Orion Minerals

ASX/JSE RELEASE: 28 March 2025

Orion updates Mineral Resources at the Flat Mines Area, Okiep Copper Project

Other historical mines and prospects also being modelled, with potential to deliver further resource growth

- **A review of the geological interpretation at Flat Mine (Nababeep), including eight holes drilled by Orion, has resulted in improved definition of the mineralised zones.**
- **Mineral Resources at Flat Mine (Nababeep) are 0.6 Mt at 1.0% Cu for 6,000 tonnes of contained copper, comprising an Indicated Resource of 0.3 Mt at 1.07% Cu and an Inferred Resource of 0.3 Mt at 1.0% Cu.**
- **This brings the total Mineral Resources within the Flat Mines Area of the Okiep Copper Project to 11.5 Mt at 1.3% Cu for 152,000 tonnes of contained copper.**
- **Previously announced Mineral Resources were 9.4 Mt at 1.3% Cu for Flat Mine North, Flat Mine East and Flat Mine South and 1.5 Mt at 1.3% Cu for Jan Coetzee Mine and Nababeep Kloof Mine.**
- **Other historical mines and prospects are currently being modelled, with the potential to deliver further growth in the OCP Mineral Resource.**

Orion's Managing Director and CEO, Errol Smart, commented:

"Confidence in the Flat Mines Mineral Resource estimate has been improved by recent drilling and the Flat Mine Nababeep Mineral Resource is modelled for consideration as an underground mining project with large open stopes including significant internal dilution.

"Our success in Mineral Resource estimation at Flat mines, following our validation drilling is providing growing confidence in the extensive historical Newmont and Goldfields data that we acquired for the Okiep District. Ongoing digitisation and modelling is allowing us to rank the surrounding mineralised bodies and consider Reasonable Expectation of Eventual Economic Extraction with the objective of targeting bodies with qualities that could provide rapid growth in production scale and extension of mine life for prioritised infill and validation drilling.

"This report is the culmination of an intense twelve-month program and has been a very valuable demonstration of the ability to rapidly establish Mineral Resources in a rapidly executed, cost effective drilling program. We have several mineralised bodies with similar historical scale and density of historic drilling that we are prioritising for similar programs as just completed."

Orion Minerals Limited (**ASX/JSE: ORN**) (**Orion** or **Company**) is pleased to report an update in the Mineral Resource estimate for Flat Mine (Nababeep) (**FMNb**) that forms part of the Okiep Copper Project (**OCP**), located in the Northern Cape Province of South Africa, following a detailed review of the geology and remodelling of the deposit.

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The Indicated and Inferred Mineral Resources, as stated in Table 1 below, have been re-estimated for the FMNb deposit, and now are **0.6 Mt grading 1.0% Cu for 6,000 tonnes of contained copper** (Table 1).

Together with the previously reported Mineral Resources for Flat Mine North (**FMN**), Flat Mine East (**FME**) and Flat Mine South (**FMS**) (refer ASX/JSE release 28 August 2023) of 9.4 Mt grading 1.3% Cu including a Measured and Indicated Mineral Resource of 7.4 Mt grading 1.35% Cu (Table 2) and an Inferred Mineral Resource for Jan Coetzee Mine and Nababeep Kloof Mine (refer ASX/JSE release 29 March 2021) of 1.5 Mt grading 1.3% Cu (Table 2), this latest resource estimate revises the total Mineral Resource at the OCP to **11.5 Mt grading 1.3% Cu for 152,000 tonnes of contained copper** (Table 2). The total Measured and Indicated Mineral Resource at the OCP has increased from 7.4 Mt grading 1.35% Cu to 7.7 Mt grading 1.34% Cu.

The Mineral Resource estimation is based on historical drilling data and Orion drill holes and is estimated by a Competent Person and classified in accordance with the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code (2012)**) with supporting information in Appendices 1 and 2.

Updated FMNb Mineral Resource

Following an extended period of detailed review resulting in an increased understanding of the local geology and the controls on mineralisation, a new interpretation was completed for the FMNb deposit. The new interpretation has significantly improved the definition of the estimation domains at FMNb and has due consideration of JORC Code (2012) guidelines for requirements of RPEEE (Reasonable Prospects of Eventual Economic Extraction) using underground mining methods for the more diluted but continuous blocks.

The changes to the resource models decreased the total Mineral Resource at FMNb from 1.0 Mt (Inferred category) grading 1.4% Cu (refer ASX/JSE release 29 March 2021) to 0.6 Mt grading 1.0% Cu, including Indicated Resources of 0.3 Mt grading 1.07% Cu and Inferred Resources of 0.3 Mt grading 1.0% Cu. This change is a direct result of adjustments to the resource model due to the increase in understanding of the geology and mineralisation models.

The FMNb Mineral Resource shown in Table 1 is based on drilling data available for the Flat Mines Southern African Tantalum Mining (Pty) Ltd (**SAFTA**) Mining Right NC30/5/1/2/2/10150MR (refer ASX/JSE releases 29 March 2021, 3 September 2024, 17 December 2024). The Mineral Resources are reported in accordance with the JORC Code (2012), with supporting information provided in Appendices 1 and 2.

Several other historical mines and prospects are currently being modelled, with the potential to deliver further growth in the OCP Mineral Resource.

Table 1: Mineral Resource Statement for the Flat Mine (Nababeep).

Mine / Prospect	Measured			Indicated			Inferred		
	Tonnes	% Cu	t Cu	Tonnes	% Cu	t Cu	Tonnes	% Cu	t Cu
Flat Mine (Nababeep)	-	-	-	300,000	1.07	3,000	300,000	1.0	3,000

**Numbers may not add up due to rounding in accordance with the JORC Code (2012) guidance.*
Resources are reported at a 0.5% Cu cut-off grade.

