

**ASX ANNOUNCEMENT**

**15 September 2020**

**NANADIE WELL COPPER PROJECT ACQUISITION COMPLETION**

**HIGHLIGHTS**

- **Cyprium has completed the acquisition of a 100% interest in the Nanadie Well Copper Project from Horizon<sup>1</sup>**
- **The Nanadie Well Project is ~75km to the east-northeast of the Hollandaire deposits, which includes mineral resources and other high priority drill ready targets, that will be included in the Cue Copper Project scoping study**
- **Nanadie Well deposit has a high grade, shallow supergene Cu-Au zone**
- **Mining lease M51/887 has been granted at Nanadie Well**
- **The Project also includes the Stark Cu-Ni-PGE prospect, 1.2km to the south east of the Nanadie Well deposit, where the mineralisation remains open in all directions**
- **Exploration tenements E51/1986 & E51/1987 applied for, adjacent to Nanadie Well**

Cyprium Metals Limited (“CYM” or “Cyprium”) is pleased to advise the completion of the acquisition of tenements E51/1040 and M51/887 from Horizon Minerals Limited (“HRZ” or “Horizon”), which includes the Nanadie Well Cu-Au Project, which is located ~75km to the east-northeast of Cyprium’s Hollandaire copper deposits.

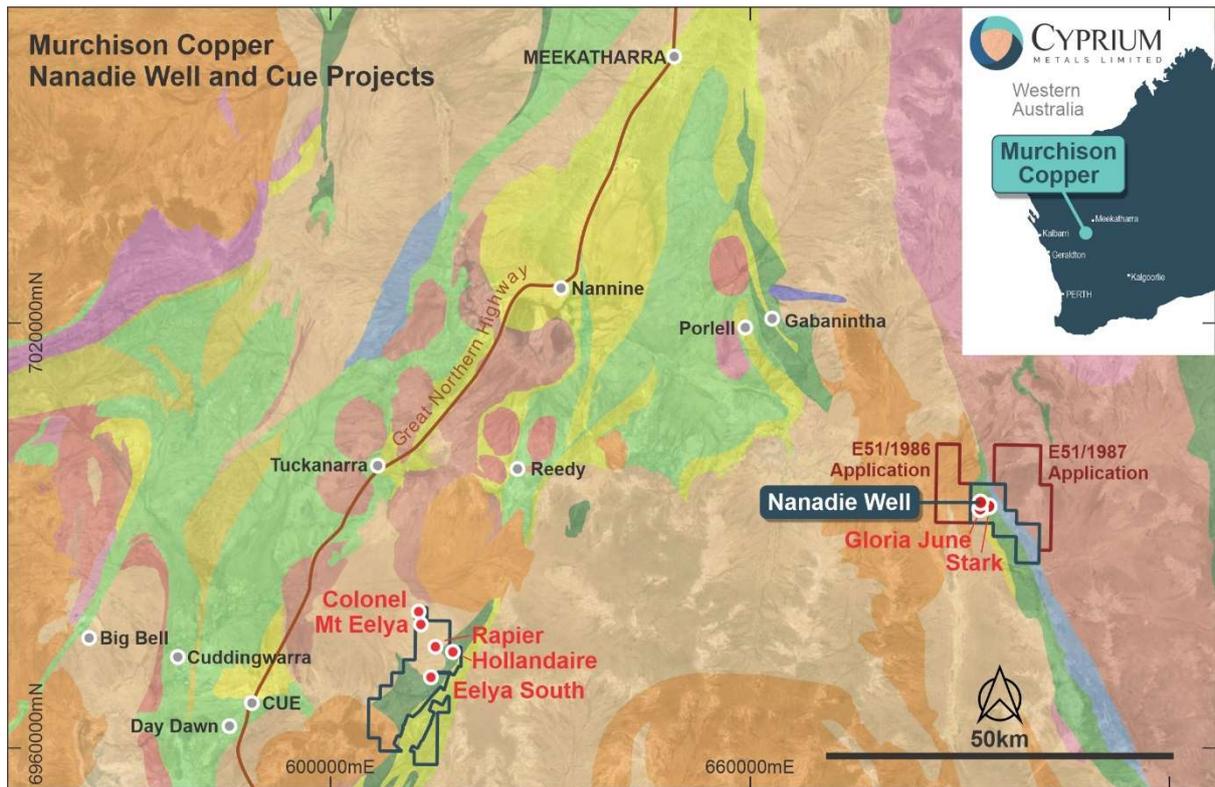
A mining lease, M51/887, has also been granted for the Nanadie Well Copper-Gold Project and Cyprium has applied for exploration tenements to the west and east of the Nanadie Well Copper-Gold Project (refer to Figure 1), to expand our regional presence in the area and increase the projects exploration prospectivity.

The project also has the Stark Cu-Ni-PGE prospect along with a number of drill ready targets that offer excellent exploration upside.

Executive Director Barry Cahill commented *“We are pleased to complete the 100% acquisition of the Nanadie Well Project, which includes a substantial 2004 JORC compliant copper mineral resource that has multiple shallow and broad intersections which are open along strike and at depth. It has several drill ready targets that offer excellent exploration upside.*

*The Nanadie Well deposit and Stark mineralisation are both very prospective, and we will initially focus on geological interpretation activities from which we will then plan our resource definition and extensional drilling programmes. The Nanadie Well copper deposit is located only 75km to the east-northeast of our Hollandaire copper deposits and is an exciting addition that increases our regional mineral resource base which will be included in the ongoing Cue Copper Project scoping study.”*

<sup>1</sup> Refer to the attached CYM ASX announcement on 14 July 2020 and to the HRZ ASX announcement on 19 September 2013



**Figure 1 | Location of Cue Copper Project and Nanadie Well Projects**

This ASX announcement was approved and authorised by the Board.

**For further information:**

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## About Cyprium Metals Limited

Cyprium Metals Limited (ASX: CYM) is an Australian-listed company with exploration 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.

Currently the Company has two resource projects in the Murchison region of Western Australia. The Murchison region is host to a number of base metals deposits, particularly with copper and gold mineralisation. The Company is undertaking a Scoping Study to determine the parameters required to develop a copper project in the region which provides direction for resource expansion work.

## Cue Copper Project

Cyprium has an 80% interest in a joint venture for the non-gold rights with Musgrave Minerals Limited (ASX:MGV) at the Cue Copper Project, which is located ~20km to the east of Cue, in the Murchison region of Western Australia.

The Cue Copper Project is centred around the Hollandaire West and Hollandaire copper mineralisation, which is open at depth. A 2004 JORC compliant mineral resource of 38.7kt contained copper was estimated by Silver Lake Resources ("Silver Lake JORC 2004 Resource"). Details of the reporting of the Silver Lake JORC 2004 Resource are available in the announcement made by Silver Lake on 31 July 2013 ("*JORC Resources Reserves – July 2013*") and the Company's announcement dated 11 July 2019 ("*Maiden Drill Campaign to Commence at Cue Copper Project*"). Metallurgical test-work was undertaken to determine the optimal copper extraction methodology, which resulted in rapid leaching times and the production of copper metal plates. The Hollandaire West and Hollandaire Copper deposits are included in the ongoing Cue Copper Project scoping study. Refer to CYM announcements dated 11 July 2019 ("*Maiden Drill Campaign to Commence at Cue Copper Project*") and 9 March 2020 ("*Copper Metal Plated*").

## Nanadie Well Copper Gold Project

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. A 2004 JORC compliant mineral resource of 151.5kt contained copper and 74.2koz contain gold ("Nanadie JORC 2004 Resource") was estimated by Horizon (formerly Intermin Resources Limited) (ASX: HRZ) as announced on 19 September 2013. Details of the reporting of the estimates are available in the announcement made on the Company's ASX Platform (ASX: CYM) on 14 July 2020 ("*Nanadie Well Copper Project Acquisition*"). The Nanadie Well Copper-Gold project will be included in the Company's ongoing Cue Copper Project scoping study.



