



Orion Minerals_{NL}

ASX RELEASE: 28 JULY 2017

Quarterly Activities Report

For Period Ending 30 June 2017

HIGHLIGHTS

- **Fast tracking development at the Prieska Zinc-Copper Project:**
 - Maiden Orion diamond drill results from the Deep Sulphide Target intersected massive sulphides and identified strike extensions to historical mineralisation:
 - 22.45 m at 5.33% Zn, 1.34% Cu, 0.26g/t Au and 10.60g/t Ag from 1060m, incl. 5.7m at 10.89% Zn from 1060.8m (OCOD048).
 - 16.15 m at 3.30% Zn, 1.72% Cu, 0.26g/t Au and 13.72g/t Ag from 1116m, incl. 4m at 5.34% Zn from 1119m (OCOD052).
 - Drilling from surface continues at the +105 Level Target (open pit).
 - 5.2m at 4.95% Zn, 1.42% Cu and 0.38g/t Au from 147.53m down hole (70m below surface; OCOD037).
 - Underground access to 105 Level re-established with ongoing geotechnical and infrastructure assessment.
- **Lead Consultants Appointed for Bankable Feasibility Study:**
 - DRA Projects SA Pty Ltd and ABS Africa Pty Ltd appointed as the lead consultants for the Bankable Feasibility Study and Environmental Impact Assessment studies.
 - Studies have commenced utilising the extensive historical mining and processing database on site.
- **Mine Re-entry and geotechnical studies progressed:**
 - Safe underground access to 360m below surface has been established allowing underground drilling and data gathering to commence.
 - Ground conditions through the mine have been found in a better state than anticipated.
 - Hutchings shaft inspected down to the accumulated water level and concrete and steelwork determined to be in a re-useable state.

Exploration

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

During the Quarter, Orion commenced a major new phase of drilling at its Prieska Zinc-Copper (**Prieska**) Project (Figure 1) as well as a Bankable Feasibility Study (**BFS**) aimed at fast tracking the Prieska Project towards production. Underground access was re-established allowing assessment of geotechnical conditions and the substantial remaining underground infrastructure.

