

ASX/JSE RELEASE: 21 May 2021

# Geological interpretation of historic exploration data puts spotlight on high priority targets at the Okiep Copper Project

Target generation on the Okiep Project delivering high-priority drill targets

- Due diligence work at the Okiep Copper Project has defined high priority drill targets on the Carolusberg
   Koperberg line.
- ► The Carolusberg Koperberg line was first discovered in 1680 and subsequent workings have been intermittently mined from 1850-2001.
- ► The Carolusberg Koperberg workings contributed approximately 35% of the total post World War II production of 105Mt of copper ore produced by the O'Okiep Copper Company (OCC).
- Newmont and subsequently Goldfields, who were the owners of OCC, undertook extensive drilling and geological mapping during their tenure.
- Paper records of the historic exploration have now been digitised and are being modelled by Orion.

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

"Our geological team at OCP continue to unpack huge value from the historic data that we have secured. Using modern 3D GIS modelling, we are able to get a better understanding of the geological controls which assist in identifying high priority targets for drill testing.

"We have already demonstrated that the high-quality data allows us to fast-track the re-estimation of resources using historic drill data with a Mineral Resource of 11.5Mt @ 1.4% Cu already reported in accordance with JORC 2012 (refer ASX / JSE release 29 March 2021). This Resource was confirmed within three months of securing options on the mineral rights and the historic data. Resource estimation work is continuing under the guidance of Mr Paul Matthews, who has joined Orion as Group Mineral Resource Manager.

"I am particularly thrilled to be working with Paul again, as he was a key member of the contracted team that helped us identify the early potential at Prieska. Paul's early resource estimates for Prieska, back in 2015, have proved to be accurate after extensive follow up drilling and resource estimation. Paul is a very experienced Mineral Resource Manager and has joined us full time.

"Our attention at OCP is now turning to identifying high-quality targets for undiscovered high-grade deposits such as those historically discovered in the Okiep district including the Okiep Mine (that gave the district its name) which yielded 907,000 tonnes of sulphide ore at 21% copper, and Nababeeb South which yielded 816,000 tonnes at 5.5% copper. We are focusing on similar geological settings to that of Okiep and Nababeeb South and have identified high-priority targets to be tested on the BCC property which is currently under option to Orion.

"These high-grade deposits are usually found in pipes or blows and have very small dimensions of 150m - 250m diameter and were easily missed by historic wide-spaced drilling."

#### Okiep Copper Project

Orion Minerals Limited (ASX/JSE: ORN) (Orion or Company) is pleased to advise that it has identified new high-priority drill targets on the Carolusberg – Koperberg complex that form part of the Okiep Copper Project (OCP), located 570km north of Cape Town in the Northern Cape Province of South Africa. The Carolusberg – Koperberg Complex is situated 20km southeast of the Flat Mine Complex that hosts the current OCP Mineral Resources base of 11.5Mt at 1.4% Cu for 159,000 tonnes of contained copper (refer ASX / JSE release 29 March 2021) (Figure 1).

The targets were identified during ongoing due diligence investigations being undertaken by Orion on the extensive database recently secured (refer ASX / JSE release 15 February 2021).

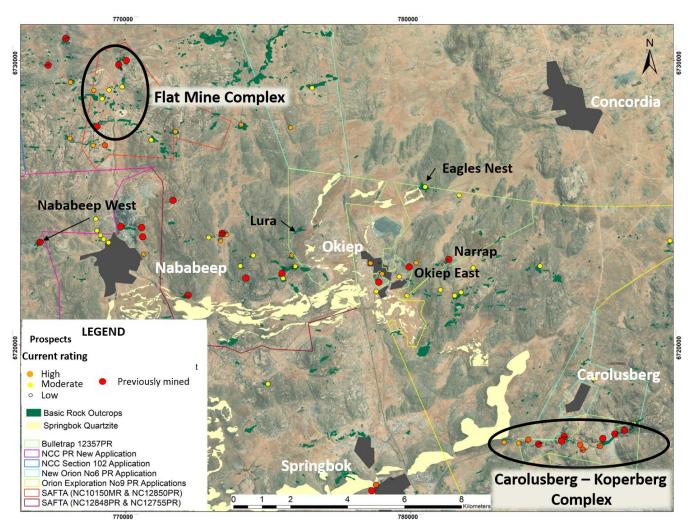


Figure 1: Locality map showing the Carolusberg – Koperberg and Flat Mine Complexes.

