



## Orion Minerals

ASX/JSE RELEASE: 12 May 2026

# Resource Optimisation Drilling Extends Significant Copper Mineralisation at Flat Mine East, Okiep Copper Project

Significant new zone in recent diamond drilling confirms down-dip extension of cornerstone deposit

- Recently completed resource optimisation drill hole OFMED157 at Flat Mine East (FME) has intersected a 7.88m zone of significant visible copper sulphide mineralisation from 311.26m down-hole (Table 2).
- The OFMED157 intersection is located 36m down-dip from a previously reported high-grade copper intersection in hole OFMED154, which returned:
  - 15.00m at 4.80% Cu from 248.00m; and
  - 9.27m at 3.01% Cu from 185.00m, within:
  - 78.00m at 1.57% Cu from 185.00m.
- Significantly, OFMED157 is located 100m along strike from a previously reported high-grade copper intersection in hole OFMED153, which intersected:
  - 49.35m at 5.05% Cu from 231.00m, including:
  - 21.66m at 9.41% Cu from 258.69m.
- The intersection in OFMED157 is characterised by disseminated, blebby to massive and semi-massive vein-type bornite-chalcopyrite mineralisation in norite (Table 2).
- The new intersection confirms that the highly prospective mafic norite and previously confirmed significant copper mineralisation continues down-dip beyond the current Indicated Resource envelope.
- Assay results have also been received for resource optimisation drill hole OFMND244 at Flat Mine North (FMN), including:
  - 21.34m at 1.55% Cu from 147.72m in OFMND244.

### Orion's Managing Director and CEO, Tony Lennox, commented:

"Our ongoing drilling at the Okiep Project continues to demonstrate strong resource growth potential, particularly down-dip of previously intersected wide, high-grade copper mineralisation. Importantly, the newly intersected mineralisation remains open down-dip, which Orion is targeting with the next drill hole at FME, OFMED158.

"While we remain cautious ahead of laboratory assays, these early observations provide further encouragement regarding the continuity and scale of the mineralised system beyond the current resource envelope. These latest results reinforce the quality and growth potential of the Flat Mines area as a cornerstone of Orion's broader Okiep development strategy. We look forward to reporting assay results in approximately three weeks."

Orion Minerals Limited (ASX/JSE: ORN) (Orion or Company) is pleased to advise that the first resource-optimisation drill hole completed at the Okiep Copper Project (OCP) Flat Mine East (FME) prospect, located in the Northern

Cape of South Africa, has intersected a significant zone of visible copper sulphide mineralisation down-dip from a wide zone of high-grade copper mineralisation intersected last year.

The OFMED157 drill hole was designed to test an open zone in the block model, 36m down-dip of previously reported high-grade mineralisation in OFMED154 (refer ASX/JSE release 24 June 2024).

The latest results add further momentum to Orion's development strategy for the OCP, building on the outstanding outcomes of the recently completed confirmation drilling program, which confirmed the geology and endowment of the Flat Mines area (refer ASX/JSE releases 22 April 2024, 24 June 2024, 9 July 2024 and 3 September 2024).

The OCP ground holdings, which cover an area of 703km<sup>2</sup>, encompass most of the Okiep copper mining district, where a total of 105Mt is reported to have been mined over the past 100 years (refer ASX/JSE release 21 May 2021). Of the 105Mt mined, some 77Mt was mined on OCP prospecting and mining rights. The Flat Mines area and the current drilling program fall entirely within executed Mining Right NC10150MR.

The Mining Right is surrounded by granted prospecting rights, NC12755PR and NC12848PR (refer ASX/JSE release 13 August 2024), which host several exciting historically drilled prospects and historical mines that offer the potential for additional mineral resources through future drilling.

The results reported in this announcement continue to demonstrate the potential to extend or in-fill partially drilled zones of high-grade mineralisation in the currently reported Mineral Resource. Furthermore, a structural control model for the high-grade mineralisation is being developed to enable targeted follow-up drilling where the mafic unit is affected.

Orion reported an updated Mineral Resource for the Flat Mines deposits in March 2025, underpinned by historical drilling results (refer ASX/JSE release 28 March 2025) of 10.0Mt at 1.3% Cu (Table 1)<sup>1</sup>.

**Table 1: Mineral Resource Statement for Flat Mine North, Flat Mine East, Flat Mine South and Flat Mine Nababeep.**

Mine / Prospect	Measured			Indicated			Inferred		
	Tonnes	% Cu	† Cu	Tonnes	% Cu	† Cu	Tonnes	% Cu	† Cu
Flat Mine North	440,000	1.13	5,000	940,000	1.42	13,000	200,000	1.50	4,000
Flat Mine East	-	-	-	3,400,000	1.37	47,000	1,000,000	1.00	9,000
Flat Mine South	-	-	-	2,600,000	1.35	35,000	800,000	1.60	13,000
Flat Mine Nababeep	-	-	-	300,000	1.07	3000	300,000	1.00	3000
<b>Total*</b>	<b>440,000</b>	<b>1.13</b>	<b>5,000</b>	<b>7,240,000</b>	<b>1.30</b>	<b>98,000</b>	<b>2,300,000</b>	<b>1.30</b>	<b>29,000</b>

\*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.

### Flat Mine East (FME) and Flat Mine North (FMN) Resource Optimisation Drilling Program

The FME drill hole, OFMED157, targeting down-dip extensions of high-grade mineralisation beyond the margins of the current Indicated Mineral Resource, was successfully completed and intersected a zone of significant visible copper sulphide mineralisation over 7.88m from 311.29m down-hole. It anticipated that assay results should be released in approximately three weeks.

