

### ASX/JSE RELEASE: 24 February 2022

## Copper Discovery in First Drill Hole to test SkyTEM Anomaly at Okiep, Northern Cape

Previously unknown copper mineralised mafic intrusive discovered following ground mapping and scout drilling to test coincident EM and magnetic anomalies

- ► Outcrop of mafic intrusive with copper oxide staining at surface identified from groundtruthing conducted over a coincident SkyTEM<sup>™</sup> electromagnetic (EM) and magnetic anomaly.
- High-priority sub-surface targets mapped from follow-up high-resolution drone magnetic and ground gravity surveys.
- Orion's first diamond drill hole at the Nous Prospect has intersected 10 metres of matic intrusive with massive and semi-massive veins of copper sulphide below the copper oxide outcrop, 120 metres above the main EM target.
- ▶ Follow-up drilling is underway to test the EM targets at depth.

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

"This exciting discovery at the Nous Prospect provides early validation of our exploration methodology for the Okiep district. Remarkably, this is the first discovery in the district in more than forty years – and it is directly attributable to the use of modern geophysics, followed by mapping and detailed ground surveys.

"Our early exploration success underscores the huge potential upside in the Okiep region, where geological records and mining history show that many orebodies either have no outcrop or have only minor showings at surface, as in this case.

"The significant chalcopyrite-pyrrhotite mineralisation intersected in the hole is exactly what we had targeted with the SkyTEM<sup>TM</sup> survey. From the historic records, we know that the predominant copper mineralisation in the district is bornite and magnetite-rich and will therefore, not respond well to EM detection. However, we also recognised that all of the largest bodies that were mined at Okiep had recorded the presence of pods of pyrrhotite rich sulphides, which will react strongly to EM survey techniques.

"The value of modern EM surveying, which allows us to more accurately model the depth of targets is demonstrated by the fact that Newmont's Okiep Copper Company had identified this magnetic target and tested it with a 104.85m deep vertical drill-hole, - which was stopped above the EM target that we have modelled as commencing from a depth of 290m at Target 3.

"Targets 3 and 4 have now been re-ranked by Orion to top priority and fast tracked for drilling due to the discovery of copper oxides at Target 4, together with other key structural and alteration indicators on surface over the entire Nous Prospect area.

"What is really exciting, however, is that a further eight selected high priority SkyTEM™ targets are currently being followed up with systematic ground surveys at the Okiep Copper Project and will be drilled over the next 12-24 months. The potential for new discoveries and significant additions to what is already an area with enormous copper endowment, is huge."

www.orionminerals.com.au

ASX Code: ORN JSE Code: ORN ISIN: AU000000ORN1 Orion Minerals Limited (**ASX/JSE: ORN**) (**Orion** or **Company**) is pleased to advise that it has made a significant new copper discovery within its Okiep Copper Project in the Northern Cape Province of South Africa (**Okiep Copper Project**).

The first diamond drill-hole completed to test a coincident magnetic and electromagnetic (EM) anomaly at the **Nous Prospect** has intersected mafic-intrusive-hosted copper sulphide mineralisation over a drill width of 10m from 31.72m down-hole in drill-hole OND001.

This is the first drill hole designed to test one of several SkyTEM<sup>™</sup> geophysical anomalies identified within the Okiep Project from an extensive SkyTEM<sup>™</sup> survey flown last year.

The mineralisation intersected occurs as blebs, veins and massive sulphide (80-100%) lenses of pyrrhotite-chalcopyrite over widths of 1-25cm in drill core within the magnetite rich, mafic intrusive host (see Figure 1 below).