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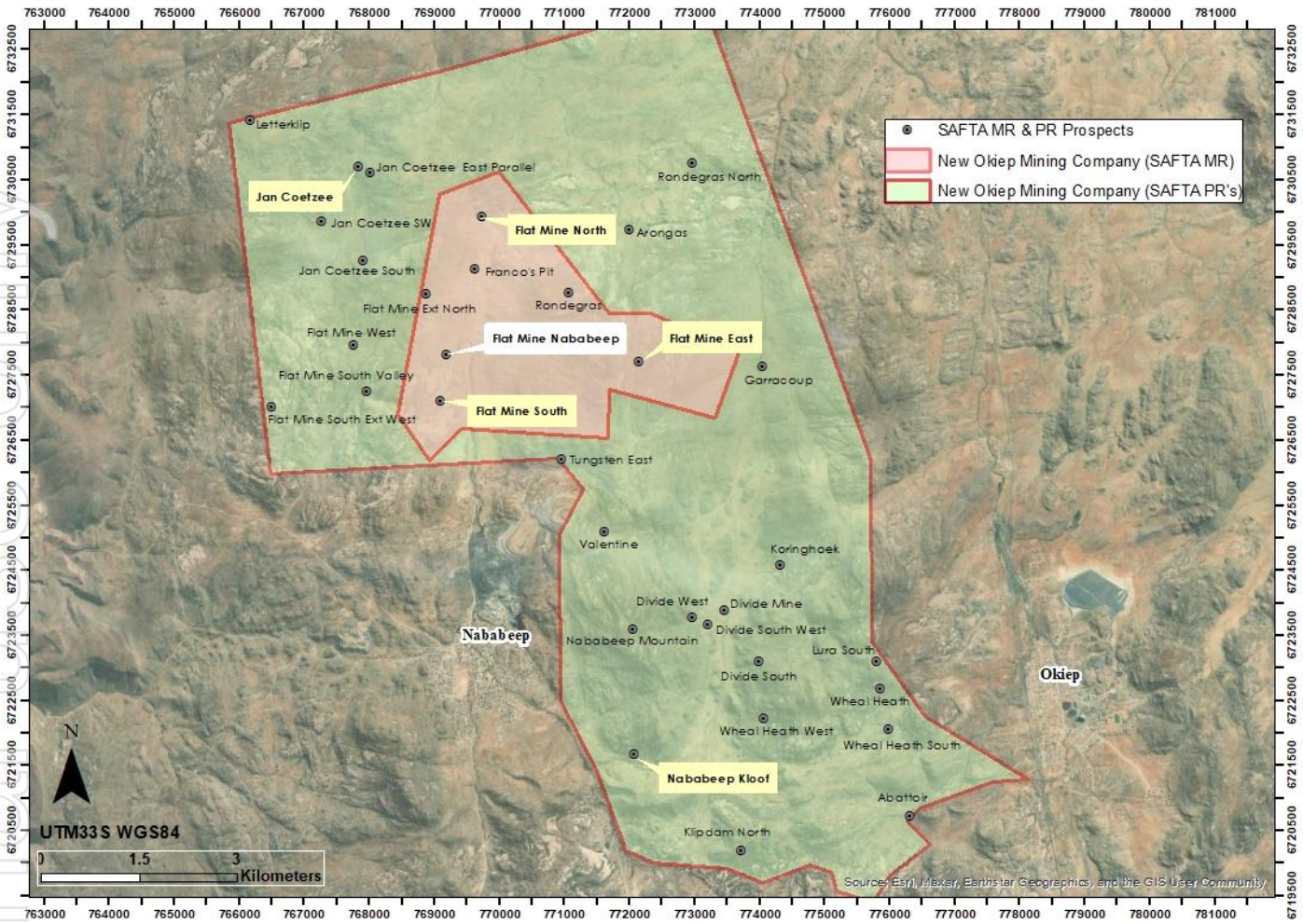


Figure 1: SAFTA prospecting and mining rights showing prospects with previously reported (yellow) and updated (grey) Mineral Resources.

Table 2: Total Mineral Resource Statement for the Flat Mines Area of the OCP.

Mine / Prospect	Measured			Indicated			Inferred		
	Tonnes	% Cu	t Cu	Tonnes	% Cu	t Cu	Tonnes	% Cu	t Cu
Flat Mine (Nababeep)	-	-	-	300,000	1.07	3,000	300,000	1.0	3,000
Jan Coetzee Mine	-	-	-	-	-	-	1,000,000	1.4	14,000
Nababeep Kloof Mine	-	-	-	-	-	-	500,000	1.2	6,000
Flat Mine North	440,000	1.13	5,000	940,000	1.42	13,000	200,000	1.5	4,000
Flat Mine East	-	-	-	3,400,000	1.37	47,000	1,000,000	1.0	9,000
Flat Mine South	-	-	-	2,600,000	1.35	35,000	800,000	1.6	13,000
Total	**440,000**	**1.13**	**5,000**	**7,200,000**	**1.36**	**98,000**	**3,900,000**	**1.3**	**49,000**

**Numbers may not add up due to rounding in accordance with the JORC Code (2012) guidance.*
Resources are reported at a 0.7% Cu cut-off grade for FMN, FME, FMS, Jan Coetzee and Nababeep Kloof. Resources are reported at a 0.5% Cu cut-off grade for FMNb.

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Geology and Geological Interpretation

The Okiep copper deposits are orogenic-type copper deposits hosted in mafic to ultra-mafic intrusive bodies in the western part of the Namaqua Complex, South Africa. Mines in the Okiep Copper District (**OCD**) produced 106 Mt at 1.7% Cu since the 1900s[1]. Production in the OCD came from both underground and surface workings.

Copper deposits in the Okiep district are generally hosted by east-trending mafic/ultramafic dykes and sills. Some 1,700 of these intrusions occur in the district. A structural control on intrusives in the form of 'steep structures' or monoclinal folds is well established. Copper mineralisation occurs as disseminations of chalcopyrite and bornite with local massive sulphide concentrations within and adjoining mafic intrusive bodies.

Mineralisation at FMNb is hosted by shallow, sub-surface bodies within a continuous mafic intrusive. The mineralised bodies have an overall strike of 270m and a steep dip of 80° towards the north to vertical. The mineralised bodies are offset by two faults, the FMNb West Fault and the FMNb East Fault. The West Fault has a dip of approximately 65° to the east and the East Fault has a dip of approximately 65° towards the west. The two faults converge at a depth of approximately 210m, effectively terminating the known mineralisation (Figure 2).

The bulk of the known mineralisation is located between the two faults and is referred to as the Main Mineralised Zone with a strike at surface of approximately 200m and an average width of around 25m. The mineralised body is offset 60m to the south by the West Fault where mineralisation appears to narrow to approximately 5m width and extends approximately 30m beyond the fault. The East Fault offsets the mineralisation approximately 35m to the north in a sinistral sense, where it extends eastwards at an average width of approximately 10m. The mineralisation east of the East Fault has a short strike on surface of approximately 10m but the strike extends to approximately 100m downdip due to the shallow west dip of the East Fault (Figure 2).

The deposit was mined in the Main Mineralised Zone in the 1950s, accessed by a 155m deep, 3m by 2m sized vertical shaft, and five main levels of development 100 feet (approximately 30m) apart. A larger eastern stope and a smaller western stope, according to historical production reports, extracted 141,000 tonnes of ore material (refer ASX/JSE release 29 March 2021).

Drilling Techniques

Drilling at FMNb was undertaken during two distinct periods: from 1947 to 1978 by O'Okiep Copper Company (**OCC**) and in 2024 by Orion.

A total of 55 surface diamond drill holes totalling 15,263m and 116 holes underground diamond drill holes comprising 2,785m are captured in the historical drilling database. All historical drilling was at AX core size.

A further nine NQ diamond drill holes totalling 959.47m were drilled by Orion in 2024 (refer ASX/JSE releases 17 December 2024 and 3 September 2024[2]). Eight of these holes were targeted on the known mineralisation, while one hole (OFMD170) was targeted on a geophysical anomaly. The eight holes intersecting the mineralisation were used to update the geological interpretation and were used in the update of the Mineral Resource estimate.

Sampling and Sub-Sampling Techniques

Historical OCC diamond drill holes were sampled as whole core. There is limited information available on sampling techniques. Samples were taken over two-metre intervals adjusted to accommodate geological contacts. OCC submitted whole core to the laboratory, except for a 5-10cm piece of core left as a reference. Sampling was carried out under the supervision of OCC geologists.

Historical samples were prepared at the OCC on-mine laboratory in Nababeep. No official records are available for laboratory procedures for the OCC laboratory. Core samples were reportedly crushed and split prior to

[1] Lombaard A.F,, in Annhauser C.R., and Maske S. (eds). The Copper Deposits of the Okiep Copper District, Namaqualand in Mineral Deposits of Southern Africa. 1982 pp 1421 - 1445.

[2] Orion's 2024 Flat Mines drilling information is extracted from the reports entitled 'Okiep Confirmation Drilling Successfully Completed' and 'Strong New Copper Intercepts Indicate Significant Additional Potential of Flat Mine South – Okiep Project' dated 3 September 2024 and 17 December 2024, respectively, and available to view on https://www.orionminerals.com.au/download-category/2024-asx-jse-announcements/. Orion confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. Orion confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

analysis. In the Competent Person's opinion, the sampling and sub-sampling are fit for the purpose of classifying an Indicated and Inferred Mineral Resource. The OCC successfully operated copper mines in the district for more than 50 years and had a proven record of converting resources to reserves.

