Orion Minerals

ASX/JSE RELEASE: 29 March 2021

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

Resource estimates completed for three additional near surface deposits, increasing the total Mineral Resource at the OCC to 11.5Mt at 1.4% Cu

- **Due diligence work at the Okiep Copper Project (OCP) has defined Inferred Mineral Resource estimates for a further three deposits in the Flat Mines area, all of which represent potential open pit mining opportunities.**
- **The three additional Resource areas are at Flat Mine (Nababeep), Jan Coetzee Mine and Nababeep Kloof Mine.**
- **Mineral Resources across the three deposits total 2.5Mt at 1.4% Cu[1], which, in addition to the previously announced Resource of 9Mt at 1.4% Cu (refer ASX/JSE release 10 February 2021), brings the total Mineral Resources within the Flat Mines Area of the OCP to 11.5Mt at 1.4% Cu.**
- **The additional Mineral Resources are based on exploration and drilling data contained within the extensive OCC exploration database secured by Orion last month (refer ASX/JSE release 15 February 2021), confirming the outstanding value of this data acquisition.**
- **Other exploration and mining drill targets and historical mines are currently being modelled, with the potential to deliver further growth in the OCP Mineral Resource.**

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

*"The delineation of additional Mineral Resources within the Okiep Copper Project (OCP) is a very positive result for Orion which provides further evidence of the exceptional value we've been able to unlock through the recent access and option agreement to acquire of the O'Okiep Copper Company (**OCC**) archives.*

The three latest deposits bring our total Mineral Resource within the OCP to 11.5 million tonnes grading 1.4 per cent copper, which is a remarkable achievement given we only signed the option agreement over the OCP and commenced due diligence in early February.

"We have a large number of additional targets and historical mines currently being modelled, which we believe offer strong potential to further expand the OCP Resource base."

[1] Mineral Resource reported in ASX release of 10 February 2021: "Orion reports maiden JORC Mineral Resource for the Okiep Copper Prospect, Flat Mines" available to the public on www.orionminerals.com.au/investors/market-news. Competent Person Mineral Resource: Dr Dion Brandt. Orion confirms it is not aware of any new information or data that materially affects the information included above. The company confirms that all material assumptions and technical parameters underpinning the estimates in the original release continue to apply and have not materially changed. Orion confirms that the form and context in which the Competent Person's findings are presented have not been materially modified.

Orion Minerals Limited (**ASX/JSE: ORN**) (**Orion** or **Company**) is pleased to report Mineral Resource estimates for three additional, near surface deposits that form part of the Okiep Copper Project (**OCP**), where Orion is currently undertaking due diligence work associated with the acquisition and option agreement announced on 2 February 2021.

The Inferred Mineral Resources, as stated in Table 1 below, have been estimated for the Flat Mine (Nababeep) (**FM, figures 2 and 3**), Jan Coetzee Mine (**JCM, figures 4 and 5**) and Nababeep Kloof Mine (**NKM, figures 6 and 7**) deposits, and total 2.5 million tonnes grading 1.4% copper for 35,000 tonnes of contained copper.

Together with the previously reported Mineral Resources for the Flat Mine North, Flat Mine East and Flat Mine South deposits (refer ASX / JSE release 10 February 2021), these latest Resource estimates increase the total Mineral Resource at the OCP to 11.5 million tonnes grading 1.4% copper for 159,000 tonnes of contained copper.

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

Mine / Prospect	Measured			Indicated			Inferred		
	Tonnes	% Cu	t Cu	Tonnes	% Cu	t Cu	Tonnes	% Cu	t Cu
Flat Mine (Nababeep)*	-	-	-	-	-	-	1,000,000	1.4	15,000
Jan Coetzee Mine*	-	-	-	-	-	-	1,000,000	1.4	14,000
Nababeep Kloof Mine*	-	-	-	-	-	-	500,000	1.2	6,000
Total*	**-**	**-**	**-**	**-**	**-**	**-**	**2,500,000**	**1.4**	**35,000**

**Numbers may not add up due to rounding in accordance with the JORC code guidance. Resources are reported at a 0.7% Cu cut-off grade.*

Table 1: Inferred Mineral Resource Statement for the Flat Mine (Nababeep), Jan Coetzee Mine and Nababeep Kloof Mine.

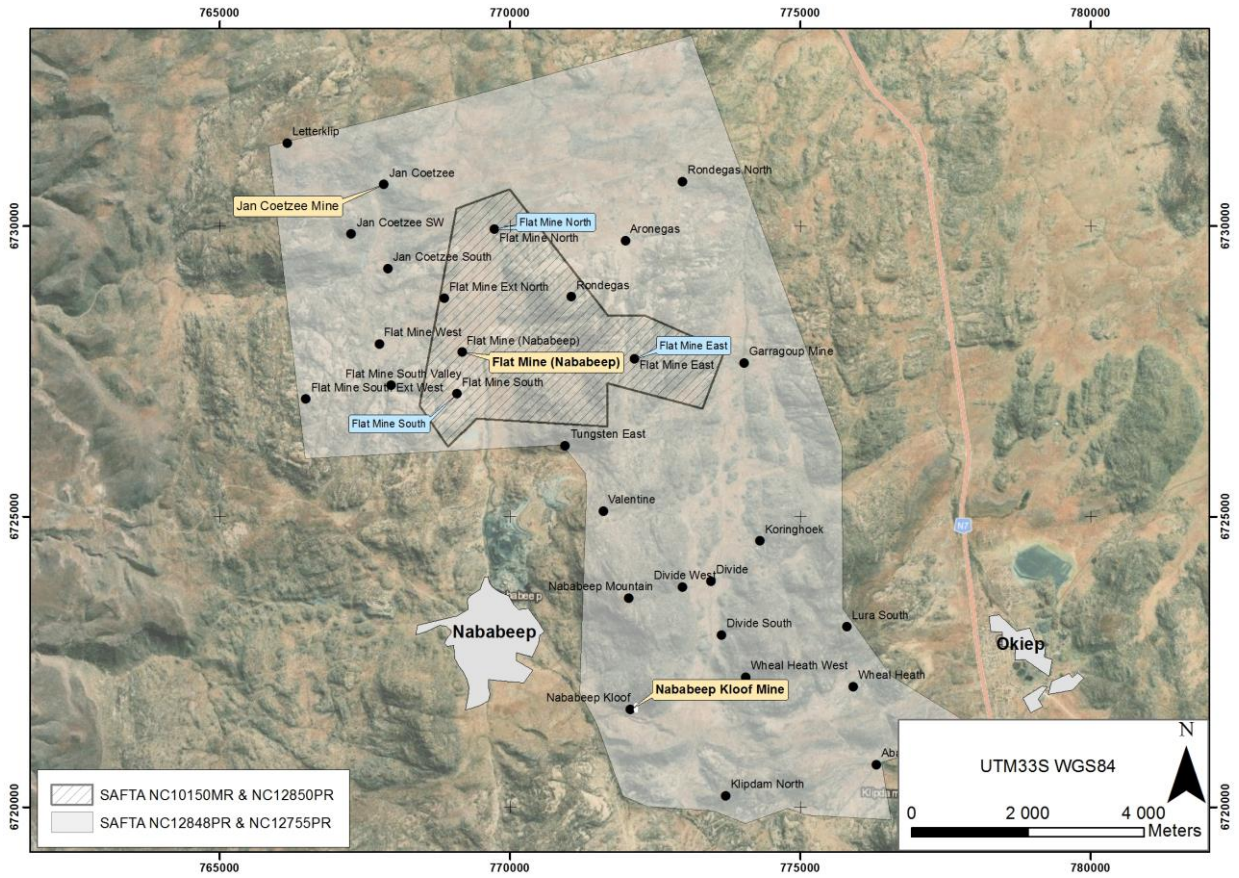

Figure 1: SAFTA/Orion prospecting and mining rights showing previously-reported (blue) and additional (orange) Mineral Resources.

Mine / Prospect	Measured			Indicated			Inferred		
	Mt	% Cu	t Cu	Mt	% Cu	t Cu	Mt	% Cu	t Cu
Flat Mine (Nababeep)	-	-	-	-	-	-	1.0	1.4	15,000
Jan Coetzee Mine	-	-	-	-	-	-	1.0	1.4	14,000
Nababeep Kloof Mine	-	-	-	-	-	-	0.5	1.2	6,000
Flat Mine East[1]	3.166	1.43	45,000	0.800	1.11	8,900	-	-	-
Flat Mine North[1]	0.339	1.27	4,300	0.970	1.50	14,500	-	-	-
Flat Mine South[1]	-	-	-	3.321	1.41	45,600	0.4	0.8	3,000
Total	**3.505**	**1.41**	**49,300**	**5.001**	**1.38**	**69,000**	**3.0**	**1.3**	**38,000**

Table 2: Total Mineral Resource Statement for the Flat Mines Area of the OCP (0.7% Cu cut-off).