The intercept suggests the down-dip continuity of the FME lower zone of the previously intersected and reported significant mineralisation in OFMED154, which returned **15.00m at 4.80% Cu** and **9.27m at 3.01% Cu** within **78.00m at 1.57% Cu** (refer ASX/JSE release 24 June 2024). Significantly, OFMED154 is located 50m along strike to the east

<sup>1</sup> Mineral Resource reported in accordance with the JORC Code (2012) in ASX release of 28 March 2025: "Orion Updates Mineral Resources at Okiep Copper Project" available to the public on <https://www.orionminerals.com.au/asx-jse-announcements/>. Orion confirms it is not aware of any new information or data that materially affects the information included above. The Company confirms that all material assumptions and technical parameters underpinning the estimates in the original release 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 a previously reported high-grade copper intersection in hole OFMED153 with **49.35m at 5.05% Cu including 21.66m at 9.41% Cu** (refer ASX/JSE release 24 June 2024).

**Table 2: Visual mineralisation estimates - drill hole OFMED157.**

Hole ID	From (m)	To (m)	Width (m)	Sif1	Sif1 pc	Texture	Sif2	Sif2 pc	Texture	Total % Sulphide	Lithology
OFMED157	311.26	312.18	0.92	bornite	20.00	blb	chalcopyrite	5.00	blb	25.00	Norite
OFMED157	312.18	313.84	1.66	bornite	0.50	pat	chalcopyrite	0.50	pat	1.00	Anorthosite
OFMED157	313.84	316.00	2.16	bornite	10.00	dis	chalcopyrite	4.00	dis	14.00	Norite
OFMED157	316.00	317.08	1.08	bornite	10.00	blb	chalcopyrite	5.00	dis	15.00	Norite
OFMED157	317.08	317.45	0.37	bornite	30.00	vnd	chalcopyrite	20.00	vnd	50.00	Norite
OFMED157	317.45	318.17	0.72	bornite	30.00	blb	chalcopyrite	20.00	blb	50.00	Norite
OFMED157	318.17	318.53	0.36	bornite	30.00	mas	chalcopyrite	20.00	mas	50.00	Norite
OFMED157	318.53	318.85	0.32	bornite	3.00	dis	chalcopyrite	3.00	dis	6.00	Norite
OFMED157	318.85	319.00	0.15	bornite	5.00	mas	chalcopyrite	90.00	mas	95.00	Norite
OFMED157	319.00	319.17	0.17	bornite	5.00	dis	chalcopyrite	3.00	dis	8.00	Norite

**Key:** blb – blebby, dis – disseminated, mas – massive, pat – patchy, vnd - veined

**Note:** Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

These drill results demonstrate the potential to expand the known mineralisation by targeting additional gaps in the resource model for future resource extension. The intersection in OFMED157 displays bornite and chalcopyrite mineralisation ranging from disseminations, blebby to massive and semi-massive vein types (Figure 1).

The norite in OFMED157 is narrower due to interfingered granitic units (Figure 5). Drill core from OFMED157 has been sampled and submitted to ALS laboratory for analysis and results are pending. It is anticipated that assay results should be released in approximately three weeks.



**Figure 1: OFMED157 drill core from 313.75m to 319.25m (refer to full reporting in Table 2). Chalcopyrite and bornite sulphide mineralisation is observed from a drill depth of 311.26m to 319.25m.**

Orion has also completed two holes at FMN, OFMND244 and OFMND245, as part of a resource optimisation drilling campaign along with holes OFMND246, OFMND247 and OFMND248, as part of a resource extension probe.

Drilling focused on areas of the Inferred Resource where an increase in drill density would provide the required information for potential resource classification upgrade.

To date, assays have been received for OFMND244, which returned **21.34m at 1.55% Cu from 147.72m** and OFMND245, which returned **4.45m at 1.29% Cu from 169m** and **7m at 0.88% Cu from 176m** and no significant mineralisation for OFMND246. Assays are pending for OFMND247 and OFMND248.

