Tuesday, 24 October 2023

Soil Geochemistry results confirm Gravity Targets

- **Maximum values of 472.5 ppm Cu, 371.8 ppm Cu and 351.7 ppm Cu recorded in soil geochemical sampling.**
- **Strong anomalism recorded in four reconnaissance traverses across previously identified gravity targets.**
- **Re-processing of geophysical datasets identifies another 21 Areas of Interest.**

NT Minerals Limited (ASX: NTM) ('**NT Minerals**', '**NTM**' or 'the **Company**') is pleased to announce the results from reconnaissance soil sampling across 20 target areas identified within the Redbank area. These target areas comprised some of the 28 gravity targets identified in a review of historical geophysical surveys (ASX:NTM 26 April 2023) and followed the recommendation to undertake surface sampling programs.

In addition, the Company has received results from enhanced reprocessing of aeromagnetic and gravity datasets which has identified an additional 21 Areas of Interest ("**AOI**") within tenement ELR94 which warrant further investigation.

This work has been conducted entirely within tenement ELR94 which comprises only a small part of NTM's tenement holdings (Figure 1).

NTM's Chairman, Mal James comments *"The outcomes from this current work by the exploration team has identified exciting opportunities within the area referred to as the Redbank pipe cluster through the re-evaluation of existing datasets.*

The petroleum industry has for decades grappled with the difficulties of understanding the complexities of the substrate in sedimentary basins and developed techniques and processes to assist in understanding and evaluation of these basins. The Company is seeking to leverage off some of these learnings and apply them in its search for copper and critical minerals across the Redbank and Wollogorang Projects within the McArthur Basin.

The Company has now identified 49 targets/AOI, in addition to the seven known mineralised pipes within a 3 kilometre radius of the centre of the pipe cluster. Each target has been the subject of minimal exploration with only a handful having had minor exploratory drilling. The proximity of the targets suggest the real possibility of combined mining that brings economic synergies.

This is only one pipe cluster, with other known pipe clusters, namely Stanton/Running Creek, Copperado and Selby warranting this level of evaluation."

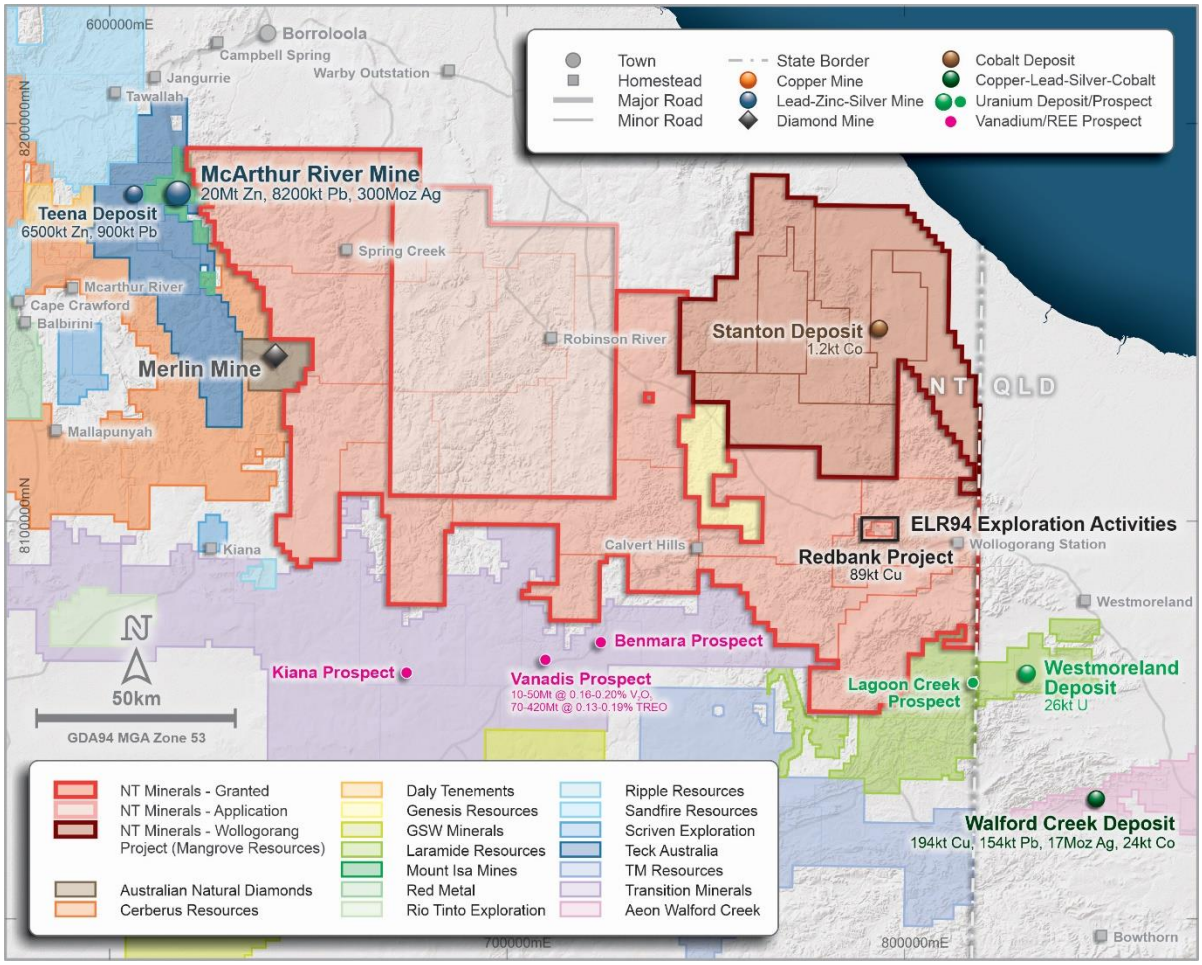

Figure 1: **Project Location Plan – showing area of ELR94 exploration activities.**

Soil Geochemistry Results

A review of historical geophysical surveys completed at Redbank in early 2023 (refer ASX:NTM 26 April 2023) determined known mineralised pipes were associated with characteristic gravity lows. A total of 28 gravity targets were identified within tenement ELR94 with recommendations for ground investigations comprising surface sampling and ground based EM.