## JORC 2004 Resources

The Company notes that the Nanadie JORC 2004 Resource and the Silver Lake JORC 2004 Resource (together, the “**JORC 2004 Resources**”) were reported by Horizon and Silver Lake respectively, and not the Company itself. Further information in respect of the estimates obtained in respect of the Nanadie JORC 2004 Resource is available in the announcement made on Horizon’s ASX Platform (ASX: HRZ) on 19 September 2013 and the announcement made on Silver Lake’s ASX Platform (ASX: SLR) on 31 July 2013. The Nanadie Well deposit and the Hollandaire West and Hollandaire copper mineralisation were reported under the JORC Code 2004. Accordingly, they may not conform to the requirements of the JORC Code 2012. The Company confirms that there is no more recent estimates or data relevant to the Nanadie JORC 2004 Resources available to the Company and the Company is currently updating the Silver Lake JORC 2004 Resource to the JORC 2012 standards.

## Competent Persons

The information in this announcement that relates to exploration results is based on information compiled by Mr. David O’Farrell who is the Exploration Manager of Horizon Minerals Ltd. Mr. O’Farrell is a Member of The Australian Institute of Mining and Metallurgists (AusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking, to qualify as Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr. O’Farrell consents to the inclusion in the document of the information in the form and context in which it appears and confirms the information is an accurate representation of the available data and studies.

## Confirmation and Cautionary Statement

The information in this report that relates to Horizon’s Mineral Resources estimates is extracted from and was originally reported in Horizon’s ASX announcement “Initial Resource Estimate for the Nanadie Well Cu-AU project” dated 19 September 2013. The information in this report that relates to Silver Lake’s Mineral Resources estimates is extracted from and was originally reported in Silver Lake’s ASX announcement “JORC Resources Reserves – July 2013” dated 31 July 2013.

In respect of the Nanadie JORC 2004 Resource, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in those announcements continue to apply and have not materially changed. The Company confirms that the form and context of the Competent Person’s findings in relation to those Mineral Resources estimates or Ore Reserves estimates have not been materially modified from the original market announcements.

The Company cautions that the Mineral Resources are not reported in accordance with the JORC Code 2012. A Competent Person has not yet done sufficient work to classify the estimates of Mineral Resources in accordance with the JORC Code 2012. It is possible that following evaluation and/or further exploration work the currently reported estimates contained in this Announcement, may materially change and hence will need to be reported afresh under and in accordance with the JORC Code 2012. The Company has not independently validated the former owners estimates and therefore cannot be regarded as reporting, adopting or endorsing those estimates.

In respect of the Silver Lake JORC 2004 Resource, the Company cautions that the Mineral Resources are not reported in accordance with the JORC Code 2012. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in those announcements continue to apply and have not materially changed. The Company confirms that the form and context of the Competent Person’s findings in relation to those Mineral Resources estimates or Ore Reserves estimates have not been materially modified from the original market announcements. The Company has not independently validated the former owners estimates and therefore cannot be regarded as reporting, adopting or endorsing those estimates. The Company is currently updating the Silver Lake JORC 2004 Resource to the JORC 2012 standards.

## ASX ANNOUNCEMENT

14 July 2020

### NANADIE WELL COPPER PROJECT ACQUISITION

#### HIGHLIGHTS

- **Cyprium has entered into a Sale and Purchase Agreement with Horizon to acquire 100% of the Nanadie Well Copper Project**
- **The Nanadie Well Project is approximately 75km to the east of the Hollandaire deposits, includes mineral resources and other high priority drill ready targets, that will be included in the Cue Copper Project scoping study**
- **2004 JORC compliant Mineral Resource of 151,506t contained copper at Nanadie Well**
- **Nanadie Well deposit has a high grade, shallow supergene Cu-Au zone that remains open along strike and at depth**
- **The Project also includes the Stark Cu-Ni-PGE prospect, 1.2km to the south east of the Nanadie Well deposit, where the mineralisation remains open in all directions**

Cyprium Metals Limited (“**CYM**” or “**Cyprium**”) is pleased to advise that it has signed a Sale and Purchase Agreement for 100% of tenements E51/1040 and M51/887 with Horizon Minerals Limited (“**HRZ**” or “**Horizon**”), which includes the Nanadie Well Cu-Au Project which is located approximately 75km to the east of Cyprium’s Hollandaire copper deposits (refer to Figure 1). Tenement E51/1040 covers an area of 45km<sup>2</sup> and is part of a northwest trending belt of Archean mafic and metasedimentary units with demonstrated prospectivity for both magmatic copper-nickel-PGE mineralisation and gold lode mineralisation.

The Nanadie Well deposit has a 2004 JORC Code Compliant Inferred Resource of 36.07Mt @ 0.42% Cu containing 151,506 tonnes of copper and 0.06g/t Au containing 74,233 oz of gold<sup>1</sup>. The project also contains the Stark Cu-Ni-PGE prospect along with a number of drill ready targets that offer excellent exploration upside.

Executive Director Barry Cahill commented “*We are pleased to acquire 100% of the Nanadie Well Project, which includes a significant 2004 JORC compliant copper mineral resource that is near surface and remains open along strike and at depth.*”

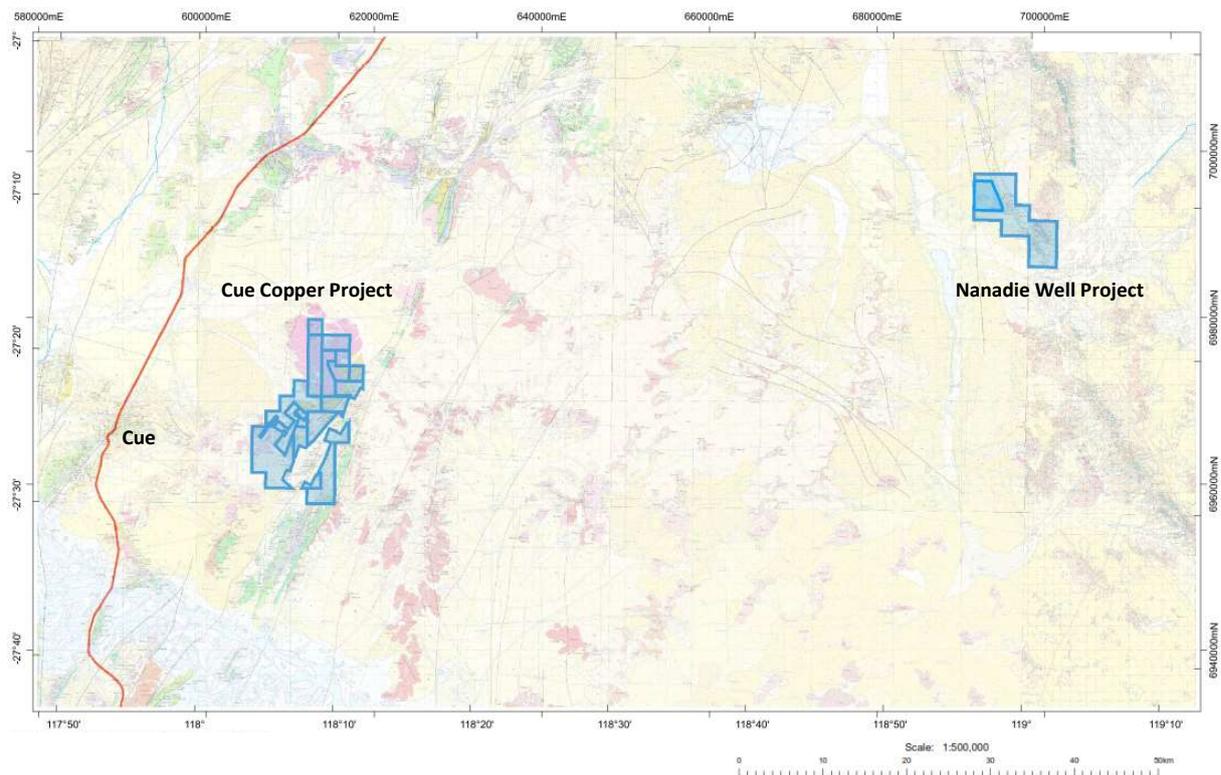
*The Nanadie Well deposit and Stark mineralisation are both very prospective, and we will initially focus on geological interpretation activities from which we will then plan our resource definition and extensional drilling programmes.*

