

ASX ANNOUNCEMENT

17 April 2023

SOIL SAMPLING ASSAYS SUPPORT PRIORITY TARGET AREAS AT ARCOONA GOLD PROJECT

Highlights

- Results from Ultra-fine fraction (UFF) soil sampling program received from the lab
- 352 soil samples submitted for assaying focussing on gold and possible Ni-Co-Cr mineralisation
- Sampling targeted a portion of the eight high-priority target areas generated from the earlier airborne magnetics survey (T^{1A} to T^{1D} & T^{2A} to T^{2D})
- Highest soil sample assays received include:
 - 24.5ppb Au, 288ppm Cu, 110ppm Co & 234ppm Ni
- Most of the anomalous results plot over targets T^{2B} & T^{2C} with Au, Co, Cu & Ni being represented
- Four anomalous Au samples overlay inferred greenstone targets T^{1A} & T^{1D}
- Follow up field work is planned for H2 CY2023

Native Mineral Resources Holdings Limited (**ASX: NMR**), or (“NMR” the “Company”), is pleased to advise that it has received the results for its Ultra-fine fraction (UFF) soil sampling program completed at the Arcoona Project in the Eastern Goldfields of WA.

The anomalous sampling results received plot directly over the targeted areas confirming the potential for mineralisation in the targets identified from the airborne magnetics survey.

The program focussed on sampling the clay horizon covering the majority of the eight priority targets generated from NMR’s earlier airborne magnetics survey completed in 2022 covering the southern part of the Arcoona Project.

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The principal aim of the survey was to assist NMR with interpreting the potential presence and extent of previously inferred greenstones (igneous mafic volcanics) at several locations on the tenement, but with a particular focus on the southern edge where previous exploration has not been carried out.

Management Commentary

NMR's Managing Director, Blake Cannavo, commented: "The soil sampling results received by NMR have reaffirmed the company's belief that there are likely undiscovered greenstone rocks beneath the cover at Arcoona, and there is a high possibility of them containing gold and base metals mineralisation along with PGE metals (Figure 1).

We are pleased with the outcomes from the sampling program which support and reinforce the targets identified from the geophysical results at Arcoona as shown in Figure 2 and Figure 3 below. Areas under cover are often overlooked and lack sufficient exploration but this new dataset has provided NMR with the confidence that there are likely to be significant volumes of greenstones under cover, and that these greenstones may host gold or nickel mineralisation as show in other key deposits in the region."