Multi-element geochemical analyses have been received for 101 samples from reconnaissance soil sampling within the Redbank pipe cluster, this work comprised single line traverses over 20 identified gravity target positions (T01, T03-T07, T10, T11, T17-T28), refer Figure 2.

Details of the reconnaissance sampling program, sample location, copper and key pathfinder elements are provided in Attachment 1. Strongly anomalous results were recorded from target T17 (peak value of 472.5ppm Cu), target T24 (peak value of 371.8ppm Cu) and target T27 (peak value of 351.7 ppm Cu) with associated

moderate levels of anomalism in bismuth (>0.5 ppm) and antimony (>2 ppm). Importantly, the Company notes target T24 has had no historical exploration conducted across it (surface sampling or drilling), this target along with T25 and T27 are all located within 500 metres of the Bluff resource (2.2Mt @ 1.4% Cu Inferred, refer ASX:RCP 24 June 2021) which accounts overall for 36% of the Redbank Project metal content.

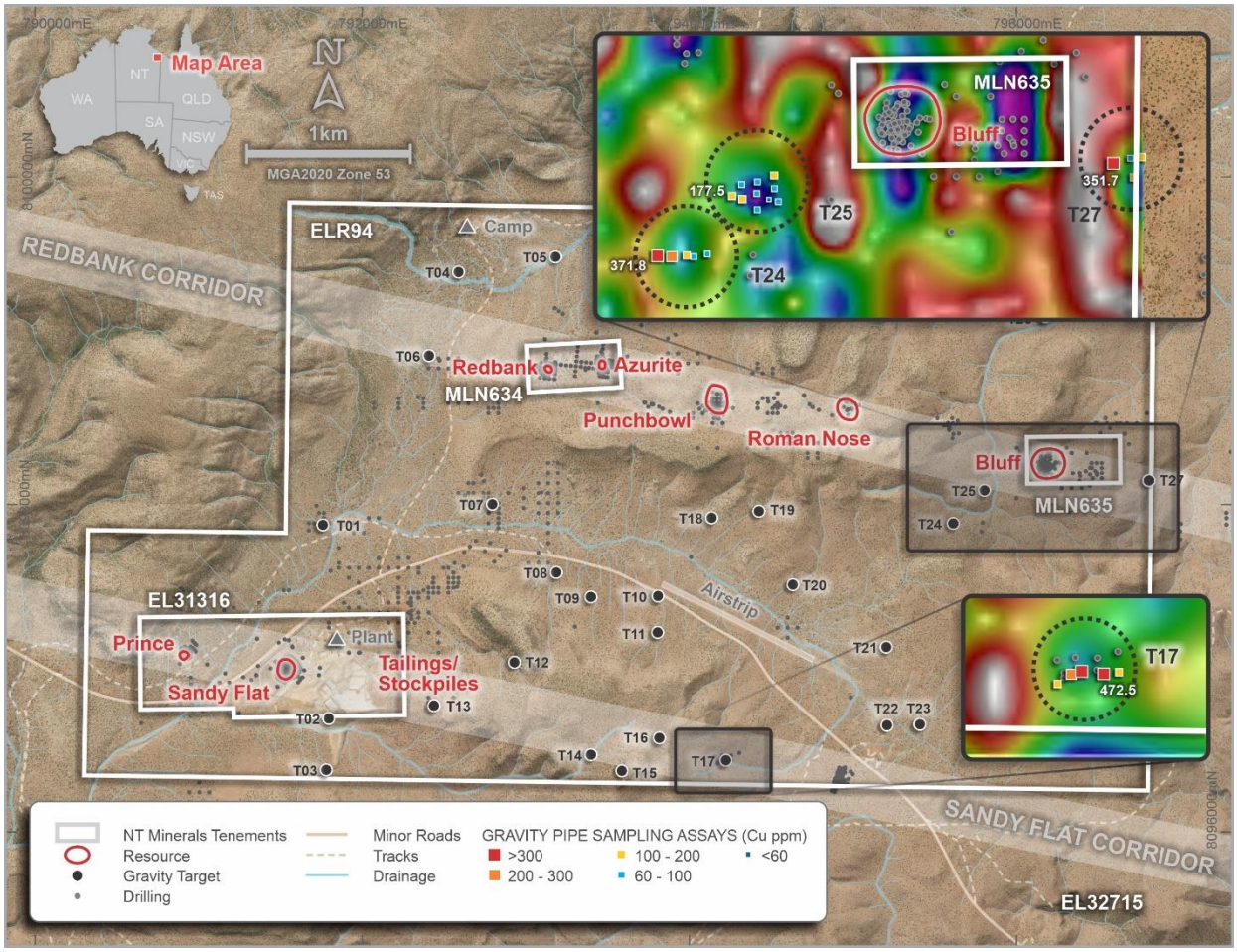

Figure 2: **ELR94 – Gravity Target Locations with Strong Copper Geochemical Assays.**

Re-Processed Geophysical Data

The Company has received results from work undertaken by Archimedes Consulting Pty Ltd, an Adelaide based, petroleum industry geophysical consultancy group, applying one of their proprietary processing techniques (Automatic Curve Matching or ACM) to NTM's magnetic and gravity field potential datasets within tenement ELR94. This work was to evaluate the suitability of this technique to map out and identify depth extent of the Redbank breccia pipes. The extent of the work was restricted to data within an area of one kilometre surrounding tenement ELR94.