Orion's 2024 sampling was carried out using industry-standard procedures. NQ-size diamond drill cores were longitudinally split in half using a diamond core cutting machine. Half core was cut to quarter core where duplicates were taken. One-metre sample lengths were taken in most cases in the mineralised zones, with two-metre sample lengths generally taken in poorly mineralised zones and sections of internal waste. Sample lengths were varied to honour geological and mineralisation boundaries.

Sample Analyses

Historical OCC drill samples were analysed at the OCC on-mine laboratory in Nababeep. No official records are available for laboratory procedures for the OCC laboratory. Core samples were reportedly assayed for copper content by atomic absorption techniques. No certified reference material, blanks and duplicates were inserted, however the OCC laboratory inserted in-house standard reference material with each batch. In the Competent Person's opinion, the sample analyses are fit for the purpose of classifying an Indicated and Inferred Mineral Resource.

All 2024 Orion drill samples were analysed by an appropriate high-grade aqua regia ICP-AES method, ALS code ME-ICP41a. Samples where assays returned >5% Cu were re-assayed by aqua regia digestion and ICP-AES method, ALS code MEOG-46. Samples were assayed for gold by fire assay and AAS, ALS code AU-AA25 method. Appropriate quality control was undertaken, and the accuracy and precision of the geochemical data is considered acceptable. In the Competent Person's opinion, the sample analyses are fit for the purpose of classifying an Indicated and Inferred Mineral Resource.

Estimation Methodology

The following estimation methods were applied:

- Mineralisation often occurs as discrete mineralised lenses within and normally following the general trend of a broader mafic intrusive body. With the irregular intrusive nature of the mafic rocks and mineralisation it can be difficult to correlate individual lenses between sections and drill holes and in many cases modelling of estimation domains was only feasible by grouping the lenses into a broader envelope including internal waste and resulting in a lower copper grade.
- Estimation domains were delineated by creating interpreted strings along successive vertical sections. A 0.5% Cu cut-off grade was selected for the outer limit of the estimation domain. From visual observation, using a cut-off grade above 0.5% Cu, the mineralisation lacks the required continuity to construct a viable domain for resource estimation and, as a result, significant portions of internal waste have been included in the mineralisation envelope.
- In addition, in some areas, the 0.5% Cu cut-off was lowered (often in sections where all grades are below 0.5% Cu but still anomalous and in the mafic lithologies associated with the mineralisation) in order to maintain continuity and a viable domain for resource estimation. Modelling of internal 'waste pillars' (mostly associated with granitic inclusions within the mafic bodies) as a separate domain for estimation was not possible due to difficulties in correlating internal waste zones between drill holes over any significant distance.
- Extrapolation distances were maintained at halfway between drill holes with mineralisation above the cut-off grade and drill holes where no significant mineralisation was intersected, or terminated at modelled structures. With the generally high density of drill hole information this extrapolation distance did not exceed 15m.
- Many of the internal waste zones in the historical drill holes are unsampled and have been assigned a value of half the detection limit.
- No differentiation was made between the oxide and sulphide mineralisation as generally the oxide component is insignificant within the Flat Mines deposits. The oxides extend to a depth of approximately 4m on average.
- Copper assay values were capped to 10% Cu and this was applied to 3 samples. Sample lengths were composited to 1m. A block model with cell sizes of 2m (X) x 2m (Y) and 2m (Z) was used with no sub-celling. The composite data were used to estimate the block grades using Inverse Distance Squared (IDW^2).

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- The mineralised zone was separated into three domains:
  - West of the West Fault.
  - The Main Mineralised Zone between the West Fault and the East Fault.
  - East of the East Fault.
- Search ellipses of dimensions 60m x 60m x 10m oriented in line with the general strike for each of the three domains were used to estimate blocks in each domain. The search ellipse size was guided by the range of the variogram. A minimum of two drill holes was required for block estimation.
- Bulk Densities (t/m3) for Orion drill holes were determined using the water displacement method. There were no bulk densities measured for historical holes. Densities were assigned to the historical holes by proxy to lithological units using measurements from Orion holes at FMNb, FMN, FME and FMS. Block densities were calculated using IDW². The orientation and radius of the search ellipse used was the same as for copper.

In the Competent Person's opinion, the estimation methodologies are suitable for the type of deposit and nature of the data and can be used to classify the estimate in accordance with the JORC Code (2012).

Resource Classification

The Resource classification has been carried out in accordance with the JORC Code (2012).

The resources are classified as Indicated and Inferred. Cognisance was taken of the potential uncertainties related to mineralised envelope delineation and therefore the associated volume estimation, as well as that this resource estimation is partly based on historical data.

The resource classification has increased relative to the previous FMNb Mineral Resource (Refer ASX Release 29 March 2021) in areas tested by Orion's 2024 confirmation drilling.

The geological models are considered by the Competent Person to be defined to an acceptable level and there is sufficiently accurate data to produce block estimates. In areas where there is a limited number of samples resources are defined as Inferred.

With the relatively high density of information, extrapolation for both Indicated and Inferred Resources was at the halfway point between drill holes with mineralisation above the cut-off grade and drill holes where no significant mineralisation was intersected or terminated at modelled structures. With the generally high density of drill hole information this extrapolation distance did not exceed 15m. The differentiation between Indicated and Inferred Resources was largely based on the coverage of Orion 2024 drill holes and the proximity of historical underground workings (Figure 3).

Although there is a moderate level of uncertainty associated with the estimation of bulk densities at FMNb, the common lithologies associated with the mineralisation have a relatively narrow range of density values.

Areas in the Main Mineralised Zone above the historical mine workings were defined as Indicated. There are six Orion holes spread along the 200m strike which intersected mineralisation and broadly confirmed the zones and grades defined by the historical drilling.

Areas in the Main Mineralised Zone below the upper limits of historical mine workings were defined as Inferred. While there is a good density of historical drill hole information, and development and stopes have been defined for depletion purposes, none of the Orion drill holes intersected this area. Furthermore, historical workings are based on 1950s information and have limitations in accuracy and while the host formations are competent, there may be a degree of caving or scaling from the historical stopes.

West of the West Fault, there are no Orion drill holes and a lower density of historical information and this area was defined as Inferred. East of the East Fault there is a higher density of historical information and two Orion drill holes, and this area was defined as Indicated.

Twin and infill drilling will be required to increase the confidence and upgrade the Inferred Resources. Drilling should also include probe holes to investigate the extent of the underground workings, all in the area of Inferred Resources. The results conform to the view of the Competent Person.

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Cut-off Grades

A cut-off grade of 0.5% Cu was used for the Mineral Resource Statement that corresponds with RPEEE using today's economics. This is based on the break-even grade estimated for the 2025 Definitive Feasibility Study (**DFS**) study released contemporaneously with this report.

Mining, Metallurgical Methods and Modifying Factors

The deposit is considered suitable for potential underground mining operations.

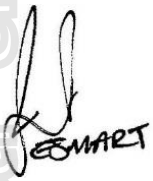
Historically mined areas (stopes) shown on mine survey plans were excluded from the resource. 141,000 tonnes of ore are recorded to have been historically mined (refer ASX/JSE release 29 March 2021).