Geology and Interpretation

The Okiep Copper Deposits are Orogenic Type Copper Deposits hosted in mafic to ultra-mafic intrusive bodies in the western part of the Namaqua Complex, South Africa. Mines in the Okiep district produced 105.6Mt at 1.71% Cu since the 1900's[2].

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

The intermediate and basic mineralised rocks are structurally controlled with pinching and swelling a common feature, in both strike and dip.

A strong correlation is recognised between high-grade massive ore and at least three favourable lithological target horizons, with high grade blows forming where the dykes cut these three specific lithologies:

- Springbok Quartzite and Schist;
- Mixed Zone or Wolfram Schist; and
- Ratelpoort Quartzite and Schist.

The best analogue to the Okiep copper district is probably the copper district of the Curaçá River Valley in Brazil, which hosts quoted deposits of 180Mt of copper sulphide grading 1% copper, including 5 million tons of copper oxide material at a grade of 0.6% Cu[3]. Production came from both underground and surface workings.

The Flat Mine (Nababeep) mineralisation occurs as one relatively continuous east-west striking body. The known mineralised portion is at least 200m long, strikes east – west and dips steeply towards the north (figures 2 and 3). The mineralised body occurs at surface to shallow sub-surface and was historically mined down dip.

Mineralisation at Jan Coetzee Mine also has a general east-west strike and a length of approximately 230m, it occurs as numerous steep northerly dipping lenses (dyke slivers), figure 4. An apparent gap exists between the "main" mineralisation body and another body located to the west.

The Nababeep Kloof Mine mineralised intermediate-basic rocks generally strike east-west and are outcropping. It has no discernible dip and has a general "rod" or lens geometry, figure 7. The mineralised body strikes at least 120m – 150m.

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

[3] Hasui Y.,Del'Rey L.J.H., Silva F. J.L., Mandetta P., De Moraes J. A. C., De Oliveira J. G., and Miola W. Geology and Copper Mineralisation of Curaçá River Valley in Bahia. Revista Brasileira de Geodencias vol 12(1-3) March 1982.

Drilling Techniques

A total of 33 surface drill-holes totalling 5,462m of drilling at Flat Mine (Nababeep), 33 surface holes (3,790m) at Jan Coetzee Mine and 44 surface holes (2,763m) and 26 underground holes (1,072m) at Nababeep Kloof Mine were captured in the drilling database and were used to model the Mineral Resources (Figure 1, Table 3). All holes were drilled using diamond drilling.

All historical collars were surveyed using a total station theodolite by a qualified surveyor. Down hole surveys of the historical holes were done using and Eastman survey tool.

Historical drilling was primarily carried out by OCC when a Newmont subsidiary and later as a Gold Fields of South Africa (Pty) Ltd (GFSA) subsidiary, all of which were reputable mining companies operating in South Africa during the 1980's.

Historical AX or BQ (OCC) size diamond drill core was used for analysis of grades. Where AX size core was drilled, whole core was sampled. In the case of BQ core, core was split and the full length of half-core was submitted for assay. BQ size was later used by GFSA.

No twin drilling was done on the Flat Mine (Nababeep), Jan Coetzee Mine and Nababeep Kloof Mine deposits, however recent twin drilling was carried out by current owners at Flat Mine North and South (refer ASX release 10 February 2021). A good correlation between the historical and recent twin holes was achieved

Sampling and Sub-Sampling Techniques

Historical diamond AX or BQ whole core was used for analysis of grades.

For diamond drilling carried out by OCC between 1953 and 1978, there is limited information available on sampling techniques for core. It is considered that there would be procedures in place to the industry best practice standard at that time.

Samples by OCC and GFSA were taken over two meter intervals adjusted to accommodate geological contacts. OCC submitted whole core to the lab (AX core size), except for a 10cm piece of core left as a reference. GFSA cut the BQ core at the core-yard and half core samples were taken. The entire sample length was cut and sampled.

Exploration is considered to have been carried out under the supervision of OCC. In the Competent Person's opinion, the sampling and sub-sampling was accurate, precise and fit for the purpose of resource estimation. The OCC successfully operated copper mines in the district for more than 50 years and has a proven record of converting resources to reserves.

Sample Analysis Method

Historical samples were prepared and analysed at the OCC on-mine laboratory in Nababeep. No official records exist for laboratory procedures for the OCC laboratory. Core samples were reportedly crushed, split and assayed for copper content by atomic absorption techniques[4]. No certified reference material, blanks and duplicates were inserted, however the OCC laboratory inserted in-house standard reference material with each batch. In the Competent Person's opinion Sampling analysis was according to industry's best practises and is acceptable for inferred resource estimation.

Estimation Methodology

Mineralised zones ("grade shells" for all three deposits (Flat Mine (Nababeep), Jan Coetzee Mine and Nababeep Kloof Mine) were delineated by using a 0.5% Cu cut-off grade shell.

Samples were composited to 1m; no capping was applied to all three deposits.

Interpolation of the composite data was used to calculate block Cu grades using omni-directional variograms (50m range) and inverse distance squared estimation.

[4] Gadd-Claxton D.L. The Economic Geology of the Okiep Copper Deposits, Namaqualand, South Africa. M.Sc. (Mineral Exploration) dissertation, Rhodes University, Grahamstown, 1981.

Block model cells of 5m x 5m x 2.5m were used for all three estimations. Sub-celling was applied.

Historical relative densities (SG t/m^3) were determined using the Archimedes method by weighing the core in air and water respectively. Average SG's were applied and were not estimated.

No differentiation was made between the oxide and sulphide mineralisation, generally the oxide component is insignificant within the OCP.

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

Resource Classification

Confidence in the geological and mineralisation models and geological continuity allowed the incorporation and use of the entire drilling database. Confidence is further based on historical underground plans, cross sections, long sections, and production records.

These shallow sulphide resources are classified as Inferred. This reflects potential uncertainties relating to mineralised envelope delineation (and therefore the associated volume estimation), as well as that most of this resource estimation is based on historical data.

Twin and some infill drilling will be required to increase the confidence and upgrade the Inferred Resources.

The Resource classification has been carried out in accordance with the JORC Code (2012). The grade and densities are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence has been derived from adequately detailed and reliable exploration and sampling gathered through appropriate techniques, and is sufficient to assume geological and grade continuity between data points.

In the Competent Person's view, it is a realistic inventory of the mineralisation which, after preliminary evaluation of technical, economic and development conditions, might, in whole or in part, become economically extractable. In the Competent Person's opinion, it is more likely than not that there are reasonable prospects for eventual economic extraction of the Flat Mine (Nababeep), Jan Coetzee Mine and Nababeep Kloof deposits.

Cut-off Grades

Mineralised zones ("grade shells" for all three deposits (Flat Mine (Nababeep), Jan Coetzee Mine and Nababeep Kloof Mine) were delineated by using a 0.5% Cu lower cut-off grade shell. Historical modelling and resource delineation has shown that a geological cut-off grade of 0.5% Cu yields representative grade shells for this type of mineralisation.

Mineralisation delineation is based on available geological and mining data. Strikes and dips derived from geological plans and sections are considered and applied accordingly.

Resources are reported at a series of cut-off grades, i.e. 0.5%, 0.7%, 1.0% and 2.0%, similarly these cut-offs where historically found to be representative in modelling and reporting. For the purpose of this document, resources are reported at 0.7% Cu cut-off.

Mining, Metallurgical Methods and Modifying Factors

Mining of these three resources is considered of interest for of open pit operations. No metallurgical test work results are available.

Historical mined areas (stopes) shown on historical mine survey plans were excluded from the resource. Reported tonnes mined:

- Flat Mine (Nababeep) – 0.15Mt @ 2.72% Cu ~ 3,841 t Cu;
- Jan Coetzee Mine – 1.9Mt @ 1.05% Cu ~ 19,888 t Cu; and
- Nababeep Kloof Mine – 0.2Mt @ 1.39% Cu ~ 2,507 t Cu.

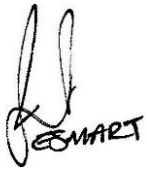
Apart from Jan Coetzee Mine where mining concentrated on the northern limb/portion, it is evident that historical underground mining primarily targeted the high grades.

No historical metallurgical test results are available; however, since 1946, OCC mined and treated 105.6Mt from 27 different mines all with similar and amenable metallurgy. No metallurgical test work has been done by Orion.

Future Activities

Some twin and infill drilling will be required to increase the confidence and upgrade the Inferred Resources. A scoping study assessment is currently underway which will determine potential viability for mining of the OCP Resources.

For and on behalf of the Board.



Errol Smart
Managing Director and CEO

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

Competent Persons Statement

The information in this report that relates to Orion's Exploration Results and Mineral Resource at the Okiep Copper 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 ROPO 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.