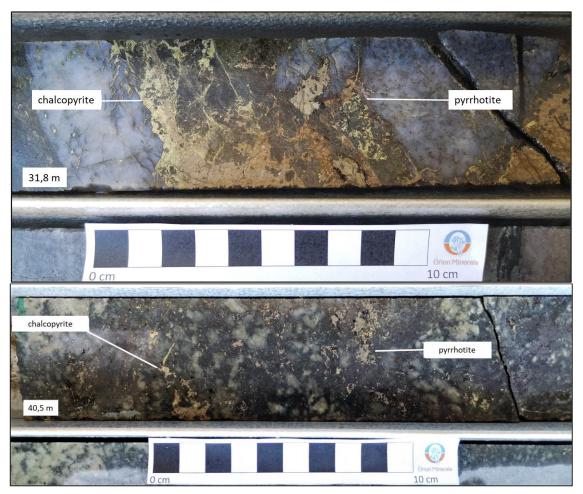


Figure 1: Photographs of mineralised core with chalcopyrite and pyrrhotite intersected in OND001.

The Nous Prospect encompasses two adjacent SkyTEM<sup>™</sup> anomalies contained within a magnetic anomaly located approximately 5,000m south-west of the historic Nababeep Mine which has recorded historic production of >2Mt (Figure 2) (refer ASX/JSE release 2 February 2021).

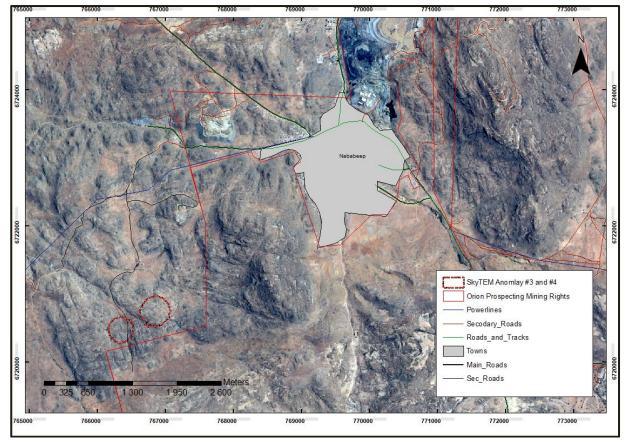


Figure 2: Locality of Targets 3 (right) and 4 (left) SkyTEM<sup>™</sup> anomalies on Nous Prospect outside Nababeep.

The mineralisation was drilled down dip of an outcrop of mafic rocks partly obscured by gneiss scree with of green and blue copper oxide staining. The outcrop is located in a steep gully, in rocky, mountainous terrain incised by deep crags (Figure 3). The dominant outcrop in the area is the host Nababeep Gneiss country rock with small inliers of ferruginous schist and meta-quartzite.



Figure 3: Drill rig at foot of the hill at OND001 (photo facing west).

Mapping of the Nous Prospect has identified several small mafic (basic) intrusive outcrops of different composition ranging from diorite to anorthosite and gabbro (Figure 4). Structural mapping within the geophysical target has identified several signature "steep structure" formations that most commonly accompany the mineralised mafic intrusives in the Okiep copper district. The gneiss rocks also have pervasive charnockitic alteration which is often found as an alteration halo above mafic intrusive bodies.

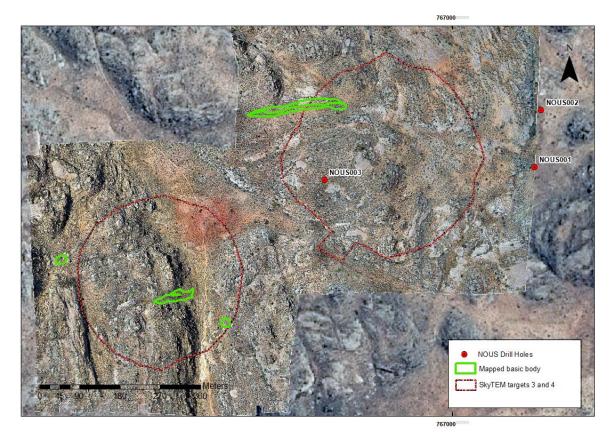


Figure 4: Mapped mafic (basic) bodies over SkyTEM<sup>™</sup> anomalies Target 3 (right) and Target 4 (left) in the Nous prospect area.

The Nous Prospect was initially selected for follow up after two relatively strong EM conductors contained within a large magnetic anomaly were identified by the SkyTEM<sup>™</sup> helicopter borne EM survey completed in September 2021 (refer ASX/JSE release 28 October 2021).