No historical metallurgical test results are available. However, the geology and mineralisation at FMNb is of a similar style to other deposits in the immediate vicinity (FMN, FME, FMS) where extensive metallurgical testwork has been done and will be reported in the current DFS.

Future Activities

Some twin and in-fill drilling will be required to increase the confidence and upgrade the Inferred Resources.

For and on behalf of the Board.



Errol Smart
Managing Director and CEO

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Investors	**Media**	**JSE Sponsor**
Errol Smart – Managing Director & CEO	Nicholas Read	Monique Martinez
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T: +61 (0) 3 8080 7170	T: +61 (0) 419 929 046	T: +27 (0) 11 325 6363
E: info@orionminerals.com.au	E: nicholas@readcorporate.com.au	E: monique.martinez@merchantec.com

Competent Persons Statement

The information in this report that relates to Mineral Resources is based on information compiled by Mr Paul Matthews (Pr.Sci.Nat.), a Competent Person who is a member of the South African Council for Natural Scientific Professionals, a Recognised Professional Organisation (**RPO**). Mr Matthews is a full-time employee of Orion. Mr Matthews has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Matthews consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

References to Previous Reports

Information on the Flat Mine North (FMN), Flat Mine East (FME), and Flat Mine South (FMS) Mineral Resources is extracted from the report entitled 'Orion upgrades Mineral Resources at the Flat Mines Area, Okiep Copper Project as BFS nears completion' dated 28 August 2023 and available to view on https://www.orionminerals.com.au. Orion confirms that it is not aware of any new information or data that materially affects the FMN, FME and FMS Mineral Resources included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Orion confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

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Information on the Jan Coetzee Mine and Nababeep Kloof Mine Mineral Resources is extracted from the report entitled 'Orion further expands Mineral Resources at the Okiep Copper Project, Flat Mines Area' dated 29 March 2021 and available to view on https://www.orionminerals.com.au. Orion confirms that it is not aware of any new information or data that materially affects the Jan Coetzee Mine and Nababeep Kloof Mine Mineral Resources included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Orion confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Disclaimer

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Appendix 1: Maps and Figures

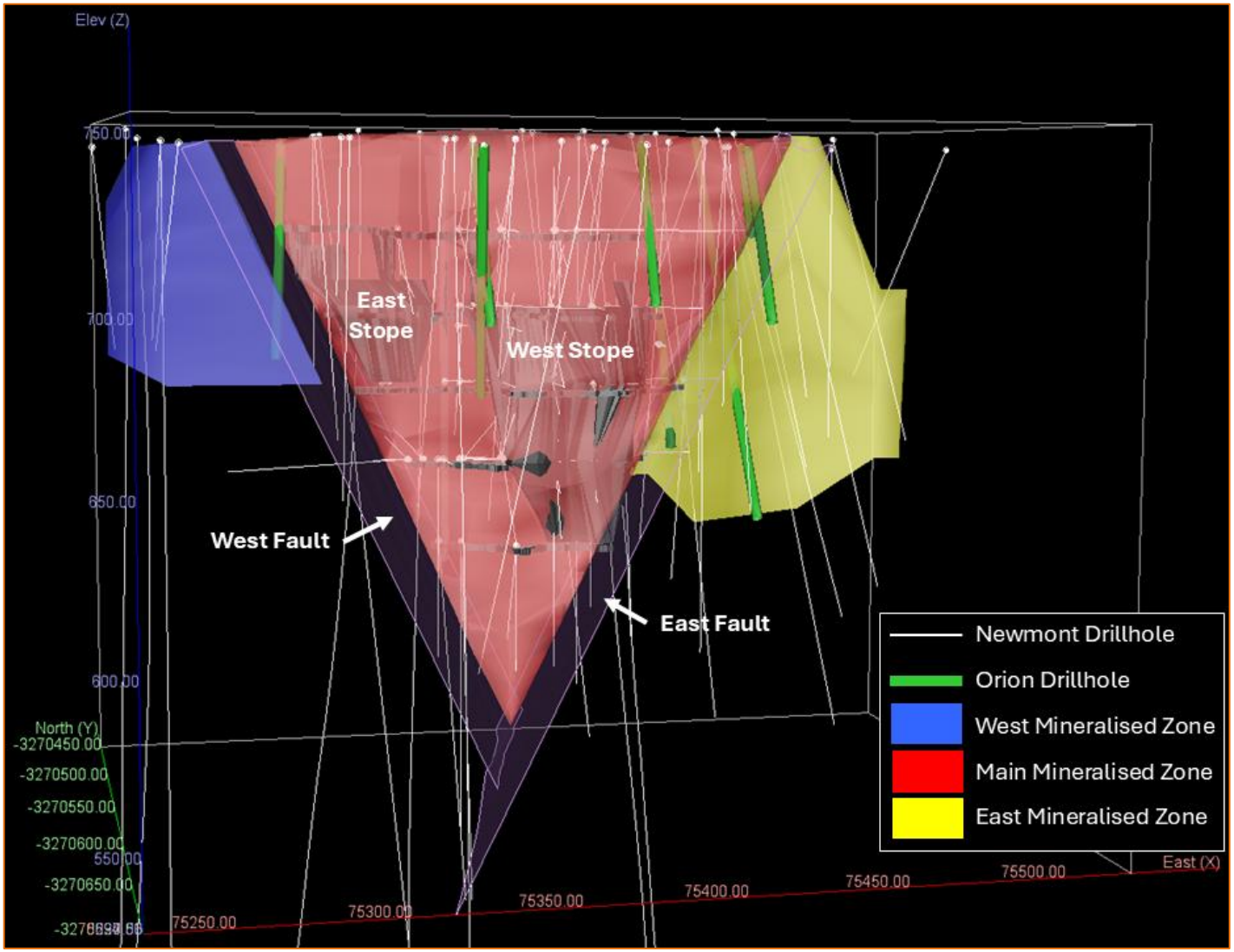


Figure 2: Flat Mine (Nababeep) defined estimation domains, drill hole traces and existing mine workings. View looking north.