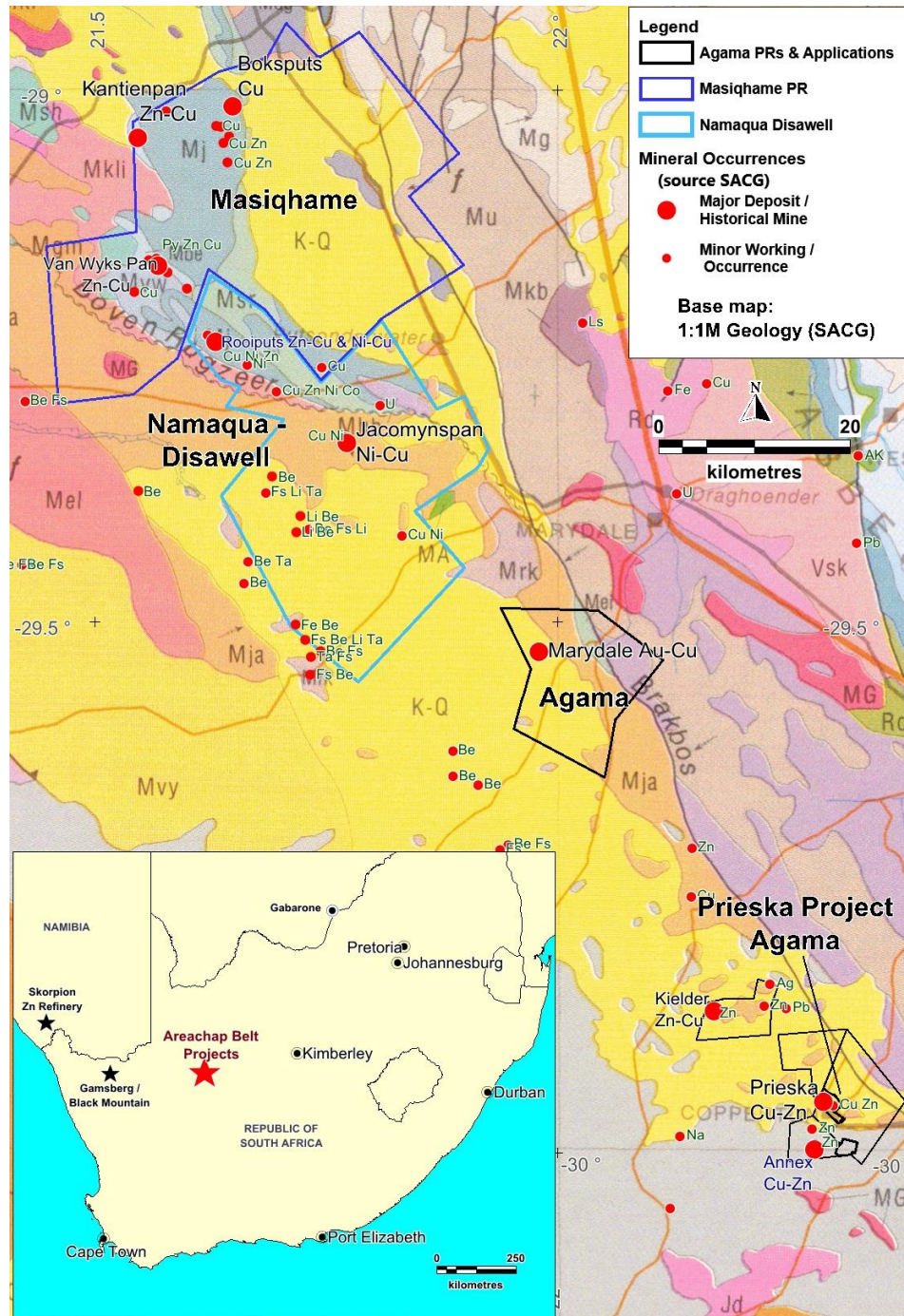


Figure 1: Regional geology map of the Areachap Belt showing prospecting rights owned by Orion and currently under option to Orion and noted mineral occurrences as per published data from South African Council for Geoscience.

Prieska Zinc-Copper Project

The Prieska Project covers unmined dip and strike extensions from historical underground mining, with the mineralisation having previously been delineated by extensive drilling and geophysics. As a result of the completion of the Agama transaction during the March 2017 Quarter, the Company now owns 73.33% of the Prieska Project. Further details of the terms and conditions of the acquisition of Agama are detailed in the Corporate section below.

Safety and Environment

The Prieska Project recorded one Lost Time Injury (**LTI**) in June 2017, with 37,706 man hours logged for the Quarter. The LTI was a low severity falling incident on surface and the worker returned to full service after 2 shifts off for monitoring. The year-to-date Lost Time Injury Frequency Rate (**LTIFR**) for 200,000 man hours is: 5.30, which compares well to the industry average of 10.30. Orion strives to achieve a totally safe workplace for all. There were no significant environmental incidents during the Quarter.

All statutory appointments are now in place commensurate with opening underground mine workings. This includes, amongst others, the appointment of a registered surveyor, geotechnical engineer, ventilation officer, occupational hygienist, occupational medical practitioner, first aiders, certifying engineer, certified miner and mine supervisors.

Community and Stakeholder Engagement

The Company held a public consultation in the town of Prieska during June 2017 to communicate the current status of the Prieska Project and the Company's planned work programs that aim to return the Prieska Project to production (Figure 2). The community through its Honourable Mayor, Clr. H. Tshume expressed overwhelming support for Orion and the Prieska Project and have availed an office in the municipal buildings for a permanent community liaison interface.

The key topic raised by the community was availing of opportunities for employment and training for local inhabitants. The Company is putting protocols in place to ensure that these expectations are addressed. Further briefings will be held with the community throughout the development of the project, and the Company will establish an office in the Siyathemba Municipal Offices in the town of Prieska to assist in dialogue.



