

ASX ANNOUNCEMENT

16 March 2021

Geophysical Survey Update for the Murchison Copper-Gold Projects

HIGHLIGHTS

- Detailed aeromagnetic and radiometric survey completed at Nanadie Well
- Detailed gravity survey completed at Eelya South
- Downhole electromagnetic surveys completed at Nanadie Well in drillholes cased during December 2020 and January 2021

Cyprium Metals Limited ("**CYM**", "**Cyprium**" or "**the Company**") is pleased to update the progress of geophysical programmes in the Murchison Copper Project as detailed in Figure 1.

Executive Director Barry Cahill commented " The geophysics surveys we have undertaken have utilised the latest technologies and are showing outstanding potential for further targets and indicators to extend the copper mineralisation.

We look forward to undertaking further geophysical programmes and to drill test the anomalies that they provide us. We are continually encouraged with potential for further mineralisation at our Murchison Copper-Gold projects."

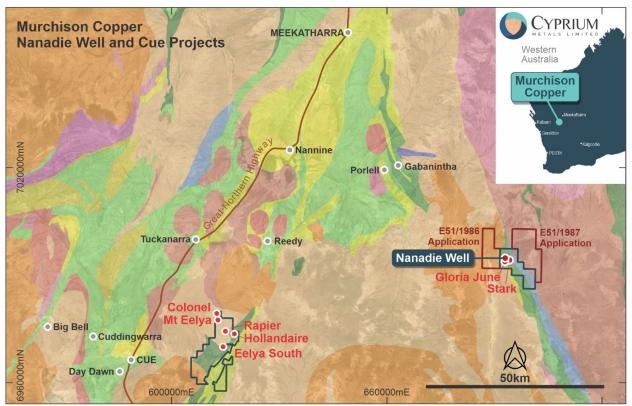


Figure 1 | Murchison Copper Project

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Nanadie Well Aeromagnetic and Radiometric December 2020 survey

Cyprium geological staff and specialist consultants have been analysing the aeromagnetic and radiometric data that has been collected by Thompson Aviation during December 2020 as detailed in Table 1 and Figure 2.

Survey Name	Nanadie Well
Contractor	Thompson Aviation
Survey Date	5/6/2020-8/6/2020
Survey Area	131.6 sq km
Traverse Line spacing	50m
Total Line kilometres	3176 line km
Line direction	090-270
Flying height	35m
Survey Magnetometer	Geometrics G822A
Gamma Ray Spectrometer	Radiations Solutions RS500
Navigation	Novatel OEMV-1VBS GPS Receiver

Table 1: Summary of Nanadie Well Magnetic/Radiometric survey

Figure 2 | Traverse and tie lines flown for the Nanadie Well aeromagnetic/radiometric December 2020 survey



Nanadie Well aeromagnetic survey results

Figure 3 shows the new total magnetic intensity data collected in the December 2020 survey. It details relationships between intrusive units hosting the Nanadie Well and Stark mineralisation that extends for 8km within Cyprium licenses, and the 13km section of adjacent Barrambie greenstone belt immediately to the east.

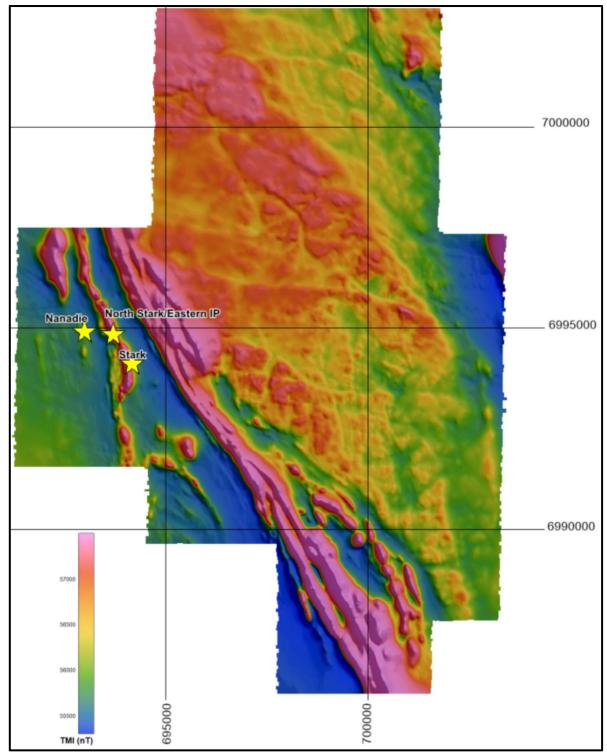


Figure 3 | Total magnetic intensity image, east shaded and non-linear colour stretch