Historic records show that Newmont had also identified a magnetic anomaly at this site, three shallow vertical holes (ranging in depth from 104.8m to 238.0m) were drilled by Newmont, with no intersections of mafic rocks or mineralisation were recorded in the holes and no copper mineralisation was mapped in the prospecting area.

The SkyTEM<sup>TM</sup> geophysical data has been supplemented by high resolution drone magnetics and ground gravity surveys, all of which revealed coincident anomalies over the same target area (Figure 5). The two SkyTEM<sup>TM</sup> EM targets have cores located 570m apart and are modelled at 290 - 510m depth at Target 3 and 70 – 237m at Target 4 (Figure 6).

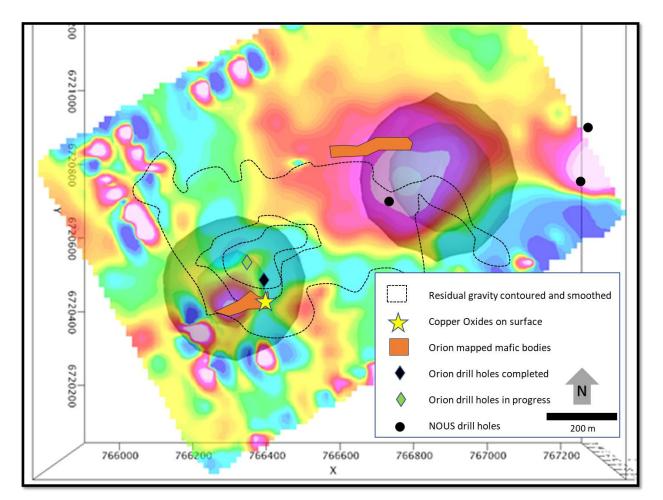


Figure 5: Residual gravity contoured and along with mapped mafic bodies and borehole positions draped over total field drone magnetics (red = high). Anomalous areas coincide over the same target area.

Orion drilled diamond hole OND001 to confirm the sulphide assemblage, at shallow depth directly below the copper mineralised outcrop adjacent to and above Target 4 (Figure 6).

The hole intersected well developed pyrrhotite-chalcopyrite mineralisation, with pyrrhotite in massive (80 to 100%) and semi massive (40 to 80%) veins and lenses of up to 25cm thickness presenting prospective strong EM conductors.

Notably the intersection is outside the peak detected EM anomaly which is now being drilled with a follow-up hole (Figure 6).

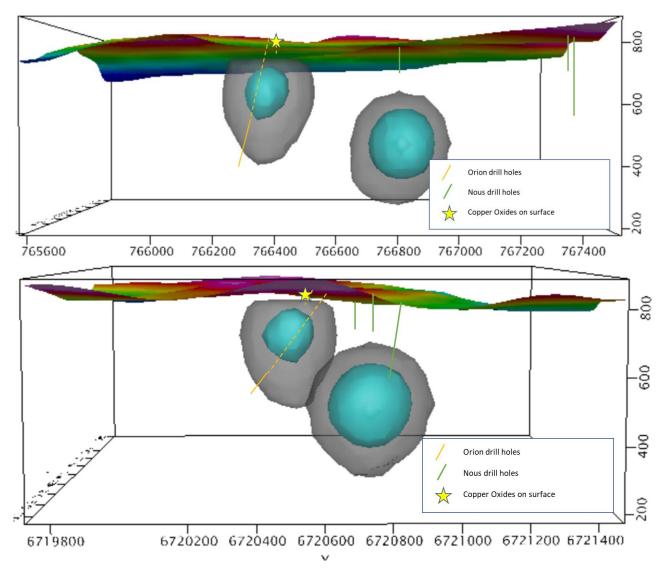


Figure 6a (top): A schematic representation of the egg-shaped EM anomalies in relation to OND001 (short hole testing the surface sulphide assemblage) and the planned depth for OND002 (longer hole). Facing direction is north and holes OND001 and OND002 have azimuths of 180° and 190° respectively.