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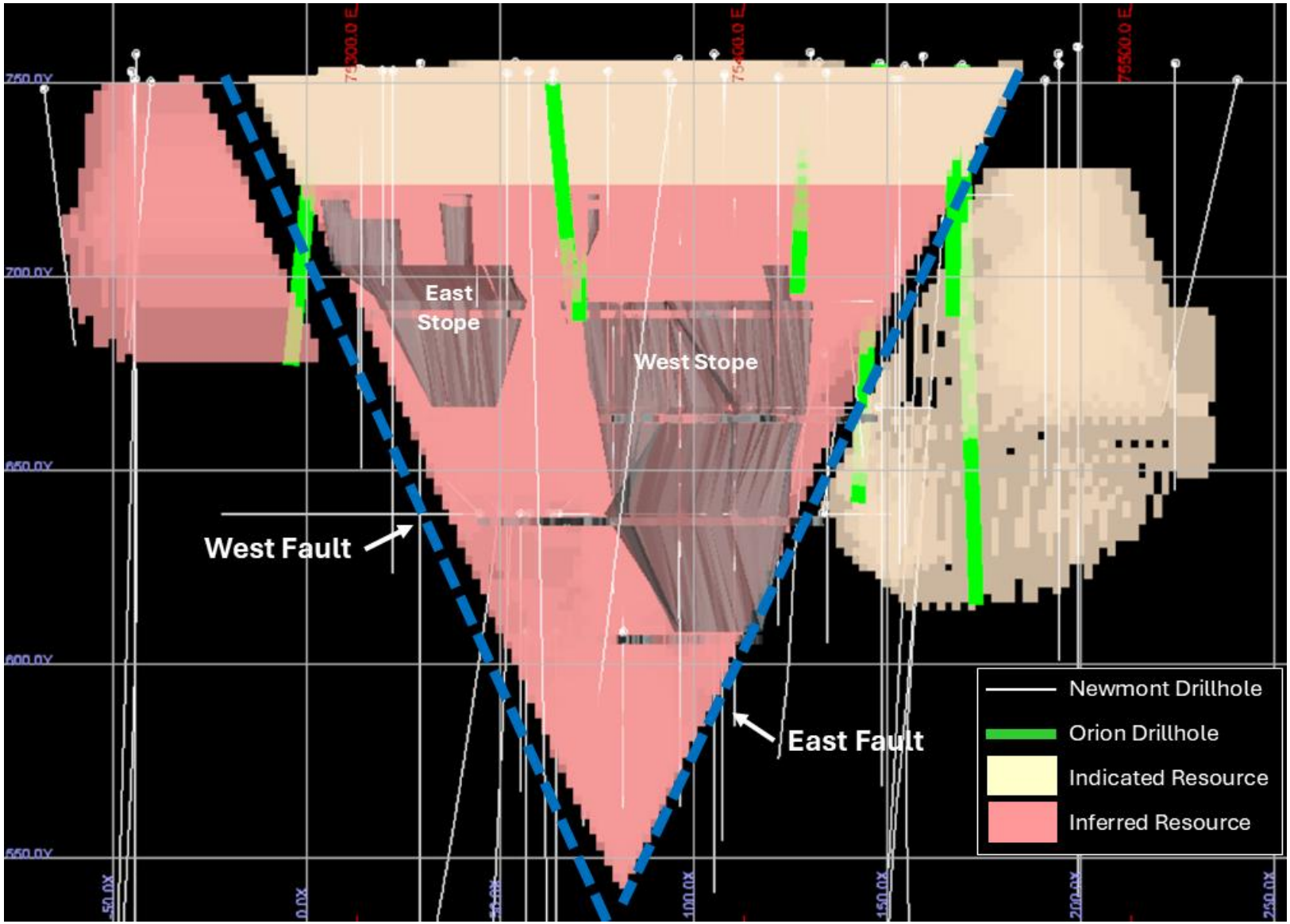


Figure 3: Flat Mine (Nababeep) Mineral Resource classification, drill hole traces and existing mine workings. Long section view looking north.

Appendix 2: The following tables are provided to ensure compliance with the JORC Code (2012) requirements for the reporting of Mineral Resources for the Okiep Copper Project – Flat Mine Nababeep.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where 'industry standard' work has been done this would be relatively simple (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.	Drilling and sampling at FMNb was undertaken during two distinct periods since the initial discovery of mineralisation: • Prior to 1978 by O'Okiep Copper Company (**OCC**) under the ownership of **Newmont**. • In 2024 by Orion Minerals (**Orion**). **Newmont:** • For diamond drilling carried out by OCC between 1947 and 1978, there is limited detailed documentation available on sampling techniques for core. However, it is known from discussions with OCC exploration department personnel that all drill core was brought to the exploration offices in Nababeep to be logged and sampled. • With exploration and resource management being carried out under the supervision of OCC, it is considered by the Competent Person that there would be procedures in place to the industry best practice standard at that time. This is based on discussions with personnel employed by OCC. • The exploration and resource management were under the supervision of the OCC geology department, recognised as one of the best exploration departments in South Africa at the time. OCC was successful in defining resources which were used as the basis of the successful development of 33 different mines for an operation over a 45-year period. • Drilling of exploration holes in the main area of mineralisation was generally carried out on a 30m by 15m line spacing. • Drill samples were all sent to the OCC on-mine laboratory in Nababeep. • Samples were generally taken over 1.5 to 2m intervals adjusted to accommodate geological contacts. • Whole core was submitted to the laboratory (AX core size). A 5 to 10cm representative length of core was archived for each mafic sample and for each change in rock type. • Core samples were numbered with sample tickets and bagged in canvas sacks at the core yard before being dispatched to the assay

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Criteria	JORC Code explanation	Commentary
		laboratory in Nababeep. • No formal QC samples were inserted at the time by the geologists on the exploration site. OCC laboratory developed its own standards, and those were used internally in the laboratory. No record exists on the preparation method of the standards. Duplicate samples were also inserted to check for repeatability. No records exist on the percentage of duplicates or standards. • No historical Standard Operating Procedures are available. **Orion:** • Sampling was carried out using industry standard procedures. NQ-size diamond drill cores were longitudinally split in half using a diamond core cutting machine. Half core was cut to quarter core where field duplicates were planned. • A total of 8.84 metres of oxide mineralisation was sampled from HQ core in three holes from FMNb. • One-metre sample lengths were taken in most cases in the mineralised zones, with two-metre sample lengths generally taken in poorly mineralised zones and sections of internal waste. Sample lengths were varied to honour geological and mineralisation boundaries. • The minimum sample length was 0.3m and the maximum sample length was 2.24m. • Areas of sampling were selected based on rock type and readings from a handheld Niton XL3t 500 XRF analyser (standard analytical range >25 elements from S to U with additional elements Mg, Al, Si and P via helium purge). • A minimum of five metres of hangingwall and footwall samples were collected. • Sampling was carried out by an experienced geologist according to Standard Operating Procedures (SOP). • Sampling of the mineralised drill core was of a high standard and found suitable for estimation purposes. • QC samples were inserted as per Orion's sampling SOP, and the records are available.
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.).*	**Newmont:** • All intersections were by core drilling. • BX core size was drilled in the weathered zone followed by AX core size. • Core orientation was not done.

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Criteria	JORC Code explanation	Commentary
		Orion: • Diamond core drilling was undertaken. • HQ and NQ size core was drilled using a standard tube. HQ core size was only drilled in the upper weathered portion of approximately 6m. Copper mineralisation was visually identified in the HQ core for three holes where oxide copper mineralisation was intersected and sampled. • No core orientation was carried out.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	**Newmont:** • All mineralised intersections were drilled with diamond core. • Core stick-ups reflecting the depth of the drill hole were recorded at the rig at the end of each core run. • A block with the depth of the hole written on it was placed in the core box at the end of each run. • Core recoveries were measured for each run. • No records exist for core recoveries on individual samples. • Intersections were in hard rock and good recoveries are envisaged through the mineralisation and core recoveries were reported to be generally around 90%. **Orion:** • Core 'stick-ups' reflecting the depth of the drill hole were recorded at the rig at the end of each core run. A block with the depth of the hole written on it was placed in the core box at the end of each run. At the core yard, the length of core in the core box was measured for each run. The measured length of core was subtracted from the length of the run as recorded from the stick-up measured at the rig to determine any core loss. • Core recovery was found to be very good (>98%) within the mineralised zone. • Ground conditions below the shallow (maximum 6 metres) weathered zone were generally very good. • No obvious relationship exists between sample recovery and grade. • No core/sample loss or gain was experienced which could result in sample bias.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.*	**Newmont:** • All relevant intersections for surface holes have been logged by qualified geologists and all of this information is available. • No geotechnical information is available for the historic drill holes.