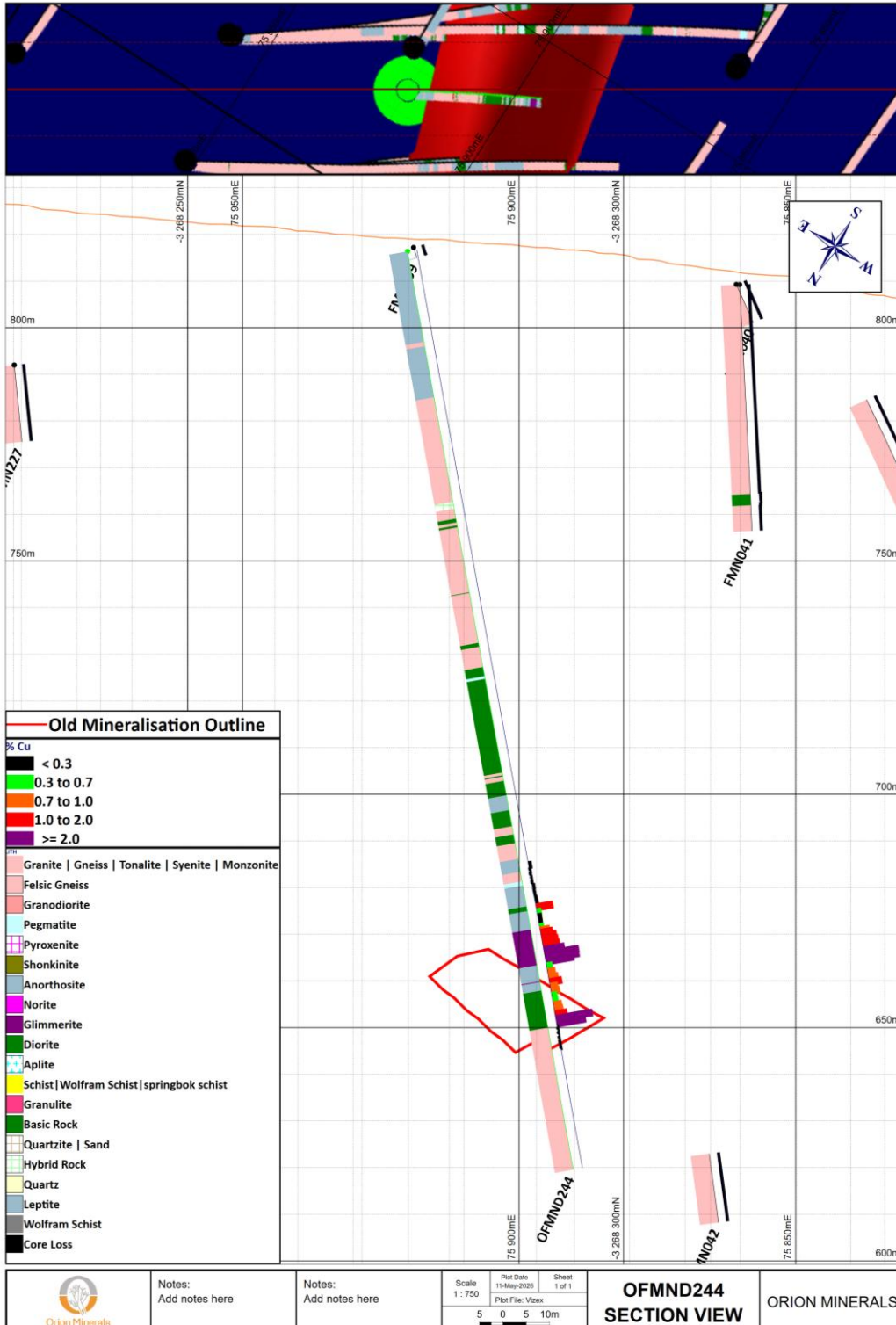


Figure 2: Cross-section view of OFMND244.

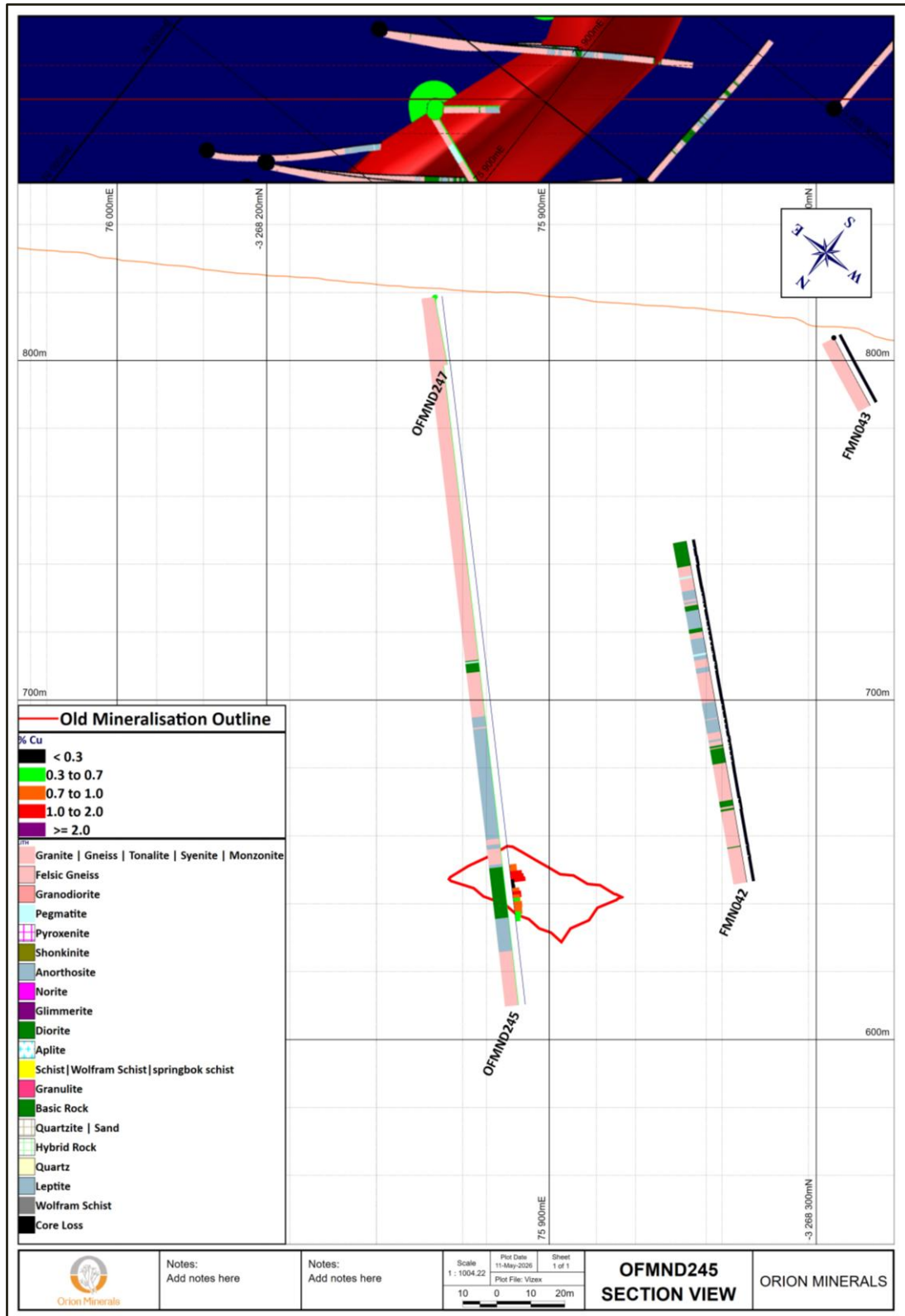


Figure 3: Cross-section view of OFMND245.