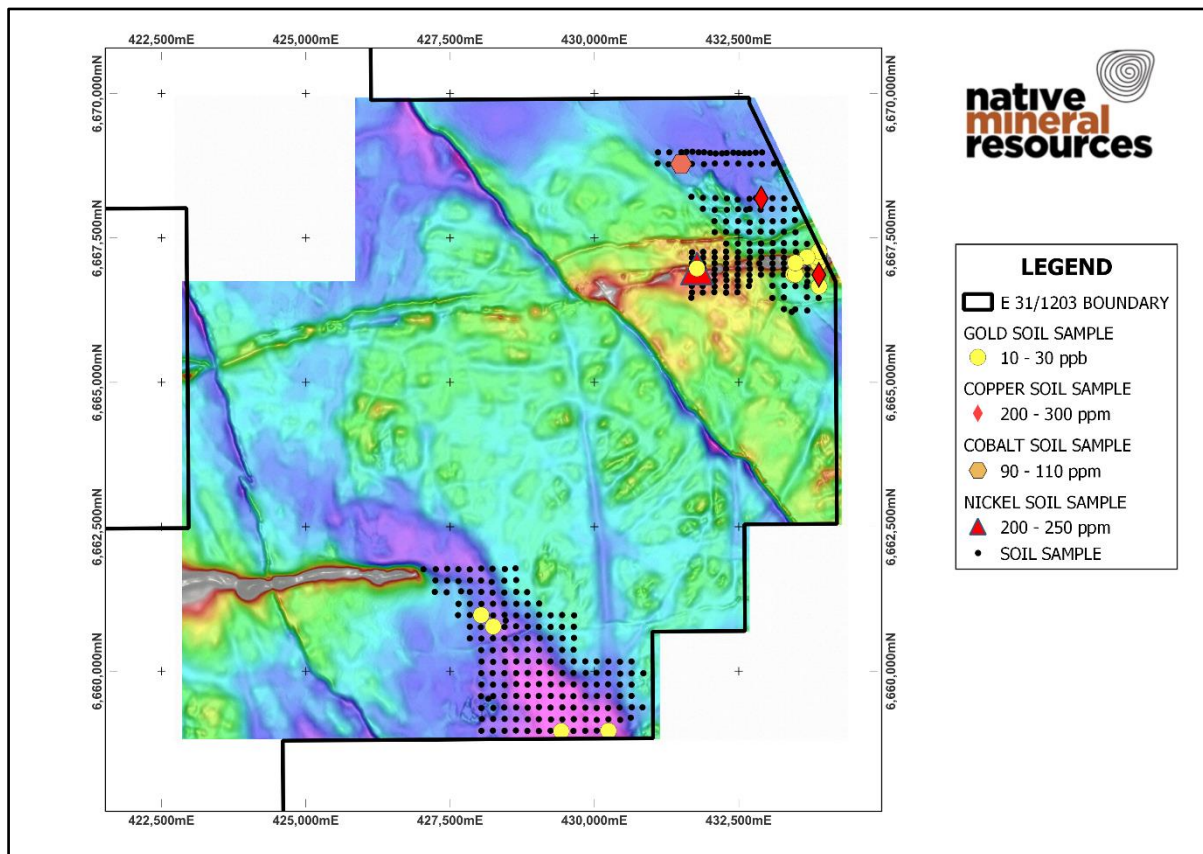


Figure 1. Soil samples points & results overlaying NMR magnetic survey image.

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LabWest Ultra-Fine Assay Technique

LabWest, in conjunction with the CSIRO, have developed the Ultrafine geochemical analysis as a method of detecting anomalies against a normalised background by completing a full analytical digest via a $-2\mu\text{m}$ clay fraction.

Ultrafine soil particles such as clays and iron oxides, have more surface area which can bind gold and other metals that move through the environment, enabling the ultrafine particles to effectively trap and hold geochemical signatures of bedrock covered by transported cover while removing the effect of spikey data.

The approach has been shown to be effective with cover up to 20 m, which makes it an ideal method for the Arcoona project.

It should be noted that UFF sampling can be disrupted by the presence of a calcrete layer below the sampling horizon as the calcrete layer can limit the ability of the clay and iron oxides from interacting with targeted metals.

During the sampling process at Arcoona, areas of calcrete were observed during the collection of the soil samples, but no adjustment of sample depth was made.

Further work is needed to see if sampling above or below calcrete layers affects the results of any soil sampling program.

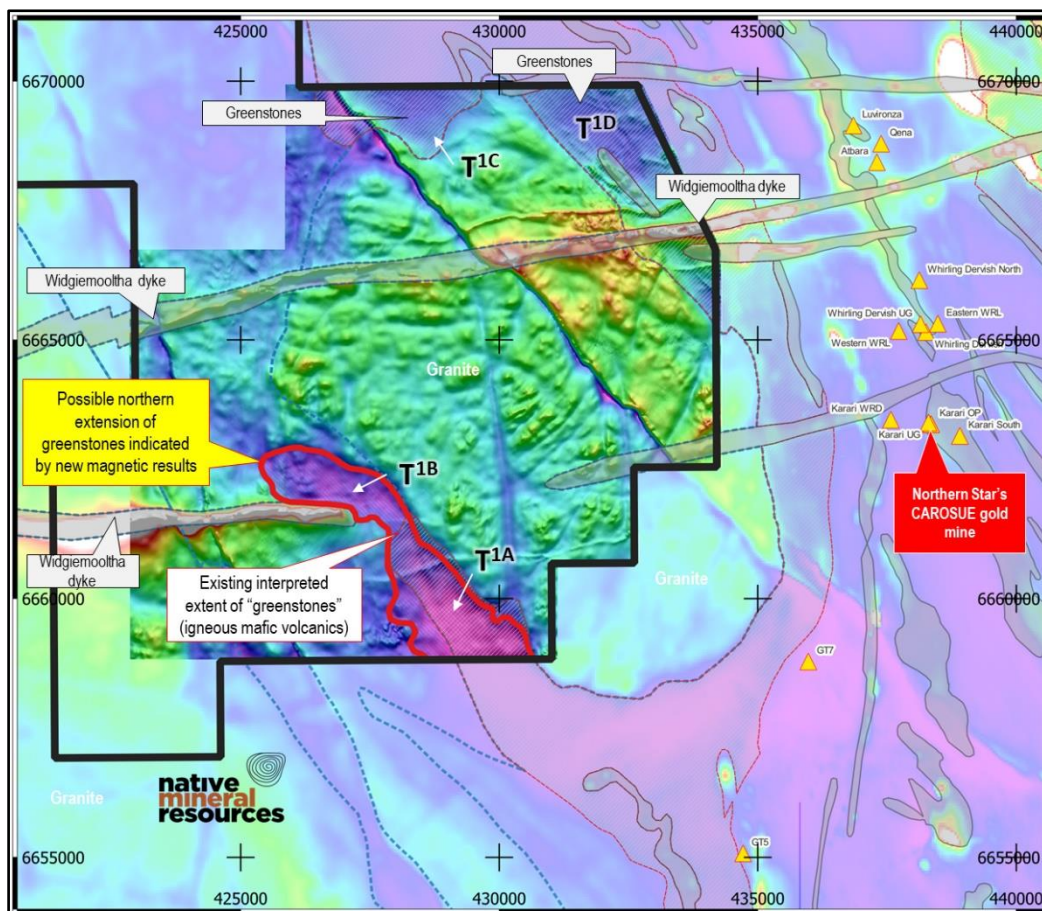


Figure 2. Map showing the location of Arcoona's greenstone targets $T^{1A} - T^{1D}$