Figure 2: Public Consultation with Siyathemba Mayor.

Feasibility Studies and Environmental Impact Assessment

DRA Projects SA Pty Ltd (**DRA**) and ABS Africa Pty Ltd (**ABS Africa**) have been appointed as the lead consultants to conduct the Prieska Project BFS and Environmental Impact Assessment (**EIA**) studies. DRA will manage the BFS and will assume the role of the overall study coordinator and compiler. ABS Africa have been appointed to manage the EIA studies for the associated BFS.

The BFS and EIA work programs will be undertaken in parallel with the current activities (resource drilling, underground inspections and establishment of activities). The BFS will build on both the substantial existing historical dataset relating to mining and processing activities as well as the new information being generated by the onsite activities.

DRA and ABS Africa were selected following an extensive tendering and assessment process conducted by management with the assistance of R&R Quantity Surveyors and Project Managers, Earth Science Solutions environmental consultants and Falcon Hume Incorporated legal practitioners as external third-parties to structure and guide the adjudication and award process and to prepare contracts.

Orion has also commissioned a bulk power supply study through Eskom, the state power supply company. Eskom will investigate the technical and commercial requirements of re-establishing power supply from their Cuprum Substation that is located on the project site.

Investigations into re-using the existing Prieska to Copperton water pipeline are also under way, with discussions now in progress with the Siyathemba Municipality and other water pipeline users. Preliminary engineering inspections of the water supply infrastructure indicate that sufficient capacity exists to support a large-scale mining and ore processing operation.

Mine Re-entry and Geotechnical Appraisal

Orion has made significant progress in assessing the state of existing mine infrastructure at the Prieska Project. Safe underground access has been re-established via the main decline roadway. The main Hutchings vertical shaft has also been visually inspected down to 360m below surface, the level accumulated ground water has risen to. Underground access will facilitate efficient data gathering for the mine feasibility study, allowing amongst others, more accurate infill drilling, geotechnical mapping and back analysis, assessment of the condition of the mine crown pillar, sampling and inspection of historical draw points and better access to the shaft infrastructure.

The portal and main decline had been partially backfilled during mine closure in 1991. These have been fully re-excavated and rehabilitated to allow for vehicle access. Though both portal and decline roadway were in very good condition, some precautionary re-supporting work was conducted to meet contemporary safety standards. This remedial work has required a careful and systematic approach, using a select and experienced underground re-entry team, to ensure best practice workplace safety for our people.

Ground conditions and infrastructure in the underground mine were found to generally be in a better state than was expected (for example Figure 3). Orion is confident that mine refurbishment will not require substantial engineering effort.

Underground drilling platforms were established to allow for the infill drilling of the +105 Level Target and the collection of additional metallurgical and geotechnical investigation samples. The setup has required the installation of mine services, upgrading of ventilation and establishing of underground communications.

On surface, geotechnical monitoring stations have been established on the western edges of the sinkholes that abut the +105 Level Target and baseline readings taken to supplement visual inspections are being used to track ground stability.

Key observations:

- The decline and mine workings have now been inspected down to 360m below surface. This is the level that accumulated ground water in the underground workings has risen to since mine closure in 1991. Excavations were found to generally be in excellent and re-useable condition. Roadways are all trafficable after minor scraping to improve mobile equipment traction and installation of precautionary ground support were required.
- The Hutchings shaft has been visually inspected down to 360m below surface and non-destructive testing of some of the steelwork conducted. This work has confirmed that the main carrier steelwork is in satisfactory condition and should not require replacement ahead of possible future recommissioning.
- The integrity and re-useability of the concrete and steelwork making up the 68m-high Hutchings shaft headframe was also verified by engineering inspection and non-destructive testing.
- The accumulated water level in the mine, currently at 360m below surface, has been sampled for environmental baseline studies and to confirm suitability for use in metallurgical processing. Water samples have been collected via the Hutchings shaft from depths of 360m, 400m, 500m and 600m below surface. Analyses of these water samples indicate that the water has a neutral pH of 7.4, providing encouragement that the submerged steel and concrete in the Hutchings shaft will not have corroded with time.
- Monitoring stations adjacent to the sinkholes and visual inspections indicate no significant movement or change has occurred adjacent to the +105 Level Target.