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Appendix 1: Maps and Figures

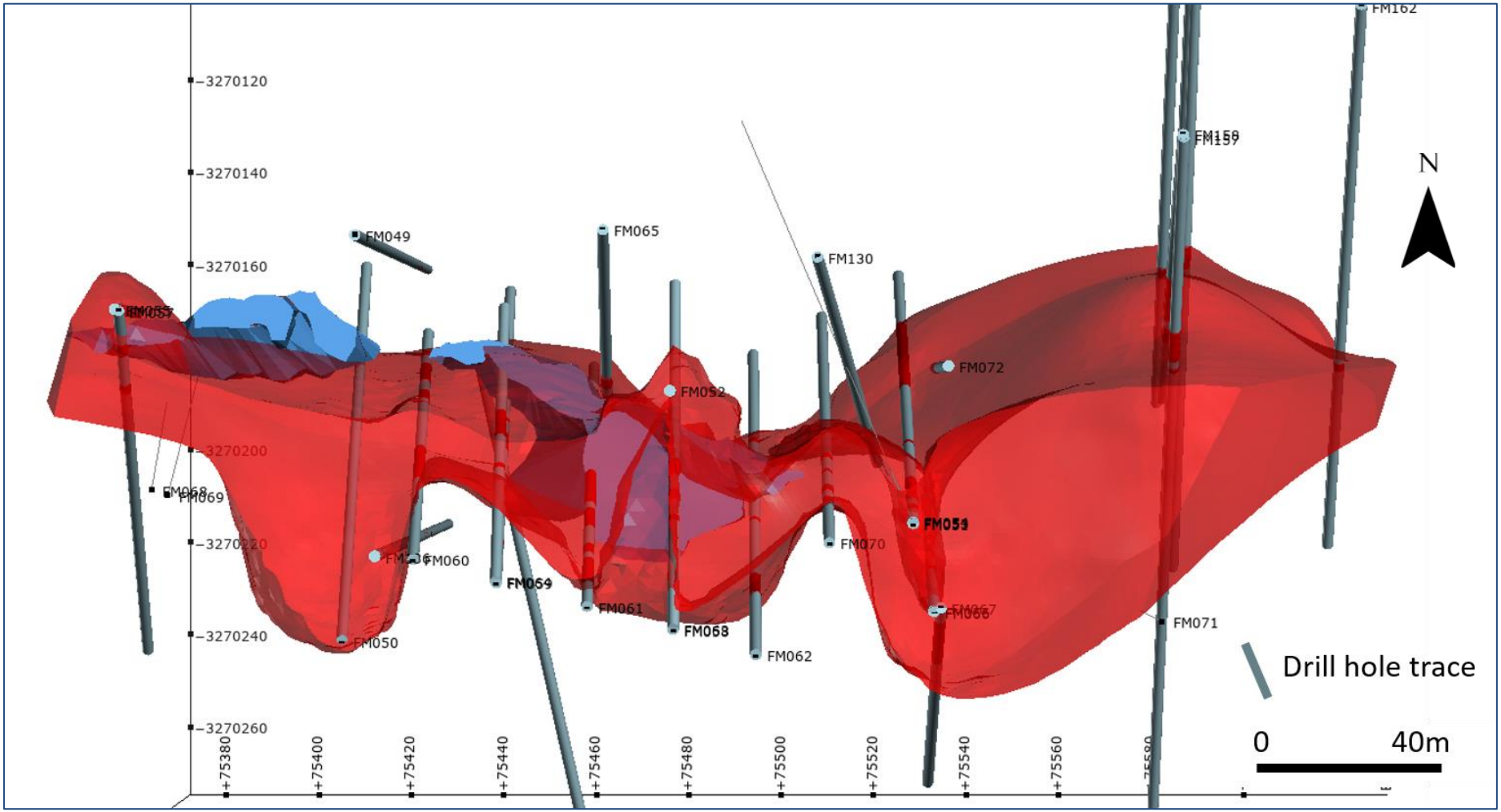

Figure 2: Flat Mine (Nababeep) plan view (Red mineralised bodies at 0.5% Cu) Light blue wireframes represent known underground workings.

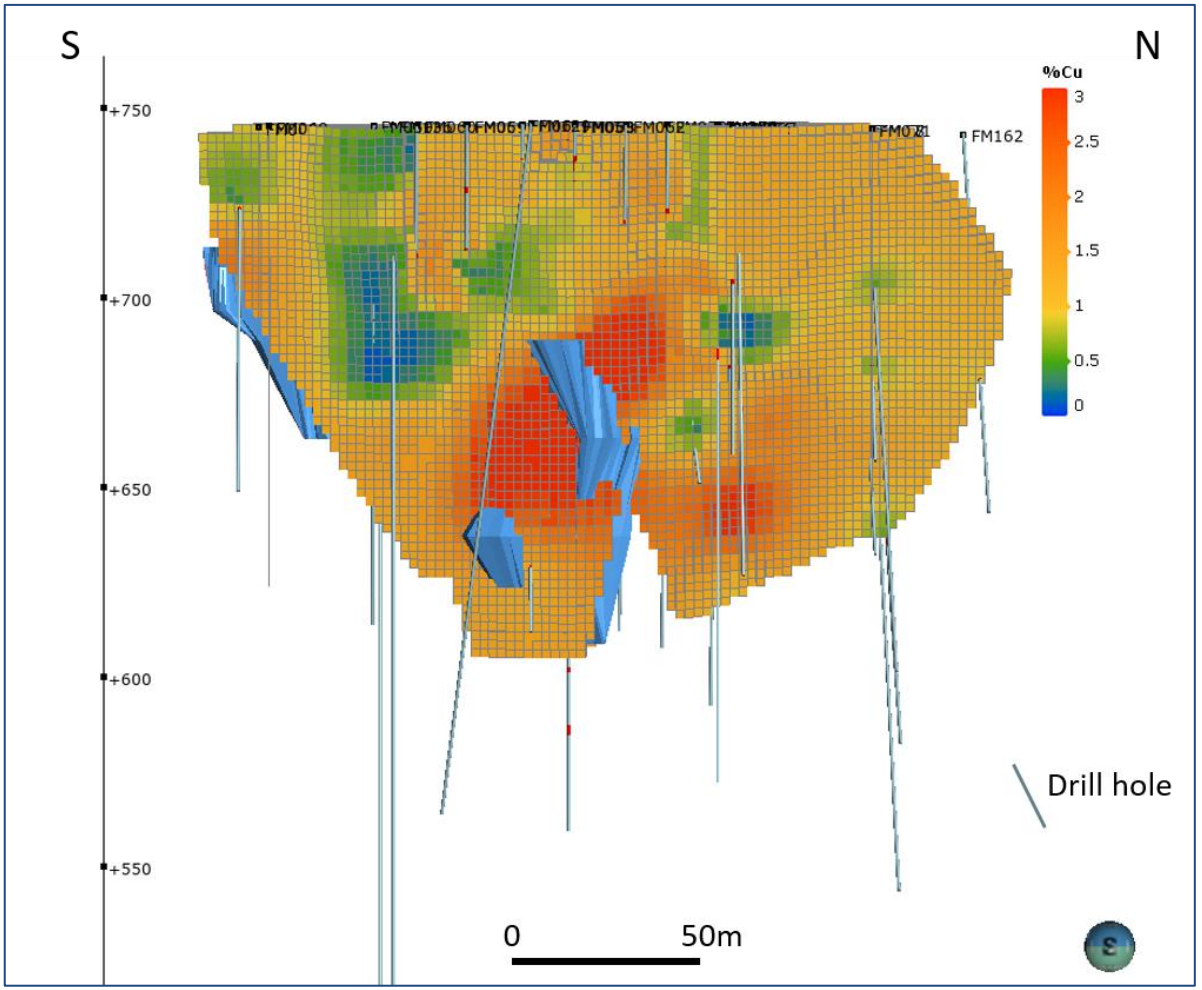

Figure 3: Flat Mine (Nababeep) longitudinal block model (looking West) Light blue wireframes represent underground mined areas.

