Orion Minerals

**ASX/JSE RELEASE: 16 January 2019**

# First Assays from Ayoba Satellite VMS Discovery and Preliminary Airborne EM Data, Confirm Excellent Near-Mine Potential at Prieska Zinc-Copper Project

- **9.50m of massive sulphide mineralisation grading 0.93% Zn and 0.63% Cu, including 1.50m at 4.98% Zn and 0.89% Cu, intersected at the Ayoba Prospect.**
- **The Ayoba discovery intersection was drilled 5.3km south-west of the Prieska Zinc-Copper Project and 2km west of Annex, which returned a historical best drill result of 4.28m at 0.34% Zn and 2.88% Cu.**
- **The mineralisation and associated alteration, which has been confirmed by an up-dip intercept in a subsequent deflection (wedge) hole of 7.13m grading 1.44% Zn and 0.66% Cu, are typical of Volcanogenic Massive Sulphide (VMS) deposits.**
- **The discovery validates Orion's expectation that there is excellent potential to discover a cluster of VMS deposits around the Prieska Project.**
- **A 148km$^2$ high-power SkyTEM$^{TM}$ airborne EM survey completed on the near-mine target area.**
- **Final processing and interpretation of the SkyTEM$^{TM}$ data is currently in progress, with an initial review by expert geophysical consultants revealing multiple AEM anomalies.**

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

*"We now have confirmation via analytical results of a new VMS discovery in a completely new satellite position at the Ayoba Prospect, just 5.3km from the main Prieska Resource. This is the first new VMS discovery in the Areachap Belt in over 36 years and highlights the enormous upside over and above the large, high-quality Mineral Resource we have already defined. The early success of our near-mine exploration program validates our exploration approach at Prieska, which is based on the application of modern geophysical techniques to unlock the potential of this emerging VMS camp.*

*Our focus is on bringing Prieska into production as quickly as possible, based on the parameters outlined in the positive Scoping Study released in December 2018. The Bankable Feasibility Study is already well advanced and on track to be completed in Q2 2019. While our engineering and development team is focusing on the delivery of the Project, our exploration team will pursue the multiple emerging opportunities on the exploration front – establishing a growth pipeline that can leverage off the infrastructure we build at Prieska."*

Orion Minerals Limited (**ASX/JSE: ORN**) (**Orion** or **Company**) is pleased to announce that analytical results have confirmed the discovery of a new VMS zinc-copper-bearing massive sulphide body at the Ayoba Prospect, located just 5.3km south-west of the Company's flagship Prieska Zinc-Copper Project (**Prieska Project** or **Prieska Deposit**) in the northern Cape region of South Africa.

The discovery comes as Orion's near-mine exploration program continues to ramp up, with the recent completion of a helicopter-borne magnetic and electro-magnetic survey (**AEM** or **SkyTEM™**) over the Prospecting Rights of Repli, Doonies Pan (**Repli**), Vardocube and Bartorax areas on 9 December 2018 (Figures 3 and 4).

The Ayoba discovery hole, OAXD002, was drilled 3.5km south of the Prieska Project's Hutchings Shaft and the Prieska Mineral Resource of 30Mt @ 3.7% Zn and 1.2% Cu (refer ASX release 15 January 2019)[1]. It is both the first exploration hole to be drilled as part of the Company's near-mine exploration project and the first hole to test for new mineralisation surrounding the historical Prieska Copper Mine in more than 36 years (Figures 1 and 2).

Historical exploration in the area stopped prematurely after the discovery of the Annex Deposit 1.6km to the east, with a best intersection of **4.28m at 0.34% Zn and 2.88% Cu** in hole VAX26 drilled in 1979 (refer ASX release 18 September 2018).

**Ayoba Target Drilling**

Diamond drill hole OAXD002 tested a fixed-loop electro magnetic plate (**FLEM**) (refer ASX release 28 November 2018) and intersected **9.50m of massive sulphide mineralisation at 0.93% Zn, 0.63% Cu, 0.22g/t Au and 2g/t Ag** from a down-hole depth of 654.00m (Figures 1 and 2 and Table 1). This mineralisation includes a high-grade zone of 1.5m grading 4.98% Zn, 0.89% Cu, 0.26% Au and 3g/t Ag from a down-hole depth of 654.50m (Figure 2).