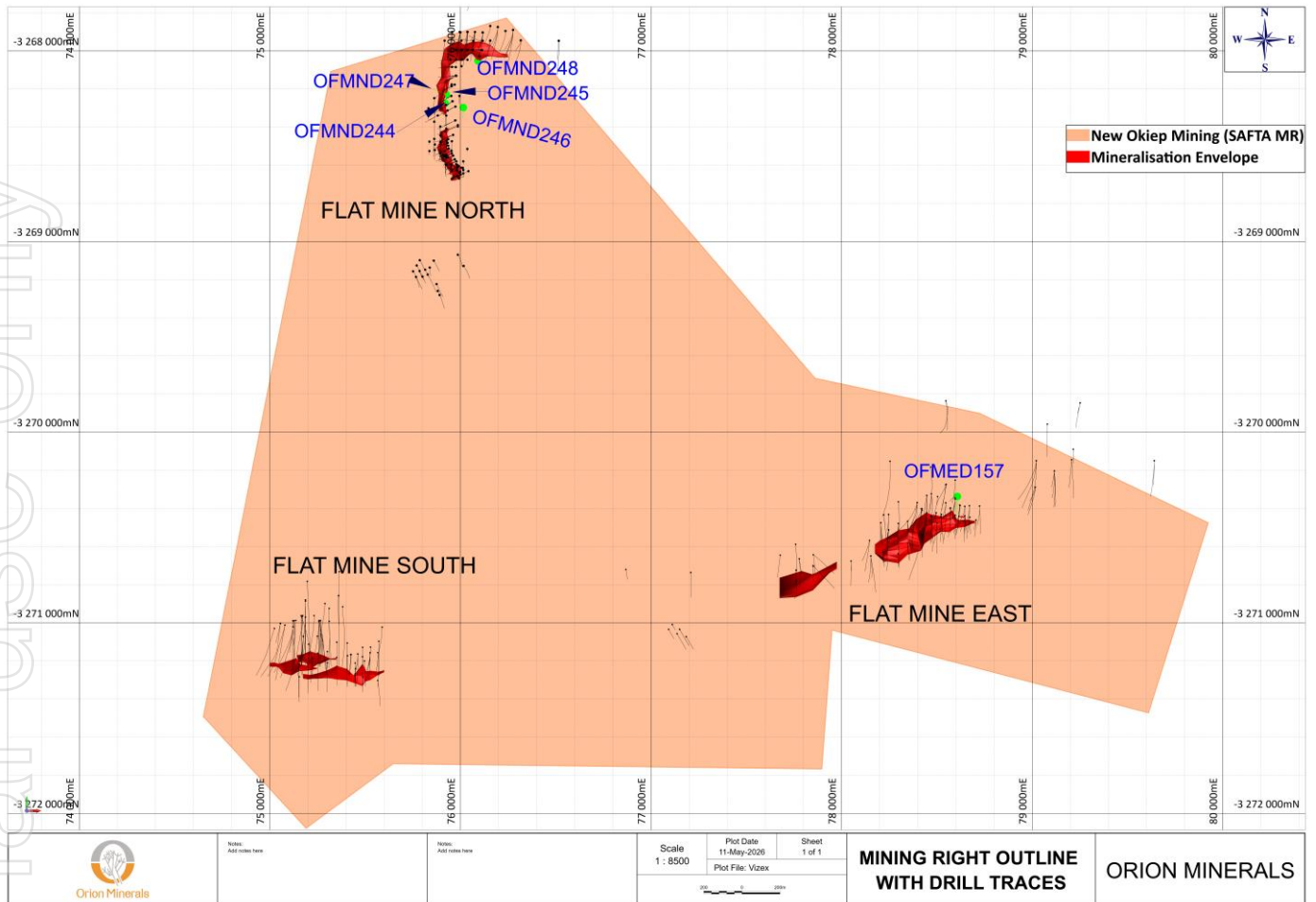


Figure 4: Plan showing historical and current (green-labelled) Orion drill holes, interpreted mineralisation envelopes and extent of the Mining Right.

Table 3: Summary table of assay drill results to date for FMN prospect (as analysed by ICP-MS, minimum cut-off of 0.7% Cu with maximum 3m consecutive internal waste allowed). Intersections and inclusions with grades mostly above 1% Cu are tabulated. The data was not capped. Note: widths are down-hole drill widths.

