

### ASX Code: ORN

#### **Issued Capital:**

Ordinary Shares: 484M

Options:

85M

#### **Directors:**

#### **Denis Waddell**

Chairman

#### **Errol Smart**

Managing Director, CEO

#### **Bill Oliver**

**Technical Director** 

#### **Alexander Haller**

Non-Executive Director

#### **Management:**

#### Martin Bouwmeester

Company Secretary & Business Development Manager

Suite 2 64 Thomas Street West Perth WA 6005 ABN 76 098 939 274

**T:** +61 8 9485 2685

E: info@oriongold.com.au

## **QUARTERLY ACTIVITIES REPORT**

FOR THE QUARTER ENDED 30 SEPTEMBER 2016

#### **HIGHLIGHTS**

- Drilling continues at the Prieska Zinc-Copper Project, South Africa:
  - Drilling continues to intersect massive sulphides at the +105 Level Exploration Target, with results including.
    - 22 m at 10.8% Zn and 1.38% Cu (OCOR016) including 7 m at 17.8% Zn and 1.41% Cu.
    - 12 m at 4.14% Cu and 1.89% Zn (OCOR017) including 3 m at 7.4% Cu and 4.34% Zn.
  - Historical Prieska Copper Mine is recorded as one of world's 30 largest VMS base metal deposits with recorded historical production of 0.43Mt of copper and 1Mt of zinc from 46.8Mt of sulphide ore milled(1). Unmined dip and strike potential is confirmed by extensive drilling and geophysics.
- Drilling also being carried out at the Kantienpan Zinc-Copper Deposit, where high-powered electromagnetic surveys have discovered a strong, previously undetected conductor (KN1) below the extent of historical drilling:
  - The response from KN1 is substantially stronger than the response from the previously drilled conductor.
  - Orion's first drill hole OKNR014 returned 7m at 6.44% Zn.
  - Drilling has commenced at the Kantienpan Zinc-Copper Deposit to test the recently discovered KN1 EM conductor.
- Geophysical surveys define compelling targets at the Marydale Gold-Copper Project:
  - Drilling set to commence at the Marydale Gold-Copper Project to test newly delineated IP anomalies identified away from the previously drilled NW Quadrant area.
  - o Significantly, two types of anomalism have been detected:
    - Near-surface high chargeability anomalies; and
    - Deeper, high chargeability bodies with stronger IP response.
  - Orion's recent drilling (including assays of 64m at 1.55g/t Au and 0.26% Cu) has confirmed a link between chargeable features caused by concentrations of disseminate sulphides and gold mineralisation.
- Exploration to date only represents initial phase of unlocking the potential of the Areachap Belt:
  - Orion has rights over a total of 1,790km<sup>2</sup> of prospective tenure in the Areachap Belt.
  - The belt is prospective for VMS, VHMS, SEDEX and mafic intrusive hosted base metal mineralisation, as well as lithium and rare earth element bearing pegmatites.



### **Exploration**

During the Quarter, Orion ramped up exploration at its highly prospective South African projects. Drilling continued at the Prieska Copper Mine Zinc-Copper (**PC**) Project and has also been carried out at the Marydale and Kantienpan Projects. Excellent results have been received during the Quarter from both drilling and geophysical surveys, with compelling new targets being delineated for drilling in coming weeks. Work has also commenced on a maiden Mineral Resource at the PC Project based on results from the ongoing drilling. The Company also completed geophysical surveys at its Fraser Range Nickel-Copper Project which delineated a number of prospective targets for follow up exploration.

#### Areachap Copper-Zinc and Gold-Projects (South Africa)

During the Quarter, the Company continued resource delineation drilling programs at the historical PC Project, commenced exploration drilling at the Kantienpan Project as well as completing a high-powered EM survey over the area, and received results from drilling and geophysical surveys at the Marydale Gold-Copper Project (Figure 1).

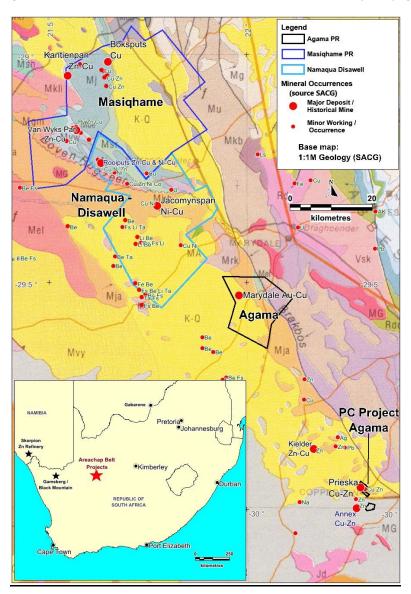


Figure 1: Regional magnetic map of the Areachap Belt showing prospecting rights currently under option to Orion and noted mineral occurrences as per published data from South African Council for Geoscience.



## Orion Gold<sub>NL</sub> Prieska Zinc-Copper Project

Drilling at the PC Project is designed to confirm, in-fill and extend the historical drilling at the Company's +105 Level Exploration Target, where it is targeting mineralisation that would be amenable to extraction via open pit (Figure 2, Table 1). Drilling is currently focused on diamond core drilling to test the supergene and primary sulphide zone immediately up-dip of historical stoping, where geotechnical conditions prevent access for RC drilling, and continues to intersect massive sulphides (Figure 3). To date 17 RC holes and 2 diamond core holes for 1,528m have been completed. Significant intersections received to date include:

- 22m at 10.8% Zn, 1.38% Cu and 0.3g/t Au from 57m incl. 7m at 17.8% Zn and 1.41% Cu (OCOR016);
- 12m at 4.14% Cu, 1.89% Zn and 0.29g/t Au from 57m incl. 3m at 7.4% Cu and 4.34% Zn (OCOR017);
- 20m at 8.58% Zn, 2.21% Cu and 0.3g/t Au from 48m incl. 17m at 9.98% Zn and 2.01% Cu (OCOR023);
- 42m at 4.41% Zn, 2.36% Cu, 0.42g/t Au + 14g/t Ag from 55m incl. 5m at 9.28% Cu from 55m;
   incl. 6m at 12.4% Zn from 75m (OCOR027).

(refer ASX release 25 July 2016)

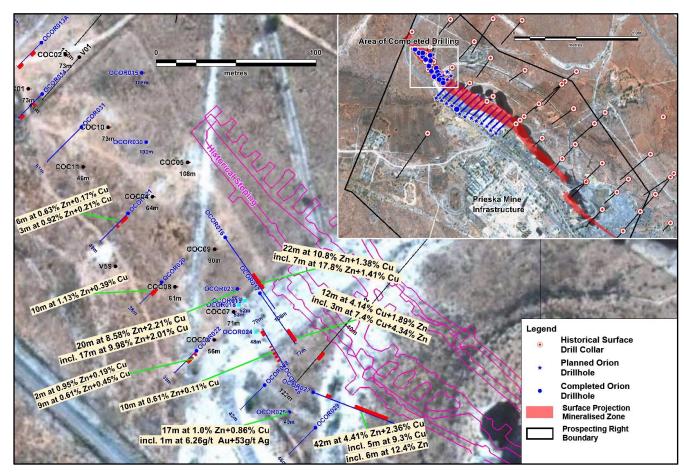


Figure 2: Plan showing the PC Project with completed, proposed and historical drilling at the +105 Level Exploration Taraet.



PC Project – Exploration Targets			
Area Tonnage Range		Cu range (%)	Zn range (%)
+105 Level	3,000,000 – 4,500,000	1.0 – 1.6	1.3 – 2.0
Deep Sulphide	7,000,000 – 11,000,000	1.2 – 1.8	3.9 – 5.9

**Table 1:** Exploration Targets at the PC Project. Detail and supporting information relating to these Exploration Targets is contained in the ASX release of 18 November 2015.

**Table 1 Notes:** The potential quantity (tonnage) and grade of the Exploration Target is conceptual in nature and the Exploration Target should be assessed in conjunction with the information included in the ASX release of 18 November 2015. There has been insufficient exploration to estimate a Mineral Resource and, while it is uncertain if further exploration will result in the estimation of a Mineral Resource, the aim of the current drilling program is to test the Exploration Target and determine if a Mineral Resource can be estimated.

