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ASX ANNOUNCEMENT **5 February 2025**

Updated Maroochydore Copper-Cobalt Resource Demonstrates Large Copper Sulphide System with 1.6Mt Contained Copper

Cyprium Metals Ltd (ASX: CYM / OTCQB: CYPMF) (**Cyprium** or the **Company**), a copper developer focused on recommencing production at the Nifty Copper Complex in the Paterson region of Western Australia (**Nifty**), has upgraded its mineral resource estimate for its 100% owned Maroochydore Copper-Cobalt Project (**Maroochydore**). The Maroochydore project is also located in the Paterson region of Western Australia, 81km from the Nifty Copper Complex.

Highlights of the Resource Upgrade include:

- **Inferred resources of 370,800,000 tonnes at 0.43% Cu and 227 ppm Co for 1,595,000 contained copper and 84,000 tonnes contained cobalt at 0.25% Cu cut-off grade.**
- **Higher-grade zone contained within the inferred resource of 106,300,000 tonnes at 0.67% Cu and 308 ppm Co for 712,000 tonnes contained copper and 33,000 tonnes contained cobalt at 0.45% Cu cutoff grade.**
- **Sedimentary copper mineralisation style demonstrating significant continuity of mineralisation and resource scale - similar geology to nearby Nifty Copper Complex.**
- **Higher grade domain will be further studied as satellite feed operation to Cyprium's nearby Nifty mill and concentrator in the Paterson district.**

Cyprium Executive Chair Matt Fifield commented: "*Maroochydore has seen little attention over the last decade - previous work was focused on the near-surface copper oxide mineralization. Cyprium recognised the same sedimentary copper mineralisation style that we have at Nifty and turned our attention to the potential of the copper sulphide resource. We remodelled the historic resource from first principles and included an additional 19,456 meters of core and RC drilling that was available.*

The results are clear – Maroochydore is a very large, near-surface sulphide resource with a higher-grade zone that has high potential to be a medium-term expansion project for Cyprium. An important moment for Cyprium, and a potential meaningful source of Australian copper and cobalt."

Resource Tables

Table 1: Maroochydore January 2025 Inferred Mineral Resource Estimate, by mineralisation category, ≥0.25% Cu Cutoff.

Oxidation	Resource Tonnes t	Cu% (cut)	Cu Metal (Contained t)	Co ppm (cut)	Co Metal (Contained t)
Oxide	42,190,000	0.52	219,000	385	16,000
Transitional	55,500,000	0.51	283,000	272	15,000
Sulphide	273,150,000	0.39	1,065,000	193	53,000
Total	**370,840,000**	**0.43**	**1,595,000**	**227**	**84,000**

0.25% Cu cutoff. Metal grades take into account top and bottom cut. Numbers are rounded to reflect a suitable level of precision and may not sum due to rounding. The reported contained metal is not the same as a "recoverable" or "marketable" amount, as recovery rates and other factors can influence how much metal can be extracted. See accompanying technical report for additional details and important disclosures.

Table 2: Maroochydore January 2025 higher grade domain by mineralisation category, ≥0.45% Cu Cutoff.

Oxidation	Resource Tonnes t	Cu% (cut)	Cu Metal (Contained t)	Co ppm (cut)	Co Metal (Contained t)
Oxide	21,500,000	0.69	148,000	504	11,000
Transitional	26,300,000	0.70	184,000	305	8,000
Sulphide	58,500,000	0.66	386,000	238	14,000
Total	**106,300,000**	**0.67**	**712,000**	**308**	**33,000**

0.45% Cu cutoff. Metal grades take into account top and bottom cut. Numbers are rounded to reflect a suitable level of precision and may not sum due to rounding. The reported contained metal is not the same as a "recoverable" or "marketable" amount, as recovery rates and other factors can influence how much metal can be extracted. See accompanying technical report for additional details and important disclosures.

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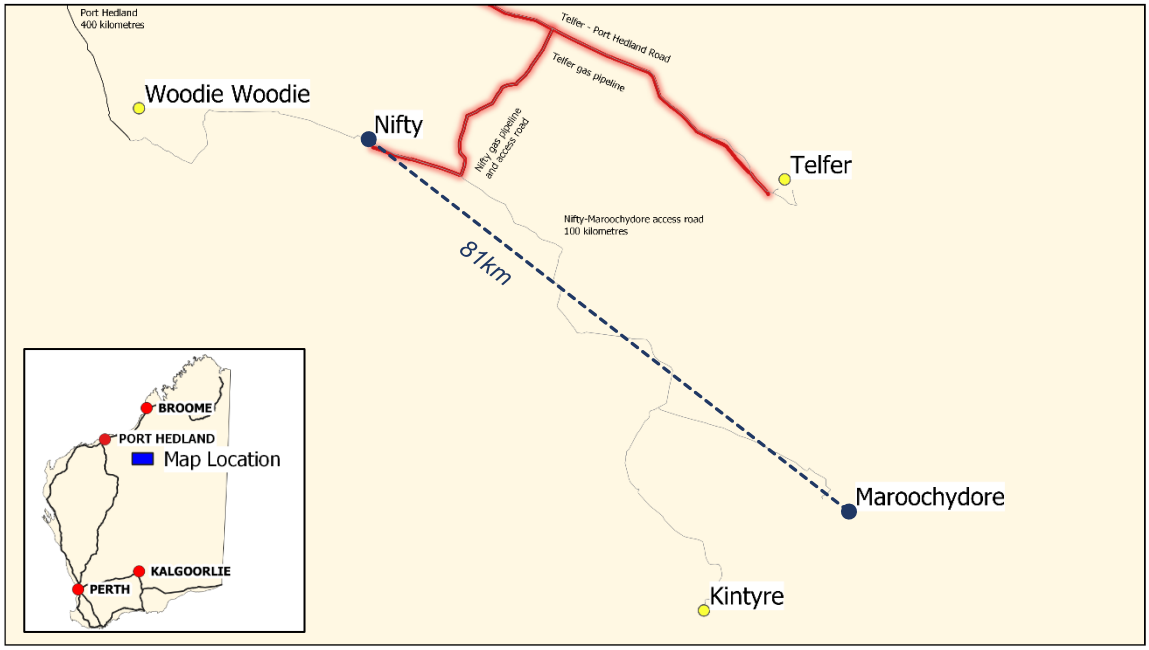
Updated Resource Model Shows Near-Surface, Flat-lying Sedimentary Copper System

Maroochydore is a sediment-hosted deposit type located in the Paterson region of Western Australia. The project is 81km by air and ~100km by unsealed road from Cyprium's Nifty Copper Complex.

Figure 1: Maroochydore general location and regional infrastructure

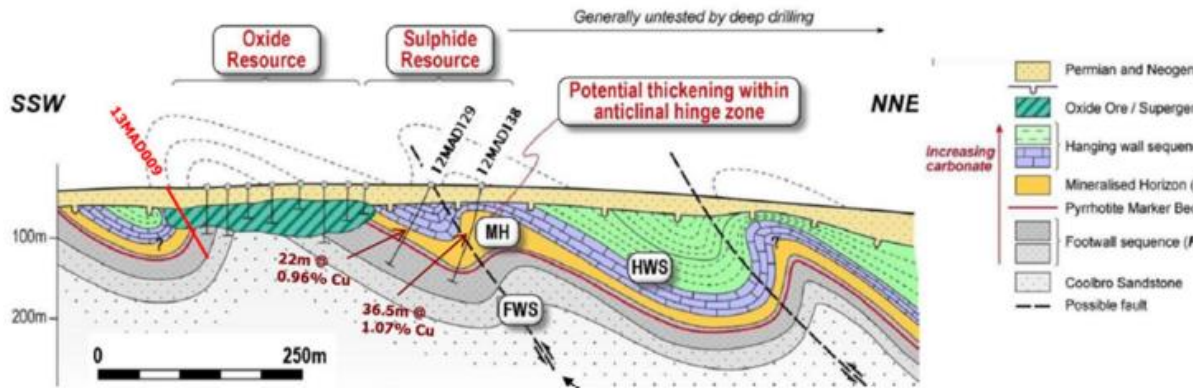


Stratigraphy at Maroochydore is part of the Broadhurst Formation (Yeneena Group) similar to the nearby Nifty Copper Complex.

The deposit is a mixture of oxide/supergene and primary sulphides. The upper resources are dominated by oxide and transitional materials hosted in the 50 to 100m thick mineralised horizon consisting of carbonaceous shales and recrystalised dolostones.

The structural framework that hosts the mineralised sequence is less restricted than what is found at Nifty, which leads to Maroochydore's more extensive and diffuse mineralisation system. Current mineralised material is defined over a strike length of ~7km and is shallow, with cover varying from 20m depth at the south-eastern end to 80m depth at the north-western end, and relatively flat lying.

Figure 2 – Maroochydore Conceptual Geology



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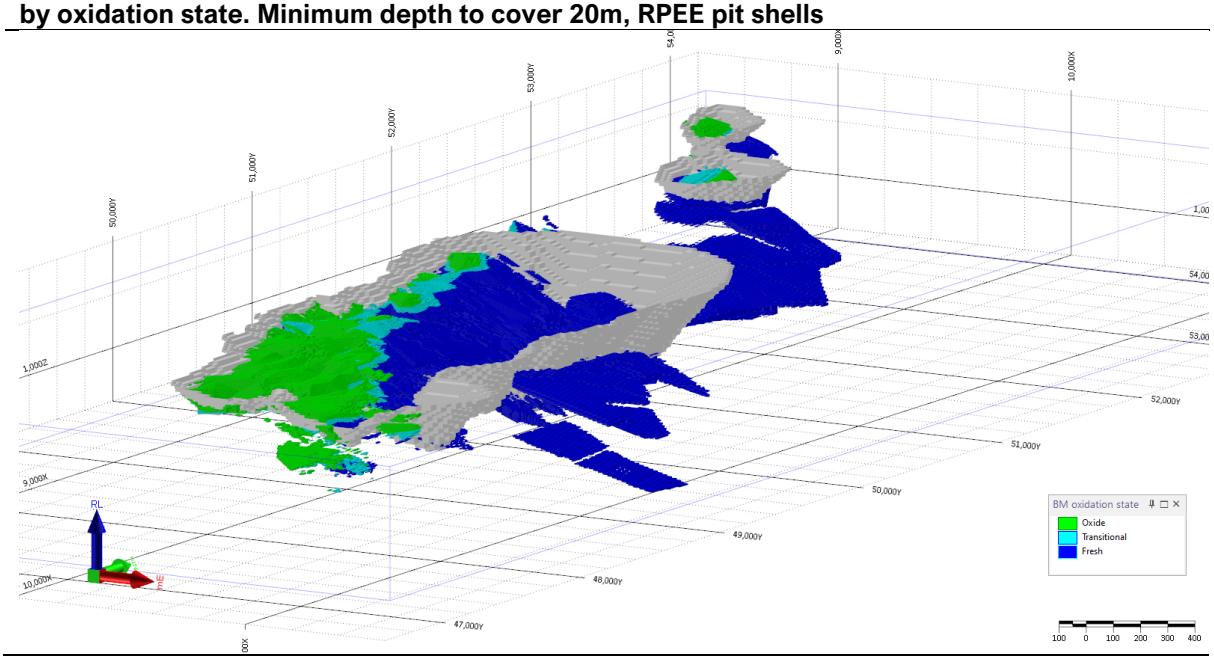
Large Continuous Sulphide Resource Underlying Shallow Oxide Cap

Earlier resource assessments on Maroochydore were focused on defining resources from oxidized copper mineralisation that can be processed via heap leach method. This is consistent with early regional exploration programs and development concepts which focused on finding analogues to the nearby Nifty Copper Complex which began operations with a higher-grade heap leach operation.

Later drilling programs in 2014, 2019 and 2021 targeted further extensions of the known oxide areas as well as also additional data about sulphide mineralisation found down dip from the oxides. Approximately 19,500 meters of RC and core drilling was undertaken since the last mineral resource estimate on Maroochydore, but due to multiple changes in ownership and budgetary constraints, the resulting information from these drill campaigns was not incorporated into a new resource model until now. The 2025 mineral resource estimate is based on 1,299 drillholes for 110,379 meters of drilling information.

Figure 3 shows an oblique view of the 2025 mineral resource estimate at a 0.25% cut off grade with 371 million tonnes of predominately sulphide material at 0.43% Cu. Figure 3 also shows the conceptual pit shells that define created to define the reasonable prospect of economic extraction (**RPEE**) required to define a resource under the JORC Code.

Figure 3 – Oblique view of Maroochydore mineralised material at 0.25% Cu cutoff grade by oxidation state. Minimum depth to cover 20m, RPEE pit shells



The 2025 Maroochydore MRE defines a substantial copper sulphide resource that lays down-dip of previously identified oxide mineralisation. Table 1 above shows that of the 381 million tonnes of resource, 273 million tonnes or 74% are primary sulphide minerals, and 56 million tonnes or 15% are transitional copper mineralisation. Figures 4 and 5 below show the Maroochydore resource in cross-sectional view by oxidization state.

Figure 4 – 2025 Maroochydore MRE block model by oxidation state at 49,200N section

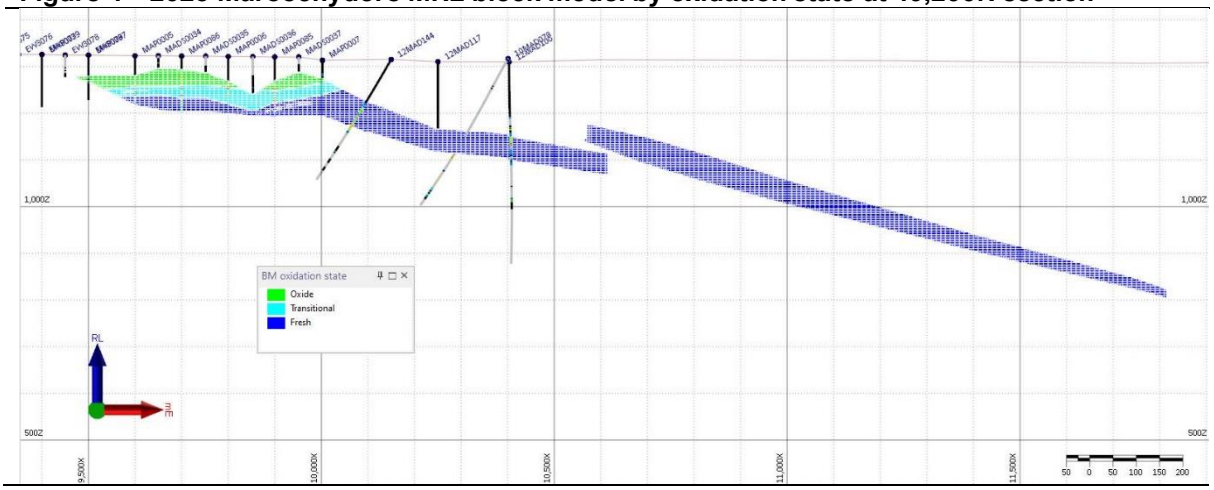
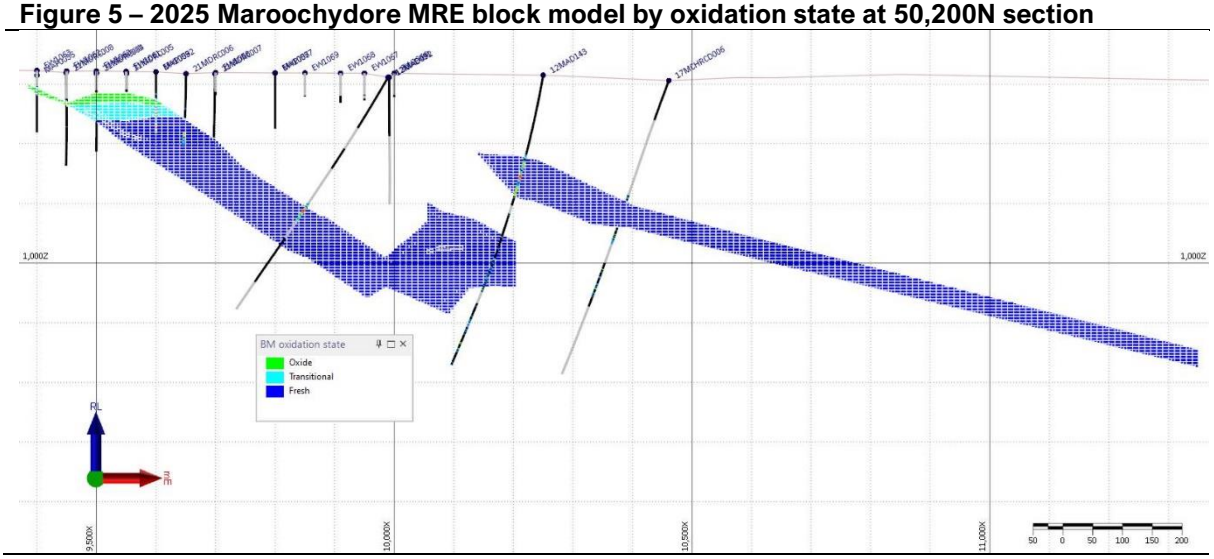


Figure 5 – 2025 Maroochydore MRE block model by oxidation state at 50,200N section



The dominant sulphide mineralisation of the Maroochydore resource means that the most conventional processing and recovery method will be through milling and floatation in a concentrator.

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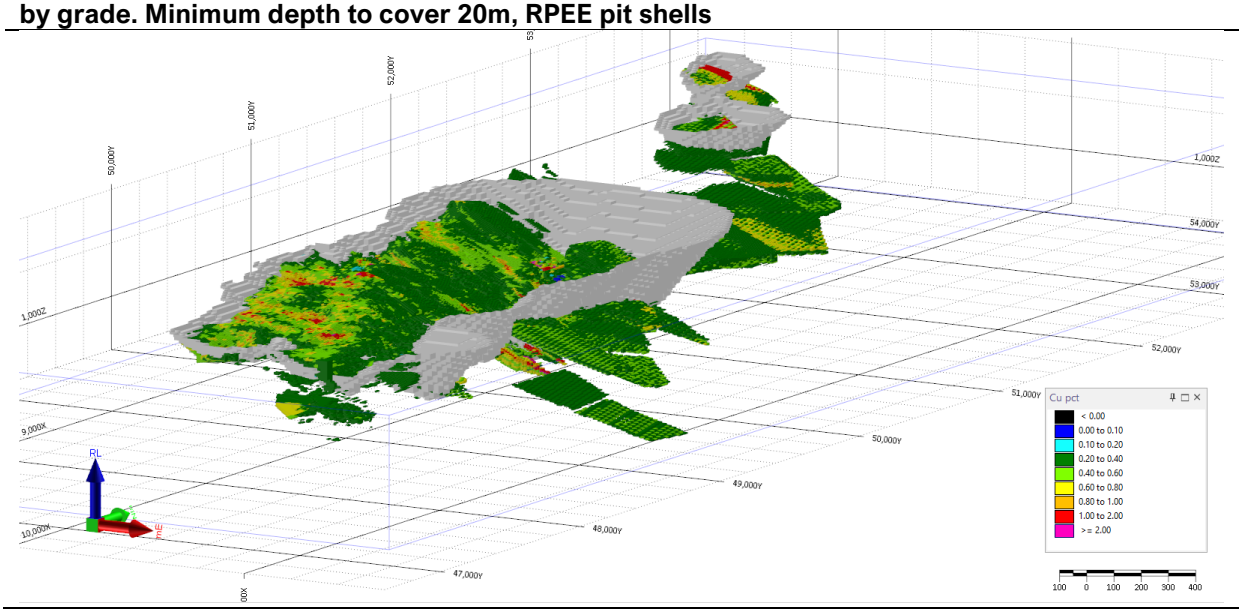
Large Higher-grade Resource Zone within Inferred Resource

Figure 6 below shows the Maroochydore resource block model at a 0.25% Cu cutoff grade, which is the resource cutoff grade used at the nearby Nifty Copper Complex[1]. The resource, of which 100% is categorised at as inferred, demonstrates the lateral continuity of mineralisation and strata-bound nature of the sedimentary copper ore body. Per Table 1, the inferred resource is 371 million tonnes at an average grade of the 0.43% copper.

Within this resource, a substantial zone can be determined using a higher cutoff grade of 0.45% Cu. See Figures 6 and 7 for a comparison of the resource block model at the two cutoff grades.

At this higher cutoff grade, the inferred resource is 106 million tonnes at 0.67% Cu and 300ppm Co, containing 712,000 of copper metal and 33,000 tonnes of cobalt.

Figure 6 – Oblique view of Maroochydore inferred resource at 0.25% Cu cutoff grade by grade. Minimum depth to cover 20m, RPEE pit shells



[1] See ASX Announcement "Updated Nifty Mineral Resource Reaches 1 Million Tonnes Contained Copper" made on 14 March 2024, https://investorhub.cypriummetals.com/announcements/6245817

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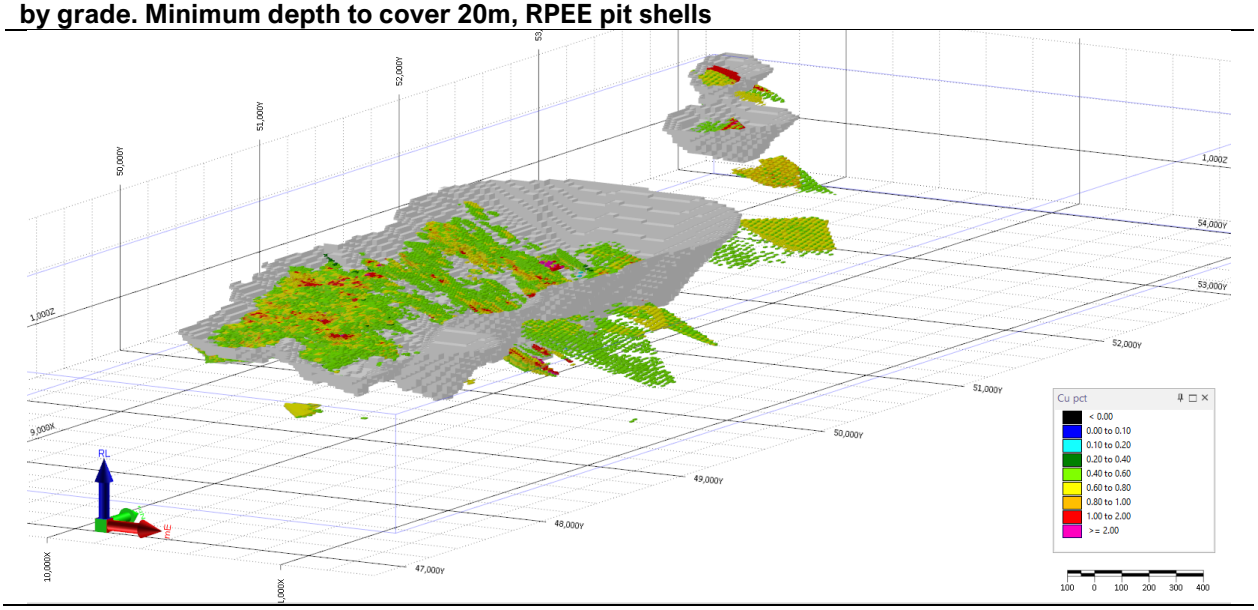
Figure 7 – Oblique view of Maroochydore inferred resource at 0.45% Cu cutoff grade by grade. Minimum depth to cover 20m, RPEE pit shells



Executive Chair Fifield concluded:
"By going back to first principles and challenging status quo thinking we have defined a large, shallow and flat copper sulphide resource with a higher-grade zone. There's more work that can be done with the existing data. It's very clear that this resource has the potential to support a large-scale operation. We will do further work to determine how to incorporate this and build off our existing copper processing infrastructure in the Paterson. Yet another step towards building Australia's next great copper company."

The accompanying Mineral Resource Estimate completed by MEC advisory is attached and can also be found at www.cypriummetals.com/investor-centre/asx-announcements.

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This release has been approved by the Cyprium Board of Directors.

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About Cyprium Metals Limited

Cyprium Metals Limited (ASX: CYM) is an ASX-listed Australian copper company. Its flagship property is the Nifty Copper Complex in Western Australia, which previously produced significant copper from both oxide and sulphide resources. Cyprium is focused on redeveloping Nifty, which has the advantage of significant invested capital, data from a long operating history, large-scale resources, current operational approvals, and recent investment in the property.

The Company's other assets include significant copper-focused properties in the Paterson and Murchison Provinces, including multiple defined resources.

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Competent Person

The information in this report that relates to the estimation and reporting of the Maroochydore Mineral Resource Estimate dated 4 February 2025 is an accurate representation of the recent work completed by MEC Advisory Pty Ltd. Mr Dean O'Keefe has compiled the work for MEC Advisory and is Manager of Resources for MEC Mining and a Fellow of the Australasian Institute of Mining and Metallurgy (#112948). Mr O'Keefe 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 O'Keefe consents to the inclusion in the release of the matters based on this information in the form and context in which it appears.

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Mineral Resource Estimation Memorandum

Maroochydore deposit; Western Australia

Cyprium Metals Ltd

January 2025

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1 EXECUTIVE SUMMARY

MEC was commissioned by Cyprium Metals Ltd (Cyprium) in October of 2024 to complete a Mineral Resource estimate (MRE) of the Maroochydore project and to report the MRE in compliance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code 2012 Edition).

