



ASX/JSE RELEASE: 12 November 2020

Shallow Massive Sulphide Intersections at Two Near-Mine Prospects at the Prieska Copper-Zinc Project

Initial diamond drilling underway at exciting Kielder VMS prospect, just 15km from mine infrastructure

- ▶ **Drilling at the Kielder Project, located 15km from the planned mill at the proposed Prieska Copper-Zinc Mine in the Northern Cape, South Africa intersects massive copper and zinc sulphide mineralisation.**
- ▶ **Intersections are near surface.**
- ▶ **Drilling tested outcropping VMS-style mineralisation with results of up to 4.8m @ 0.46% Cu, 6.18% Zn and 15g/t Ag from historical shallow drilling by Newmont SA in the 1970s.**
- ▶ **Rigs now moved to test targets at the Jacomynspan Ni-Cu-Co-PGE Prospect on Orion's Areachap prospecting rights, where it will test for shallow high-grade nickel-copper mineralisation and provide samples for metallurgical test work.**

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

"This is an exciting start to our recently commenced high-impact exploration program at Prieska. We have intersected shallow, base metal massive sulphide at two different prospects in our very first holes at the near-mine Kielder Project. This is a clear demonstration of the enormous exploration upside around the proposed Prieska Copper-Zinc mill which offer opportunities to extend the mine life and grow our production profile in the future.

"Based on visual observations, the intersections we have drilled are geologically very similar to what we see at the main Prieska copper zinc deposit and, excitingly, they occur at very shallow depths which bodes well for their future economic potential.

"The planned Prieska Copper-Zinc Mine is one of the few fully permitted and development-ready base metal assets worldwide, underpinned by a compelling investment case outlined in the updated BFS of May 2020 which included an NPV (at an 8% discount rate) of AUD779 million from a 12-year foundation phase mine, planned to produce ~22ktpa of copper and ~70ktpa of zinc¹. Exploration success in the near-mine environment will build on these strong fundamentals, unlocking the potential of what we believe to be a significantly under-explored, district-scale opportunity in the Northern Cape Province."

Orion Minerals Limited (**ASX/JSE: ORN**) (**Orion** or the **Company**) is pleased to announce that it has intersected base metal sulphides at two prospects within 15km of the proposed mill at the planned Prieska Copper-Zinc Mine (**PCZM**), within the Prieska Copper-Zinc Project (**Prieska Project**), in South Africa's Northern Cape.

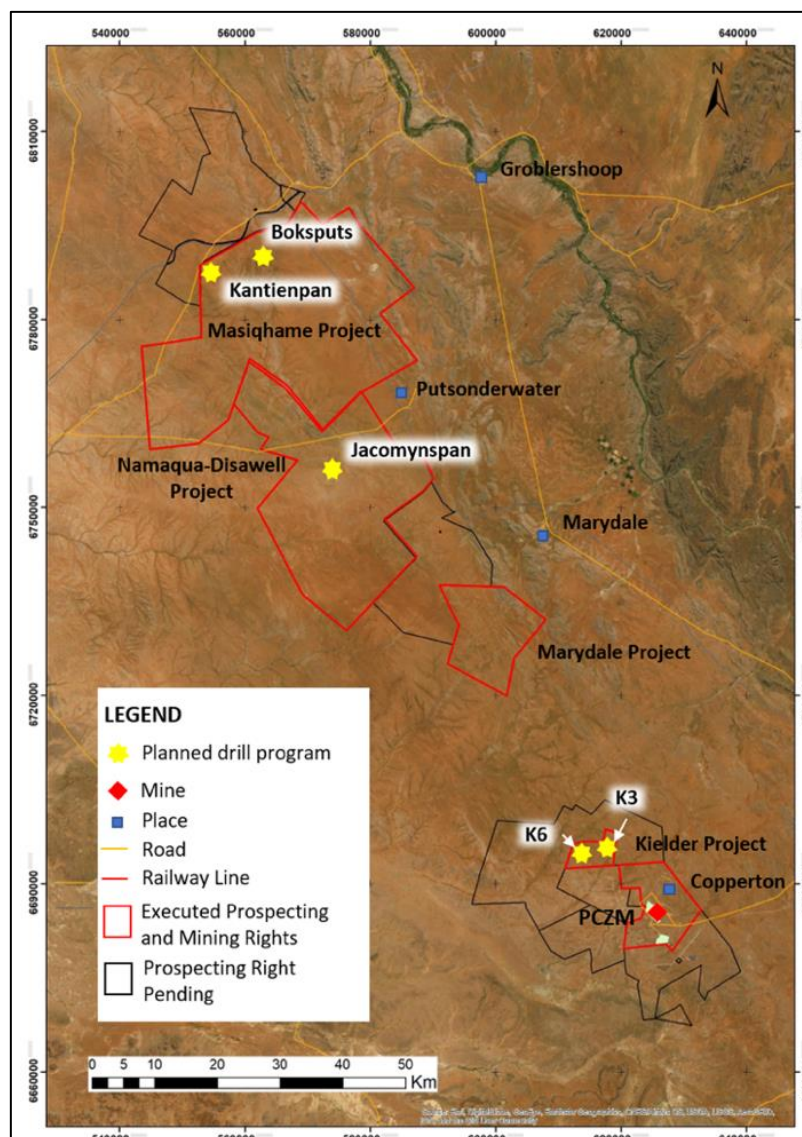
Drilling was undertaken at the K3 and K6 prospects within the Kielder Project, located on the Dooniespan prospecting right, which is located 15km north-west of the planned PCZM, within the Prieska Project (Figure 1).