Figure 3: 294m below surface Level - Water settlers still useable.

Deep Sulphide Target drilling program

During the Quarter, the Company commenced a major new phase of drilling designed to evaluate the main Deep Sulphide Target below the historical mine which is expected to form the cornerstone of the Company's development strategy. Drilling aims to systematically test and confirm the extensive historical drilling data. Results are anticipated to provide statistical validation of historic drilling that intersected unmined mineralised zones and add to infill data so that the resultant data spacing meets the requirements for a JORC compliant Mineral Resource estimate.

The initial drilling will provide technical information that will allow Orion to plan and complete a drill program aimed at testing the mineralised zone at a spacing (combined historical and current) of <45m over 75% of the target. The remaining 25% will be at 45m-100m spacing.

The drilling program will take advantage of advances in drilling technology and expertise, with directional drilling to be used to achieve multiple deflections from a single mother hole, thereby reducing the total amount of drilling required.

The drilling program has now been optimised following geostatistical appraisal of the historic data available and the drilling program is designed to achieve 46 intersections from 27 mother holes which is expected to provide sufficient twin and infill intersections to allow estimation of maiden JORC compliant Mineral Resource estimate by CQ1 2018.

At the date of this report nine holes were in progress (six with active diamond core drilling and a further three holes with pre collars completed, Figure 6).