Hole ID	Mineralisation				
	Notes	From (m)	To (m)	Interval (m)	% Cu
OFMND244		147.72	169.06	21.34	1.55
	including	147.72	155.56	7.84	2.19
	including	164.00	169.06	5.06	1.95
OFMND245		169.00	173.45	4.45	1.29
		176.00	183.00	7.00	0.88

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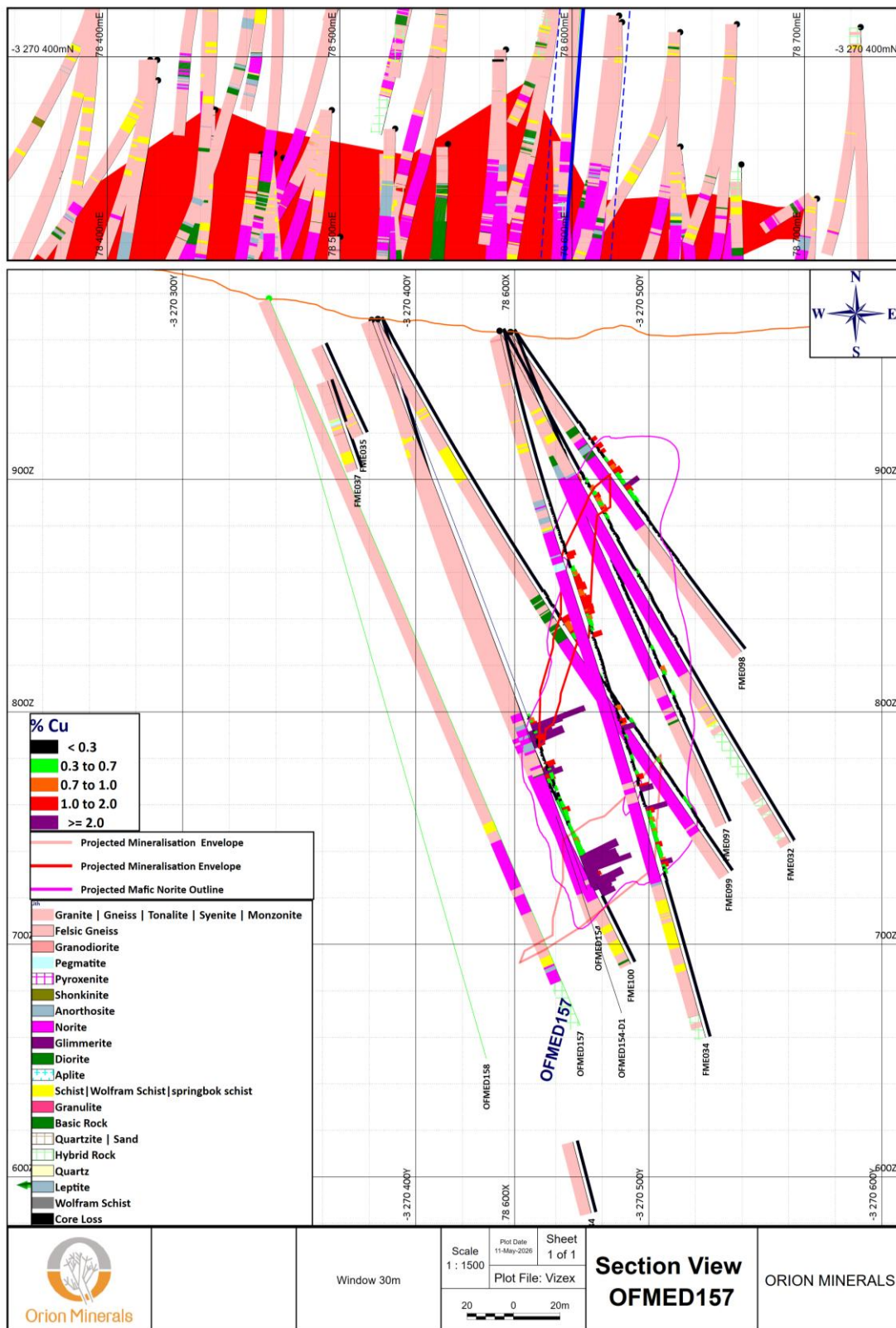


Figure 5: Cross-section of OFMED157, with adjacent holes.

For and on behalf of the Board.

Tony Lennox  
**Managing Director and CEO**

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## Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr John Paul Hunt (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 Hunt is a full-time employee of Orion. Mr Hunt 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 Hunt consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

## Reference to Previous Reports

Exploration Results from previous drilling at Flat Mines area were reported in ASX/JSE releases of 22 April 2024: "Spectacular High-Grade Copper Intercept at Okiep Project", 24 June 2024: "More Outstanding Hits at Okiep Copper Project", 9 July 2024: "Okiep Copper Project Continues to Deliver" and 3 September 2024: "Okiep Confirmation Drilling Successfully Completed", and Mineral Resources at Flat Mines are reported in ASX release of 28 March 2025: "Orion Updates Mineral Resources at Okiep Copper Project", all available to the public on <https://www.orionminerals.com.au/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 announcements. Orion confirms that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the original release 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 announcements.

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Appendix 1: Drill hole collar information and assay results from drill program at Flat Mine North and Flat Mine East

Table 4: Drill hole collar information for FMN and FME prospects. Coordinates in LO17 Hartebeesthoek 94.

Prospect	Hole ID	Easting	Northing	RL	Azimuth	Dip	Depth (m)	Comment
FMN	OFMND244	-75919.82	3268275.00	816.33	240	-80	200.00	Completed
FMN	OFMND245	-75925.46	3268228.85	818.69	230	-83	210.00	Completed
FMN	OFMND246	-76015.49	3268297.29	819.62	180	-70	162.51	Completed
FMN	OFMND247	-75924.17	3268227.67	818.58	290	-70	210.00	Completed
FMN	OFMND248	-76092.38	3268052.30	839.25	240	-71	231.90	Completed
FME	OFMED157	-78607.46	3270337.03	977.85	185	-66	340.25	Completed

Table 5: OFMND244 drill assay results.

