Orion Minerals

ASX/JSE RELEASE: 11 January 2022

Maiden Drilling Program Delivers Shallow, High-Grade Intersections at Okiep Copper Project, Northern Cape, South Africa

- **Assay results received for the first four drill holes from the maiden drilling program at the Okiep Copper Project, confirming and exceeding expectations.**
- **Three holes were drilled to confirm historically reported mineralisation, returning high-grade results including 10.36m at 1.84% Cu, 5.71m at 1.93% Cu and 4.69m at 2.05% Cu.**
- **Importantly, drilling also intersected a new mineralised zone at Koperberg West, supporting Orion's geological model, with a high-grade intercept of 4.76m at 3.99% Cu.**
- **The maiden drilling program is now 55% complete, with 14 diamond holes completed at Koperberg West and 2 diamond holes completed at Koperberg East with a total of 1,900m drilled to date.**

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

"We are thrilled with the first assays received from our ongoing maiden drilling program at Okiep. The results we've received to date have confirmed the historical drill results for high-grade sulphide copper mineralisation near-surface and more importantly, confirming our geological hypothesis for a model for intrusive bodies arranged in en-echelon side-stepping lenses.

"Historical drilling focussed on drilling down-dip projections, without adequately testing the probable side-stepping of mineralised lenses as was encountered at the 38 million tonne Carolusberg Deeps mine, which sits along strike from and on the same structure as Okiep.

"This potential for offset, high-grade lenses, that continue down dip below the extensive, shallow historical mining on the 5 km strike Carolusberg line, presents a very exciting exploration opportunity. Drill testing this down dip position has been elevated to a high priority focus for 2022, alongside the testing of EM targets identified through our recent SkyTem™ survey.

"Our engineering and permitting teams are also making good progress on the early mining project we announced on 3 May 2021 and we anticipate being able to provide market updates on this work shortly"

Orion Minerals Limited (**ASX/JSE: ORN**) (**Orion** or **Company**) is pleased to advise that initial drilling assays from the maiden drilling program at the Okiep Copper Project (**OCP**) in the Northern Cape, South Africa, have delivered very positive results, confirming the presence of shallow high-grade copper mineralisation and demonstrating the potential for additional high-grade mineralised lenses at depth.

OCP Drilling Program

The exploration drilling program at the OCP is designed to test and expand mineralisation intersected in historical drilling. Drilling is currently focussed on the Carolusberg – Koperberg line of intrusives (Figures 1 and 2). The Carolusberg Complex was the biggest contributor to historical mining in the Okiep Copper

District delivering 38Mt grading 1.54% Cu out of the reported total of 105Mt mined over the past 100 years. Historical mine records show that Carolusberg Deeps contributed 16Mt at a head grade of 2.05% Cu (refer ASX/JSE release 3 August 2021).

Orion is currently exploring prospects with known copper mineralisation along strike of Carolusberg, applying an exploration model derived from structural interpretation of Carolusberg Mine mineralisation. The current drilling program also includes twin and infill drilling to verify historical drilling results and to allow future resource estimation.

To date, 1,900m of the 3,500m planned diamond drilling program has been completed, representing 16 of the 26 planned holes. Assay results from 39 samples have been received. Further drill holes are currently being logged and sampled by Orion's geological team, prior to dispatch to ALS Laboratory in Johannesburg.