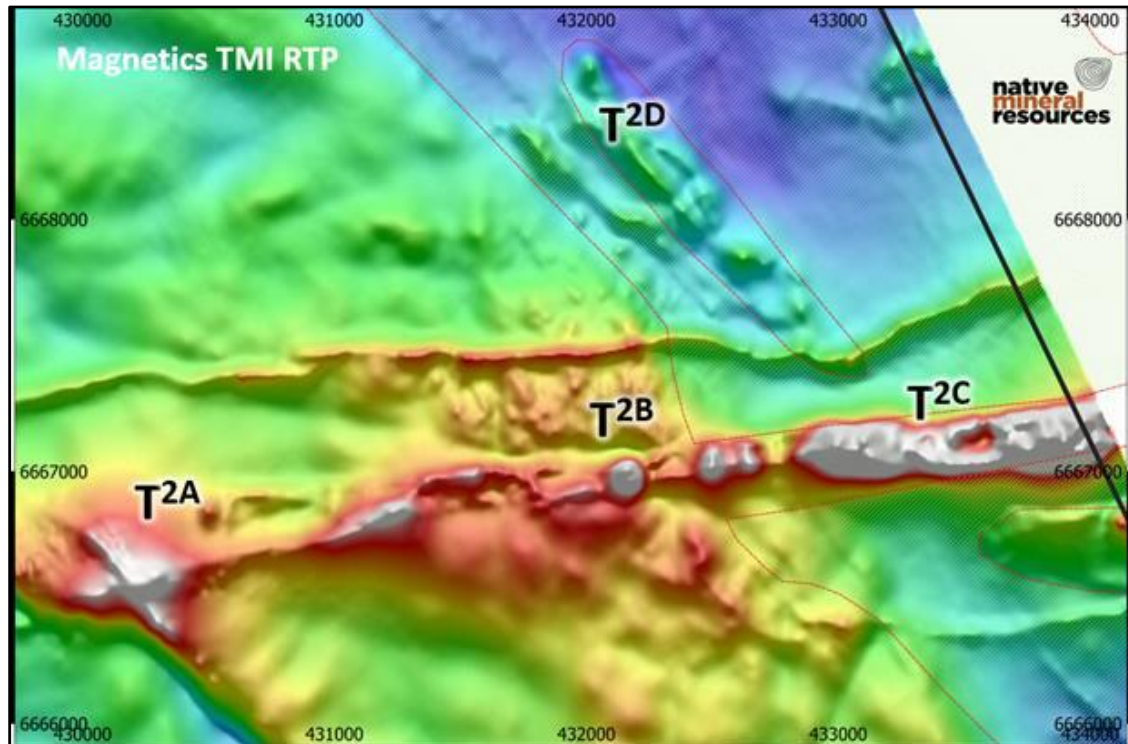


Figure 3. Map showing the location of Arcoona's Widgiemooltha dyke targets T^{2A} – T^{2D}

Results

352 samples were submitted to LabWest, and 49 elements were analysed using the company's UFF analysis technique. Elements analysed included, but not limited to, Au (ppb), Cu (ppm), Pb (ppm), Zn (ppm), Ni (ppm), Co (ppm), Pt (ppm) and Li (ppm).

A total of 14 samples assayed greater than 10ppb Au with the highest being 24.5ppb Au, while the mean was 4.53ppb Au. Table 1 below lists a summary for eight most important elements at Arcoona.

As can be seen in Table 1, the anomalous maximum grades for Au, Co, Cu, Ni and Pt are a factor of between 4 and 16 above the mean grade for the elements suggesting that these grades are anomalous in relation to the surrounding grades, which increases the potential for mineralisation associated with the targets sampled.