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Criteria	JORC Code explanation	Commentary
	• *The total length and percentage of the relevant intersections logged.*	• Core was not photographed. • Logs were recorded in the core yard on standard log sheets. • Quantitative estimates of sulphide mineralogy were done. • Core of the entire drill hole length was geologically logged and recorded on standardised log sheets by qualified geologists. • No air-core drilling was carried out. **Orion:** • Core of the entire hole length was geologically logged by qualified geologists. • The core was logged to a level of detail that is sufficient to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Geological logging was qualitative and was carried out using a standard sheet with a set of standard logging codes to describe lithology, structure and mineralisation. The logging sheet allows for free-form description to note any unusual features. • Geological logs were captured electronically. • All cores were photographed before sampling. • All generated core was logged from collar to end of hole and data was electronically captured. • A total of nine holes were drilled resulting in approximately 959 diamond core metres logged. • Geotechnical logging was completed. The data collected per drill run consisted of core recovery, length of core greater than ten centimetres, longest piece, fracture count, alpha and beta angles for all joint types and lithological contacts, joint infill types and their strength as well as nature of joint surface.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material*	**Newmont:** • All sample data are available. • Whole core was used for assaying. • The entire sample length was submitted to the laboratory except for a 5 to 10cm piece of core retained as a reference every 2m in a mineralised intersection. • Sample preparation included crushing, splitting and pulverising and was undertaken by the OCC Laboratory. • The retention of the maximum 10cm length of core from every 2m or from a change in lithology will not result in maximum representativity of samples. However, this methodology was employed for numerous prospects which were successfully mined.

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Criteria	JORC Code explanation	Commentary
	being sampled.	• No certified reference material, blanks or duplicates were inserted, however the OCC laboratory inserted in-house standard reference material with each batch. **Orion:** • NQ core was cut, and half core was taken as a sample with quarter core for duplicates. • HQ core size was only drilled in the upper weathered portion and HQ core was only sampled in three holes where copper oxide mineralisation was intersected. • Sample preparation was undertaken at ALS Laboratory in Johannesburg (ALS), an ISO accredited laboratory, and is considered appropriate. ALS utilises industry best practice for sample preparation for analysis involving drying of samples, weighing samples, crushing to <2mm if required. Crushed samples are riffle-split and a 250g portion pulverised with +85% passing through 75 microns. • Crushing and pulverising QC tests were applied by ALS and found acceptable. • 15 quarter core field duplicates were taken as per the geologist's cut sheet whilst the laboratory had 15 pulp repeats. Analysis of results for both show excellent precision with HARD of 2.46% and HRD of –-2.07 for copper. • All sample sizes are deemed appropriate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *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.*	**Newmont**: • No detailed records exist for laboratory quality procedures for the OCC laboratory. • Samples were assayed for copper content by atomic absorption techniques. • No physical records have been located for the QAQC protocols and the Standard Operating Procedures used. • No geophysical tools, spectrometers or handheld XRF instruments were used. • No record is available on quality control methods. **Orion**: • Areas of sampling were selected based on visual observations and readings from a handheld Niton XL3t 500 XRF analyser (standard analytical range >25 elements from S to U with additional elements Mg, Al, Si and P via helium purge). • Samples submitted to ALS were analysed for base metals and gold.

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Criteria	JORC Code explanation	Commentary
		• All samples were analysed by an appropriate high-grade aqua regia ICP-AES method, ALS code ME-ICP41a. • Samples where assays returned >5% Cu were re-assayed by aqua regia digestion and ICP-AES method, ALS code MEOG-46. • Samples were assayed for gold by fire assay and AAS, ALS code AU-AA25 method. • Orion inserted CRMs every 10th sample. A total of seventy-three (73) CRMs were inserted. CRMs were alternated throughout the sample stream and where possible, matched to the sample material being analysed. • Four CRMs were used. AMIS0399 (1.014% Cu), AMIS0847 (1.05% Cu), AMIS0809 (2.97% Cu) and AMIS0088 (0.3% Cu). • All CRMs, with the exception of one batch, returned acceptable results within two standard deviations of the CRM average. • Chip blanks are inserted at the beginning of each batch and after any sample that may be considered high grade. A total of twenty-eight (28) blanks were used. Acceptable results were returned indicating no contamination. • The laboratory conducts their own checks which are also monitored. The accuracy and precision of the geochemical data reported on has deemed to be acceptable with a correlation factor of 0.99, HRD of -0.05% and HARD of 0.76%. • Results from the three (3) quarter core field duplicates showed acceptable correlation coefficient of 0.97, HRD of –2.07% and HARD of 2.46%. • No external laboratory checks have been carried out at this stage.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	**Newmont:** • No records are available for the verification of data. • Exploration was managed by the OCC exploration departments, consisting of qualified geologists. • No adjustments to assay data were reported. **Orion:** • Orion's exploration geologist personally supervised the drilling and sampling along with a team of experienced geologists. • Holes were planned to infill within the reported historical Mineral Resource and to confirm limited strike extensions. • Due to the high degrees of deviation in both dip and azimuth of the historical Newmont holes, twin holes were not planned. However, with the high density of historical drilling in some areas, some Orion-drilled

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Criteria	JORC Code explanation	Commentary
		holes intersected mineralisation in relative close proximity to historical intersections. Assay results and the position of the mineralised intersections showed a good correlation with historical drilling to the Competent Person's satisfaction. • The Competent Person has reviewed the raw laboratory data and confirmed the calculation of the significant intersections. • No adjustments have been made to the assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	**Newmont:** • All holes were initially located using local grids and ground positions surveyed in by a qualified company surveyor. The next stage was pegging of collars and pick up utilising the Cape Lo17 grid system pre 1990 and South African grid (Hartebeesthoek 94) post 1990 by the surveyor. • On completion drill collars were capped and labelled. • Downhole survey was conducted utilising two multi-shot Eastman survey instruments and a Sperry-Sun single shot instrument. **Orion**: • All collar positions of the holes were initially located using a hand-held Garmin GPS and have been subsequently surveyed by a qualified surveyor using a differential GPS. • On completion drill collars are capped and labelled. • The local South African Lo17 (Hartebeesthoek94) grid system is used. • All the holes have been surveyed down-hole. A north-seeking Reflex SPRINTIQ gyro tool was used for the down-hole surveys.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	**Newmont:** • Exploration holes were generally drilled aiming to achieve a 30m by 15m spacing, considered appropriate for Mineral Resource estimation of this type of mineralisation. **Orion**: • Drill spacing was variable with the main constraint being the avoidance of historical stopes. Drill spacing varied between 30m and 60m along strike. • The drill spacing is considered sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation and classifications. • Two-metre samples were taken in wider zones of internal waste or barren zones separating hanging wall and footwall mineralised zones. Within

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Criteria	JORC Code explanation	Commentary
		the mineralised zones one-metre samples were taken.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	**Newmont:** • Historical drilling is generally oriented perpendicular, or at a maximum achievable angle to, the attitude of the mineralisation. • As a result, most holes intersect the mineralisation at an acceptable angle. • No sampling bias is anticipated as a result of drill hole orientations. **Orion:** • To achieve unbiased sampling, drilling was oriented as close as possible to perpendicular, or at a maximum achievable angle, to the attitude of the mineralisation. • No sampling bias is anticipated because of drill hole orientations.
Sample security	• *The measures taken to ensure sample security.*	**Newmont:** • No details of sample security are available. However, during the mining operations, the site was fenced and gated with security personnel employed as part of the staff. • All sampling was done in the coreyard of the OCC geological offices. • Assay laboratory reject samples were stored at the planning department until the economic appraisal of the prospect had been completed. **Orion:** • Core and sample storage was at a secure location. • Sample security and storage followed standard procedures. • Samples were properly bagged, tagged and sealed with cable ties. • Samples were handed over by the site geologist and shipped via couriers to the laboratories. • Laboratories received all samples in good order and no breaches where reported. • Records of chain of custody exist.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	**Newmont:** • No audits and/or review records or documentation are available. **Orion:** • Drilling procedures, sample collection and preparation techniques were audited by external and independent consulting exploration and