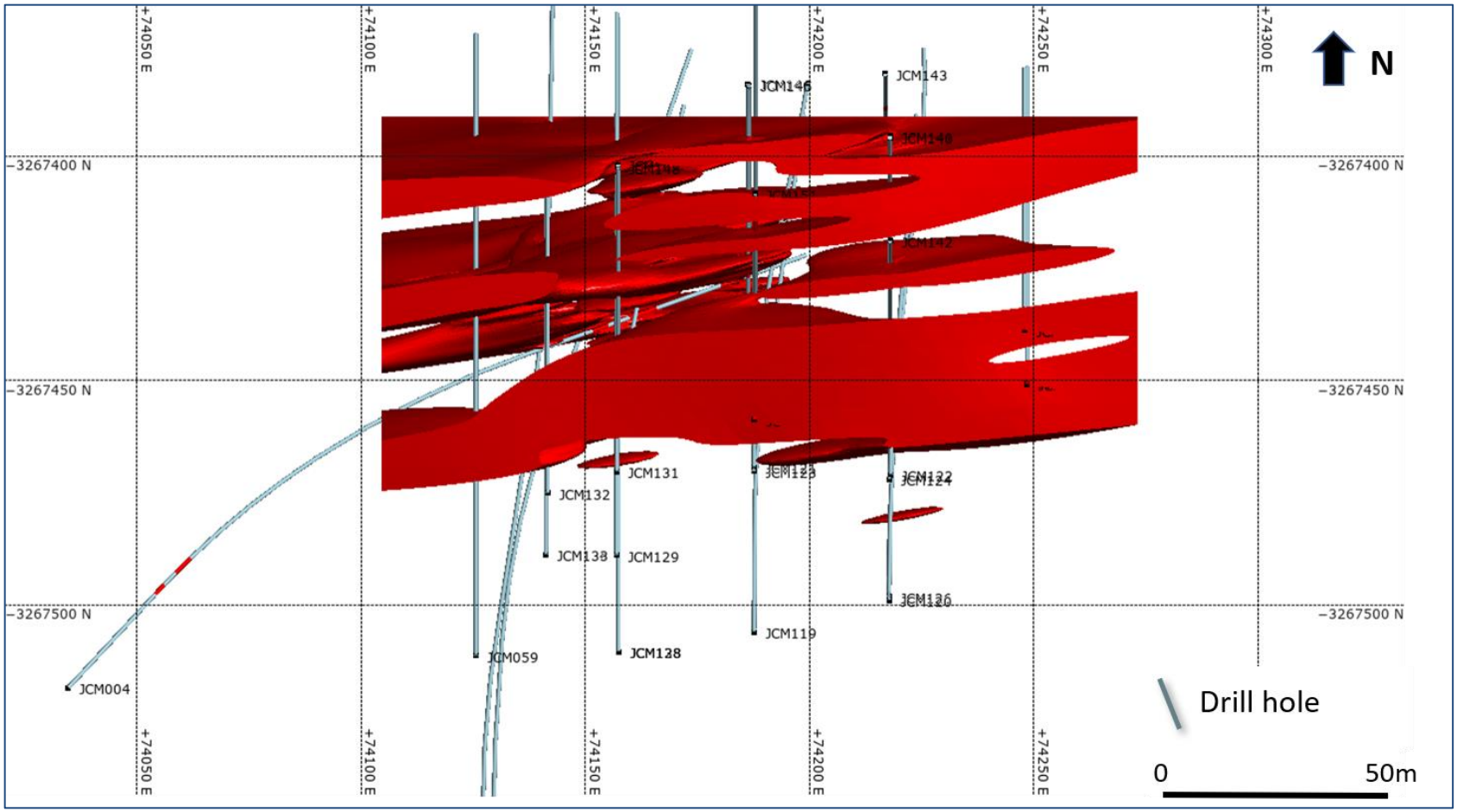

Figure 4: Jan Coetzee Mine plan view (Red wireframes of mineralised bodies above 0.5% Cu cut-off).

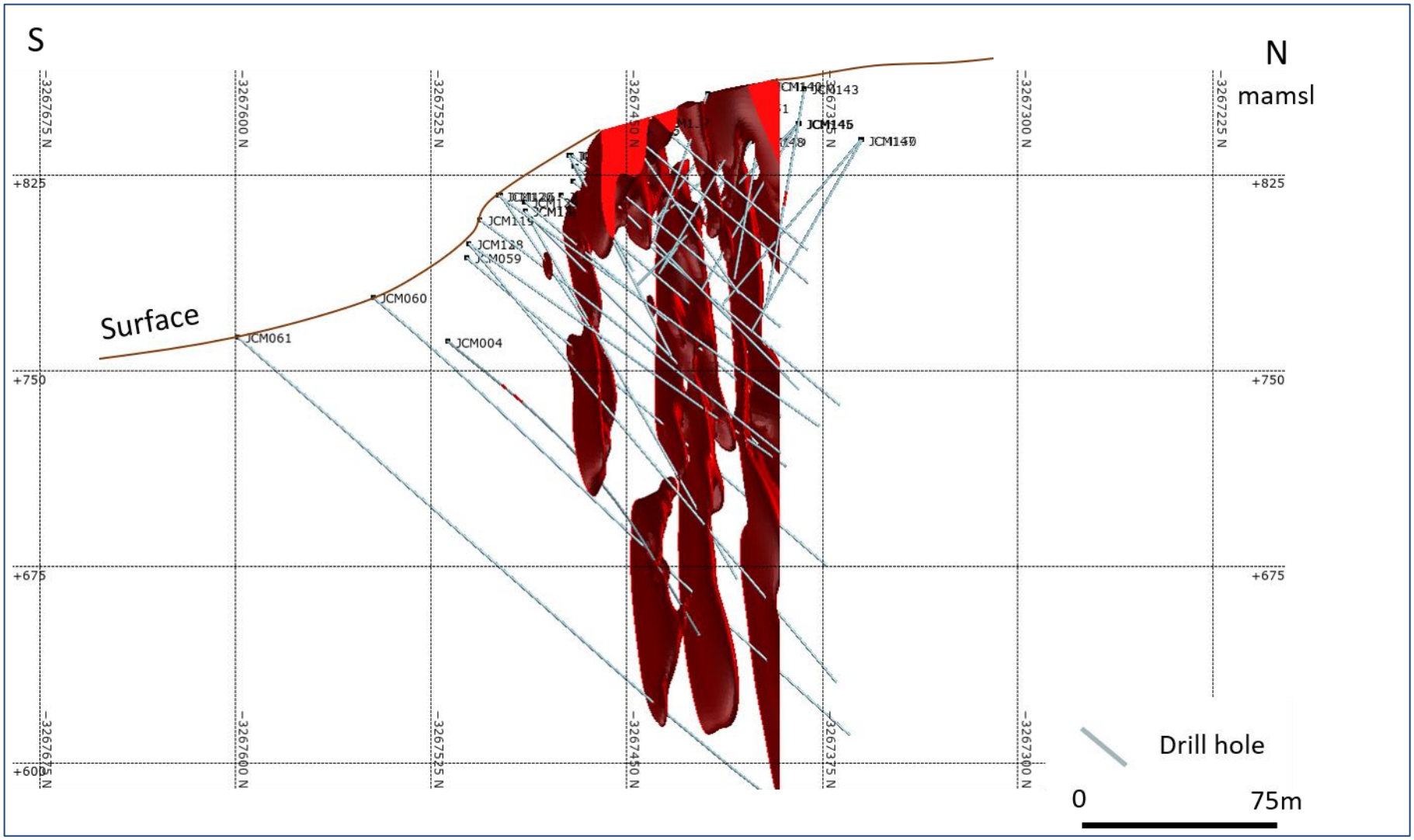

Figure 5: Jan Coetzee Mine 3D cross section (looking west).