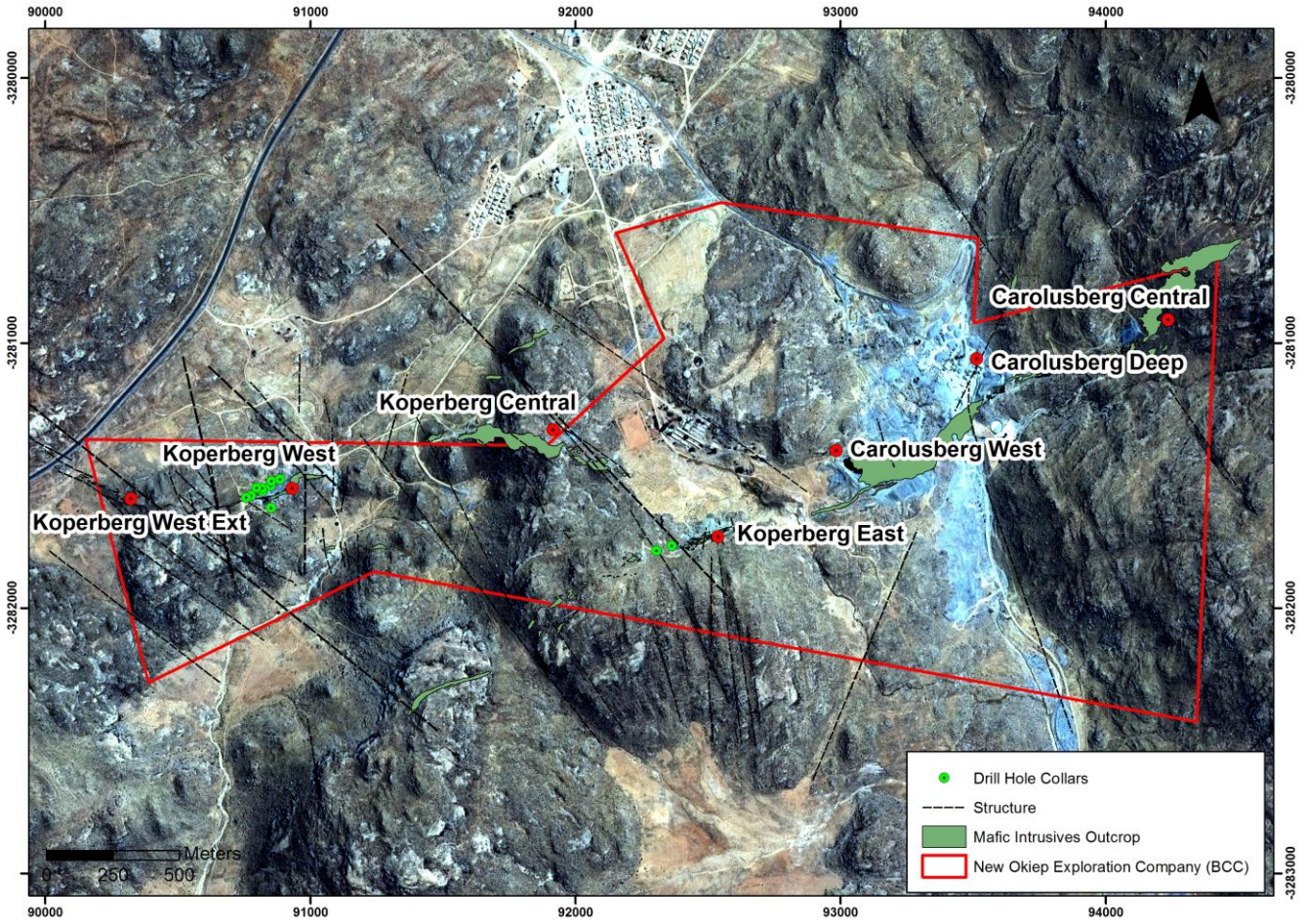


Figure 1: Carolusberg-Koperberg locality map showing drill hole collars, prospects/mines and mafic intrusives.

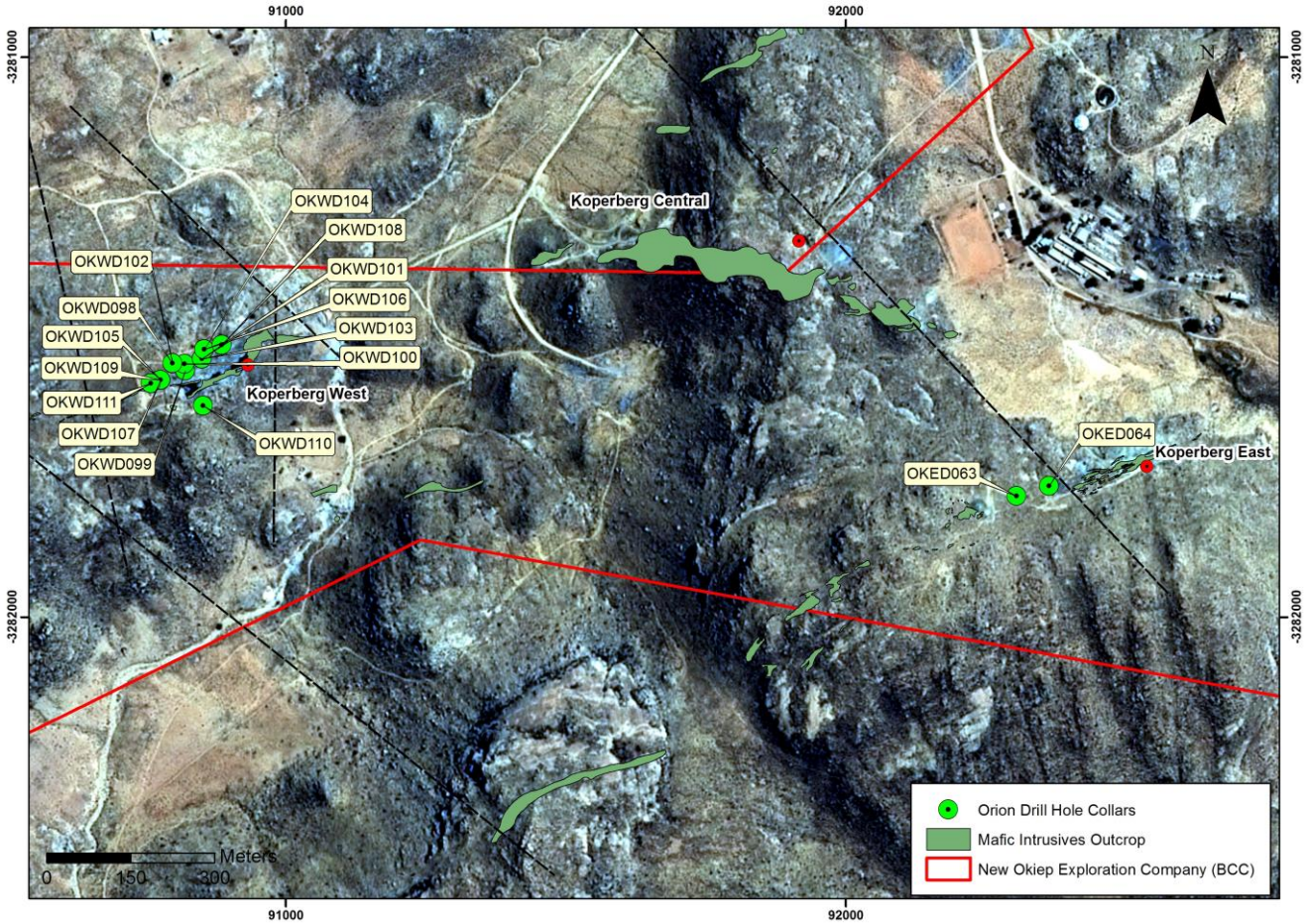


Figure 2: Koperberg West and East drill hole locations. Refer to Table 3 for collar details.

Results received to date

Three holes into historically drilled mineralisation have returned high-grade copper intersections including 10.36m at 1.84% Cu from 58.94m in OKWD100, 5.71m at 1.93% Cu from 72.85m in OKWD102 and 4.69m at 2.05% Cu from 49.22m in OKWD105. Results confirm high-grade, near-surface sulphide copper mineralisation.

Hole OKWD102, drilled primarily to twin historical hole KW020[1], returned comparable high-grade copper sulphide mineralisation (refer Table 1). Drillhole collar coordinates are provided in (Table 3).

Table 1: Twin hole intersection for comparison (a minimum cut-off of 0.5 %Cu with maximum 3m internal waste allowed, no capping).

Twin Hole					Historical Hole				
Hole ID	**From (m)**	**To (m)**	**Thickness (m)**	**Cu%**	**Hole ID**	**From (m)**	**To (m)**	**Thickness (m)**	**Cu%**
OKWD102	72.85	78.56	5.71	1.93	KW020	71.63	78.03	6.4	1.31

[1] Historical Exploration Results from KW020 were reported in accordance with the JORC Code (2012) in Orion's ASX release of 3 August 2021: "Exploration ramps up at the Okiep Copper Project following exercise of Option to Purchase" available to the public on https://www.orionminerals.com.au/investors/asx-jse-announcements/. Competent Person: Mr Errol Smart. Orion is not aware of any new information or data that materially affects the information included here. Orion confirms that the form and context in which the Competent Person's findings are presented have not been materially modified.