Diamond drill hole OAXD002_D1, a deflection (wedge hole) drilled from OAXD002, has confirmed the massive sulphide mineralisation up-dip of OAXD002. The hole intersected **7.13m of massive sulphide mineralisation at 1.44% Zn, 0.66% Cu, 0.34g/t Au and 2g/t Ag** from a down-hole depth of 654.87m (Figure 2 and Table 1). This intersection included a high-grade interval of **0.88m at 11.20% Zn, 0.89% Cu, 0.35g/t Au and 4g/t Ag**, from a down-hole depth of 654.87m (Figure 2), which correlates with the zone of high-grade zinc intersected in OAXD002.

| Drill hole | East | North | From | To | Length | Cu | Zn | Au | Ag |
|---|---|---|---|---|---|---|---|---|---|
| | UTM 34 SOUTH | UTM 34 SOUTH | (m) | (m) | (m) | (%) | (%) | (g/t) | (g/t) |
| OAXD002 | 622130 | 6681090 | 654.00 | 663.50 | 9.50 | 0.63 | 0.93 | 0.22 | 2 |
| | | Incl. | 654.50 | 656.00 | 1.50 | 0.89 | 4.98 | 0.26 | 3 |
| OAXD002_D1 | | | 654.87 | 662.00 | 7.13 | 0.66 | 1.44 | 0.34 | 2 |
| | | Incl. | 654.87 | 655.75 | 0.88 | 0.89 | 11.20 | 0.35 | 4 |

1. All intersections quoted are based on a minimum width of 0.8m and lower cut-off grade of 1% (Zn% + (2 X Cu%)). No top-cut has been applied.
2. The quoted average grades are length and density weighted (Appendix 1).
3. All intercept lengths are down-hole lengths.

**Table 1: Intersections reported from the Ayoba discovery.**

The current structural interpretation shows that the newly-discovered mineralisation, as well as the Annex and Prieska Deposits, all occur on the same stratigraphic horizon (Figure 1). This conforms to Orion's exploration model of VMS deposits clustering around giant VMS deposits like the Prieska Deposit, to form VMS camps.

The intersections of narrow high-grade zinc mineralisation in a capsule of pyrite-dominant sulphide with low base metal, zinc-dominant content are characteristic of distal mineralisation (distant from the vent) in a VMS cell. Importantly, the very thick accumulation of massive sulphides in a distal zone indicates the presence of a high-volume VMS vent and presents the opportunity to vector in to thick zones of high-grade base metal sulphides closer to the vent.

[1] Mineral Resource reported in ASX release of 15 January 2019: "Prieska Mineral Resource Exceeds 30Mt @ 3.7%Zn and 1.2% Cu following updated open pit Resource" available to the public on www.orionminerals.com.au/investors/market-news. Competent Person Orion's exploration: Mr. Pottie Potgieter. Orion is not aware of any new information or data that materially affects the information included above. Orion confirms that the form and context in which the Competent Person's findings are presented here have not materially changed.

The nearby Annex VMS lens, located 1,600m to the east (refer ASX release 18 September 2018), yielded peak drill results of 4.28m at 0.34% Zn and 2.88% Cu (hole VAX26), with the copper-dominant mineralisation intersected typical of an intersection more proximal to a vent in that cell. Annex and Ayoba are interpreted to be two cells within a sub-cluster, close to the large Prieska VMS Deposit.

The modelled FLEM conductor at Ayoba, tested by holes OAXD002 and OAXD002_D1, has a strike length of 1.1km and extends down-dip to at least 800m below surface and the vertical depth to the top of the conductor is 500m (Figures 1 and 2).

Beyond this conductor, the key stratigraphic horizon remains untested by geophysics or drilling for a further 1km along strike to the western tenement boundary (Figure 2). Approximately 1km west-northwest of the Ayoba FLEM anomaly, the newly acquired magnetic data from the SkyTEM™ survey (see below) has identified a fold closure in the target stratigraphy.

Duplication of the target stratigraphy in the fold closure offers an excellent target for follow-up and the ground electro magnetic (**EM**) survey will be extended to cover this fold closure (Figure 3).

Additional FLEM surveys and drilling are planned to explore the lateral and depth extensions of the mineralisation.