The new 50m traverse lines survey is a substantial improvement on the existing 400m traverse line data flown for the government in 2000. Figure 4 outlines the level of detail available to assist Cyprium geologists in revising lithostructural interpretations of the Nanadie Well tenements to better inform targeting further copper-gold mineralisation in the Nanadie Well Project area.

This new survey data will be used with geological mapping, drilling, downhole geophysical and surface geophysical / geochemical data to develop a 3D model outlining magnetic stratigraphy and magmatic igneous layers that appear to be associated with sulphide formation and copper mineralisation at Nanadie Well. The models will assist in targeting further mineralisation at the Nanadie Well prospect during 2021.

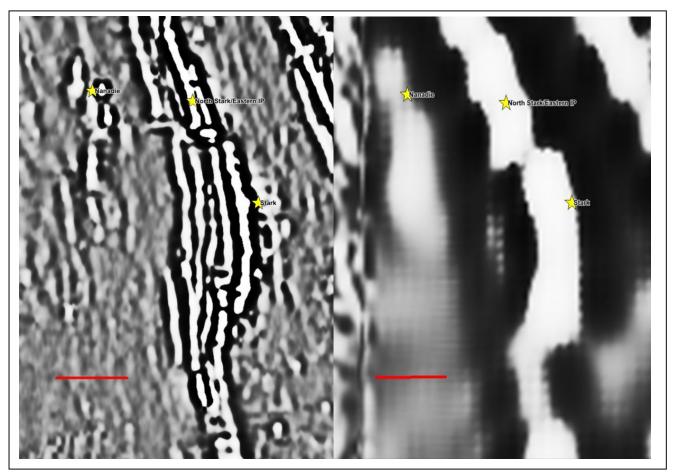


Figure 4 | Detail of 2VD images of the aeromagnetic data from the 2020 survey (left) and the 2000 survey (right) over Cyprium prospects showing a remarkable improvement in the lithostructural detail. The red scale line is 500m long.



Nanadie Well radiometric survey results

The aerial radiometric survey flown concurrently with the aeromagnetic survey in December 2020, identified low responses not dissimilar to those noted at Nanadie Well within the relatively unexplored Barrambie greenstone belt and may be indicative of further mafic/ultramafic intrusions. The radiometric lows will be mapped and will be taken into account for the design of further programmes, including drilling programmes to test the most promising targets.

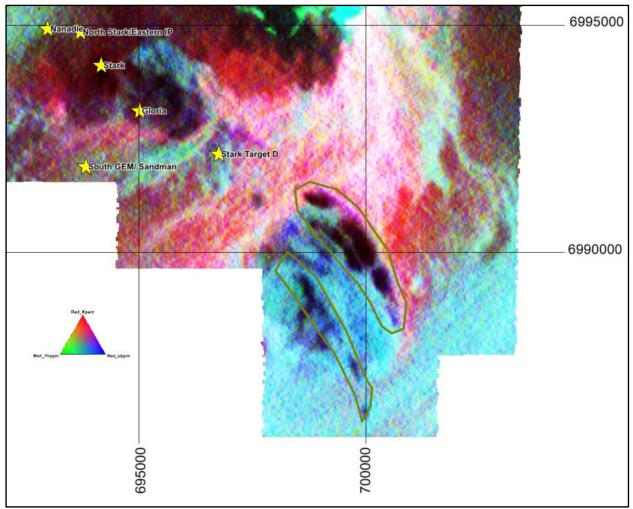


Figure 5 | Radiometric lows identified south east of Nanadie Well.