*The Nanadie Well copper deposit is located only 75km to the east of our Hollandaire copper deposits and is an exciting addition that increases our regional mineral resource base which forms part of the ongoing Cue Copper Project scoping study.”*

<sup>1</sup> Refer to HRZ ASX announcement on 19 September 2013

## The Nanadie Well Copper Project

The Nanadie Well Project is located approximately half-way between Sandstone and Meekatharra in the Murchison District of Western Australia, on Exploration Tenement E 51/1040. The project straddles the Baranbie and Poison Hills greenstone belts, with basement rock types consisting of felsic-ultramafic volcanics, granite and gabbroic intrusions. The presence of the historic Gloria June gold mine, the Nanadie Well Cu-Au deposit and the Stark Cu-Ni-PGE prospect outlines the potential of the project to host several different mineralisation styles.



**Figure 1 | Location of Cue Copper Project and Nanadie Well Projects**

The tenement that contains Nanadie Well is approximately 75 km East of the current Hollandaire resource, as illustrated in Figure 1. The project covers part of the northwest trending belt of Archean mafic and metasedimentary units with demonstrated prospectivity for both magmatic copper-nickel-PGE mineralisation and lode gold mineralisation. The oxide mineralisation comprises malachite/azurite which often forms a zone of localised supergene enrichment. The ore below 40 metres depth is mostly fresh disseminated fine grained chalcopyrite within a sequence of basalts/amphibolites, felsic volcanics and dolerite. The mineralisation outline, surface expression and selected intersections is shown in Figure 2. The Nanadie Well Prospect contains a shallow and broad 2004 JORC Compliant Inferred Resource<sup>1</sup> (as outlined in Table 1), including the following intercepts:

- 156m @ 0.7% Cu from Surface (NRC12015)
- 105m @ 0.76% Cu and 0.22g/t Au from 8m (NRC5020)
- 28m @ 0.85% Cu and 0.3g/t Au from 44m (NRC5026)
- 14m @ 2.16% Cu and 0.55g/t Au from 38m (NRC05020)

The nearby Stark prospect is located 1.2km east of Nanadie Well (refer Figure 2) and has Ni-Cu-PGE mineralisation over 1 km of strike which remains open in all directions.

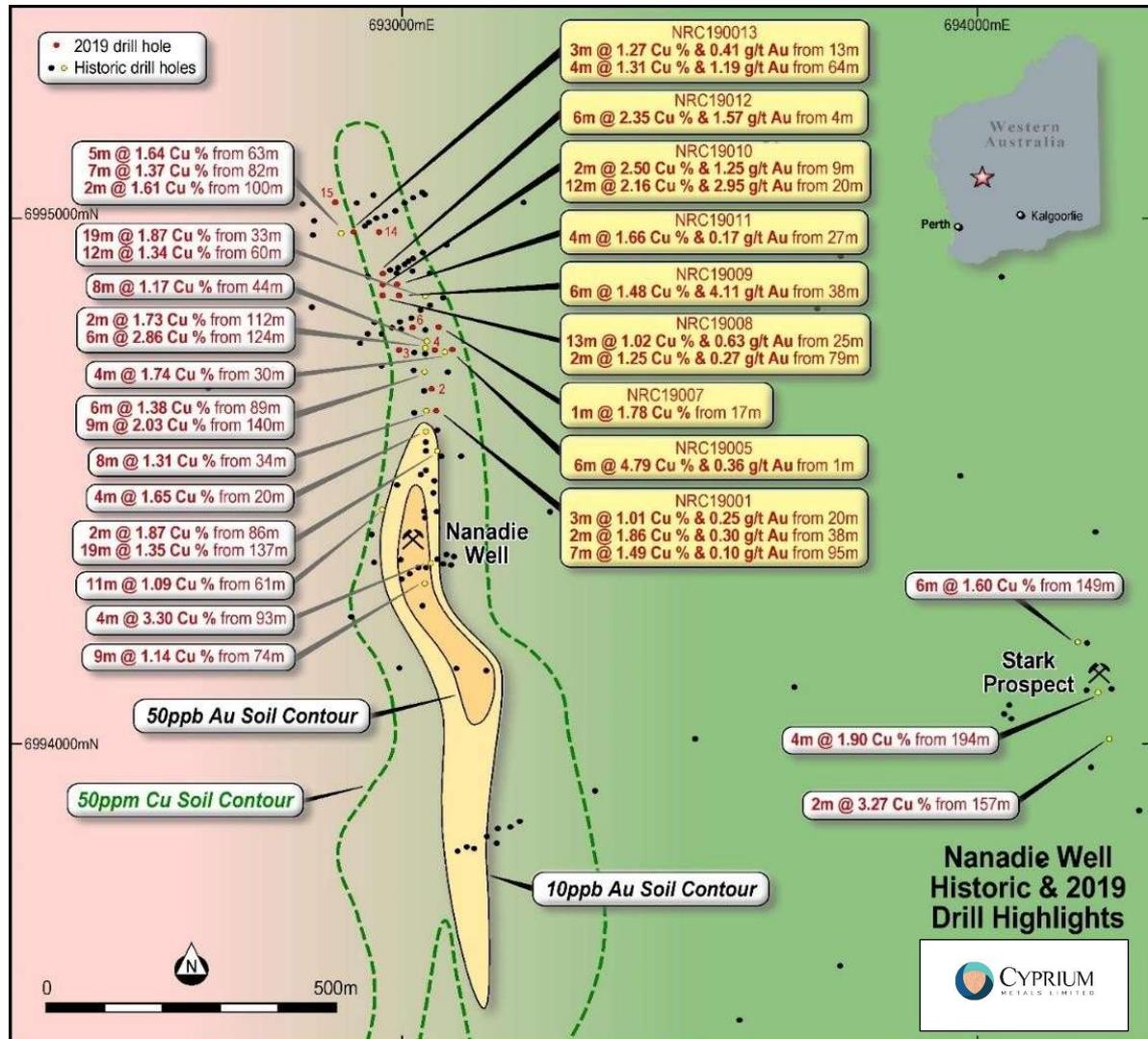


Figure 2 / Nanadie Well location, underlying geology and drilling results

During 2020, Horizon conducted Reverse Circulation (“RC”) recent drilling on the Nanadie Well deposit (refer to HRZ ASX announcement on 20 May 2020) of 14 RC holes to a maximum depth of 55m and confirmed the presence of a high grade, shallow supergene Cu-Au zone that remains open along strike and at depth. Significant results include:

- 6m @ 1.48% Cu and 4.11 g/t Au from 38m (NRC19009)
- 12m @ 2.16% Cu and 2.95 g/t Au from 20m (NRC19010)
- 6m @ 2.35% Cu and 1.57 g/t Au from 4m (NRC19012)
- 13m @ 1.02% Cu and 0.63 g/t Au from 25m (NRC19008)
- 6m @ 4.79% Cu and 0.36 g/t Au from 1m (NRC19005)

At the Stark prospect, RC drilling intercepted copper, gold and PGE’s at depth, including:

- 4m @ 1.90% Cu and 0.32 g/t Au (and 0.32 g/t Pt-Pd) from 194m (NRC18008)
- 2m @ 3.27% Cu and 0.55 g/t Au (and 0.19 g/t Pt-Pd) from 157m (NRC15001)

The recent drilling results by HRZ indicated that Nanadie Well and surrounds have a much higher copper and gold prospectivity than previously thought. The small first pass RC program, as reported above, was successful infill and extending the high-grade areas in the top 100m of the Nanadie Well resource. This program now needs follow up and near surface drill testing needs to be undertaken at the Stark Prospect as there has been limited drilling conducted and to drill test extensional targets.