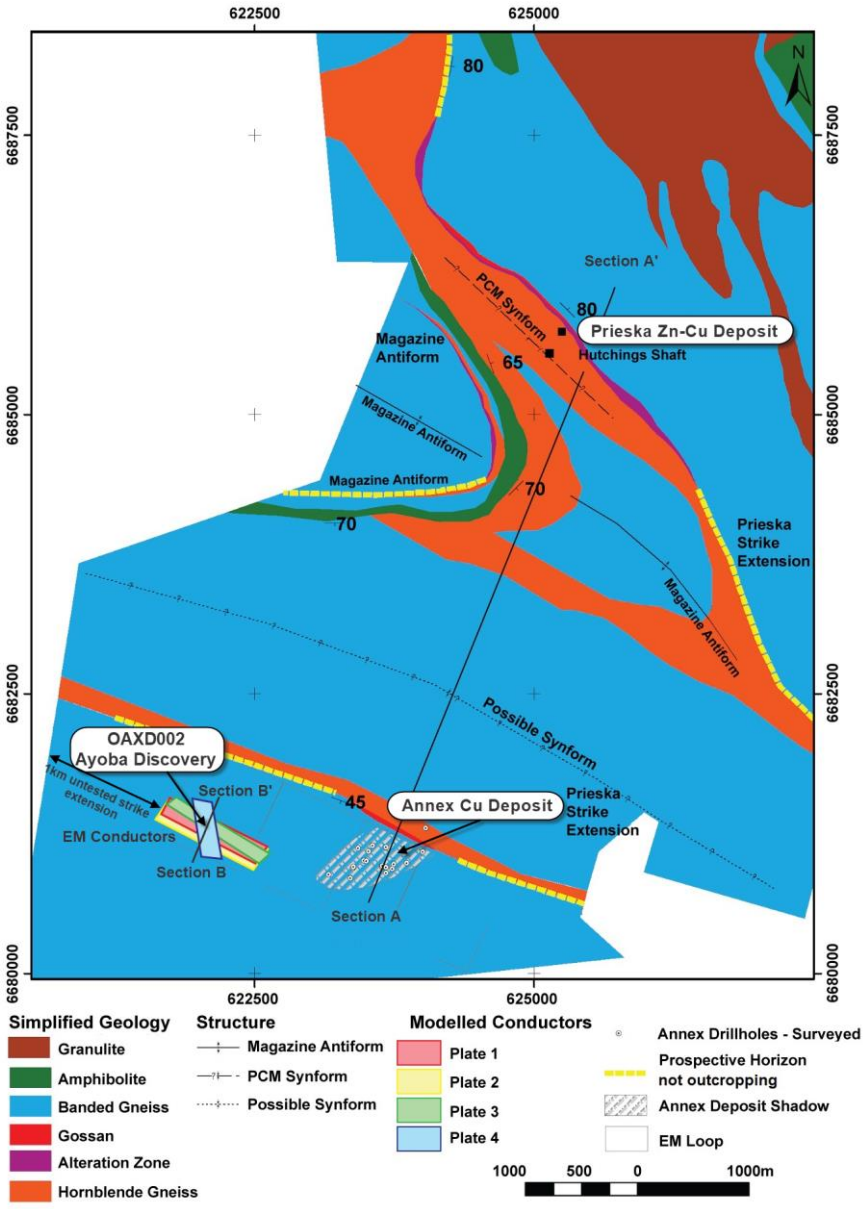


**Figure 1: Geology map of the Copperton area showing the location of the Prieska Deposit, Annex Deposit and the Ayoba Target.**