The ACM technique utilises special input parameters and filters designed to analyse anomalies arising from magnetic bodies located within the top 2 km of the crust using the high to medium frequency component of Total Magnetic Intensity (TMI) and vertical gradient of TMI. The procedure allows the rock magnetism at different depths to be imaged and clusters of magnetic sources to be mapped which could represent pipe-shaped features and/or structural elements. The result of this processing is the development of several ACM-Cubes with hundreds of thousands of magnetic sources detected by ACM, with each source represented by a single point with assigned attributes: location of the source body; depth to top of causative body; geometry of the source body and magnetic susceptibility. The ACM-Cubes allow for the rock magnetisation to be visualised in 3D, an example of the ACM_{MAG} Cube is shown in Figure 3, with a WNW-ESE oriented Vertical Crustal Slice approximately aligned along the Sandy Flat Corridor.

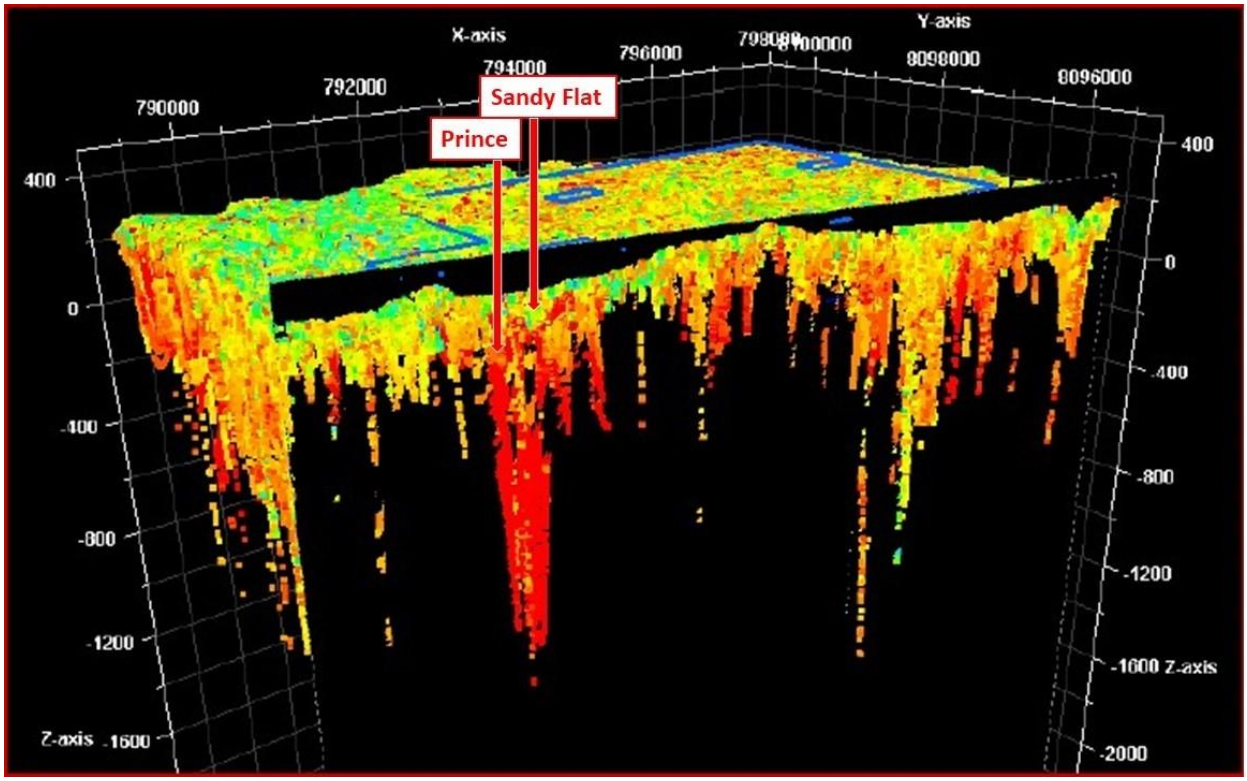

Figure 3: **ACM-Cube$_{MAG}$ with WNW-ESE oriented Vertical Crustal Slice along Sandy Flat Corridor.**

The key objectives of the study were to determine whether:

- Known mineralised breccia pipes could be modelled using this technique,
- Map out/interpret depth extent of the known pipes below the existing (shallow) drill coverage, and
- Identify additional areas of interest within the investigation area.

Results confirm this modelling technique can be adapted and applied to the known mineralisation. At Sandy Flat, drilling has evaluated mineralisation to a depth of 350 metres below surface, the ACM_{MAG} Cube shown in Figure 3 and a cross section view in Figure 4, clearly shows areas of higher magnetic susceptibility extending vertically below the drill defined mineralised wireframe to a depth of some 1,400 metres below surface.