Importantly, extended hole OKWD102 intersected 4.76m at 3.99% Cu from 95.08m, representing a new intrusive lens and supporting a model for en-echelon side stepping mineralisation occurring along the entire strike of the Carolusberg line. High-grade mineralisation at the Carolusberg Mine was mined down to 1,900m depth, and comprised several en-echelon side steps down dip (Figure 3).

Several other recent holes, with assay results pending, intersected the en-echelon downdip lenses of sulphide mineralisation, supporting this geological model and presenting high-priority follow-up drill targets on offset down-dip extensions below historical shallow mining.

Drill core logging identified a further ten mafic (Koperberg Suite) intersections. The logged copper mineral assemblages are all sulphide mineralisation, comprising chalcopyrite and bornite, with minor pyrrhotite present. Assay results are pending for several holes. Intersections are tabled in Table 2 and illustrated in Figures 5 - 9 below.

Table 2: Intersections made in current exploration drill holes (a minimum cut-off of 0.5 Cu% with maximum 3m internal waste allowed. Higher grade inclusions at 1.0 Cu%, no capping).

Project	Hole ID	Ultramafics/Mafics			Mineralisation			
		From (m)	To (m)	Interval (m)	From (m)	To (m)	Interval (m)	Cu%
Koperberg West	OKWD099	45.98	47.73	1.75	Sampling/Results Pending			
		105.04	107.27	2.23	Sampling/Results Pending			
	OKWD100	58.94	69.34	10.40	58.98	69.34	10.36	1.84
					64.98	69.34	4.36	2.41
	OKWD102	69.85	78.56	8.71	72.85	78.56	5.71	1.93
					75.06	78.56	3.50	2.09
		95.08	100.50	5.42	95.08	99.84	4.76	3.99
	OKWD103	65.70	67.76	2.06	66.56	67.77	1.21	0.62
	OKWD105	33.85	39.70	5.85	33.85	34.90	1.05	1.71
					38.85	39.70	0.85	0.96
		49.22	53.91	4.69	49.22	53.91	4.69	2.05
	OKWD108	59.57	65.35	5.78	Sampling/Results Pending			
	OKWD109	21.38	27.14	5.76	Sampling/Results Pending			
	OKWD110	112.80	113.02	0.22	Sampling/Results Pending			
		150.28	150.44	0.16	Sampling/Results Pending			
	OKWD111	18.69	21.89	3.20	Sampling/Results Pending			
		24.70	26.93	2.23	Sampling/Results Pending			
Koperberg East	OKED064	25.50	25.59	0.09	Sampling/Results Pending			
		28.53	34.67	6.14	Sampling/Results Pending			
		36.36	43.61	7.25	Sampling/Results Pending			
		45.32	48.35	3.03	Sampling/Results Pending			
		49.05	52.66	3.61	Sampling/Results Pending			
		53.29	55.65	2.36	Sampling/Results Pending			
		63.02	63.57	0.55	Sampling/Results Pending			
		75.98	89.34	13.36	Sampling/Results Pending			
		96.19	97.60	1.41	Sampling/Results Pending			
		100.19	102.37	2.18	Sampling/Results Pending			

The data aggregation methods are deemed acceptable for this type of mineralisation.

Table 3: Current and Historical Twin Drill Hole Collar Data (LO17WGS84).

Prospect	Hole ID	Easting	Northing	RL	Depth	Azimuth	Dip
Koperberg West	KW020	90795.06	-3281539.74	1011.71	109.07	160	-60
Koperberg West	OKWD098	90798.00	--3281547.50	1011.81	181.56	160	-65
Koperberg West	OKWD099	90819.00	--3281548.00	1013.50	127.47	160	-60
Koperberg West	OKWD100	90819.00	--3281548.00	1013.50	100.16	160	-50
Koperberg West	OKWD101	90850.00	--3281551.90	1018.36	106.67	160	-75
Koperberg West	OKWD102	90798.02	--3281547.70	1011.81	120.00	160	-50
Koperberg West	OKWD103	90849.23	--3281551.60	1018.19	100.50	160	-65
Koperberg West	OKWD104	90854.00	--3281521.90	1013.19	121.35	160	-65
Koperberg West	OKWD105	90776.00	--3281578.20	1017.06	110.21	160	-60
Koperberg West	OKWD106	90854.00	--3281521.90	1013.19	64.08	160	-45
Koperberg West	OKWD107	90776.00	--3281578.20	1017.06	127.36	160	-75
Koperberg West	OKWD108	90886.00	--3281516.50	1015.92	121.60	160	-65
Koperberg West	OKWD109	90776.00	--3281578.00	1017.00	87.56	160	-45
Koperberg West	OKWD110	90853.00	--3281631.80	1019.61	210.90	340	-75
Koperberg West	OKWD111	90759.00	--3281583.00	1017.80	79.07	160	-50
Koperberg East	OKED063	92306.00	--3281784.00	1107.11	130.22	160	-65
Koperberg East	OKED064	92364.00	--3281767.00	1092.87	102.5	160	-60