Assays received during the Quarter were from holes drilled to test the continuity of the high-grade supergene sulphide mineralisation intersected In OCOR016 and OCOR017, both along strike (OCOR027; Figure 4) and up-dip (OCOR023; Figure 5). A secondary aim of drilling was to confirm that the mineralised horizon and hangingwall is not impacted or destabilised by historical underground stoping in this area or by the sinkholes that resulted from subsidence into historical stoping (Figure 4).

By persisting with drilling through the leached horizon, the current drill program has intersected the supergene zone where the primary sulphides have been enriched by the reprecipitation of metals leached from the up-dip area. Below this enriched supergene zone the ore transitions into primary sulphide mineralisation, as shown in Figure 6 below.

An unexpected positive feature of the mineralisation is the occurrence of what appears to be supergene-enriched zinc sulphides, most likely comprising the mineral Wurtzite. Zinc is less commonly found to be supergene-enriched in the sulphide zone, while copper enrichment is common.

This exceptionally high-grade sulphide ore is likely to be amenable to open pit mining, while the presence of an overlying, geotechnically weak, "leached zone" presented a geotechnical challenge to historic underground mining. Provisional mining assessments by Sound Mining Consultants on behalf of Orion has established a potential mining method that will geotechnically stabilise this ground and render it available for systematic open pit mining at minimal additional cost.

Most importantly, the sulphide composition of the ore suggests the likelihood of higher metallurgical recoveries than that of oxide ore, with the potential to produce high quality differentially recovered copper and zinc concentrates.

Modelling of the mineralisation defined by drilling is now underway with the objective of estimating a maiden JORC Code (2012) compliant Mineral Resource estimate for this target in coming months.

Drilling continues to return significant gold-silver mineralisation associated with the zinc-copper mineralisation. It should be noted that the previous operator of the historical Prieska Copper Mine did not routinely assay for precious metals, however the results received to date indicate the potential for significant precious metal credits.





Figure 3: Massive sulphides in OCOD035 (157.8m down-hole, approximately 80m below surface) at the PC Project.

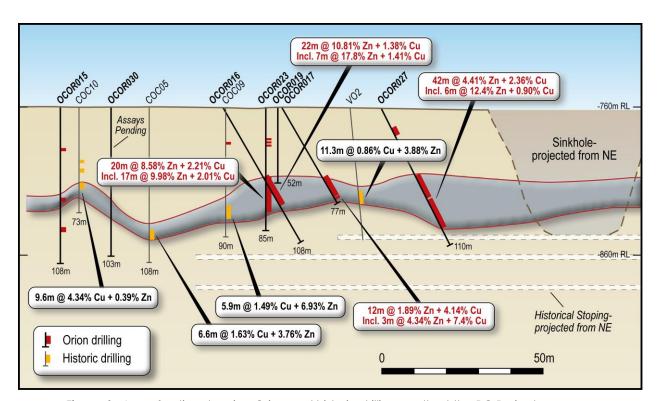
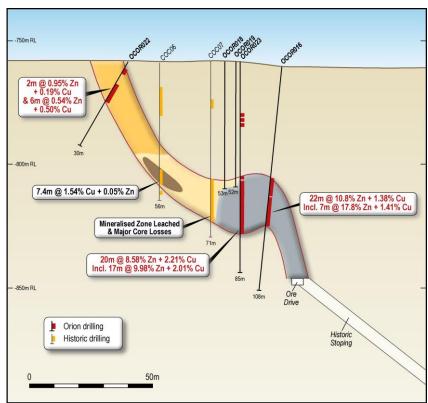


Figure 4: Long Section showing Orion and historic drilling results at the PC Project.



**Figure 5**: Section showing drilling at the PC Project with results from OCOR022 and 23.

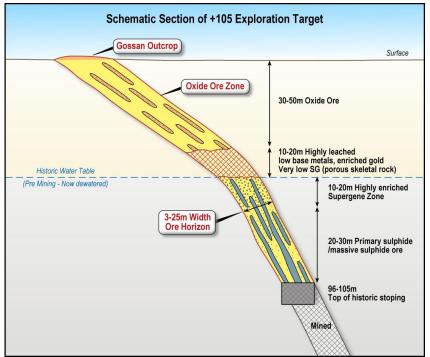


Figure 6: Schematic section showing mineralisation styles at the +105 Level Exploration Target.



#### Marydale Gold-Copper Project

During the Quarter the Company received results from its maiden drilling program at Marydale which returned thick intercepts in OWCD032 (64m at 1.55g/t Au and 0.26% Cu including several higher grade zones) and OWCD033 (25m at 1.81g/t Au and 0.31% Cu including several higher grade zones). All results are contained in the ASX release of 5 October 2016.

The broad intersections returned in the Orion drilling are consistent with historical drilling results, which were detailed and discussed in the ASX releases of 18 November 2015 and 25 July 2016. Significantly, the Orion drilling has also generated structural data and lithological data which identified the following features:

- Mineralisation is hosted in a complex folded and sheared package with general moderate south-westerly dip;
- Two distinct orientations are observed at prospect level the regional NNW-SSE fabric and a cross-cutting NE-SW orientation;
- Mineralisation is associated with sulphide-rich intervals amenable to detection by electrical geophysical survey methods; and
- Mineralisation is remobilised or to some extent influenced/localised by shearing.

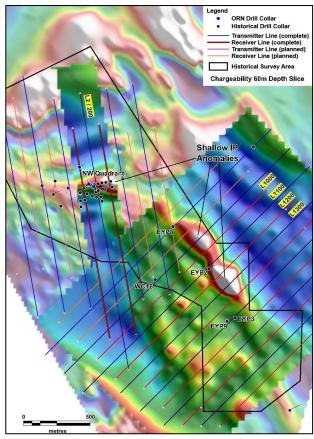
Based on these findings the Company undertook a trial high-powered induced polarisation (IP) survey across the broader project area, where previous exploration defined numerous geochemical and geophysical anomalies (Figure 7). Following the success of the trial survey the survey has been expanded to completely cover the prospective horizon for mineralisation at the Marydale Prospect with high powered surveying and verify historical IP surveys.

The IP survey is being undertaken using higher powered and more modern instruments than the previous survey carried out by Anglo American Prospecting Services (AAPS) in 1973, with the objective of looking deeper and providing more defined targets. The complex sheared and folded stratigraphy may result in higher grade or larger lenses of mineralisation being preserved at depth as blind-to-surface ore bodies.

The IP survey has successfully delineated several strong, shallow chargeability features (Figure 7) which are interpreted to be related to the gold-copper mineralisation intersected in recent drilling.

In addition, the IP survey has delineated highly prospective, deeper anomalies in both the chargeability and resistivity data which have not previously been identified in surveying or tested by drilling.

Given the compelling nature of this target, the Company has decided to mobilise a diamond core rig to test the anomaly. The aim is to obtain oriented core through the anomaly to enable the geological setting to be properly characterised, and to determine the geological relationship to the broad zones of near surface gold-copper mineralisation intersected in historical drilling and further tested by Orion earlier this year (refer ASX releases 18 November 2015, 25 July 2016, and 5 October 2016).



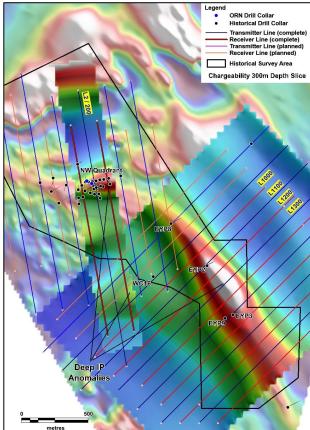


Figure 7: Depth slices of IP response (chargeability)

Top: 60m below surface Bottom: 300m below surface.

Note features detected 300m below surface away from NW Quadrant.