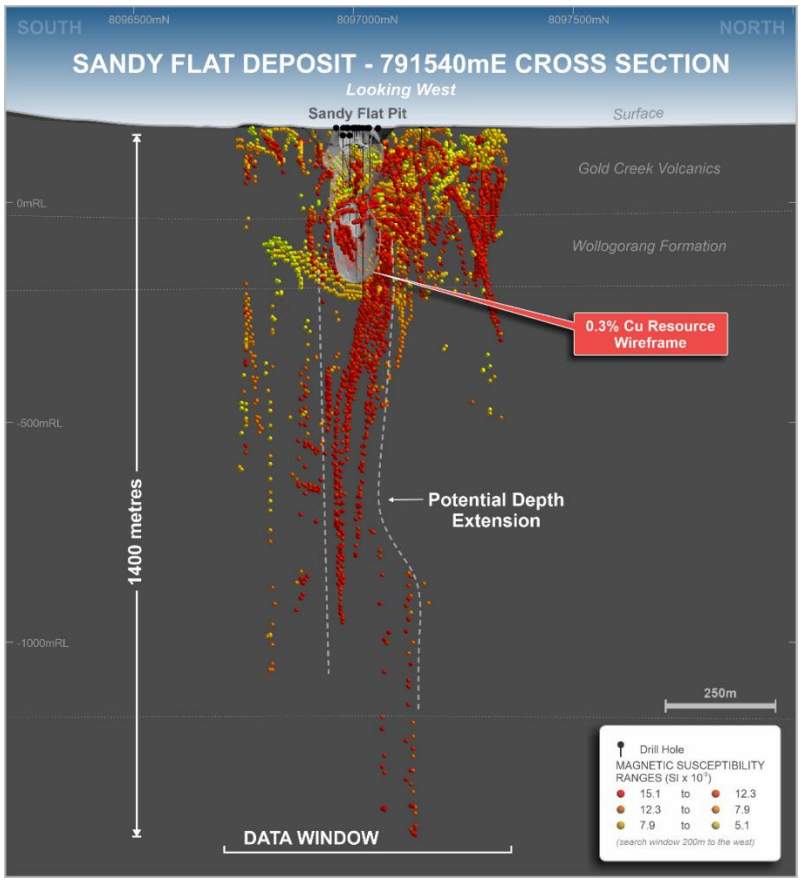

Figure 4: **Sandy Flat Deposit – South/North Oriented Cross Section.**

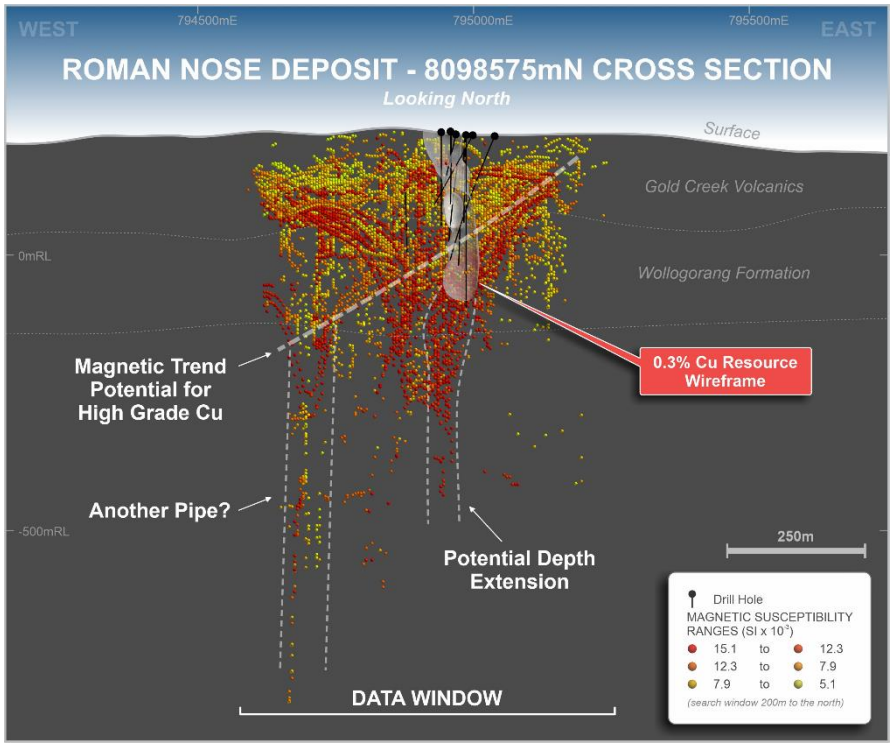

Figure 5: **Roman Nose Deposit – West/East Oriented Cross Section.**

Another example is the Roman Nose deposit, where drilling has evaluated mineralisation within a pipe of smaller dimensions (some 70 metres across) to a depth of 300 metres below surface. The ACM_{MAG} Cube shows a moderate to strong magnetic susceptibility response extending some 400 metres beneath the current level of drilling. In addition, there appears to be a low angle magnetic trend cross-cutting the deposit which may be associated with higher copper grades observed in drilling.

Note of Caution when viewing this information as the observations are preliminary with the results providing positive indications for the three desired outcomes. Current interpretation of the ACM_{MAG} model suggests it reflects a weak-moderate magnetite halo surrounding the breccia pipes, previously unrecognised in historical logging or descriptions of the deposits. The Company is undertaking field-based investigations of drill core to confirm this interpretation. NTM's exploration team will endeavour to maximise the level of geological information to be obtained from available and suitable drill core to advance the understanding of these positive results obtained from the ACM_{MAG} model.