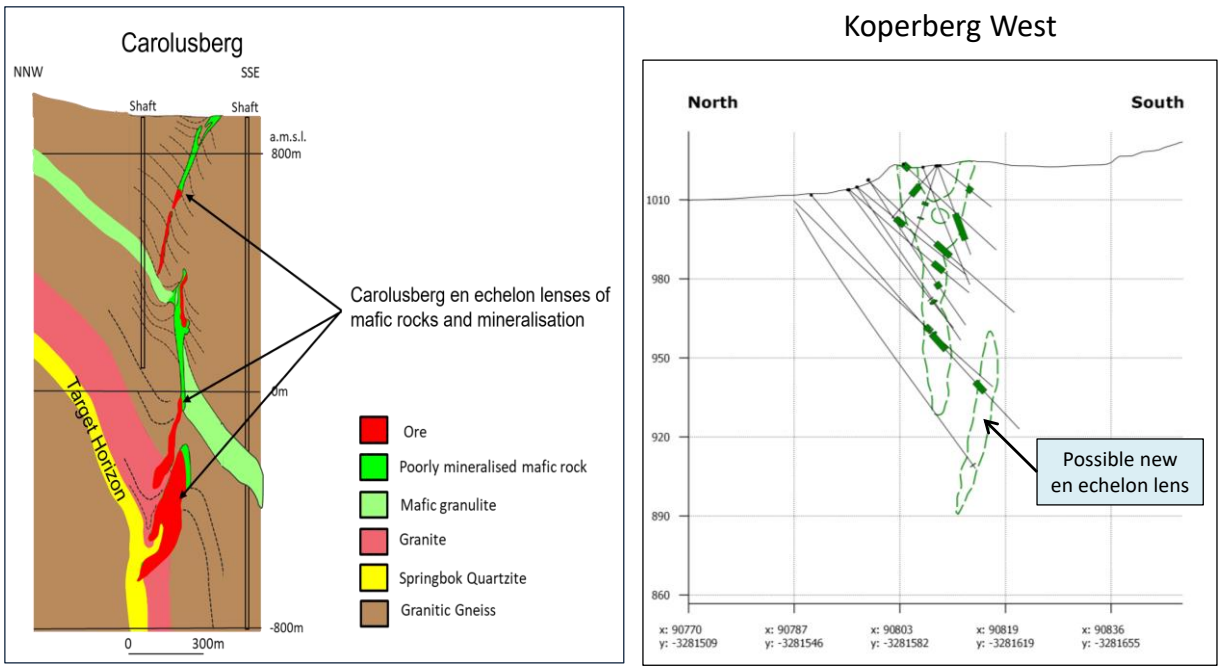


Figure 3: Sections (not to scale) at Carolusberg (after Kister et. al, 1996) and Koperberg West illustrating the concept of en-echelon mafic intrusions and mineralisation. Note: For the sake of illustrating the concept, hole IDs are not included.

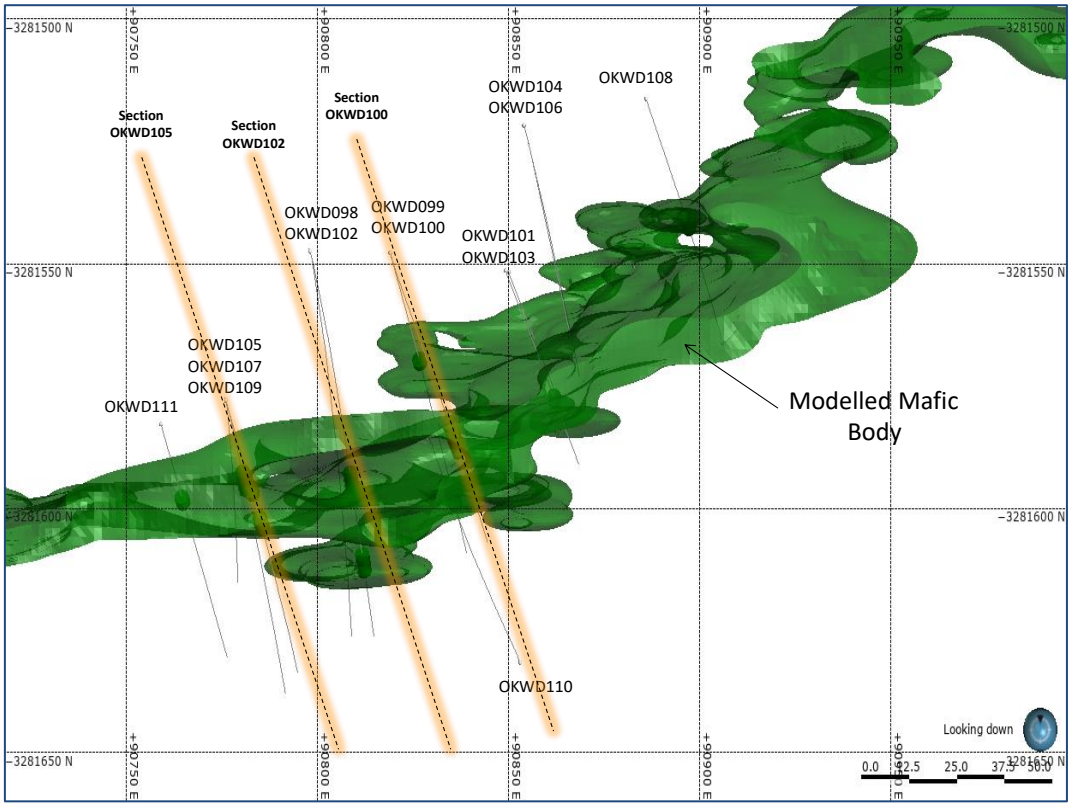


Figure 4: Plan view of the modelled mafic and mineralised body of Koperberg West, showing holes drilled and section lines.