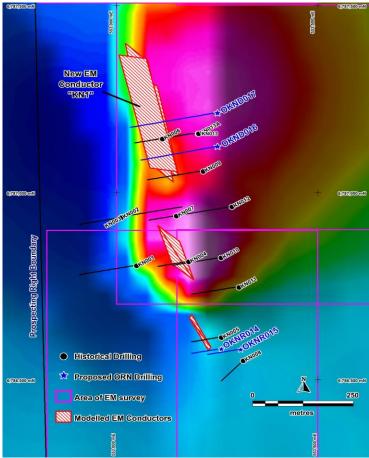
#### Kantienpan Deposit (Masiqhame)

During the Quarter the Company exercised the Option it holds with Masiqhame Trading 855 Pty Ltd (**Masiqhame**), for Orion to acquire an initial 50% interest in Masiqhame. Refer to the Corporate section for further detail. This followed positive initial results from its maiden drilling program at the Kantienpan Deposit, including an intersection of 7m at 6.44% Zn and 0.43% Cu from 60m including 3m at 7.94% Zn from 63m in drill hole OKNR014.

OKNR014 was drilled to test the southern extension of mineralisation from historical drill hole KN005, and is located 50m south of that hole (Figure 8). KN005 is one of 14 historical diamond core holes for 3,199m previously drilled by Iscor at the Kantienpan Deposit (Figure 8, ASX release 31 May 2016). Drilling at the Kantienpan Deposit was curtailed soon after discovery, due to a corporate decision by Iscor to stop all exploration and focus on iron ore production. Significant intersections from the historic Iscor drilling include the following results:

- 8.84m at 6.32% In and 1.02% Cu (KN005);
- 6.15m at 4.74% Zn and 0.49% Cu (KN010);
- 7m at 3.15% In and 0.57% Cu (KN007);
- 13m at 3.96% Zn and 0.36% Cu (KN003); and
- 2.6m at 6.59% Zn and 0.35% Cu (KN011).

(refer ASX release 31 May 2016)



**Figure 8**: Plan showing response from Channel 30 from the recently completed HP\_FLEM survey along with modelled conductors (including KN1) from survey data and historical and proposed drilling at Kantienpan.

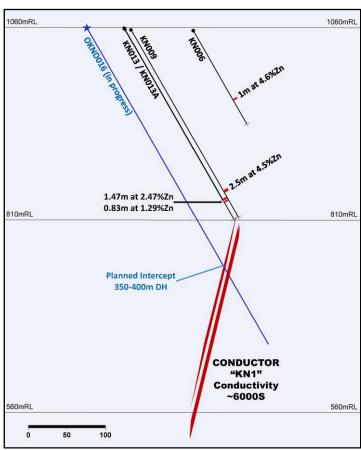
# Sorion Gold<sub>NL</sub>

Orion has commenced a drilling program designed to test strike and depth extensions to mineralisation at the Kantienpan Deposit, which is open to the south and north as well as down dip. Drilling at Kantienpan was temporarily suspended while high power fixed loop ground electromagnetic surveys (**HP FLEM**) were completed.

The HP\_FLEM survey defined a strong, late channel conductor in the northern portion of the deposit (Figure 8) below the conductor imaged in historical EM surveying. The KN1 conductor is a strong, late channel conductor located down-dip of an historical shallow conductor detected in historical EM surveying (see Figure 9) and tested by historical holes KN006 (1m at 4.59% Zn and 0.24% Cu) and KN013A (1.47m at 2.57% Zn) (refer ASX release 31 May 2016).

The KN1 conductor is modelled to be substantially larger, extending the highly anomalous strike for at least 250m northward, and is highly conductive (~6000-8000S), being ~3 times the conductance of the shallower, drilled, conductor, yet it was not detected in the previous survey due to limitations with the low-powered system used at the time and the use of a much higher base frequency.

The KN1 conductor has three times higher conductance than any other conductor detected in the EM survey. A positive correlation between higher electromagnetic (**EM**) conductance, attributed to elevated pyrrhotite content associated with the sphalerite (Zn values) in historical drilling, provides encouragement for the potential of the KN1 conductor to be associated with high pyrrhotite-sphalerite mineralisation.

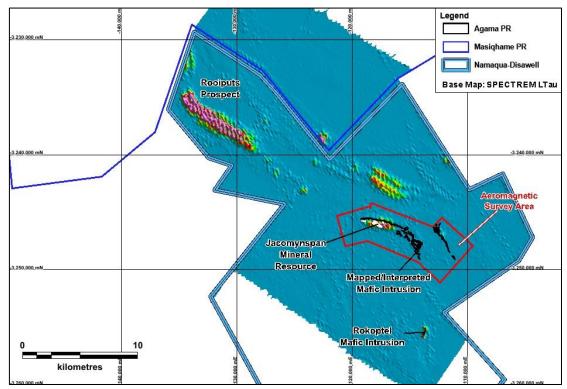


**Figure 9:** Orthogonal view showing the drill hole currently in progress to test the new KN1 conductor defined in the recent Orion survey at Kantienpan along with historical drill holes and significant intersections.



#### Jacomynspan Nickel-Copper-PGE Project (Namaqua- Disawell)

During the Quarter the Company continued an extensive compilation and review process of data relating to the Namaqua – Disawell Tenure (Figure 1). A substantial amount of predigital data exists from exploration pre 2000 by (amongst others) Anglo American/AAPS, Phelps Dodge, Anglovaal and Iscor (now Kumba). Data being reviewed is predominantly from areas within the project away from the Jacomynspan Deposit (e.g. the Rooiputs and Rokoptel Prospects; Figure 10) and includes geophysical surveys such as IP and gravity as well as shallow historical drilling.



**Figure 10:** Late time constant (Tau) data from the Namaqua – Disawell SPECTREM airborne EM survey showing the high resolution magnetic survey area including the Jacomynspan Mineral Resource and hartzburgite hosted Nickel-Copper targets.

#### <u>Background on the Jacomynspan Nickel-Copper-PGE Project (Namaqua-Disawell)</u>

The Jacomynspan Project area contains numerous known occurrences of VHMS style zinc-copper deposits and is highly prospective for magmatic hosted nickel-copper mineralisation similar to that seen in Proterozoic mobile belts worldwide including the Thompsons Belt in Canada and the Albany-Fraser Belt in Western Australia. A number of mafic-ultramafic intrusions have been recognised within the project area, with most historical work focusing on the Jacomynspan Deposit (Figure 1).

The Jacomynspan Deposit was first identified by AAPS with drilling carried out along a 4km strike length. In one portion of the deposit AAPS drilled to a depth of 900m. Disseminated nickel sulphide mineralisation was intersected with widths between 30 – 70m.



Orion believes a substantial exploration opportunity exists within the project area to search for higher grade, massive and semi-massive accumulations of nickel-bearing sulphides, analogous to the Nova-Bollinger deposit in the Fraser Range Province of Western Australia.

Orion has identified many similarities to the Fraser Range-style of mineralisation from historical data available for the project area and the surrounding Areachap belt. This includes:

- mafic-ultramafic intrusives of late Proterozoic age;
- intruded in intercratonic/craton margin tectonic setting;
- hosted in high metamorphic grade rocks (garnet, amphibolite gneisses) within a mobile belt;
- the presence of evolving magmas yielding multi-phase intrusives, including mafic to ultramafic rocks. Importantly, lithologies observed at the Jacomynspan Project include anorthosites, hartzburgites and various metamorphic equivalents;
- the identification of nickel and copper-bearing sulphides with minor cobalt and PGE's (higher concentrations than in Fraser Range) at numerous localities;
- low-grade, disseminated nickel-copper sulphide bodies are re-intruded by cumulate textured mafics, with net textured and massive sulphides present; and
- shallow, recent cover sequences (calcrete and soil) obscures much of the surface expression on the belt.

Orion will be utilising its experience and expertise developed in exploring for magmatic nickel-copper deposit in the Fraser Range Province of Western Australia to reinterpret the extensive database for the Jacomynspan Project area and rank the exploration targets. These will then be followed up with modern high-powered geophysical tools and methods which have not previously been applied in the Areachap belt before drill testing.