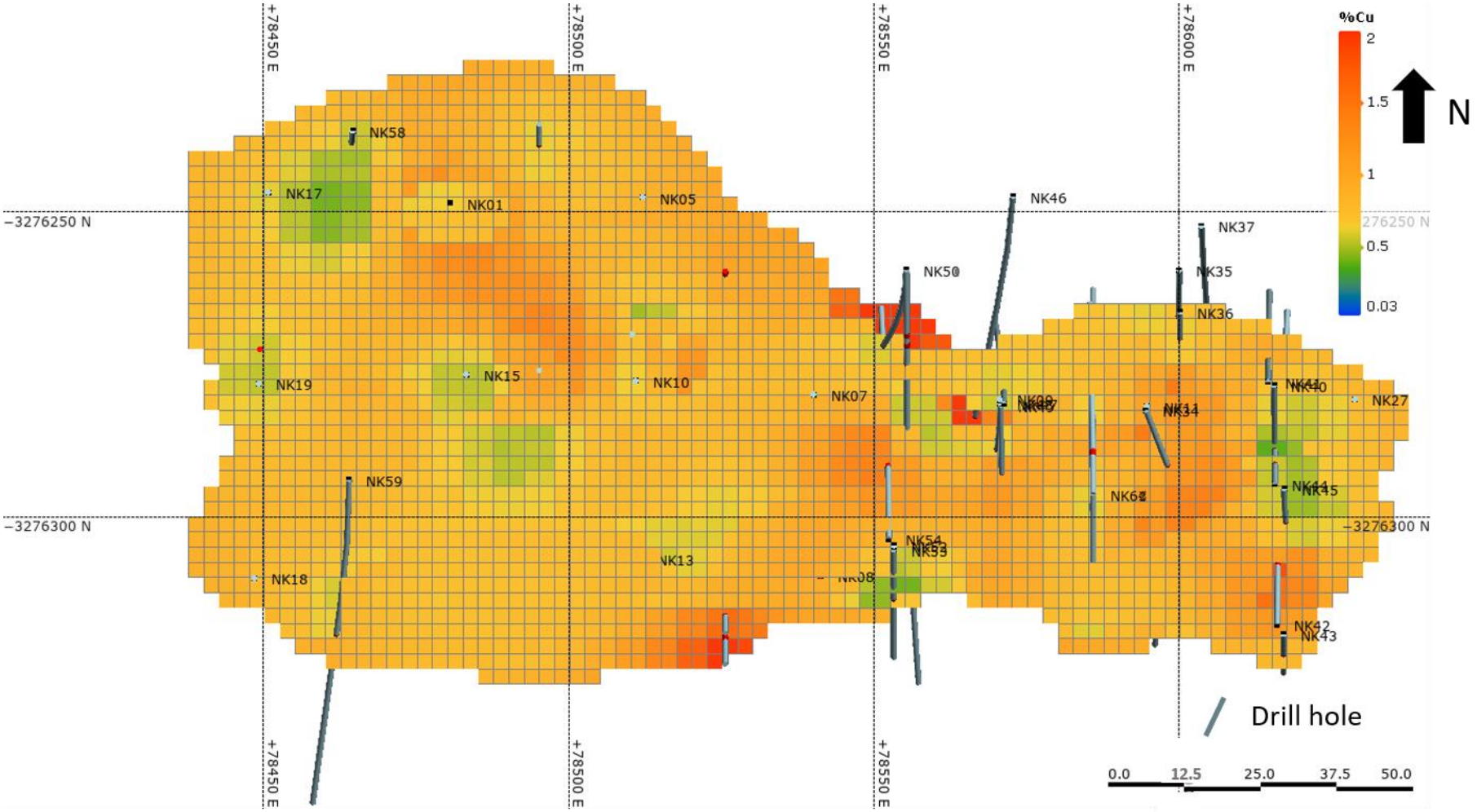

Figure 6: Nababeep Kloof Mine block model, plan view.

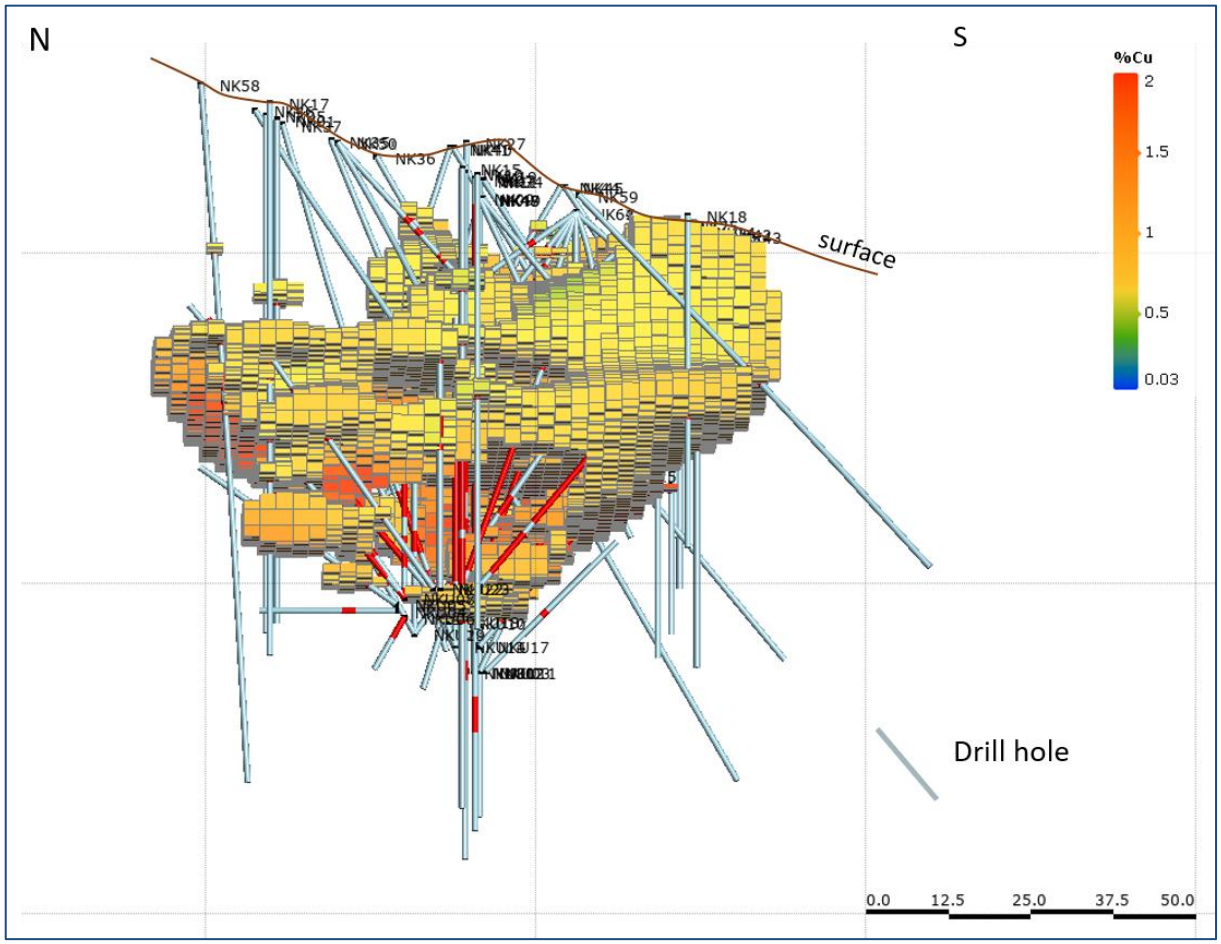

Figure 7: Nababeep Kloof Mine 3D cross section block model (looking east).

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

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Drilling and sampling was undertaken during three distinct periods since the initial discovery of mineralisation: • Prior to 1984 by O'Okiep Copper Company (**OCC**). • 1984 – 1999 by Goldfields of South Africa (**GFSA**). • and in 2018 by South Africa Tantalum Mining (**SAFTA**). **OCC and GFSA:** • 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. • 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. • GFSA is a reputable South African Mining house and owned gold, base metal and platinum mines at the time. • Drilling of exploration holes was carried out on a 60m by 30m line spacing. • Drill samples from OCC and GFSA drilling were all sent to OCC on-mine laboratory in Nababeep. • 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. • 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.

Criteria	JORC Code explanation	Commentary
		• For both companies, samples were numbered and bagged at the core yard before being submitted to the laboratory. • 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. • No historical Standard Operating Procedures are available.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	**OCC:** • All intersections were by core drilling. • AX-size core was drilled. • Core orientation was not done. **GFSA:** • All intersections were by core drilling. • BQ core size was drilled. • No core orientation was carried out.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	**OCC:** • All mineralised intersections were done with core drilling. • 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. • Core recoveries were measured for each "run". • No records exist for core recoveries on individual samples. • Intersections were in hard rock and good recoveries are envisaged through the mineralisation. **GFSA:** • All mineralised intersections are done with core drilling. • 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

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	• *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.*	**OCC and GFSA:** • All relevant intersections for surface holes have been logged by qualified geologists and all of this information is available. • No geotechnical information is available for the historic drill holes. • Core was not photographed. • Logs were recorded in the core yard on standard log sheets. • Quantitative estimate of sulphide mineralogy. • Core of the entire drill hole length was geologically logged and recorded on standardised log sheets by qualified geologists. • No air drilling was carried out.
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.*	**OCC:** • All sample data is available. • All drill core were used. • The entire sample length was submitted to the laboratory except for a 10cm piece of core left as a reference. • Sample preparation was undertaken by the OCC Laboratory. • The sampling method was appropriate and representative of the sample interval. • No certified reference materials, blanks and duplicates were inserted, however the OCC Laboratory inserted in house standard reference material with each batch. **GFSA:** • BQ core was cut a core yard and half core taken as sample. • With core samples, the entire sample length is cut and sampled. • No certified reference materials, blanks and duplicates were inserted, however reportedly the OCC Laboratory inserted in house standard reference material with each batch.
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 records exist for laboratory procedures for the OCC Laboratory. Core samples were reported to be crushed, split and assayed for

Criteria	JORC Code explanation	Commentary
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	copper content by atomic absorption techniques[4]. • No geophysical tools, spectrometers or handheld XRF instruments were used. • No record is available on quality control methods. • The OCC successfully operated copper mines in the district for more than 50 years and has a proven record of converting resources to reserves.
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.*	**OCC and GFSA:** • No records available on the verification of data. • Exploration was managed by the OCC and GFSA exploration departments, consisting of qualified geologists. • No adjustments to assay data were reported.
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.*	**OCC and GFSA:** • Drill hole collars were surveyed by qualified surveyors and documented in a Survey Logbook. • All surface and underground drill hole collars were surveyed by qualified surveyors using a theodolite. • The historic mine survey data is in the old national LO 17 Cape1880 system coordinate system. • 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.
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.*	**OCC and GFSA:** • Original exploration 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	• *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.*	**OCC and GFSA:** • Historical drilling is generally oriented perpendicular, or at a maximum achievable angle, to the attitude of the mineralisation. • As a result, most holes intersect the mineralisation at an acceptable angle. • No sampling bias is anticipated as a result of drill hole orientations.