Figure 6b (bottom): illustrates the same information however, direction is west.

While drilling continues at Target 4 from the base of the steep hill, drill access tracks are currently being established to reach the top of the hill at Target 3 so that drilling can commence on this larger and higher intensity EM anomaly.

OND001 has been logged, sampled and submitted to the laboratory with assay results expected in the coming weeks.

For and on behalf of the Board.

Errol Smart Managing Director and CEO

#### **ENQUIRIES**

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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 Andre Vorster, Orion Minerals Consulting Geologist, 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**). Mr Vorster, as Orion Minerals Consulting Geologist, is a full-time employee of the company. Mr Vorster confirms there is no potential for a conflict of interest in acting as the Competent Person. Mr Vorster 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 Andre Vorster (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 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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# 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	<ul> <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> <li>Sampling was carried out under supervision of a qualified geologist using industry standard procedures. NQ size diamond drill cores were longitudinally split in half using a diamond core cutting machine. HQ core was not sampled.</li> <li>One metre sample lengths were generally taken. However, in some cases, subsamples of 10cm to 15cm were taken to determine Cu and Ni tenure in sulphide intersections. Sample lengths were varied to honour geological and mineralisation boundaries.</li> <li>Areas of sampling were selected based on visual observations assisted by readings from handheld Niton XL3t 500 XRF instrument for qualitive assessment and mineral identification.</li> <li>Niton readings include standard analytical range &gt;25 elements from S to U with additional elements Mg, Al, Si and P via helium purge.</li> </ul>
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).	<ul> <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 6m weathered portion.</li> <li>Core was not oriented.</li> </ul>
Drill sample recovery	<ul> <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> <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>Ground conditions below the weathered zone are very good and excellent core recovery was obtained. Core recovery was &gt;98% within the mineralised zone.</li> <li>No obvious relationship exists between sample recovery and grade.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>There was no core/sample loss or gain which could result in sample bias.</li> <li>No additional measures were taken to maximize sample recovery.</li> <li>Samples are deemed representative by the CP.</li> </ul>
Logging	<ul> <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> <li>Core of the entire hole length was geologically logged by qualified geologists.</li> <li>Geological logging was quantitative and was carried out using a reference sheet with a set of standard codes to describe lithology, structure and mineralisation. The logging sheet also allows for free-form description to note any unusual features.</li> <li>Geological logs were captured electronically.</li> <li>All cores were photographed before and after sampling.</li> <li>One hole (OND001) has been drilled and logged to date. This included an intersection of ultramafic/mafic lithologies hosting visual Cu mineralisation from 31.72m to 41.68m.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <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> <li>NQ core was cut, and half core was taken as sample. No HQ core was sampled.</li> <li>Half-core samples of 10 to 15cm were taken and submitted for assay where massive pyrrhotite was observed. Care was taken to maintain sample mass above 300g. This sample mass is considered satisfactory.</li> <li>At the time of this release, samples have been submitted to ALS Laboratory, Johannesburg (an ISO accredited laboratory) however no results have been received as yet.</li> <li>ALS utilises industry best practice for sample preparation for analysis involving drying and weighing of samples, crushing to &lt;2mm, riffle splitting to 250g, and then pulverising with +85% passing through 75 microns.</li> <li>Crushing and pulverising QC tests are applied by ALS.</li> <li>Field duplicates were not included for the 22 core samples submitted for analysis to ALS.</li> </ul>
Quality of assay data and laboratory tests	<ul> <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> </ul>	<ul> <li>All samples will be analysed by an appropriate high-grade aqua regia ICP-AES method, ALS code ME-ICP41a.</li> <li>Samples submitted to ALS are analysed for base metals and Au. ALS is an ISO/IEC 17025:2005 accredited laboratory.</li> <li>Orion (purchased from AMIS) CRMs were inserted every 10<sup>th</sup> sample. The CRM used was AMIS0399 (1.014% Cu).</li> </ul>