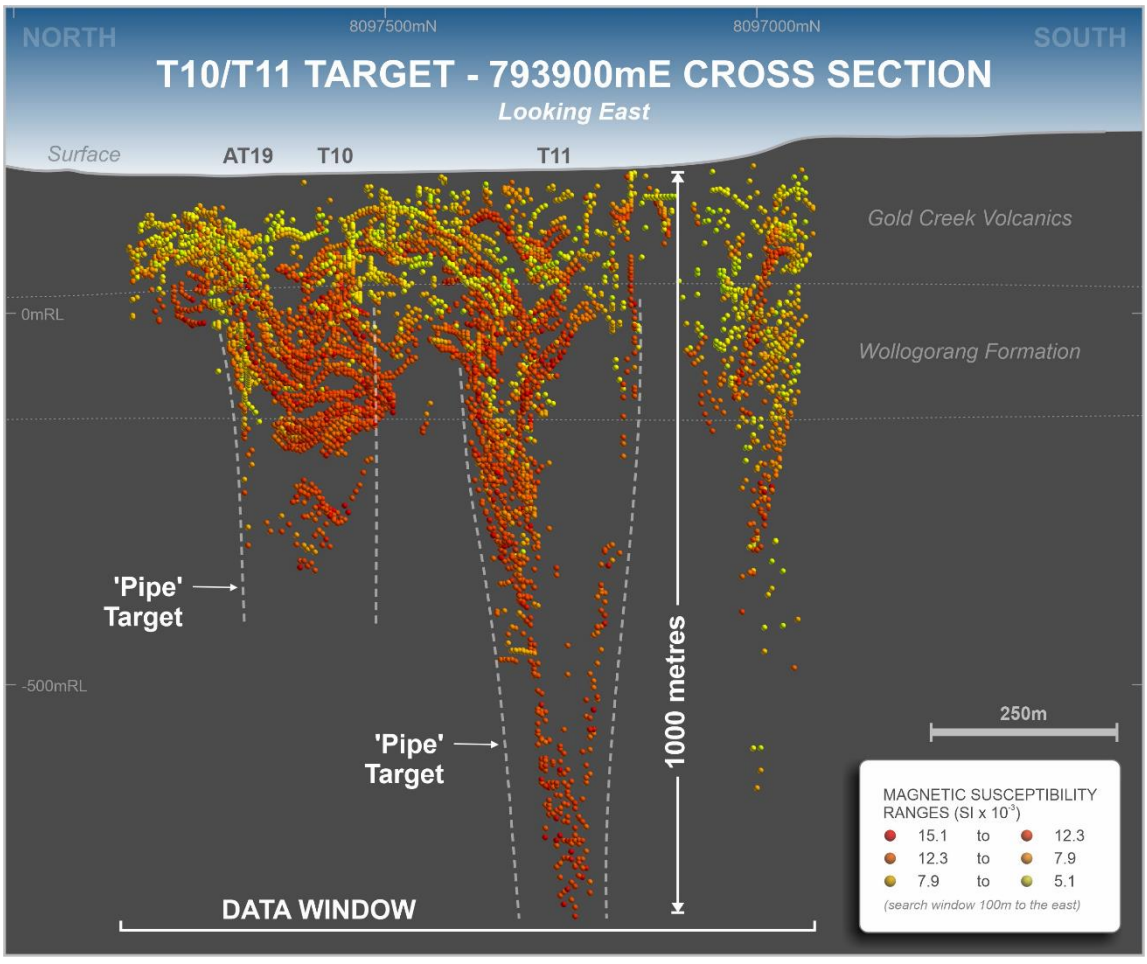

Figure 6: **Target T10/T11/AT19 – North/South Oriented Cross Section.**

The Company is also cross-referencing the ACM_{MAG} model with gravity targeting reported earlier, of particular note is gravity target T11 which now has a strong magnetic susceptibility response (Figure 6) with coincident soil anomalism from a reconnaissance soil traverse which reported moderate copper anomalism (~100 ppm), moderate Bi (0.3 ppm) and high Sb (2 to 3.5 ppm), refer to Attachment 1.

This provides confidence that the strategy being applied by the Company is providing targets worthy of evaluation, in addition to the gravity targeting, a review of the ACM_{MAG} model has identified an additional 21 AOI's (Areas of Interest), refer Figure 7, which warrant field investigation.

The Company looks forward to providing updates as it interrogates the ACM_{MAG} model and identifies additional areas of interest within tenement ELR94 and develops its overall targeting and evaluation strategy.