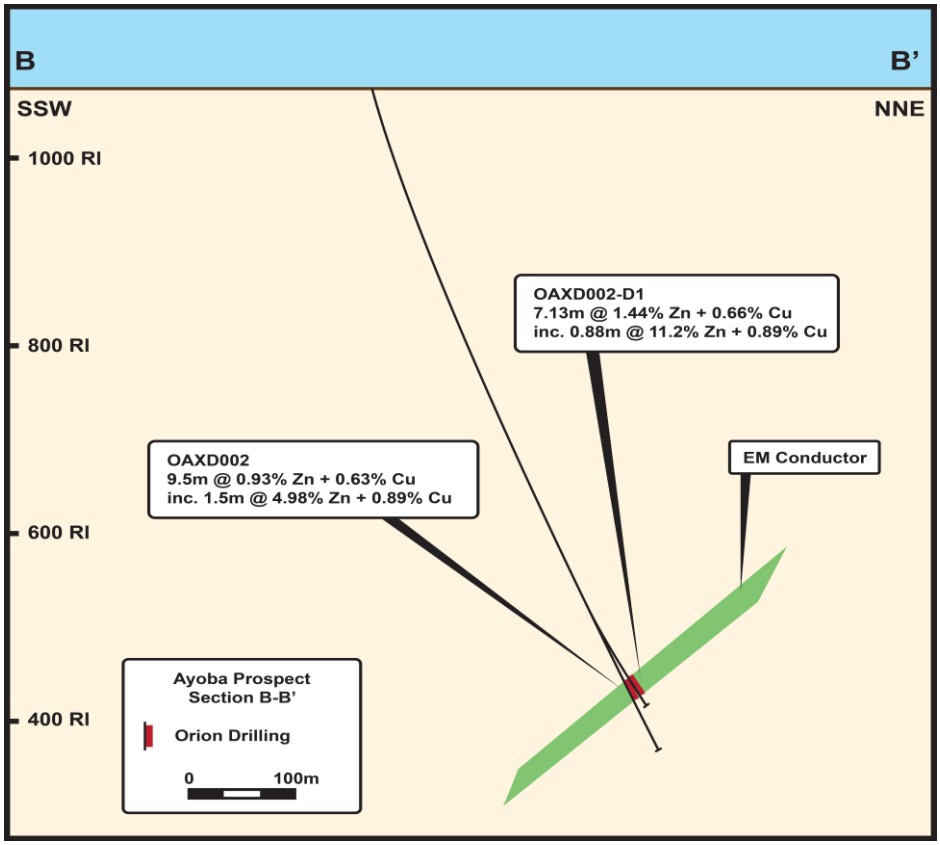


**Figure 2: Section through holes OAXD002 and OAXD002_D1 showing the mineralisation intersected.**

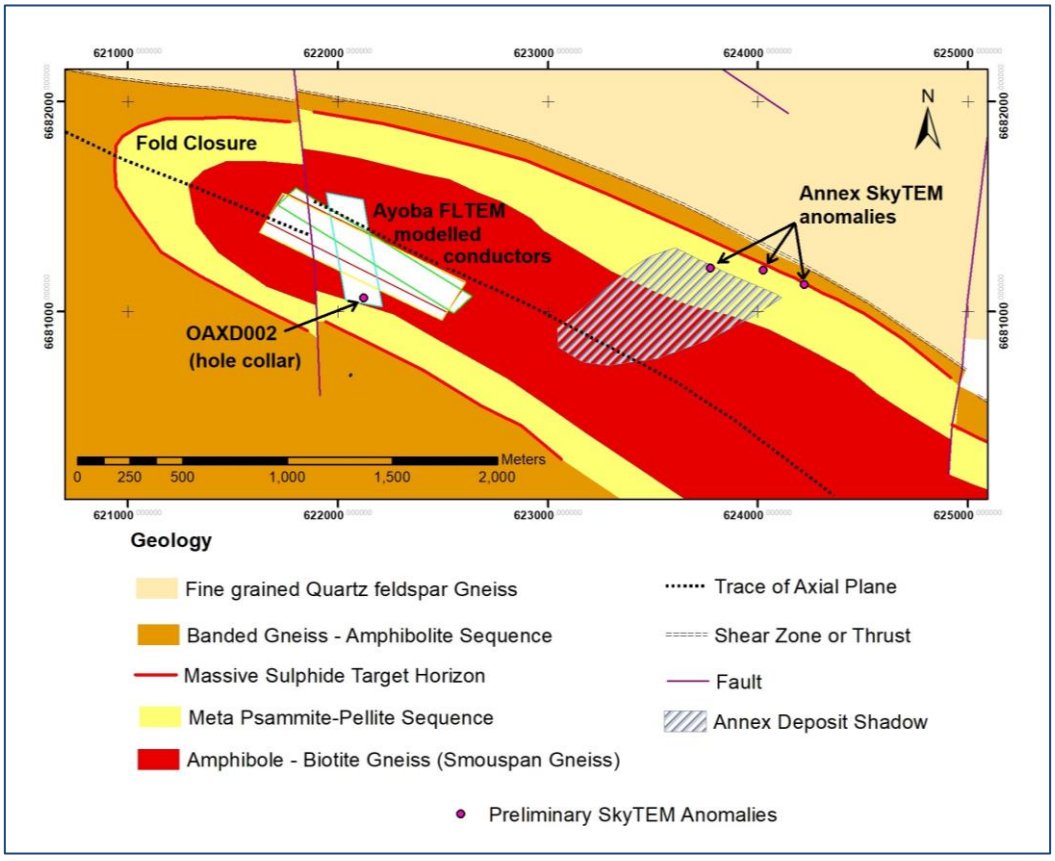


**Figure 3: Geological map interpreted from the newly acquired aeromagnetic data showing Annex, the Ayoba FLEM conductor and the fold closure target to the west-northwest.**

**SkyTEM™ Survey**

A SkyTEM™ survey (refer ASX release 3 December 2018) completed on 9 December 2018, covered an area of 146.78km$^2$ over the Repli, Repli (Doonies Pan), Vardocube and Bartotrax Prospecting permits (Figure 4). The survey was flown with the highly innovative SkyTEM™ 312 high-power technology for deep target imaging. This high-power system, with a peak moment up to 1,000,000 NIA, is optimised to provide an exceptional depth of investigation, due to the high moment mode with high current and low base frequency of 12.5 Hz.