The following targets are currently being prioritised for exploration follow-up:

#### Koperberg - Carolusberg (Bulletrap PR)

- Shallow, potentially open pit targets (1, 2 and 3 on Figures 3 and 4) defined by:
  - o basic rock type outcrops with visible copper oxide mineralisation (Figure 2); and
  - o targets above historical mined areas not tested by historic drill holes.
- Deeper underground targets (4, 5 and 6 on Figures 3 and 4) defined by:
  - the upper and lower contacts of the favourable Springbok Quartzite / Schist horizon along the Koperberg – Carolusberg line of mafic intrusions (refer ASX / JSE release 2 February 2021). This is the same geology as Okiep, Nababeeb South and Carolusberg Deeps;
  - o a large undrilled area above drill intercepts (Appendix 1, Table 2) located immediately west of Carolusberg Deep; and
  - a large untested area adjacent to drill intercepts (Appendix 1, Table 2) located east of Carolusberg Deep and below Carolusberg East.

In addition, the line of mafic bodies extending west – southwest and east – northeast from the Koperberg East Deposit, warrants follow-up drilling. Two preliminary targets, 7 and 8 on Figure 3, have been prioritised.



Figure 2: Photo showing green malachite staining on mafic rocks outcropping at Koperberg West.

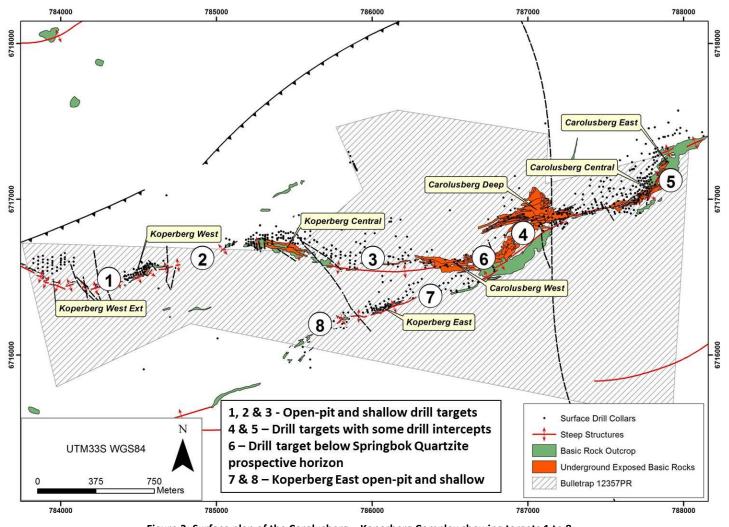


Figure 3: Surface plan of the Carolusberg – Koperberg Complex showing targets 1 to 8.

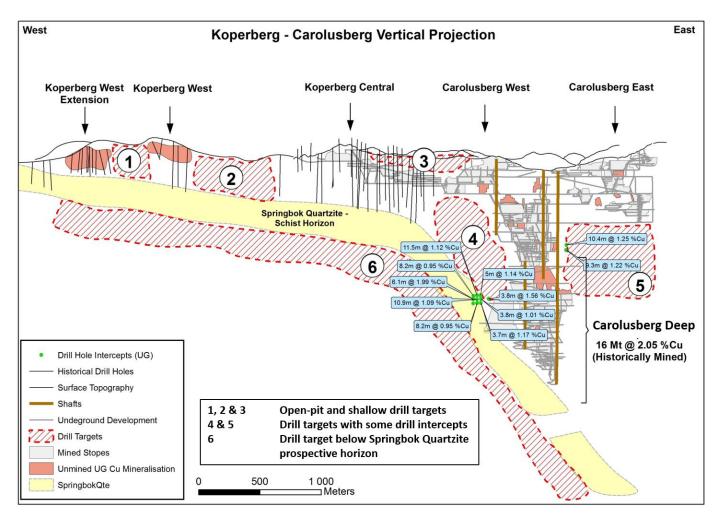


Figure 4: Longitudinal projection of deposits along the Carolusberg – Koperberg Line of historic copper mines.