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	**OCC and GFSA:** • 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.
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	• *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.*	**OCC and GFSA:** • OCC and GFSA held vast areas under prospecting and mining rights, most of these have been relinquished. **SAFTA/ORION:** • The Flat Mines area comprises 8,311.9ha and is covered by two prospecting rights (licences), figure 1. • 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. • The prospecting rights were issued for copper and tungsten ore only. • An application under Section 102 was made to include additional metals lead, silver, zinc, bismuth, cadmium, cobalt, magnetic minerals, gold and uranium. • An application for a mining right (NC10150MR) has been submitted covering a smaller portion (approximately 1,210 ha) of expired right NC11896PR and FM. • Only one renewal is allowed and is now covered by prospecting right application NC12755 submitted 5 February 2021.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	**OCC and GFSA:** • Underground and especially surface geological mapping are of high quality and detail. • Historical data included in this resource estimation were generated by OCC and GFSA. • Later limited follow-up exploration was completed by Metorex.

Criteria	JORC Code explanation	Commentary
		• It is evident that the historical data was collected via industry best practices and are considered suitable and acceptable for resource estimation.
Geology	• *Deposit type, geological setting and style of mineralisation.*	**Okiep Copper Project (OCP):** • These Cu deposits are part of the well-known Namaqualand Metamorphic Complex which consists primarily of meta-volcanic sedimentary and intrusive rock types. • Copper mineralisation is primarily associated with irregular, elongated and steeply dipping Koperberg Suite mafic intrusives. • The Koperberg Suite intrusives are mainly restricted to so-called "Steep Structures" of extensive strike lengths and steeply dipping to the north. • The Koperberg Suite consists of anorthosite, diorite and norite intermediate rock types. • Mineralisation usually occurs as blebs to disseminated Cu mineral assemblages bornite > chalcopyrite > chalcocite and less pyrite and pyrrhotite. • The more mafic and magnetite-rich lithologies generally host the bulk of and higher grade mineralisation. • The OCP has a long exploration and mining history, and the geology is well known and understood.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		OCC and GFSA:
		• 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.
		• Historically at least 102 holes were drilled totalling 42,834m on the three deposits, most are AQ
		• Numerous underground drill holes were drilled, these still have to be digitally captured, imported into the database and modelling.
		• This resource estimate was based on only a portion of the drill hole database, namely: FM (33 holes, 5,462m), JCM (33 holes, 3,790m) and NKM (70 holes, 3,835m).
		• All historical drill hole collars were surveyed.
		• Down-hole surveys are available for the majority of the historical GFSA.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	**OCC and GFSA:** • Individual intersections were weighted by sample width. • Mineralised sample lengths were erratically standardised at 1.0, 1.5 and 2.0 metres. • No truncations were applied.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	**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.*	• Numerous plans and cross-sections are available and were utilised during the geological and mineralization modelling. • All historical data is available as hard copies and is currently being digitised and incorporated into a GIS system.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	**ORION:** • This resource estimation is based on all available historical data.
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.*	**ORION:** • Detailed surface maps and drill sections were extensively consulted and utilised in the understanding of geology and mineralisation. • Regional and detailed geophysical maps (magnetic) were also consulted. • Historical surface and down-hole geophysical work were executed to industry best practices. • 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	1. *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* 2. *Diagrams clearly highlighting the areas of possible extensions,*	**ORION:** • More twinning of historical drill holes is needed in order to improve confidence in the historical data.

Criteria	JORC Code explanation	Commentary
	including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Deeper mineralisation as well as en echelon type mineralised lenses are potentially present and should be further investigated. **FM:** • Twin drilling in order to verify historical drill holes geology and grades. • In-fill resource delineation drilling to upgrade the resource to at least "Indicated". • Target drilling to follow-up on the potential strike and dip extension towards the east and west. **JCM:** • Twin drilling in order to verify historical drill holes geology and grades. • In-fill resource delineation drilling to upgrade the resource to at least "Indicated". • Target drilling to follow-up on the potential strike extension towards the east. **NKM:** • Twin drilling in order to verify historical drill holes geology and grades • In-fill resource delineation drilling to upgrade the resource to at least "Indicated".

Table 3: Drill hole information used in resource estimations for all prospects.

Mine/Prospect	Hole ID	Easting	Northing	RL	Hole Length	Dip	Azimuth	Company	Type
Flat Mine (Nababeep)	FM049	75424.77	-3270161.67	755.38	504.749	-90	0	OCC	Surface Diamond
Flat Mine (Nababeep)	FM050	75422.55	-3270230.47	752.65	154.229	-65	360	OCC	Surface Diamond
Flat Mine (Nababeep)	FM051	75519.36	-3270210.61	752.97	169.774	-75	360	OCC	Surface Diamond
Flat Mine (Nababeep)	FM052	75478.14	-3270188.05	754.42	200.254	-90	0	OCC	Surface Diamond
Flat Mine (Nababeep)	FM053	75519.33	-3270210.40	752.97	184.709	-90	0	OCC	Surface Diamond
Flat Mine (Nababeep)	FM054	75519.27	-3270210.16	752.92	153.619	-60	338	OCC	Surface Diamond
Flat Mine (Nababeep)	FM055	75384.03	-3270174.21	753.60	82.601	-90	0	OCC	Surface Diamond
Flat Mine (Nababeep)	FM056	75522.85	-3270225.39	750.98	91.44	-90	0	OCC	Surface Diamond
Flat Mine (Nababeep)	FM057	75384.74	-3270174.54	753.57	119.177	-60	180	OCC	Surface Diamond
Flat Mine (Nababeep)	FM058	75478.65	-3270228.51	752.33	131.064	-70	360	OCC	Surface Diamond

Mine/Prospect	Hole ID	Easting	Northing	RL	Hole Length	Dip	Azimuth	Company	Type
Flat Mine (Nababeep)	FM059	75448.67	-3270220.57	753.14	148.742	-70	360	OCC	Surface Diamond
Flat Mine (Nababeep)	FM060	75434.58	-3270216.64	752.88	113.995	-70	360	OCC	Surface Diamond
Flat Mine (Nababeep)	FM061	75464.09	-3270224.57	752.52	119.786	-70	360	OCC	Surface Diamond
Flat Mine (Nababeep)	FM062	75492.68	-3270232.75	751.51	150.571	-70	360	OCC	Surface Diamond
Flat Mine (Nababeep)	FM063	75478.73	-3270228.31	752.34	103.327	-55	360	OCC	Surface Diamond
Flat Mine (Nababeep)	FM064	75448.62	-3270220.30	753.13	94.183	-60	360	OCC	Surface Diamond
Flat Mine (Nababeep)	FM065	75466.78	-3270160.79	756.11	153.619	-70	180	OCC	Surface Diamond
Flat Mine (Nababeep)	FM066	75522.89	-3270225.57	750.95	73.152	-75	360	OCC	Surface Diamond
Flat Mine (Nababeep)	FM067	75524.08	-3270224.86	751.04	129.54	-75	180	OCC	Surface Diamond
Flat Mine (Nababeep)	FM068	75390.30	-3270204.81	753.25	57.607	-75	360	OCC	Surface Diamond
Flat Mine (Nababeep)	FM069	75393.06	-3270205.77	753.21	131.978	-80	360	OCC	Surface Diamond
Flat Mine (Nababeep)	FM070	75505.15	-3270213.79	752.73	152.4	-75	360	OCC	Surface Diamond
Flat Mine (Nababeep)	FM071	75561.57	-3270227.13	750.76	102.718	-90	0	OCC	Surface Diamond
Flat Mine (Nababeep)	FM072	75525.32	-3270183.84	754.33	123.139	-90	0	OCC	Surface Diamond
Flat Mine (Nababeep)	FM129	75465.33	-3270270.29	750.12	211.836	-65	345	OCC	Surface Diamond
Flat Mine (Nababeep)	FM130	75503.13	-3270165.41	755.49	108.814	-70	162	OCC	Surface Diamond
Flat Mine (Nababeep)	FM136	75428.10	-3270216.09	753.06	550.164	-90	0	OCC	Surface Diamond
Flat Mine (Nababeep)	FM157	75565.11	-3270145.29	754.91	201.2	-50	180	OCC	Surface Diamond
Flat Mine (Nababeep)	FM158	75565.02	-3270144.62	754.99	106	-65	180	OCC	Surface Diamond
Flat Mine (Nababeep)	FM159	75565.01	-3270085.43	757.62	163	-50	180	OCC	Surface Diamond
Flat Mine (Nababeep)	FM160	75570.07	-3270042.33	759.36	252	-45	180	OCC	Surface Diamond
Flat Mine (Nababeep)	FM161	75570.06	-3270041.72	759.46	278.8	-52	180	OCC	Surface Diamond
Flat Mine (Nababeep)	FM162	75595.19	-3270122.90	755.16	144	-50	180	OCC	Surface Diamond
Jan Coetzee Mine	JCM004	74034.65	-3267518.52	761.38	224.333	-30	44	OCC	Surface Diamond
Jan Coetzee Mine	JCM059	74125.63	-3267511.27	793.42	182.27	-40	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM060	74127.15	-3267547.05	778.30	249.022	-40	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM061	74129.38	-3267598.93	763.09	298.399	-40	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM119	74187.65	-3267506.12	807.81	146.304	-35	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM120	74217.78	-3267499.06	817.17	151.79	-35	0	OCC	Surface Diamond