The MEC January 2025 Maroochydore MRE reported by oxidation state above a 0.25% Cu cutoff grade and topcut Cu grade of 12% is shown in **Table 1-1**. The Co topcut grade was 5,000ppm. All MRE are classified as Inferred Mineral Resources.

Table 1-1: Maroochydore MEC January 2025 Mineral Resource Estimate by oxidation state, Cucut% ≥0.25%

OXIDATION	DENSITY t/m3	TONNES t	Cucut%	Cu%	Cocut ppm	Co ppm
OXIDE	2.20	42,190,000	0.52	0.54	385	416
TRANSITIONAL	2.50	55,500,000	0.51	0.53	272	286
FRESH	2.74	273,150,000	0.39	0.40	193	193
TOTAL	2.63	370,800,000	0.43	0.44	227	233

Numbers are rounded to reflect a suitable level of precision.
Numbers may not sum due to rounding.

The MEC January 2025 Maroochydore MRE reported by oxidation state above a 0.45% Cu cutoff grade and topcut Cu grade of 12% is shown in **Table 1-2.** The Co topcut grade was 5,000ppm. All MRE are classified as Inferred Mineral Resources.

Table 1-2: Maroochydore MEC January 2025 Mineral Resource Estimate by oxidation state, Cucut% ≥0.45%

OXIDATION	DENSITY t/m^3	TONNES t	Cucut%	Cu%	Cocut ppm	Co ppm
OXIDE	2.2	21,500,000	0.69	0.72	460	504
TRANSITIONAL	2.5	26,300,000	0.70	0.72	292	305
FRESH	2.74	58,500,000	0.66	0.68	238	238
TOTAL	2.55	106,300,000	0.67	0.70	296	308

Numbers are rounded to reflect a suitable level of precision.
Numbers may not sum due to rounding.

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1.1 Location

The Maroochydore Project area is located 85 kilometres east - southeast of the Nifty mining centre, 50 kilometres south of Telfer gold mine and 450 kilometres southeast of Port Hedland. The tenements are located on the western fringe of the Great Sandy Desert in the East Pilbara. Access to Maroochydore from Port Hedland is via sealed highway through the Marble Bar and Rippon Hills roads, then the unsealed Woodie Woodie to Nifty Road, and 4WD tracks from Nifty to the project area (**Figure 1-1**).

Figure 1-1: Maroochydore project location

1.2 Tenements

The Maroochydore tenement package encompasses 140 square kilometres. Tenements are 100% owned by Maroochydore Copper Pty Ltd, in turn a subsidiary private company 100% owned by listed entity Cyprium Metals Ltd and consists of a combination of granted MLs (Mining licences), ELs (Exploration licences) and PLs (Prospecting licences).

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The Maroochydore deposit is situated on pre-native title MLs. Tenure relating to the Maroochydore Project combined reporting group C162/1996 is shown in **Table 1-3.**

Table 1-3: Maroochydore licence tenure

Maroochydore Project			
Lease	Area		Expiry
	Blocks	Hectares	
E45/1840	4		15/04/2025
E45/1841	7		7/04/2025
E45/3011	6		8/04/2026
E45/4318	2		9/01/2027
E45/4319	5		31/03/2026
M45/314		912.3	9/03/2030
M45/315		345.3	9/03/2030
M45/317		996.3	9/03/2030
M45/318		998.6	9/03/2030
M45/492		162.9	11/12/2033
P45/3055		43.0	9/10/2026
P45/3151		76.2	18/04/2025
M45/711		356.0	4/11/2045
M45/712		722.1	4/11/2045
M45/713		708.2	4/11/2045
M45/745		448.9	4/11/2045
M45/746		924.0	Pending survey
TOTALS	**24**	**6,693.5**	

1.3 Project History

Exploration over the Maroochydore area has been completed by numerous companies since the late 1970's (**Table 1-4**). Cyprium Metals Limited acquired the Maroochydore project in March of 2021.

Table 1-4: Exploration History over the Maroochydore Project

Period	Explorer/s	Activity
1978 - 1979	Amax Iron Ore Corp	Rock chip sampling & shallow percussion drilling
1984 - 1986	Esso Australia Ltd	Geophysics, mapping & sampling, RAB, RC & core drilling. Discovery of Maroochydore
1986 - 1988	City Resources Ltd	Data compilation, mapping & surface sampling
1988 - 1989	Chevron Exploration/ City Resources Ltd	Data compilation & thematic mapping. Chevron sold its interest to Barrack Mines Ltd in 1989

1989 - 1991	Barrack Mines Ltd/City Resources Ltd	Data compilation & structural studies. RC drilling. Maiden resource estimate of 14 Mt @ 1.6 % Cu (1% Cu cog). Preliminary mineralogical & metallurgical studies. In 1991 Barrack sold interest to MIM & City Resources sold to Omega Mines.
1991 - 1994	MIM/Omega Mines	Geophysics, mapping, sampling, RC & Diamond drilling. Omega Mines sold to Murchison United Ltd in 1994
1994 - 1996	MIM/Murchison	Diamond drilling. PhD thesis study work. In 1996 MIM sold to Straits Resources Ltd.
1996 - 2003	Straits Resources Ltd/Murchison	Trial MMI survey, RC & Diamond drilling. Updated resource to 138 Mt @ 0.57 % Cu (0.2 % Cu cog) Aditya Birla purchased Straits interest in 2003
2003 - 2009	Aditya Birla/Murchison	Data compilation, geophysics & RC drilling. Studies into mining & metallurgy. Revised resource estimate of 41.2 Mt @ 0.82 % Cu; 0.04 % Co (0.5 % Cu cog) Murchison sold it's interest to Aditya Birla in 2009.
2009 - 2016	Aditya Birla	Geophysics, RC & Diamond drilling. Updated resource estimated **48.6 Mt @ 1.0 % Cu; 0.038 % Co** (0.5 % Cu cog in oxide & 1.5 % Cu cog in Sulphide). Birla's interest was sold to Metals X in 2016.
2016 - 2021	Metals X	Geophysics, RC & Diamond drilling
2021 - present	Cyprium Metals Limited	Cyprium acquired Maroochydore from Metals X on 31 March 2021. Since acquisition Cyprium has drilled 46 resource definition RC holes, 4 water bore holes & 6 diamond holes.

1.4 Regional Geology

The Maroochydore deposit is located in the Paterson Province of the eastern Pilbara, which also contains the Nifty (Cu), Winu (Cu-Au) and Telfer (Au-Cu) deposits. The project lies within the Yeneena Basin, which is bounded to the west by the Archaean Pilbara Craton, to the north and east by the late Carboniferous to early Permian Canning Basin, and to the east and south by sedimentary rocks of the Officer Basin. The Paterson Province is an important region for sediment-hosted copper, and has potential for sediment-hosted lead-zinc mineralisation (**Figure 1-2)**.

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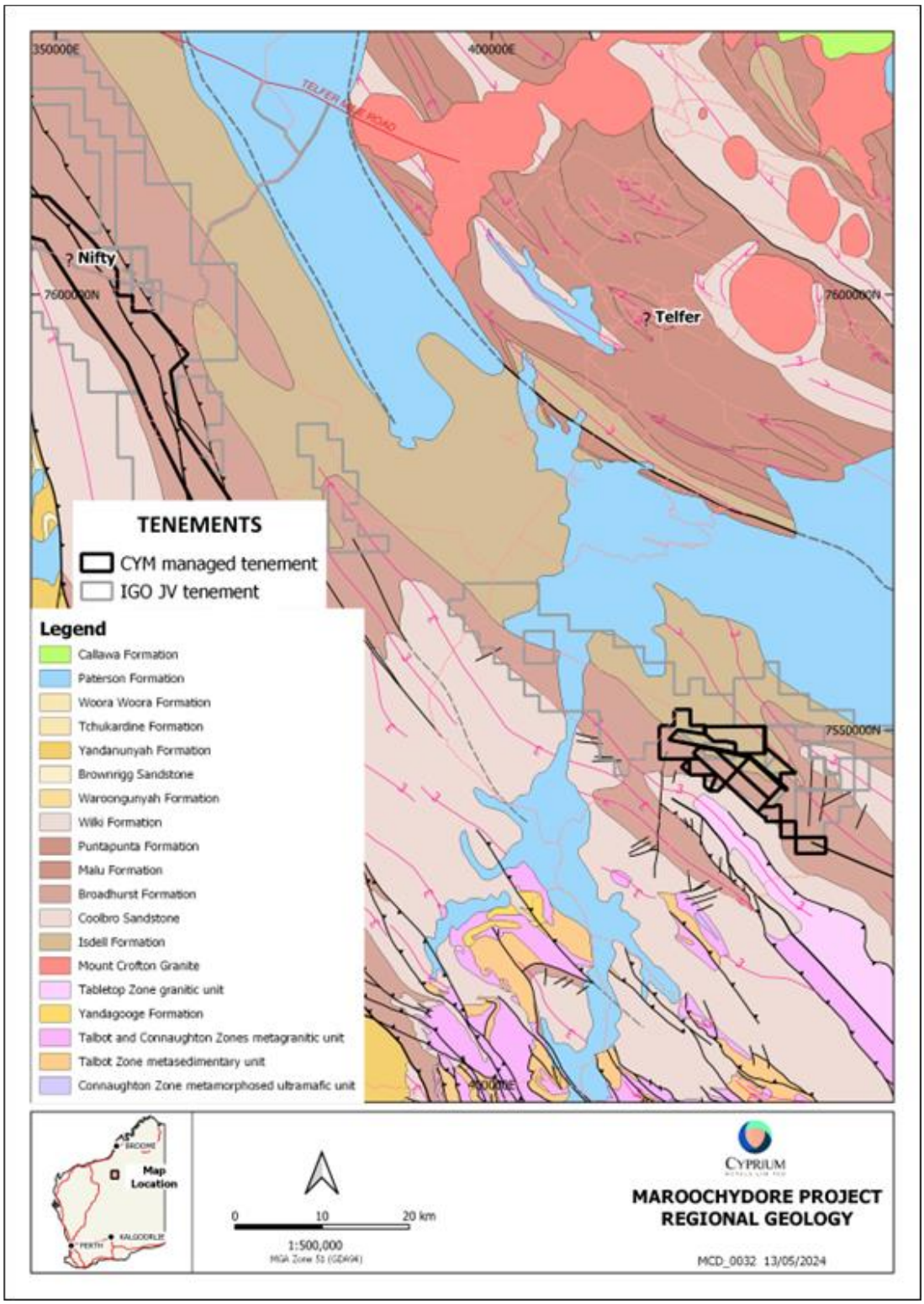

Figure 1-2: Maroochydore project regional geology

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1.5 Project Geology

Four distinct geological units have been identified within the Maroochydore area. These units are the Rudall Metamorphic Complex, the Yeneena Group, Eva Well Intrusives, the Paterson Formation, and Cainozoic cover sequences. A remnant Tertiary peneplain is evident over much of the region associated with widespread laterisation, duricrust and pallid zone development.

Stratigraphy at Maroochydore is part of the Broadhurst Formation (Yeneena Group) and is subdivided into three stratigraphic units comprising the Hangingwall Succession, Mineralised Horizon, and the Footwall Succession.

- The Hangingwall Succession consists of dolomitic and weakly carbonaceous shale with increasing carbonate content towards the top of the sequence and decreasing carbonate/increasing carbonaceous content towards the base of the sequence.
- The Mineralised Horizon sequence averages 75 metres thickness and is subdivided into an Upper Carbonaceous Shale with abundant framboidal pyrite, a Dolostone Sequence comprising recrystallized dolostone, and the Lower Carbonaceous Shale with common framboidal pyrite.
- The Footwall Succession consists of mudstones with interbedded carbonaceous shales intruded by coarsely crystalline differentiated gabbros and dolerites.

Over much of the Maroochydore Project, Broadhurst Formation host rocks are blanketed by transported Permian sedimentary sequences 6 to 120 metres thick, in turn overlain by Cainozoic aeolian sand dunes and drifts. Cainozoic cover varies from 1 to 10 metres in thickness (**Figure 1-3**). A project structural map is shown in **Figure 1-4**.

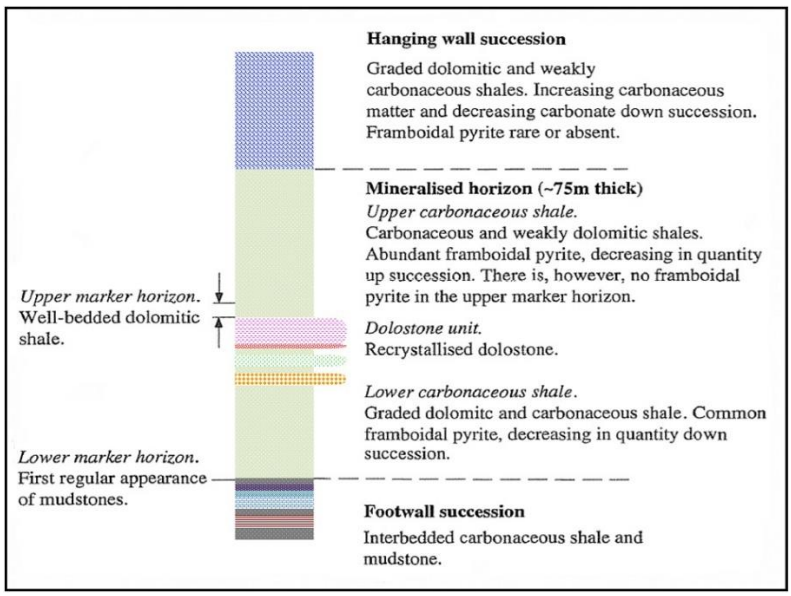

Figure 1-3: Maroochydore Local Stratigraphy

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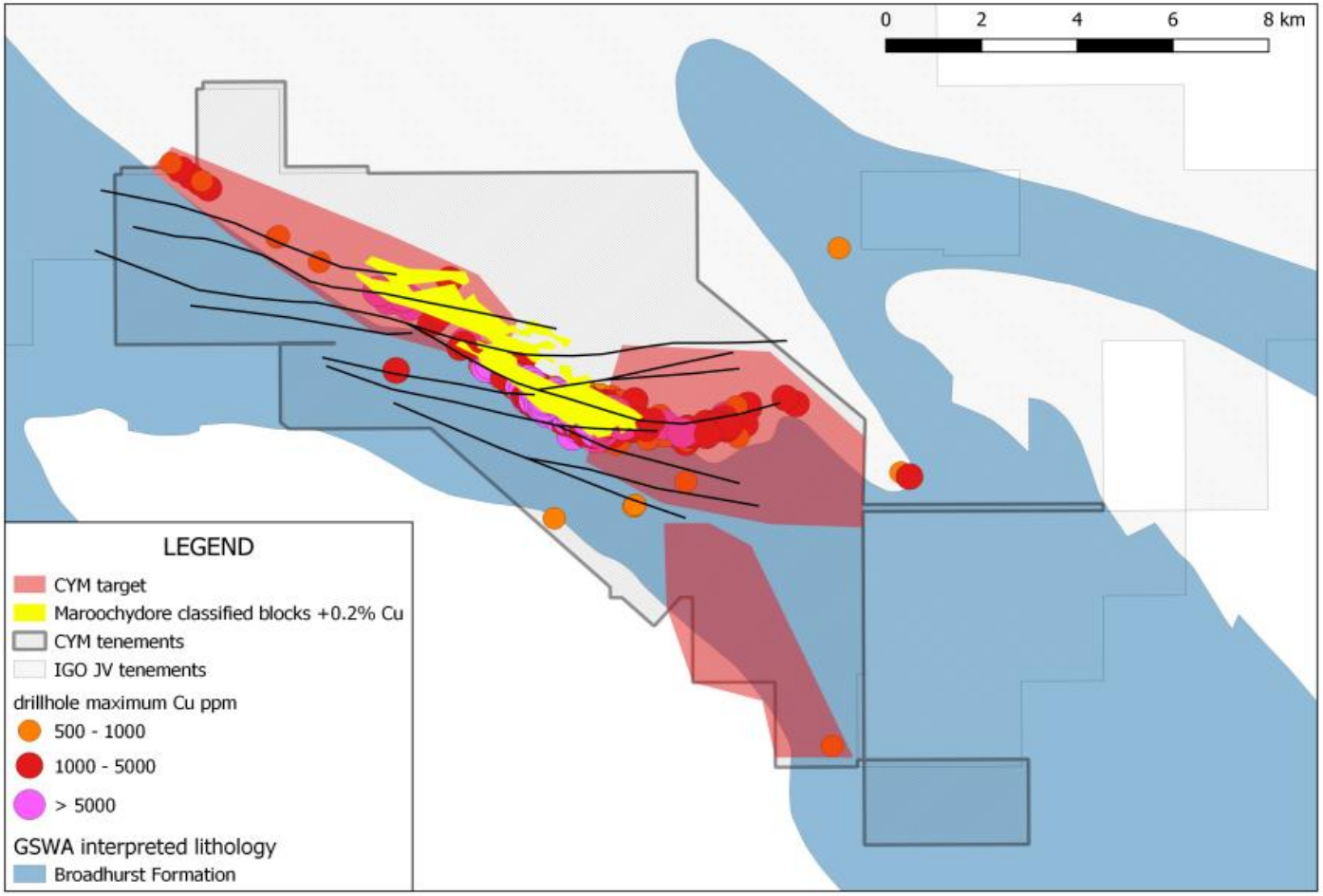

Figure 1-4: Maroochydore structural map with Cu drillhole grades

1.6 Deposit type

Maroochydore is a sediment hosted deposit type that has a less restricted structural framework and host sequence (wide interval of thinly interbedded dolomitic siltstone and shale) than Nifty, which led to formation of a more extensive and diffuse mineralisation system. The upper resources are dominated by oxide and transitional materials hosted in the 50 to 100m thick mineralised horizon consisting of carbonaceous shales and recrystalised dolostones. The deposit is a mixture of Oxide/Supergene and Primary Sulphides and is currently defined over a strike length of ~7km and is under cover varying from 20m depth at the south-eastern end to 80m depth at the north-western end (**Figure 1-5**).

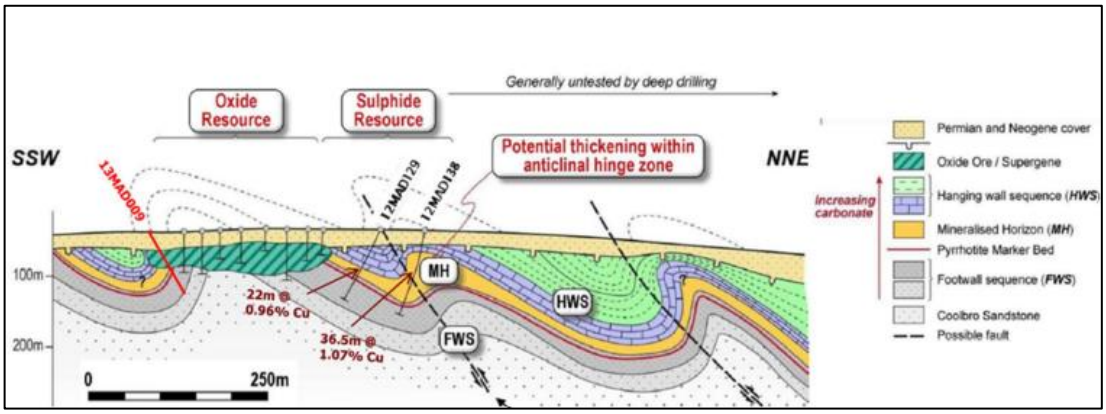

Figure 1-5: Maroochydore conceptual geology

1.7 Drillhole Spacing

The drillhole spacing in the western lode ranges from 50m x 50m increasing to 100m x 100m. The drillhole spacing in the eastern lode ranges from 200m x 200m increasing to 800m x 400m. Many drillholes are shallow, several drill campaigns targeted oxide Mineral Resources (**Figure 1-6**).

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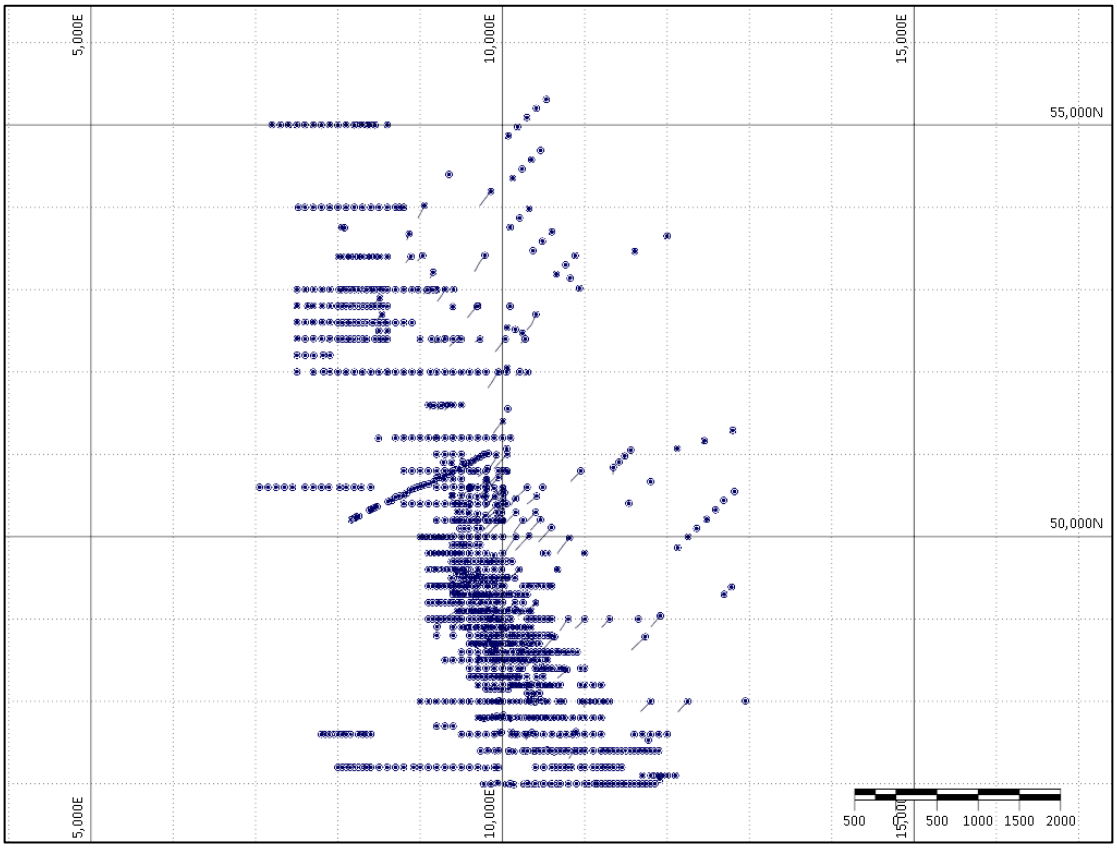

Figure 1-6: Drillhole collar plan

1.8 Database

The database used for the January 2025 MEC MRE includes 1,299 drillholes for 110,379m. Inclusive of 35 Aircore drillholes for 734m, 337 Reverse circulation drillholes for 36,018m, 34 Reverse circulation drillholes with a diamond tail for 13,854m, 112 diamond drillholes for 28,558m, 780 Rotary air blast drillholes for 31,165m, and 1 water bore for 50m (**Table 1-5**).

Table 1-5: Database drill types

Drillhole type	# drillholes	Metre
AC	35	734
RC	328	36,018
RCD	34	13,854
DD	112	28,558
RAB	780	31,165
HWT	1	50
Total	1,299	110,380

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Assay information prior to 2007 is not known, however, the 2014 DataGEO report states that the 2007, 2010 and 2012 drill programs were sent to ALS Chemex Laboratories in Perth for analysis by four acid digest and ICP-OES analysis. Samples from the 2012 drill program were analysed by Genalysis Laboratory services and used four-acid digest and ICP-OES analysis.

The 2021 RC drill program were analysed by Bureau Veritas using Lead Collection Fire Assay and ICP-AES analysis (Scheme FA 002) for Au, Pt and Pd. Analysis of an extended multi-element range was completed using a mixed acid digest (scheme MA200) in combination with analytical schemes MA201 (ICP-AES) and MA202 (ICP-MS) for the various elements. Information relating to detection limits can be sourced from the BV website.

Assay Validation was completed for Cu_pct, Co_pct, and Zn_pct. A total of 11 records with -0.5558, 3 records of -0.5557, and 1 record of -0.5556 for Cu Co and Zn were found on the database. These records are Unassayed intervals. All the records were removed from the database.

A total of 25 records with below detection limits were found in the Assay file for Cu_pct, Co_pct, and Zn_pct. All values below detection limits were changed to half the detection limit value.

1.9 Grid system

The grid system used for the MEC January 2025 MRE is the local Maroochydore grid. The transformation from GDA94 Zone 51 grid to local Maroochydore grid is – Point 1: GDA94 Zone 51 7,545,504.249N to local grid 47,400.00N; GDA94 Zone 51 431,259.409E to local grid 11,800.00E; Point 2: GDA94 Zone 51 7,543,395.306N to local grid 44,399.746N; GDA94 Zone 51 433,391.745E to local grid 11,800.00E.