Criteria	JORC Code explanation	Commentary
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable	• One CRM was inserted for this batch of 22 samples. The total submission consisting of 19 half-core samples, two blanks and one CRM.
	levels of accuracy (ie lack of bias) and precision have been established.	• Not enough samples were submitted to alternate CRM's throughout the sample stream.
		• Chip blanks were inserted at the beginning of each batch and after any sample that may be considered high grade. Two blanks were inserted in the submission of 22 samples.
		• No external laboratory checks have been carried out at this stage.
		• As of date of this release, sample results are pending.
Verification of Sampling and	The verification of significant intersections by either independent or alternative company personnel.	• Orion's exploration geologist, along with a team of experienced consultant geologists, are supervising the drilling and sampling.
assaying	The use of twinned holes.	Sample results are pending.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	
	Discuss any adjustment to assay data.	
Location of data points	<ul> <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> </ul>	<ul> <li>Collar positions of the holes were surveyed using a hand-held Garmin GPS. Drill collars will be surveyed by a qualified surveyor on completion of the drilling program.</li> </ul>
	Specification of the grid system used.	On completion drill collars will be capped and labelled.
	Quality and adequacy of topographic control.	• The World Geodetic System (WGS84) ellipsoid in the UTM coordinate system zone 34J South has been used thought-out the project (i.e, UTM WGS84).
		• A REFLEX EZ-TRAC tool was used for the down-hole surveys.
		<ul> <li>A high resolution and accurate DTM (within 1.5m elevation) 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.</li> </ul>
Data spacing and	Data spacing for reporting of Exploration Results.	One hole has been completed (OND001) and the second hole
distribution	• 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.	(OND002) is in progress as at date of this release.
	Whether sample compositing has been applied.	
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.	• 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.

Criteria	JORC Code explanation	Commentary
	If the relationship between the drilling orientation and the orientation     of key mineralised structures is considered to have introduced a	• Drill holes OND001 and OND002 were inclined at -50° and -55° respectively.
	sampling bias, this should be assessed and reported if material.	• No sampling bias is anticipated as a results 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 laboratory.
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	<ul> <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> <li>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.</li> <li>A prospecting right, NC30/5/1/1/2/11125PR, in accordance with section 17 of the MPRDA was granted to Nababeep Copper Company (Pty) Ltd (NCC) to prospect for a period of five years effective from 8 November 2017.</li> <li>The prospecting right was granted for copper ore and tungsten ore for portion of Portion 3 of the farm Nababeep No 134, remainder of the farm Plaatjesfontein No 135, portions 2, 3, 4 and 7 of the farm Nigramoep No 136, portion RE of the farm Schaap Rivier No 208, RE and Portion 1 of Farm No 610 and Portion 9 of the farm Ezelsfontein No 214, situated within the administrative district of Namaqualand. The total Area measures 18 475 Ha in extent.</li> <li>Section 102 applications are in process with the authorities to add land to bring the total extent to approximately 33 900Ha; and add 26 minerals including nickel, gold and silver.</li> <li>The surrounding area was historically mined for copper.</li> <li>Orion, recently acquired 100% of the project through the NCC-Orion Acquisition Agreement (refer ASX/JSE release 2 August 2021).</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The O'Okiep Copper Company conducted surface mapping over the prospect and adjacent areas.
		<ul> <li>Newmont drilled 3 exploration holes which stopped short of their respective geophysical anomalies.</li> </ul>