¹ The production target and forecast financial information were first reported in ASX announcement of 26 May 2020: "Updated Feasibility Study Delivers..." available to the public on <http://www.orionminerals.com.au/investors/asx-jse-announcements/>. All material assumptions underpinning the production target and forecast financial information in the initial report continue to apply and have not materially changed.

Mineralisation similar to that at the Prieska Project has been intersected at less than 200m from surface at both K3 and K6 prospects (Figures 4 and 6). Massive, semi massive and disseminated base metal sulphide mineralisation was intersected as follows:

PROSPECT	HOLE NUMBER	DOWN HOLE DEPTH		INTERVAL (m)	Description
		FROM (m)	TO (m)		
K3	OKD031	173.76	174.73	0.97	Massive and semi-massive pyrrhotite and pyrite with traces of chalcopryite
		188.5	196.01	7.51	Massive and semi-massive pyrite and pyrrhotite with sphalerite up to 10%
	OKD033	90.3	108.8	18.5	Disseminated pyrite and pyrrhotite with traces of sphalerite
		108.8	109.5	0.7	Massive pyrite with sphalerite up to 5%
K6	OKD032	123.2	127.03	3.83	Massive pyrite with sphalerite up to 10%
		127.03	127.6	0.57	Quartz vein with remobilized sulphide
		127.6	130.45	2.85	Massive pyrite with traces of sphalerite
		130.45	131.59	1.14	Disseminated pyrite and pyrrhotite with traces of sphalerite and chalcopryite

The drill rigs have now moved to the northern Prospecting Rights where drilling will be carried out on the Company's Namaqua-Disawell and Masiqhame prospecting rights (Figure 1) at the Bokspits, Kantienpan and Jacomynspan prospects. (refer ASX release 20 October 2020).