Eelya South detailed gravity survey

The Eelya South detailed gravity survey was completed during the last quarter of 2020 to detect basement variations in lithology and alteration that could indicate mineralised systems, as detailed in Figure 6.

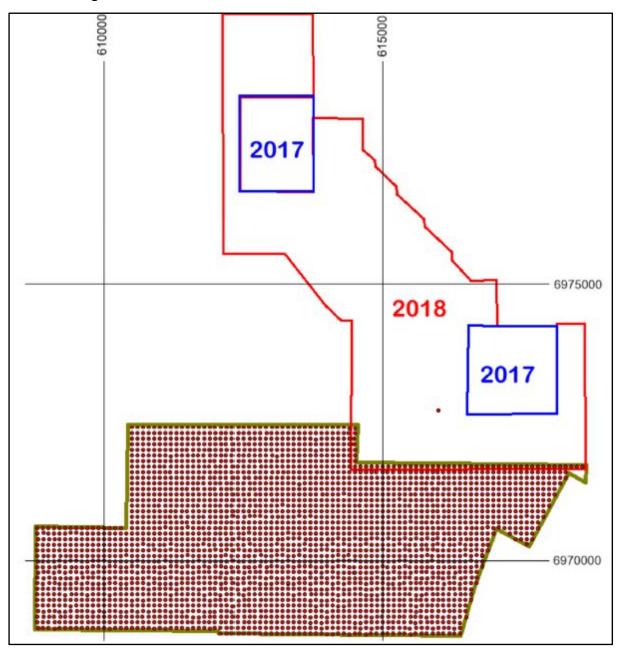


Figure 6 | Detailed gravity surveys completed in the Cue Copper Project.

The combination of the 2020 surveys with previous surveys that were completed by Musgrave Minerals Limited for residual gravity anomalies in the Cue Copper-Gold project are detailed in Figure 7.



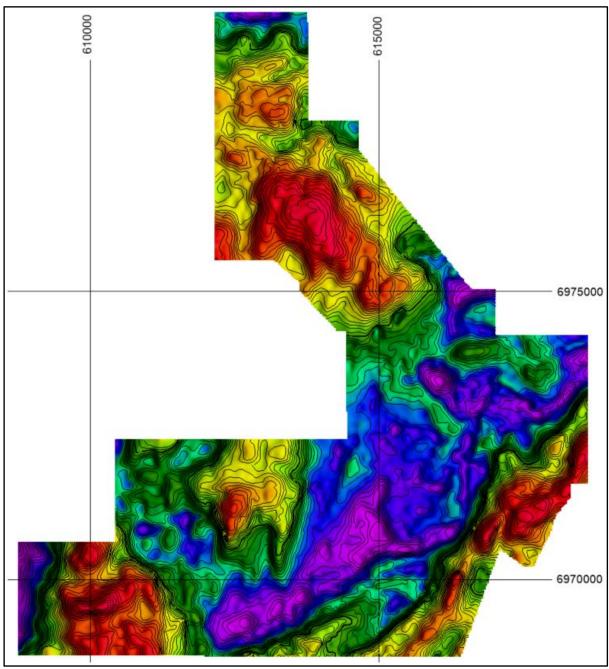


Figure 7 | Cue Copper Project merged residual gravity image and contours. Contours are 1GU (0.1mGal).

Several residual gravity anomalies are consistent with magnetic anomalies and electromagnetic surveys and will be further investigated during 2021 and tested with follow up drilling as appropriate.



Nanadie Well downhole electromagnetic surveys

Ten drillholes as detailed in Table 2 were cased during the recent reverse circulation ("**RC**") and diamond drilling campaigns that were surveyed in February and March 2021, with the results and interpretations expected by the end of April 2021. Should significant downhole conductors be identified, they will be drill tested by Cyprium and reported to the market when results are received.