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The tenements are in the Okiep Copper District. 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 mainly of anorthosite, diorite and norite.</li> <li>Mineralisation occurs as disseminated Cu mineral assemblages of bornite &gt; chalcopyrite &gt; chalcocite and less pyrite and pyrrhotite. Massive sulphides are locally developed.</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>
Drill hole Information	<ul> <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> <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</li> </ul>	<ul> <li>Only drill hole OND001 has been completed at time of release. Drill hole OND002 has started and is in progress.</li> <li>Newmont holes (NOUS001 – NOUS003) azimuth and dip are included in the table below.</li> <li>Hole ID Easting Northing Azimuth Dip Hole Length Intersection OND001 766412 6720480 180° -50° 60m 31.72-41.68m</li> <li>OND002 766364 6720567 190° -55° &gt;250m Drilling ongoing</li> <li>NOUS001 767178 6720728 0 -90 135m Nil</li> <li>NOUS002 767196 6720857 180 -68 238m Nil</li> <li>NOUS003 766715 6720699 0 -90 104m Nil</li> </ul>
Data aggregation methods	<ul> <li>the understanding of the report, the Competent Person should clearly explain why this is the case.</li> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high</li> </ul>	<ul> <li>Coordinates in UTM WGS84 zone 34J South.</li> <li>Coordinates surveyed by a geologist using a Garmin handheld GPS. The collar will be surveyed by a qualified surveyor on completion of the drilling program.</li> <li>OND001 intersected mineralised mafic rocks of the Koperberg Suite from 31.72m to 41.68m.</li> <li>NA. No assay results or grades are reported in the announcement. Assay results for OND001 are pending and samples for OND002 is in</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values</li> </ul>	
	should be clearly stated.	
Relationship between mineralisation widths	These relationships are particularly important in the reporting of Exploration Results.	• Drilling is oriented at a maximum achievable angle to the attitude of the mineralisation.
and intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	• Mineralisation is expected to dip between 70° and 90° north. Holes OND001 and OND002 were inclined to -50° and -55° respectively.
	• 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').	Only down hole lengths are reported.
Diagrams	<ul> <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> <li>Refer to text.</li> <li>Drilling data was analysed in Leapfrog 3D geological software.</li> </ul>
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, progress reported in this announcement has 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;	An airborne electromagnetic survey (SkyTEM) covered the area (Refer ASX / JSE release 1 September 2021).
	geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density,	• Historical and current detailed surface mapping has been interpreted and utilised during drill hole planning.
	groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>A high-resolution drone magnetic survey was carried-out.</li> <li>Drone (DJI 600M Pro) magnetics were done at 30m above ground level and 50m line spacing.</li> <li>The GemSys GSMP-25U magnetics sensor specifically designed for drones was used.</li> <li>The line orientation was 330° (NW-SE).</li> </ul>
		<ul> <li>The GSMP-25U has the following specifications:</li> <li>Sensitivity: 0.022 nT @ 1 Hz</li> <li>Resolution: 0.0001 nT</li> <li>Absolute Accuracy: +/- 0.1 nT</li> <li>Heading Error: + / - 0.05 nT</li> <li>Dynamic Range: 15,000 to 120,000 nT</li> <li>Gradient Tolerance: 50,000 nT/m</li> </ul>

Criteria	JORC Code explanation	C	ommentary
			<ul> <li>Sampling Intervals: 1, 2, 5, 10, 20 Hz</li> </ul>
		•	Various geophysical products were produced, i.e. Total Magnetic Intensity (TMI), 1st Vertical Derivative (1VD), Reduce to Pole (RTP) and Analytical Signal (AS).
		•	A detailed ground gravity survey was carried out.
		•	A Scintrex CG5 Auto-gravity meter was used to carry out the ground gravity survey at 50m line spacing with 25m station spacing over the target areas and 50m station over the background area.
		•	The ground gravity stations elevation measurements were surveyed using a Leica 900 Differential Global Positioning System (DGPS).
		•	The line orientation was 150° (NW-SE).
		•	<ul> <li>Scintrex CG5 Auto Gravimeter has the following specifications:</li> <li>Resolution: 0.001 milligal</li> <li>Minimum Operating Range: 8000 milligals</li> <li>Repeatability: 0.005 milligals</li> <li>Range of Automatic Tilt Correction: +/- 200 arc seconds</li> <li>Measurement duration: 60 seconds</li> </ul>
		•	Leica 900 DGPS has the following specifications: Accuracy with real time/RTK RTK capability Kinematics, standard Horizontal: 10mm + 1ppm Vertical: 20mm + 1ppm Geophysical products were the Complete Bouguer Anomaly Map (C_Bouguer) and Trend Removed Bouguer Anomaly.
		•	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	BD = weight of sample (weight of sample in air – weight of the sample in water)	
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	• Drilling will continue to test the prospect for copper mineralisation.	
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>		