#### Background on Prieska Copper – a world-class VMS development asset(1)

Prieska Copper Mines Limited, then a subsidiary of Anglovaal Limited, operated the mine between 1971 and 1991, producing over 430,000 tonnes of copper and more than 1 million tonnes of zinc from an underground operation based on an initial drilled reserve<sup>(2)</sup> of 47Mt grading 1.74% copper, 3.87% zinc, 8g/t silver, 0.4g/t gold and 30% pyrite. Mining ceased in 1989, with milling ceasing in 1991.

The project is located 270km south-west of Kimberley (the regional capital) in the Northern Cape province. Importantly, the project has access to significant local and regional infrastructure, with mine infrastructure including a regional power grid feed, bitumen access roads, access to a bulk, treated water supply and a 1,900m landing strip. Several large commercial wind and solar generation projects are operational in the surrounding area and the mine is located just 48km from a railway siding at Groveput.

The underground development and regional infrastructure and services in place at the mine are estimated by Orion to have significant replacement value, which will assist in the feasibility and economics of any potential redevelopment of the mine.

(1) Source of information in this section: Mine records. (2) Note – this is not a JORC Compliant figure, source Prieska Copper Mines Ltd Annual Report 1970.

# **S**Orion Gold<sub>NL</sub>

Orion Gold

As part of its due diligence process, Orion has digitally captured, validated and modelled all available project drilling data, from hard-copy sources. This work has enabled the Company to calculate Exploration Targets for near surface mineralisation comprising both oxide, supergene and primary sulphide material to a depth of 100m which is potentially accessible via an initial open pit (+105 level Exploration Target) and an Exploration Target for the deeper sulphide mineralisation identified by historic drilling (Deep Sulphide Exploration Target) (refer Figure 11, Table 1 and ASX release 18 November 2015). The Exploration Target is based on 182 drill intersections, which can be relied on for width and depth of mineralisation, while 88 boreholes provide information on grade of mineralisation (Figure 11 and Table 2).

While the data has shortcomings due to loss of some historic records, which prevent estimation of JORC 2012 compliant resources, the Company is encouraged by the assessment by its Competent Person that limited infill and confirmatory drilling may be sufficient to establish JORC 2012 compliant resource estimates. The historic data and mine records also provide important information for preliminary mine design and selection of mining methods to advance scoping studies.

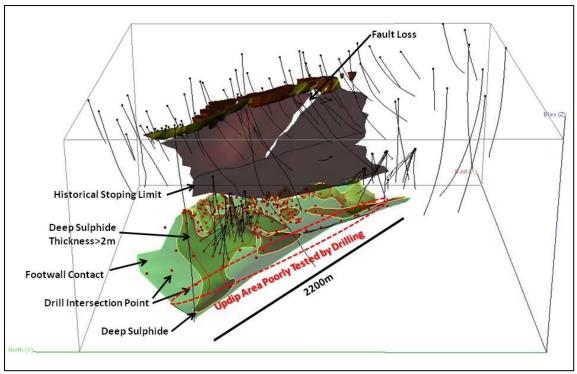


Figure 11: Three Dimensional view of drilling and 3D mineralisation model for the PC Project.



Area	Item	Arithmetic Mean Value	Weighted Mean	Max Value	Count
	Cu%	1.59	1.49	4.29	42
NIM Trough	Zn%	4.19	4.12	6.52	42
NW Trough	SG	3.54	3.65	N/A	17
	Thickness	7.71	N/A	N/A	75
	Cu%	1.52	1.27	3.13	4
NW Hinge	Zn%	3.73	3.81	4.27	4
INVV Hillige	SG	3.41	3.41	N/A	4
	Thickness	5.76	N/A	N/A	39
	Cu%	1.34	1.38	2.76	28
SE Trough	Zn%	5.58	5.54	7.68	28
SE Hough	SG	3.64	3.62	N/A	24
	Thickness	4.97	N/A	N/A	36
	Cu%	1.63	1.75	2.69	12
SE Hings	Zn%	6.94	7.04	12.62	12
SE Hinge	SG	3.77	3.77	N/A	2
	Thickness	10.12	N/A	N/A	14
Central Trough Area	Cu%	0.40	0.40	0.41	2
	Zn%	5.91	5.39	8.29	2
	SG	3.18	3.19	N/A	2
	Thickness	5.77	N/A	N/A	18
Whole Area	Cu%	1.48	1.50	4.29	88
	Zn%	5.03	4.90	12.62	88
WIIDIE AIEA	SG	3.57	3.62	N/A	49
No.	True Thickness	6.74	N/A	N/A	182

Notes

Table 2: Summary of drill hole intersections available for the PC Project

#### Background on the Option Agreement and Due Diligence Investigations

In November 2015 the Company announced the signing of a binding term sheet giving Orion the right to acquire the unlisted company, Agama Exploration & Mining (Pty) Ltd (**Agama**), a South African registered company which through its subsidiary companies, ultimately holds an effective 73.33% interest in the PC Project and the Marydale gold project (**Option**). Information on these projects is detailed in the Company's ASX release of 18 November 2015 and is summarised in the "Background" section above.

The projects have a well established Broad Based Black Economic Empowerment (**BBBEE**) ownership structure (26.66% ownership) in place with strong local partners.

On 13 May 2016, the Company announced that the terms of the Option have been amended. Importantly, the Option term has been extended to 31 December 2016 and can be terminated at any time at Orion's election. This enables Orion to continue to conduct comprehensive due diligence, including geophysics, in-fill and confirmatory drilling and feasibility studies in advance of a decision to exercise the Option and to advance discussions with prospective investors interested in financing and/or joint venture participation in the acquisition.

The Option represents a low-cost, counter-cyclical opportunity for Orion to expand its existing resource portfolio beyond greenfields exploration projects and create significant value for its shareholders. Importantly, the PC Project has a cash backed environmental fund of ZAR17.3 million (~A\$1.5 million) which has not been needed since the mine closed in 1991. Further, the acquisition target is well financed at project level to advance its main project, with ZAR 30 million (~A\$2.6 million) facility available from a South African Investment Fund.

Cu%, Zn% and SG "arithmetic mean values" are arithmetic mean of stretch values.

<sup>&</sup>quot;Weighted means" are individual intersections (stretch values) weighted by true thickness.

Cu% and Zn% "max values" are maximum of stretch values.

Thickness mean values are arithmetic mean of true thickness values.

Sorion Gold

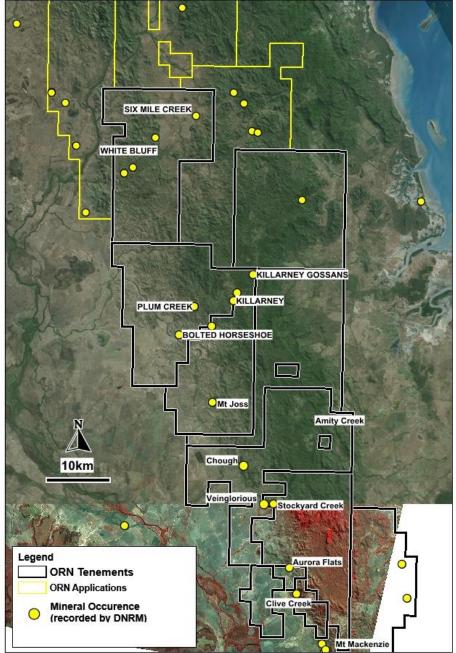
Orion Gold<sub>NL</sub> The Option period allows Orion to conduct comprehensive due diligence, including geophysics, in-fill and confirmatory drilling and feasibility studies in advance of a decision to exercise the Option. Since signing of the Option the Company has progressed extensive due diligence investigations including:

- Legal title opinion by Japie Van Zyl Attorneys in South Africa has confirmed good standing of the Prospecting Rights of the PC Project and the Marydale project, freehold title to certain properties at PC and servitude rights for usage of all land required to operate PC if a Mining Right is granted.
- Paul Matthews, a geologist and Competent Person under the JORC Code, has undertaken extensive review of historical geological records, capturing and recording all information to evaluate the geological potential and has signed off on the +105 Level and Deep Sulphide Exploration Targets including compilation of information required under the JORC Code (refer ASX release 18 November 2015).
- A comprehensive review of environmental conditions, mining infrastructure, engineering design and costing for potential future mine development to +-30% accuracy levels (normally applied at the Scoping Study level) has been carried out by a team of over 10 engineers and scientists under the supervision of the METS Group and Shaft Sinkers, who are industry leaders in planning and executing primary mine development.
- METS made use of specialist sub-contractor groups to evaluate open pit mining, underground mining, mineral processing and environmental conditions.
- Drilling has commenced to firm up on the expectations of the Exploration Target and advance toward JORC compliant resources.