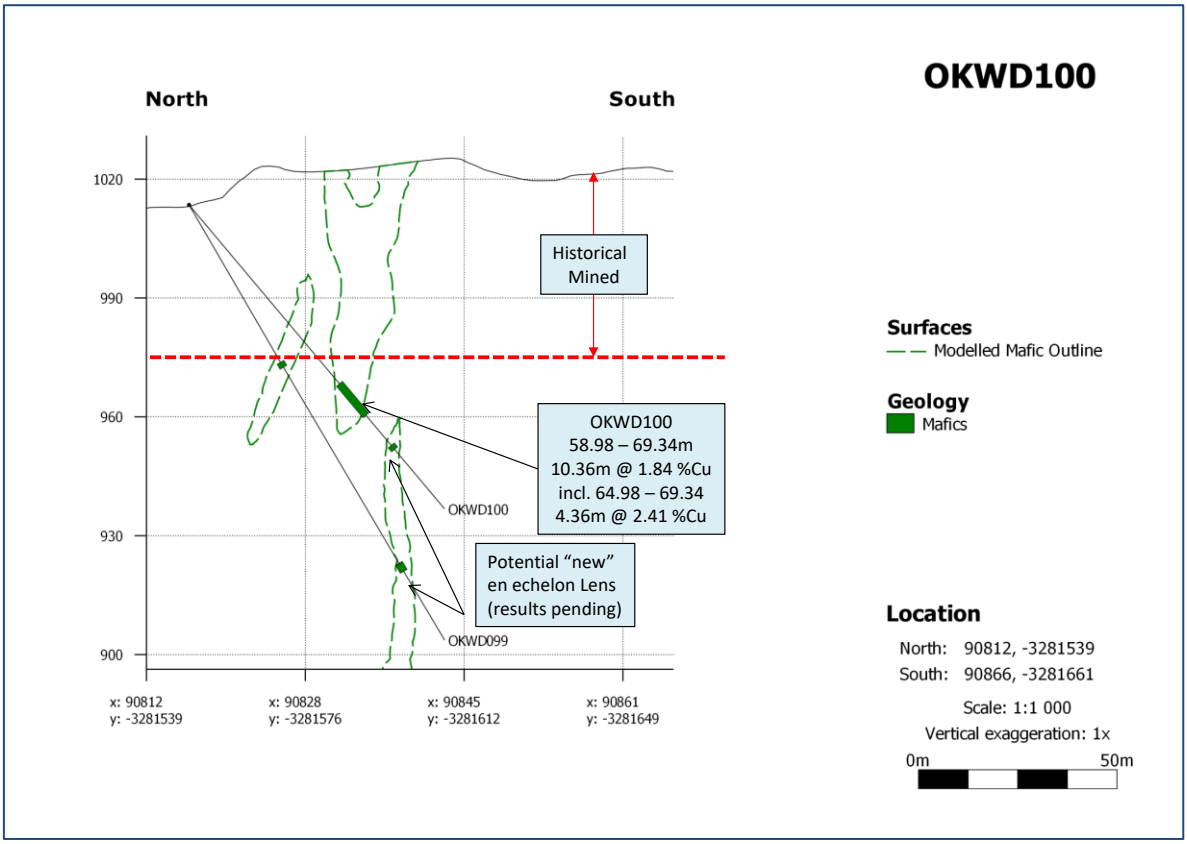


Figure 5: Section (Koperberg West) showing OKWD100 intercepts, looking east.

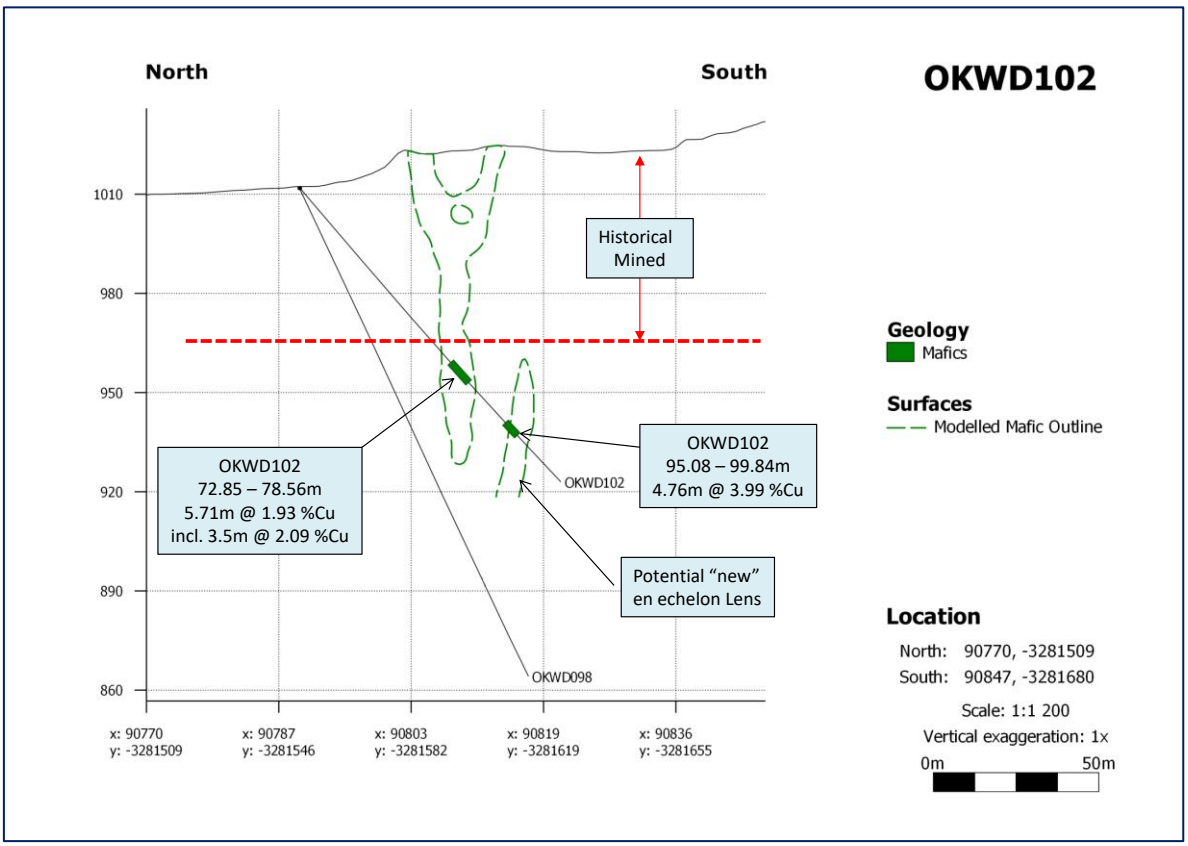


Figure 6: Section (Koperberg West) showing OKWD102 intercepts, looking east.
Note: Holes are projected along strike onto the section.