Hole ID	From (m)	To (m)	% Cu
OFMND244	133.56	134.56	0.2140
OFMND244	134.56	135.56	0.0576
OFMND244	135.56	136.56	0.0217
OFMND244	136.56	137.22	0.0578
OFMND244	137.22	138.35	0.0454
OFMND244	138.35	139.00	0.1645
OFMND244	139.00	140.00	0.1160
OFMND244	140.00	141.00	0.1265
OFMND244	141.00	142.00	0.1910
OFMND244	142.00	142.74	0.2170
OFMND244	142.74	143.77	1.6850
OFMND244	143.77	144.88	0.3470
OFMND244	144.88	146.00	0.2990
OFMND244	146.00	147.00	0.2880
OFMND244	147.00	147.72	0.3310
OFMND244	147.72	148.23	0.9070
OFMND244	148.23	149.00	1.1950
OFMND244	149.00	150.00	1.5300
OFMND244	150.00	151.00	1.6300
OFMND244	151.00	152.00	1.7100
OFMND244	152.00	153.00	2.1300

Hole ID	From (m)	To (m)	% Cu
OFMND244	153.00	154.00	3.5900
OFMND244	154.00	155.00	3.5400
OFMND244	155.00	155.56	2.9100
OFMND244	155.56	156.78	0.5130
OFMND244	156.78	158.00	0.7130
OFMND244	158.00	159.00	0.9270
OFMND244	159.00	160.00	1.2300
OFMND244	160.00	161.00	0.7300
OFMND244	161.00	162.00	0.8170
OFMND244	162.00	163.00	0.4660
OFMND244	163.00	164.00	0.4920
OFMND244	164.00	165.00	0.7900
OFMND244	165.00	166.00	0.8520
OFMND244	166.00	167.00	1.2000
OFMND244	167.00	168.00	3.8400
OFMND244	168.00	169.06	3.0200
OFMND244	169.06	170.00	0.0348
OFMND244	170.00	171.00	0.0018
OFMND244	171.00	172.00	0.0058
OFMND244	172.00	173.00	0.0026
OFMND244	173.00	174.00	0.0021

**Table 6: OFMND245 drill assay results.**

Hole ID	From (m)	To (m)	% Cu
OFMND245	169.00	170.00	0.8300
OFMND245	170.00	171.00	0.8290
OFMND245	171.00	172.00	1.5050
OFMND245	172.00	173.00	1.7200
OFMND245	173.00	173.45	1.9200
OFMND245	173.45	174.00	0.2280
OFMND245	174.00	175.00	0.2230
OFMND245	175.00	176.00	0.2830
OFMND245	176.00	177.00	0.8420
OFMND245	177.00	178.00	1.0450
OFMND245	178.00	179.00	0.8180
OFMND245	179.00	180.00	0.6860
OFMND245	180.00	181.00	0.9990
OFMND245	181.00	182.00	0.9080
OFMND245	182.00	183.00	0.8740
OFMND245	183.00	184.00	0.6410
OFMND245	184.00	185.00	0.4660

**Table 7: OFMND246 drill assay results.**

Hole ID	From (m)	To (m)	% Cu
OFMND246	0.00	0.50	0.0144
OFMND246	3.33	4.62	0.0287
OFMND246	5.98	6.51	0.0406
OFMND246	6.51	7.00	0.1010
OFMND246	7.00	8.00	0.0209
OFMND246	8.00	9.00	0.0352
OFMND246	9.00	9.44	0.0206
OFMND246	9.44	10.00	0.0328
OFMND246	10.00	11.00	0.0432
OFMND246	11.00	12.00	0.1215
OFMND246	12.00	13.00	0.2320
OFMND246	13.00	14.00	0.0648
OFMND246	14.00	15.00	0.0751
OFMND246	15.00	16.00	0.0481
OFMND246	16.00	17.00	0.0455
OFMND246	17.00	18.00	0.0108
OFMND246	18.00	19.00	0.0341
OFMND246	19.00	20.00	0.0217
OFMND246	20.00	21.00	0.0336
OFMND246	21.00	21.67	0.0319
OFMND246	21.67	23.00	0.0006
OFMND246	23.00	24.00	0.0008
OFMND246	24.00	25.00	0.0009
OFMND246	25.00	26.00	0.0022
OFMND246	26.00	27.00	0.0003