1.10 Selective sampling

Selective sampling has occurred at Maroochydore where some drillholes were assayed only for logged intervals that were considered potentially strongly mineralised. Where this occurred the nearby fully sampled drillholes were used for interpretation. Where the wireframe lode may have gone through the selectively sampled drillhole where no samples had been taken, to avoid estimation bias a default grade of 0.1 Cu% was used (**Figure 1-7**).

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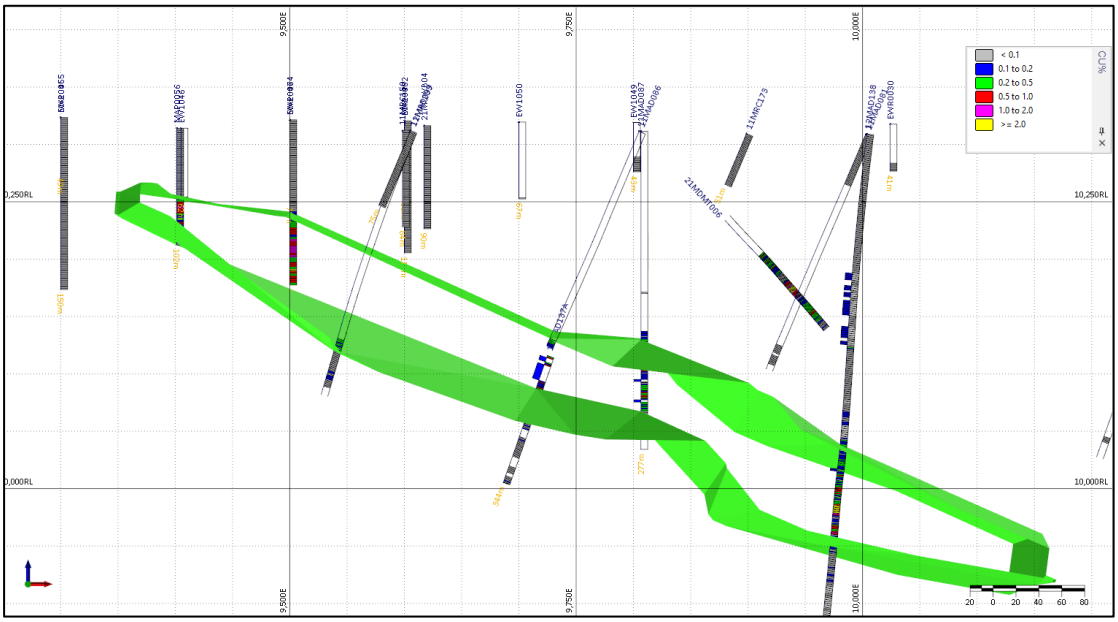

Figure 1-7: Selective sampling Section 50560N, looking north

1.11 Weathering

Weathering layers of oxide, transitional and fresh were modelled from drillhole logging.

2 SITE VISIT

A site visit to the Maroochydore project was completed on 29th of October 2024 by MEC Manager of Resources Dean O'Keefe and MEC Resource geologist Issam Digais, accompanied by Cyprium Metals Ltd Milan Jerkovic (Cyprium Metals Corporate Advisor), Gavin Hammer (Cyprium Metals Nifty site General Manager) and Mark Styles (Cyprium Metals Manager of Exploration). The Encounter camp, the Maroochydore camp, and the drilled project area were visited. Several drillhole collars were found and a handheld GPS was used to check coordinates against provided coordinates. The handheld GPS surveyed coordinates were within ~5m of the planned drillhole collar coordinates.

The Maroochydore project area is shown in **Figure 2-1**.

Drill core at the Maroochydore camp is shown in **Figure 2-2**.

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Figure 2-1: Maroochydore project area

Figure 2-2: Maroochydore project area

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3 QAQC

All provided QAQC data is post 2021. The QAQC data includes certified reference material (CRM or standards) to assess analytical accuracy, blanks to test laboratory hygiene by checking for cross contamination, and sample recovery.

3.1.1 Standards

The performance of standards (Certified Reference Material) is judged on whether the analysed results agree with the expected mean and whether values lie within 3 standard deviations of the mean. Samples outside of 3 standard deviations of the mean are considered to have 'failed'. Standards were inserted across the Maroochydore project by Cyprium. No post 2021 standard results failed. The available standard results are acceptable to the CP.

The GBM321-16 standard is a copper sulphide ore high grade. With Cu grade of 69,389Cu_ppm, and standard deviation of 2,531. The results were acceptable to the CP (**Figure 3-1**).

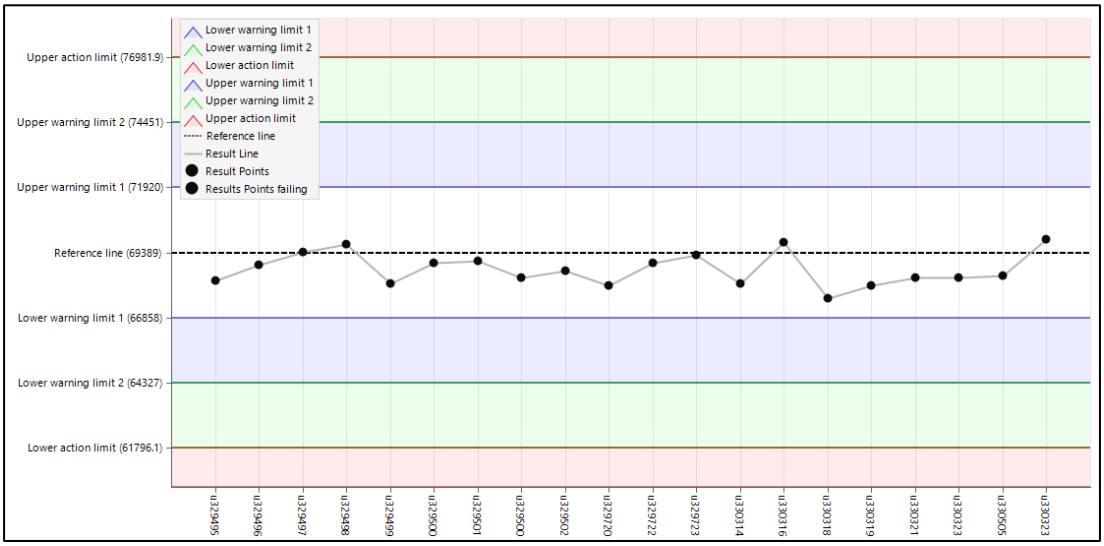

Figure 3-1: Shewhart plot GBM321-16 Cu_ppm standard result

GBM916-2 is described as a zinc, copper, and silver oxide standard. With Cu grade of 1,675 Cu_ppm, and standard deviation of 58, zinc grade 8,792 Zn_ppm with standard deviation of 321, and cobalt grade of 10 Co_ppm with standard deviation of 1. All results for the GBM916-2 standard occurred within warning limit 1 (**Figure 3-2** to **Figure 3-4**).

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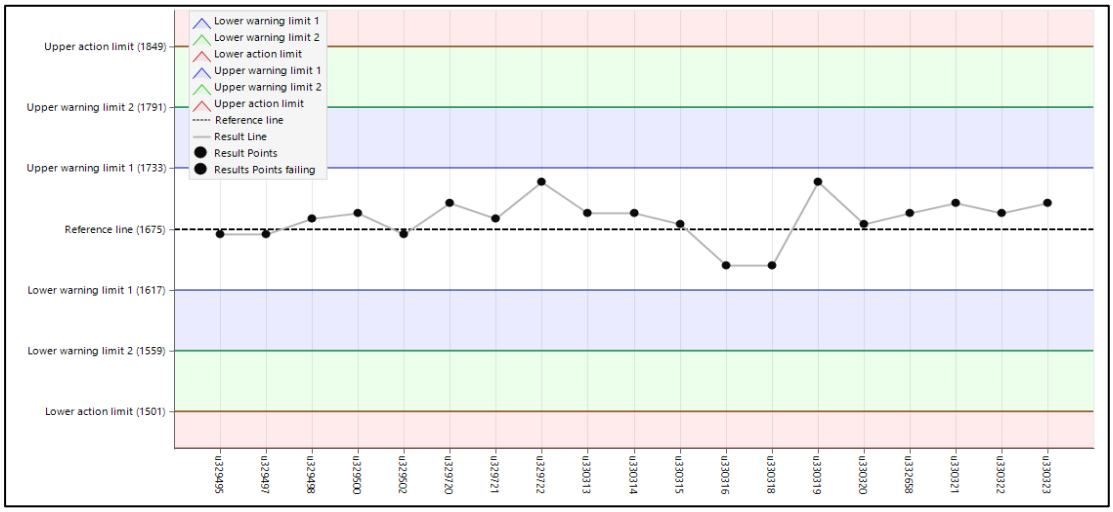

Figure 3-2: Shewhart plot GBM916-2Cu_ppm standard result

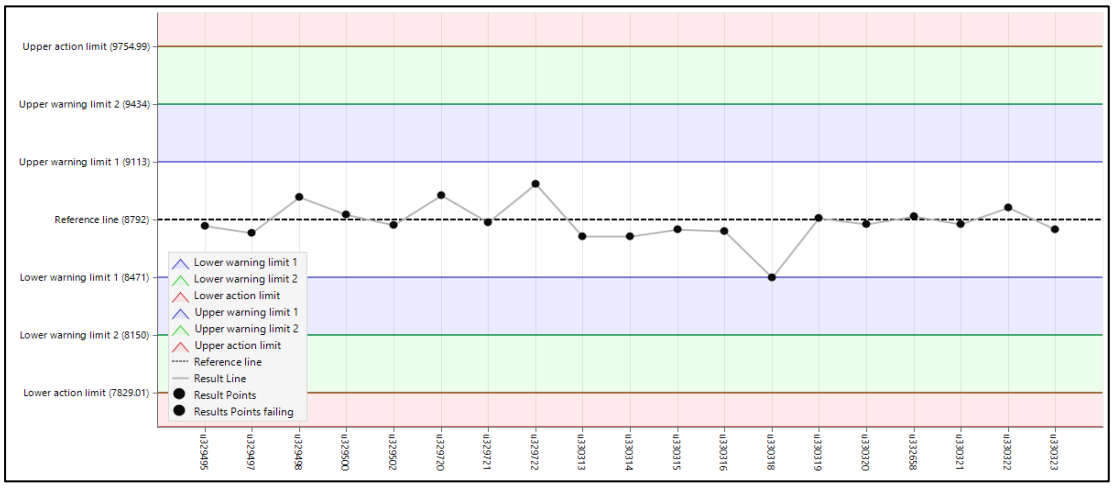

Figure 3-3: Shewhart plot GBM321-16 Zn_ppm standard result

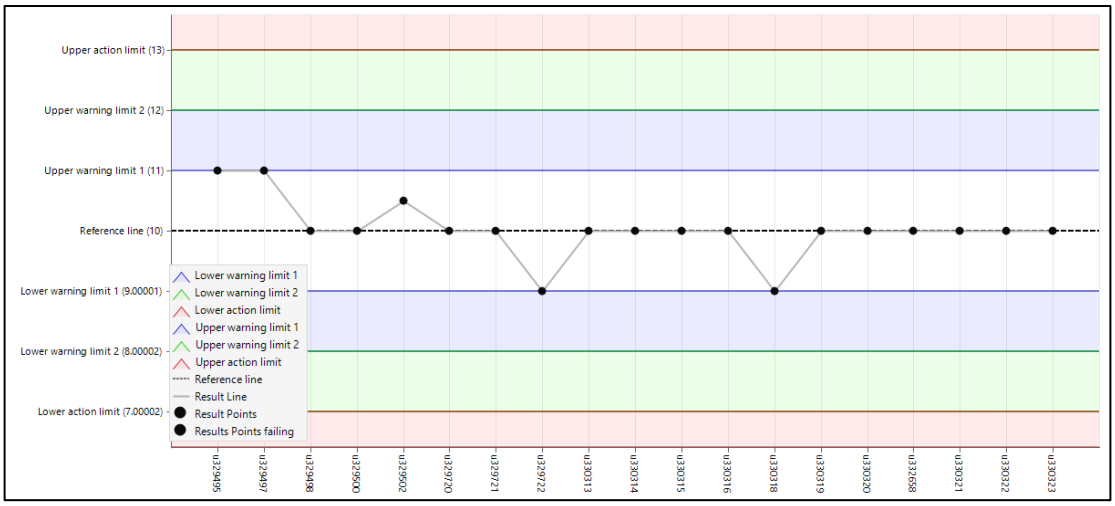

Figure 3-4: Shewhart plot GBM321-16 Co_ppm standard result

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3.1.2 Blanks

Blank samples with no mineralised content are routinely submitted to determine if there is any unexpected grade increase during sample preparation and analysis that may have eventuated from poor laboratory hygiene and sample cross contamination. 70 blanks were inserted by Cyprium and no unacceptable grade increase was returned. (**Figure 3-5**).

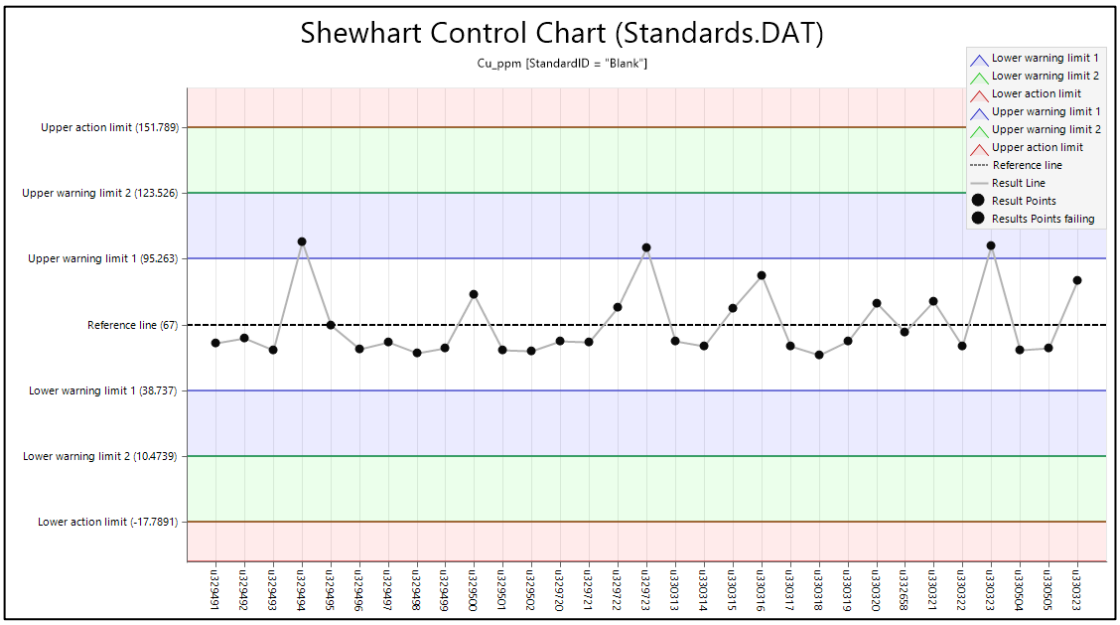

Figure 3-5: Blank Shewhart Chart

3.1.3 Sample recovery

Sample recovery data was recorded for 16 diamond drillholes for 1,254m. Mean sample recovery was 97% .

QAQC results include standards, blanks, and sample recovery post 2021. These results are acceptable for the CP, but are not representative of all drilling and sampling within the deposit.

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4 SAMPLE COMPOSITION

4.1 Sample Composition

Sample intervals were composited to an interval length of 1m using a minimum composite length restriction of 1m with no adjustment for residuals. Assay grades were calculated using a length weighted average. Neither geology nor mineralisation boundaries were used to control the placement of composite intervals.

Composite sample assay values from aircore (AC), reverse circulation (RC), Diamond (DD), and rotary air blast (RAB) were used to complete the interpretation and inform the estimation. A breakdown of assayed composites by drilling method is shown in **Table 4-1**. The spatial distribution of composite samples by drilling method is shown in **Figure 4-1** along with the location of the interpreted copper mineralisation. It is noted that the majority of the RAB drilling composite assays are not within the interpreted copper mineralisation envelope.

Table 4-1: 1m composite assays by drilling method

Drillhole type	# drillholes	# drillhole meters	# assayed composites
AC	35	734	734
RC	442	42,584	36,715
DD	137	34,332	18,265
RAB	763	30,561	9,164
Total	1377	108,211	64,878

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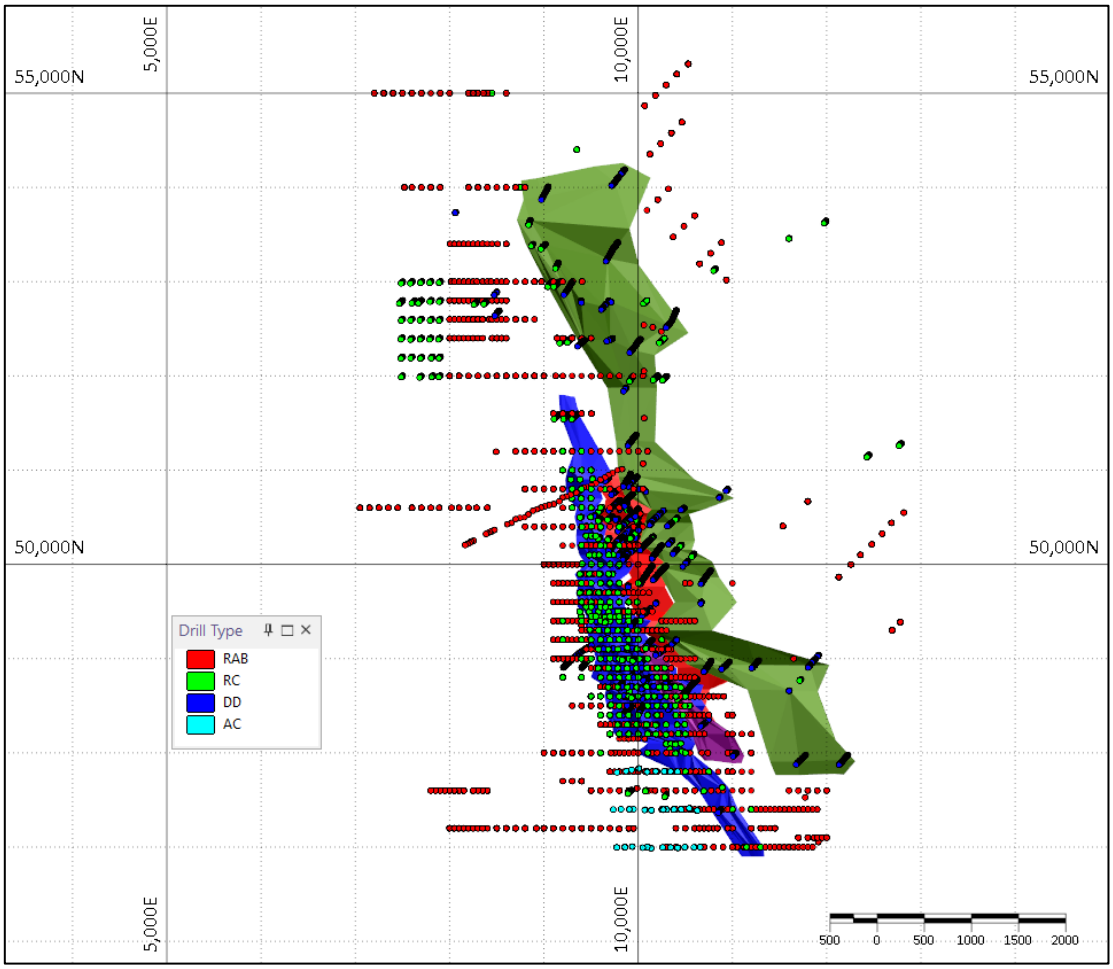

Figure 4-1: Assay composites by drilling method with copper mineralisation

4.2 Composite Grade Representivity by Drilling Method

A paired sample function was used to check each interval in each drillhole in the assay composite file against other intervals in all other drillholes, from that point in the interval file, ensuring there is only one entry for each paired interval. The function allows for a single sample in a drillhole to be paired with several samples in adjacent drillholes. Composites were compared using drilling method, comparing RC with DD values, and RC with RAB values.

A maximum pair distance was used to define the distance between paired points. The maximum paired distance for the RC vs DD composites was set to 10m, and the maximum paired distance for the RC vs AC composites was set to 5m.

QQ plots were used to assess the paired populations by drilling method of the composited sample copper grades for RC vs DD (**Figure 4-2**) and RC vs RAB (**Figure 4-3**). The different drilling methods were found to provide similar population grade distributions with minimal observed grade bias between the drilling methods.

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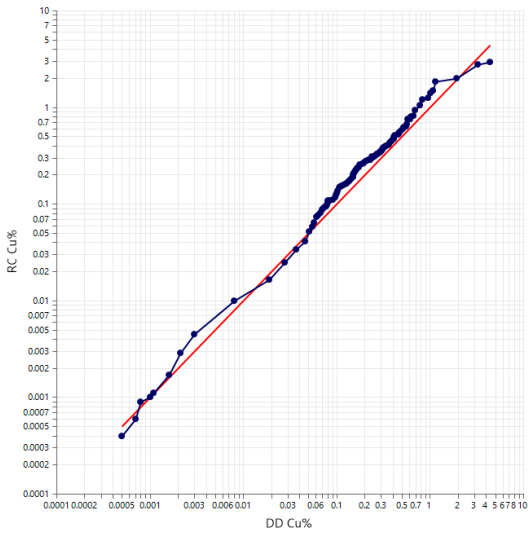

Chart Type	Quantile-Quantile
Y Axis	
Input File	ASSAY COMP SECOND PAIRS RC DD 10m (Cu)
Y Name	Cu_Pct(RC)
N Quantiles	102
Sample Ny	6663
Mean	0.383
Variance	0.203
Std Dev	0.45
Corr Coeff	0.949
X Var / Y Var	0.905
Chi² Degrees of Freedom	7
Experimental Chi²	210
Critical Chi² 5%	14.1
Critical Chi² 10%	12
X Axis	
Input File	ASSAY COMP SECOND PAIRS RC DD 10m (Cu)
X Name	Cu_Pct(DD)
Sample Nx	6663
Mean	0.315
Variance	0.184
Std Dev	0.428

Figure 4-2: QQ Plot of 1m Comp Paired Cu grades comparing RC with DD samples

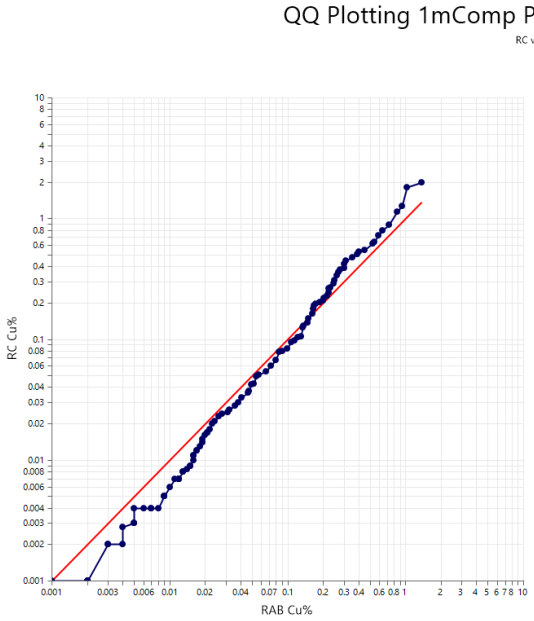

Chart Type	Quantile-Quantile
Y Axis	
Input File	ASSAY COMP SECOND PAIRS RC RAB 5m (Cu)
Y Name	Cu_Pct(RC)
N Quantiles	102
Sample Ny	5371
Mean	0.175
Variance	0.09
Std Dev	0.3
Corr Coeff	0.99
X Var / Y Var	0.517
Chi² Degrees of Freedom	7
Experimental Chi²	345
Critical Chi² 5%	14.1
Critical Chi² 10%	12
X Axis	
Input File	ASSAY COMP SECOND PAIRS RC RAB 5m (Cu)
X Name	Cu_Pct(RAB)
Sample Nx	5371
Mean	0.145
Variance	0.047
Std Dev	0.216

Figure 4-3: QQ Plot of 1m Comp Paired Cu grades comparing RC with RAB samples

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5 ESTIMATION

5.1 Classical statistics

The histogram and probability plot for the copper exhaustive population are shown in **Figure 5-1** and **Figure 5-2**. Two distinct populations are apparent, a weakly mineralised population and a mineralised population, with an inflection point at 0.1% Cu. The mixed populations were separated by applying a geological cutoff grade of 0.1% copper.