In addition to the drill targets identified on the Carolusberg – Koperberg line, Orion is currently evaluating the potential of drill targets described in Table 1 below and shown on Figure 1:

Target	Prospecting Right	Description
Okiep East	Bulletrap	Potential exists for additional mineralisation within the mine and near mine area along strike and down dip. Numerous untested strong magnetic anomalies remain to be investigated.
Narrap	Bulletrap	Potential exists for additional mineralisation in the near mine area along strike and down dip. Some magnetic anomalies in the area have not been fully investigated.
Eagles Nest	Bulletrap	Potential exists for additional mineralisation in the near mine area along strike and down dip. Limited historical surface drilling was done at this prospect.
Nababeep West Mine	NCC	Potential exists for additional mineralisation in the near mine area along strike and down dip.
Nababeep North Mine Extension West	Bulletrap	Potential still exists for additional copper mineralisation on the westward extension of the high-grade Nababeep (North) Mine.
Lura	Bulletrap	Potential for higher grade mineralisation exists at the untested mafic rock – Springbok Quartzite intersection. This target was not tested by historic exploration and limited drilling was carried out on the prospect.

Table 1: Potential drill targets (as shown on Figure 1).

The due diligence work completed on OCP in only a few months since securing options to acquire the large tenement package and an extensive database, has highlighted how prospective the project area is for the discovery of new high grade and large tonnage copper deposits.

For and on behalf of the Board.



**Errol Smart** 

#### **Managing Director and CEO**

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#### **Competent Person's Statement**

The information in this report that relates to Orion's Exploration Results at the Okiep Project complies 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. Dr Vermaakt (Pri. Sci. Nat.) is registered with the South African Council for Natural Scientific Professionals (Registration No. 400020/00), a Registered Overseas Professional Organisation for JORC purposes. 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 Vermaakt consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

#### Disclaimer

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# Appendix 1: The following tables are provided in accordance with the JORC Code (2012). They apply to the Exploration Results announced in this announcement (historic drill hole data and geological interpretation of targets).

### 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 (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Drilling and sampling was undertaken during three distinct periods since the initial discovery of mineralisation:</li> <li>Prior to 1984 by O'Okiep Copper Company (OCC).</li> <li>1984 – 1999 by Goldfields of South Africa (GFSA).</li> <li>and in 2018 by South Africa Tantalum Mining (SAFTA).</li> <li>OCC and GFSA:</li> <li>For diamond drilling carried out by OCC between 1953 and 1978, there is limited information available on sampling techniques for core. With exploration and resource management being carried out under the supervision of OCC, it is considered by the Competent Person that there would be procedures in place to the industry best practice standard at that time. This is based on discussions with personnel employed by OCC.</li> <li>The exploration and resource management were under the supervision of the OCC geology department, recognised as one of the best exploration departments in South Africa at the time. OCC was successful in defining resources which were used as the basis of successful mine development for 33 different mines over an operation over a 45-year period.</li> <li>GFSA is a reputable South African Mining house and owned gold, base metal and platinum mines at the time.</li> <li>Drilling of exploration holes was carried out on a 60m by 30m line spacing.</li> <li>Drill samples from OCC and GFSA drilling were all sent to OCC onmine laboratory in Nababeep.</li> <li>Samples were taken over two metre intervals adjusted to accommodate geological contacts. OCC whole core was submitted to the lab (AX core size). A 10cm representative core was archived for each sample.</li> <li>GFSA drilled BQ size core. Core was cut with a core cutter at the core yard and half core submitted over the entire sample interval.</li> </ul>		

