

## AIRCORE DRILLING RECOMMENCES AT HERCULES

Saturn Metals' is continuing to explore for complementary gold deposits adjacent to the newly upgraded 1.47Moz ounce Apollo Hill Mineral Resource<sup>1</sup> after recent promising results (see ASX Announcements 19 May 2022 and 16 June 2022).

## HIGHLIGHTS

- Aircore drilling has recommenced at Hercules as part of a wider 20,000m regional drill program planned across the Apollo Hill Project.
- Infill and extensional drilling will be prioritised around recent significant results (Figure 1) including<sup>a</sup>:
  - Hercules:
    - o 20m @ 2.27g/t Au from 24m AHAC0925
    - 4m @ 4.57g/t Au from 54m AHRC0836
  - Artemis:
    - o 4m @ 4.08g/t Au from 40m within 33m @ 0.73g/t Au from 24m AHAC0672



Plate 1 – Aircore Rig arriving at Apollo Hill – 20 June 2022

Saturn Metals Limited (ASX:STN) ("**Saturn**", "**the Company**") is pleased to announce the resumption of exploration drilling across its 100% owned, 1,000km<sup>2</sup> Apollo Hill Gold Project, 60km south-east of Leonora in the Western Australian Goldfields.

A 20,000m phase of targeted Aircore drilling is now underway across Saturn Metals extensive tenement holding (Figure 1).

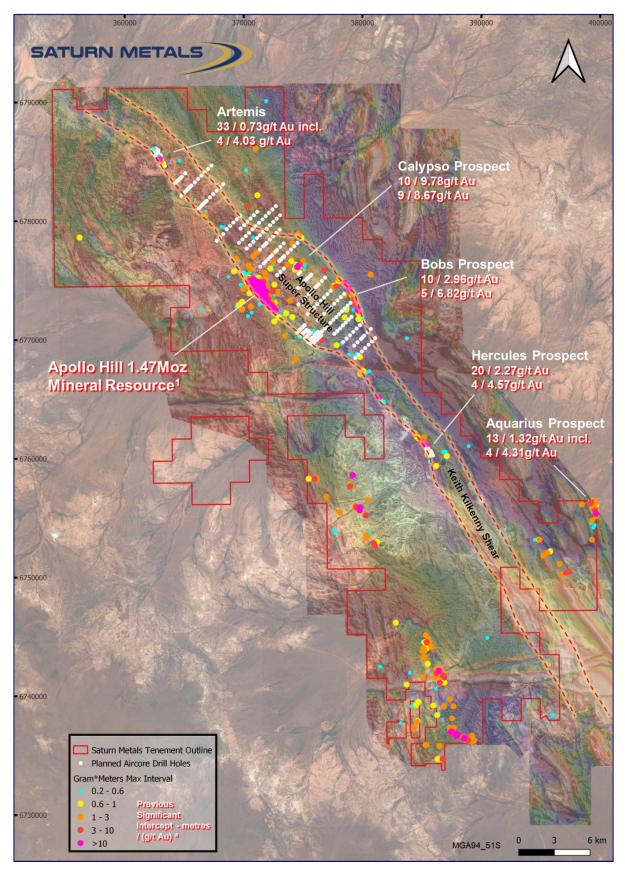
The planned program will initially target high priority infill and extensional drilling at the Hercules and Artemis Prospects focusing on the large mineralised systems identified earlier in the year. Drilling at both prospects remains widely spaced with some great opportunities at infill drill sites.

Drilling will then progress to the greater Apollo Hill Super Structure and Keith Kilkenny Shear where exploration will target highly prospective ground directly adjacent to and along strike of the Apollo Hill Resource.

The drill program also targets areas where historical drillholes have not reached sufficient depth to properly test for mineralisation on geological and geophysical interpreted structures.

<sup>&</sup>lt;sup>1</sup> Details of the Mineral Resource which currently stands at 76.6 Mt @ 0.6 g/t Au for 1,469,000 oz Au and a breakdown by category are presented in Table 1a (page 3) of this document) along with the associated Competent Persons statement and details of the ASX announcement that this information was originally published in.

See note <sup>a</sup> (page 3) for details of the ASX announcements referenced in this document.



# Figure 1 – Planned phase 1 Aircore drill holes within the Saturn Metals tenements – Au gram metre values on merged geophysical and aerial image background.