#### Connors Arc Epithermal Gold Project (Queensland)

During the Quarter, exploration activities at the Connors Arc Epithermal Gold Project (Queensland) were limited due to the intense activity in South Africa. Field work comprised further geological reconnaissance and preparation for drilling planned at the 6 Mile Creek and Killarney Prospects and to follow up results from the Chough Prospect (Figure 12).





**Figure 12:** Plan showing location of Chough, Aurora Flats and Veinglorious Prospects. Regional prospects and recorded mineral occurrences also shown.

#### **Background**

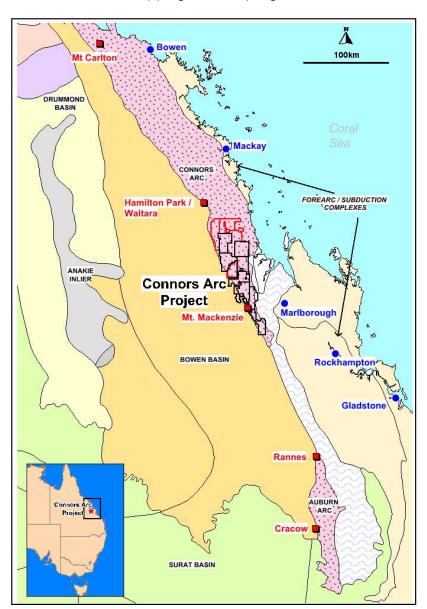
The New England Fold Belt in Queensland hosts numerous +1Moz Devonian through to Triassic aged epithermal and intrusion-related gold deposits. Many of these are Permian – Carboniferous aged systems and are intimately associated with intrusive lithologies of similar age.

Orion's Connors Arc project area is located within a geological and structural setting very similar to other significant epithermal gold systems in Queensland (Figure 13). Notable features include close proximity to the eastern margin of the Bowen Basin and prospective, Permo-Carboniferous aged volcanic and intrusive lithologies. In addition:



- Key prospects are spatially associated with a large, magmatic hydrothermal system (Mt Mackenzie);
- This hydrothermal system is located within a geological and structural setting which is very similar to other significant epithermal gold systems in Queensland such as Cracow and Mt Carlton and is of the same broad age (Permo-Carboniferous) as many other intrusion-related gold systems in Queensland; and
- Geological and geochemical characteristics in historical drilling which suggests that some prospects may be shallowly eroded, implying potential for higher gold grades at depth and existence of blind to surface orebodies.

In addition, several targets have been identified based on historical data review and using coincident ASTER alteration, geological and geophysical features which represent grass-roots additions to the project's target portfolio, which complement more mature targets such as Aurora Flats. Field mapping and sampling has also identified new targets.



**Figure 13:** Location of tenements in the Connors Arc Project.



## Orion Gold<sub>NL</sub> Fraser Range - Nickel-Copper Projects (Western Australia)

During the Quarter the Company received results from geophysical surveys over the southern portion of its Fraser Range Project area. The tenements forming the focus of the current exploration program are at the southern end of the Company's Fraser Range Project, on the eastern margin of the central gravity anomaly observable in regional-scale data (LHS of Figure 14). These tenements were pegged with the objective of targeting the eastern margin of the Fraser Zone. Adjacent tenement holders include Vale (to the east) and IGO (to the north and west). The tenements on which the current programs are being carried out are 100% owned by Orion and do not form part of the joint ventures with other parties.

The aim of the current surveys is to identify locations with the highest potential to host maficultramafic intrusions – and their feeder zones, with the potential to host nickel-copper mineralisation. In addition, interpretation of the data will enable compilation of a geological model including identification of major crustal structures, which may represent historical magma pathways, and sediments – which would provide chemical contaminants to trigger the deposition of metal-bearing sulphides.

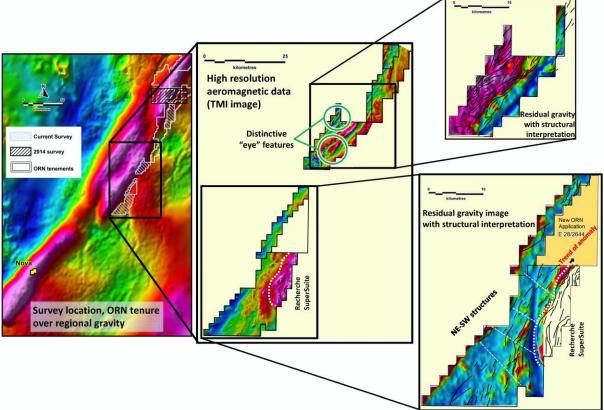
While the data analysis is ongoing, clear areas of priority interest for potential magmatic nickel-copper-PGE mineralisation were observable in the preliminary data (Figure 14). These include:

- "Eye" features characteristic of mafic-ultramafic intrusions in the Fraser Range Province:
- NE-SW structural trends leading from the eastern margin of the Fraser Zone the same trend as the interpreted magma pathway for the Fraser Range mafic-ultramafic intrusions; and
- Several gravity anomalies, including a cluster coincident with the NE-SW trending structures.

Certain of these trends extend off Orion's current tenure, leading to an application lodged by the Company for E28/2644, contiguous with Orion's current holdings (Figures 14 and 15) and for which the company is the sole applicant.

The Company and its consultants are currently carrying out the same inversion modelling process as previously used in the Plumridge East area (refer ASX release 26 May 2015) to refine targets for follow-up based on density and magnetic signatures.

Prior to the Fraser Range surveys commencing, the Company had already identified some 34 targets defined in the northern portion of its holdings and the addition of further targets confirms the prospectivity of the Company's holdings.

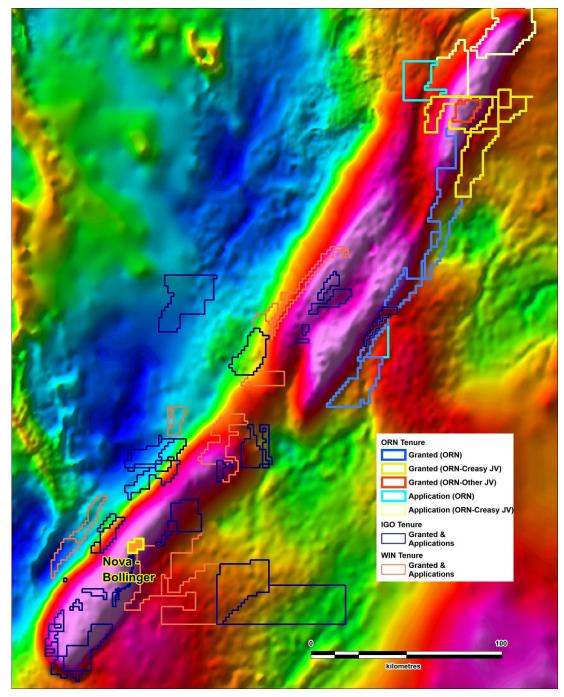


**Figure 14**: Plans showing survey location and Orion tenure (LHS, also refer Figure 15), TMI image from high resolution aeromagnetic data recently flown by Orion (centre) and residual gravity images from ongoing gravity survey (RHS) with structural interpretation.