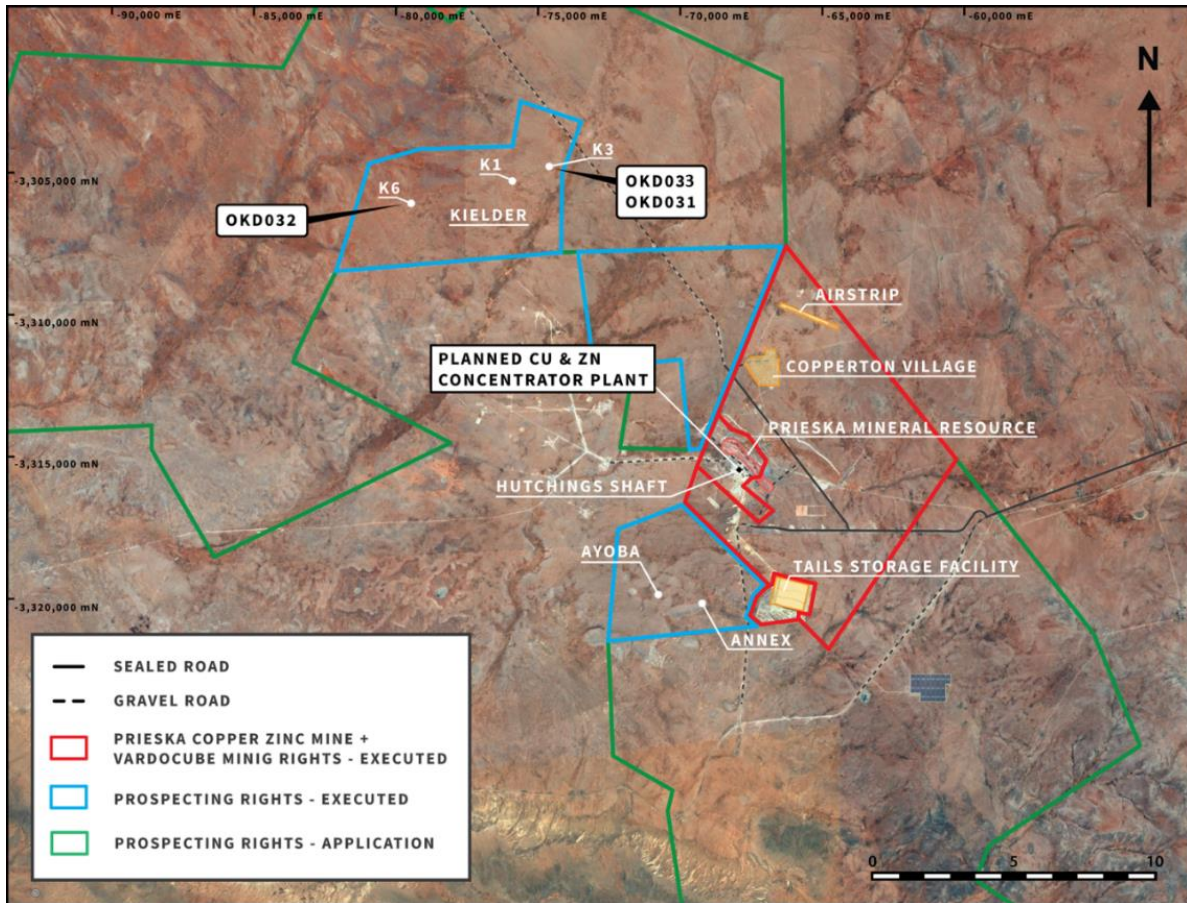


Figure 1: Location maps showing the prospects on Orion's tenements in the Areachap belt where drilling is taking place during the current drilling program.

Prieska Project (Kielder)

Newmont South Africa (**Newmont**) discovered volcanogenic massive sulphide (**VMS**) style copper-zinc mineralisation at three prospects on the Kielder Project in 1976.

The drilling records and exploration reports available to Orion are incomplete, but include reports of feasibility study work for open pit mining and consideration by Anglovaal and Newmont of a potential joint venture, with milling of the Kielder open pit ore to be undertaken at the nearby Prieska Copper Mine mill, that was operating just 15km away at the time.

The tonnages and grades of the ore mentioned in the feasibility study reports cannot be verified by Orion due to incomplete drilling and exploration records and are therefore not reported in this announcement.

Available Newmont reports indicate that K3 and K6 prospects had returned the best results with maximum intersections of **4.8m @ 0.46% Cu, 6.18% Zn and 15g/t Ag from 116m** in KDH15, at prospect K6, and **13.08m @ 0.23% Cu and 3.69% Zn from 179.21m** in KDH3, at prospect K3. A 1% Zn cut-off was used with no top-cut. Where present, internal waste is included in the intersections (refer ASX release 20 October 2020).

Newmont drilling only tested the mineralisation at shallow depths with available data showing most of the intersections at depths of less than 200m. At K3, Newmont drill tested up to the border of the tenement boundary. The mineralisation potentially continues to the east of the boundary, where Orion has a pending prospecting right application.

Apart from verifying the Newmont data, the holes drilled by Orion (Figure 2) will provide drill core for mineralisation characterisation purposes and to provide a platform for follow-up down-hole geophysics.

Orion has demonstrated the value of applying modern, high-powered down-hole geophysics at the nearby PCZM VMS deposit, where down-hole geophysics assisted in guiding drilling to define a current Mineral Resource

of 30.49Mt @ 1.2% Cu, 3.7% Zn in accordance with the JORC Code² (19.13Mt at 1.18% Cu, 3.59% Zn Indicated Resources and 11.36Mt @ 1.2% Cu, 3.80% Zn Inferred Resources). Several remaining geophysical targets indicate further extensions of the PCZM deposit at depths of >1,000m below surface (refer ASX release 25 February 2019).

The shallow depth of mineralisation and the strong potential for strike and dip extensions at K3 and K6 – with the possibility of higher grades and thicknesses extending beyond the limited Newmont drilling grids – offers a significant opportunity for Orion to delineate a shallow, near-mine deposit which could become a future source of satellite ore feed to an expanded operation at PCZM.