<sup>(a)</sup> This diagram contains exploration results and historic exploration results as originally reported in fuller context in Saturn Metals Limited's ASX Announcements as published on the Company's website. Saturn Metals Limited confirms that it is not aware of any new information or data that materially affects the information on results noted.



Saturn Managing Director, Ian Bamborough said: 'We are excited to get the rig back and grow the mineralised systems at Hercules and Artemis. In addition, we are looking forward to the opportunity to test our geological interpretations across the greater gold prospective corridor where we have all the right ingredients for another major discovery in close proximity to our 1.47Moz Apollo Hill Mineral Resource.'

This announcement has been approved for release by the Saturn Metals Limited Board of Directors.

IAN BAMBOROUGH Managing Director

For further information please contact:

*Ian Bamborough* Managing Director Saturn Metals Limited +61 (0)8 6234 1114 info@saturnmetals.com.au

#### Competent Persons Statement – Resource:

<sup>1</sup>The information for the Mineral Resource included in this report is extracted from the report entitled (Apollo Hill Gold Resource Upgraded To 1.47Moz) created on 2 May 2022 and is available to view on the Saturn Metals Limited website. Saturn Metals Limited confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Saturn Metals Ltd confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

# Table 1 (a). May 2022 Mineral Resource Statement; 0.23 g/t Au cut-off by oxidation domain within a 1.2 revenue factor pit shell to represent reasonable prospects for eventual economic extraction.

Lower Cut-off	Oxidation state	Measured			Indicated		Inferred			MII Total			
Grade Au g/t		Tonnes	Au	Au Metal	Tonnes	Au	Au Metal	Tonnes	Au	Au Metal	Tonnes	Au	Au Metal
		(Mtonnes)	(g/t)	(KOzs)	(Mtonnes)	(g/t)	(KOzs)	(Mtonnes)	(g/t)	(KOzs)	(Mtonnes)	(g/t)	(KOzs)
	Oxide	0	0	0	1.08	0.54	19	0.75	0.61	15	1.8	0.57	34
0.23	Transitional	0	0	0	8.3	0.58	155	3.1	0.61	61	11	0.59	216
0.23	Fresh	0	0	0	31	0.58	586	32	0.62	634	63	0.60	1,220
	Total	0	0	0	41	0.58	760	35	0.62	710	76	0.60	1,469

The model is reported above the 2022 nominal RF1.2 pit optimization shell (AH8A\_2 MII HL) for RPEEE and 0.23 g/t Au lower cut-off grade for all material types. There is no known depletion by mining within the model area. Estimation is by LMIK for Apollo Hill ZONECODE=100 and 300 while Ra ZONECODE=200 and Tefnut (ZONECODE=400, 402) were estimated using ROK due to limited data. Grade field AU\_FIN1. The model currently assumes a 5mE x 12.5mN x 5mRL SMU for selective open pit mining. Selectivity may vary with changed mining and processing scenarios. The final models are SMU models and incorporate internal dilution to the scale of the SMU. The models do not account for mining related edge dilution and ore loss. These parameters should be considered during the mining study as being dependent on grade control, equipment and mining configurations including drilling and blasting. Classification is according to JORC Code Mineral Resource categories. Totals may vary due to rounded figures.

#### Competent Persons Statement – Exploration:

The information in this report that relates to exploration targets and exploration results is based on information compiled by Ian Bamborough, a Competent Person who is a Member of The Australian Institute of Geoscientists. Ian Bamborough is a fulltime employee and Director of the Company, in addition to being a shareholder in the Company. Ian Bamborough has sufficient experience that is relevant to the style 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'. Ian Bamborough consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

<sup>a</sup> This document contains exploration results and historic exploration results as originally reported in fuller context in Saturn Metals Limited ASX Announcements, Quarterly Reports and Prospectus - as published on the Company's website. Saturn Metals Limited confirms that it is not aware of any new information or data that materially affects the information on results noted. Announcement dates referred to include but are not limited to: 27/01/2022, 28/01/2022, 31/03/2022, 26/04/2022, 19/05/2022, 16/06/2022.



# **Appendix 1:**

## **Saturn Metals Project Areas**

Apollo Hill (29.15°S and 121.68°E) is located approximately 60km south-east of Leonora in the heart of WA's goldfields region (Figure 2). The deposit and the Apollo Hill project are 100% owned by Saturn and are surrounded by good infrastructure and several significant gold deposits. The Apollo Hill Project has the potential to become a large tonnage, simple metallurgy, low strip open pit mining operation.