	MGA94 Zone 50					
Hole ID	East	North	RL	Dip°	Azimuth°	Depth m
NWD2001	693,050.0	6,994,950.0	476.4	-60	270	393
NWD2101	693,010.0	6,994,530.0	475.0	-60	090	312
NWD2004	693,050.0	6,994,630.0	475.2	-60	090	210
NWD2003	693,040.0	6,994,680.0	475.3	-60	090	198
NWD2002	693,100.0	6,994,740.0	475.4	-80	270	207
SRC21001	694,222.0	6,993,890.0	480.0	-60	260	210
SRC21002	694,170.0	6,994,000.0	481.0	-60	260	138
SRC21003	694,115.0	6,994,090.0	482.7	-60	260	132
SRC21005	694,135.0	6,994,230.0	485.8	-60	270	179
SD2101	694,190.0	6,994,200.0	487.7	-60	260	303

Table 2: Nanadie Well/Stark drillholes downhole electromagnetic surveyed February/March 2021

This ASX announcement was approved and authorised by the Board.

For further information:

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https://twitter.com/CypriumMetals https://www.linkedin.com/company/cyprium-metals/

Competent Person

The information in this report that relates to Exploration Targets, Exploration Results and the estimation and reporting of the Hollandaire Mineral Resource Estimate is an accurate representation of the available data and is based on information compiled by external consultants and Mr. Peter van Luyt who is a member of the Australian Institute of Geoscientists (2582). Mr. van Luyt is the Chief Geologist of Cyprium Metals Limited, in which he is also a shareholder. Mr. van Luyt has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person (CP). Mr. van Luyt consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



About Cyprium Metals Limited

Cyprium Metals Limited (ASX: CYM) is an ASX listed company with projects in Australia. The Company has a highly credentialed management team that is experienced in successfully developing sulphide heap leach copper projects in challenging locations. The Company's strategy is to acquire, develop and operate mineral resource projects in Australia which are optimised by innovative processing solutions to produce copper metal on-site to maximise value.

The Company has projects in the Murchison region of Western Australia, that is host to a number of base metals deposits with copper and gold mineralisation. The Cue and Nanadie Well Copper-Gold projects are included in an ongoing scoping study, to determine the parameters required to develop a copper project in the region, which provides direction for resource expansion work.

Cue Copper-Gold Project

Cyprium has a joint venture with Musgrave Minerals Limited (ASX: MGV) at the Cue Copper-Gold Project, which is located ~20km to the east of Cue, in the Murchison region of Western Australia. Cyprium has an 80% attributable joint venture interest in the project's copper, gold and silver mineralisation however MGV has a 100% interest in primary gold deposits that are not associated with a copper-gold deposit.

The Cue Copper-Gold Project includes the Hollandaire Copper-Gold Mineral Resource (<u>https://cypriummetals.com/hollandaire-copper-gold-mineral-resource-estimate/</u>), which is open at depth. Metallurgical test-work has been undertaken to determine the optimal copper extraction methodology, which resulted in rapid leaching times (refer to 9 March 2020 CYM announcement, "*Copper Metal Plated*", <u>https://cypriummetals.com/copper-metal-plated/</u>).</u>

Resource category	Material type	Volume	Tonnes	Cu %	Cu Tonnes	Au g/t	Au Ounces	Ag g/t	Ag Ounces
	Oxide	5,000	10,000	1.20	100	0.09	0	4.16	1,300
Indicated	Transitional	95,000	275,000	1.80	5,000	0.24	2,100	5.06	44,700
	Fresh	638,000	1,894,000	2.00	37,100	0.31	18,900	6.64	404,400
Sub Total		738,000	2,179,000	2.00	42,200	0.30	21,000	6.43	450,400
Informed	Transitional	4,000	12,000	0.40	0	0.02	0	0.98	400
Inferred	Fresh	194,000	593,000	1.60	9,300	0.41	7,800	6.46	123,200
Sub Total		198,000	605,000	1.60	9,300	0.40	7,800	6.35	123,600
TOTAL		936,000	2,784,000	1.90	51,500	0.32	28,800	6.41	574,000

Hollandaire 2012 JORC Mineral Resource Estimate (values are rounded)

Differences in sum totals of tonnages and grades may occur due to rounding

Nominal cut-off at 0.3% Cu

Cyprium has an 80% attributable interest in the copper, gold and silver

Gold mineralisation not associated with the copper resource that is 100% attributable to MGV, has not been modelled or reported in the Hollandaire 2012 JORC Mineral Resource estimate

Nanadie Well Copper-Gold Project

Notes:

The Nanadie Well Project is located ~650km north east of Perth and ~75 km south east of Meekatharra in the Murchison District of Western Australia, within mining lease M51/1040.