JORC (2004) Classification	Cut-off Grade	Nanadie Well Inferred Resource				
		Mt	Cu %	Au ppm	Contained Cu Metal (t)	Contained Au (oz)
Inferred	0.1	36.07	0.42	0.064	151,506	74,233
<b>TOTAL</b>		<b>36.07</b>	<b>0.42</b>	<b>0.064</b>	<b>151,506</b>	<b>74,233</b>

*Table 1 / Nanadie Well Inferred Resource (JORC 2004)*

A Mining License application (M51/887) has been lodged over the Nanadie Well (Cu- Au) and Stark (Cu-Ni-PGE) prospects.

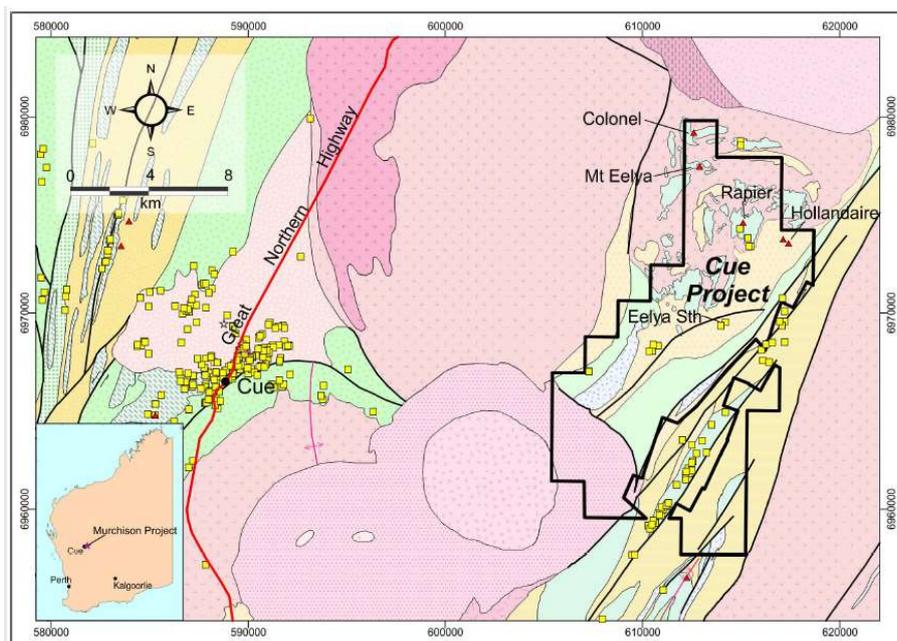
### Consideration

The following up-front consideration is payable by Cyprium to Horizon:

- \$250,000 cash; and
- \$400,000 of CYM shares based on a 20-day VWAP.

The following deferred consideration will be payable by Cyprium to Horizon:

- \$350,000 of CYM shares based on a 20-day VWAP and issued in 12 months;
- \$300,000 of CYM shares based on a 20-day VWAP and issued in 24 months; and
- \$200,000 of CYM shares based on a 20-day VWAP upon a decision to mine.



**Figure 3 | Location of Mt Eelya and Rapier prospects at the Cue Copper Project**



## **Earn-in and Joint Venture**

Pursuant to an agreement between a wholly owned subsidiary of CYM and Musgrave Minerals Limited (ASX: MGV), an option was granted by Musgrave Minerals Limited to earn-in and joint venture for an 80% interest in the non-gold rights over the tenements at the Cue Copper Project (CYM ASX Release 25 March 2019).

The earn-in expenditure requirement for an 80% interest in the non-gold rights over the tenements at the Cue Copper Project, WA was met during the March 2020 quarter which was required for the transfer of the interests and formation of the joint venture (CYM quarterly activities report released on 17 April 2020).

This ASX announcement was approved and authorised by the Board.

## **For further information:**

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## **Competent Persons**

The information in this announcement that relates to exploration results is based on information compiled by Mr. David O'Farrell who is the Exploration Manager of Horizon Minerals Ltd. Mr. O'Farrell is a Member of The Australian Institute of Mining and Metallurgists (AusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking, to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. O'Farrell consents to the inclusion in the document of the information in the form and context in which it appears.

## **Confirmation**

The information in this report that relates to Horizon's Mineral Resources estimates or Ore Reserves estimates is extracted from and was originally reported in Horizon's ASX announcement "Initial Resource Estimate for the Nanadie Well Cu-AU project" dated 19 September 2013. Horizon confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in those announcements continue to apply and have not materially changed. The Company confirms that the form and context of the Competent Person's findings in relation to those Mineral Resources estimates or Ore Reserves estimates have not been materially modified from the original market announcements.

## 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	<p><i>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.</i></p>	<p>4m composite samples taken with a metallic scoop being thrust through the chip pile. 1m single splits taken using cone splitter off rig. Average sample weights about 1.5-2kg.</p>
	<p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p>	<p>For RC drilling regular air and manual cleaning of cyclone to remove hung up clays where present.</p> <p>Standards &amp; replicate assays taken by the laboratory. Based on statistical analysis of these results, there is no evidence to suggest the samples are not representative.</p>
	<p><i>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.</i></p>	<p>RC was used to obtain 1m samples from which approximately 1.5-2kg was pulverised to produce a 50 g charge for fire assay. RC chips were geologically logged over 1m intervals, initially sampled over 4m composite intervals and then specific anomalous intervals were sampled over 1m intervals. Depending on the final hole depth, the maximum composite interval was 4m and minimum was 1m. Samples</p> <p>assayed for Cu, Au, Pb, Zn, Ni, Ag, Co, As only for this program. Drilling intersected oxide, transitional and primary ore at a maximum downhole depth of 112m. Assays were determined by Fire assay with checks routinely undertaken.</p>
Drilling techniques	<p><i>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).</i></p>	<p>RC drilling with a 5' 1/4 inch face sampling hammer bit.</p>
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p>	<p>RC recovery and meterage was assessed by comparing drill chip volumes (piles) for individual meters.</p>

Criteria	JORC Code explanation	Commentary
		<p>Estimates of sample recoveries were recorded. Routine checks for correct sample depths are undertaken</p> <p>every RC rod (6m). RC sample recoveries were visually checked for recovery, moisture and contamination.</p> <p>The cyclone was routinely cleaned ensuring no material build up.</p>
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Due to the generally good/standard drilling conditions around sample intervals (dry) the geologist believes the samples are representative, some bias would occur in the advent of poor sample recovery which was logged where rarely encountered. At depth there were some wet samples and these were recorded on geological logs. Where significant samples were wet they were recorded.
	<i>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.</i>	No sample bias has been identified to date.
Logging	<i>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.</i>	Drill chip logging and core was completed on one metre or selected intervals at the rig by the geologist. The log was made to standard logging descriptive sheets, and transferred into Micromine software once back at the office.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging was qualitative in nature.
	<i>The total length and percentage of the relevant intersections logged.</i>	All intervals logged for RC drilling.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	4m composite and 1m RC samples taken.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	RC samples were collected from the drill rig by scooping each 1m collection bag and compiling a 4m composite sample. Single splits were automatically taken off the rig cyclone splitter. Samples collected in mineralisation were all dry.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	For HRZ samples, no duplicate 4m composites were taken in the field. 4m and 1m samples were analysed by Aurum Labs in Perth.