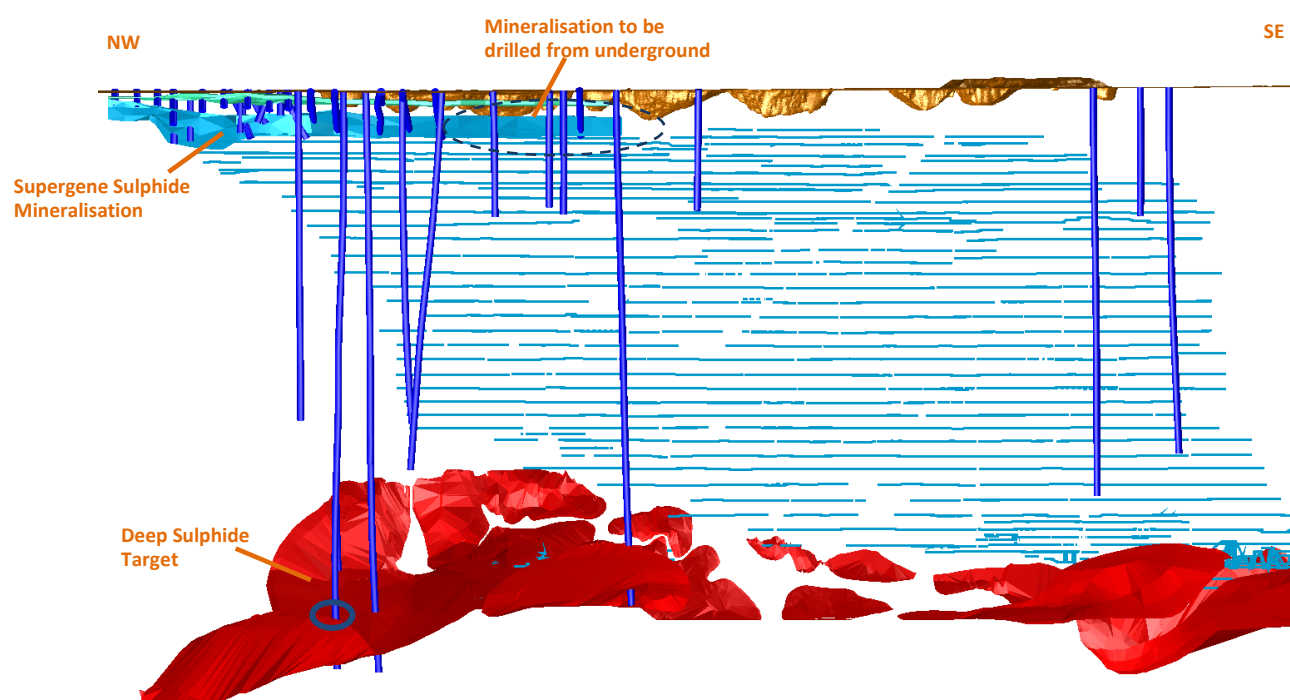


Figure 4: Long section looking to the north east showing current drilling, historical development and sinkholes at the Prieska Project. The intersection in OCOD052 is circled.

Drill holes OCOD048 and OCOD052 successfully intersected massive sulphides and returned significant intersections as follows:

- 22.45 m at 5.33% Zn, 1.34% Cu, 0.26g/t Au and 10.60g/t Ag from 1060m, including: 5.7m at 10.89% Zn from 1060.8m (OCOD048); and
- 16.15 m at 3.30% Zn, 1.72% Cu, 0.26g/t Au and 13.72g/t Ag from 1116m, including: 4m at 5.34% Zn from 1119m (OCOD052)

(refer ASX releases 17 July 2017 and 27 July 2017)

The intersection in OCOD048 successfully twinned the intersection reported from historical drill hole F2007 whereas the intersection in OCOD052 is located ~100m from the nearest historical intersections, as well as being ~100m along strike from OCOD048, and represents an extension to the thick mineralisation confirmed by drilling at the Deep Sulphide Target.

Both intersections are predominantly pyrrhotite and pyrite with chalcopyrite and sphalerite, (Figure 5) similar to the sulphides reported in historical drill logs, emphasising the consistency and continuity of the mineralised sequence.