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Criteria	JORC Code explanation	Commentary
		resource geologists e.g. from The Mineral Corporation (**TMC**) and Practara. • Site visits were undertaken to review adherence to the SOPs and confirm field locations of drill collars. • The drill hole database was reviewed as part of the Mineral Resource estimation by the Competent Person. • QA and QC sample collection protocols where reviewed, interrogated and found to be adequate for inclusion of the data in the Mineral Resource estimation by the Competent Person.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The mineral rights to the properties are vested in the State and the Minerals and Petroleum Development Act, 2002, (MPRDA) regulates the exploration and mining industry in South Africa. **Newmont:** • OCC held vast areas under prospecting and mining rights, most of these have been relinquished. **Orion:** • **Flat Mines Mining Right**. A mining right, NC30/5/1/2/2/10150MR was granted on 28 July 2022 to Southern African Tantalum Mining (Pty) Ltd (SAFTA) in terms of section 23 of the MPRDA to mine for a period of fifteen years. The right may be renewed for periods of up to 30 years. The mining right was ceded to an Orion indirect subsidiary, New Okiep Mining Company (Pty) Ltd (NOMC) on 12 December 2023. The right is for copper ore and tungsten are over a portion of portion 3, a portion of portion 13, a portion of portion 14 and a portion of portion 21 of the farm Nababeep No 134 situated within the Administrative District of Namaqualand. The area measures 1,214Ha in extent. • A prospecting right, NC30/5/1/1/2/12850PR (**Prospecting Right**), for the same area was granted to SAFTA on 27 June 2023 in accordance with section 17 of the MPRDA for 3 years for 26 additional minerals including gold and silver. • A prospecting right, NC30/5/1/1/2/12755PR was granted on 21 June 2024

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Criteria	JORC Code explanation	Commentary
		to SAFTA in terms of section 17 of the MPRDA to prospect for a period of 3 years, renewable for 3 years. The right is for copper ore and tungsten ore for portion of Portion 3, portion of Portion 10, portion of Portion 13, portion of Portion 14, Portion 15, Portion 16, portion of Portion 21 of the farm Nababeep 134 and Okiep Township Plot 2086, situated within the Administrative District of Namaqualand. The total area measures 7,164Ha in extent. • A prospecting right NC30/5/1/1/2/12848PR was granted on 21 June 2024 to SAFTA in terms of section 17 of the MPRDA for the same area as the prospecting right NC12755PR for 3 years (renewable for 3 years) for 26 additional minerals including gold and silver. • Orion acquired 56.25% of the tenement rights through the SAFTA-Orion Acquisition Agreement. The remaining 43.75% is held by the Industrial Development Corporation of South Africa (**IDC**) (refer ASX/JSE releases 2 August 2021, 7 September 2022, 14 November 2022, 17 April 2024, 6 May 2024). Applications for Section 11 consent in terms of the MPRDA to cede the rights to NOMC are submitted once each right is granted and are in preparation and process. • The area was mined historically for copper and tungsten.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	**Newmont:** • Surface geological mapping is of a high quality and detail. Underground mapping is also available. • Historical data included in the Mineral Resource estimation were generated by OCC. • It is evident that the historical data was collected via standard industry practices at the time and are considered suitable and acceptable for Mineral Resource estimation.
Geology	• *Deposit type, geological setting and style of mineralisation.*	**O'Okiep Copper District (OCD):** • These Cu deposits are part of the well-known Namaqualand Metamorphic Complex which consists primarily of meta-volcanic sedimentary and intrusive rock types. • Copper mineralisation is primarily associated with irregular, elongated and steeply dipping Koperberg Suite mafic intrusives. • The Koperberg Suite intrusives are mainly restricted to so-called 'Steep Structures' of extensive strike lengths and steeply dip to the north. • The Koperberg Suite consists of anorthosite, diorite and norite intermediate rock types. • Mineralisation usually occurs as blebs to disseminated Cu mineral assemblages bornite > chalcopyrite > chalcocite and less pyrite and

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Criteria	JORC Code explanation	Commentary
		pyrrhotite. • The more mafic and magnetite-rich lithologies generally host the bulk of and higher-grade mineralisation. • The OCD has a long exploration and mining history, and the geology is well known and understood.

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.*
		Newmont:
		• All historical grade and density information are incorporated in the database, and due to the large number of intersections made it is in the Competent Person view that it should not be included in this table.
		• Historically 171 holes were drilled totalling 18,048m, AX size core.
		• All drill hole collars were surveyed.
		• Down-hole surveys are available for the majority of the historical holes.
		• Some down-hole surveys are missing for some shallow holes. Deviations at these hole depths is not considered by the Competent Person to be of material significance.
		Orion
		• At FMNb, a total of nine holes were drilled comprising 959.47m. Eight of these holes were targeted on the known mineralisation while one hole (OFMD170) was targeted on a geophysical anomaly. The eight holes intersecting the mineralisation were used to update the geological interpretation and were used in the update of the Mineral Resource estimate.

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.* • *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.*	• No Exploration Results are reported in this report. • No metal equivalents are reported.
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 (e.g. 'down hole length, true width not known').*	**Orion:** • For the eight Orion holes drilled into the moderately steep dipping FMNb mineralisation true widths are ~70-90% of the downhole intercepts. • Down-hole lengths are reported for all intercepts.

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Criteria	JORC Code explanation	Commentary
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.*	• Numerous plans and cross-sections are available and were utilised during the geological and mineralisation modelling. • All historical data is available as hard copies and is currently being digitised and incorporated into a GIS system.
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.*	• The Mineral Resource estimation is based on all available and verified historical and Orion 2024 drilling. • Although limited, statistical comparisons of matching twin and historical holes indicates a close correlation. • Peer review of the geological modelling and resource estimation has found it to be a reasonable assessment of the mineralisation.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Detailed surface maps and drill sections were extensively consulted and utilised in the understanding of geology and mineralisation. • Regional and detailed geophysical maps (magnetic) were also consulted. • Historical surface and down-hole geophysical work were executed to industry best practices.
Further work	1. *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* 2. *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Deeper mineralisation as well as en-echelon type mineralised lenses are potentially present and should be further investigated. • Further investigation of the continuation of the mineralised body to the west of the west bounding fault is required.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in Section 1 and where relevant in Section 2. 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.* • *Data validation procedures used.*	• Historical and Orion data has been digitally captured from hand-written documents, plans and sections. • All data are presented MS Excel spreadsheet format. • Integrity checks by the Competent Person have found the database to be an accurate representation of the original data. • Data checking and corrections were also made, i.e. checking for overlaps, gaps, collar positions and erroneous surveys. • All drill hole data has been imported into a DataShed™ data management system which allows for easier and automated checks and verification.