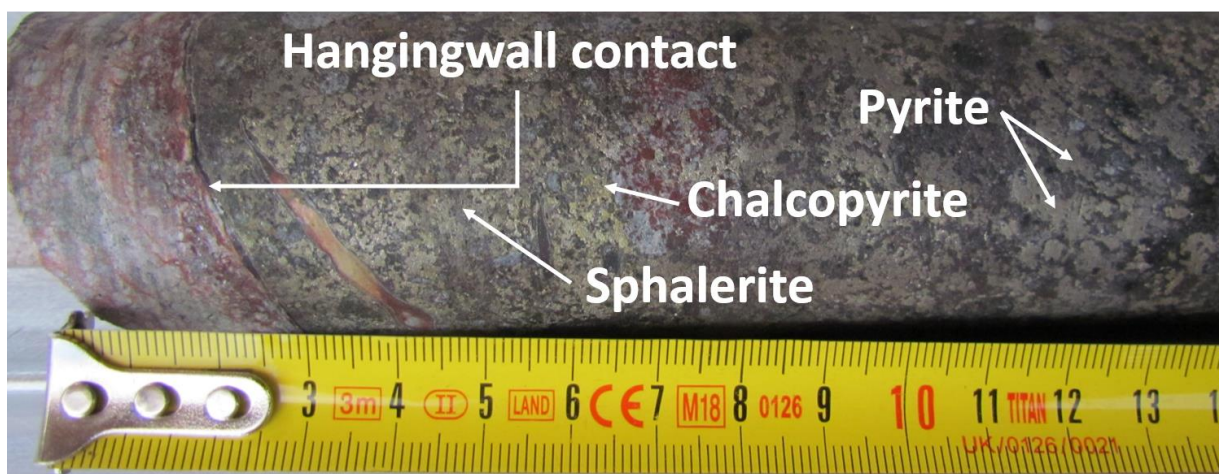


Figure 2: Massive sulphide intersection in K6 drill hole OKD032 containing copper and zinc sulphides.

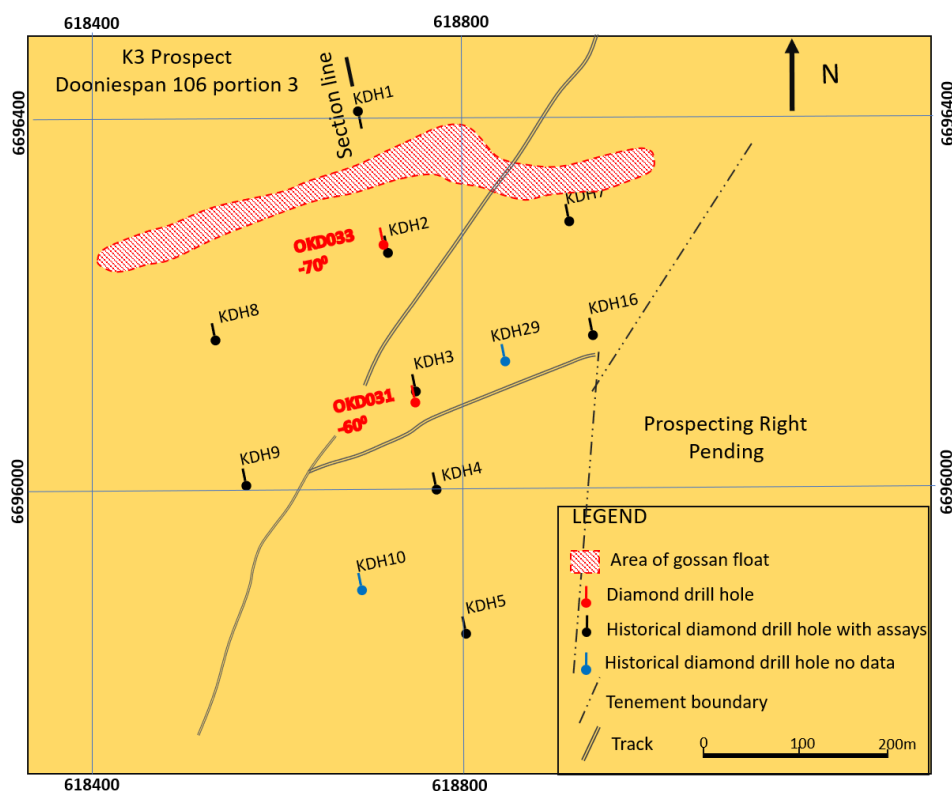


Figure 3: Map showing the historical drilling and drill holes at K3.

² Mineral Resource reported in ASX release of 15 January 2019: "Prieska Total Resource Exceeds 30Mt @ 3.7% Zn and 1.2% Cu Following Updated Open Pit Resource" available to the public on <http://www.orionminerals.com.au/investors/asx-jse-announcements/>. Competent Person Orion's exploration: Mr. Errol Smart. Competent Person: Orion's Mineral Resource: Mr. Sean Duggan. Orion confirms it is not aware of any new information or data that materially affects the information included in the original market announcement. Orion confirms that all material assumptions and technical parameters underpinning the mineral resource estimates continue to apply and have not materially changed. Orion confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