Mine/Prospect	Hole ID	Easting	Northing	RL	Hole Length	Dip	Azimuth	Company	Type
Jan Coetzee Mine	JCM121	74187.62	-3267469.37	828.47	121.92	-40	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM122	74218.12	-3267471.03	832.60	103.937	-35	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM123	74187.57	-3267470.17	828.47	81.686	-60	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM124	74217.84	-3267472.07	832.58	50.902	-60	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM125	74187.75	-3267458.75	833.92	53.95	-35	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM126	74217.78	-3267498.17	817.17	60.35	-55	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM128	74157.44	-3267510.42	798.81	149.962	-35	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM129	74156.95	-3267488.90	814.83	128.321	-40	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM131	74157.03	-3267470.35	822.59	133.502	-40	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM132	74141.61	-3267475.10	817.16	97.536	-40	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM133	74141.23	-3267488.86	811.31	126.492	-45	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM134	74141.25	-3267488.86	811.31	163.068	-60	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM135	74248.56	-3267450.21	842.41	91.44	-40	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM136	74248.56	-3267450.82	842.40	76.81	-55	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM137	74247.96	-3267438.82	845.23	76.2	-40	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM138	74157.44	-3267510.42	798.82	219.456	-50	0	OCC	Surface Diamond
Jan Coetzee Mine	JCM140	74217.96	-3267395.92	859.16	82.601	-60	180	OCC	Surface Diamond
Jan Coetzee Mine	JCM141	74217.96	-3267395.53	859.16	75.286	-80	180	OCC	Surface Diamond
Jan Coetzee Mine	JCM142	74218.01	-3267418.90	856.21	60.96	-70	180	OCC	Surface Diamond
Jan Coetzee Mine	JCM143	74216.89	-3267381.69	858.00	85.344	-80	180	OCC	Surface Diamond
Jan Coetzee Mine	JCM145	74186.56	-3267384.23	844.82	73.457	-60	180	OCC	Surface Diamond
Jan Coetzee Mine	JCM146	74186.29	-3267383.89	844.82	88.392	-45	180	OCC	Surface Diamond
Jan Coetzee Mine	JCM147	74187.97	-3267360.15	838.44	82.296	-50	180	OCC	Surface Diamond
Jan Coetzee Mine	JCM148	74157.32	-3267402.58	837.97	51.816	-40	180	OCC	Surface Diamond
Jan Coetzee Mine	JCM149	74157.32	-3267402.00	837.97	61.874	-55	180	OCC	Surface Diamond
Jan Coetzee Mine	JCM150	74187.97	-3267359.73	838.44	85.039	-60	180	OCC	Surface Diamond
Jan Coetzee Mine	JCM151	74187.90	-3267408.35	850.87	54.864	-55	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK01	78480.61	-3276248.53	959.40	76.81	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK05	78512.15	-3276247.61	963.89	78.943	-90	0	OCC	Surface Diamond

Mine/Prospect	Hole ID	Easting	Northing	RL	Hole Length	Dip	Azimuth	Company	Type
Nababeep Kloof Mine	NK07	78540.08	-3276279.95	957.59	99.365	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK08	78541.32	-3276309.70	949.32	60.96	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK09	78570.57	-3276280.70	958.33	59.436	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK10	78510.93	-3276277.72	954.98	104.546	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK11	78594.68	-3276281.89	963.82	96.926	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK12	78569.69	-3276310.91	951.33	44.806	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK13	78511.67	-3276306.97	947.06	65.837	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK14	78477.85	-3276312.12	942.17	66.446	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK15	78483.20	-3276276.67	952.40	97.536	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK17	78450.75	-3276246.77	958.37	84.125	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK18	78448.44	-3276310.04	941.15	50.597	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK19	78449.22	-3276278.17	947.25	69.19	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK25	78601.46	-3276312.38	958.00	55.474	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK27	78628.80	-3276280.72	973.71	64.618	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK34	78594.55	-3276282.54	963.88	48.768	-54	158	OCC	Surface Diamond
Nababeep Kloof Mine	NK35	78600.03	-3276259.53	970.57	79.248	-67.5	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK36	78600.16	-3276266.43	968.15	110.033	-60	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK37	78603.62	-3276252.28	973.41	83.82	-75	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK40	78615.53	-3276278.45	971.29	48.768	-59	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK41	78614.59	-3276277.90	971.23	48.768	-71.5	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK42	78616.05	-3276317.73	958.41	66.142	-38	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK43	78617.06	-3276319.29	958.10	18.288	-70	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK44	78615.70	-3276294.65	965.41	35.357	-59.5	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK45	78617.18	-3276295.37	965.64	26.822	-56	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK46	78572.76	-3276247.43	971.82	81.077	-59	184	OCC	Surface Diamond
Nababeep Kloof Mine	NK47	78571.30	-3276281.44	958.33	56.388	-75	360	OCC	Surface Diamond
Nababeep Kloof Mine	NK48	78570.68	-3276281.39	958.20	56.693	-65	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK49	78570.73	-3276281.73	958.20	39.014	-50	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK50	78555.26	-3276259.50	964.85	103.632	-48	180	OCC	Surface Diamond

Mine/Prospect	Hole ID	Easting	Northing	RL	Hole Length	Dip	Azimuth	Company	Type
Nababeep Kloof Mine	NK51	78555.26	-3276259.50	964.85	60.35	-59	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK52	78553.26	-3276304.71	949.47	29.87	-82	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK53	78553.21	-3276305.42	949.39	30.785	-55	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK54	78552.43	-3276303.63	949.52	49.682	-40	360	OCC	Surface Diamond
Nababeep Kloof Mine	NK58	78464.60	-3276236.68	962.87	107.29	-85	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK59	78464.02	-3276293.91	946.08	78.334	-46.5	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK61	78585.88	-3276296.29	957.98	38.405	-35	360	OCC	Surface Diamond
Nababeep Kloof Mine	NK62	78585.88	-3276296.29	957.98	59.741	-60	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK63	78585.88	-3276296.29	957.98	33.528	-90	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK64	78585.88	-3276296.29	957.98	53.95	-51.5	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK65	78585.88	-3276296.29	957.98	76.505	-72.5	0	OCC	Surface Diamond
Nababeep Kloof Mine	NK66	78585.88	-3276296.29	957.98	32.918	-67.5	180	OCC	Surface Diamond
Nababeep Kloof Mine	NK67	78585.88	-3276296.29	957.98	33.528	-40	180	OCC	Surface Diamond
Nababeep Kloof Mine	NKU01	78555.40	-3276278.91	884.40	45.11	65	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU02	78555.40	-3276280.13	884.40	39.014	90	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU03	78555.40	-3276281.05	884.40	45.72	65	180	OCC	Underground Diamond
Nababeep Kloof Mine	NKU04	78464.66	-3276266.18	882.72	20.726	0	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU05	78464.66	-3276266.18	883.72	36.271	35	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU06	78464.66	-3276267.50	881.70	9.144	-60	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU07	78464.66	-3276267.50	884.72	51.816	55	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU08	78464.66	-3276267.50	884.72	29.566	90	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU09	78464.66	-3276267.50	884.72	37.795	50	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU10	78495.14	-3276276.00	884.72	62.789	50	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU11	78555.40	-3276281.96	884.40	28.042	45	180	OCC	Underground Diamond
Nababeep Kloof Mine	NKU12	78495.14	-3276276.00	884.72	46.33	90	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU13	78495.14	-3276275.00	884.72	64.008	50	180	OCC	Underground Diamond
Nababeep Kloof Mine	NKU14	78525.62	-3276276.60	884.72	49.378	70	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU15	78525.62	-3276276.60	884.72	43.891	90	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU16	78525.62	-3276276.60	884.72	54.559	70	180	OCC	Underground Diamond