Several AEM anomalies were identified during a preliminary review of the data by Orion's Perth-based geophysical consultants, Southern Geoscience Consultants (Figure 5). Due to the high level of noise from the Prieska Mine infrastructure, tailings dam, pipelines, Eskom sub-station, solar power plant and power lines, the data requires extensive processing to mask the cultural feature noise in order to detect the subtle geological source conductors being targeted.

The preliminary results of the AEM data show subdued AEM response over both the main Prieska Deposit, where cultural features provide a high noise effect and the Ayoba Target. Modelling of the FLEM data at Ayoba showed a conductor with a low conductance of 100S to 150S (Siemens) correlating well with the intersected mineralisation, which is pyrite-dominated, with minor pyrrhotite that is unlikely to yield strong conductance (refer ASX release 28 November 2018).

Final processing of the data is in progress and is expected by the end of January 2019. Following final processing of the data, the next step will be to prioritise the AEM anomalies by:

- Integration with existing geological data;
- Reinterpretation of the regional geology aided by the newly acquired magnetic data; and
- Detailed field mapping to confirm the geological setting taking into account the characteristics of VMS deposits, including, spatial association with the paleo-seafloor, presence of alteration and structural setting.

In addition to the AEM data, the accompanying magnetic data will significantly improve the Company's understanding of the geology and structure in this area of poor outcrop.

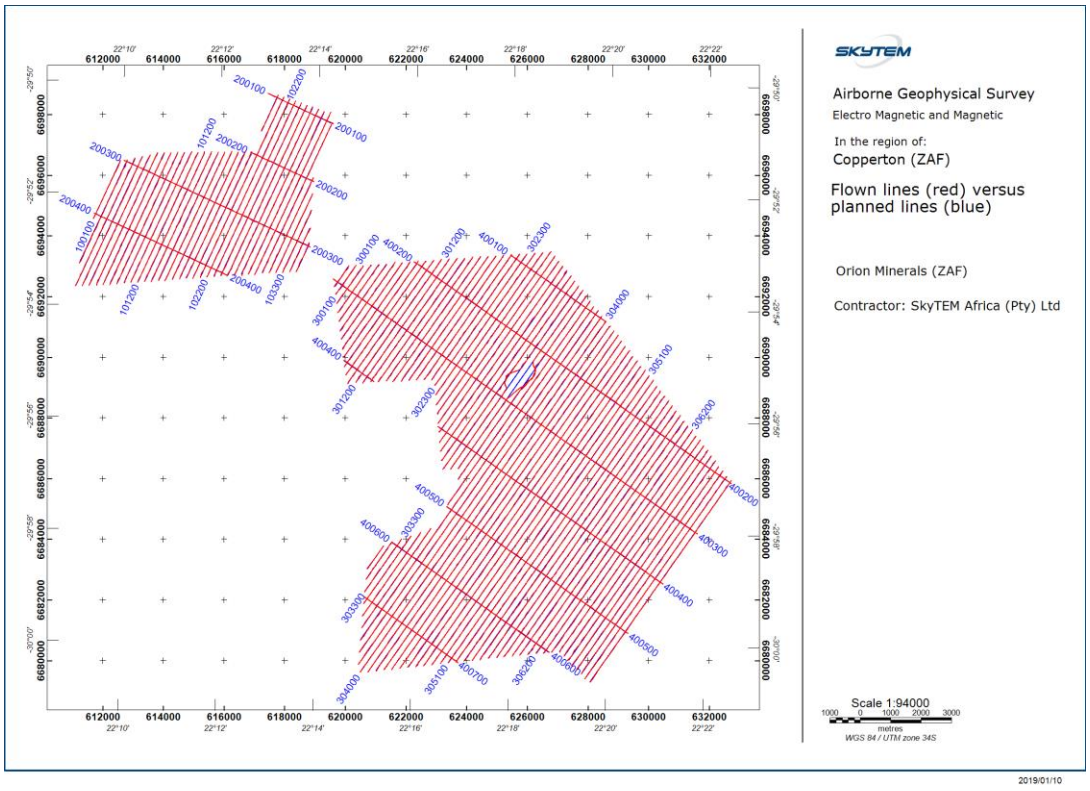


**Figure 4: Plan showing the flight lines of the SkyTEM™ survey over the Repli, Repli (Doonies Pan), Vardocube and Bartotrax Prospecting Right areas.**