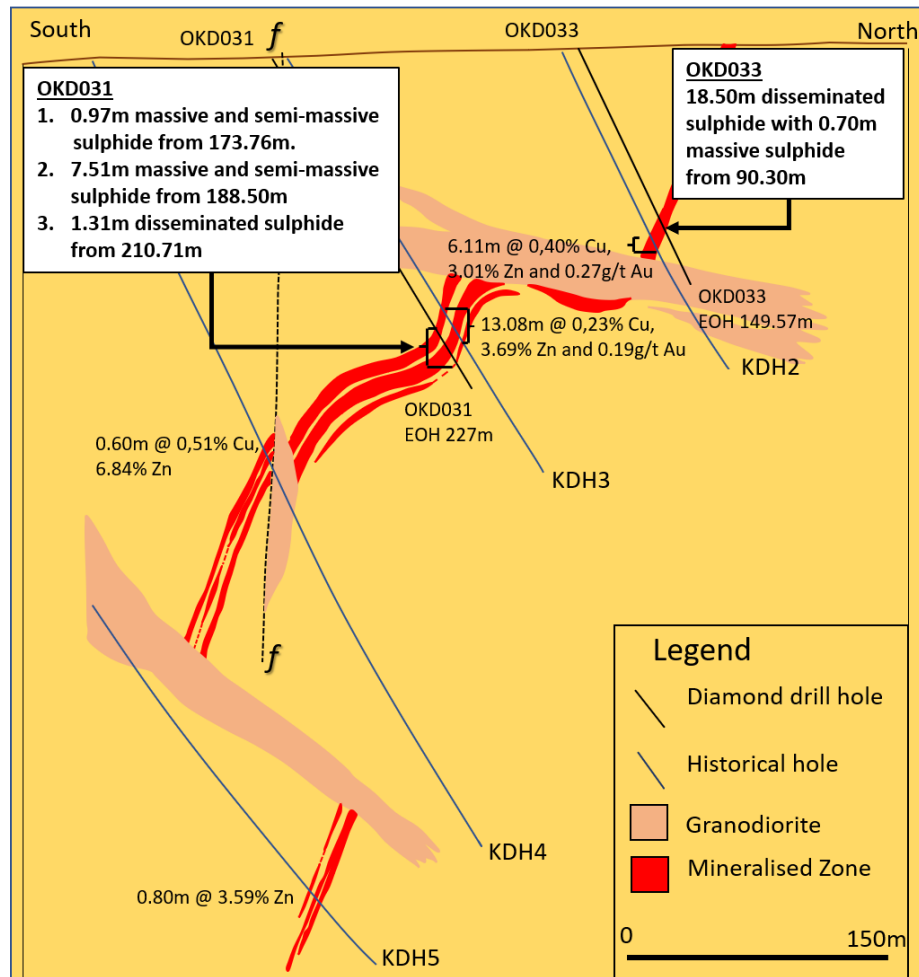


Figure 4: Cross-section showing the mineralisation intersected in drill holes OKD031 and OKD033 at the K3 Prospect.

Newmont reported its highest-grade drill intersections at Kielder at K6. While little of the Newmont historical drill information is available to Orion (Figure 4 and Appendix 1), available reports do indicate that the Newmont geologists found that the geophysical techniques available at the time, including electro-magnetic (**EM**) surveys, failed to detect the mineralisation at K6, rendering geophysical targeting for down-dip and along strike extensions virtually impossible at the time.

Orion drilled a diamond hole at K6 to obtain core for mineral classification purposes and also as a platform for the application of modern high-powered geophysical methods (Figures 5 and 6).

The Company's exploration team believes that there is significant potential for a combined approach utilising structural analysis together with high-powered, modern surface and down-hole geophysics as a viable targeting method for the mineralisation, which has demonstrated significant copper and zinc grades.