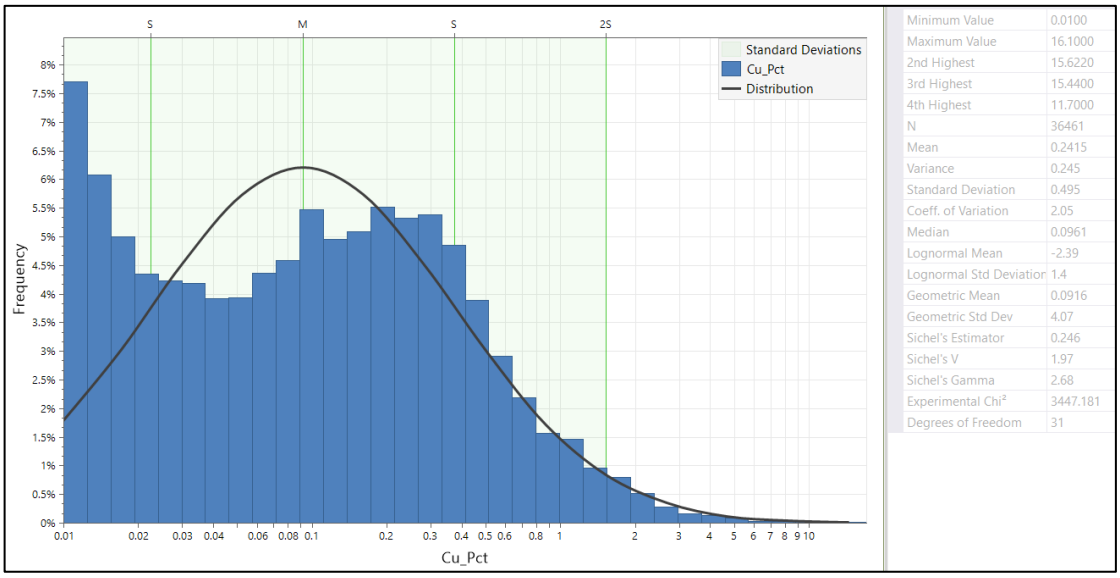

Figure 5-1: Histogram exhautive population for Cu%

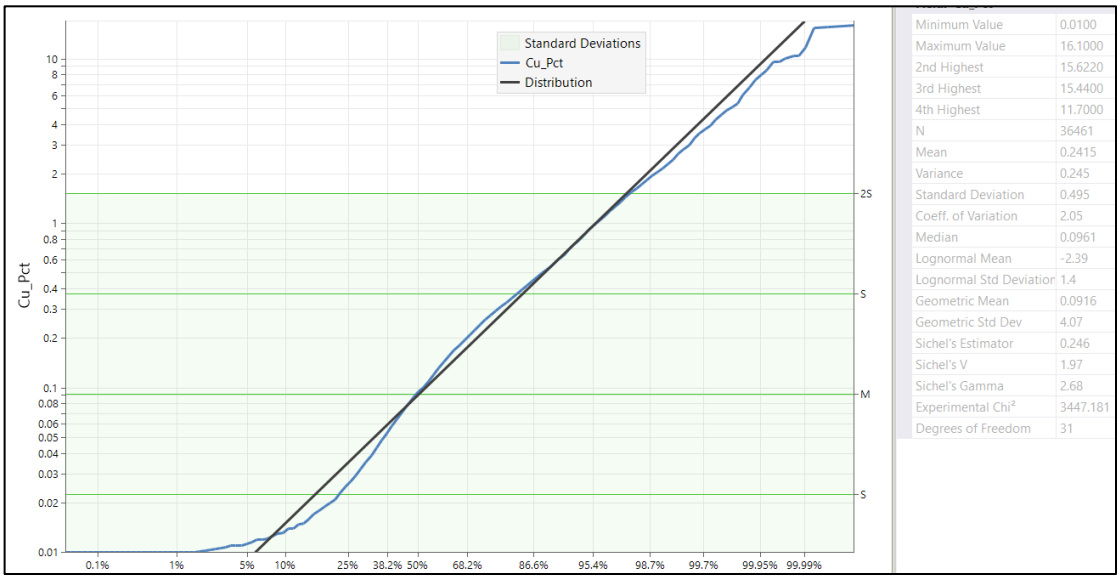

Figure 5-2:Probability plot exhaustive population for Cu%

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5.2 Domaining and Geological cutoff grade

MEC used a 0.1% Cu geological cut-off grade to delineate the mineralised envelopes. Interpretation was conducted in section with all strings snapped in 3d to the drillholes. Two main lodes and a smaller upper lode were interpreted. Lode and grade continuity was strong for the western lode due to the closer spaced drilling. The eastern lode had less drillhole coverage and consequently less data to allow interpretation of the lodes resulting in lower confidence in the lode continuity and geometry. Grades were displayed along with logged geology for the interpretation. Following sectional interpretation the lodes were then wireframed.

5.3 Block extents

Block extents are shown in **Table 5-1** and **Figure 5-3**.

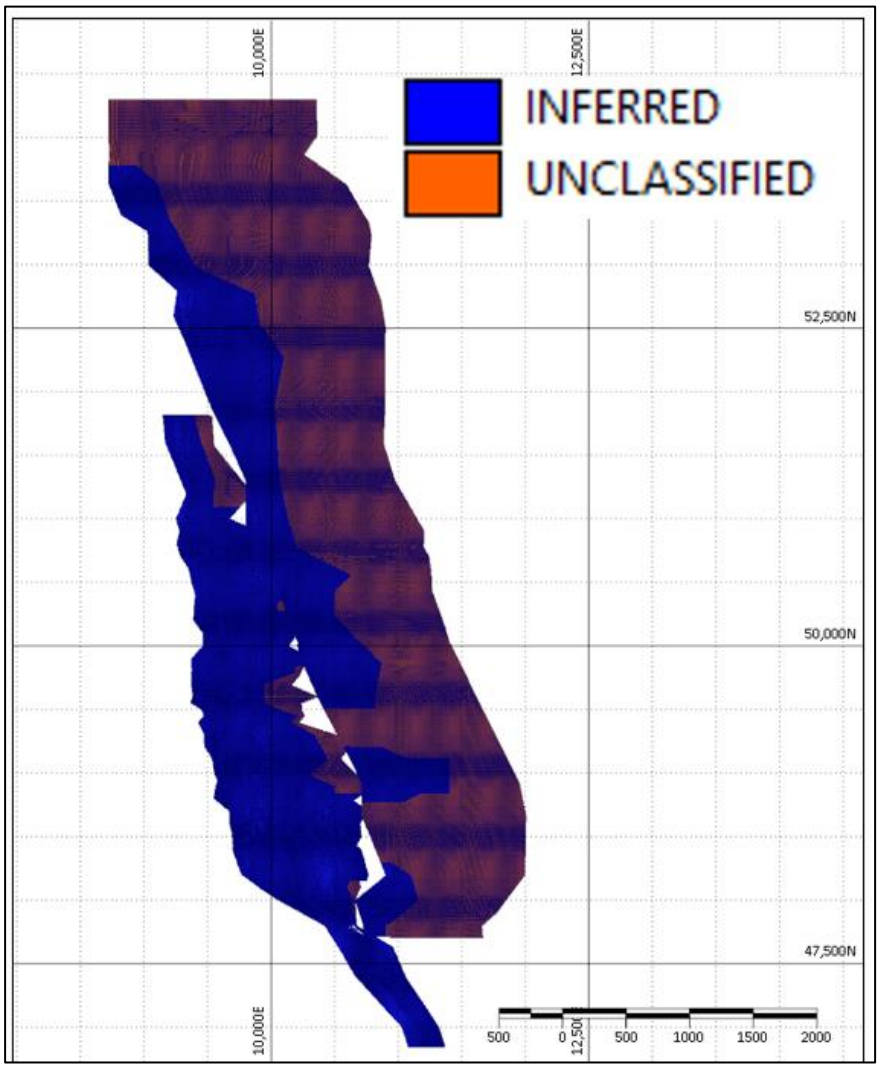

Figure 5-3: Block model extents plan view

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Table 5-1: OBM extents

	North	East	m RL
Minimum	46,740	7,495	9,497.5
Maximum	55,590	12,995	10,497.5

5.4 Density

The Maroochydore dry bulk density data includes 90 measurements previously sourced from the BirlaMAR_Database_20150430.mdb and 70 measurements completed by Cyprium as part of the 2021 drill campaign obtained from drillholes 21MDMT005 and 21MDMT006. All density measurements were acquired by using the water immersion technique of weighing the sample mass in both air and water.
All density measurements occurred within the fresh zone and no density measurements were taken within the oxide / transitional horizons. Density data covered a 450-meter strike length predominantly within the western lode, the deposit strike length is 4km. Density measurements are not considered by the CP to be representative as they are concentrated in one part of the deposit.

Density was applied to the OBM for reporting of tonnage by defaulting average densities to the weathering layers. These average densities were defaulted from the Nifty oxide, transitional, and fresh weathering domains; 2.74t/m^3 in fresh material, 2.5 t/m^3 transitional material and 2.2 t/m^3 in the oxide.

The assignment of these density values is approximate only and is not representative of the Maroochydore project. The tonnage estimation is inexact.

5.5 Geostatistics

The downhole variogram was modelled for each domain to establish the nugget effect. This nugget effect percentage was then assigned to the directional variograms.

For each estimation domain, variogram maps were used to identify the direction of maximum grade continuity. Experimental variograms were modelled for Cu% within the western domain, northern end (**Figure 5-4**), the directional variograms are shown in **Figure 5-5.** Experimental variograms were modelled for Cu% within the western domain, southern end (**Figure 5-6**), the directional variograms are shown in **Figure 5-7.**

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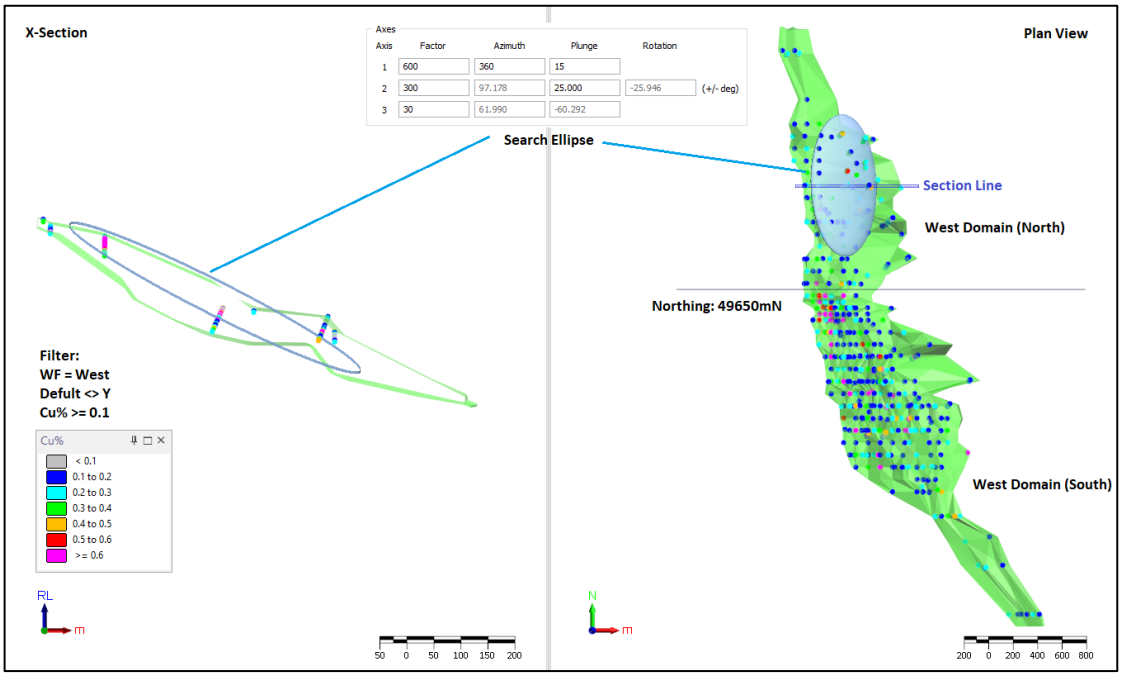

Figure 5-4: West domain, northern end

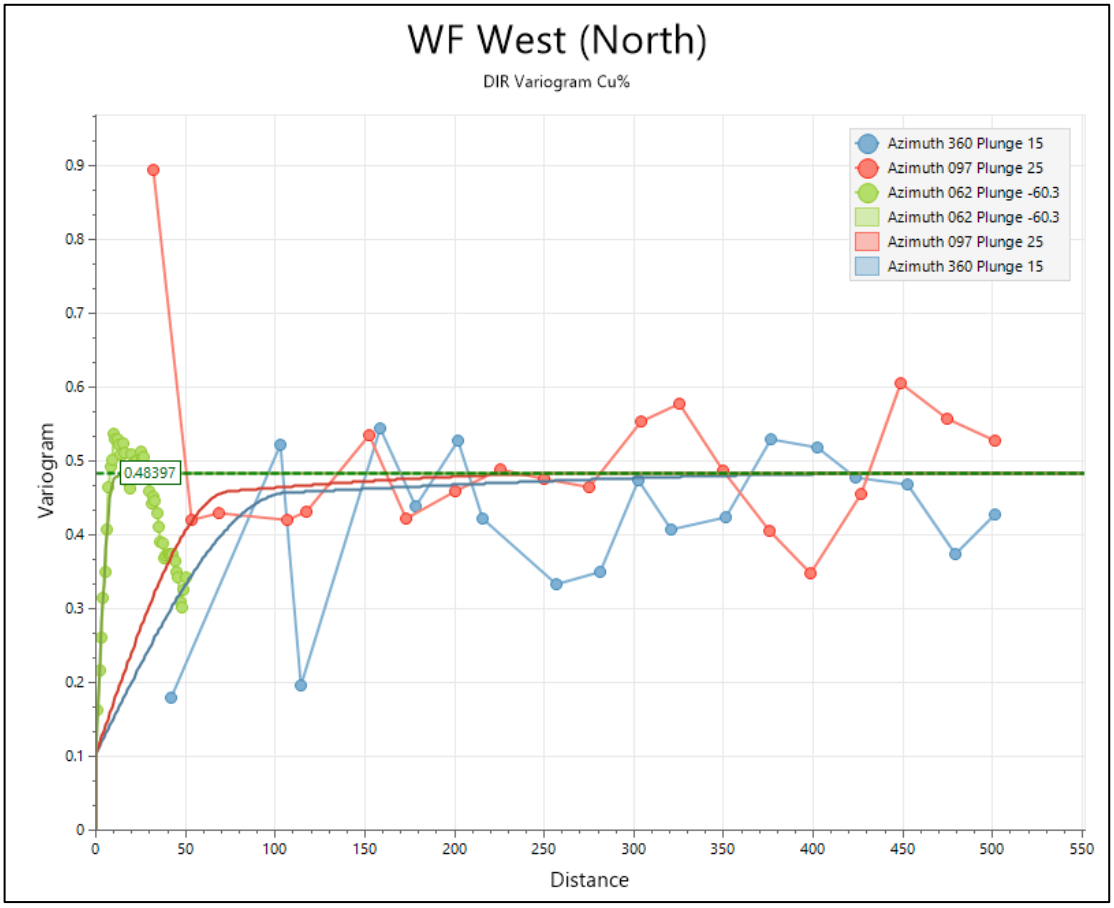

Figure 5-5: Directional variograms west domain, northern end

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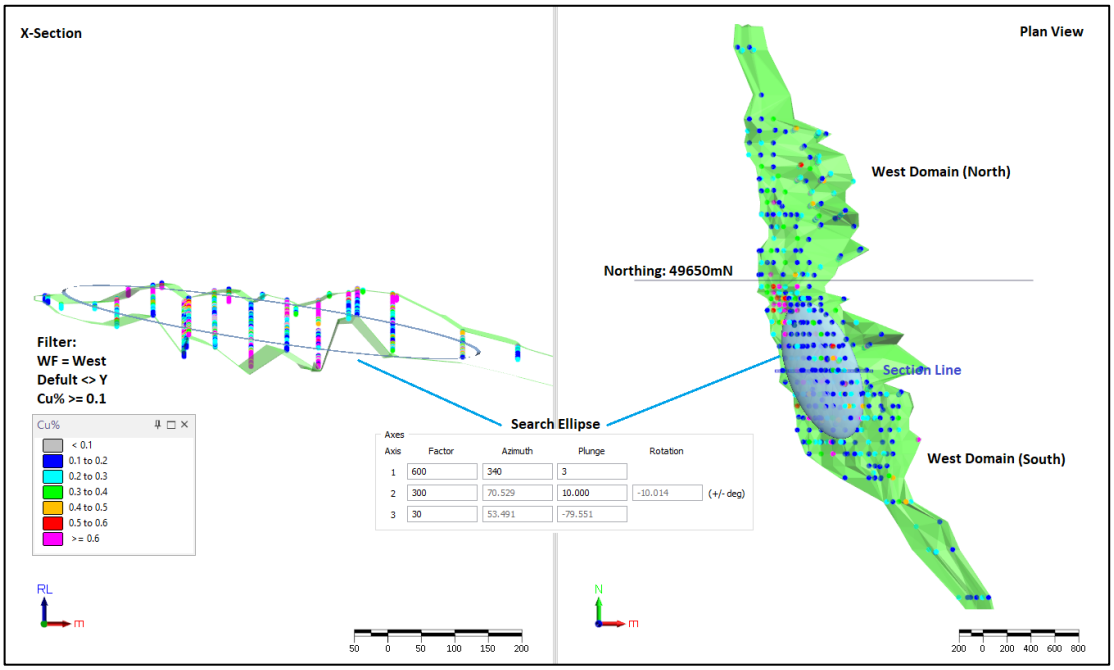

Figure 5-6: West domain, southern end

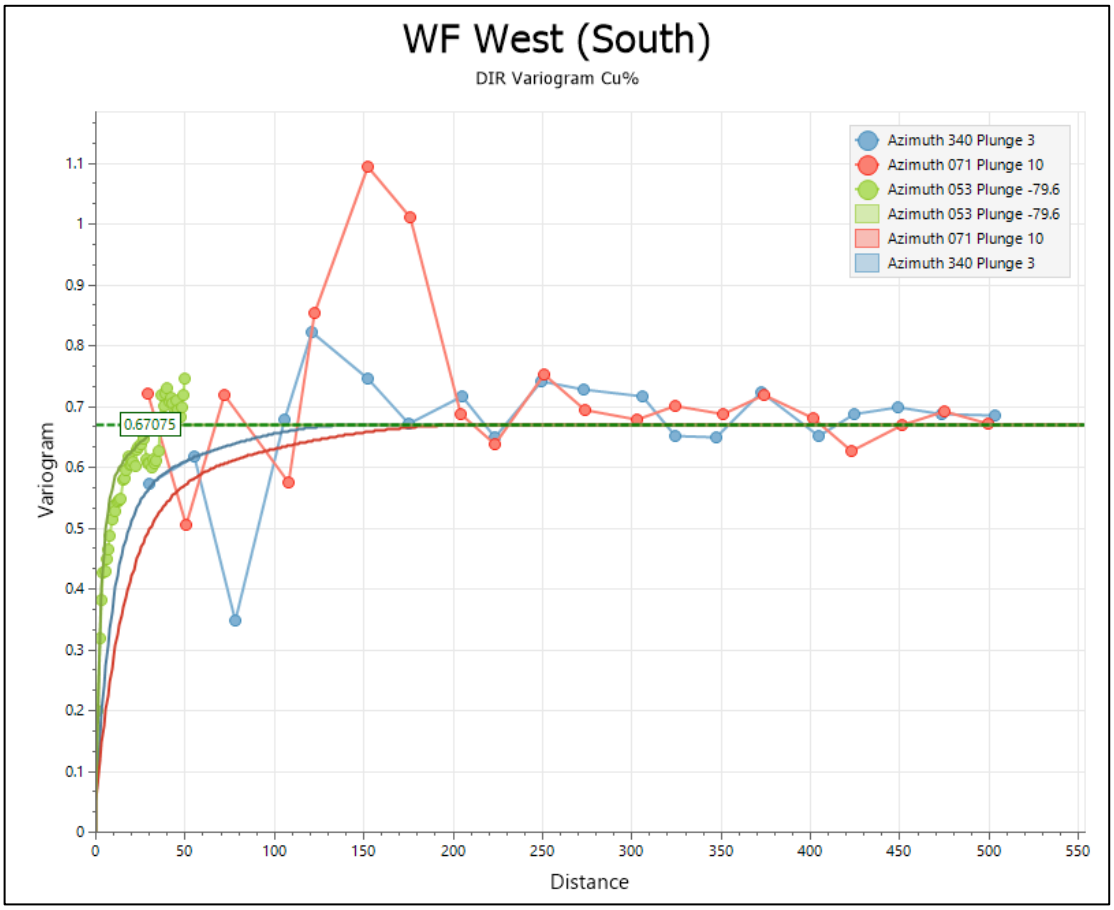

Figure 5-7: Directional variograms west domain, southern end

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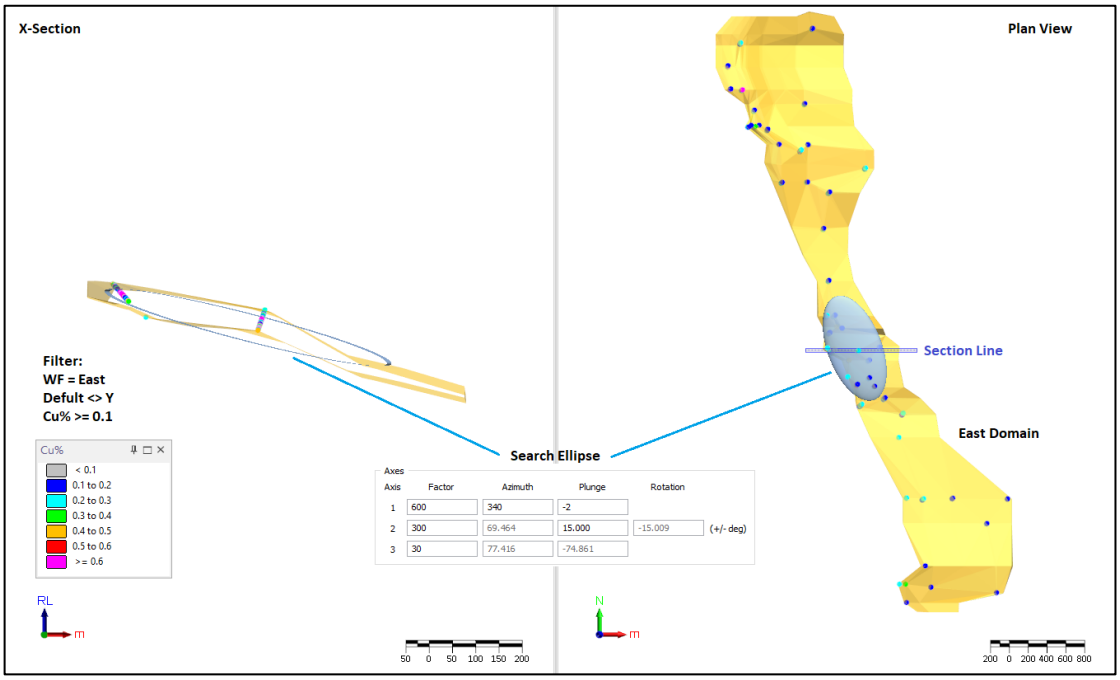