Mine/Prospect	Hole ID	Easting	Northing	RL	Hole Length	Dip	Azimuth	Company	Type
Nababeep Kloof Mine	NKU17	78525.62	-3276280.30	884.64	68.275	50	180	OCC	Underground Diamond
Nababeep Kloof Mine	NKU18	78495.14	-3276275.00	884.72	45.72	70	180	OCC	Underground Diamond
Nababeep Kloof Mine	NKU19	78510.38	-3276270.10	884.72	38.71	90	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU20	78510.38	-3276270.10	884.72	34.747	60	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU21	78510.38	-3276270.10	884.72	51.816	55	180	OCC	Underground Diamond
Nababeep Kloof Mine	NKU22	78449.42	-3276271.52	884.35	43.282	55	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU23	78449.42	-3276272.52	884.35	39.624	90	0	OCC	Underground Diamond
Nababeep Kloof Mine	NKU24	78510.38	-3276297.64	910.86	23.774	60	180	OCC	Underground Diamond
Nababeep Kloof Mine	NKU25	78525.62	-3276299.47	910.86	30.48	50	180	OCC	Underground Diamond
Nababeep Kloof Mine	NKU26	78540.87	-3276299.47	910.86	31.09	60	180	OCC	Underground Diamond

Collars were surveyed by total station theodolite. All drill holes were surveyed with down-hole instruments. Collar coordinates are in LO17 Cape survey system.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in Section 1 and where relevant in Section 2. also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	**ORION:** • Historical data has been digitally captured from hand-written documents, plans and sections. • All data is presented in excel spread sheet format. • Where possible integrity checks by the CP have found the database to be an accurate representation of the original data. • Data checking and corrections were also made, i.e. checking for overlaps, gaps, collar positions and erroneous surveys. • All drill hole and spatial data will be imported into an Access database format which will allow easier and automated checks and verification.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	**ORION:** • Numerous site visits were undertaken by the competent person.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral*	**ORION:** • Geological interpretation was done based on drill hole sections.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>deposit.
Nature of the data used and of any assumptions made.
The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation.
The factors affecting continuity both of grade and geology.</td><td>Mineralisation is found to occur predominantly in most of the intermediate rock types also crossing lithological boundaries.
Mineralisation generally does not extent into the granitic and gneiss host rocks and the contact is usually sharp.
Due to the complex nature of these intrusive lithologies and different phases, ore envelopes based on grade were constructed.
Grade envelopes were constructed for FM, JCM and NKM using a minimum sample length weighted cut-off grade of 0.5% Cu.
The intermediate mineralised rocks are structurally controlled and pinching and swelling is a common feature, in both strike and dip.</td></tr>
<tr><td>Dimensions</td><td>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</td><td>FM:
The mineralisation occurs as one relatively continuous east-west striking body.
The known mineralised portion is at least 200m long, strikes east – west and steeply dips towards the north, figures 2 and 3.
The FM resource occurs at surface to sub-surface and was historically mined at depth.
JCM:
Mineralisation also has a general east-west strike and length of approximately 230m.
Mineralisation occurs as numerous steeply dipping lenses (dykes), figure 4.
A gap exists between the “main” modelled mineralisation and a body located to the west.
NKM:
The NKM generally strikes east-west, and outcrops on surface.
It has no discernible dip and has generally a “rod” geometry, figure 7.
The mineralised body strikes at least 120m – 150m.</td></tr>
<tr><td>Estimation and modelling techniques</td><td>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters, and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.
The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</td><td>OCC and GFSA:
No official resource estimates were done prior to 2017.
A non-compliant estimate based on available historical drilling was done in 2017/2018 by OCC.
FM, JCM & NKM were all modelled and estimated using 5m x 5m x 5m blocks.
Inverse Distance Squared was applied.
No capping of results was applied.
OCC Resources reported at 0.50% Cu (FM, JCM).
<table><tr><th>Prospect</th><th>Tonnes</th><th>Mean %Cu</th></tr><tr><td>Flat Mine (Nababeep)</td><td>1,508,504</td><td>1.19</td></tr></table></td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	• *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulfur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	**Jan Coetzee Mine** 1,006,217 1.12 **Nababeep Kloof Mine** 1,117,713 0.93 • Modelling and cut-offs are different to ORION's but still comparable. **ORION:** • Only Cu was modelled and estimated, no other buy-products or deleterious elements (such as sulphur) were estimated. • No selective mining units were modelled. • No data cuts were applied. • Geological knowledge and data from surface plans, geological sections and historical underground workings were used during grade shell modelling. **Flat Mine (Nababeep):** • Flat Mine (Nababeep) was discretised using blocks of 5m x 5m x 2.5m. • Inverse Distance Squared was used to interpolate Cu values into a three-dimensional block model. • A total of 200,772 blocks were estimated. • Sub-celling was applied with rotation of blocks (004°/85°). • An omni-directional search ellipsoid was applied with radii 50m. • No top cut was applied to the 1m composites. **Jan Coetzee Mine:** • A block model was created by discretizing the geological model by 5m x 5m x 2.5m. • Inverse Distance Squared estimation was applied. • Sub-celling was applied with no rotation of blocks. • A total of 613,360 blocks were estimated. • No top cut was applied to the 1m composites. **Nababeep Kloof Mine:** • The geological model was discretised using 5m x 5m x 2.5m. • Inverse Distance Squared was selected for final estimation. • An omni-directional search ellipsoid was applied with radii 50m. • No sub-celling and no rotation of blocks. • Sub-celling was applied with no rotation of blocks. • A total of 205,020 blocks were used. • No capping was applied.

Criteria	JORC Code explanation	Commentary
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	**ORION:** • No moisture content was calculated, and the core was naturally dried when logged and sampled. The estimated tonnages are therefore based on a natural basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	**ORION:** • Based on historic experience and allowing better modelling, a grade envelope at a cut-off of 0.5 %Cu was used. • The mineral resource reported used a base case of 0.7% Cu.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	**ORION:** • All tonnages reported are dry. • All three prospects (FM, JCM and NKM) were to a certain extent mined underground. • The proposed mining method will be open pit. • **The resource (FM, JCM & NBK) reported was depleted in portions by the historical mined areas.** • **Generally, the higher grades were mined underground.**
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	**ORION:** • No metallurgical test results are available. • No metallurgical test work has so far been done.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of*	**ORION:** • The mining site (deposits) is located within a relatively non-ecologically sensitive location. • A number of potential sites were investigated for waste rock and tailings as part of the minimization of the operational footprint. • Mining operations will be open pit. • Already spoilt areas will be used for siting of new infra-structure. • Existing access roads will be used during the operations.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</td><td>• Finer material will be pumped to the Tailings Storage Facility (TSF) to be established on existing old evaporation pans close by.</td></tr>
<tr><td>Bulk density</td><td>• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.
• The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.
• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>ORION:
• Limited Bulk Density (B.D.) data is available for historical drill core.
• The B.D. data was acquired using the Archimedes method by weighing drill core in air and water, a practical method considered appropriate for this competent rock types.
• The average B.D.'s used for all three deposits is 2.75 (mineralised intermediate-mafic rocks) which seem to be a good representative average of the mineralised rock types within the area.</td></tr>
<tr><td>Classification</td><td>• The basis for the classification of the Mineral Resources into varying confidence categories.
• Whether appropriate account has been taken of all relevant factors, i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data.
• Whether the result appropriately reflects the Competent Person(s)' view of the deposit.</td><td>ORION:
• Resource classification incorporated the confidence in the quality of the drill hole data, data distribution, geological and grade continuity and consideration of reasonable expectation for eventual economic extraction.
Flat Mine (Nababeep)
• Inferred resource reported at base cut-off grade of 0.7% Cu.
• Previously mined mineralisation (ore) was deducted from the mineral resource estimate.
<table>
<tr><th>Category</th><th>Tonnes</th><th>Mean % Cu</th></tr>
<tr><td>Inferred</td><td>1,024,000</td><td>1.4</td></tr>
</table>
Jan Coetzee Mine
• Inferred resource reported at base cut-off grade of 0.7% Cu.
• Previously mined mineralisation (ore) was deducted from the mineral resource estimate.
<table>
<tr><th>Category</th><th>Tonnes</th><th>Mean % Cu</th></tr>
<tr><td>Inferred</td><td>1,014,000</td><td>1.4</td></tr>
</table>
Nababeep Kloof Mine
• Inferred resource reported at base cut-off grade of 0.7% Cu.
• Previously mined mineralisation (ore) was deducted from the mineral resource estimate.
<table>
<tr><th>Category</th><th>Tonnes</th><th>Mean % Cu</th></tr>
<tr><td>Inferred</td><td>527,00</td><td>1.2</td></tr>
</table></td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	**ORION:** • Mineral resource estimate has not yet been externally audited.

Discussion of relative accuracy/confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*
	• *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.*
	• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*
		ORION:
		• The geological and mineralisation model, geological and grade continuity has been demonstrated to an acceptable confidence level in order to support the mineral categories classification.
		• Successful historical mining also increases confidence in used drill data.
		• Reported mine production figures (1990) as follows:
		  ○ Flat Mine (Nababeep) – 0.15Mt @ 2.72% Cu ~ 3,841t Cu;
		  ○ Jan Coetzee Mine – 1.9Mt @ 1.05% Cu ~ 19,888t Cu; and
		  ○ Nababeep Kloof Mine – 0.2Mt @ 1.39% Cu ~ 2,507t Cu.