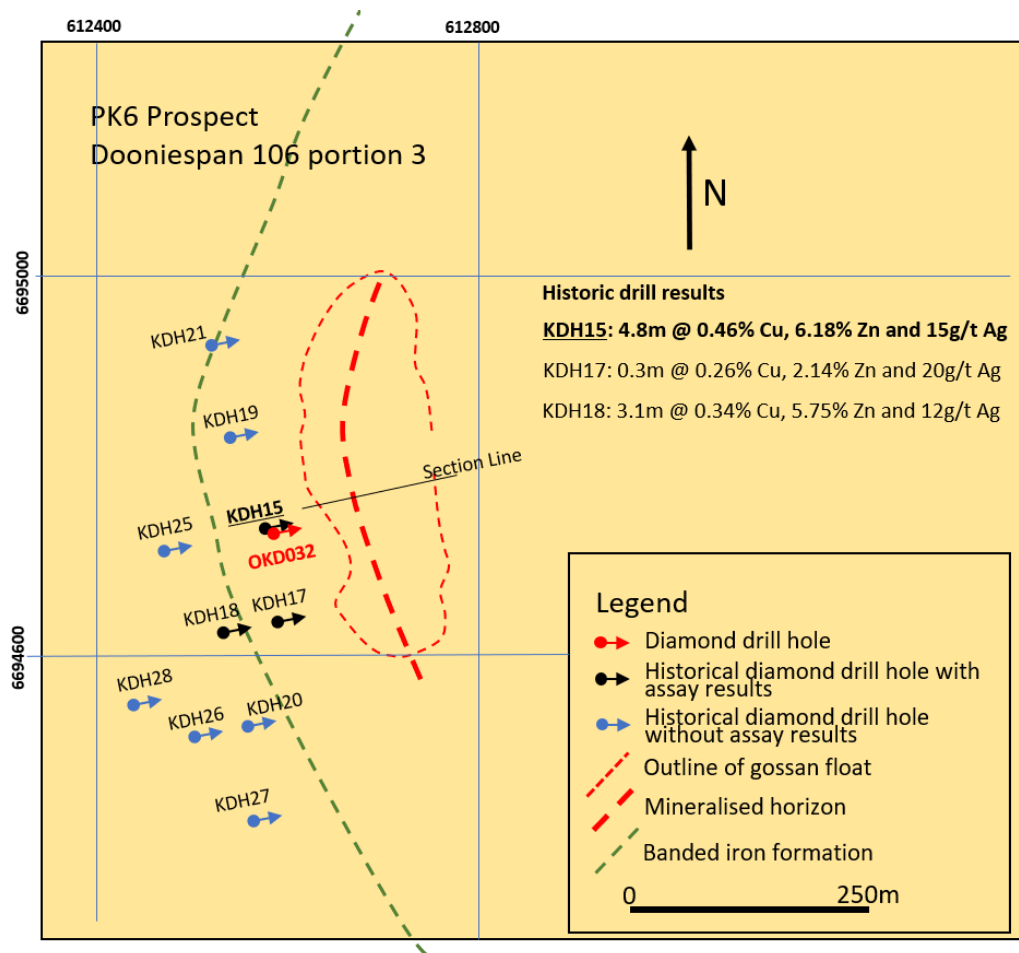


Figure 5: Map of the historical drilling at K6 also showing the planned diamond drill hole.

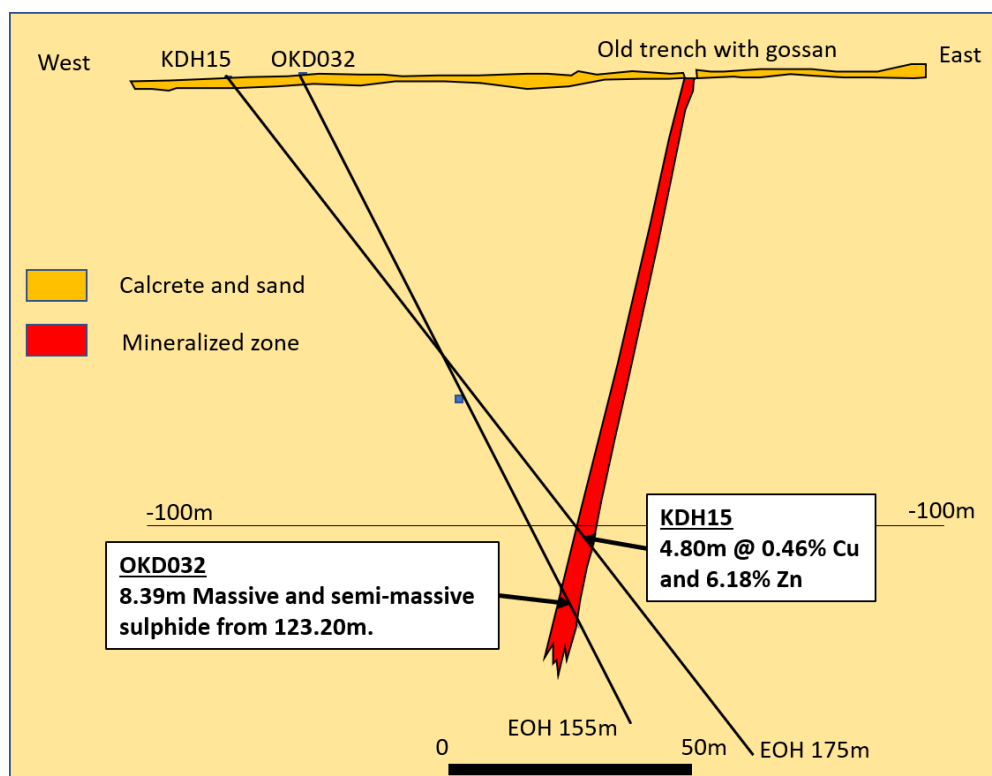


Figure 6: Cross-section through drill holes KDH15 and OKD032 showing the sulphides intersected in drill hole OKD032.

For and on behalf of the Board.



Errol Smart
Managing Director and CEO

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Competent Person Statement

The information in this report that relates to Exploration Results has been compiled under the supervision of Mr Conrad Louw van Schalkwyk, a Competent Person who is registered with the South African Council for Natural Scientific Professionals, a 'Recognised Professional Organisation (RPO)'. Mr Van Schalkwyk is a full-time employee of Orion in the role of Executive: Exploration. Mr Van Schalkwyk 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Van Schalkwyk consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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

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Appendix 1:

Table 1: Drill hole information and intersections of historical holes drilled on the K3 and K6 prospects Dooniespan 103 portion 6. A 1% Zn cut-off was used with no top cut-off. Where present, internal waste is included in the intersections.