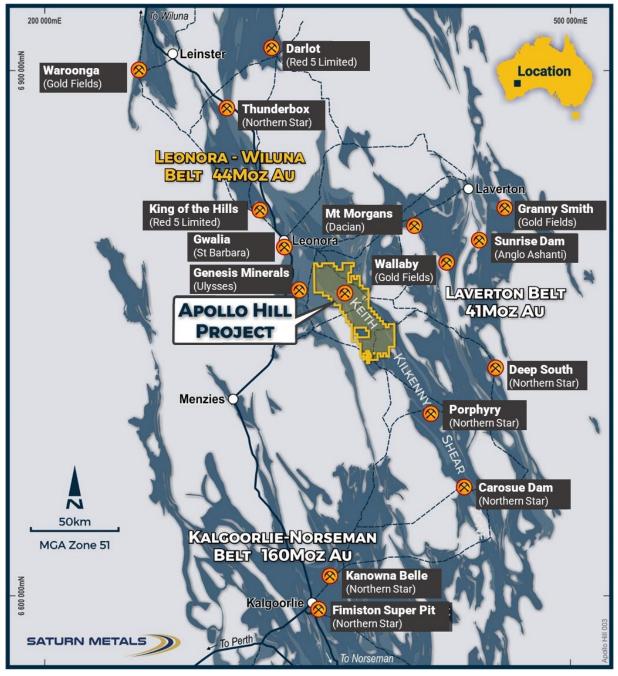


Figure 2 – Apollo Hill location, Saturn Metals' tenements and surrounding gold deposits, gold endowment and infrastructure.



In addition, Saturn has a second quality gold exploration project in Australia. The Company has an option to earn an 85% joint venture interest in the West Wyalong Project (Figure 3), which represents a high-grade vein opportunity on the highly gold prospective Gilmore suture within the famous Lachlan Fold belt of NSW.

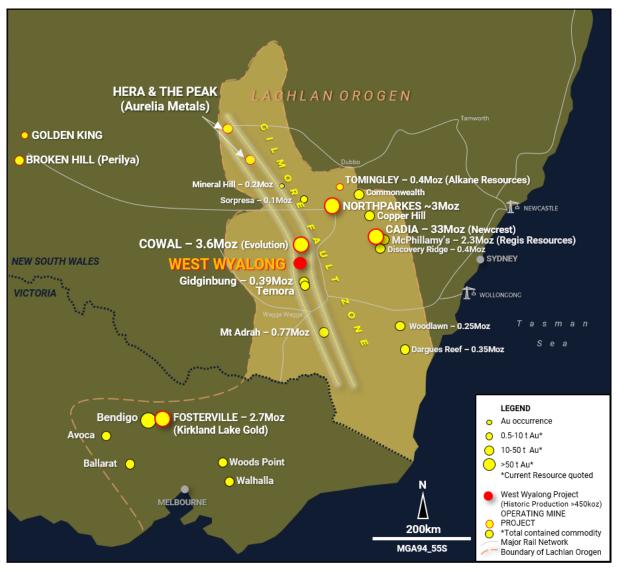


Figure 3 – Regional setting and location of the West Wyalong Gold Project in relation to other gold projects in New South Wales and Victoria (map taken from Saturn ASX announcement on 28 April 2020 where full references are provided).



# **Appendix 2:**

## JORC Code, 2012 Edition – Table 1 – Apollo Hill Exploration Area

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to the Apollo Hill, Apollo Hill Regional, Apollo Hill Hanging-wall and Ra and Tefnut exploration areas all succeeding sections).