Criteria	JORC Code explanation	Commentary
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Samples were consistent and weighed approximately 1.5-2.0 kg and it is common practice to review 1m results and then review sampling procedures to suit.
	<i>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.</i>	Once samples arrived in Perth, further work including duplicates and QC was undertaken at the laboratory.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Mineralisation is located in weathered and fresh mafics, felsic rocks. The sample size is standard practice in the WA Goldfields to ensure representivity.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	The 1m RC samples were assayed by Fire Assay (FA50) by Aurum Labs (Perth) for multi-elements. Standard, blanks and duplicates were also submitted for QA/QC purposes. The results were satisfactory.
	<i>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.</i>	No geophysical assay tools were used.
	<i>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.</i>	Laboratory QA/QC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in-house procedures. QC results (blanks, duplicates, standards) were in line with commercial procedures, reproducibility and accuracy.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Work was supervised by senior Aurum staff experienced in metals assaying. QC data reports confirming the sample quality are supplied.
	<i>The use of twinned holes.</i>	Twinned holes of Mt Eelya Drilling will be considered should the future scale of the prospect require it.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Data storage as PDF/XL files on company PC in Perth office.
	<i>Discuss any adjustment to assay data.</i>	No data was adjusted.
Location of data points	<i>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.</i>	All drill collar locations were initially pegged and surveyed using a hand held Garmin GPS, accurate to within 3-5m. Tape and measuring from historic holes was used to refine the collar location. The holes are normally accurately surveyed using a RTK-DGPS system at a later date. Holes were drilled on a regular spacing as per Table 1 collar details. All reported coordinates are referenced to

Criteria	JORC Code explanation	Commentary
		a MGA94 grid. The topography is undulating at the location of the drilling. Down hole surveys were taken.
	<i>Specification of the grid system used.</i>	GDA94, zone 50.
	<i>Quality and adequacy of topographic control.</i>	Topography is broadly flattish, small differences in elevation between drill holes will have little effect on mineralisation widths on initial interpretation.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Holes were variably spaced and were consistent with industry standard resource style drilling in accordance with the collar details/coordinates supplied in Table 1.
	<i>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.</i>	The hole spacing was determined by HRZ to be sufficient when combined with confirmed historic drilling results to define mineralisation in preparation for a future JORC Compliant Resource update.
	<i>Whether sample compositing has been applied.</i>	n/a
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	No, drilling angle holes is deemed to be appropriate to intersect the oxide and primary mineralisation and potential dipping structures. At Nanadie Well, all holes were angled and used to intersect the inferred steep dipping lodes. In this case the intercept width is about (~75%) to the true width however, further drilling is required.
	<i>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.</i>	The relationship between the drilling orientation and the orientation of mineralised structures is not considered to have introduced a sampling bias. Given the style of mineralisation and drill spacing/method, it is the most common routine for delineating shallow gold resources in Australia.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Samples were collected on site under supervision of the responsible geologist. The work site is remote and on a pastoral station. Visitors need permission to visit site. Once collected samples were bagged and transported to Meekatharra and then Perth for analysis. Dispatch and consignment notes were delivered and checked for discrepancies.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No Audits have been commissioned.

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>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.</i>	E51/1040 and MLA 51/887. No JV partners involved.
	<i>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.</i>	The tenement is in good standing and no known impediments exist.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Previous workers in the area include Dominion Mining and Mithril Resources.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	Archaean mafics, felsics, granites and sediments. Oxide supergene and transitional Cu-Au with vein quartz, shear hosted with varying amounts of sulphide mineralisation.
<i>Drill hole Information</i>	<i>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:</i>  <i>easting and northing of the drill hole collar</i>  <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i>  <i>dip and azimuth of the hole</i>  <i>down hole length and interception depth</i>  <i>hole length.</i>	See Table 1 of HRZ ASX announcement on 20 May 2020.
	<i>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.</i>	No information is excluded.

Criteria	JORC Code explanation	Commentary
<i>Data aggregation methods</i>	<i>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.</i>	No weighting or averaging calculations were made, assays reported and compiled are as tabulated in Table 1 of HRZ ASX announcement on 20 May 2020.
	<i>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.</i>	All assay intervals reported in Table 1 of HRZ ASX announcement on 20 May 2020 are 1m downhole intervals or as indicated.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalent calculations were applied.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Laterite, oxide mineralisation is generally flat lying while transitional and primary mineralisation at depth is generally steep dipping 60-90 degrees.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Drill intercepts and true widths appear to be close to each other, or within reason allowing for the minimum intercept width of 1m. Horizon estimates that the true width is variable but probably around 75-100% of most intercept widths.
	<i>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').</i>	Given the nature of RC drilling, the minimum width and assay is 1m. The true thickness of the downhole given the orientation of the drilling.
<i>Diagrams</i>	<i>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.</i>	See Figure 2.
<i>Balanced reporting</i>	<i>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.</i>	Summary results showing 1m assays >1.00 g/t Au are shown in Table 1 of HRZ ASX announcement on 20 May 2020.
<i>Other substantive exploration data</i>	<i>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</i>	No comprehensive metallurgical work has been completed at Nanadie Well.  See details from previous ASX releases from Intermin Resources Limited (ASX; IRC) and more recently Horizon Minerals (ASX: HRZ) and Mithril



Criteria	JORC Code explanation	Commentary
	<i>treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	Resources (ASX: MTH). These can be accessed via the internet.
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	New resource calculations are planned once sufficient data is compiled. Economic assessments will follow if warranted.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Commercially sensitive.



ACN 007 761 186  
ABN 88 007 761 186

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**ASX RELEASE**  
**INITIAL RESOURCE ESTIMATE FOR THE NANADIE WELL CU-AU PROJECT**  
**19 SEPTEMBER 2013**

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**HIGHLIGHTS**

Initial inferred resource estimate at the Nanadie Well Cu-Au project.

- **36.07Mt @ 0.42% Cu and 0.064 g/t Au containing over 150, 000 tonnes of Cu and 74,000 oz Au.**
- **Ore block model extends from surface to 220m depth and interpreted to be up to 150m wide.**
- **Excellent potential for resource upgrades and extensions.**
- **Untested IP target 500m east of Nanadie Well deposit.**

Intermin Resources Ltd (ASX:IRC) advises that it has completed an initial JORC Inferred Resource for its wholly owned Nanadie Well Cu-Au project in the Murchison district 100km south east of Meekatharra, WA.