Hole No	Prospect	UTM E	UTM N	Inclination	Bearing	Final Depth	From (m)	Width (m)	Cu wt%	Zn wt%	Au (g/t)	Ag (g/t)
KDH1	K3	618690	6696414	-55	169	66.06	Hole abandoned					
KDH2	K3	618724	6696258	-65	349	199.08	116.32	6.11	0.4	3.01	0.27	3.32
KDH3	K3	618757	6696106	-60	349	274.5	179.21	13.08	0.23	3.69	0.19	4.67
KDH4	K3	618778	6695998	-70	349	491.1	246.95	0.6	0.51	6.84	0.09	3.7
KDH5	K3	618810	6695839	-70	349	596.75	556.4	0.8	0.04	3.59	0.07	2.7
KDH6	K3	619136	6696240	-80	349	405.15	No intersection					
KDH7	K3	618918	6696293	-50	349	178.76	104.8	0.6	0.12	1.16	0.14	4.3
KDH8	K3	618540	6696166	-60	349	175.85	151.45	0.35	0.16	0.01	<0.05	1.1
KDH9	K3	618573	6696009	-60	349	288.7	148	2	0.2	0.01	0.11	0.05
KDH10	K3	618451	6695455	-50	169	138.25	No data available					
KDH11	K3	618495	6695300	-45	349	175.5	No mineralisation					
KDH15	K6	612652	6694766	-55	79	175.7	116	4.8	0.46	6.18	0.1	15.4
KDH16	K6	618945	6696163	-60	349	224.6	No mineralisation					
KDH17	K6	612668	6694671	-55	79	175.7	114.4	0.3	0.26	2.14	5.9	20.2
KDH18	K6	612608	6694656	-65	79	239.9	184.78	3.1	0.34	5.75	0.3	11.62
KDH19	K6	612612	6694857	-45	79	192.25	No data available					
KDH20	K6	612635	6694559	-55	79	274.1	No data available					
KDH21	K6	612595	6694956	-45	79		No data available					
KDH25	K6	612542	6694749	-55	79	249.8	No data available					
KDH26	K6	612576	6694548	-55	79	289	No data available					
KDH27	K6	612629	6694456	-65	79	332.8	No data available					
KDH28	K6	612504	6694583	-65	79	1	No data available					
KDH29	K3	618850	6696138	-60	349	283.35	No data available					
KDH30	K3	618699	6695888	-60	349	405.35	No data available					

Coordinate system: UTM/WGS84 Zone 34J

Appendix 2: The following tables are provided as a requirement under the JORC Code (2012) requirements for the reporting of Exploration Results for the Namaqua-Disawell Project: Hartbeestpan (Area 4) and Rok Optel Prospects.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The core from historic holes were sampled in lengths varying from 0.06m to 2.50m, with a mean of 1.17m. This is appropriate for a reconnaissance-level assessment of volcanogenic massive sulphide deposits. No additional details are supplied of the sampling techniques of the historical drilling presented in the figures and tables in this report and publicly reported here for this first time. It is assumed that the work was undertaken according to the 'industry standards' of the period. <p>Current Program</p> <p>Sample results for the current program are awaited.</p> <ul style="list-style-type: none"> NQ size cores are cut longitudinally in half and 1 metre sample lengths were taken. These were varied to honour geological / mineralisation boundaries. <p>The samples will be analysed by accredited laboratory ALS Chemex (ALS).</p>
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<p>Historic Data</p> <ul style="list-style-type: none"> The historical drilling is presented in the figures and text in this report and publicly reported here for this first time. Diamond core drilling was undertaken. No details of the drilling companies used. BQ size core were drilled. The core is not available. Drill holes were drilled at -45° to -65°. There is no record of orientated core. <p>Current Program</p> <ul style="list-style-type: none"> Diamond core drilling was undertaken. HQ and NQ size core was drilled. Drill holes was drilled at -70 and -60 degrees. Core was not orientated.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The drill cores were fitted together and recovered length was measured. Core recovery was found to be excellent (>98%) within the mineralised zone. No information is available on core recovery in the historic data.