Orion notes the recent significant increase in corporate activity in the region following first concentrate production by Independence Group NL (ASX: IGO) from its Nova-Bollinger Nickel-Copper Project<sup>1</sup>. This activity includes exploration programs by Windward Resources Ltd (ASX: WIN), Legend, MMG (via its joint venture with Segue) and corporate transactions involving IGO and Buxton and WIN/Eastern Goldfields and WIN/IGO. The Orion Board considers the Company's Fraser Range Project has considerable value given the IGO-WIN transaction announced during the Quarter, valuing WIN at ~\$21 million.

Orion maintains a significant land-holding of 3,830km² in the Fraser Range (Figure 15), which would be second only to IGO should the proposed IGO-WIN transaction proceed. While Orion's current focus is the highly prospective Areachap Belt in South Africa (where it has several advanced zinc-copper, nickel-copper, base metal and gold projects), it is continuing to advance the Fraser Range projects through systematic exploration such as the recent surveys.





**Figure 15**: Plan showing Orion tenure and ownership/JV structure.

Also shown are WIN and IGO tenure (source: ASX releases IGO and WIN 5 October 2016).

#### **Background**

The Fraser Range Project is located between two world-class discoveries, being the Tropicana Gold Project to the north, owned by Independence Group and AngloGold Ashanti and the Nova Nickel-Copper-Cobalt Project to the south, owned by Independence Group. The tenement areas cover prospective targets for both Tropicana-style gold and Nova-style nickel deposits, with historical geochemical anomalies and scout drilling identifying bedrock mineralisation of both minerals.



Orion Gold<sup>NL</sup> Nickel-PGE exploration in the Peninsula Project, to the north-east of the Cundeelee Shear Zone, was carried out by Western Areas NL between 2000 and 2006. Scout RC drilling in 2005 yielded intersections of gabbronorite and other mafic units which were interpreted to represent differentiated mafic intrusives, similar to those which were later discovered and host Independence Group's Nova-Bollinger nickel-copper-cobalt deposit.

Exploration of the Peninsula Project pre-dated the Nova-Bollinger discovery and the Company has now reinterpreted data from the Project in that context and acquired additional geophysical data to generate targets for drilling to test for deposits obscured by surface cover.

In December 2013, the Company carried out its maiden drilling program at the Peninsula Project and identified prospective mafic-ultramafic intrusive lithologies in areas where intrusive bodies had not previously been identified. RC drilling at Peninsula in early 2014 yielded anomalous Nickel-Copper results which are the subject of current work programs.

In addition, a total of 34 Nickel-Copper-Platinum Group Element targets, have been generated, based on geophysical, geochemical and geological criteria across the Company's substantial landholding of 3,830km² (Figure 15). The Company's interest in these tenements is between 70% - 100% and includes 1,783km² of granted tenements and 1,933km² of applications where the Company and its partner are the sole or priority applicant.

The Company's exploration programs have recently focussed on the Peninsula Prospect where the following key indicators have been observed:

- Large bodies of mafic-ultramafic intrusives are present, with the Company's drilling confirming the nature and extent of the magma chamber at Pennor;
- Detailed geochemical data from drill hole (fresh rock) samples confirms that:
  - o the large HA2 and Pennor intrusive bodies are related and from the same source;
  - o the parent magmas for these intrusions are fertile as sources of Nickel-Copper;
  - a substantial amount of crustal contamination has occurred during uplift and emplacement of these magmas, adding the necessary components to form sulphides;
  - the HA2 magma chamber contains sulphides which were formed in the parent magma then entrained by magma dynamics;
  - the Pennor magma chambers contains magma which is depleted in Nickel-Copper, relative to the parent magma; and
  - the Nickel-Copper segregated out (or entrained in the case of HA2) is expected to have accumulated along basal contacts in magma chamber or in feeder zones to the large chambers.

#### Walhalla Gold and Polymetals Project (Victoria)

During the Quarter, the Company did not carry out any exploration activity on the Walhalla Project.



### **Tenement Schedule**

Tenement	Project	Ownership Interest	Change in Quarter	Joint Venture Partner
Western Aus	tralia			
E28/2367	Fraser Range	100%		
E28/2378	Fraser Range	100%		
E28/2462	Fraser Range	100%		
E39/1653	Fraser Range	80%		Geological Resources Pty Ltd
E39/1654	Fraser Range	70%		NBX Pty Ltd
E69/2379	Fraser Range	70%		Ponton Minerals Pty Ltd
E69/2380	Fraser Range	70%		Ponton Minerals Pty Ltd
E69/2707	Fraser Range	70%		Ponton Minerals Pty Ltd
Queensland	_			
EPM19825	Connors Arc	100%		
EPM25122	Connors Arc	100%		
EPM25283	Connors Arc	100%		
EPM25703	Connors Arc	100%		
EPM25708	Connors Arc	100%		
EPM25712	Connors Arc	100%		
EPM25714	Connors Arc	100%		
EPM25763	Connors Arc	100%		
EPM25764	Connors Arc	100%		
EPM25813	Connors Arc	100%		
EPM26003	Connors Arc	100%	Granted	
EPM26081	Connors Arc	100%		
EPM26082	Connors Arc	100%		
EPM26083	Connors Arc	100%		
Victoria	1			- 1
MIN5487 <sup>(3)</sup>	Walhalla	100%		
EL5340	Walhalla	100%		
EL5348	Walhalla	100%		

<sup>(3)</sup> MIN5487 has been sold to A1 Consolidated Gold Ltd.



#### Corporate

#### Cash and Finance

Cash on hand at the end of the Quarter was \$32,000. Following the end of the Quarter, the Company has received cash from a placement of Shares, a loan facility with Tarney and from the sale of investments. Refer below for further detail.

#### Earn-In Right - Jacomynspan Nickel-Copper-PGE Project (South Africa)

As referred to in the Exploration section of this Report, on 14 July 2016 the Company announced that it had entered into a binding term sheet to acquire the earn-in rights over the Jacomynspan Project from two companies, Namaqua and Disawell, which hold partly overlapping prospecting rights and mining right applications.

Orion's earn-in right is via a South African-registered special-purpose vehicle (SPV), which will be established by Orion as its vehicle for investment in the joint ventures and of which historically-disadvantaged South African (HDSA) shall hold a minimum of 26% of the issued shares. Key terms of the transaction are set out below:

- Orion SPV has the exclusive opportunity to earn up to an 80% interest (Orion 59.2%) in the Companies. The Companies are privately owned South African companies with 26% or greater HDSA ownership.
- Conditions precedent to the commencement of earn in rights (Earn-In Commencement Date) include:
  - Due diligence to be conducted by Orion;
  - Orion providing the Companies with an initial exploration program to be carried out for the first 6 month period following the Earn-In Commencement Date (Initial Program);
  - The Companies obtaining all necessary approvals for Orion to access the Jacomynspan Project and conduct exploration activities including the Initial Program;
  - Orion providing proof of financial capacity to execute the Initial Program prior to 9 January 2017; and
  - o The parties entering into a comprehensive earn-in agreement prior to 10 November 2016.
- Orion SPV is able to earn an initial interest of 25% (Orion 18.5%) in the Companies via staged expenditure of US\$0.5 million on the Jacomynspan Project over the 12 months from the Earn In Commencement Date (First Earn In Right) including:
  - o Expenditure commitment of US\$0.25 million in the first 6 months; and
  - o A further \$0.25 million must be spent within 12 months of the Earn-In Commencement Date (US\$0.5 million in total expenditure).
- Once Orion SPV has earnt the initial 25% interest:
  - o The Companies will issue Orion with fully paid ordinary shares in the Companies (**Shares**) which shall result in Orion SPV being the holder of 25% of the total Shares on issue immediately following such issue of Shares;
  - The Companies will record a shareholder loan account in favour of Orion SPV to the value of the First Earn In Right expenditure incurred by Orion and shall