Appendix 2: The following tables are provided in accordance with the JORC Code (2012) requirements for the reporting of Exploration Results from the Okiep Copper Project.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling was carried out using industry-standard diamond drilling 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 taken.</li> <li>HQ core size was only drilled in the upper weathered portion and no HQ core was sampled.</li> <li>One-metre sample length was taken in most cases, with two-metre sample length in poorly mineralised zones and internal waste. Sample lengths were varied to honour geological and mineralisation boundaries, with a maximum sample size of 2.00m and a minimum sample size of 48cm.</li> <li>Areas of sampling were selected based on visual observations and readings from a handheld Niton XL3t 500 XRF analyser (standard analytical range &gt;25 elements from S to U with additional elements Mg, Al, Si and P via helium purge).</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core drilling was undertaken.</li> <li>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. No Cu mineralisation was visually identified in the HQ core and no HQ core was sampled.</li> <li>Core was oriented using a Reflex ACT III™.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Core 'stick-ups' reflecting the depth of the drill hole are recorded at the rig at the end of each core run. A block with the depth of the hole written on it is placed in the core box at the end of each run. At the core yard, the length of core in the core box is measured for each run. The measured length of core is subtracted from the length of the run as recorded from the stick-up measured at the rig to determine the core loss.</li> <li>Core recovery was found to be very good (&gt;98%) within the mineralised zone.</li> <li>Ground conditions below the weathered zone were very good.</li> <li>No obvious relationship exists between sample recovery and grade.</li> <li>No core/sample loss or gain which could result in sample bias.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Core of the entire hole length was geologically logged by qualified geologists.</li> <li>The core was logged to a level of detail that is sufficient to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>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.</li> <li>Geological logs were captured electronically.</li> <li>All cores were photographed before sampling.</li> <li>Geotechnical logging was completed on non-oriented core. The data collected per drill run consisted of core recovery, length of core greater than ten centimetres, longest piece, fracture count, alpha angles for all joint types and lithological contacts, joint infill types and their strength as well as nature of joint surface.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>NQ core was cut, and half core was taken as sample with quarter core for duplicates.</li> <li>HQ core size was only drilled in the upper weathered portion and no HQ core was sampled.</li> <li>Sample preparation was undertaken at ALS Laboratory 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 &lt;2mm if required. Crushed samples are riffle-split and a 250g portion pulverised with +85% passing through 75 microns.</li> <li>Crushing and pulverising QC tests were applied by ALS and results found acceptable.</li> <li>Quarter core field duplicates were taken for thirty-six samples with acceptable results at a correlation factor of 0.9.</li> <li>All sample sizes are deemed appropriate.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks,</li> </ul>	<p><b>Flat Mine North drill hole results reported in this release:</b></p> <ul style="list-style-type: none"> <li>Areas of core were selected based on visual observations and readings from a handheld Niton XL3t 500 XRF (pXRF) analyser (standard analytical range &gt;25 elements from S to U with additional elements Mg, Al, Si and P via helium purge).</li> <li>Samples submitted to ALS were analysed for base metals and gold.</li> <li>All samples were analysed by an appropriate high-grade aqua regia</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</p>	<p>ICP-AES method, ALS code ME-ICP41a.</p> <ul style="list-style-type: none"> <li>• Samples where assays returned &gt;5% Cu were re-assayed by aqua regia digestion and ICP-AES method, ALS code MEOG-46.</li> <li>• Samples were assayed for gold by fire assay and AAS, ALS code AU-AA25 method.</li> <li>• Orion inserted CRMs every 10th sample. A total of thirty-eight CRMs were inserted. CRMs were alternated throughout the sample stream and where possible, matched to the sample material being analysed.</li> <li>• Three CRMs were used. AMIS0847 (1.05%Cu), AMIS0809 (2.97 %Cu) and AMIS0088 (0.3 %Cu).</li> <li>• All CRMs returned acceptable results within two Standard Deviations of the CRM average.</li> <li>• Chip blanks are inserted at the beginning of each batch and after any sample that may be considered high grade. A total of seventeen blanks (AMIS0908 and AMIS0991) were used. Acceptable results were returned indicating no contamination.</li> <li>• 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.</li> <li>• Results from the three-quarter core field duplicates showed a correlation coefficient of 0.9.</li> <li>• No external laboratory checks have been carried out at this stage.</li> </ul>
<p><b>Verification of Sampling and assaying</b></p>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• Orion's exploration geologist personally supervised the drilling and sampling along with a team of experienced geologists.</li> <li>• No twin holes were drilled.</li> <li>• The mineralisation intersection in OFMED157 is located approximately 36m from the mineralised intersection in OFMED154 which was recently drilled as part of the Orion confirmation drilling program. The geology broadly corresponds though width of norite zone is narrower in OFMED157 compared to OFMED154.</li> <li>• The Competent Person has reviewed the raw laboratory data and confirmed the calculation of the significant intersections.</li> <li>• No adjustments have been made to the assay data.</li> </ul>
<p><b>Location of data points</b></p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Collar positions of the FMN and FME prospect holes were initially located using a hand-held Garmin GPS and have been subsequently surveyed by a qualified surveyor using a differential GPS.</li> <li>• On completion drill collars are capped and labelled.</li> <li>• The local South African Lo17 (Hartebeesthoek 94) grid system is used.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>All the FME and FMN holes have been surveyed down-hole. An ITC Gyroshot serial number 3033 used for the down-hole surveys.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>OFMED157 intersected mineralisation approximately 36 metres from mineralisation intersected in drill hole OFMED154. The hole was drilled to test for down-dip continuity.</li> <li>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.</li> <li>Mostly one-metre samples were taken in mineralised zone and five-metre fringe zone with the exception being fifty-centimetre samples collected in the lower mineralised zone of OFMED157. Two-metre samples were taken in wider zones of internal waste or barren zones separating hanging wall and footwall mineralised zones.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>To achieve unbiased sampling, drilling is oriented as close as practically possible to perpendicular, or at a maximum achievable angle, to the attitude of the mineralisation. OFME157 was inclined at -66°, data for all the holes drilled in included in intext collar table.</li> <li>No sampling bias is anticipated as a result of drill hole orientations.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody is managed by the Company. Samples were stored on site in a secure locked building and then freighted directly to the laboratory.