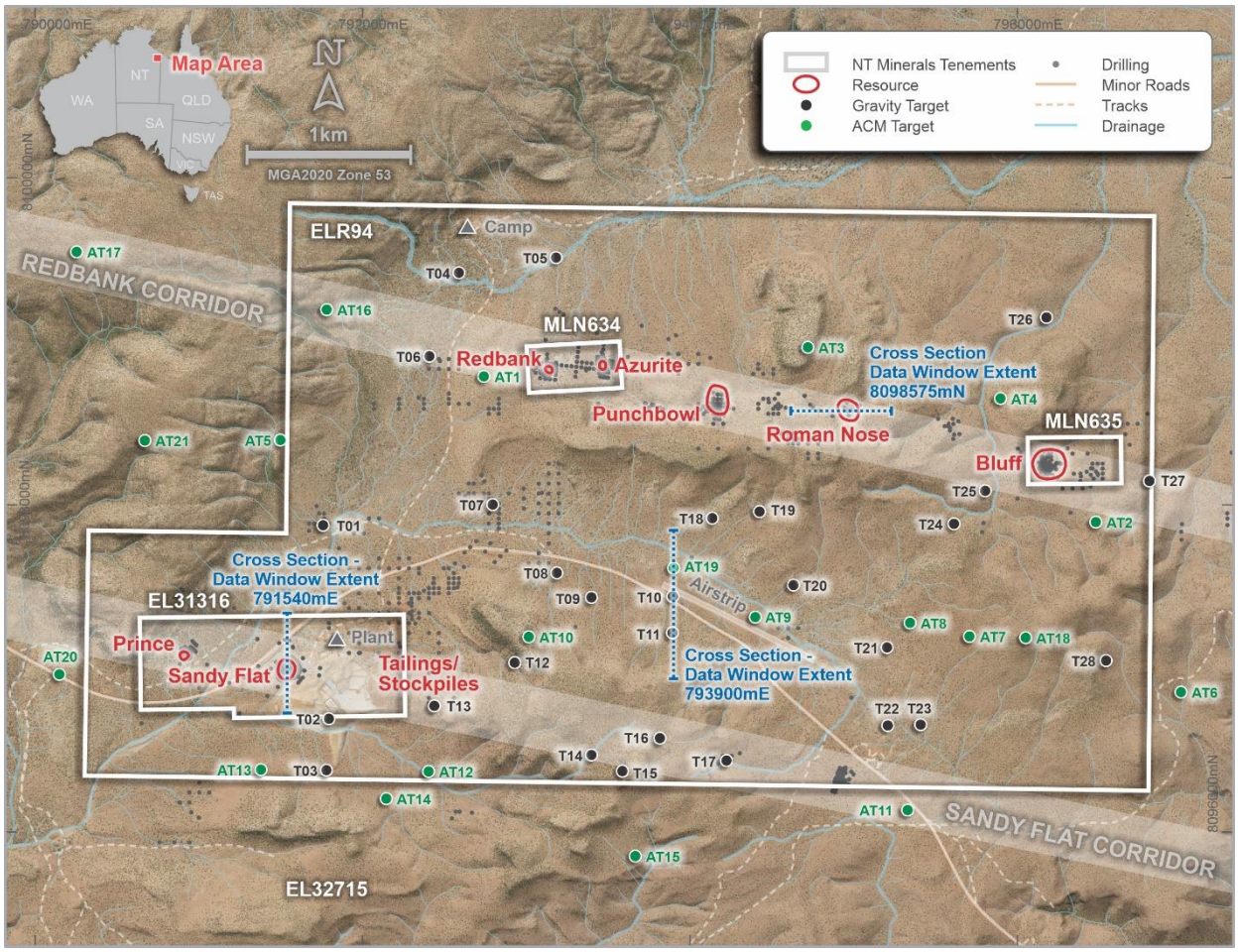

Figure 7: **ELR94 – Gravity Target Locations and ACM_{MAG} Areas of Interest Locations.**

-ENDS-

For further information please contact:

Mal James
Chairman
Ph: +61 8 9362 9888

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

Competent Person's Statement

The information provided in this announcement is based on, and fairly represents, information compiled by Mr Greg Wilson, a Member of the Australian Institute of Mining and Metallurgy. Mr Wilson is a Consulting Geologist providing services to NT Minerals Limited. He has sufficient experience, which is relevant to the style of mineralisation and type of deposits 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 Wilson 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.

ABOUT ARCHIMEDES CONSULTING

Archimedes Consulting is a geophysical consulting group providing services to the petroleum and mineral exploration & development industry. Archimedes has developed unique proprietary processing techniques and combined with powerful 3D imaging provides resolution and detail superior to traditional approaches.

The processing techniques comprise:

- Energy Spectral Analysis (ESA) using magnetic, gravity and gradiometry data for Horizon interpretation (Stratigraphy Mapping).
- Automatic Curve Matching (ACM) using magnetics for Fault interpretation & imaging magnetic susceptibility contrasts.

Archimedes has adapted its technology for use in the mineral exploration industry, magnetic source bodies detected with ACM have been visualised in 3D using Petrel and computed magnetic susceptibilities have been assigned specific colour ranges allowing features like pipe-shaped magnetic breccia of the IOCG or ISGC type to be identified rapidly from large high resolution aeromagnetic datasets. This technique has also been applied in the search for Massive Sulphide Ni-Cu deposits, MVT type deposits, Ironstone bodies and other prospects of interest to the mineral exploration industry.

ATTACHMENT 1:

Target ID	Sample_ID	East	North	Cu_ppm	Bi_ppm	Mo_ppm	Sb_ppm	Tl_ppm
T01	**23SS0011**	791762	8097889	23.2	0.15	1.17	0.53	0.08
T01	**23SS0012**	791702	8097889	18.8	0.16	0.86	0.51	0.10
T01	**23SS0013**	791804	8097906	16.1	0.12	0.77	0.38	0.06
T01	**23SS0014**	791853	8097884	44.9	0.19	1.08	1.02	0.15
T03	**23SS0068**	791781	8096377	69.0	0.26	1.41	2.02	0.54
T03	**23SS0069**	791750	8096392	43.2	0.31	1.48	2.34	0.46
T03	**23SS0071**	791826	8096359	94.0	0.24	1.59	2.26	0.52
T03	**23SS0072**	791845	8096345	73.5	0.18	1.52	1.89	0.41
T03	**23SS0140**	791709	8096403	36.4	0.22	1.32	1.88	0.42
T04	**23SS0001**	792592	8099418	11.7	0.11	0.84	0.43	0.05
T04	**23SS0002**	792553	8099411	11.5	0.11	1.03	0.40	0.04
T04	**23SS0003**	792538	8099406	10.1	0.13	0.71	0.44	0.05
T04	**23SS0004**	792608	8099415	26.8	0.21	0.88	0.36	0.05
T04	**23SS0005**	792645	8099421	12.2	0.15	0.58	0.34	0.05
T05	**23SS0123**	793187	8099529	13.4	0.12	0.88	0.43	0.08
T05	**23SS0124**	793230	8099542	10.9	0.14	0.70	0.45	0.12
T05	**23SS0126**	793137	8099527	27.8	0.23	1.22	0.51	0.17
T06	**23SS0006**	792408	8098907	29.5	2.52	0.91	0.60	0.07
T06	**23SS0007**	792358	8098909	17.4	0.40	0.98	0.63	0.06
T06	**23SS0008**	792329	8098913	12.0	0.17	1.01	0.55	0.06
T06	**23SS0009**	792439	8098909	32.2	1.44	1.17	0.67	0.08
T06	**23SS0010**	792475	8098901	30.6	0.49	1.11	1.06	0.23
T07	**23SS0015**	792794	8098001	63.7	0.30	1.05	1.04	0.48
T07	**23SS0016**	792775	8097996	32.9	0.21	0.91	0.74	0.22
T07	**23SS0017**	792752	8097998	35.3	0.19	1.06	0.98	0.25
T07	**23SS0018**	792820	8098006	19.5	0.17	0.76	0.57	0.16
T07	**23SS0019**	792839	8098009	20.4	0.17	0.77	0.61	0.14
T10	**23SS0031**	793809	8097438	75.6	0.24	1.22	2.17	0.36
T10	**23SS0032**	793829	8097429	75.1	0.25	1.47	1.91	0.32
T10	**23SS0033**	793855	8097409	57.3	0.25	1.56	2.21	0.24
T10	**23SS0034**	793769	8097442	92.8	0.27	1.52	2.26	0.44
T11	**23SS0035**	793802	8097221	115.8	0.37	1.58	3.42	0.42
T11	**23SS0036**	793842	8097220	114.2	0.32	1.56	2.77	0.44
T11	**23SS0037**	793869	8097224	100.4	0.28	1.22	2.22	0.35
T11	**23SS0038**	793778	8097202	129.2	0.41	2.05	3.89	0.41