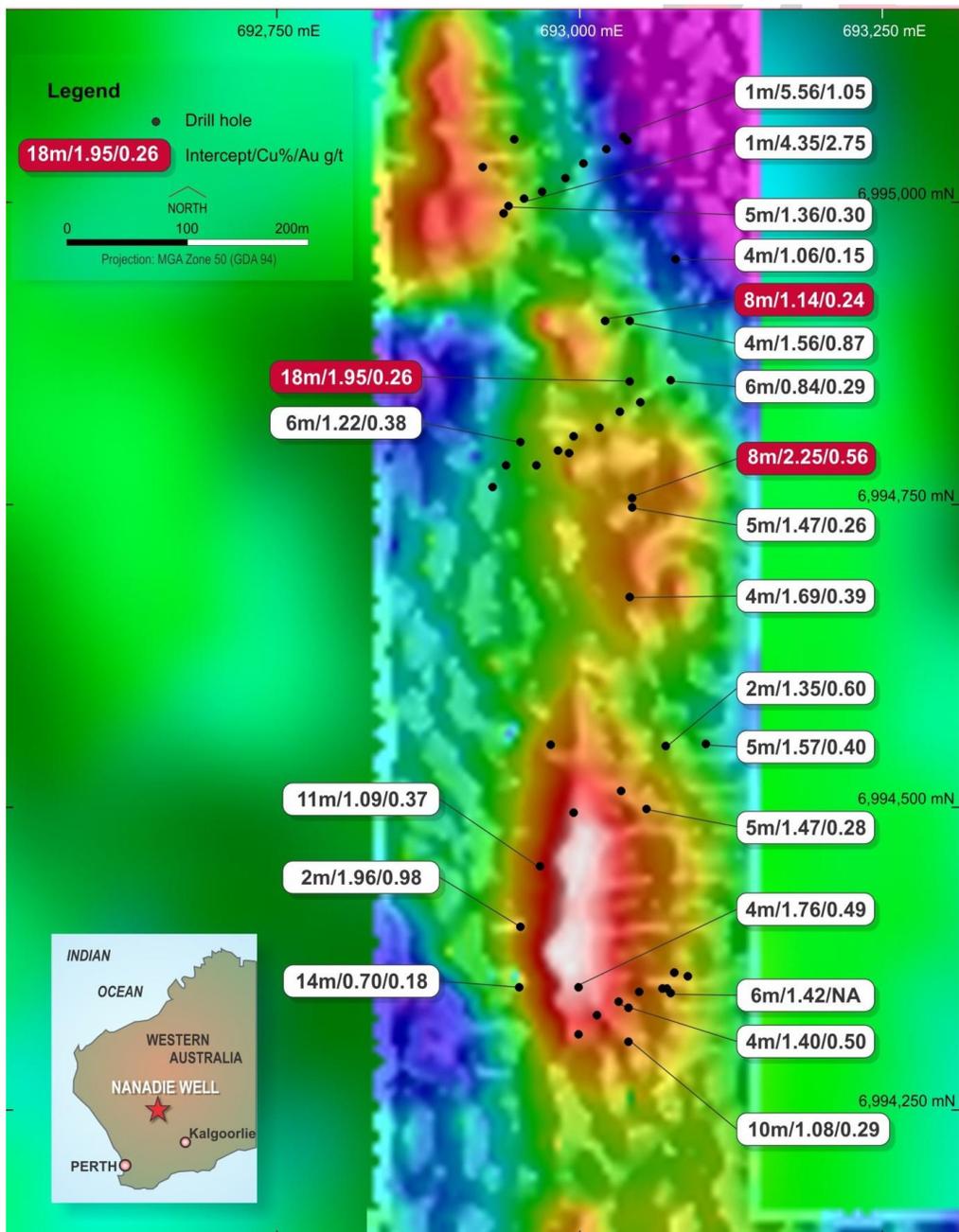
The resource is based on 88 RC holes, of which 54 were drilled by Intermin between 2004 to 2012. The 3D block model extends from 6994105mN to 6995095mN (990m length) and varies between 50-150m width, with a maximum depth of 220m. A minimum cutoff of 0.1 Cu % was used. See Table 1 below.

<b>Table 1</b>					
<b>Nanadie Well Inferred Resource<sup>1</sup></b>					
<b>JORC Classification</b>	<b>Tonnes (Mt)</b>	<b>Cu %</b>	<b>Au ppm</b>	<b>Contained Cu metal (t)</b>	<b>Contained Au (oz)</b>
Inferred	36.07	0.42	0.064	151,506	74,233

The oxide mineralisation comprises malachite/azurite which often forms a zone of localised supergene enrichment in the top 40m (Table 2). The ore below 40m depth is mostly fresh, disseminated fine grained chalcopyrite within a sequence of basalts/amphibolites, felsic volcanics and dolerite. Unmineralised granite sills/dykes frequently intrude the host rock. High grades are also found in the fresh rock and are typically of a stringy or veined chalcopyrite (Figure 1). No "classical" massive sulphide style mineralisation has yet been encountered.

**Figure 1**

**Plan showing location of typical higher grade copper shoots at Nanadie**



**Table 2****Significant High Grade Copper Intercepts in the top 40m depth at Nanadie Well**

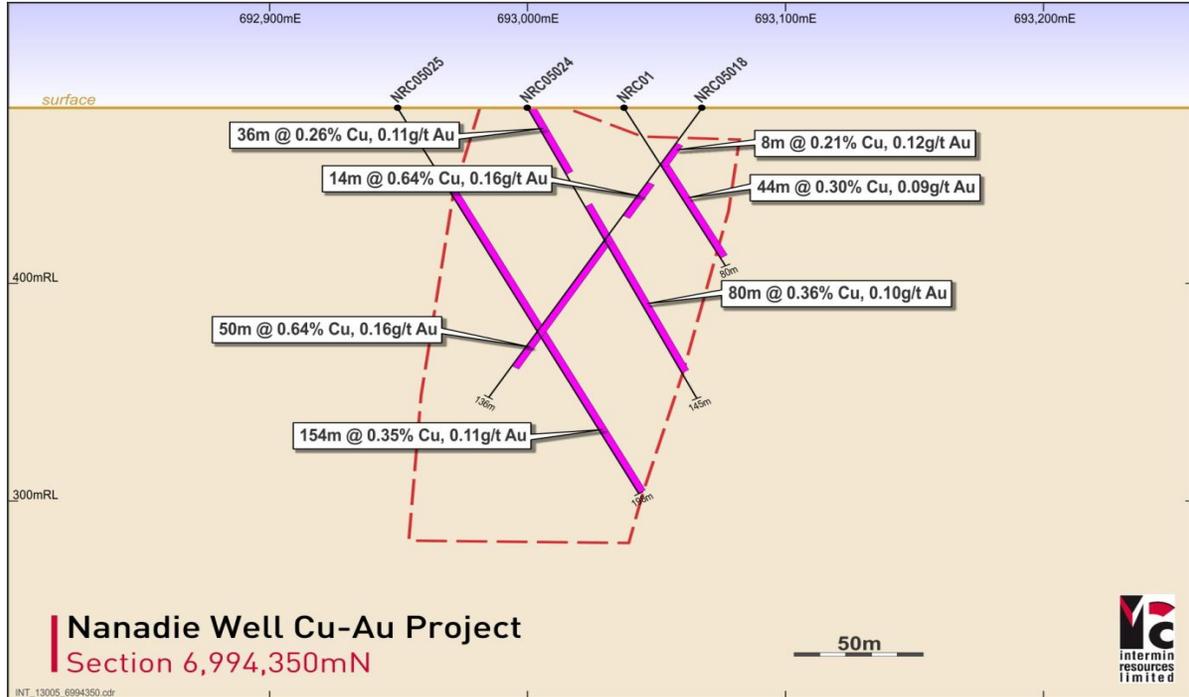
Hole Number	Easting (m)	Northing (m)	Dip °	Azimuth °	From (m)	To (m)	Interval (m)	Cu %	Au g/t
NRC05018	692927	6994199	-60	270	42	44	2	1.65	0.15
NRC05019	692902	6994604	-60	270	33	34	1	1.50	0.42
NRC05020	692900	6994700	-60	270	33	37	4	1.25	0.34
					38	52	14	2.16	0.55
					39	41	2	6.96	1.93
					49	50	1	3.44	0.46
					32	33	1	2.15	0.02
NRC06	692937	6994991	-60	090	28	29	1	4.35	0.26
NRC06125	692941	6994997	-60	270	44	47	3	1.46	0.382
NRC11001	693040	6994307	-60	270	11	12	2	1.08	0.01
NRC11003	693041	6994674	-60	090	32	33	1	3.90	0.03
NRC11005	693021	6994902	-60	270	25	27	2	1.66	0.01
NRC12001	693040	6994640	-60	090	37	43	6	1.50	0.02
NRC12015	693043	6994604	-60	090	20	24	4	1.65	0.01
NRC12030	693085	6994720	-60	090	14	15	1	1.65	0.09
NRC12032	693080	6994740	-60	090	30	33	3	2.14	0.21
NRC12036	692993	6994900	-60	090	24	25	1	6.86	1.61
NRC12037	692895	6994975	-60	090	26	27	1	1.54	0.24

The geology at Nanadie shares some characteristics with other Archean VMS deposits in having a polymetallic nature (Cu-Au-Ag-Zn). At Nanadie, Au-Ag-Zn values are elevated (anomalous) but not ore grade. Typically, sulphide abundance correlates with increased silica/chlorite/sericite alteration, but the foliation tends to be variably developed, suggesting shear zones also have an important role in the mineralisation. IRC plan to follow this up and develop an improved geological model.