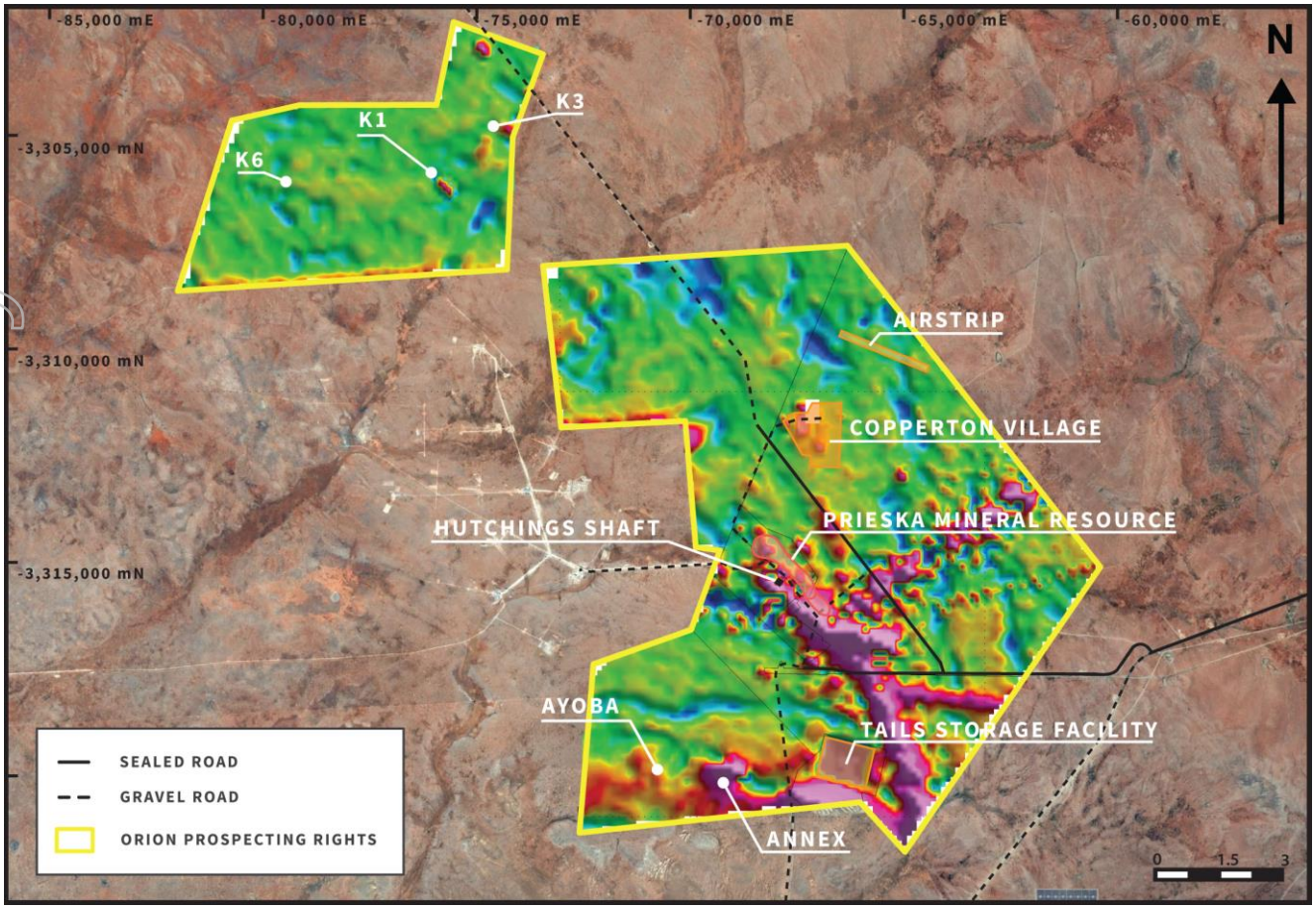


**Figure 5: Preliminary results of SkyTEM™ survey showing CH30Z response and location of known deposits at Prieska, Annex, Doonies Pan (K1, 3 and 6) and the Ayoba discovery.**

Errol Smart
**Managing Director and CEO**

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## Competent Person's Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr JE Potgieter (Pr.Sci.Nat.), a Competent Person who is a member of the South African Council for Natural Scientific Professionals, a Recognised Professional Organisation (**RPO**). Mr Potgieter is a full-time employee of Orion. Mr Potgieter has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Potgoeter consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

## Disclaimer

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

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## Appendix 1: The following tables are provided in accordance with the JORC Code (2012) requirements for the reporting of Exploration Results for the Ayoba Target.