Target ID	Sample_ID	East	North	Cu_ppm	Bi_ppm	Mo_ppm	Sb_ppm	Tl_ppm
T11	**23SS0039**	793750	8097201	94.5	0.32	1.48	2.60	0.32
T17	**23SS0040**	794217	8096431	336.9	0.73	1.28	2.28	0.56
T17	**23SS0041**	794271	8096425	472.5	0.28	1.70	2.38	0.75
T17	**23SS0042**	794308	8096430	180.6	0.20	1.71	1.65	0.73
T17	**23SS0043**	794192	8096424	254	1.07	1.38	2.76	0.58
T17	**23SS0044**	794158	8096401	156.2	0.74	1.37	2.18	0.42
T18	**23SS0073**	794143	8097918	17	0.16	1.14	0.68	0.10
T18	**23SS0074**	794119	8097919	14.9	0.14	1.02	0.62	0.10
T18	**23SS0076**	794174	8097916	17.4	0.20	1.21	0.79	0.11
T18	**23SS0077**	794205	8097896	31	0.17	1.32	1.29	0.09
T18	**23SS0141**	794074	8097920	83.4	0.47	1.77	2.47	0.58
T19	**23SS0078**	794366	8097971	78.3	0.40	1.20	1.84	0.22
T19	**23SS0079**	794405	8097959	113.7	0.37	1.31	1.77	0.60
T19	**23SS0080**	794427	8097960	108.4	0.38	1.43	1.91	0.69
T19	**23SS0081**	794452	8097966	66.3	0.29	1.25	1.83	0.64
T19	**23SS0082**	794487	8097957	46.0	0.25	1.63	1.75	0.73
T20	**23SS0083**	794576	8097526	53.4	0.32	1.25	2.63	0.29
T20	**23SS0084**	794607	8097511	47.3	0.28	1.52	1.77	0.43
T20	**23SS0085**	794640	8097509	50.6	0.31	1.52	1.85	0.50
T20	**23SS0086**	794674	8097515	44.6	0.27	1.46	1.59	0.47
T20	**23SS0087**	794713	8097525	46.6	0.27	1.36	1.56	0.53
T21	**23SS0098**	795207	8097123	32.5	0.29	1.21	1.16	0.17
T21	**23SS0099**	795173	8097130	26.8	0.24	0.97	1.05	0.16
T21	**23SS0101**	795244	8097136	37.6	0.33	1.19	1.46	0.19
T21	**23SS0102**	795283	8097127	23.6	0.26	1.41	1.18	0.11
T21	**23SS0142**	795132	8097132	23.9	0.24	1.05	0.98	0.16
T22	**23SS0088**	795211	8096650	21.4	0.14	0.97	0.50	0.11
T22	**23SS0089**	795179	8096656	24.2	0.14	0.84	0.57	0.11
T22	**23SS0090**	795142	8096662	31.1	0.18	0.87	0.64	0.14
T22	**23SS0091**	795243	8096646	14.5	0.09	0.61	0.40	0.07
T22	**23SS0092**	795276	8096649	16.1	0.11	0.97	0.44	0.08
T23	**23SS0093**	795350	8096652	14.2	0.11	0.70	0.44	0.10
T23	**23SS0094**	795379	8096658	14.2	0.11	0.87	0.53	0.09
T23	**23SS0095**	795409	8096656	31.4	0.16	0.74	0.66	0.14
T23	**23SS0096**	795439	8096663	28.0	0.16	1.08	0.77	0.27
T23	**23SS0097**	795464	8096668	38.7	0.19	1.04	0.89	0.31
T24	**23SS0103**	795615	8097888	189.5	0.80	1.09	3.19	1.10
T24	**23SS0104**	795575	8097884	273.3	1.19	1.05	4.15	0.82