## Table II Extract of JORC Code 2012 Table 1

Criteria	JORC Code Explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized 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 mineralization 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 1m samples from which 3 kg was pulverized 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 mineralization types (e.g. submarine nodules) may warrant disclosure of detailed information.	Measures taken to ensure the representivity of RC and AC sampling include close supervision by geologists, use of appropriate sub-sampling methods, routine cleaning of splitters and cyclones, and AC/RC rigs with sufficient capacity to provide generally dry, reasonable recovery samples. Information available to demonstrate sample representivity includes AC/RC sample weights, sample recovery, sample consistency, field duplicates, standards and blanks. AC holes were sampled over 4m intervals using a conesplitter mounted to the AC drill rig. RC holes were sampled over 1m intervals using a cone-splitter mounted to the RC drill rig. AC/RC samples were analyzed by ALS in both Kalgoorlie and Perth and SGS in Kalgoorlie. At the laboratories, the samples were oven dried and crushed to 90% passing 2 mm, and pulverized to 95% passing 106 microns, with analysis by 50 g fire assay. AC/RC samples were generally taken at 1 m interval but if composited were composited to 4 m to produce a 3 kg representative sample to be submitted to the laboratory. If the 4 m composite sample was anomalous (Au>0.16 g/t), the original 1 m samples were retrieved and submitted to the laboratory. In general, the expected mineralized zones are all sampled using 1 m intervals. Diamond core was drilled HQ3 and NQ2 dependent on weathering profile and ground conditions. The core was cut in half using a Corewise diamond saw at the ALS laboratory in Perth, where both half and full core were submitted for analysis. Half and full core samples were taken with a diamond saw, generally on 1 m intervals, dependent on geological boundaries where appropriate (lengths ranging from a minimum 0.3 m to a maximum of 1.2 m). Whole core samples were taken within the zones of the gold. Sampling was undertaken using Saturn Metals Limited (STN) sampling and QAQC procedures in line with industry best practice, which includes the submission of standards, blanks. Duplicates were taken at regular intervals within each submission for RC and Diamond samples.
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.).	Standard AC diameters and bits were used. Reverse Circulation drilling used either a 4.5 inch or 5.5 inch face-sampling bit. Diamond core was HQ3 of NQ2 diameter core. All RC drillholes were surveyed by Gyro, every 30 m down hole. All core was oriented using a Reflex orientation tool, which was recorded at the drill site, and all core pieced back together and orientated at the STN core yard at Apollo Hill.
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.	RC sample recovery was visually estimated by volume for each 1 m bulk sample bag and recorded digitally in the sample database. Very little variation was observed. Measures taken to maximize recovery for AC/RC drilling included use of face sampling bits and drilling rigs of sufficient capacity to provide generally dry, high



Criteria	JORC Code Explanation	Commentary
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred	recovery samples. RC sample weights indicate an average recovery of 85% to 95% and were dry.
	due to preferential loss/gain of fine/coarse material.	The cone splitter was regularly cleaned with compressed air at the completion of each rod. The RC Drilling was completed using auxiliary compressors and boosters to keep the hole dry and ensure the sample was lifted to the sampling equipment as efficiently as possible. The cyclone and cone splitter were kept dry and clean, with the cyclone cleaned after each drillhole and the splitter cleaned after each rod to minimize down-hole or cross-hole contamination. The 3 kg calico bag samples representing 1 m were taken directly from the cyclone and packaged for freight to Kalgoorlie. The calico represents both fine and coarse material from the drill rig. Diamond core recovery was measured and recorded for each drill run. The core was physically measured by tape and recorded for each run. Core recovery was recorded as percentage recovered. All data was loaded into the STN database. Diamond drilling utilized drilling additives and muds to ensure the hole was conditioned to maximize recoveries and sample quality. There was no observable relationship between recovery and grade, or preferential bias between hole- types observed at this stage. There was no significant loss of core reported in the
		mineralized parts of the diamond drillholes to date.
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.	sulphide and visible gold mineralization and weathering. AC bottom of holes or interesting geology chip trays are retained.
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.	and 1m bottom of hole samples. RC holes were sampled over 1 m intervals by cone-splitting. RC sampling was closely supervised by field geologists and included appropriate sampling methods routing
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,	Sampling included field duplicates, blind reference standards, field blanks and inter-laboratory checks to confirm assay precision and accuracy with sufficient confidence for the current results, at a rate of 5%.



