Mar-27
20	EL32466	778.31	30-Mar-21	29-Mar-27
21	EL32467	797.48	30-Mar-21	29-Mar-27
22	EL32468	745.90	24-May-21	23-May-27
23	EL32469	788.73	30-Mar-21	29-Mar-27
24	EL32470	574.37	30-Mar-21	29-Mar-27
25	EL32471	229.57	30-Mar-21	29-Mar-27
	Total granted	9053.14		
	Total in application	4131.73		
	Total	**13,184.87**		

Criteria	JORC Code explanation	Commentary
		The Redbank Project was purchased from Redbank Copper Pty Ltd, by Redbank Mines Pty Ltd in 2005 (see ASX announcement 31st Aug 2005). Redbank Mines Pty Ltd then changed its name to Redbank Copper Limited in 2009. The 2005 Sale Agreement dated 5 August 2005 verifies the transaction. All tenements are in good standing. Native title has not been granted on all the granted tenements. The Sandy Flat Mine Site/ processing facility is believed to be the source of pollution which affects the surrounding environment. The Northern Territory of Australia acknowledges that no action by Redbank has contributed to the pollution. To facilitate the Northern Territory of Australia access to the Site to carry out works to enable improved environmental outcomes for the mining site and its surrounds, Redbank entered into an agreement with the Northern Territory of Australia on the 29 June 2016, to surrender the mining leases. The mining leases were replaced by EL31316 granted on the 6 February 2017.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Copper mineralisation was first discovered at Redbank around 1916. The Redbank area has been subject to an almost continuous history of small scale mining, prospecting and exploration. The Redbank area has been systematically explored by numerous companies since 1969. Prominent amongst these were Newmont NEWAIM JV (1971-1972), Triako Mines NL (1972-1983) with various JV partners (Amax Iron, Aquitane Australia Minerals) and Alameda with CRA Exploration. Previous work included, geologic mapping, soil geochemistry, airborne and ground geophysics, extensive drilling campaigns and early non-

Criteria	JORC Code explanation	Commentary
		JORC resource calculations (1970s to 1980s) and rudimentary 2004 JORC calculations (1989-2004). SRK Consulting completed MREs (JORC 2004) between 2005-2011. A JORC2012 MRE was reported to the ASX on 24 June 2021.
Geology	*Deposit type, geological setting, and style of mineralisation.*	The known Redbank mineralisation is consistent with breccia pipe deposits. The Redbank mineralisation consists of at least 7 discrete mineralised pipe-shaped deposits, although more than 50 unmineralized pipe-like intrusions have been identified in the district. Copper bearing breccia pipes of the Redbank district intrude an interbedded sequence of Paleoproterozoic-aged igneous and dolomitic sedimentary rocks which have undergone regional scale potassic alteration or metasomatism. Breccia pipes are steeply inclined and tapered to cylindrical. The core of these pipes contains both autochthonous and allochthonous breccias, with copper mineralisation confined to the breccia matrix.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *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*	Not applicable, as these are soil results. .

Criteria	JORC Code explanation	Commentary
	report, the Competent Person should clearly explain why this is the case.	
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 used, soils results.
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').*	Not applicable, as these are soil results.
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.*	Numerous diagrams are presented to provide as much context as possible to the location of the work completed to known deposits.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.*	Not applicable, as these are soil results.
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*	Since the discovery of copper at Redbank, considerable geological information concerning the mineralisation and its host has been compiled. Similarly, numerous geochemical soil surveys and geophysical surveys have been conducted across the tenement

Criteria	JORC Code explanation	Commentary
	characteristics; potential deleterious or contaminating substances.	package. This information is well documented in company annual reports. Historical metallurgical test work on drill core samples from the Redbank Project was carried out principally in the 1970s and 1980s prior to AMALG constructing the plant from 1993 to 1995. More recently metallurgical testing was conducted by AMMTEC from 2006-10, with samples from the various deposits tested for various leach and comminution tests. Additional geotechnical data was added post 2005. SRK was contracted in late 2008 to provide geotechnical studies on the available core and outcrop, to refine slope angles in optimisation work being undertaken on block models generated from the resource. Geotechnical samples were submitted to SGS Rock Mechanics Laboratory in Welshpool in 2009.
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.*	Soil sampling is ongoing, year on year to build a foundation geochemical dataset. Appropriate diagrams showing soil locations have been used

COMPETENT PERSON'S STATEMENT

The information that relates to Exploration Results is based on, and fairly represents, information compiled by Mr Michael Cowin, a Competent Person, who is a Member of the Australian Institute of Geoscientists. Mr Cowin is employed as a Consulting Geologist by the Company. Mr Cowin has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, 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 Cowin consents to the inclusion of the matters based on his information in the form and context in which it appears.

END