- continue to record further expenditure by the Orion SPV as an increase in the shareholder loan account (**Orion Loan**);
- Orion can elect to increase its interest via further expenditure, as detailed below, or maintain its 25% interest by contributing pro-rata to exploration; and
- o Within 30 days, the parties will negotiate the terms of a shareholders agreement to govern the terms of relationship between the shareholders.
- Following the First Earn-in Right, should Orion elect to increase its interest via further expenditure, the Orion SPV can earn a further 25% interest (making its total interest 50% (Orion 37%)) by expending a further US\$1 million on the Jacomynspan Project (US\$1.5 million total expenditure) over a further 12 months (2 years from Earn-In Commencement Date) (Second Earn In Right).
- Once Orion SPV has earnt a 50% interest:
  - o The Companies will issue Orion with Shares which shall result in Orion SPV being the holder of 50% of the total Shares on issue immediately following such issue of Shares; and
  - Orion can elect to increase its interest via further expenditure, as detailed below, or maintain its 50% interest by contributing pro-rata to exploration.
- Following the Second Earn in Right, should Orion elect to increase its interest via further expenditure, Orion SPV can earn a further 30% interest (making its total interest 80% (Orion 59.2%)) by:
  - Expending a further US\$0.5 million on the Jacomynspan Project (US\$2 million total expenditure) over a further 12 months (3 years from Earn In Commencement Date);
  - Completing a bankable feasibility study, which has been reviewed and signed off by an independent external expert; and
  - o Providing or securing project finance terms to develop a mining operation within the Project Area as per the bankable feasibility study and which shall not result in any Shareholder dilution.
- On the Earn-In Commencement Date, Orion will be appointed as the operator and manager of the joint ventures and will have the right to appoint a minimum of one director to the boards of the Companies.
- The Companies shareholders on the date of execution of the Term Sheet (**Signature Date**) shall be entitled to a 2% royalty in proportion to their beneficial interest in the Companies at the Signature Date, on net smelter returns arising from the production and sale of metals from the Jacomynspan Project's SAMREC resource as at the Signature Date (**Royalty**). At any time following the Earn-In Commencement Date, Orion shall have the right at its sole discretion to buy out the Royalty for an aggregate value of US\$2 million.
- As noted above, all expenditure by Orion shall be advanced to the Companies as an Orion Loan. In addition to the Orion Loan, the Companies have existing shareholder loans of ZAR78.5 million (~US\$5.4 million) as at the Signature Date (together Shareholder Loans). Following the completion of the First Stage Earn In, the parties will negotiate the terms of a Shareholders Loan to govern the terms of the Shareholder Loans. The Shareholder Loan agreement will contain clauses normally contemplated by a formal agreement negotiated in good faith between the parties.



Orion Gold

Should Orion fail to meet its earn in right commitments, then either the parties will renegotiate the terms of the Term Sheet or, if the parties are unable to agree those new terms, then Orion will relinquish its rights to earn any further interest in the Companies and the Term Sheet will be at an end.

#### Option Agreement – Masighame (South Africa)

As referred to in the Exploration section of this Report, on 29 April 2016 the Company announced that it had executed a binding option agreement with Masiqhame for Orion to earn up to a 73% interest in Masiqhame. Masiqhame holds prospecting rights over large, highly prospective area located approximately 80km north of the PC Project. On 7 September 2016 the Company announced that the terms of the option had been amended to enable Orion to commence exploration activities including drilling and have the cost of this work program deducted from the consideration payable of ZAR1,500,000 (~A\$130,000) by Orion for 50% of Masiqhame shares on issue.

On 29 September 2016, the Company announced that following positive initial results from its maiden drilling program at the Kantienpan Deposit, it had exercised the Option it holds with Masighame, for Orion to acquire an initial 50% interest in Masighame.

Key terms of the amended binding term sheet (Term Sheet) are as follows:

- Orion has the opportunity to earn up to a 73% interest in Masighame.
- Masighame is a privately owned South African company with 100% Historically Disadvantaged South African ownership. Masighame is thus black economic empowerment (BEE) compliant from the outset and Orion will earn in to an incorporated joint venture, partnering with a BEE partner via Masighame.
- Orion will have an exclusive option to undertake due diligence on the corporate entity and the prospecting rights until no later than 30 September 2016 (Option), failing which the parties will be released from their obligations under the Term Sheet. As noted above, Orion has exercised the Option.
- Upon exercise the Option:
  - Orion will pay Masiqhame ZAR1,500,000 less all expenditure by Orion on the exploration program currently underway, to invest in new fully paid Masiqhame shares (Masiqhame Shares). As a result of exploration activities currently underway, Orion will not be required to make any cash payment to Masiqhame upon Completion; and
  - o Masiqhame will issue Orion with Masiqhame Shares which shall result in Orion being the holder of 50% of the total Masiqhame Shares on issue immediately following such issue of Masiqhame Shares.

#### (Completion)

Upon Masiqhame obtaining all requisite regulatory approvals to the extent required, Completion will occur by no later than 30 days following the exercise of the Option.

 At Completion, Orion shall have the right to appoint the majority of directors to the board of Masighame and shall be appointed manager and operator of the prospecting rights;



- Once Orion has earned the initial 50% interest in Masighame through the issue of Masighame Shares to Orion, Orion can elect to increase its interest by a further 23% (to 73% in total) via:
  - o provision of a shareholder loan to Masighame (**Loan**) on the following terms:
    - The principal amount of the Loan shall be the ZAR equivalent of A\$100,000 in each 12 month period commencing from the 12<sup>th</sup> month following Completion (Principal);
    - Proceeds from the Loan shall be used to progress exploration programs and feasibility study works;
    - The Loan interest rate shall be nil;
    - The Loan shall only be repaid from operating surplus from future operations of Masighame;
    - In addition to the Principal, Orion may elect at its sole discretion to provide additional finance by means of the Loan in order to progress exploration works and complete feasibility study works and if applicable, apply for a mining right;
    - Masighame shareholders as at the date of execution of the Term Sheet will be free carried until such time that a mining right is granted; and
    - If Orion fails to advance the Principal in any 12 month period, Masiqhame may subject to notice periods demand that all of the Shares held by Orion be transferred back to the Masiqhame shareholders (excluding Orion) for nil consideration and remove Orion as manager.
  - o finalisation of a feasibility study; and
  - o lodgement of an application for the grant of a mining right over some or all of the area of the prospecting rights.

Following the above terms being satisfied, Masiqhame shall immediately issue further new Masiqhame Shares to Orion which shall result in Orion being the holder of 73% of the total Masiqhame Shares on issue immediately following such issue.

#### Option Agreement Amendment to terms of Agama option (South Africa)

As referred to in the Exploration section of this Report, on 13 May 2016, the Company announced that the terms of the Option to acquire an effective 73.33% interest in Agama, the company holding Prospecting Rights over the historic Prieska Copper Mine, located at Copperton, Northern Cape province, South Africa have been amended. Importantly, the binding term sheet with private company Agama provides Orion with an exclusive right to carry out due diligence and to acquire Agama, which through its subsidiary companies, ultimately holds an effective 73.33% interests in the PC copper – zinc project and the nearby Marydale gold project.

The key terms of the revised binding term sheet (**Term Sheet**) are set out below:

- The vendor group, who are unrelated and at arm's length to Orion, have agreed to option and sale terms, to sell a 100% interest in Agama.
- The Option is exercisable at Orion's election at any time before 31 December 2016 (previously 31 July 2016), and can be terminated at any time at Orion's election.
- Orion has committed to expend a minimum of ZAR1.2 million (A\$0.1 million) on an exploration program during the Option period. As detailed below, the exploration program will be undertaken at PC and Marydale and will include drilling and



trenching to test near surface mineralisation, as well as soil sampling to identify additional mineralisation.