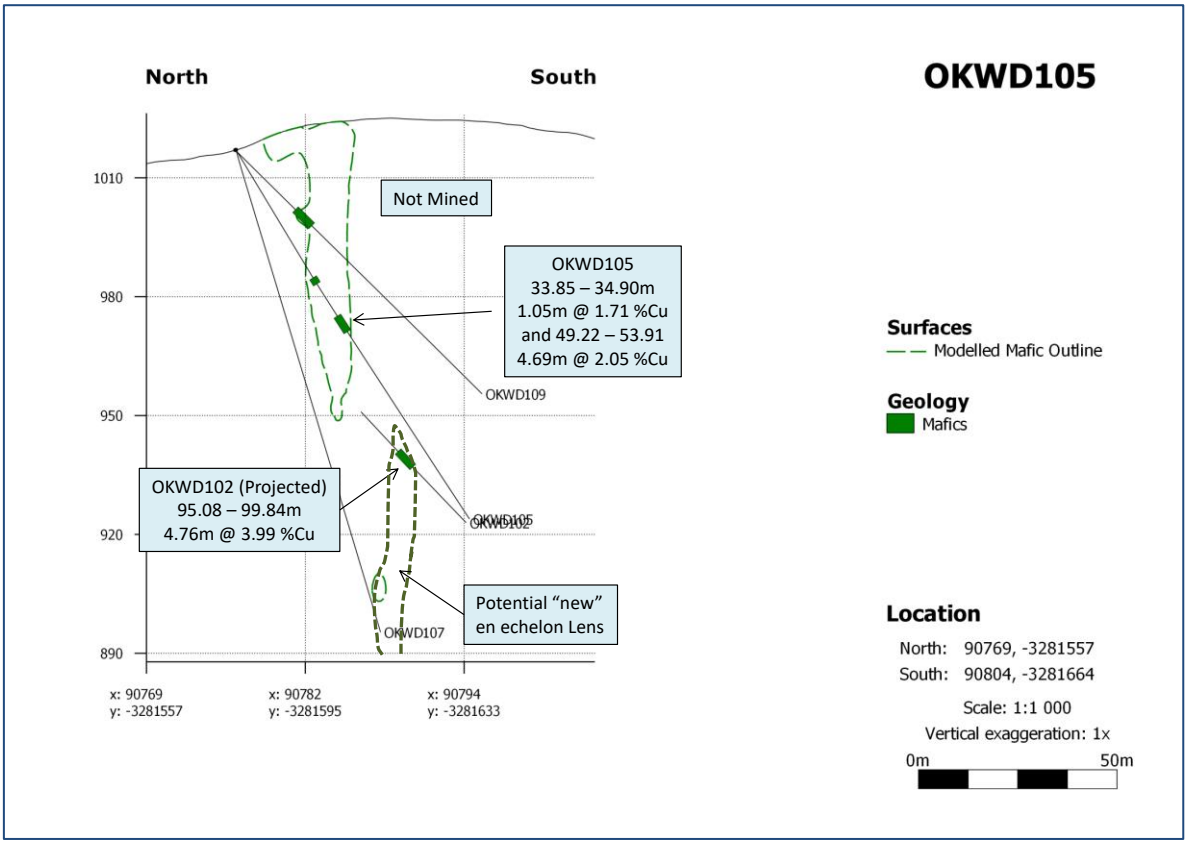


Figure 7: Section (Koperberg West) showing OKWD102 intercepts, looking east.

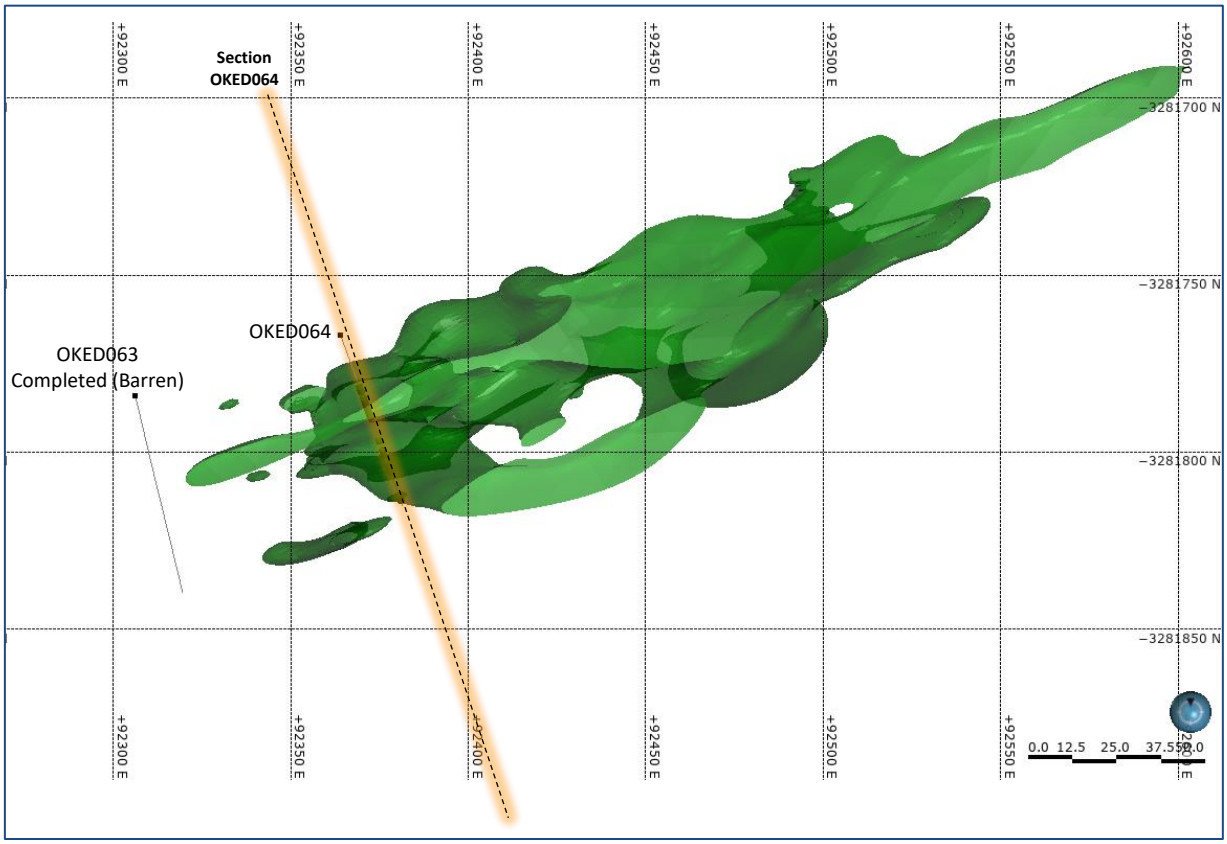


Figure 8: Plan view of mafic and mineralised body of Koperberg East - showing completed holes.