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Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Multiple site visits have been undertaken by the Competent Person between May 2021 and March 2025. • No major issues have been observed which could have had a material impact.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Geological interpretation was done based on drill hole sections. • Mineralisation is found to occur predominantly in most of the intermediate rock types and also crossing lithological boundaries. • Mineralisation generally does not extend into the granitic and gneiss host rocks and the contact is usually sharp. • Due to the complex nature of these intrusive lithologies and different phases of intrusion and mineralisation, mineralisation envelopes based on grade were constructed. • Grade envelopes were constructed using a minimum sample length weighted cut-off grade of 0.5% Cu. • The intermediate mineralised rocks are structurally controlled and pinching and swelling is a common feature, in both strike and dip.
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 main zone of the mineralisation occurs as a relatively continuous east-west striking body between a west bounding fault and an east bounding fault. • The mineralisation is offset to the south of the western fault by approximately 60m and to the north of the eastern fault by approximately 35m. • The mineralised portion between the two bounding faults is 200m long, strikes east – west and steeply dips towards the north. • The mineralisation to the western side of the western fault has a known strike of approximately 70m. • The mineralisation to the eastern side of the eastern fault has a known strike of approximately 100m. • The Mineral Resource occurs at surface to sub-surface and was historically mined at depth.
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 availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	• Mineralised zones were delineated by creating interpreted strings along successive vertical sections using a 0.5% Cu cut-off grade. • Mineralisation often occurs as discrete mineralised lenses within a larger mafic body. Generally, individual lenses were grouped together to allow for correlation, interpretation and modelling of mineralisation between successive vertical sections and to create a viable mineralisation domain for Mineral Resource estimation. • Extrapolation distances were maintained at halfway between drill holes with mineralisation above the cut-off grade and drill holes where no

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Criteria	JORC Code explanation	Commentary
	• *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	significant mineralisation was intersected, or terminated at modelled structures. With the generally high density of drill hole information this extrapolation distance did not exceed 15m. • No differentiation was made between the oxide and sulphide mineralisation as the oxide component is insignificant with a weathering limit in the order of 4m. • Samples were composited to 1.0m lengths. • Cu values were assessed for capping. A threshold of 10% was determined and three samples were capped. • A block model was created with dimensions 2m X x 2m Y x 2m Z. No rotation was applied. No sub-celling was applied. • Estimation was carried out by inverse distance weighting (to a power of two) (IDW²). • A previous estimate carried out by Orion in 2021 (refer ASX/JSE release 29 March 2021). • A comparison between the 2025 and 2021 estimates indicates a similar volume for the geological interpretation (at a zero cut-off) but a significant drop in tonnage (41.1%) and grade (27.6%) at a 0.5% Cu cut off. • The difference is largely a result of the 2021 estimate applying null values to areas not sampled (predominantly unmineralised granitic internal waste) while the 2025 estimate applied values of half detection limit to these areas not sampled.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• No moisture content was calculated, and the core was naturally dried when logged and sampled. The estimated tonnages are therefore based on a natural basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A cut-off of 0.5% Cu was used for the Mineral Resource statement. This is based on the break-even grade estimated for the 2025 DFS study released contemporaneously with this report.
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 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.*	• All tonnages reported are dry. • FMNb was mined historically in the 1950s and the historical workings are currently flooded and inaccessible. • Mining is planned to consist of historically proven access declines, drill drives, ore access and draw points. • The development method is considered to be based on drill-and-blast executed with trackless mobile equipment. • The stoping method to be used is a variation on long-hole open stoping referred to as 'Vertical Crater Retreat' (**VCR**). Both VCR and

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Criteria	JORC Code explanation	Commentary
		conventional long-hole open stoping were historically successfully implemented.
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.*	**Newmont**: • Historical extraction of bornite, chalcopyrite, and chalcocite from FMNb in the 1950s was done using sulphide flotation for recovery. No detailed information on copper recoveries at FMNb are available. **Orion:** • No significant metallurgical testwork has been carried out on FMNb by Orion. • Comprehensive metallurgical tests were conducted from 2022 to 2024 for nearby Flat Mine North (FMN), Flat Mine East (FME) and Flat Mine South (FMS). The geology and mineralogy at FMNb is considered similar to that at FMN, FME and FMS. • These tests included ore sorting, pre-concentration, comminution, flotation, and the thickening of both concentrate and tailings. • Key service providers involved in this process were Suntech Geomet Laboratories, Geolabs Global, Maelgwyn South Africa, SGS, and Rados International Technologies. • Flotation testwork on FMN, FME and FMS indicated the following parameters: ➢ Feed grind ~ 90% passing 106 microns ➢ Concentrate Grade >30% Cu ➢ Flotation Recovery >92.5% ➢ Mass pull to concentrate ~4.0% m/m • A grade recovery curve was created from the optimised flotation test data for the NSR estimations. • Processing test work guided the design of the plant, utilising established technology and aligning with historical operations.
Environmental factors or assumptions	• *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*	• The mining site (deposits) is located within a relatively non-ecologically sensitive location. • A number of potential sites were investigated for waste rock and tailings as part of the minimisation of the operational footprint. • Mining operations will likely be underground limiting rehabilitation and decommissioning. • Already spoilt areas will be used for siting of new infra-structure where possible. • Existing access roads will be used during the operations. • Finer material will be pumped to the Tailings Storage Facility (TSF) to be

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Criteria	JORC Code explanation	Commentary
	assumptions made.	established on existing old evaporation pans close by.
Bulk density	• *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.* • *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.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• The bulk density (**BD**) data was acquired using the Archimedes method by weighing drill core in air and water, a practical method considered appropriate for these competent rock types. • BD measurements are available for the nine Orion drill holes. • No BD measurements are available for historical holes. Density values were assigned to logged lithologies based on density statistics from 2024 Orion drill holes at FME, FMN, FMS and FMNb where host lithologies are similar. • No capping was applied to the BD values assumed for FMNb. • Block density was estimated using IDW² technique (using the density values assumed from logged lithology). • The orientation and range of the search ellipse was defined by the Cu % models.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *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.* • *Whether the result appropriately reflects the Competent Person(s)' view of the deposit.*	• Mineral Resource classification incorporated the confidence in the quality of the drill hole data, data distribution, geological and grade continuity and consideration of reasonable prospects for eventual economic extraction (RPEEE). • The resources are classified as Indicated and Inferred. Cognisance was taken of the potential uncertainties related to mineralised envelope delineation and therefore the associated volume estimation, as well as that some areas of this resource estimation are based on historical data. • The differentiation between Indicated and Inferred Resources was largely based on the coverage of Orion 2024 drill holes and the proximity of historical underground workings. • The geological models are considered by the Competent Person to be defined to an acceptable level. • Although there is a moderate level of uncertainty associated with the estimation of densities, the common lithologies associated with the mineralisation have a relatively narrow range of density values. • The main zone between the West and East bounding faults there is generally a high density of information with both surface and underground drilling. • The main zone between the west and east bounding faults, above 724m elevation, above the mine workings, and where there is reasonable coverage by Orion 2024 drill holes is classified as Indicated. • The main zone between the west and east bounding faults, below 724m elevation, there is uncertainty regarding the full extent of mining as historical records might not be accurate, and this area has been classified as Inferred.

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		• For the mineralisation west of the west fault, there are only historical drill holes, with a lower density of information and this area has been defined as Inferred. • For the mineralisation east of the east fault, there is a reasonable density of historical information and two Orion 2024 intersections. This area has been defined as Indicated. • Twin drilling will be required to increase the confidence and upgrade the Inferred Resources. The results conform to the view of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource estimates have been internally audited by Orion. No external audit has been carried out to date.
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.* • *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.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The geological and mineralisation model, geological and grade continuity has been demonstrated to an acceptable confidence level in order to support the mineral categories classification. • Composite and estimated final grade and density distributions were compared to ensure that the block estimates represent the original data distribution. These were found to be reasonably compatible. • All estimates were studied graphically and compared to the composite data in three-dimensional space, and they compared reasonably well, given the high variability of the sample data. • For FMNb, historical mine records indicate that 141,000 tonnes was mined at a grade of 2.72% Cu in the 1950s.

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