Criteria	JORC Code explanation	Commentary			
		<ul> <li>For both companies, samples were numbered and bagged at the core yard before being submitted to the laboratory.</li> <li>No formal QA/QC samples were inserted at the time by the geologists on the exploration site. OCC laboratory developed their own standards, and those were used internally in the laboratory. No record exists on the preparation method of the standards. Duplicate samples were also inserted to check for repeatability. No records exist on the percentage duplicate or standard.</li> <li>No historical Standard Operating Procedures are available.</li> </ul>			
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	All intersections were by core drilling.     AX-size core was drilled.     Core orientation was not done.  GFSA:			
		<ul> <li>All intersections were by core drilling.</li> <li>BQ core size was drilled.</li> <li>No core orientation was carried out.</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>All mineralised intersections were done with core drilling.</li> <li>Core stick-ups reflecting the depth of the drill hole are recorded at the rig at the end of each core run.</li> <li>A block with the depth of the hole written on it is placed in the core box at the end of each run.</li> <li>Core recoveries were measured for each "run".</li> <li>No records exist for core recoveries on individual samples.</li> <li>Intersections were in hard rock and good recoveries are envisaged through the mineralisation.</li> </ul>			
		<ul> <li>All mineralised intersections are done with core drilling.</li> <li>Core stick-ups reflecting the depth of the drill hole are recorded at the rig at the end of each core run.</li> <li>A block with the depth of the hole written on it is placed in the core box at the end of each run.</li> <li>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</li> </ul>			

Criteria	JORC Code explanation	Commentary			
		of the run as recorded from the stick-up measured at the rig to determine the core lost.  Core recoveries were done for individual samples.  Intersections were in hard rock and good recoveries are envisaged through the mineralisation.			
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>OCC and GFSA:</li> <li>All relevant intersections for underground holes have been logged by qualified geologists and all of this information is available.</li> <li>No geotechnical information is available for the historic drill holes.</li> <li>Core was not photographed.</li> <li>Logs were recorded in the core yard on standard log sheets.</li> <li>Quantitative estimate of sulphide mineralogy.</li> <li>Core of the entire drill hole length was geologically logged and recorded on standardised log sheets by qualified geologists.</li> <li>No air drilling was carried out.</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 insitu 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>All sample data is available.</li> <li>All drill core were used.</li> <li>The entire sample length was submitted to the laboratory except for a 10cm piece of core left as a reference.</li> <li>Sample preparation was undertaken by the OCC Laboratory.</li> <li>The sampling method was appropriate and representative of the sample interval.</li> <li>No certified reference materials, blanks and duplicates were inserted, however the OCC Laboratory inserted in house standard reference material with each batch.</li> <li>GFSA:</li> <li>BQ core was cut a core yard and half core taken as sample.</li> <li>With core samples, the entire sample length is cut and sampled.</li> <li>No certified reference materials, blanks and duplicates were inserted, however reportedly the OCC Laboratory inserted in house standard reference material with each batch.</li> </ul>			
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.	OCC and GFSA:  No detailed records exist for laboratory procedures for the OCC Laboratory. Core samples were crushed, split, pulverised and			

Criteria	JORC Code explanation	Commentary			
Verification of sampling and assaying	<ul> <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, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> <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</li> </ul>	<ul> <li>assayed for copper content by atomic absorption techniques.</li> <li>No geophysical tools, spectrometers or handheld XRF instruments were used.</li> <li>No record is available on quality control methods.</li> <li>The OCC successfully operated copper mines in the district for more than 50 years and has a proven record of converting resources to reserves.</li> <li>OCC and GFSA: <ul> <li>No records available on the verification of data.</li> <li>Exploration was managed by the OCC and GFSA exploration</li> </ul> </li> </ul>			
	verification, data storage (physical and electronic) protocols.  • Discuss any adjustment to assay data.	<ul><li>departments, consisting of qualified geologists.</li><li>No adjustments to assay data were reported.</li></ul>			
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> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>OCC and GFSA:         <ul> <li>Drill hole collars were surveyed by qualified surveyors and documented in a Survey Logbook.</li> <li>All surface and underground drill hole collars were surveyed by qualified surveyors using a theodolite.</li> <li>The historic mine survey data is in the old national LO 17 Cape1880 system coordinate system.</li> <li>Down-hole surveys were carried out using an Eastman survey instrument and documented and filed. Plans and sections were meticulously plotted and signed off by a certified surveyor.</li> </ul> </li> </ul>			
Data spacing and distribution	<ul> <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>	OCC and GFSA:  Holes were drilled aiming to achieve a 60m by 30m spacing, considered appropriate for Mineral Resource estimation of this type of mineralisation.			
Orientation of data in relation to geological structure	<ul> <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> <li>OCC and GFSA:</li> <li>Historical drilling is generally oriented perpendicular, or at a maximum achievable angle, to the attitude of the mineralisation.</li> <li>As a result, most holes intersect the mineralisation at an acceptable angle.</li> <li>No sampling bias is anticipated as a result of drill hole orientations.</li> </ul>			