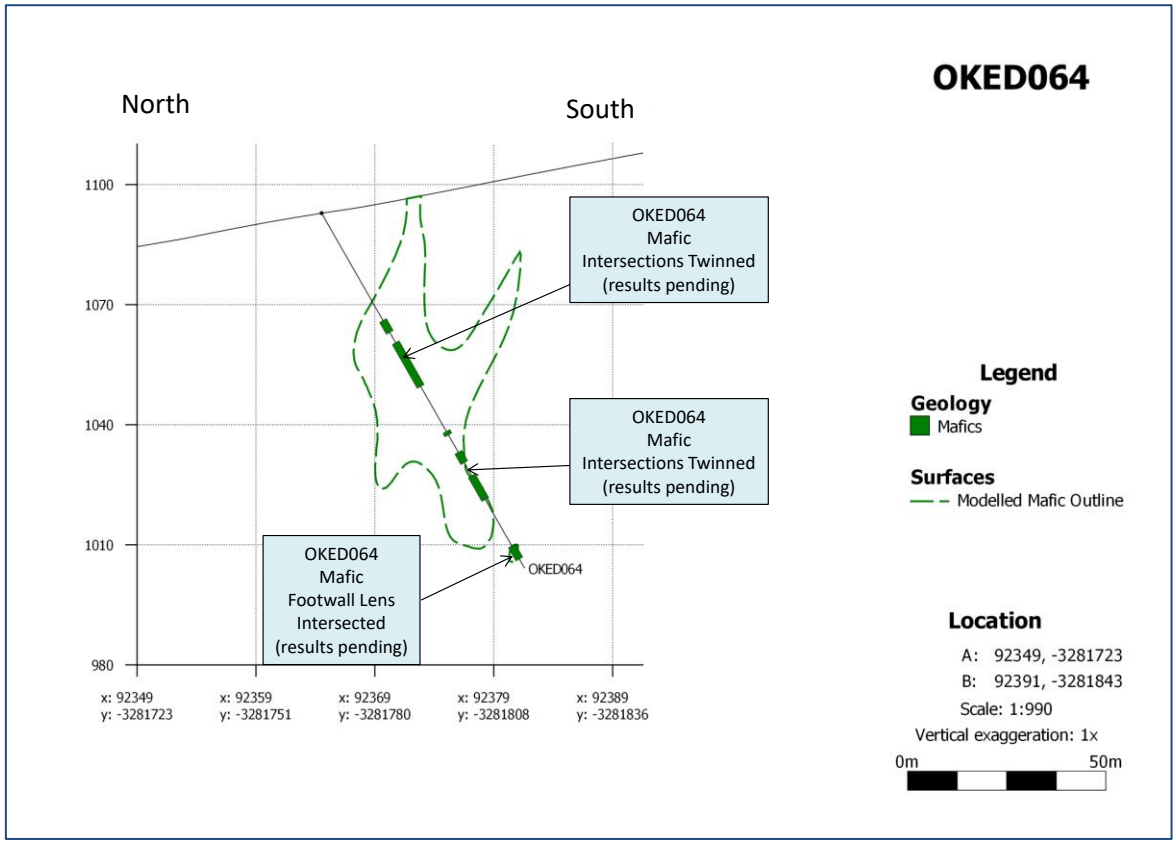
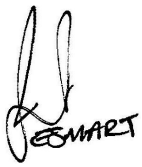


Figure 9: Mafic intercepts plotted in section showing hole OKED064 drilled at Koperberg East. A potential additional footwall lens appears to have been intersected (sampling and results still pending). Looking east.

For and on behalf of the Board.



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Competent Persons Statement

The information in this report that relates to Orion's Exploration Results at the Okiep Copper Project is reported in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code**) and has been compiled and assessed under the supervision of Dr Deon Vermaakt, Orion Minerals Exploration Manager, a Competent Person who is a Professional Natural Scientist (Pr.Sci.Nat.) registered with the South African Council for Natural Scientific Professionals, a Recognised Professional Organisation (RPO). Dr Vermaakt, as Orion Minerals Exploration Manager, is a full-time employee of the company. Dr Vermaakt confirms

there is no potential for a conflict of interest in acting as the Competent Person. Dr Vermaakt 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. Dr Deon Vermaakt (Pr.Sci.Nat) consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Disclaimer

This release may include forward-looking statements. Such forward-looking statements may include, among other things, statements regarding targets, estimates and assumptions in respect of metal production and prices, operating costs and results, capital expenditures, mineral reserves and mineral resources and anticipated grades and recovery rates, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions. These forward-looking statements are based on management's expectations and beliefs concerning future events. Forward-looking statements inherently involve subjective judgement and analysis and are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Orion. Actual results and developments may vary materially from those expressed in this release. Given these uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. Orion makes no undertaking to subsequently update or revise the forward-looking statements made in this release to reflect events or circumstances after the date of this release. All information in respect of Exploration Results and other technical information should be read in conjunction with Competent Person Statements in this release (where applicable). To the maximum extent permitted by law, Orion and any of its related bodies corporate and affiliates and their officers, employees, agents, associates and advisers:

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- disclaim all responsibility and liability for these forward-looking statements (including, without limitation, liability for negligence).

Appendix 1: 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
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 (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.*	• Sampling was carried out under supervision using industry standard procedures. NQ size diamond drill cores were longitudinally split in half using a diamond core cutting machine. • HQ core size was only drilled in the upper weathered portion and HQ core was sampled. • 1 metre sample lengths were taken in most cases. Sample lengths were varied to honour geological / mineralisation boundaries. • Areas of sampling were selected based on visual observations and readings from handheld Niton XL3t 500 XRF instrument. • Standard analytical range >25 elements from S to U with additional elements Mg, Al, Si and P via helium purge.
Drilling techniques	• *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).*	• 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 and no HQ core was sampled. • HQ core generally only in upper 6m weathered zone, no Cu mineralisation intersected. • Core was not oriented.
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.*	• 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. • Core recovery was found to be excellent (>98%) within the mineralised zone. • Ground conditions belowe the weathered zone was excellent, furthermore slower drilling ensured excellent core recovery.