Nanadie Wells' basement geology consists of Meeline Suite layered igneous intrusive rocks and amphibolites which are part of the GSWA mapped Murchison Supergroup. Details of the Nanadie Well Copper-Gold Project are available in the announcement made on the Company's ASX platform (ASX: CYM) on 14 July 2020, ("Nanadie Well Copper Project Acquisition", <u>https://cypriummetals.com/nanadie-well-copper-project-acquisition/</u>).



JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard	Gravity surveys will consist of 100m spaced lines of 100m spaced sensors with Scintrex CG5 gravity meter data acquisition.
	measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples	Aeromagnetic survey conducted from a Cessna 210 aircraft at 50m flight height, 50m traverse line spacing with a Geometrics G822A magnetometer.
	should not be taken as limiting the broad meaning of sampling.	Radiometric Survey conducted from a Cessna 210 aircraft at 50m flight height, 50m traverse line spacing with a Radiations Solutions RS500 Gamma Ray Spectrometer.
		Downhole EM surveys will be conducted with a continuous sensing tool for electromagnetic conductance anomalies with an Atlantis slim line tri-axial fluxgate magnetometer.
		All methods are standard practice for the generation and acquisition of geophysical data in the resources industry.
	Include reference to measures taken to ensure sample representivity and the	Geophysical equipment is calibrated before field work or on site as appropriate.
	appropriate calibration of any measurement tools or systems used.	Gravity meters used for the survey were recently calibrated on the Guildford Cemetery – Helena Valley Primary School calibration range (2010990117 - 2010990217) in Western Australia. The calibration process validated each gravity meter's scale factor to ensure reduction of the survey data produces correct Observed Gravities from measured dial reading values
	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.	Geophysical signal generation and data acquisition details in section above.
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	Not applicable.



Criteria	JORC Code explanation	Commentary
	tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).	
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Not applicable.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not applicable.
	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.
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.	Not applicable.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Not applicable.
	The total length and percentage of the relevant intersections logged.	Not applicable.
Sub- sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable.
and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Not applicable.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Not applicable.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Not applicable.
	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.	Not applicable.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Not applicable.



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.	Not applicable.
	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.	Noted in previous section.
	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.	Noted in previous section.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	All surveys checked by field crew supervisor on site during acquisition and daily by senior/consultant geophysicist off site for data accuracy, precision and consistency.
	The use of twinned holes.	Not applicable.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Not applicable.
	Discuss any adjustment to assay data.	Not applicable.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and	All flight and tie lines for the aeromagnetic survey recorded with a differential GPS by Thompson Aviation.
	other locations used in Mineral Resource estimation.	Gravity stations surveyed with Garmin autonomous DGPS receivers, accuracy +/-38mm when completed.
		Drillhole collars for downhole surveys picked up by Arvista Surveys with a differential GPS RTK-DGPS instrument, accuracy +/-0.5m when completed.
		Downhole surveys completed by Terra drilling and NDRC drilling with an Axis champ gyroscopic downhole tool.
	Specification of the grid system used.	GDA94, zone 50.
	Quality and adequacy of topographic control.	DGPS and GPS surveys completed as detailed in previous section.
Data spacing	Data spacing for reporting of Exploration Results.	Line and sensor spacing as noted previously in Section 1.



Criteria	JORC Code explanation	Commentary
and distribution	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.	Not applicable.
	Whether sample compositing has been applied.	Not applicable.
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.	Line and sensor setups optimised for local geological orientations based on current knowledge of the project areas.
	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.	Not applicable.
Sample security	The measures taken to ensure sample security.	Not applicable.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	All surveys checked by field crew supervisor on site during acquisition and daily by senior/consultant geophysicist off site for data accuracy, precision and consistency.



Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral	Type, reference name/number, location	Nanadie Well / Stark
tenement and land tenure status	and ownership including agreements or material issues with third parties such as joint ventures, partnerships,	E51/1040 and ML 51/887, Cyprium Metals 100% ownership.
	overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Royalties payable to a syndicated comprising of WS Hitch, KW Wolzak, PW Askins, Tyson Resources PL of:
		settings.
		Cue Copper Project
		Cyprium has an 80% interest in a joint venture for the non-gold rights of the Cue Copper project with Musgrave Resources Limited.
		The Hollandaire deposit is on granted Mining Lease M20/526 100% owned by the Cyprium Metals / Musgrave Resources 80/20 joint venture.
	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.	All tenements are in good standing.
Exploration	Acknowledgment and appraisal of	Nanadie Well / Stark
done by other parties	exploration by other parties.	1970 Kia Ora Gold Corporation – regional reconnaissance exploration.
		1976-1977 BHP Ltd. Mapping, surface sampling, 72 RAB drillholes and geophysical surveys.
		1987-1993 Dominion Mining Ltd. Mapping. Surface, rock chip and lag sampling, 126 RAB drillholes, 9 RC drillholes.
		1995-1996 Newcrest Mining Ltd. Lag sampling, 63 RAB drillholes.
		1999 Dominion Mining Ltd. 14 RAB drillholes.
		2004-2013 Intermin Resources Ltd. 185 RC drillholes. 2004 JORC inferred mineral resource estimate of 36.07Mt @ 0.42% Cu in September 2013.
		Mithril Ltd 2013-2019. Ground geophysical surveys. 36 RC drillholes. 1 diamond drillhole.
		Intermin Resources Ltd / Horizon Minerals Ltd 2019. 14 RC drillholes and mining lease application M/51/887



Criteria	JORC Code explanation	Commentary
		Cue Copper Project
		The Hollandaire, Colonel, Mt Eelya, Eelya South and Rapier prospects in the Cue Project were identified in the 1970's by their outcropping gossans (oxidised sulphide material) in field mapping campaigns by Western Mining Corporation.
		Some exploration and development work was completed on the Cue project prospects from the 1980's to 2007 by Westgold Resources NL and Tectonic Resources NL however this was generally focussed on potential gold resources.
		Silver Lake Resources acquired the Cue Project from Tectonic Resources in 2007 and commenced regional exploration which also focussed on gold but did include multi-element geochemical analytical work. This further defined the previously identified copper/gold/silver anomalism at Hollandaire.
		Silver Lake commenced aircore drilling at Hollandaire in 2011 and discovered the sulphide copper/gold mineralisation in the same year.
		Hollandaire was resource definition drilled in 2011 and 2012 with the first 2004 JORC mineral resource estimate completed by Silver Lake towards the end of 2012.
		Musgrave Minerals acquired the Cue project in November 2015 from Silver Lake Resources and commenced exploration planning that year with drilling and geophysical work on the Cue project beginning in 2016 and finishing in March 2019 when the Joint Venture agreement was completed with Cyprium Metals.
Geology	Deposit type, geological setting and	Nanadie Well / Stark
	style of mineralisation.	Magmatic Cu/Au/Ni/PGE deposit hosted in structurally deformed Archaean gabbros norites and metagabbros with 1 to 25m of quaternary alluvial and aeolian barren cover.
		Flat lying supergene Cu/Au mineralisation occurs at the top of the current and paleo water table levels.
		Cue Copper Project
		Felsic, mafic and metasedimentary schists hosting base metal and gold mineralisation.
		Hollandaire
		Metasediment and felsic schist hosted copper mineralisation possibly formed as a distal apron type Volcanigenically Hosted Massive Sulphide (VHMS) or as a Sedimentary Exhalative (SedEx)



Criteria	JORC Code explanation	Commentary
		deposit. Extensive post mineralisation metamorphism and structural activity has obscured Hollandaire's protoliths and ore deposit processes, work continues to develop a formation model for the deposit.
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:	Not applicable.
	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.	Not applicable.
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.	Not applicable.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable.



Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and	These relationships are particularly important in the reporting of Exploration Results.	Not applicable.
intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Not applicable.
	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.	Included in the body of the report.
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.	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.	Not applicable.
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).	As detailed in the body of the announcement.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	To be released when compiled.