Figure 5-8: East domain

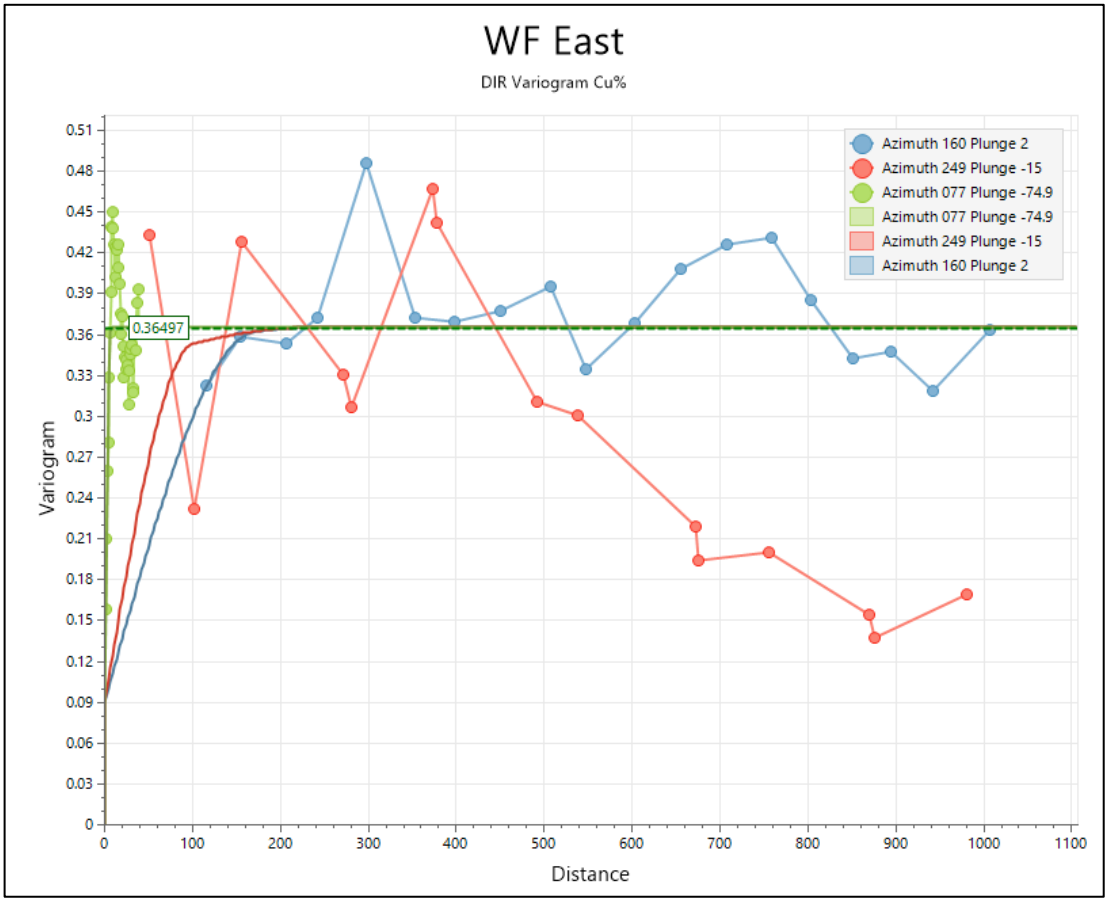

Figure 5-9: Directional variograms east domain

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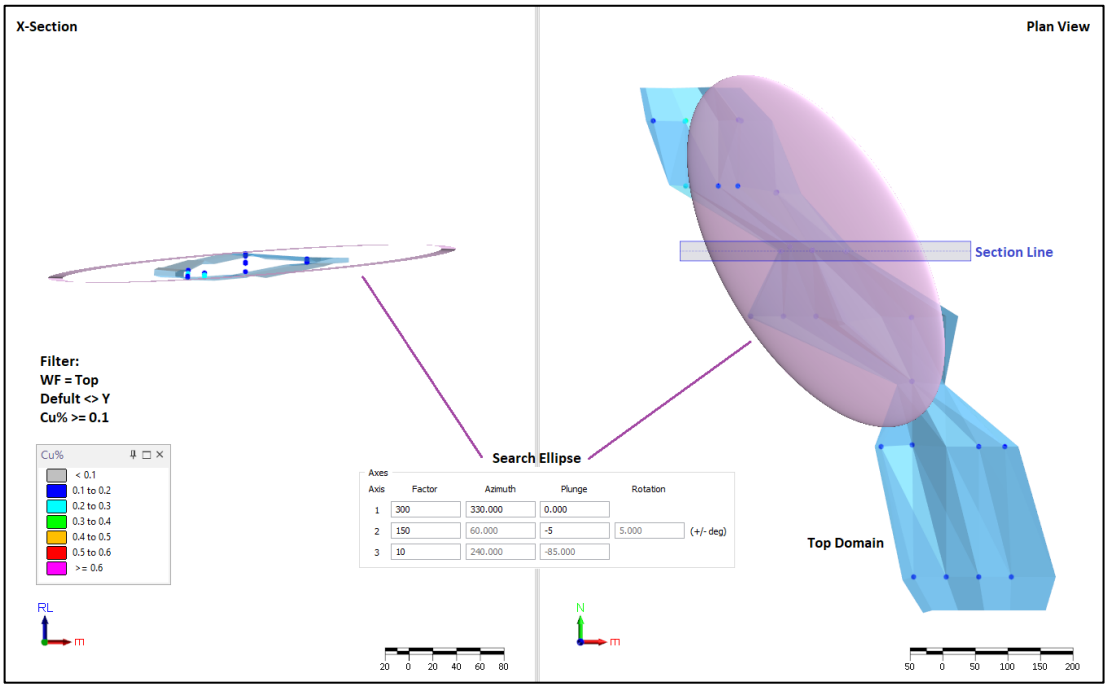

Figure 5-10: Top domain

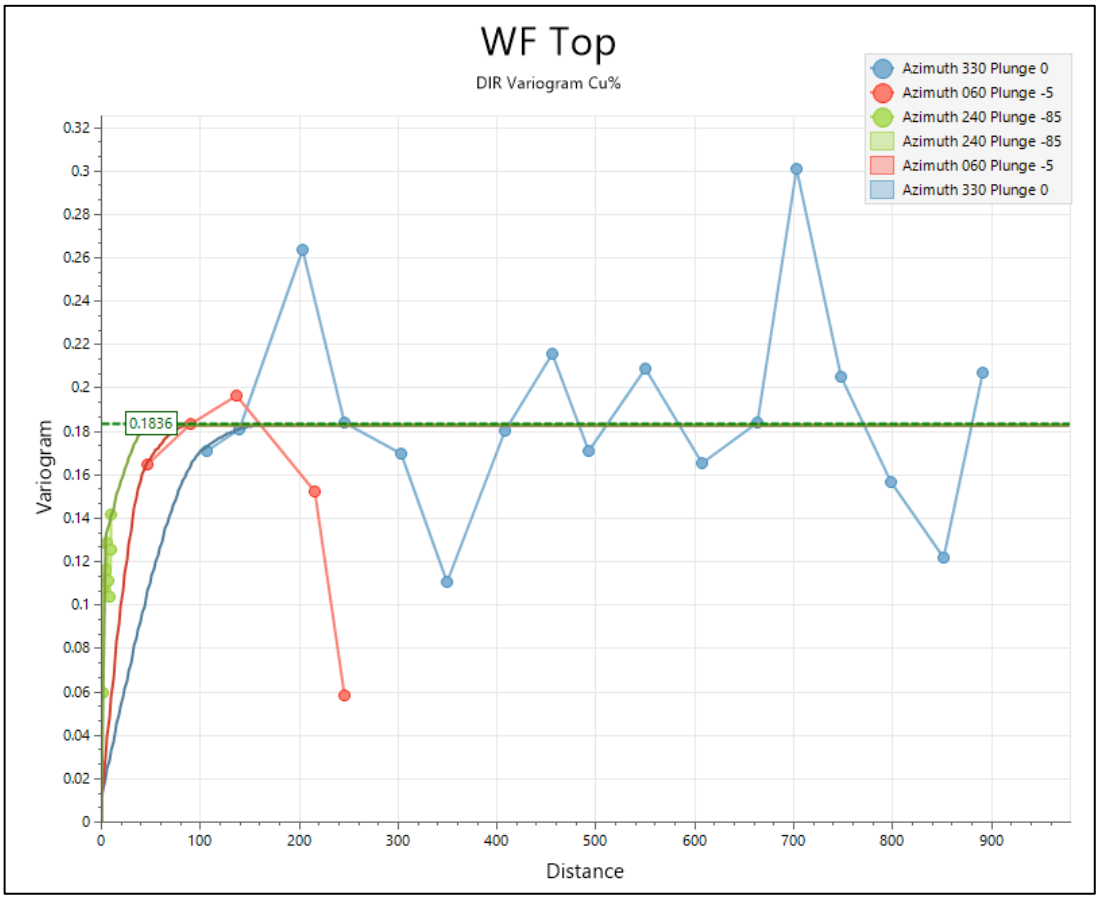

Figure 5-11: Directional variograms top domain

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Experimental variograms were modelled for Cu% within the east domain (**Figure 5-8**), the directional variograms are shown in **Figure 5-9.** Experimental variograms were modelled for Cu% within the top domain (**Figure 5-10**), the directional variograms are shown in **Figure 5-11.**

All experimental variograms were modelled by fitting spherical models with two components. The semivariogram parameters are shown in **Table 5-2**. Geometric anisotropy was modelled, as such the nugget, partial sill 1 and partial sill 2, are the same for the directional variograms for each unit. The nugget effect ranged from 6.6% to 24.7% for copper.

The copper variograms were also used for the estimation of cobalt.

Table 5-2: Semivariogram parameters

Semi Variogram Parameters									
Variable: Cu	Modelled Structures			Orientation					
Domain	C0 (Nugget)	C1 (Spherical)	C2 (Spherical)	Direction	C1 Range (m)	C2 Range (m)	Azimuth (°)	Plunge (°)	Rotation (°)
West (N≤49650)	0.06 (8.2%)	0.5	0.11	Major	30.0	145.0	340.00	3.00	-
				Intermediate	50.0	210.0	70.53	10.00	-10.01
				Minor	9.0	45.0	53.49	-79.55	-
West (N>49650)	0.1 (21.5%)	0.34	0.04	Major	106.0	465.0	360.00	15.00	-
				Intermediate	74.0	282.0	97.18	25.00	-25.95
				Minor	9.7	16.0	61.99	-60.29	-
East	0.09 (24.7%)	0.24	0.03	Major	170.0	234.0	340.00	-2.00	-
				Intermediate	100.0	230.0	69.46	15.00	-15.01
				Minor	6.5	9.0	77.42	-74.86	
Top	0.01 (6.6%)	0.11	0.06	Major	105.0	165.0	330.00	0.00	-
				Intermediate	45.0	90.0	60.00	-5.00	5.000
				Minor	3.3	50.0	240.00	-85.00	-

5.6 Kriging Neighbourhood Analysis

Kriging neighbourhood analysis ("KNA") is conducted to minimise the conditional bias that occurs during grade estimation as a function of estimating block grades from point data. Conditional bias typically presents as overestimation of low-grade blocks and underestimation of high-grade blocks due to the use of non-optimal estimation parameters and can be minimised by optimising search and estimation parameters. The following parameters were optimised for Domain West (N≤49650) and applied during the estimation process for all domains:

- Ore block model block size;
- number of search ellipse sectors; and
- block discretisation.

The semi-variogram parameters are shown in **Table 5-2**, and the search ellipse parameters are shown in **Table 5-3** for the western lode.

A single test location was selected within Domain West (N≤49650), representing a location with excellent sample coverage (**Figure 5-12**).

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A summary of the KNA results by parameter for Domain West (N≤49650) are shown in **Figure 5-13** to **Figure 5-19**.

The KNA study supports a parent block size of 10mE(X) by 20mN(Y) by 5mRL(Z), 8 sectors, and a block discretisation between 2 – 4 divisions by direction.

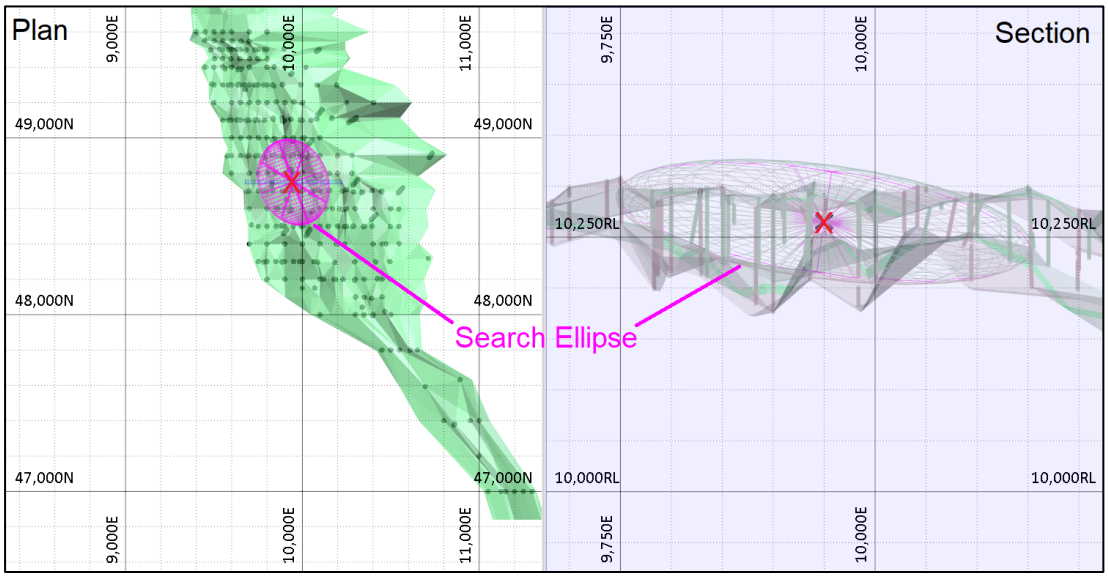

Figure 5-12: KNA test location within Domain West (N≤49650)

Max Points / Sector	Min Points	Sectors	Block Size X	Block Size Y	Block Size Z	Disc X	Disc Y	Disc Z
5	40	8	Variable	100	50	2	2	2

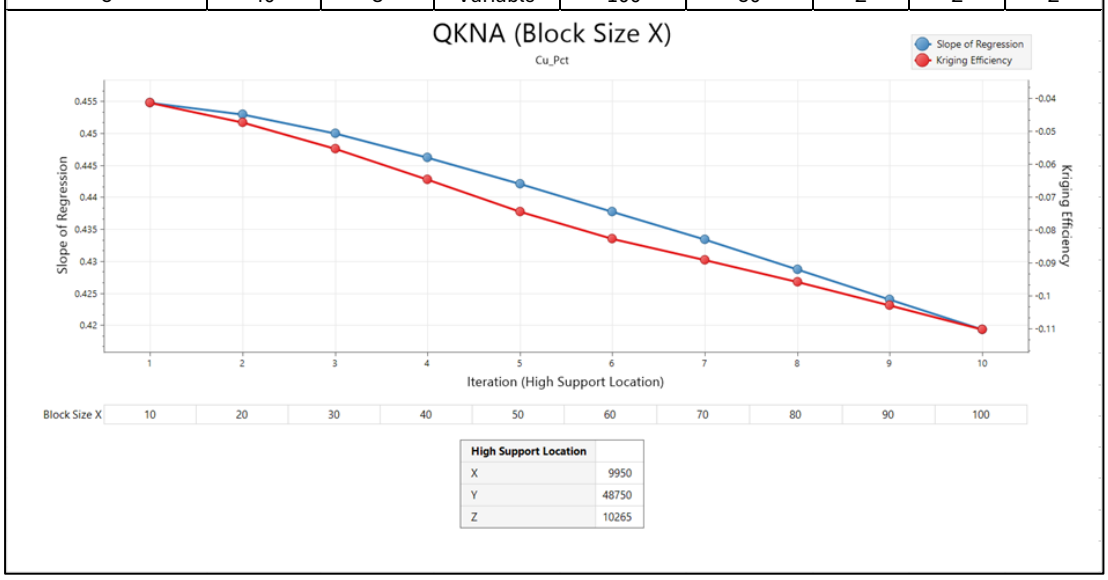

Figure 5-13: Block Size Parameter Direction X Optimisation

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Max Points / Sector	Min Points	Sectors	Block Size X	Block Size Y	Block Size Z	Disc X	Disc Y	Disc Z
5	40	8	10	Variable	50	2	2	2

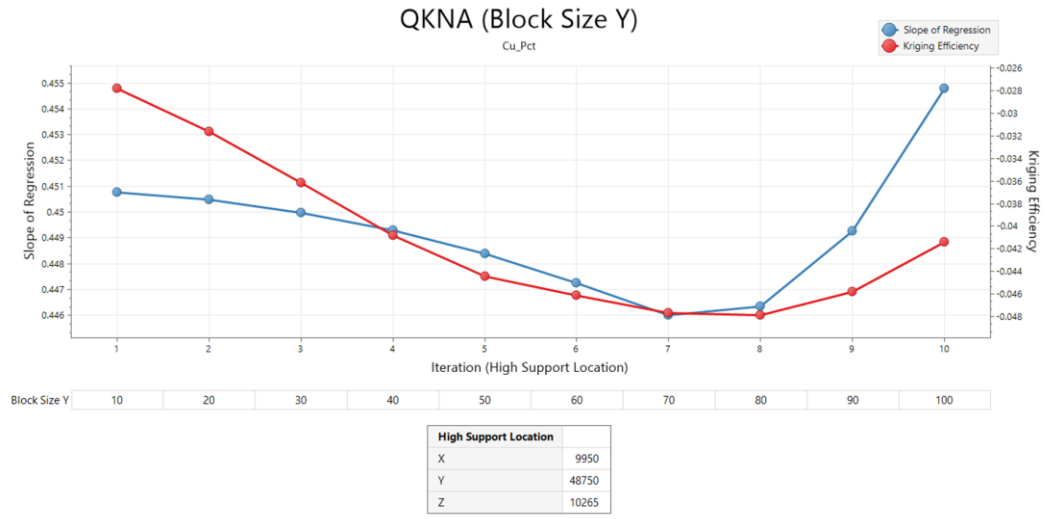

Figure 5-14: Block Size Parameter Direction Y Optimisation

Max Points / Sector	Min Points	Sectors	Block Size X	Block Size Y	Block Size Z	Disc X	Disc Y	Disc Z
5	40	8	10	20	Variable	2	2	2

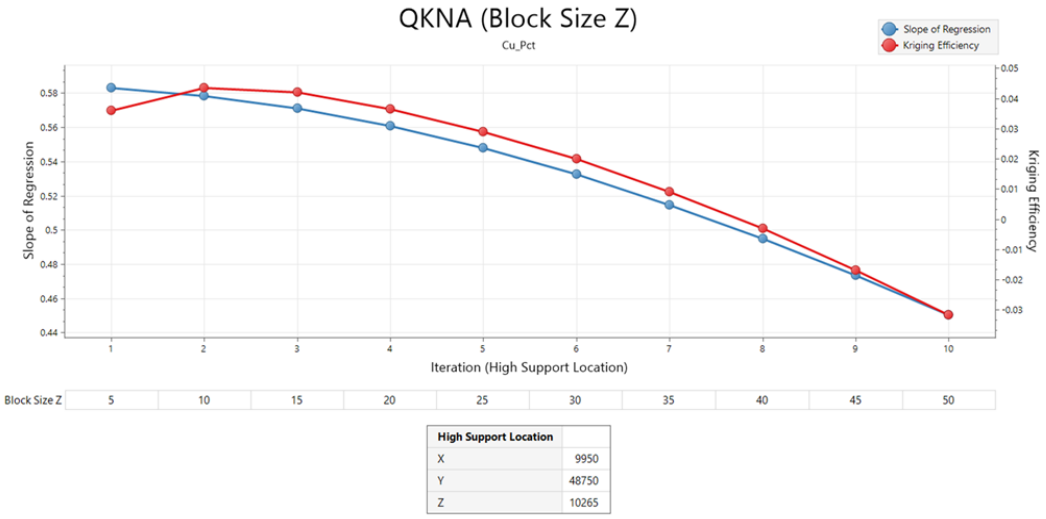

Figure 5-15: Block Size Parameter Direction Z Optimisation

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Max Points / Sector	Min Points	Sectors	Block Size X	Block Size Y	Block Size Z	Disc X	Disc Y	Disc Z
5	40	Variable	10	20	5	2	2	2

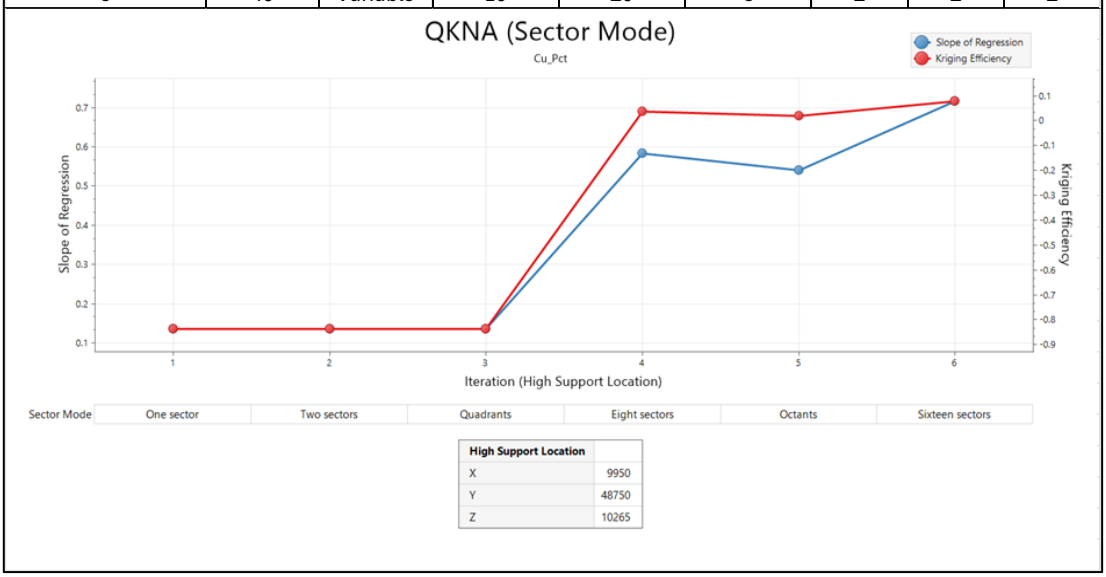

Figure 5-16: Number of Sectors Parameter Optimisation

Max Points / Sector	Min Points	Sectors	Block Size X	Block Size Y	Block Size Z	Disc X	Disc Y	Disc Z
5	40	8	10	20	5	Variable	10	10

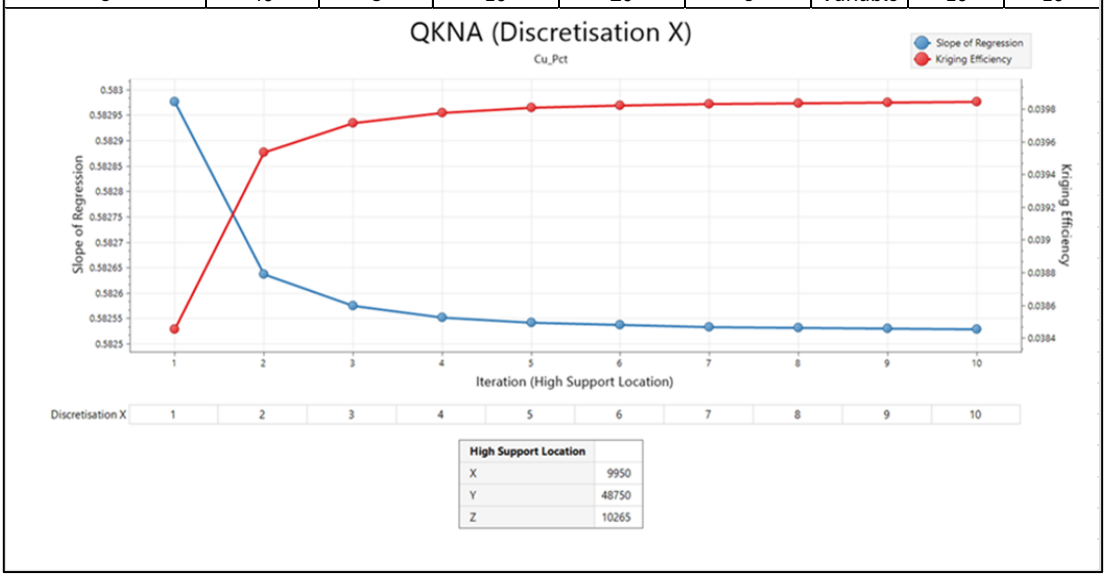

Figure 5-17: Discretisation Parameter Direction X Optimisation

Max Points / Sector	Min Points	Sectors	Block Size X	Block Size Y	Block Size Z	Disc X	Disc Y	Disc Z
5	40	8	10	20	5	2	Variable	10

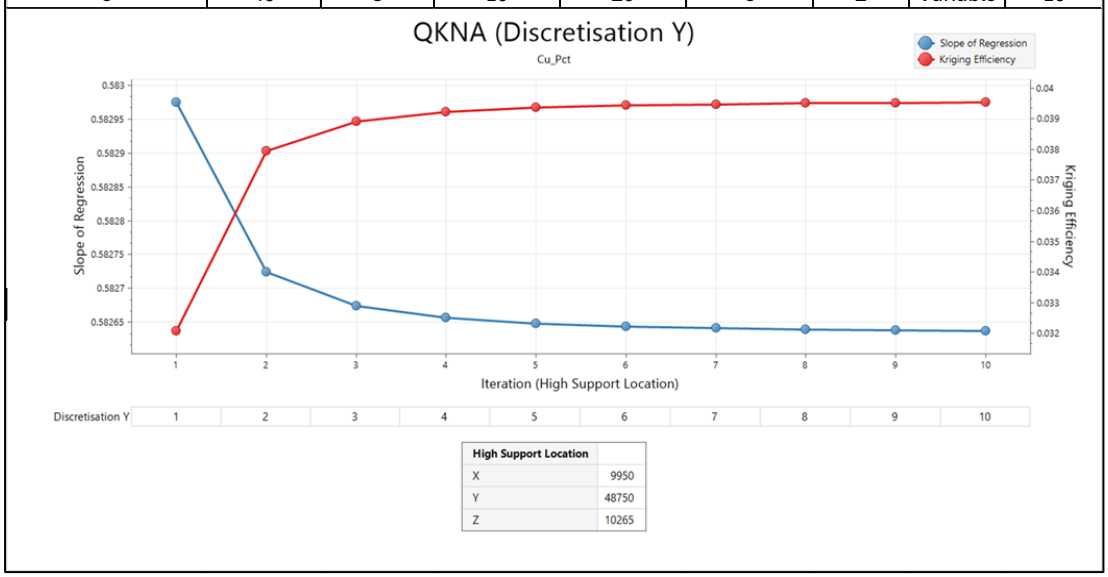

Figure 5-18: Discretisation Parameter Direction Y Optimisation

Max Points / Sector	Min Points	Sectors	Block Size X	Block Size Y	Block Size Z	Disc X	Disc Y	Disc Z
5	40	8	10	20	5	2	2	Variable

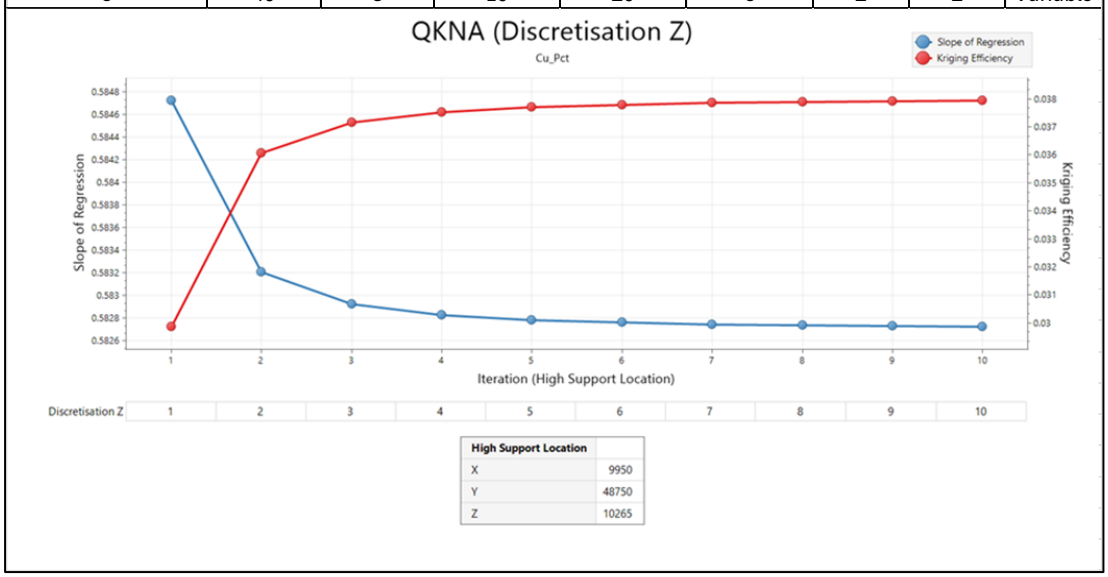

Figure 5-19: Discretisation Parameter Direction Z Optimisation

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5.7 Estimation Methodology

All drillhole intervals were composited to 1m which was the dominant sample length.