Criteria	JORC Code explanation	Commentary
		• No obvious relationship exists between sample recovery and grade. • No core/sample loss or gain which could result in sample bais.
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.* • *The total length and percentage of the relevant intersections logged.*	• Core of the entire hole length was geologically logged by qualified geologists. • Geological logging was quantitative and was carried out using a standard sheet with a set of standard 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 and after sampling. • 16 Diamond holes, totalling ~1,900m core was logged. Of this, approximately 58m are ultramafic/mafic lithologies primarily hosting the Cu mineralisation.
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 being sampled.*	• NQ core was cut, and half core was taken as sample • HQ core size was only drilled in the upper weathered portion and no HQ core was sampled. • 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 <2mm if required, crushing samples are riffle split and then pulverising to 250 gwith +85% passeing through 75 microns. • Crushing and pulverising QC tests were applied by ALS.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• All samples were analysed by an appropriate high-grade aqua regia ICP-AES method, ALS code ME-ICP41a Samples submitted to ALS were analysed for base metals and Au. • Orion (purchased) CRMs were inserted every 10th sample and Orion field duplicates every 20 samples. • A total of 6 CRMs were inserted. CRMs were alternated throughout the sample stream and where possible matched to the sample material being analysed. • The average grade of the CRM used is 1.014 %Cu (AMIS0399). All 6 CRMs returned acceptable results within 2 Standard Deviations of the CRM average. • Due to limited dataset, no plots are shown and there is not enough

Criteria	JORC Code explanation	Commentary
		data to draw conclusive results, however the two duplicates inserted showed excellent correlation • Chip blanks are inserted at the beginning of each batch and after any sample that may be considered high grade. Acceptable results were returned with no contamination. Acceptable results were returned with no contamination. • 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.*	• Orion's exploration geologist is personally supervising the drilling and sampling along with a team of experienced geologists. • Twinning is used to confirm and verify the available historical drill holes data, good correlation was obtained between OKWD102 and KW020. More twinning results are expected. • The CP 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.*	• Collar positions of the holes were surveyed using a hand-held Garmin GPS. • On completion drill collars are capped and labelled. • Drill collars will be surveyed by a qualified surveyor on completion of the drilling program. • The local South African LO17 WGS84 (Hartbeeshoek 94) grid system is used. • A REFLEX EZ-TRAC tool was used for the down-hole surveys. • A high resolution and accurate DTM was generated and obtained from Drone Photogrammetry. A DJI drone is used drape flying at 100m AGL and approximately 45m line spacing. The imagery is processed using AgiSoft™ software.
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.*	• Exploration holes testing potential strike-extent/continuation are drilled closely spaced along 25m to 30m drill lines. • Due to the irregular intrusive nature of the mineralisation, the drill spacing is kept tight. • The drill data spacing is considered sufficient for this deposit type geological and grade continuity. • The drill data spacing is considered sufficient for this deposit type geological and grade continuity. In the event of resource estimation, the data spacing and distribution will be applicable. • No samples were composited.

Criteria	JORC Code explanation	Commentary
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.*	• 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. Drill holes were inclined between -45° to -75° degrees. • No sampling bias is anticipated as a result of drill hole orientations
Sample security	• *The measures taken to ensure sample security.*	• Chain of custody is managed by the Company. Samples were stored on site in a secure locked building and then freighted directly to the lab.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been carried out to date.

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. • A prospecting right, NC30/5/1/1/2/12357PR, in accordance with section 17 of the MPRDA was granted to Bulletrap Copper Co (Pty) Ltd (BCC) to prospect for a period of five years effective from 14 January 2021. • The prospecting right was granted for the minerals copper and tungsten ore in respect of the farms portion of Portion 10, portion of Portion 9 and Portion 11 of the farm Brakfontein No. 133, portion of Portion 1 and portion of Portion 23 of the farm Melkboschkuil No 132, situated within the administrative district of Namaqualand. The total area measures 2547,0791 Ha in extent. • A Section 102 application is in process with the authorities to add 26 minerals, including gold and silver. • Orion, recently acquired 100% of the project through the BCC-Orion Acquisition Agreement (refer ASX/JSE release 2 August 2021).
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Previous explorers in the region includes Newmont, Gold Field of SA and SAFTA. Exploration was aimed at Cu.
Geology	• Deposit type, geological setting and style of mineralisation.	• The tenements are located over the Central and Western parts of the Okiep Copper District. The style of mineralisation is mafic hosted orogenic Cu-mineralisation.

Criteria	JORC Code explanation	Commentary
		• 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 dipping to the north. • The Koperberg Suite consists of anorthosite, diorite and norite intermediate to mafic rock types. • Mineralisation usually occurs as blebs to disseminated Cu mineral assemblages bornite > chalcopyrite > chalcocite and less pyrite and 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:
	  o easting and northing of the drill hole collar
	  o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
	  o dip and azimuth of the hole
	  o down hole length and interception depth
	  o 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.
		• Refer to Table 3 for collar details of all completed drillholes and historical twinned hole.

Data aggregation methods	• *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.* • *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.*	• A minimum 0.5%Cu cut-off was used to calculate intercepts. • Allowance was made for 3m internal waste. • A cut-off of 1.0 %Cu was used for the higher-grade inclusions. • Weighted grades were calculated as follows; %Cu x sample length(m) x Bulk Density. • The CP is of the opinion that the above aggregation methods are acceptable for this type of deposit. • No metal equivalents are reported. • No capping of assay results was required.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Drilling is generally oriented perpendicular, or at a maximum achievable angle to, the attitude of the mineralisation. • Generally, drill hole inclinations ranged between -45° to -75° while the mineralisation is expected to dip close to 90^0. • Only down holes lengths are reported.
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.*	• Refer to text. • Drilling data was incorporated and monitored in 3D Leapfrog geological model based on the available historical drill data.
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.*	• In the Competent Person's opinion, the Exploration Results reported in this announcement have been reported in a balanced manner.
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.*	• The Company's previous ASX releases have detailed exploration works. • High-resolution drone magnetic survey was carried-out and will assist in future planning of additional drill holes. • Drone (DJI 600M Pro) magnetics were done at 30m AGL and 50m line spacing. • Historical detailed surface mapping is interpreted and utilised during drill hole planning. • The GemSys GSMP-25U mag sensor specifically designed for drones has been used. • Where possible, bulk density measurements were made over the full length of each individual sample of split core. Where not possible due to 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:

Criteria	JORC Code explanation	Commentary
		BD = $\frac{\text{weight of sample}}{\text{(weight of sample in air – weight of the sample in water)}}$
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Drilling will continue on targets generated to date with the aim of adding confidence and/or tonnage. • Further surface geophysical surveys may inter allia include ground, drone and/or airborne EM, gravity and radiometrics.