Criteria	JORC Code Explanation	Commentary
- Interio	reading times, calibrations factors applied and their	Samples were submitted to ALS in Kalgoorlie and Perth
	derivation, etc.	and SGS in Kalgoorlie where they were prepared, processed and analyzed via 50 g charge fire assay.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	
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,	No independent geologists were engaged to verify results. STN project geologists were supervised by the Company's Exploration Manager. No adjustments were made to any assays of data.
	data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	Logs were recorded by field geologists on hard copy sampling sheets which were entered into spreadsheets for merging into a central SQL database.
		Laboratory assay files were merged directly into the database. The project geologists routinely validate data when loading into the database.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource	Collars are initially surveyed by hand-held GPS, utilizing GDA94, Zone 51. For resource holes final drillhole collars are all surveyed
	estimation.	by DGPS by ABIMS & Goldfield Surveyors.
	Specification of the grid system used. Quality and adequacy of topographic control.	All RC and diamond holes were down-hole surveyed using a gyroscopic survey tool.
		A topographic triangulation was generated from drillhole collar surveys and the close-spaced (50 m) aeromagnetic data.
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.	Apollo Hill mineralization has been tested by generally 30 m spaced traverses of south- westerly inclined drillholes towards 225°. Across strike spacing is variable. Material within approximately 50 m of surface has been generally tested by 2 m to 30 m spaced holes, with deeper drilling ranging from locally 20 m to greater than 6 m spacing.
	Whether sample compositing has been applied.	Bob's and Hercules has currently been drilled on a 200m-100m line spacing by 100m-50m drill spacing.
		The data spacing is sufficient to establish geological and grade continuity.
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 mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Mineralized zones are interpreted to dip at an average of around 30° to 60° towards the northeast. Detailed orientations of all short-scale mineralized features have not yet been confidently established. The majority of the drillholes were inclined at around 60° to the southwest.
Sample security	The measures taken to ensure sample security.	Apollo Hill is in an isolated area, with little access by the general public. STN's field sampling was supervised by STN geologists. Sub-samples selected for assaying were collected in heavy-duty poly-woven bags which were immediately sealed. These bags were delivered to the assay laboratory by independent couriers, STN employees or contractors. Results of field duplicates, blanks and reference
		material, and the general consistency of results between sampling phases provide confidence in the general reliability of the drilling data.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The Competent Person independently reviewed STN sample quality information and database validity. These reviews included consistency checks within and between database tables and comparison of assay entries with original source records for STN's drilling. These reviews showed no material discrepancies. The Competent Person considers that the Apollo Hill drilling data has been sufficiently verified to provide an adequate basis for the current reporting of exploration results.



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	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.	The Apollo Hill Project lies within Exploration License E39/1198, M31/486 and M39/296. These tenements are wholly owned by Saturn Metals Limited. These tenements, along with certain other tenure, are the subject of a 5% gross over-riding royalty (payable to HHM) on Apollo Hill gold production exceeding 1 Moz. M39/296 is the subject of a \$1/t royalty (payable to a group of parties) on any production. The tenements are in good standing and no known
		impediments exist. The Bob's Prospect sits in Apollo Hill Exploration License E39/1984. The Hercules Prospect sits in Apollo Hill Exploration License E31/1163.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	AC, RC and diamond drilling by previous tenement holders provides around 44% of the estimation dataset. The data is primarily from RC and diamond drilling by Battle Mountain, Apex Minerals, Fimiston Mining, Hampton Hill, Homestake, MPI and Peel Mining.
Geology	Deposit type, geological setting and style of mineralization.	The Apollo Hill project comprises two deposits/trends: the main Apollo Hill deposit in the northwest of the project area, and the smaller Ra-Tefnut Deposits in the south. Gold mineralization is associated with quartz veins and carbonate-pyrite alteration along a steeply north-east dipping contact between felsic rocks to the west, and mafic dominated rocks to the east. The combined mineralized zones extend over a strike length of approximately 2.4 km and have been intersected by drilling to approximately 350 m vertical depth. The depth of complete oxidation averages around 4 m with depth to fresh rock averaging around 21 m. Gold mineralisation at Bob's is associated with sheared mafic rocks with quartz veining. Gold mineralisation at Hercules is associated with sheared mafic rocks with quartz veining.
Drillhole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: easting and northing of the drillhole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole 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.	Any relevant information material to the understanding of exploration results has been included within the body of the announcement or as appendices. No information has been excluded.
Data aggregation methods	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.	For exploration data, no top-cuts have been applied. All reported RC and diamond drill assay results have been length weighted (arithmetic length weighting). No metal equivalent values are used for reporting exploration results.
Relationship between mineralization widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralization with respect to the drillhole angle is known, its nature should be reported.	All drillhole intercepts are measured in downhole meters, with true widths estimated to be about 60% of the down-hole width. The orientation of the drilling has the potential introduce some sampling bias (positive or negative).



Criteria	JORC Code Explanation	Commentary
	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').	
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 drillhole collar locations and appropriate sectional views.	Refer to Figures and Tables within the body of the text.
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 to avoid misleading reporting of Exploration Results.	lower cut-off or top-cuts have been applied.
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.	
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.	It is anticipated that further work will include infill and step out drilling and follow up RC drilling. This work will be designed to improve confidence in and test potential extensions to the current resource estimates/Bob's/Hercules mineralisation. AC drilling will continue across the nearby geological terrain.