There has been no production at Maroochydore, and there was no requirement to deplete the ore block model. A block model was created with block sizes of 10m east 20m north and 5m in elevation, sub blocked to 5m east, 10m north, and 1m in elevation. The block model was coded and sub blocked to the mineralised envelope, the weathering horizons, and the topography. Weathering domains included oxide, transitional, and fresh.

The search ellipse dimensions are shown in **Table 5-3** for the western lode and **Table 5-4** for the eastern and top lodes. Three searches were run within each domain at 150m, 250m, and 500m, all blocks were populated after the third run. With the exception of the eastern lode which was fully populated at run 3 of 800m.

Table 5-3: Search ellipse parameters western lode

Search Ellipse Parameters	Domain West (N≤49650)			Domain West (N>49650)		
	Run 1	Run 2	Run 3	Run 1	Run 2	Run 3
Search Type	Ellipsoid	Ellipsoid	Ellipsoid	Ellipsoid	Ellipsoid	Ellipsoid
Azimuth (LHR)	340	340	340	360	360	360
Plunge (LHR)	3	3	3	15	15	15
Rotation (LHR)	-10	-10	-10	-25.95	-25.95	-25.95
Major Search Range	150	250	500	150	250	500
Intermediate Search Range	120	200	400	120	200	400
Minor Search Range	30	50	100	30	50	100
Sectors	8	8	1	8	8	1
Maximum Samples Per Sector	5	5	150	5	5	150
Maximum Samples	40	40	150	40	40	150
Minimum Drill Holes	4	4	1	4	4	1
Block Discretisation	2X by 2Y by 2Z			2X by 2Y by 2Z		
Percentage of Blocks Estimated	53%	28%	19%	23%	53%	24%

Table 5-4: Search ellipse parameters eastern and top lodes

Search Ellipse Parameters	Domain East			Domain Top		
	Run 1	Run 2	Run 3	Run 1	Run 2	Run 3
Search Type	Ellipsoid	Ellipsoid	Ellipsoid	Ellipsoid	Ellipsoid	Ellipsoid
Azimuth (LHR)	340	340	340	330	330	330
Plunge (LHR)	-2	-2	-2	0	0	0
Rotation (LHR)	-15	-15	-15	5	5	5
Major Search Range	150	250	800	150	250	500
Intermediate Search Range	120	200	640	120	200	400
Minor Search Range	30	50	160	30	50	100
Sectors	8	8	1	8	8	1
Maximum Samples Per Sector	5	5	150	5	5	150
Maximum Samples	40	40	150	40	40	150
Minimum Drill Holes	4	4	1	4	4	1
Block Discretisation	2X by 2Y by 2Z			2X by 2Y by 2Z		
Percentage of Blocks Estimated	0.5%	4%	95.5%	91%	9%	0%

Data was declustered on the fly by application of a maximum number of samples per search ellipse sector. The orientation of the search ellipse was changed for the western lode for the northern end (360°) and the southern end (340°).

All boundaries are hard boundaries, with only those grades within the lodes used for estimation.

6 RISK ASSESSMENT

The risk rating was considered for the main aspects of the work process that contributed to the data used for Mineral Resource estimation. Low risk correlates with High confidence (**Table 6-1** and **Table 6-2**).

Table 6-1: Risk assessment matrix

RISK RATING KEY	LOW	MEDIUM	HIGH	EXTREME
	0 – ACCEPTABLE	1 – ALARP (as low as reasonably practicable)	2 – GENERALLY UNACCEPTABLE	3 – INTOLERABLE
	OK TO PROCEED	TAKE MITIGATION EFFORTS	SEEK SUPPORT	PLACE EVENT ON HOLD

		SEVERITY			
		ACCEPTABLE LITTLE TO NO EFFECT ON EVENT	TOLERABLE EFFECTS ARE FELT, BUT NOT CRITICAL TO OUTCOME	UNDESIRABLE SERIOUS IMPACT TO THE COURSE OF ACTION AND OUTCOME	INTOLERABLE COULD RESULT IN DISASTER
LIKELIHOOD	IMPROBABLE RISK IS UNLIKELY TO OCCUR	LOW – 1 –	MEDIUM – 4 –	MEDIUM – 6 –	HIGH – 10 –
	POSSIBLE RISK WILL LIKELY OCCUR	LOW – 2 –	MEDIUM – 5 –	HIGH – 8 –	EXTREME – 11 –
	PROBABLE RISK WILL OCCUR	MEDIUM – 3 –	HIGH – 7 –	HIGH – 9 –	EXTREME – 12 –

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Table 6-2: Risk summary

Items	Discussion	Risk
Database	The database used for the January 2025 MEC MRE includes 1,299 drillholes for 110,379m. Inclusive of 35 Aircore drillholes for 734m, 337 Reverse circulation drillholes for 36,018m, 34 Reverse circulation drillholes with a diamond tail for 13,854m, 112 diamond drillholes for 28,558m, 780 Rotary air blast drillholes for 31,165m, and 1 water bore for 50m. In addition to the many different drilling methods to collect the samples, there have been many different companies that have explored the project. There is risk regarding the veracity of the data which is increased by the lack of supporting QAQC data. Over time drillholes must be twinned and checked for inclusion or replacement for project evaluation.	**Medium** **- 6-**
QAQC	All provided QAQC data is post 2021. The QAQC data includes certified reference material (CRM or standards) to assess analytical accuracy, blanks to test laboratory hygiene by checking for cross contamination, and sample recovery. Standards were inserted across the Maroochydore project by Cyprium. No post 2021 standard results failed. The available standard results are acceptable to the CP. 70 blanks were inserted by Cyprium and no unacceptable grade increase was returned. Sample recovery data was recorded for 16 diamond drillholes for 1,254m. Mean sample recovery was 97%. QAQC results include standards, blanks, and sample recovery, post 2021. These results are acceptable for the CP, but are not representative of all drilling and sampling within the deposit.	**High** **-8-**
Selective sampling	Selective sampling has occurred at Maroochydore where some drillholes were assayed only for logged intervals that were considered potentially strongly mineralised. Where this occurred the nearby fully sampled drillholes were used for interpretation. Where the wireframe lode may have gone through the selectively sampled drillhole (where no samples had been taken) to avoid estimation bias a default grade of 0.1 Cu% was used.	**Medium** **5 - 8**

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Items	Discussion	Risk
Drillhole spacing	The drillhole spacing in the western lode ranges from 50m x 50m increasing to 100m x 100m. The drillhole spacing in the eastern lode ranges from 200m x 200m increasing to 800m x 400m. Many drillholes are shallow, several drill campaigns targeted oxide Mineral Resources.	**Medium** **-6-**
Domaining	MEC used a 0.1 Cu% geological cut-off grade to delineate the mineralised envelopes. Interpretation was conducted in section with all strings snapped in 3d to the drillholes. Two main lodes and a smaller upper lode were interpreted. Lode and grade continuity was strong for the western lode due to the closer spaced drilling. The eastern lode had less drillhole coverage and consequently less data to allow interpretation of the lodes resulting in lower confidence in the lode continuity and geometry. Grades were displayed along with logged geology for the interpretation. Following sectional interpretation the lodes were then wireframed.	**Medium** **-4-**
Dry bulk density	Density was applied to the OBM for reporting of tonnage by defaulting average densities to the weathering layers. These average densities were defaulted from the Nifty oxide, transitional, and fresh weathering domains; 2.74t/m^3 in fresh material, 2.5 t/m^3 transitional material and 2.2 t/m^3 in the oxide. The assignment of these density values is inexact and is not representative of the Maroochydore project. The tonnage estimation is approximate.	**High** **-8-**
MRE	**MRE – Estimation** The MRE was validated globally and locally. The global validation result was wireframe volume 563,082,791m^3 versus OBM volume of 562,304,100m^3, an insignificant difference. Global validation differences for grade was higher as the wireframe grade of 0.68% CuCut makes no allowance for declustering of data, the OBM grade was 0.43% CuCut, a difference of 37%. The local validation was completed by comparing the composite input assay data grade against the estimated grade. There was a strong correlation with the estimated grade honouring the input composite data. Swath plots also showed that input assay data grades mirrored the model grades.	**Medium** **5**
	MRE – Classification Mineral Resources were classified on the basis of drillhole spacing, QAQC support, density measurements, and other risk factors. Mineral Resources were classified as inferred. . The risk associated with the classification of the Mineral	**Low** **-2-**

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Items	Discussion	Risk
	Resource is considered Low – the approach undertaken directly reflects the available informing data and the understanding of the geology. The overall classification is commensurate with the associated risk.	
Economic cutoff grade	The Maroochydore MRE is reported at a 0.25% Cucut cutoff grade, which is the resource cutoff grade used at the nearby Nifty Copper project.	**Low** **-2-**
RPEEE	MEC deems that there are reasonable prospects for eventual economic extraction utilising open pit mining on the following basis: ○ The development of the Nifty project has removed many unknowns for the Maroochydore project, particularly relating to costs. ○ Metallurgical testwork has produced promising recoveries. ○ There are regional processing options.	**Medium** **-5-**

6.1 MRE Classification

Mineral Resources were classified on the basis of drillhole spacing, QAQC support, density measurements, and other risk factors. Mineral Resources were classified as inferred. The drillhole spacing for Inferred Mineral Resource was ~50m x 50m increasing to ~250m.

6.2 Economic cutoff grade

The MEC January 2025 Maroochydore MRE above a 0.25% Cu cutoff grade and topcut Cu grade of 12% reported by oxidation state is shown in **Table 1-1.** The Co topcut grade was 5,000ppm. All MRE are classified as Inferred Mineral Resources. MEC reported the MRE at the same cut off grade as the 2023 Nifty MRE.

6.3 Validation

To validate the estimated block grades, a multi-step approach was taken:

1. Initially, the composite and estimated grades were compared spatially to identify if there were any discrepancies with the estimate, with none being found.
2. The whole of domain estimate was then compared against the composite naïve and declustered composite grades.

3. Finally, swath plots were created to test that composite grade trends had been preserved in the estimate.

Local validation

The local validation was completed by comparing the composite input assay data grade against the estimated grade. There was a strong correlation with the estimated grade honouring the input composite data (**Figure 6-1** to **Figure 6-3**).

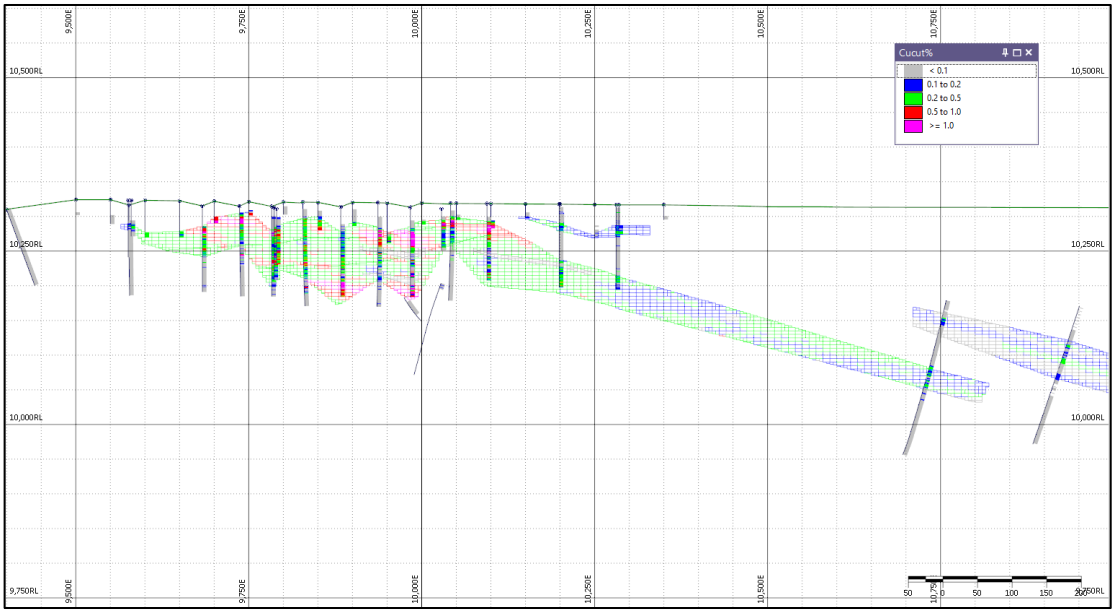

Figure 6-1: OBM west lode, 48900N, looking north

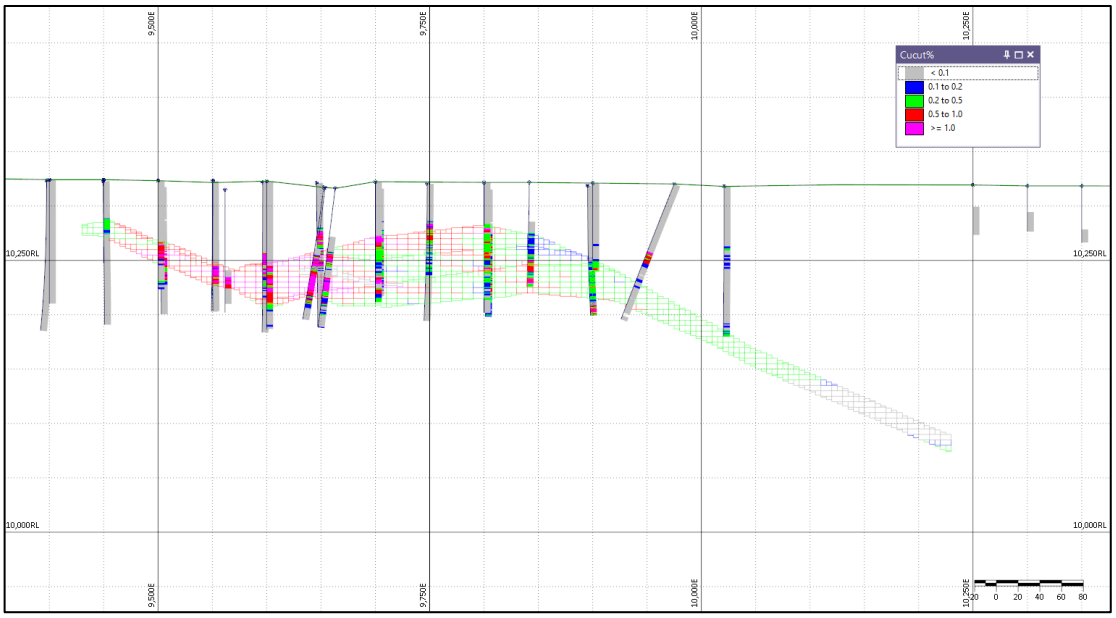

Figure 6-2: OBM west lode, 49400N, looking north

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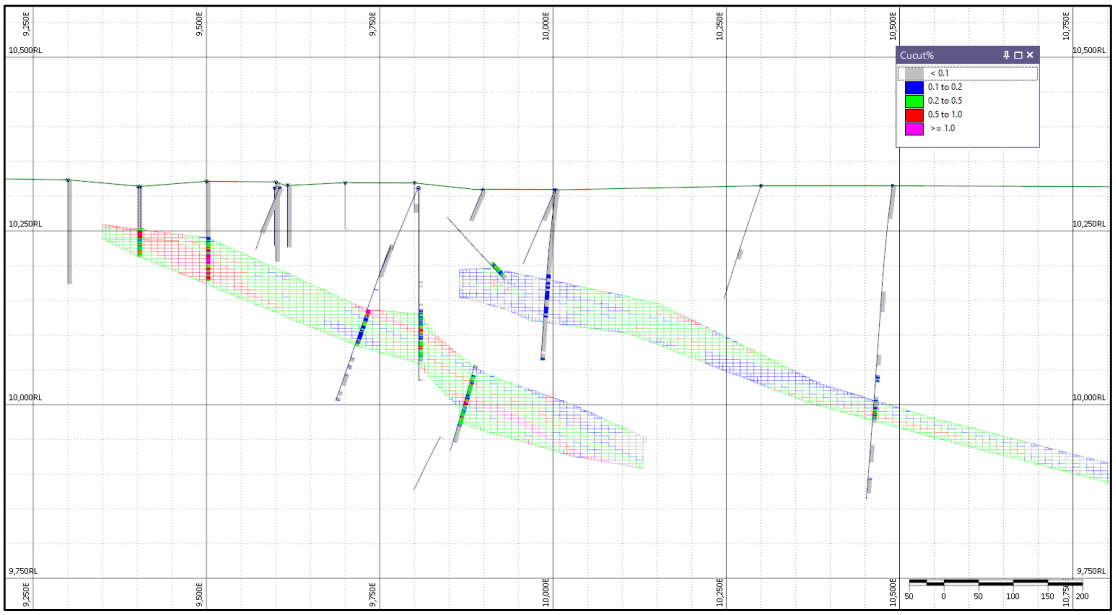

Figure 6-3: OBM west and east lodes, 50600N, looking north

Wireframe OBM comparison

The MRE was validated globally and locally. The global validation result was wireframe volume 563,082,791m^3 versus OBM volume of 562,304,100m^3, an insignificant difference.

Swath plots

Swath plots were then prepared and as with the whole of domain validation, there is evidence of considerable extrapolation beyond available sampling, significantly influencing the global validation performance. Swath plots were then prepared for the West Domain blocks located within the RESCAT_MEC fields = Inferred (**Figure 6-4** to **Figure 6-6**). The Swath plots show that the block grades for the CuCUT variable honour the grade trend of the informing composited samples. There is a small negative grade bias between the West Domain OBM and the informing composited samples.

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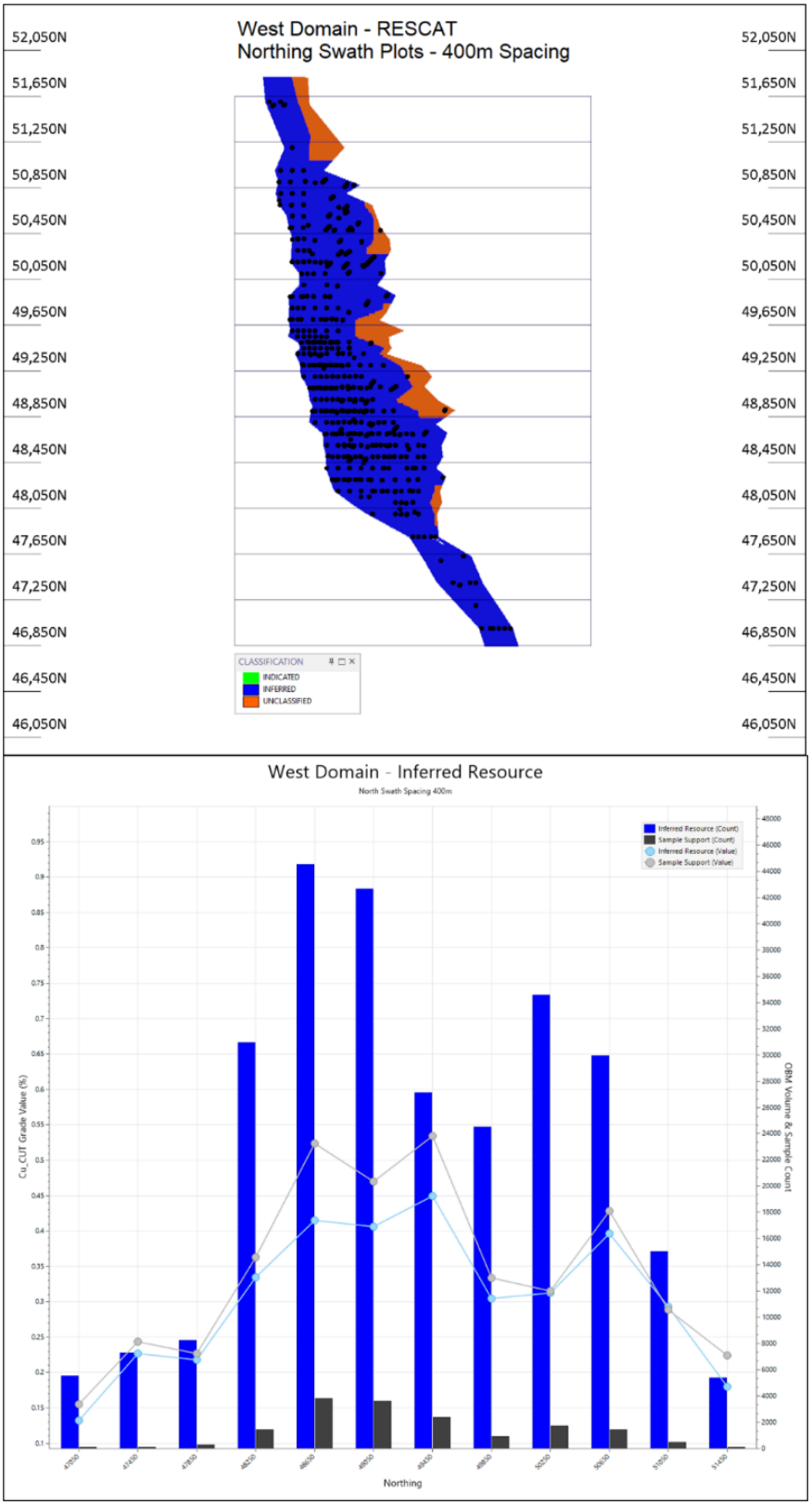

Figure 6-4: Swath plot 'West Domain' RESCAT = Inferred by northing

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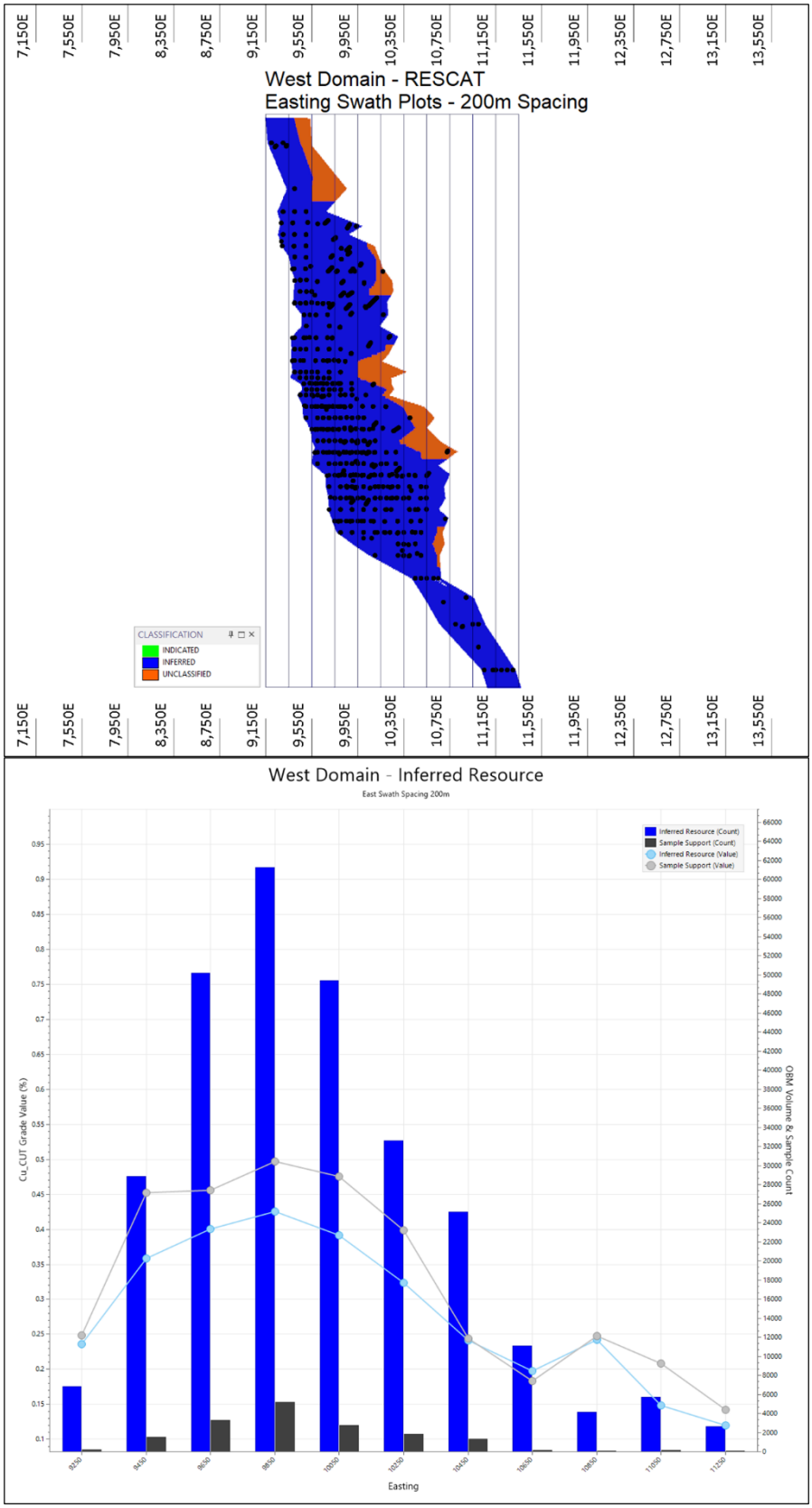