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been carried out to date for this drill campaign.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The mineral rights to the properties are vested in the peoples of South Africa and the Minerals and Petroleum Resources Development Act, 2002, (<b>MPRDA</b>) regulates the prospecting and mining industry in South Africa.</li> </ul> <p><b>Newmont and GFSA:</b></p> <ul style="list-style-type: none"> <li>O'Okiep Copper Company (Pty) Ltd (<b>OCC</b>), historically owned at different times by Newmont, GFSA and Metorex, held vast areas under an old order (prior to the MPRDA) mining right.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p><b>Orion:</b></p> <ul style="list-style-type: none"> <li>• <b>Flat Mines Mining Right.</b> A mining right, NC30/5/1/2/2/10150MR was granted on 28 July 2022 to Southern African Tantalum Mining (Pty) Ltd (<b>SAFTA</b>) 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 Orion indirect subsidiary, New Okiep Mining Company (Pty) Ltd (<b>NOMC</b>) on 12 December 2023. The right is for copper ore and tungsten ore 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.</li> <li>• A prospecting right NC30/5/1/1/2/12850PR was granted on 27 June 2023 to SAFTA in terms of section 17 of the MPRDA for the same area as the mining right for 3 years (renewable for 3 years) for 26 additional minerals including gold and silver.</li> <li>• <b>SAFTA PR.</b> A prospecting right, NC30/5/1/1/2/12755PR was granted on 21 June 2024 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.</li> <li>• 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.</li> <li>• 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 (<b>IDC</b>) (refer ASX/JSE releases 2 August 2021, 7 September 2022, 14 November 2022, 17 April 2024 and 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.</li> <li>• The area was mined historically for copper and tungsten.</li> </ul>
<p><b>Exploration done by other parties</b></p>	<ul style="list-style-type: none"> <li>• Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>• Previous explorers in the region includes Newmont, GFSA and SAFTA. Exploration was focussed on Cu.</li> <li>• Extensive historical drilling data (480 holes totalling 126,601m) is contained in the database inherited from Newmont, GFSA and SAFTA for FME, FMN and FMS. This includes 247 holes totalling 42,738m at FMN, 151 holes totalling 50,583m at FME and 82 holes totalling 33,280m at</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>FMS.</p> <ul style="list-style-type: none"> <li>Sample and analytical details are contained within JORC Table 1 of Orion's ASX/JSE release dated 28 August 2023.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The tenements are located over the Central and Western parts of the Okiep Copper District (OCD). The style of mineralisation is mafic hosted orogenic Cu-mineralisation.</li> <li>Copper mineralisation is primarily associated with irregular, elongated and steeply dipping Koperberg Suite mafic intrusives.</li> <li>The Koperberg Suite intrusives are mainly restricted to so-called "Steep Structures" of extensive strike lengths and steeply dipping to the north.</li> <li>The Koperberg Suite consists of intermediate to mafic rock types, predominated by anorthosite, diorite and norite.</li> <li>Mineralisation usually occurs as blebs to disseminated Cu mineral assemblages: bornite &gt; chalcopyrite &gt; chalcocite and less pyrite and pyrrhotite.</li> <li>The more mafic and magnetite-rich lithologies generally host the bulk of and higher-grade mineralisation.</li> <li>The OCD has a long exploration and mining history, and the geology is well known and understood.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Refer to Table 4 in Appendix 1 for collar details of drill holes reported.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for</li> </ul>	<ul style="list-style-type: none"> <li>A minimum 0.7% Cu cut-off was used to calculate intercepts.</li> <li>Allowance was made for 3m internal waste.</li> <li>A cut-off of 1.0% Cu was used for the higher-grade inclusions.</li> <li>Weighted grades were calculated as follows: %Cu x sample length(m)</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</p> <ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person is of the opinion that the above aggregation methods are acceptable for this type of deposit.</li> <li>These aggregation methods were also applied to historical holes and assay results in previous announcements.</li> <li>No metal equivalents are reported.</li> <li>No capping of assay results was required.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>Drilling is generally oriented perpendicular, or at a maximum achievable angle to, the attitude of the mineralisation.</li> <li>Generally, drill hole inclinations ranged between -65° to -75° towards the south for FME while the mineralisation is expected to dip close to 50-75° towards the north. Drill hole inclinations at FMN generally north or south at steep angles between -75 to vertical due to the shallow, 15°, north dipping mineralisation.</li> <li>Down holes lengths are reported in all instances apart from where true widths (TW) are specified.</li> <li>Where true widths (TW) are specified they are calculated by measuring the intersection width perpendicular to the interpreted mineralisation trend.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Refer to body of the announcement for plan, cross-section and tables.</li> <li>Drilling data was incorporated and monitored in Micromine™ software together with interpretation models based on the available historical drill data.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>In the Competent Person's opinion, the Exploration Results reported in this announcement have been reported in a balanced manner.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Company's previous ASX releases have detailed exploration works.</li> <li>Surface MT geophysical surveys are being undertaken. The objective of the work is to explore for deeper structures that may have acted as pathways for emplacement of the Koperberg mafic suites.</li> <li>A high-resolution drone magnetic survey was carried-out and will assist in future planning of additional drill holes.</li> <li>Drone (DJI 600M Pro) magnetics were done at 30m AGL and 50m line spacing.</li> <li>Historical detailed surface mapping is interpreted and utilised during drill hole planning.</li> <li>Where possible, bulk density measurements were made over the full length of each individual sample of split core. Where not possible due to</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>incompetent (crushed or broken) core, a minimum of 80% of the (half-core) sample was used. The bulk density is determined by measuring and subtracting the wet weight from the dry weight using an electronic scale. Care is taken to clean and zero the scale between each weighing. The intact sample portion is first weighed in air and the weight recorded. The sample is then weighed, while completely submerged in clean water within a measuring container. The mass of container and water are deducted for net submerged weight and volume displacement read on measuring container. The sample is then removed and placed back into the core tray in the correct position and orientation. The procedure is repeated for each geological sample interval. The data were recorded in the bulk density Data Sheet. The bulk density is calculated for each sample using the formula:</p> $BD = \frac{\text{weight of sample}}{(\text{weight of sample in air} - \text{weight of the sample in water})}$
<p><b>Further work</b></p>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drilling is ongoing at the Flat Mine East prospect.</li> </ul>