- tThe purchase consideration payable upon exercise of the Option to complete the acquisition is ZAR53 million (~A\$4.6 million), of which:
  - o Cash ZAR31.5 million (~A\$2.7 million) is payable in cash;
  - Consideration Shares ZAR21.5 million (~A\$1.9 million) is payable by issue of Orion fully paid ordinary shares (Shares), to be issued at a 10% discount to the 10 trading day VWAP of the Shares prior to the issue of the Shares (Share Issue Price); and
  - Each Share issued will have an attached unlisted Orion option, exercisable at a 100% premium to the Share Issue Price and expiring on the date which is 24 months following the date of issue of the unlisted option (Unlisted Option).
- The Consideration Shares are subject to regulatory and shareholder approvals. If certain South African regulatory approvals for the issue of Shares to the vendors are not received within an agreed period, the Consideration Shares may be settled by cash payment to the vendors unable to obtain such approvals.
- Shares issued to the vendors will be subject to a 6 month voluntary escrow period from their date of issue and 75% of the Shares issued to the vendors will be subject to a 12-month voluntary escrow period from their date of issue;
- Option fees payable by Orion to maintain the Option are as follows:

Date Option fee due	ZAR	A\$ Equivalent (4)
1 July 2016 (paid by Orion on 1 July 2016)	250,000	22,000
1 August 2016 – 31 December 2016	Nil	Nil

(4) Exchange rate conversion assumption: A\$1 = ZAR11.5.

Upon exercise of the Option, one final option fee will become payable to the vendor, which shall be equal to the previous option fee payment made by Orion.

- The acquisition is subject to:
  - o due diligence to be completed by Orion;
  - Orion providing or procuring finance for Agama so that it can settle all shareholder loans. Should Orion exercise the Option on or before 31 July 2016, shareholder loans settlement will amount to an aggregate of ZAR31 million (~A\$2.7 million). Should Orion exercise the Option after 31 July 2016, shareholder loans settlement will amount to an aggregate ZAR32.3 million (~A\$2.8 million);
  - regulatory approvals;
  - o the issues of Shares and Unlisted Options to the vendors being approved by Orion shareholders where required by law, including the ASX listing rules; and
  - Agama disposing of all its assets and liabilities, other than the PC project and the Marydale project prior to settlement.

#### **Capital Raising**

On 16 September 2016, the Company issued 9,100,000 Shares at an issue price of \$0.025 per Share to raise \$0.23 million by way of placement to Eastern Goldfields Limited.



Following the end of the Quarter, on 31 October 2016, the Company announced that a \$0.50 million loan facility has been agreed with Tarney Holdings Pty Ltd (Tarney), a major shareholder of Orion and a company associated with Orion's Chairman, Mr Denis Waddell (Facility).

Under the terms of the Facility, Tarney may elect to convert cash drawn down under the Facility into Orion shares, subject to shareholder approval being sought at the Company's Annual General Meeting to be held on 30 November 2016 (Meeting Date).

Any advances drawn down under the Facility will be convertible to new Shares at Tarney's discretion and at an issue price per Share which will be either:

- If Shares are issued during the period between 21 October 2016 and the Meeting Date, the highest price at which the Company issues Shares during this period, but at a price which is not less than \$0.02 per Share; or
- If no Shares are issued during the period between 21 October 2016 and the Meeting Date, the greater of:
  - o the highest price at which the Company issues Shares following the Meeting Date and the day prior to the date of issue of Shares to Tarney, but at a price which is not less than \$0.02 per Share; or
  - if no Shares are issued during the period between the Meeting Date and the date of the issue of Shares to Tarney, 80% of the VWAP, which is at a discount not greater than 20% to the market price of the Company's Shares over the last 5 days on which sales are recorded before the day on which the Shares are issued.

#### **Investments**

As a result of transactions previously announced to the ASX, the Company holds the following unlisted options in Eastern Goldfields Limited (ASX: EGS).

Number of options	Exercise Price	Expiry Date
1,000,000	\$0.168	8/03/2018
1,000,000	\$0.189	8/03/2020

The Company continuously assesses the value and progress of its interests in Eastern Goldfields and may divest some or all of its interests to provide capital for its ongoing exploration activities.

During the Quarter, the Company sold 1,016,285 (\$0.028 million) of the shares it received from A1 Consolidated Gold Limited (A1 Gold) as part of the consideration received for the sale of the Company's Walhalla Project Mining Licence in Victoria to A1 Gold. Following the end of the Quarter, the Company sold the remainder of the A1 Gold shares it held being 6,800,000 shares (\$0.176 million). In total, the Company received \$0.204 million for the sale of 7,816,285 A1 Gold shares at an average sale price of \$0.026 per share.

#### **Expiry of Options**

The following options expired during the Quarter:

<b>Exercise Price</b>	Number of Options	Expiry Date
\$0.347849	6,000,000	31 July 2016



#### Annual Financial Report – June 2016

The Company recorded a loss of \$0.23 million after tax for the year ended 30 June 2016. Net cash used in operating activities totalled \$0.23 million and in investing activities totalled \$0.37 million. A total of \$1.93 million in exploration expenditure was incurred during the year.

#### **General Meeting**

A General Meeting of shareholders of the Company was held on 28 October 2016 at RSM Australia Partners, 8 St Georges Terrace, Perth, Western Australia. All resolutions put to shareholders at the General Meeting were carried on a show of hands.

#### **Annual General Meeting**

The Annual General Meeting of shareholders of the Company will be held at RSM Australia Partners, 8 St Georges Terrace, Perth, Western Australia on Wednesday, 30 November 2016 commencing at 10:00 a.m. (Perth time).

#### **Competent Persons Statement**

The information in this report that relates to the Exploration Targets at the Prieska Copper project complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and is based on information compiled by Mr Paul Matthews, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Matthews 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 Matthews consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. The Exploration Results are based on standard industry practises for drilling, logging, sampling, assay methods including quality assurance and quality control measure as detailed in the Company's ASX announcement of 18 November 2015.

The information in this report that relates to Orion's Exploration Results and historical Exploration Results at the PC and Marydale Projects complies with the JORC Code and has been compiled and assessed under the supervision of Mr Errol Smart, Orion Gold NL's Managing Director. Mr Smart (PrSciNat) is registered with the South African Council for Natural Scientific Professionals, a ROPO for JORC purposes and has experience in the identification and exploration of mineralisation of this style. Mr Smart consents to the public release of the information in the context contained within this release as a Competent Person as defined in the JORC Code).

The information in this report that relates to historical Exploration Results at the Jacomynspan Project complies with the JORC Code and has been compiled and assessed under the supervision of Mr Errol Smart, Orion Gold NL's Managing Director. Mr Smart (PrSciNat) is registered with the South African Council for Natural Scientific Professionals, a ROPO for JORC purposes and 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 JORC Code. Mr Smart consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. The Exploration Results are based on standard industry practises for drilling, logging, sampling, assay methods including quality assurance and quality control measure as detailed in ASX announcement of 14 July 2016.

The information in this report which relates to the Jacomynspan SAMREC (2007) resource has been compiled and assessed under the supervision of Mr Errol Smart, Orion Gold NL's Managing Director. Mr Smart has concluded that the information provided in this document complies with ASX



Orion Gold Listing Rule 5.12 and is an accurate representation of the data and studies available and relating to this resource. However Mr Smart, as the Competent Person, has not yet completed sufficient review on the qualifying foreign resource estimate to classify it in accordance with the JORC Code at this time and consequently it is uncertain that, following evaluation and/or further exploration work that the qualifying foreign resource estimate will be able to be reported as a Mineral Resource in accordance with the JORC Code. Mr Smart consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results at the Connors Arc Project complies with the JORC Code and is based on information compiled by Mr Bruce Wilson, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Wilson is the Principal of Mineral Man Pty Ltd, a consultant to Orion Gold, and 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 Wilson consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results and other technical information for the Fraser Range Nickel-Gold Projects (also described as the Cundeelee Gold Project, the Peninsula Nickel Project and the Plumridge Lakes Project) complies with the JORC Code and has been compiled by Mr Bill Oliver, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Oliver is the Chief Operating Officer of Orion Gold NL and 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 Oliver 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. 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:

- disclaim any obligations or undertaking to release any updates or revisions to the information to reflect any change in expectations or assumptions;
- do not make any representation or warranty, express or implied, as to the accuracy, reliability or completeness of the information in this release, or likelihood of fulfilment of any forward-looking statement or any event or results expressed or implied in any forward-looking statement; and
- disclaim all responsibility and liability for these forward-looking statements (including, without limitation, liability for negligence).