The bulk of the mineralisation is constrained within a 0.1 Cu % outline, which overall appears to be vertical/steeply dipping, mostly to the west (Figure 2). A number of deep RC holes highlight the extent of the low grade, bulk mineralisation and are shown in Table 3:

**Figure 2**

**Section 6994350mN with 1000 ppm Cu outline**



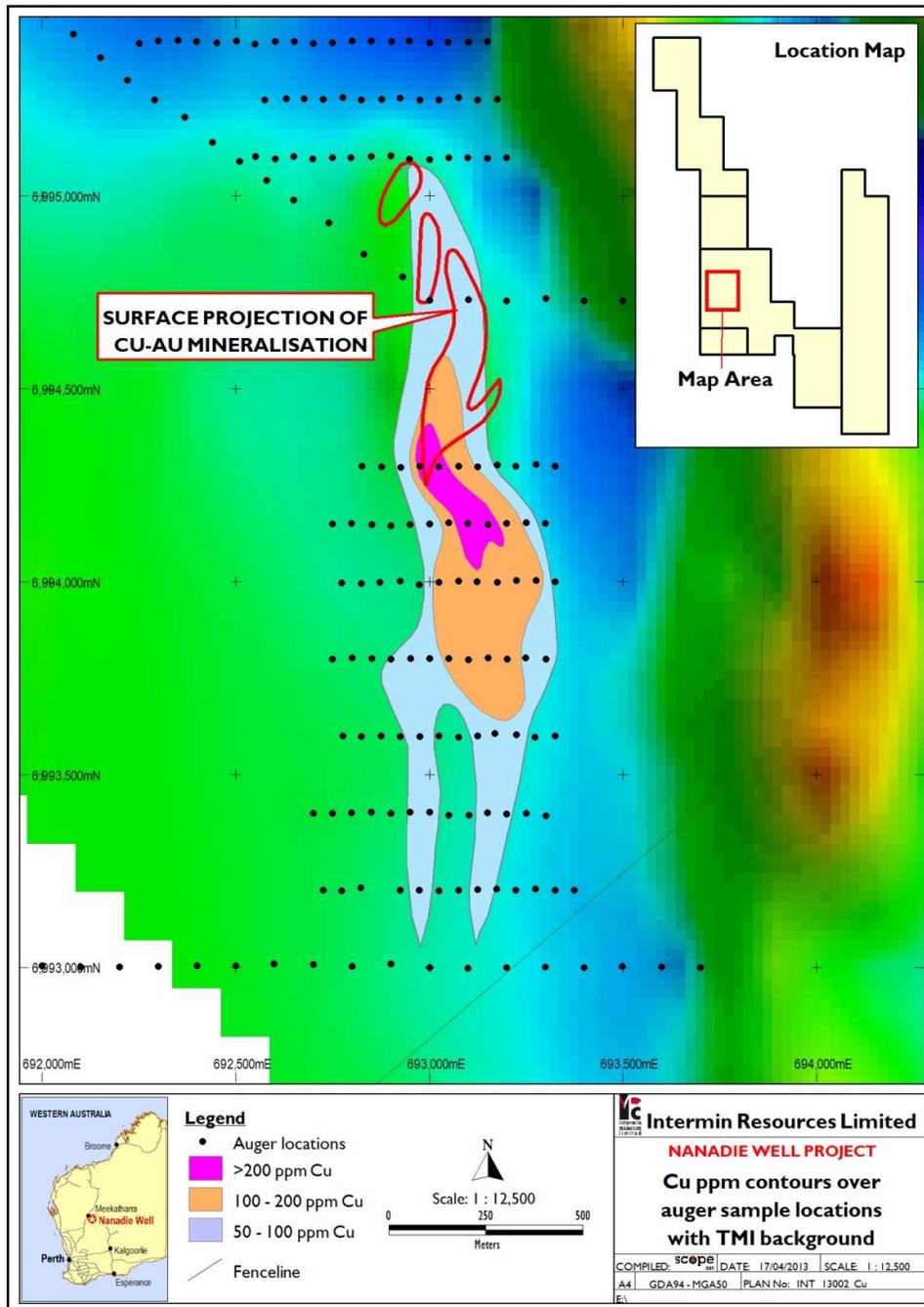
**Table 3**

**Significant Bulk Intercepts – Nanadie Well Prospect**

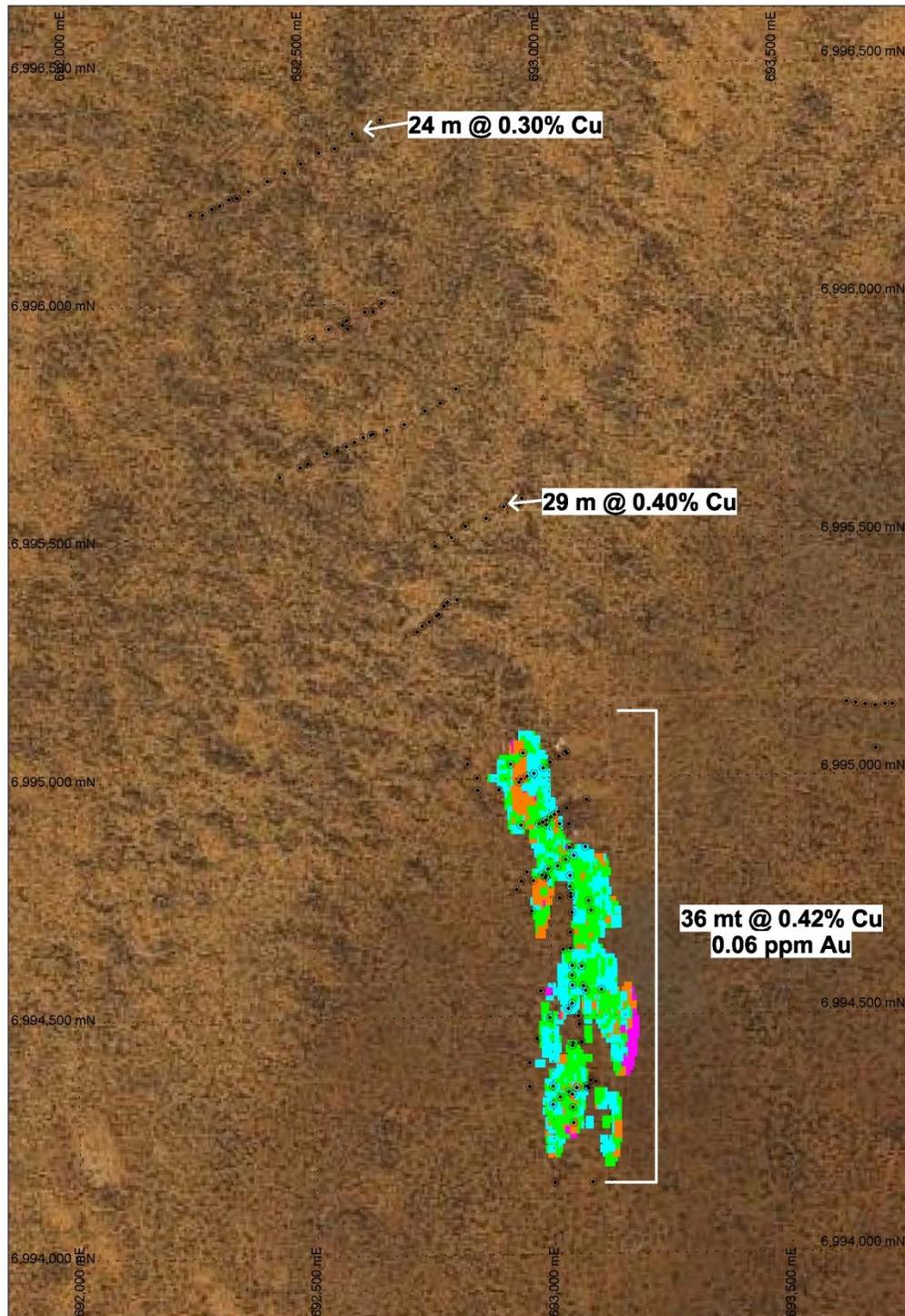
Hole Number	Easting (m)	Northing (m)	Dip °	Azimuth °	Depth (m)	From (m)	To (m)	Interval (m)	Cu %	Au g/t
NRC4011	693079	6994953	-60	270	234	167	234	67	0.41	0.14
NRC4012	693039	6995051	-60	270	204	114	204	90	0.32	0.09
NRC5016	693071	6994551	-60	270	142	76	142	66	0.39	0.12
NRC5017	693104	6994553	-60	270	172	94	134	40	0.58	0.17
NRC5018	693068	6994351	-60	090	136	79	129	50	0.64	0.16
NRC5019	693043	6994756	-60	270	176	108	140	32	0.83	0.20
NRC5020	693041	6994852	-60	270	154	8	113	105	0.76	0.22
NRC5025	692950	6994352	-60	090	198	44	198	154	0.35	0.11
NRC5026	692967	6994452	-60	090	150	44	72	28	0.85	0.30
NRC5027	692951	6994802	-60	090	200	92	200	108	0.30	0.07
NRC6123	692976	6994552	-60	090	166	68	166	98	0.46	0.12
NRC6125	692941	6994997	-60	270	138	16	132	116	0.46	0.01
NRC11003	693041	6994674	-60	270	154	4	154	150	0.52	<0.01
NRC11004	693043	6994748	-60	270	140	24	128	104	0.66	<0.01
NRC12001	693040	6994640	-60	090	166	0	160	160	0.36	<0.01
NRC12011	693019	6994746	-60	090	160	24	152	128	0.51	<0.01
NRC12013	693045	6994715	-60	270	160	4	160	156	0.69	<0.01
NRC12014	693025	6994638	-60	090	160	4	160	156	0.48	<0.01
NRC12015	693043	6994604	-60	090	160	0	156	156	0.70	<0.01
NRC12019	692940	6994900	-60	090`	160	84	160	56	0.65	<0.01
NRC12026	693041	6994770	-60	090	150	0	132	132	0.36	<0.01
NRC12031	692990	6994790	-60	090	168	90	161	71	0.36	0.04