Target ID	Sample_ID	East	North	Cu_ppm	Bi_ppm	Mo_ppm	Sb_ppm	Tl_ppm
T24	**23SS0105**	795537	8097886	371.8	1.32	1.17	5.94	0.74
T24	**23SS0106**	795633	8097884	91.0	0.42	1.12	2.49	1.11
T24	**23SS0107**	795670	8097891	96.3	0.52	1.10	2.36	1.05
T25	**23SS0108**	795804	8098084	78.6	0.34	1.12	1.54	0.58
T25	**23SS0109**	795762	8098077	60.1	0.42	1.28	1.66	0.66
T25	**23SS0110**	795764	8098039	102.6	0.59	1.32	2.21	0.91
T25	**23SS0111**	795737	8098047	177.5	0.74	1.28	2.50	1.35
T25	**23SS0112**	795803	8098010	79.6	0.46	1.31	2.66	0.67
T25	**23SS0113**	795835	8098038	44.7	0.37	1.09	1.65	0.55
T25	**23SS0114**	795860	8098032	73.1	0.35	1.24	1.89	0.54
T25	**23SS0115**	795850	8098067	67.5	1.40	1.38	2.41	0.76
T25	**23SS0116**	795850	8098102	109.3	0.50	1.11	1.53	0.47
T25	**23SS0117**	795802	8098054	67.3	0.51	1.02	1.87	0.64
T26	**23SS0118**	796179	8099148	22.7	0.22	1.77	1.97	0.76
T26	**23SS0119**	796227	8099144	20.7	0.35	1.88	2.05	0.69
T26	**23SS0121**	796155	8099165	20.8	0.22	2.00	2.17	0.78
T26	**23SS0122**	796122	8099180	21.3	0.20	1.67	2.31	0.90
T26	**23SS0143**	796268	8099146	68.5	0.49	1.22	1.91	0.53
T27	**23SS0133**	796804	8098148	98.1	0.38	1.33	2.35	0.47
T27	**23SS0134**	796759	8098133	351.7	0.45	1.43	2.41	0.58
T27	**23SS0135**	796834	8098151	117.4	0.49	1.41	1.87	0.50
T27	**23SS0136**	796814	8098097	142.8	0.78	1.55	2.86	0.59
T28	**23SS0127**	796543	8097046	133.4	0.34	1.57	2.17	1.00
T28	**23SS0128**	796576	8097036	98.5	0.29	1.47	2.08	0.65
T28	**23SS0129**	796606	8097040	72.3	0.29	1.58	1.81	0.59
T28	**23SS0130**	796529	8097079	115.9	0.35	1.63	2.10	0.73
T28	**23SS0131**	796495	8097063	109.9	0.34	1.50	2.17	0.43
T28	**23SS0132**	796455	8097047	95.4	0.37	1.91	2.26	0.25

JORC Code Table 1

SECTION 1 RECONNAISANCE SOIL SAMPLING TRAVERSES AND GEOPHYSICAL SURVEYS

Greg Wilson, 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 former Redbank Copper 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 Sampling Traverses** Soil sampling was conducted as single line traverses across identified gravity targets with sample spacing along the lines approximately 50 metres apart. Sampling 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 obtain a 0.5-1kg sample for analysis. **Airborne Magnetic Survey** Fugro Airborne Services conducted an airborne magnetic and radiometric survey between August and October 2012. The survey was flown in a NS direction at 50m flight line spacing and 45m ground clearance, with EW tie lines flown at 500m spacing. **Ground Gravity Survey** A Redbank gravity survey was historically completed by Haines Surveys in 2009 (CR2009-0540) inside ERL94. The survey was conducted on 200m x 200m stations with infill to 100m x 100m over selected prospective areas. The RasterTC program was used to calculate the terrain correction in 2021 using an Aerometrix digital surface model (DSM) completed in 2016. This was supplied at a

Criteria	JORC Code explanation	Commentary
		50cm grid spacing with a relative vertical accuracy of 30cm and providing the best available terrain model. The same DSM data was applied to an extensional ground gravity survey into EL32715 completed by Atlas Geophysics in 2021.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	**Soil Sampling Traverses** Soil samples are collected and logged via a Panasonic ToughBook recording a GPS location, and a photograph of the soil sample location using OCRIS software to record meta-data. **Airborne Magnetic Survey** Unknown. **Ground Gravity Survey** Gravity measurements were made using a SENTREX CG5 instrument. Readings of 40 seconds were made at stations. Base Station readings were taken at the beginning and end of each day.
	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.	**Soil Sampling Traverses** – explanation not applicable.
	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	Not Applicable, soil results only.

Criteria	JORC Code explanation	Commentary
	that has inherent sampling problems. Unusual commodities or mineralisation 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 laboratory before standard laboratory sample prep.

Criteria	JORC Code explanation	Commentary
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	**Soil Sampling Traverses** Soil samples were submitted into Intertek in Townsville for analysis. The assay method employed is considered appropriate for reconnaissance stage exploration. 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. 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. 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. **Airborne Magnetic Survey** Unknown.

Criteria	JORC Code explanation	Commentary
		<u>Ground Gravity Survey</u> Gravity measurements were made using a SENTREX CG5 instrument. Precision of 0.1 milligal with 40 second measurement times.
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.*	No independent verification of analyses was undertaken. Soil samples are collected and primary data logged onto a Panasonic ToughBook, recording GPS location, and a photograph of the 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, the 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.*	Soil Sampling – singular line traverses. Gravity stations were close-spaced to reflect the small breccia pipe target size.

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.*	Soil Sampling – singular line traverses in an east-west orientation across the target position.
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. Data is transferred from the SmarTEM24 receiver at the Redbank Project to the Company's server via MS Sharepoint.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Soil Sampling – no external audit of sampling techniques and data. Geophysical Surveys - all data is reviewed by the Principal Geophysicist of Core Geophysics Pty Ltd prior to further processing, imaging and interpretation.

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.*	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 km^2	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	ERL94	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
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**		

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. On 10 June 2022 Redbank Copper Ltd changed its name to **NT Minerals Ltd (ASX:NTM).** 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 in 1916. The Redbank area has been subject to an almost continuous history of discovery and mining. 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-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 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 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 near 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 report, the Competent Person should clearly explain why this is the case.*	Information relating to the reconnaissance soil traverses is provided in Attachment 1.
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.*	Not Applicable.

	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.*	
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.
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 results discussed.
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.
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.*	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 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. In 2020 samples of mineralised breccia pipe were selected for physical property measurements, and in particular, chargeability determinations. The average of these chargeability determinations was 16.2 mV/V with the highest value of 80 mV/V. The copper mineralised breccia deposit provide a good chargeability response compared to background chargeability of non-mineralised samples of ~4mV/V
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.*	Follow-up soil sampling of areas of anomalism and new targets identified. Ongoing analysis of the ACM_{MAG} processing.

END