Criteria	JORC Code explanation	Commentary			
Sample security	The measures taken to ensure sample security.	OCC and GFSA:			
		<ul> <li>No details of sample security available. However, during the mining operations, the site was fenced and gated with security personnel employed as part of the staff.</li> </ul>			
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	OCC and GFSA:			
		No audits and/or review records or documentation are available.			

## 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>OCC and GFSA: <ul> <li>OCC and GFSA held vast areas under prospecting and mining rights, most of these have been relinquished.</li> </ul> </li> <li>SAFTA/ORION: <ul> <li>The Flat Mines area comprises 8,311.9ha and is covered by two prospecting rights (licences), figure 1.</li> <li>NC11893PR expired in October 2020 and NC12014PR expired in January 2021. Renewal applications have been submitted for both licences, confirmed from Department of Mineral Resources and Energy correspondence.</li> <li>The prospecting rights were issued for copper and tungsten ore only.</li> <li>An application under Section 102 was made to include additional metals lead, silver, zinc, bismuth, cadmium, cobalt, magnetic minerals, gold and uranium.</li> <li>An application for a mining right (NC10150MR) has been submitted covering a smaller portion (approximately 1,210 ha) of expired right NC11896PR and FM.</li> <li>Only one renewal is allowed and is now covered by prospecting right application NC12755 submitted 5 February 2021.</li> <li>NC 30/5/1/1/2/12357PR: BCC has been granted a prospecting right, in terms of section 17(1) of the MPRDA, for copper ore and tungsten ore in respect of the farm Brakfontein 133, portion of portions 9, 10 &amp; 11 and the farm Melkboschkuil 132 portion of portions 1 and 23, in the Namaqualand Administrative District, Northern Cape Province. The date of grant is 14 January 2021; valid for five (5) years.</li> </ul> </li> </ul>			

Criteria	JORC Code explanation	Commentary			
Exploration done by	Acknowledgment and appraisal of exploration by other parties.	OCC and GFSA:			
other parties		<ul> <li>Underground and especially surface geological mapping are of high quality and detail.</li> </ul>			
		<ul> <li>It is evident that the historical data was collected via industry best practices and are considered suitable and acceptable for resource estimation.</li> </ul>			
Geology	Deposit type, geological setting and style of mineralisation.	Okiep Copper Project (OCP):			
		<ul> <li>These Copper deposits are part of the well-known Namaqualand Metamorphic Complex which consists primarily of meta-volcanic sedimentary and intrusive rock types.</li> </ul>			
		<ul> <li>Copper mineralisation is primarily associated with irregular, elongated and steeply dipping Koperberg Suite mafic intrusives.</li> </ul>			
		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 rock types.			
		<ul> <li>Mineralisation usually occurs as blebs to disseminated Cu mineral assemblages bornite &gt; chalcopyrite &gt; chalcocite and less pyrite and pyrrhotite.</li> </ul>			
		The more mafic and magnetite-rich lithologies generally host the bulk of and higher grade mineralisation.			
		<ul> <li>The OCP has a long exploration and mining history, and the geology is well known and understood.</li> </ul>			
Drill hole Information	A summary of all information material to the understanding of the	OCC and GFSA:			
	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	<ul> <li>All historical grade and density information are incorporated in the ORION database, and due to the large number of intersections made it is in the Competent Person view that it should not be included in this table.</li> </ul>			
	metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth	Historically thousands of underground diamond drill holes were drilled, most are AQ			
	<ul> <li>down note length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the</li> </ul>	Numerous underground drill holes were drilled, these still have to be digitally captured, imported into the database and modelling.			
	information is not Material and this exclusion does not detract from the	All historical drill hole collars were surveyed.			
	understanding of the report, the Competent Person should clearly explain why this is the case.	<ul> <li>Down-hole surveys are available for the majority of the historical GFSA.</li> </ul>			