### 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.<br>• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.<br>• Aspects of the determination of mineralisation that are Material to the Public Report.<br>• 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. | • Diamond core is cut at the core yard and half core is taken as the sample.<br>• The core is sampled at 1m intervals where possible with sample lengths adjusted to ensure samples do not cross geological boundaries or other features.<br>• Mineralised zones are drilled using core drilling.<br>• Sampling is carried out under supervision of a qualified geologist using procedures outlined below including industry standard QA/QC.<br>• Samples submitted for analysis to ALS Chemex (Pty) Ltd (**ALS**) are pulverised in its entirety at ALS and split to obtain a 0.2g sample for digestion and analysis. |
| ***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.).* | • Diamond core drilling using NQ sized core.<br>• In the near-surface weathered zone HQ core is drilled. |
| ***Drill sample recovery*** | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | • All mineralised intersections are done with core drilling.<br>• Core stick-ups reflecting the depth of the drill hole are recorded at the rig at the end of each core run.<br>• A block with the depth of the hole written on it is placed in the core box at the end of each run.<br>• At the core yard, the length of core in the core box is measured for each run. The measured length of core is subtracted from the length of the run as recorded from the stick-up measured at the rig to determine the core lost.<br>• No sampling bias due to core loss. Core recovery in all the mineralised intersections are excellent. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • Core of the entire hole length was geologically logged and recorded on standardised log sheets by qualified geologists.<br>• Qualitative logging of colour, grain size, weathering, structural fabric, lithology, alteration type and sulphide mineralogy carried out.<br>• The geological and geotechnical logging are at a level of detail to support appropriate Mineral Resource estimation.<br>• Quantitative estimate of sulphide mineralogy.<br>• Logs are recorded at the core yard and entered into digital templates at the project office. |
| ***Sub-sampling techniques and sample preparation*** | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • NQ core cut at core yard and half core taken as sample.<br>• The entire sample length was cut and sampled.<br>• Sample preparation was undertaken at ALS an ISO accredited laboratory. ALS utilises industry best practise for sample preparation for analysis, involving drying of samples, crushing to crushing to <5mm if required and then pulverising so that +85% of the sample passes 75 microns.<br>• Sample sizes are appropriate to the grain size of the material sampled. |
| ***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.*<br>• *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.*<br>• *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.* | • Samples were submitted to ALS and analysed for base metals, Au and Ag. Analysis was by the Inductively Coupled Plasma and Optical Emission Spectroscopy ("ICP-OES") methodology. An Aqua-regia digest was used.<br>• Certified Reference Material (**CRM**), blanks and field duplicates were inserted and analysed with each batch.<br>• ALS has its own internal QC protocols which include CRMs (5%), blanks (2.5%) and duplicates (2.5%).<br>• CRM samples showed high accuracy and tight precision.<br>• Blank samples indicated no contamination, within the pre-determined thresholds, during the sample preparation process. |
| ***Verification of sampling and assaying*** | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • Orion's Geology Manager is personally supervising the drilling and sampling along with a team of experienced geologists.<br>• Data entry from the primary hard copies was done on Excel spreadsheets by the geologists logging the core. The data was then imported in to to a secure Geobank database by the geologist responsible for the database. Validation of the data is done during importing into the Geobank database by running queries. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | • No adjustments have been made to the assay data. |
| ***Location of data points*** | • *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • Drill hole collar positions are laid out using a handheld GPS.<br>• Drilling collars are surveyed by a qualified surveyor using a Trimble R8 differential GPS.<br>• Down hole surveys were completed using a North-Seeking Gyro instrument.<br>• All survey data is in the WGS84 ellipsoid in the WG23 Zone with the Hartebeeshoek 1994 Datum. The coordinates are also supplied in Clarke 1880 and in UTM WGS84 Zone 34 (Southern Hemisphere). |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • Not applicable as current hole is the first drilled at the target area.<br>• No sample compositing was applied. |
| ***Orientation of data in relation to geological structure*** | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *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.* | • Drilling was oriented perpendicular to the anticipated attitude of the mineralisation.<br>• The geometry of the mineralisation can not yet be determined, and the effect of drill angle is not known. |
| ***Sample security*** | • *The measures taken to ensure sample security.* | • Chain of custody is managed throughout, and the policy managed through an appropriate SOP. Samples are stored on site in a secure locked building and then freighted directly to the laboratory. |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | • No review conducted. |