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geo-technically 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. 	<ul style="list-style-type: none"> Core of the entire hole length was geologically logged by qualified geologists. Geological logging was qualitative and was carried out using a standard sheet with a set of standard codes to describe lithology, structure and mineralisation. The logging sheet allows for free-form description to note any unusual features. Geological logs were captured electronically. All cores were photographed before and after sampling.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No details are available with respect to sub-sampling techniques and sample preparation for the historical data. Not applicable for current program.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> No details are available with respect to laboratory, or quality control on the historic data. Not applicable for current program.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No data is available of any verification of the data or storage of the historic data. Not applicable for current program.
Location of data points	<ul style="list-style-type: none"> 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. 	<p>Historic data</p> <ul style="list-style-type: none"> The drill holes are indicated on the geological maps. The collars have been located in the field and surveyed using a handheld Garmin GPS. The data are recorded using the WGS84 datum, UTM Zone 34S. Downhole positions were surveyed using a Sperry-Sun instrument. Data was used to plot the holes on available sections. The recorded data is not available.

Criteria	JORC Code explanation	Commentary
		Current program <ul style="list-style-type: none"> • Collar positions of the holes were surveyed using a hand-held Garmin GPS. • The data are recorded using the WGS84 datum, UTM Zone 34S.
Data spacing and distribution	<ul style="list-style-type: none"> • 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. 	Historic data <ul style="list-style-type: none"> • At K3 the drill holes were drilled on sections spaced 200m apart over a strike distance off 400m. Hole spacing were at 160m on the sections and two infill holes were drilled. • At K6 holes were drilled on section lines 100m apart with hole spacing 60m to 120m on the section lines. • Data spacing is insufficient to establish a Mineral Resource. • No sample compositing was done. Current program <ul style="list-style-type: none"> • Not applicable. Drill holes were designed to verify historic results and not aimed at Resource estimations.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • At K3 the stratigraphy dips steeply to the south. Drilling was undertaken from the south to intersect at a reasonable angle to dip. • At K6 the stratigraphy dips steeply to the west. Drilling was undertaken from the west to intersect at a reasonable angle to dip.
Sample security	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • No data is available on the measures taken to ensure sample security for the historic programs. • Not applicable for current program as no assays are reported.
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> • No audits or reviews is known to have been carried out.

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 style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • PCZM, formerly Repli Trading No 27 (Pty) Ltd, holds the prospecting rights, namely NC 30/5/1/2/11840, over Dooniespan 106 Portion 3 for the prospecting of Copper, Zinc, Lead, Gold, Silver, Cobalt, Sulphur in pyrite, Barytes, Limestone, Sulphur and Molybdenum. • No historical or environmental impediments to obtaining an operating licence are known.
Exploration done by other parties	<ul style="list-style-type: none"> • Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> • On Dooniespan 206 Portion 3 exploration has been undertaken by Newmont SA during the late 1970's to early 1980's. Only part of the data is available. 29 diamond drill holes were drilled on four prospects. Geological mapping, IP, gravity and EM surveys were conducted over selected areas. Soil sampling were conducted on

Criteria	JORC Code explanation	Commentary
		a regional grid with follow-up detail surveys over selected areas. Prieska Copper Mines evaluated the Newmont data and did a high level economic appraisal.
Geology	<ul style="list-style-type: none"> • Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> • The Kielder mineralisation occurs as stratabound massive sulphide lenses within a folded sequence of granulite grade quartzofeldspathic gneiss, basic granulite and amphibolite. Three massive sulphide lenses consisting of pyrite pyrrhotite, sphalerite, chalcopyrite, and galena with gangue minerals consisting of baryte, chlorite, phlogopite, apatite, tourmaline and quartz is known to exist on the property. The mineralisation is classified as volcanogenic massive sulphide type deposits.
Drill hole Information	<ul style="list-style-type: none"> • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> ◦ 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. 	<ul style="list-style-type: none"> • Table 1 lists all the historical intersections and drilling data available at Kielder.
Data aggregation methods	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Average was done weighting the samples by sample length. Density values are not available. • A 1% Zn cut-off was applied.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • 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'). 	<ul style="list-style-type: none"> • All drill holes were inclined as to intersect the mineralised horizons as close to 90° as possible and the intersection width as close to the true width as possible. • Where down hole lengths are reported it is stated in the report.
Diagrams	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Not material for this report. Plans with drill hole collars are provided within the text. Historical results are tabulated in Table 1.

Criteria	JORC Code explanation	Commentary
	<i>and appropriate sectional views.</i>	
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> In the Competent Person's view, the historic drill results and the geophysical targets are presented in a balanced manner for the purpose of this Public Report.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Extensive geology mapping, geochemical sampling, and airborne and ground geophysical programs were undertaken by previous explorers, using the equipment and methods available at that time. These geophysical data are not all available, and mainly comprises plans without the back-up information to verify the data validity. The new geophysical exploration, using modern technology, supersedes all previous geophysics. The geology mapping remains valid and has been digitally captured. The geochemical data have been captured from the original plans and used where appropriate. In 2018, Orion undertook a regional SkyTEM™ geophysical survey over the area. The results are reported in ASX releases 16 January 2019 and 8 March 2018. Interpretation of the results is ongoing.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Sampling and assaying of samples will be the next step.