Figure 6-5: Swath plot 'West Domain' RESCAT = Inferred by easting

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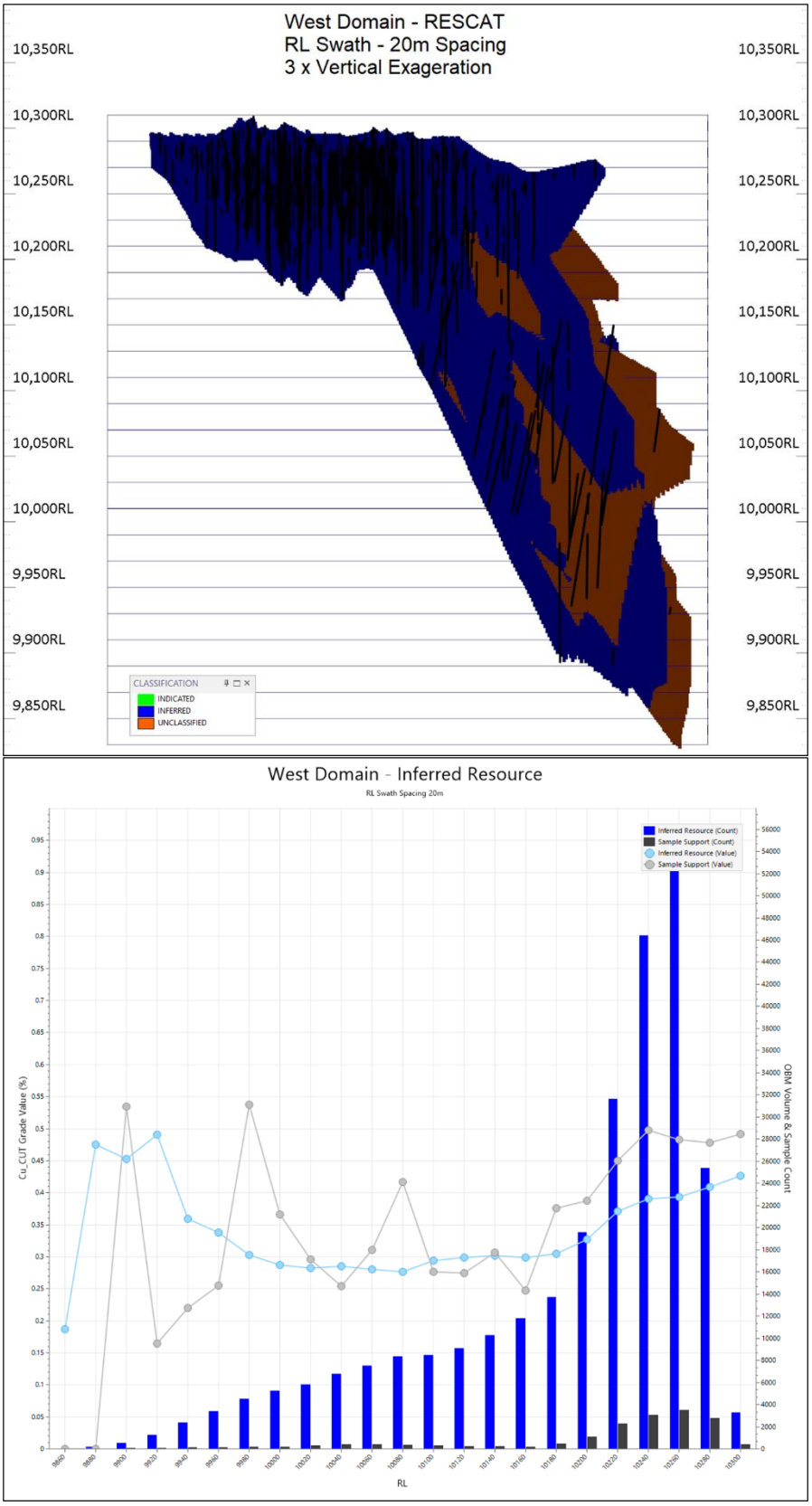

Figure 6-6: Swath plot 'West Domain' RESCAT = Inferred by elevation

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6.4 MEC January 2025 MRE statement

The MEC January 2025 Mineral Resource estimate for the entire MRE is stated at different Cucut% cutoff grades in **Table 6-3.** The grade tonnage curve for the MRE is shown in **Figure 6-7** and **Figure 6-8,** restricted by cutoff value**.**

Table 6-3: MEC January 2025 MRE, multiple economic cutoff grades

CUTOFF Cucut%≥	TONNES t	DENSITY t/m^3	Cucut%	Cu%	Cocutppm	Coppm
0.00	703,100,000	2.66	0.30	0.31	176	179
0.05	687,900,000	2.66	0.31	0.32	178	182
0.10	641,000,000	2.65	0.32	0.33	186	190
0.15	573,900,000	2.65	0.35	0.36	197	201
0.20	475,400,000	2.64	0.38	0.39	212	216
0.25	370,800,000	2.63	0.43	0.44	227	233
0.30	264,000,000	2.61	0.49	0.50	244	252
0.35	195,700,000	2.59	0.55	0.56	261	270
0.40	142,700,000	2.57	0.61	0.63	280	291
0.45	106,300,000	2.55	0.67	0.70	296	308
0.50	80,700,000	2.54	0.74	0.76	309	322
0.55	63,200,000	2.54	0.80	0.83	318	330
0.60	50,500,000	2.54	0.85	0.89	327	337

Numbers are rounded to reflect a suitable level of precision.
Numbers may not sum due to rounding.

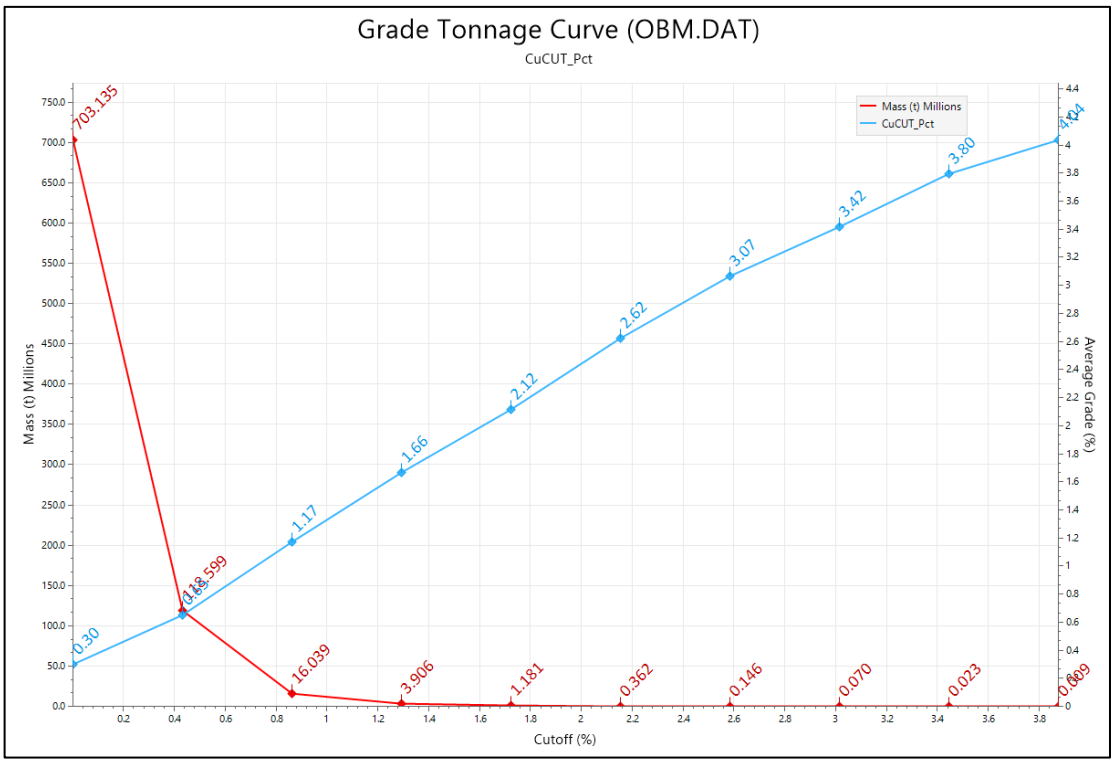

Figure 6-7: Grade tonnage curve, MEC 2025 Maroochydore MRE

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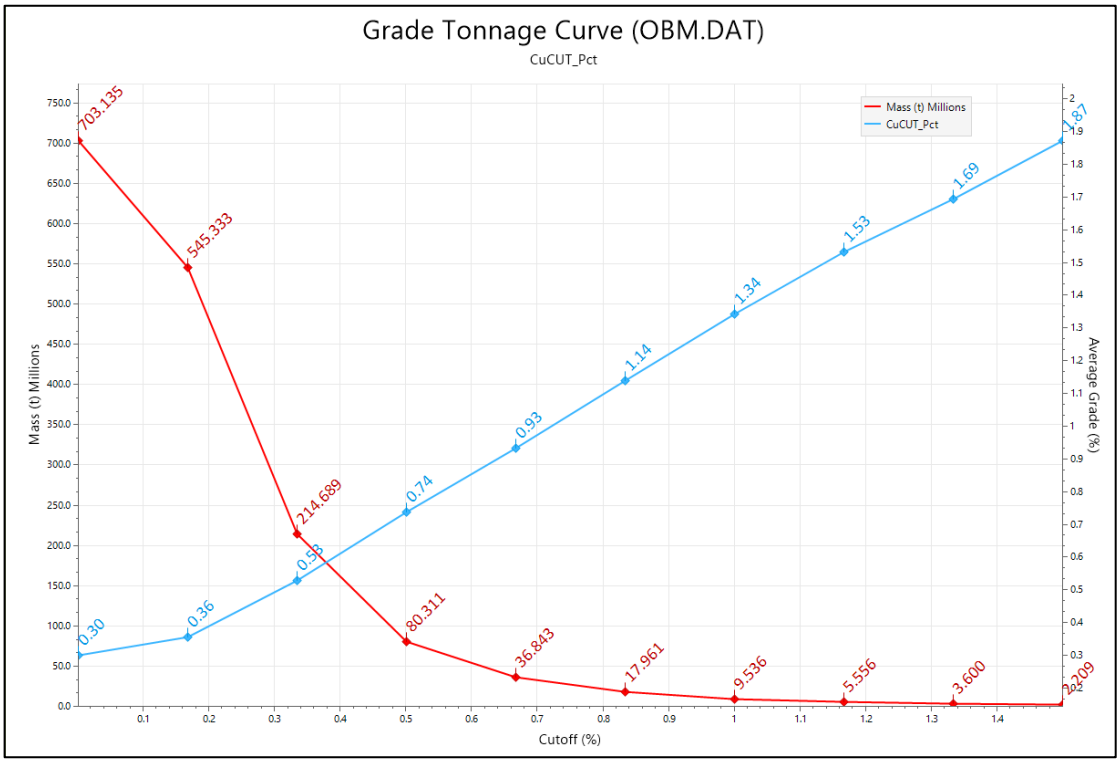

Figure 6-8: Grade tonnage curve max grade 1.5 Cucut%, MEC 2025 Maroochydore MRE

The MEC January 2025 Mineral Resource estimate is stated at different Cucut% cutoff grades for fresh in **Table 6-4**, transitional in **Table 6-5,** and oxide in **Table 6-6** .

Table 6-4: MEC January 2025 MRE, multiple cutoff grades, fresh material

OXIDATION	CUTOFF Cucut%≥	DENSITY t/m^3	TONNES t	Cucut%	Cu%	Cocutppm	Coppm
FRESH	0.00	2.74	569,300,000	0.27	0.28	151	151
FRESH	0.05	2.74	554,600,000	0.28	0.29	154	154
FRESH	0.10	2.74	512,400,000	0.30	0.31	161	161
FRESH	0.15	2.74	454,300,000	0.32	0.33	170	170
FRESH	0.20	2.74	364,800,000	0.35	0.36	182	182
FRESH	0.25	2.74	273,100,000	0.39	0.40	193	194
FRESH	0.30	2.74	180,300,000	0.46	0.47	205	205
FRESH	0.35	2.74	125,000,000	0.52	0.53	216	216
FRESH	0.40	2.74	84,000,000	0.59	0.60	228	228
FRESH	0.45	2.74	58,500,000	0.66	0.68	238	238
FRESH	0.50	2.74	42,000,000	0.73	0.75	245	245
FRESH	0.55	2.74	32,100,000	0.79	0.81	252	252
FRESH	0.60	2.74	25,400,000	0.85	0.88	259	259

Numbers are rounded to reflect a suitable level of precision.
Numbers may not sum due to rounding.

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Table 6-5: MEC January 2025 MRE, multiple cutoff grades, transitional material

OXIDATION	CUTOFF Cucut%≥	TONNES t	DENSITY t/m^3	Cucut%	Cu%	Cocutppm	Coppm
TRANSITIONAL	0.00	74,200,000	2.5	0.42	0.44	242	252
TRANSITIONAL	0.05	73,800,000	2.5	0.43	0.44	242	253
TRANSITIONAL	0.10	70,900,000	2.5	0.44	0.45	249	261
TRANSITIONAL	0.15	67,200,000	2.5	0.46	0.47	258	270
TRANSITIONAL	0.20	62,900,000	2.5	0.48	0.49	266	279
TRANSITIONAL	0.25	55,500,000	2.5	0.51	0.53	272	286
TRANSITIONAL	0.30	47,200,000	2.5	0.55	0.57	274	289
TRANSITIONAL	0.35	39,600,000	2.5	0.60	0.62	281	296
TRANSITIONAL	0.40	32,500,000	2.5	0.64	0.67	287	301
TRANSITIONAL	0.45	26,300,000	2.5	0.70	0.72	292	305
TRANSITIONAL	0.50	21,300,000	2.5	0.75	0.78	294	305
TRANSITIONAL	0.55	17,200,000	2.5	0.80	0.84	300	308
TRANSITIONAL	0.60	13,900,000	2.5	0.85	0.90	306	313

Numbers are rounded to reflect a suitable level of precision.
Numbers may not sum due to rounding.

Table 6-6: MEC January 2025 MRE, multiple cutoff grades, oxide material

OXIDATION	CUTOFF Cucut%≥	TONNES t	DENSITY t/m^3	Cucut%	Cu%	Cocutppm	Coppm
OXIDE	0.0000	59,500,000	2.2	0.42	0.43	327	349
OXIDE	0.0500	59,400,000	2.2	0.42	0.43	327	350
OXIDE	0.1000	57,800,000	2.2	0.43	0.44	334	357
OXIDE	0.1500	52,400,000	2.2	0.46	0.48	354	380
OXIDE	0.2000	47,700,000	2.2	0.49	0.50	370	398
OXIDE	0.2500	42,200,000	2.2	0.52	0.54	385	417
OXIDE	0.3000	36,400,000	2.2	0.56	0.58	401	436
OXIDE	0.3500	31,200,000	2.2	0.60	0.62	418	456
OXIDE	0.4000	26,200,000	2.2	0.64	0.67	439	480
OXIDE	0.4500	21,500,000	2.2	0.69	0.72	460	504
OXIDE	0.5000	17,400,000	2.2	0.74	0.78	480	525
OXIDE	0.5500	13,900,000	2.2	0.80	0.84	494	539
OXIDE	0.6000	11,200,000	2.2	0.85	0.89	504	543

Numbers are rounded to reflect a suitable level of precision.
Numbers may not sum due to rounding.

6.5 Comparison with Historic MRE

A Historic MRE was completed by DataGEO Geological Consultants (DatGEO) for Aditya Birla in April of 2014. The 2014 MRE stated 48.6 Mt @ 1.0% Cu; 0.038% Co (applying a ≥0.5% Cu cut-off grade in oxide and ≥1.1% Cu cut-off grade in sulphide). The MEC January 2025 MRE report is 370.8Mt @ 0.43% Cucut inferred resources, compared to the DatGEO 2014 MRE of 48.6 Mt @ 1.0% Cu. The MEC MRE has significantly higher tonnage due to application of a lower economic cutoff grade of ≥0.25% Cucut; compared with the higher economic cutoff grades used by DatGEO and through inclusion of additional drilling information from campaigns that followed the compilation of the previous estimate.

The DatGeo MRE when reported at 0.2% Cu was 115.6 Mt at 0.54% Cu oxide, and 159.2 Mt at 0.39% Cu sulphide, for a total of 274.8 Mt at 0.45% Cu% compared to the MEC January 2025 MRE of 370.8Mt @ 0.43% Cucut at 0.25% Cu cutoff.

7 CONCEPTUAL MINING STUDY

A 2024 Cyprium inhouse conceptual mining study including pit optimisation and discounted cash flow modelling was conducted using an inhouse (non JORC compliant report) MRE. The economic cutoff grade applied to the inhouse mining study was 0.25% Cu. 12M tonnes per annum and 24M tonnes per annum processing rates were considered at the conceptual study level. The results although preliminary demonstrated technical and economic viability from production of copper concentrates without a cobalt credit.

8 REASONABLE PROSPECTS HURDLE

Clause 20 of the JORC (2012) Code requires that all reports of Mineral Resources must have reasonable prospects for eventual economic extraction, regardless of the classification of the resource. MEC deems that there are reasonable prospects for eventual economic extraction utilising open pit mining on the following basis:

- The development of the Nifty project has removed many unknowns for the Maroochydore project, particularly relating to costs and performance of Broadhurst hosted sulphide mineralisation in concentrator processing plants.
- Metallurgical testwork has produced promising recoveries.
- There are existing currently underutilised regional processing options.

9 METALLURGICAL TESTWORK

Based on preliminary metallurgical testwork two initial flowsheet options are proposed for Maroochydore. The first option utilises a straightforward sulphide concentrator flowsheet, resulting in a marketable concentrate. The second option employs a more complex flowsheet that not only produces a sulphide concentrate but also includes a leaching process to generate copper cathode and potentially cobalt metal, although cobalt hydroxide as saleable product remains a viable alternative. Additionally, there is potential to separate zinc, possibly enabling the production of a third marketable product. The flowsheet option described for the hydrometallurgical route is a pathway to recovering Cu and Co, as well as treating oxides. The simplest flowsheet will mimic the Nifty copper concentrator flowsheet in terms of crushing, grinding and flotation to produce a concentrate for dewatering and shipment to port. Many processing parameters are understood from the Nifty project, and given the current knowledge of Maroochydore and Nifty mineralised material, it is likely that comminution power will be less on a per tonne basis as the Maroochydore ore is less

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silicified than Nifty and the work index will likely be lower. However, the flowsheet for Maroochydore may need more flotation cells in terms of an additional recleaning stage for the rougher concentrate due to the likely lower feed grades. Potential process recovery data by flotation, leaching, and the total hydrometallurgical recovery are shown in **Table 9-1.**

Table 9-1: MEC January 2025 MRE, multiple economic cutoff grades

METHOD	PROCESS RECOVERY %	OXIDE	SUPERGENE	SULPHIDE
FLOTATION	Cu	60	80	92
	Co	58	77	88
LEACHING	Cu	95	95	95
	Co	80	80	94
TOTAL	Cu	57	76	87.40
	Co	46.40	61.60	82.72

Testwork will be required to confirm these recoveries. Other deleterious elements that may affect the flowsheet have not yet been assessed.

10 RECOMMENDATIONS

MEC recommends -

- All drillholes have been logged, however, there are intervals on the drillholes that are unsampled, and unassayed. It is recommended to process the existing core that remains at the Maroochydore camp, the Nifty mine, and the Perth depot. The drillcore needs to be relogged, and assayed where appropriate. There are numerous intervals that may be added to the Maroochydore database without incurring the cost and time of additional drilling.
- Check and revise, if necessary the weathering horizons and establish if there is a chalcocite zone similar to Nifty deposit.
- Selective sampling should be avoided in future and where this occurs an allowance must be made in the database to avoid an incidence of estimation bias.
- Further density measurements are required across the deposit and within the different weathering layers to provide sufficient data for reliable tonnage estimation. Currently the Nifty default densities are utilised for the Maroochydore oxide, transitional, and fresh domains.
- Complete a drone surface survey to obtain an accurate DTM.
- Infill drill the western lode and the eastern lode, the eastern lode has sparse drill coverage. Previous drilling on the eastern lode targeted shallow oxide mineralisation and not the deeper sulphide resources.
- Create a structural model to integrate offsetting faults, and feeder faults and zones. The structural model will augment the MRE.
- Establish the potential credit that may be provided by cobalt. If the credit is established then report the MRE by a CuCut% equivalent grade.

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- Initiate a scoping/conceptual study for Maroochydore. As part of the scoping study confirm the economic CuCut% equivalent grade, which is currently 0.25% Cu.
- Utilise oriented drill core in future to provide improved structural data.

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11 APPENDIX 1: JORC CODE TABLE 1 SECTION 1: SAMPLING TECHNIQUES AND DATA

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	• The Maroochydore deposit has been drilled and sampled from surface along and across strike, using various drilling techniques. The drilling programs have been ongoing since initial discovery to understand and expand the mineralisation. • Most drilling has been designed to intersect the folded mineralisation as close as perpendicular as possible. A total of 1,299 Ac, RAB, RC, water bore, diamond, and pre-collared holes with diamond tails have been drilled at Maroochydore, for a total of 110,380 m of drilled metres within the immediate vicinity of the deposit. • The drillhole collars were surveyed by company employees or contractors with the orientation recorded. Down hole surveys were recorded using appropriate equipment. The diamond core was logged for lithology and other geological features including regolith and weathering. RC drilling was logged for lithology, regolith and weathering. • The diamond core diameter varied from PQ to HQ in diameter. Mineralised intervals were sampled by cutting the core. For the sampled core, 35% has been sampled as half core. The remainder was sampled as either quarter or whole core. The submitted sample weight ranged from 2 to 3 kg. • The RC drillhole diameters prior to 2021 is unknown • The RC drilling completed by Cyprium used various hole diameters from 143mm to 150mm. The submitted RC samples were collected from the cyclone on the rig and spilt at the rig to approximate 2 to 3 kg weight. The splitter was cleaned with compressed air after each sample. • No geophysical tools were employed in assessing the sample grades.
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• The drilling rate was monitored and adjusted to maximise sample recovery. • Laboratories used were/are ISO/IEC 17025 accredited.

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	• 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	• Copper mineralisation is readily identified by the presence of copper oxide minerals (dominantly azurite, malachite and chalcocite) and/or copper sulphide (dominantly chalcopyrite and bornite) mineral species. • Information relating to samples from drill programs prior to 2021 is unknown. • RC drilling was sampled at 1.0 m intervals using a cyclone and sub-sampled using a riffle or cone splitter to create a 2-3 kg sample in a calico bag, which was submitted for assaying. • Six-meter composite samples were collected through intervals logged as Permian, with sub-samples riffle split and composited on site. • Selective diamond core from the 2021 program was sampled to lithological contacts, limited to nominal 1.0 m in length and predominantly sampled as sawn half core. • The sampling protocols are considered appropriate for the nature and style of the Maroochydore copper mineralisation.
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.).	• All drilling was completed from surface whether Aircore (AC), Rotary Air Blast (RAB), reverse circulation (RC) drilling or diamond drilling. • Diamond drilling was conducted using PQ to HQ diameter drilling.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed.	• Core recovery was recorded in the database and assessed by measuring core length against total recovered core. The total core recovery averaged 97% in the fresh domain, and was less in the transitional and oxide domains. • RC sample weights were not recorded.
	• Measures taken to maximise sample recovery and ensure representative nature of the samples.	• The ground conditions in the mineralised zone are competent. In areas of less competent material, core return was maximised by controlling drill rate. • In the case of RC samples, intervals of less competent material were identified in the log.
	• 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.	• There was no relationship apparent between core recovery and grade.