Criteria	JORC Code explanation	Commentary			
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <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 should be clearly stated.</li> </ul>	<ul> <li>OCC and GFSA:</li> <li>Individual intersections were weighted by sample width.</li> <li>Mineralised sample lengths were erratically standardised at 1.0, 1.5 and 2.0 metres.</li> <li>No truncations were applied.</li> </ul>			
Relationship between mineralisation widths and intercept lengths	<ul> <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>	OCC and GFSA:  Historical drilling is generally oriented perpendicular, or at a maximum achievable angle to, the attitude of the mineralisation.  Generally, drill hole inclinations ranged between -30° to 90°.			
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.	<ul> <li>Numerous plans and cross-sections are available and were utilised during the geological and mineralization modelling.</li> <li>All historical data is available as hard copies and is currently being digitised and incorporated into a GIS system.</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, 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.	Detailed surface maps and drill sections were extensively consulted and utilised in the understanding of geology and mineralisation.     Regional and detailed geophysical maps (magnetic) were also consulted.     No metallurgical test work was done by Orion, but OCC mined and treated 105.6Mt from 27 different mines all with similar and amenable metallurgy.			
Further work	<ol> <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> <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> </ol>	More twinning of historical drill holes and additional exploration drill holes are needed in order to improve confidence in the historical data.      Deeper mineralisation as well as en echelon type mineralised lenses			

Criteria	JORC Code explanation	Commentary
		are potentially present and should be further investigated.

Table 2: Drill hole information used in geological interpretation.

Mine/Prospect	Hole ID	Easting	Northing	RL	Hole Length (m)	Dip	Azimuth	Company	Туре
Carolusberg West	CW4324	93108.53	-3281046.95	173.2	163.0	20	308.0	OCC	Underground Diamond
Carolusberg West	CW4342	93108.68	-3281048.51	173.2	189.5	17	294.0	OCC	Underground Diamond
Carolusberg West	CW4343	93446.16	-3280804.77	173.2	89.1	-23	159.5	OCC	Underground Diamond
Carolusberg West	CW4373	93108.53	-3281046.95	173.2	188.6	2	283.0	occ	Underground Diamond
Carolusberg West	CW4384	93108.53	-3281046.95	173.2	183.4	15	283.0	OCC	Underground Diamond
Carolusberg West	CW4433	93108.46	-3281047.15	173.2	169.4	30	283.0	OCC	Underground Diamond
Carolusberg West	CW4438	93109.68	-3281048.57	173.2	145.7	33	308.0	OCC	Underground Diamond
Carolusberg West	CW4441	93109.68	-3281048.57	173.2	138.5	2	294.0	OCC	Underground Diamond
Carolusberg West	CW4445	93110.79	-3281046.05	173.2	129.3	2	318.0	OCC	Underground Diamond
Carolusberg West	CW4448	93110.79	-3281046.05	173.2	119.0	40	339.5	OCC	Underground Diamond
Carolusberg West	CW4449	93111.29	-3281045.45	173.2	109.8	22	339.5	OCC	Underground Diamond
Carolusberg West	CW4456	93109.35	-3281047.71	173.2	214.6	10	272.0	OCC	Underground Diamond

Collars were surveyed by total station theodolite. Collar coordinates are in LO17 Cape survey system.