The resource is open at depth, to the north and south. Auger work undertaken in 2012 indicates that the Nanadie resource occurs in a largely untested anomalous zone at least 2km long (Figure 3). Furthermore several shallow historic drill holes up to 1.0km along strike (north) have hit anomalous widths of disseminated mineralisation typical of Nanadie (Figure 4). It's believed that transported clays obscure much of this area.

**Figure 3**  
Cu ppm auger contour plan

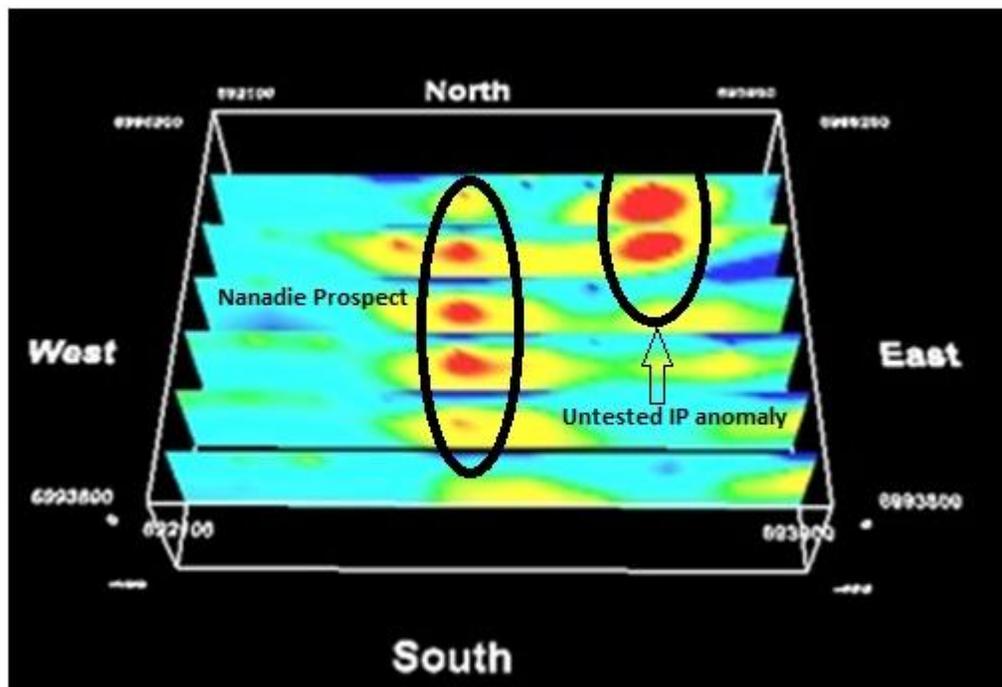


**Figure 4**  
Google earth map showing location of Nanadie  
OBM and RC/RAB hole location



An IP survey completed in 2004 highlighted two parallel chargeable anomalies, including a western one at Nanadie (250m vertical depth) and another larger anomaly 500m east where there has been little drilling (Figure 5). The western anomaly suggests that sulphide mineralisation increases at depth around 6994800mN. IRC drill holes have only intersected the periphery of this area and bottomed in good mineralisation. Both targets offer considerable exploration and resource potential.

**Figure 5**  
**IP pseudo sections 6994000N-6995000N**



IRC intends to follow up the results to date with further exploration and resource drilling, in particular areas of shallow, high grade copper oxide, diamond tails for deeper mineralisation, strike extensions and follow up of parallel structures. An application for a mining lease will be submitted in due course.

**Michael Ruane**  
**Director**

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**Notes**

**1. Intermin Resource Estimation Methodology for the Nanadie Resource (Inferred)**

Drillhole data used in the Nanadie Resource Estimate comprised a total of 88 reverse circulation drill holes for 9384 metres drilled along a portion of the interpreted strike length of the deposit (1,040 metres). Drill hole spacing was at nominal 40-50 metre centres with holes approximately 20-30 metres apart on each section.

Analysis was completed on all mineralised intervals at standard one metre intervals by reputable laboratories in Perth, Australia.

Drill Holes surveys by GPS was completed (+/- 5 metres). A bulk density of 2.60g/cm<sup>3</sup> was applied to all material based on local knowledge.

Interpretation on section was completed with the outlines wireframed together to form coherent validated shapes at a nominal 0.1 % copper. The grade estimation methods was ID2 of values lying within validated wireframes (solids) with only the numbers from the individual wireframes/solids used for the interpolation.

Parent block sizes were set at 5m (x), 10m (y) and 5m (z), with the sub-cell size down to half of the parent cell size. The resource estimate has been classified based on data density, data quality, confidence in the geological interpretation and confidence in the estimation.

This ASX release has been compiled by Michael Ruane using information on exploration results supplied by Mr David O'Farrell and Mr Simon Coxhell. David O'Farrell and Simon Coxhell are both members of the Australian Institute of Mining and Metallurgy with sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserve". Mr David O'Farrell and Mr Simon Coxhell consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.