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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.	• The routine logging of core and chips informed the general geologic features including stratigraphy, lithology, mineralisation, and alteration, which was sufficient and appropriate to apply mineralisation constraints. • Some core drilling was orientated and structural measurements of bedding, joints, veins etc captured. • The level of detail is considered suitable to support all Mineral Resource classifications and future mining and metallurgical studies.
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	• Geological logging is qualitative; core recovery and structural orientation was captured as quantitative data.
	• The total length and percentage of the relevant intersections logged.	• The entire length of all drillholes, apart from surface casing was logged geologically.
Subsampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken.	• Selective core from the 2021 program were cut. Approximately 35% of all cores was sampled as half core, 1% as whole core and less than 64% as quarter core. All cut core was sawn. It is not known if the core was consistently taken from the same side. • Field sub-sampling of RC chip samples and the use of core cutting equipment for the submitted core are considered appropriate sub-sampling methods.
	• If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	• AC, and pre 2021 RC chip samples were collected via a cyclone prior to being sub-sampled by splitter. • The splitter riffles were cleaned with compressed air between each sample. • Geological logging describes the AC and RC samples as being predominantly dry.
	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	• Prior to 2007, information relating to sampling and sample preparation are unknown. • For the 2010 and 2012 programs, samples were sent to ALS Chemex Laboratories in Perth for sample preparation and analysis using a four-acid digest method.

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		• Samples from the 2012 program were also sent to Genalysis Laboratory Services for preparation and analysis using a four-acid digest method. 2021 RC metre samples were cone split on the drill rig; the cone splitter was cleaned regularly with compressed air. • Drill samples from the 2021 program were sent to Bureau Veritas (BV) for routine sample prep consisting of drying, weighing and pulverising for RC samples. • Diamond core was also submitted to BV and has an additional crushing step involved in the sample preparation process. All assaying for core, AC, RAB and RC samples was performed by contract laboratories. • All sample preparation techniques are considered appropriate for the style and nature of the Maroochydore copper mineralisation.
	• Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	• The procedures for all subsampling stages are considered appropriate.
	• 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.	• During drilling the cone splitter was cleaned regularly using compressed air. The drill speed was monitored during drilling to optimise sample recovery. • The core was cleaned prior to logging and sampling. • All laboratories adopted appropriate industry best practices for splitting and comminution to the required particle size.
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	• Sample sizes are considered appropriate for the style of mineralisation, mineralogy and grain size being sampled.
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.	• Prior to 2007, analytical techniques are unknown. • DataGEO reported in the 2014 report that samples from 2007, 2010 and 2012 drill programs were sent to ALS Chemex Laboratories in Perth for analysis – via four-acid digest and ICP-OES analysis. Samples from the 2012 drill program were analysed by Genalysis Laboratory Services and also used a four-acid digest and ICP-OES analysis. • Since acquiring the project in 2021, Cyprium sample data was assayed at Bureau Veritas in Canning Vale, Western Australia. Samples were crushed and pulverised using Lead Collection Fire Assay and ICP-AES analysis (scheme FA002) for Au, Pt and Pd. Analysis of an extended multi-element range was completed using a mixed acid digest (scheme MA200) in combination with

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		analytical schemes MA201 (ICP-AES) and MA202 (ICP-MS) for the various elements.
	• 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.	• No geophysical tools were used to ascertain grade.
	• 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.	• All provided QAQC data is post 2021. The QAQC data includes certified reference material (CRM or standards) to assess analytical accuracy, and blanks to test laboratory hygiene to check for cross contamination. • The GBM321-16 standard is a copper sulphide ore high grade. With Cu grade of 69,389Cu_ppm, and standard deviation of 2,531. Zinc grade 1,007 Zn_ppm with standard deviation of 47. One GBM321-16 zinc value occurred within warning limit 2, results were acceptable to the CP. • GBM916-2 is described as a zinc, copper, and silver oxide standard. With Cu grade of 1,675 Cu_ppm, and standard deviation of 58, zinc grade 8,792 Zn_ppm with standard deviation of 321, and cobalt grade of 10 Co_ppm with standard deviation of 1. All results for the GBM916-2 standard occurred within warning limit 1. • GBM907-2 is described as low-grade copper and zinc sulphide standard. With Cu grade of 8,126 Cu_ppm, and standard deviation of 378. Zinc grade 31,905 Zn_ppm with standard deviation of 1,340. All results for GBM907-2 standard occurred within warning limit 1. • The GBM910-7 standard is a material is described as a Cu supergene standard. With Cu grade of 5,335Cu_ppm, and standard deviation of 233. Zinc grade 1,249 Zn_ppm with standard deviation of 73, and cobalt grade of 86 Co_ppm with standard deviation of 10. All results for GBM910-7 standard occurred within warning limit 1. • The GBM311-9 is described as a platinum, palladium, and gold standard. With Cu grade of 124 Cu_ppm, and standard deviation of 10. Zinc grade 72 Zn_ppm with standard deviation of 21, and cobalt grade of 34 Co_ppm with

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		standard deviation of 7. All copper and zinc results for GBM311-9 standard occurred within warning limit 1. • Blank samples with no mineralised content are routinely submitted to determine if there is any unexpected grade increase during sample preparation and analysis that may have eventuated from poor laboratory hygiene and sample cross contamination. 70 blanks were inserted by Cyprium and no unacceptable grade increase was returned.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel.	• The extensive data set has been reviewed by previous operators of the project and the intersections within the mineralisation have been confirmed and reported in Announcements.
	• The use of twinned holes.	• 8 sets of twinned drillholes were identified for analysis, 4 pairs were RC/diamond twins, and 2 pairs were RC/RC twins from different phases of drilling.
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• The extensive historical data set has been reviewed many times over nearly 30 years by several data management consultants. Intersections within the mineralisation have previously been confirmed. • Cyprium has adopted established data entry, verification, storage and documentation protocols.
	• Discuss any adjustment to assay data.	• Various very low values were corrected to below detection limits. Assays were composite to 1m prior to estimation.
Location of data points	• Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	• Drillhole location information from pre 2021 drilling is not available. • The 2021 drill program utilised a Trimble R8 RTK GPS unit with a Trimble TSC2 data controller was used to complete the work. • Collar positions have been surveyed on a known local grid with good, demonstrated survey control. • Drillhole collar locations are set out and surveyed using the local Maroochydore grid. • The drillhole azimuth and dip was recorded continuously or at 40m intervals.

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	• Specification of the grid system used.	• The regional grid is GDA94 Zone 51. All site survey work is completed using the local Maroochydore grid.
	• Quality and adequacy of topographic control.	• Topographic control is currently adequate and is derived from drillhole collar elevations.
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	• Surface drillholes were drilled on a 50m x 50m down to 100m x 50m spacing on the west lode, and 100m x 100m down to 100m x 400m on the East lode.
	• 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.	• Data spacing and distribution is sufficient to establish the degree of geological and grade continuity. The applied Mineral Resource classification is commensurate with the geological and grade continuity demonstrated.
	• Whether sample compositing has been applied.	• Samples were composited to 1m prior to commencing the estimate.
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.	• Drillholes were designed to reflect the orientation of the stratigraphy, mineralisation, and deposit type. • Neither the drillhole design nor the sampling are believed to have introduced a sample bias.
	• 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.	• No sampling bias is considered to have been introduced by either RC or diamond drilling.

Sample security	• The measures taken to ensure sample security.	• RC samples and diamond drillhole core trays once collected from the rig, were stored at the Maroochydore exploration camp, and Nifty mine site, which allowed only authorised access.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• Over several years, database management companies have audited the drill hole databases and found them to be representative of the information contained.

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Section 2: Reporting of Exploration Results

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

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td rowspan="2">Mineral tenement and land tenure status</td><td>• 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.</td><td>• The Maroochydore tenement package encompasses 140 square kilometres. Tenements are 100% owned by Maroochydore Copper Pty Ltd, in turn a subsidiary private company 100% owned by listed entity Cyprium Metals Ltd and consists of a combination of granted MLs (Mining licences), ELs (Exploration licences) and PLs (Prospecting licences).
The Maroochydore deposit is situated on pre-native title MLs.
<table>
<tr><th colspan="4">Maroochydore Project</th></tr>
<tr><th rowspan="2">Lease</th><th colspan="2">Area</th><th rowspan="2">Expiry</th></tr>
<tr><th>Blocks</th><th>Hectares</th></tr>
<tr><td>E45/1840</td><td>4</td><td></td><td>15/04/2025</td></tr>
<tr><td>E45/1841</td><td>7</td><td></td><td>7/04/2025</td></tr>
<tr><td>E45/3011</td><td>6</td><td></td><td>8/04/2026</td></tr>
<tr><td>E45/4318</td><td>2</td><td></td><td>9/01/2027</td></tr>
<tr><td>E45/4319</td><td>5</td><td></td><td>31/03/2026</td></tr>
<tr><td>M45/314</td><td></td><td>912.3</td><td>9/03/2030</td></tr>
<tr><td>M45/315</td><td></td><td>345.3</td><td>9/03/2030</td></tr>
<tr><td>M45/317</td><td></td><td>996.3</td><td>9/03/2030</td></tr>
<tr><td>M45/318</td><td></td><td>998.6</td><td>9/03/2030</td></tr>
<tr><td>M45/492</td><td></td><td>162.9</td><td>11/12/2033</td></tr>
<tr><td>P45/3055</td><td></td><td>43.0</td><td>9/10/2026</td></tr>
<tr><td>P45/3151</td><td></td><td>76.2</td><td>18/04/2025</td></tr>
<tr><td>M45/711</td><td></td><td>356.0</td><td>4/11/2045</td></tr>
<tr><td>M45/712</td><td></td><td>722.1</td><td>4/11/2045</td></tr>
<tr><td>M45/713</td><td></td><td>708.2</td><td>4/11/2045</td></tr>
<tr><td>M45/745</td><td></td><td>448.9</td><td>4/11/2045</td></tr>
<tr><td>M45/746</td><td></td><td>924.0</td><td>Pending survey</td></tr>
<tr><td>TOTALS</td><td>24</td><td>6,693.5</td><td></td></tr>
</table></td></tr>
<tr><td>• 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.</td><td>• Currently there are no known impediments to Cyprium obtaining a licence to operate.</td></tr>
<tr><td>Exploration done by other parties</td><td>• Acknowledgment and appraisal of exploration by other parties.</td><td>The Summary Maroochydore project history is:
• Esso Australia Ltd discovered Maroochydore between 1984 - 1986 by using regional geophysical data, mapping & sampling and reconnaissance geology, followed by RAB, RC and core drilling.
• City Resources Ltd acquired the project from 1986-1988 where they compiled the data, mapping and surface samples. From 1988 to 1989- City resources entered into a Joint Venture agreement with Chevron Exploration, and they have completed a thematic mapping campaign before Chevron sold its interest to Barrack Mines Ltd in 1989.</td></tr>
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		• Barrack Mines Ltd and City Resources Ltd completed an RC drilling campaign before estimating a Maiden Resource Estimation of 14Mt @1.6 % Cu (1 %Cu cog) before selling the project to MIM & Omega Mines in 1991. • From 1991-1994, MIM and Omega Mines carried out geophysical work, mapping, sampling, RC and diamond drilling before Omega Mines sold its interest to Murchison United Ltd in 1994. • Diamond drilling. PhD thesis study work was completed between 1994-1996. In 1996 MIM sold to Straits Resources Ltd. • From 1996-2003 Straits Resources Ltd and Murchison Trailed MMI Survey, completed RC and diamond drilling. A mineral resource of 138 Mt@ 0.57% Cu (0.2%Cu cog). • Aditya Birla acquired the project from Straits Resources in 2003 and completed geophysics and RC drilling as well as completing a mining and metallurgical studies and updated the Mineral resource estimate to 41.2Mt @ 0.82% Cu; 0.04% Co (0.5% Cu cog). In 2009 Murchison sold its interest to Aditya Birla. • Aditya Birla updated the Mineral resource estimate to 48.6 Mt @ 1.0 % Cu: 0.038 % Co (0.5 % Cu cog in oxide & 1.5 % Cu cog in Sulphide) before selling the project to Metal X in 2016. • Metals X completed geophysics, RC and Diamond drilling from 2016 to 2021 before selling the project to Cyprium Metals Limited in 2021. • Since acquisition Cyprium has drilled 46 resource definition RC holes, 4 water bore holes & 6 diamond holes.
Geology	• Deposit type, geological setting and style of mineralisation	The Maroochydore stratigraphy is part of the Broadhurst Formation and is subdivided into three stratigraphic units comprising the Hangingwall Succession, Mineralised Horizon and the Footwall Succession. • The Hangingwall Succession consists of dolomitic and weakly carbonaceous shale with increasing carbonate content towards the top of the sequence and decreasing carbonate/increasing carbonaceous content towards the base of the sequence. • The Mineralised Horizon sequence averages 75 metres thickness and is subdivided into an Upper Carbonaceous Shale with abundant framboidal pyrite, a Dolostone Sequence comprising recrystallised dolostone and the Lower Carbonaceous Shale with common framboidal pyrite.

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		• The Footwall Succession consists of mudstones with interbedded carbonaceous shales intruded by coarsely crystalline differentiated gabbros and dolerites. • Maroochydore is a sediment hosted deposit type with a less restricted structural framework and host sequence (wide interval of thinly interbedded dolomitic siltstone and shale) than at Nifty. • The upper resources are dominated by oxide and transitional materials hosted in the 50 to 100m thick mineralised horizon consisting of carbonaceous shales and recrystalised dolostones. The deposit is a mixture of Oxide/Supergene and Primary Sulphides and is currently defined over a strike length of ~7km and is under cover varying from 20m depth at the south-eastern end to 80m depth at the north-western end.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: ○ easting and northing of the drill hole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• No exploration results are reported as part of this release and any results relating to the deposit have been released previously.
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.	• No exploration results are reported as part of this release and any results relating to the deposit have been released previously.

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	• Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	• No exploration results are reported as part of this release and any results relating to the deposit have been released previously.
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	• No exploration results are reported as part of this release and any results relating to the deposit have been released previously.
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.	• No exploration results are reported as part of this release and any results relating to the deposit have been released previously.
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	• No exploration results are reported as part of this release and any results relating to the deposit have been released previously.

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	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 (eg 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.	• No exploration results are reported as part of this release and any results relating to the deposit have been released previously.

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Section 3: Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	• The measures undertaken in the past to avoid uncorrupted data are unknown.
	• Data validation procedures used.	• Drillhole collar, downhole survey, assays, geology, core recovery data was imported into Micromine software. • The imported data was then compared to the database values with no discrepancies identified. • The data was desurveyed using the Micromine software package and reviewed spatially with no discrepancies identified.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	• A site visit to the Maroochydore project was completed on 29th of October 2024 by MEC Manager of Resources Dean O'Keefe and MEC Resource geologist Issam Digais, accompanied by Cyprium Metals Ltd Milan Jerkovic (Cyprium Metals Corporate Advisor), Gavin Hammer (Cyprium Metals Nifty site General Manager) and Mark Styles (Cyprium Metals Manager of Exploration). The Encounter camp, the Maroochydore camp, and the drilled project area were visited. Several drillhole collars were found and a handheld GPS was used to check coordinates against provided coordinates. The handheld GPS surveyed coordinates were within ~5m of the planned drillhole collar coordinates.
	• If no site visits have been undertaken indicate why this is the case.	• A site visit has been conducted.
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	• Confidence in the interpretation of the weathering and oxide zones is considered good – being well tested by surface drilling, clearly identifiable mineralogy, and rock fabric. • All available historical data was provided by Cyprium. • The lithostratigraphic sequence is subject to vertical and horizontal dimension changes along and across strike and in thickness. • The interpretations have been refined in conjunction with previous interpretation.

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	• Nature of the data used and of any assumptions made.	• Surface AC, RAB, RC as well as surface diamond drilling have been used to inform the Mineral Resource estimate.
	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	• Due to both the coverage of available data and the +30 years of exploration at Maroochydore, there is limited scope for alternate interpretations in areas that have been suitably drill tested, with only minor/local scale refinements expected. • Areas with wider spaced drilling have an increased potential for alternate interpretations but are still expected to correlate well with the geological model.
	• The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	• The lithostratigraphic units were used as hard boundaries for estimation. • Geological domains were assigned to the composite prior to estimation.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource	• The Maroochydore copper deposit occurs over a 600m down plunge distance, and 7,600m across strike units vary individually between from 0.1 m to 75 m in true thickness.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	• The MRE was completed using the Micromine v2025 software. • The available samples were coded by unit (estimation domain), and 1.0m composites were created honouring these boundaries. • Copper geostatistical assessment of the controlling variograms was undertaken in true space for each estimation. The grade was estimated by ordinary block kriging using 1.0m composite grades. • Topcuts were applied to the composite samples on individual estimation domains, to restrict the impact of a limited number of extreme (high) values. Grades were top-cut for Cu to 12%, Co to 5,000ppm, and Zn to 0.5%.For estimation purposes all boundaries were treated as hard boundaries. • The primary search was 150m in the direction of maximum grade continuity, 120m along the intermediate direction of continuity and 30m in the minor direction of continuity. Up to 5 samples per eight sector (maximum number of informing samples was 40 samples) was used.

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		• The secondary search was 250m in the direction of maximum grade continuity, 200m along the intermediate direction of continuity and 50m in the minor direction of continuity . Up to 5 samples per eight sectors (maximum number of informing samples was 40 samples) was used. • The third search was 500m in the direction of maximum grade continuity, 400m along the intermediate direction of continuity and with a no sample count applied (no octant search applied).
	• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	• Previous estimates used much higher cutoff grades and targeted the oxide only MRE. There has been no production at Maroochydore.
	• The assumptions made regarding recovery of by-products.	• Cobalt is a potential byproduct.
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	• Zinc has been estimated but not reported. Other deleterious elements that may affect the process flowsheet have not yet been assessed.
	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	• The drillhole spacing in the western lode ranges from 50m x 50m increasing to 100m x 100m. The drillhole spacing in the eastern lode ranges from 200m x 200m increasing to 800m x 400m. • The ore block model was created with block sizes of 10m east 20m north and 5m in elevation, sub blocked to 5m east, 10m north, and 1m in elevation.
	• Any assumptions behind modelling of selective mining units.	• No selective mining unit assumptions were used for the Mineral Resource Estimate.
	• Any assumptions about correlation between variables.	• No assumptions have been made regarding correlated variables. The correlation between copper and cobalt was checked and a moderate correlation was established.
	• Description of how the geological interpretation was used to control the resource estimates.	• MEC used a 0.1% Cu geological cut-off grade to delineate the mineralised envelopes. Interpretation was conducted in section with all strings snapped in 3d to the drillholes. Two main lodes and a smaller upper lode were interpreted. Lode and grade continuity was strong for the western lode due to the closer spaced drilling. The eastern lode had less drillhole coverage and consequently less data

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		to allow interpretation of the lodes with lower confidence on the lode continuity and geometry. Grades were displayed along with logged geology for the interpretation. Following sectional interpretation the lodes were then wireframed.
	• Discussion of basis for using or not using grade cutting or capping.	• To prevent extreme composite grade values biasing the estimate, estimation domains with extreme values were topcut. Ordinary block kriging with a top cut was used for Mineral Resource estimation, grades were top-cut for Cu to 12%, Co to 5,000ppm, and Zn to 0.5%.
	• The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	• The MRE was validated globally and locally. The global validation result was wireframe volume 563,082,791m^3 versus OBM volume of 562,304,100m^3, an insignificant difference. Global validation differences for grade was higher as the wireframe grade of 0.68% CuCut makes no allowance for declustering of data, the OBM grade was 0.43% CuCut. • The local validation is completed by comparing the composite input assay data grade against the estimated grade. There was strong correlation with the estimated grade honouring the input composite data. Swathe plots also showed that input assay data grades mirrored the model grades.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Tonnages were estimated on a dry bulk density basis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied	• The MEC January 2025 Maroochydore MRE reports above a 0.25% Cu cutoff grade and topcut Cu grade of 12%. The Co topcut grade was 5,000ppm. All MRE are classified as Inferred Mineral Resources. MEC reported the MRE at the same cut off grade as the 2023 Nifty MRE.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider	• There has been no production at Maroochydore. The lodes are near surface, have a shallow plunge and dip which is amenable for opencut mining extraction.

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	potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• Based on preliminary metallurgical testwork two initial flowsheet options are proposed for Maroochydore. The first option utilises a straightforward sulphide concentrator flowsheet, resulting in a marketable concentrate. The second option employs a more complex flowsheet that not only produces a sulphide concentrate but also includes a leaching process to generate copper cathode and potentially cobalt metal, although cobalt hydroxide as saleable product remains a viable alternative. Additionally, there is potential to separate zinc, possibly enabling the production of a third marketable product. The flowsheet option described for the hydrometallurgical route is a pathway to recovering Cu and Co, as well as treating oxides. The simplest flowsheet will mimic the Nifty copper concentrator flowsheet in terms of crushing, grinding and flotation to produce a concentrate for dewatering and shipment to port. A lot of factors are understood from the Nifty project, given the current knowns around Maroochydore from Nifty, it is likely that comminution power will be less on a per tonne basis as the Maroochydore ore is less silicified than Nifty and the work index will likely be lower. However, the flowsheet for Maroochydore may need more flotation cells in terms of an additional recleaning stage for the rougher concentrate due to the likely lower feed grades. Potential process recovery data by flotation, leaching, and the total hydrometallurgical recovery are shown in below -

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<table>
<tr><td></td><td></td><td>
<table>
<tr><th>METHOD</th><th>PROCESS RECOVERY %</th><th>OXIDE</th><th>SUPERGENE</th><th>SULPHIDE</th></tr>
<tr><td>FLOTATION</td><td>Cu</td><td>60</td><td>80</td><td>92</td></tr>
<tr><td></td><td>Co</td><td>58</td><td>77</td><td>88</td></tr>
<tr><td>LEACHING</td><td>Cu</td><td>95</td><td>95</td><td>95</td></tr>
<tr><td></td><td>Co</td><td>80</td><td>80</td><td>94</td></tr>
<tr><td>TOTAL</td><td>Cu</td><td>57</td><td>76</td><td>87.40</td></tr>
<tr><td></td><td>Co</td><td>46.40</td><td>61.60</td><td>82.72</td></tr>
</table>
</td></tr>
<tr><td>Environmental factors or assumptions</td><td>• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made</td><td>• Cyprium reports that it operates in accordance with all environmental conditions set down as conditions for grant of the respective leases.</td></tr>
<tr><td rowspan="2">Bulk density</td><td>• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</td><td>• Bulk density was assumed on a dry basis</td></tr>
<tr><td>• The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</td><td>• Prior to density determination, the core was sealed using plastic wrap to mitigate the presence of vugs and/or voids.</td></tr>
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	• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• The Maroochydore bulk density data was provided by Cyprium including the following: ○ 90 Records previously sourced from the BirlaMAR_Database_20150430.mdb. ○ 70 Records which was completed by Cyprium as part of the 2021 drill campaign and are the result of testing 21MDMT005 and 21MDMT006 drillholes. • 160 Density records were imported into the database. All density measurements were acquired by using the water immersion technique of weighing the sample mass in both air and water. • All density measurements occurred within the fresh zone and no density measurements occurred within the oxide / transitional horizons. Density data covered a 450-meter strike length predominantly of the west lode, the deposit strike length is 4km. Density measurements are not considered to be representative as they are concentrated in one part of the deposit. • Weathering layers of oxide, transitional and fresh were modelled from drillhole logging. Density was applied to the OBM for reporting of tonnage by defaulting average densities to the weathering layers. These average densities were defaulted from the Nifty oxide, transitional and fresh weathering domains; 2.74t/m^3 in fresh material, 2.5 t/m^3 transitional material and 2.2 t/m^3 in the oxide. • The assignment of these density values is approximate only and is not representative of the Maroochydore project.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories	• Mineral Resources were classified on the basis of drillhole spacing, QAQC support, lack of density measurements, and other risk factors.
	• Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	• Mineral Resources were classified as inferred.
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	• The Mineral Resource estimate reflects the Competent Person's view of the deposit.

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Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• The MEC January 2025 MRE has been red flag audited by Palaris consulting; no fatal flaws were identified in this review.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate	• Factors that could affect the relative accuracy and confidence in the estimate are the estimation domain being considered and the proximity to informing samples. • No quantitative test of the relative accuracy has been done.
	• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used	• The January 2025 Mineral Resource update is considered a global estimate.
	• The statements of relative accuracy ad confidence of the estimate should be compared with production data, where available.	• There has been no production at Maroochydore.

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DOCUMENT CHANGE CONTROL

Version	Description of Changes/amendments	Author (s)	Date
1.	Written	Dean O'Keefe Issam Digais Matthew Watson	22/1/2025
2.	Peer reviewed	Dean O'Keefe	4/2/2025

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Author(s)	Dean O'Keefe, Issam Digais, Matthew Watson
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File Name	271022 MEC Cyprium Metals Ltd Maroochydore MRE Jan 2025 Memorandum Release
Job No	271022
Distribution	Cyprium Metals Ltd

DOCUMENT REVIEW AND SIGN OFF

Version	Reviewer	Position	Signature	Date
1.	Dean O'Keefe	Resources Manager	Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication.	4/2/2025