## 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.*<br>• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | • The Prospecting Right is held by Bartotrax (Pty) Ltd, which is a subsidiary of Orion. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Exploration done by other parties*** | • *Acknowledgment and appraisal of exploration by other parties.* | • Anglovaal conducted an airborne EM survey in 1969 followed up by ground magnetic and EM surveys and geological mapping.<br>• The Ayoba mineralisation was not detected by the Anglovaal work. |
| ***Geology*** | • *Deposit type, geological setting and style of mineralisation.* | • The Ayoba mineralisation is of Volcanogenic Massive Sulphide (**VMS**) type and is situated in the southernmost exposures of the north-northwest trending Kakamas Terrain, which forms part of the Mid-Proterozoic Namaqualand Metamorphic Complex.<br>• The mineralisation is hosted by the Copperton Formation of the Areachap Group which hosts several VMS deposits such as the Prieska, Areachap, Boksputs, Kantien Pan, Kielder and Annex deposits. |
| ***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:*<br>  ○ *easting and northing of the drill hole collar*<br>  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>  ○ *dip and azimuth of the hole*<br>  ○ *down hole length and interception depth*<br>  ○ *hole length.*<br>• *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.* | • Drill hole collar coordinates, elevation, inclination and azimuth, down hole length, interception depth and hole length are shown in Table 1A. |
| ***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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • Significant intersections for the Ayoba Target reported to the ASX are calculated by average of assays result > 1.0% Zn Eq and weighted by the sample width and specific gravity of each sample.<br>• In general, the significant intersections correspond strongly to geological boundaries (massive sulphides) and are clearly distinguishable from country rock / surrounding samples.<br>• No truncations have been applied.<br>• No metal equivalent values were considered.<br>• Significant intersections are shown in Table 2A. |
| ***Relationship between mineralisation widths and intercept lengths*** | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | • All intersection widths quoted are down hole widths.<br>• OAXD002 intersected the mineralisation at high angle to the attitude of the mineralisation. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***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.* | • Appropriate diagrams (plans and section) are shown in Figures 1 to 3 of the report.<br>• Drill hole intersections are shown in Table 2A. |
| ***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.* | • Drill hole results referred to in the release are listed in Table 2A.<br>• The Company has presented all available information in this report in a balanced manner and has provided appropriate context for the Exploration Results to allow a considered and balanced judgement of their significance. |
| ***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.* | • Hardcopy maps of geological mapping, airborne EM and airborne magnetics are available for the Ayoba Target. All available exploration data has been viewed by the Competent Person. |
| ***Further work*** | • *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Further drilling and geophysical surveys are planned to follow the lateral and depth extension of the mineralisation intersected at Ayoba Target. |

## Section 2-1 Summary of sampling results presented.



**Table 1A: Drill hole information for the Ayoba Target.**

| Hole ID | Easting (UTM 34 South) | Northing (UTM 34 South) | RL (amsl) | Hole length | Dip | Azimuth | Drill type | Company |
|---|---|---|---|---|---|---|---|---|
| OAXD002 | 622130 | 6681090 | 1055 | 750.75 | -73° | 26° | Diamond | Orion |

1. A deflection for an additional intersection was drilled from holes OAXD002, it is however not possible to include its coordinates and depth detail in this Table. The assay results of this deflection are included in Table 2A.
2. Drill holes were surveyed with a north-seeking Gyro Smart instrument.

**Table 2A: Drill hole intersections for the Ayoba Target.**

| Hole Number | Down hole Depth (m) | | Intersection width (m) | Cu % | Zn % | Au g/t | Ag g/t | Easting (UTM 34 South) | Northing (UTM 34 South) | RL (amsl) |
|---|---|---|---|---|---|---|---|---|---|---|
| | From | To | | | | | | | | |
| OAXD002 | 654.00 | 663.50 | 9.50 | 0.63 | 0.93 | 0.22 | 2 | 622240 | 6681290 | 9611 |
| Incl. | 654.50 | 656.00 | 1.50 | 0.89 | 4.98 | 0.26 | 3 | | | |
| OAXD002_D1 | 654.87 | 662.00 | 7.13 | 0.66 | 1.44 | 0.34 | 2 | 622242 | 6681294 | 9611 |
| Incl. | 654.87 | 655.75 | 0.88 | 0.89 | 11.20 | 0.35 | 4 | | | |

1. Cut-off used for intersections = 1% (Zn%+(2XCu%)).