	Au (ppb)	Co (ppm)	Cu (ppm)	Li (ppm)	Ni (ppm)	Pb (ppm)	Pt (ppm)	Zn (ppm)
Min	0.7	7.96	20.9	16.1	31.4	7.76	1	30.5
Max	24.5	110	288	89.8	234	32.6	35	199
Mean	4.53	24.51	49.94	38.18	86.55	18.84	2.14	76.53

Table 1. Arcoona soil sampling assay summary

Conclusions

Despite the potential effect of calcrete affecting the quality of the soil sample results, the results still demonstrate the potential of the eight targets identified by the airborne magnetics survey, and further work is being planned to further test the potential mineralisation of the eight targets.

Future work

NMR plans to do a trial surface soil sampling program over an area of known calcrete that has already been sampled to see the effect the calcrete has on the sample results.

Once a suitable area has been identified, samples will be collected from above the calcrete layer, and from below the layer and the results will be reviewed to see if the depth of sampling has any effect on the results.

Once a suitable depth has been ascertained for Arcoona, NMR will look at either extending the soil sampling area or redoing parts of the original survey.

Where the anomalous results have already been collected NMR is considering aircore drilling to collect geochemical samples from the bedrock below the cover sediments.

-Ends-

The Board of Native Mineral Resources Holdings Ltd authorised this announcement to be lodged with the ASX.

For more information, please visit www.nmresources.com.au or contact:

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Competent Person Statement:

The information in this report relating to Exploration Results is based on information provided to, or compiled by Mr Greg Curnow, a Competent Person who is a Member of the Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy. Mr Greg Curnow is a full-time employee of Native Mineral Resources. Mr Curnow has sufficient experience that is relevant to the styles of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Curnow has no potential conflict of interest in accepting Competent Person responsibility for the information presented in this report and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

JORC Code 2012 Edition Summary (Table 1)

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Soil samples were collected in the field by removing any surface vegetation and topsoil and then digging down to the horizon change (generally 10 – 15 cm) from which the sample was taken. Samples for UFF analysis were sieved at the sample site in the field to -2 mm and approximately 350 g of material was collected and bagged with a unique sample identification number. Each sample soil type was logged, and coordinates recorded against the sample number with a hand held GPS receiver.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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). 	<ul style="list-style-type: none"> No drilling undertaken as part of this program.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling undertaken as part of this program.

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling undertaken as part of this program Soil Sample type was recorded, and coordinates of each sample site recorded against unique sample identification number.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> UFF soil sampling is used to obtain an ultrafine fraction of the soil (-2µm), this is analysed to identify elemental concentrations. Soil samples are collected using a steel shovel, these samples are sieved passing -2 mm in the field to produce a nominal 350 g field sample, this sample is processed using the CSIRO UFF+ workflow to produce an ultrafine fraction to analyze for gold and multi-elements. The sample preparation employed by LabWest has been developed in collaboration with CSIRO.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Samples were submitted to Labwest for processing and analysis with standards being inserted by the company in-house. LabWest is a commercial independent certified laboratory in Perth, Western Australia. The -2 µm fraction of the soil samples were analysed for Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Fe, Ga, Ge, Hf, Hg, In, K, La, Li, <g, Mn, Mo, Nb, Ni, Pb, Pt, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, and Zr via LabWest's Ultrafine + microwave digest with an ICP EOS/MS finish.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sample results and standards were reviewed by NMR's Chief Geologist. Sample results and standards QAQC checked and uploaded into NMR's database.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Discuss any adjustment to assay data. 	
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Soil sample locations are located by handheld GPS receiver to an accuracy of +/- 5 m. Locations are given in GDA94 Zone 51. Diagrams showing sample locations are provided in the report.
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The soil samples were taken on a 200m by 200m grid.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The soil sampling was on a grid basis.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were collected by NMR staff & transported directly to LabWest's Kalgoorlie laboratory.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No audits have been completed.

Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The Arcoona project consist of one E31/1203. E31/1203 is held by Native Mineral Resources Pty Ltd, a 100% subsidiary of NMR.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Previous explorers have undertaken soils sampling (Goldfields) and minor drilling (Mt Kersey Mining NL, Saracen Gold and Heron Resources).
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> NMR targeting two styles at Arcoona. Greenstone-hosted, structurally controlled gold within several interpreted “belts” of greenstones interpreted from the magnetic results. The second style of mineralisation is igneous intrusion-related Ni-Cu-PGE linked to the highly magnetic mafic Widgiemooltha dykes that cut across parts of the tenement.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 total drillhole 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. 	<ul style="list-style-type: none"> n/a

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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. 	<ul style="list-style-type: none"> No data aggregation or intercept calculations are included in this release.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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 (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> No drilling completed.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Representative plans are provided in this report.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> The report is considered balanced and provided in context.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Only other meaningful work done at Arcoona is the airborne magnetics survey which is discussed in the announcement.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the 	<ul style="list-style-type: none"> Further work is detailed in the announcement.

Criteria	JORC Code explanation	Commentary
	<p><i>main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	

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