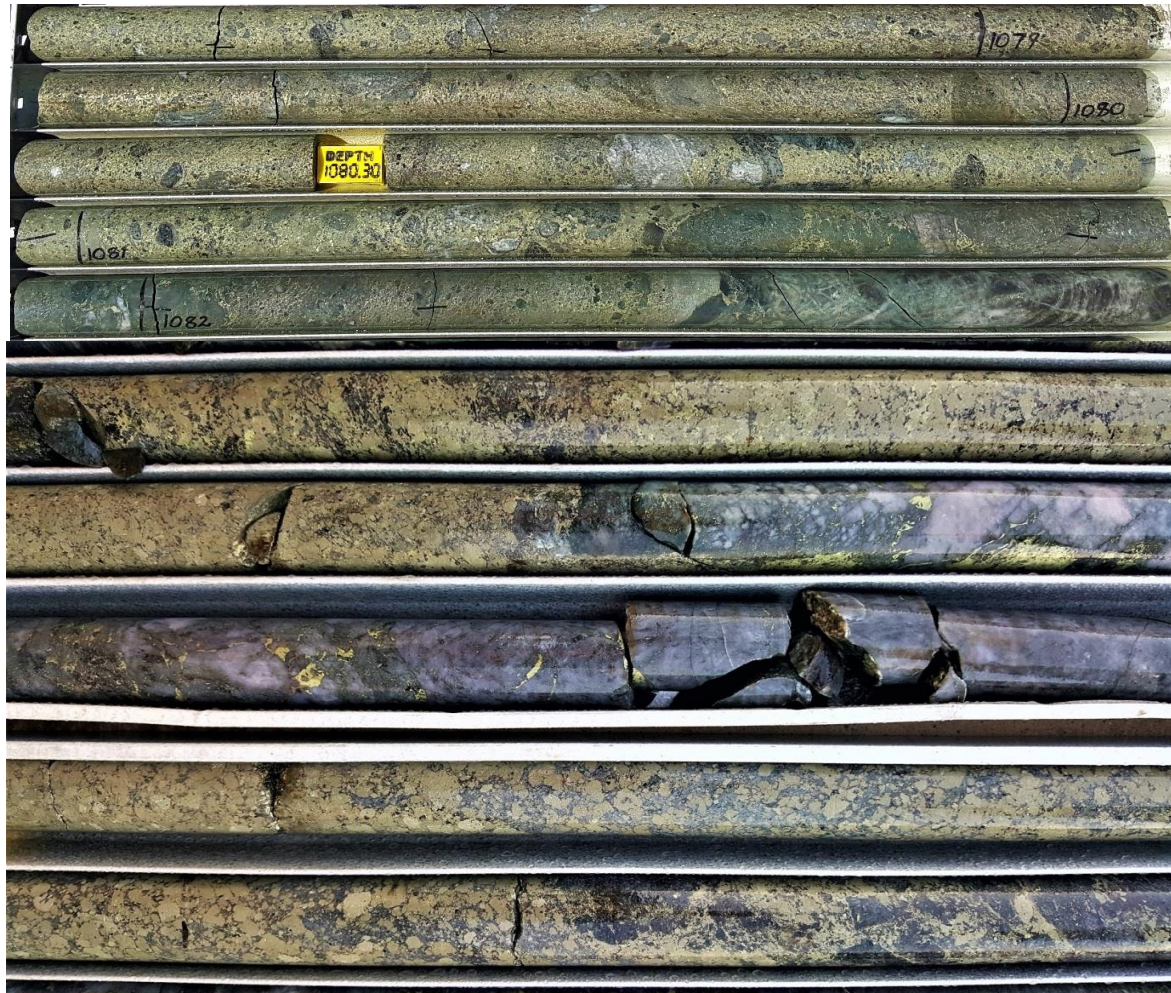


Figure 5: Photographs showing massive sulphides in OCOD048 between 1078m – 1082.5m (top) and OCOD052 between 1126m – 1132m (bottom).

+105 Level Target Area

The surface and underground drilling programs at the +105 Level Target is designed to confirm, in-fill and extend near-surface historical drilling, targeting mineralisation expected to be amenable to open pit mining (Figure 4). Surface drilling carried out in the 12 months from June 2016 has highlighted the potential for a high grade open pit project to commence the restart of Prieska in parallel to the development of the larger Deep Sulphide target.

The surface drilling program comprised of 20 RC holes for 1297m and 14 diamond core holes for 1900.71m had been completed. Significant intersections received include:

- 22m at 10.8% Zn, 1.38% Cu and 0.3g/t Au from 57m, including:
7m at 17.8% Zn and 1.41% Cu (OCOR016);
- 20m at 8.58% Zn, 2.21% Cu and 0.3g/t Au from 48m, including:

- 17m at 9.98% Zn and 2.01% Cu (OCOR023);
- 42m at 4.41% Zn, 2.36% Cu and 0.42g/t Au from 55m, including:
5m at 9.28% Cu from 55m and 6m at 12.4% Zn from 75m (OCOR027);
- 9.3m at 4.0% Zn, 1.4% Cu, 0.13g/t Au and 9.0g/t Ag from 170m (OCOD033);
- 29.4m at 3.06% Zn + 1.52% Cu, 0.36g/t Au and 9.0g/t Ag from 112.6m, including:
8.5m at 4.33% Zn + 2.17% Cu from 115m and 3m at 7.13% Zn from 139m (OCOD036);
- 12m at 4.14% Cu, 1.89% Zn and 0.29g/t Au from 57m, including:
3m at 7.4% Cu and 4.34% Zn (OCOR017);
- 20.6m at 1.36% Zn, 0.63% Cu, and 0.1g/t Au from 156.1m, including:
2.6m at 5.2% Zn (OCOD035); and
- 5.2m at 4.95% Zn, 1.42% Cu and 0.38g/t Au from 147.53m (OCOD037).

(refer ASX releases 25 July 2016, 22 August 2016, 14 September 2016, 2 November 2016, 7 December 2016, 16 December 2016, 7 February 2017 and 25 May 2017)

Surface drilling at the +105 Level Target utilised an innovative shallow drilling method to drill holes to test mineralisation up-dip of historical underground mining. By drilling from surface utilising inclinations of between 15 and 30 degrees from the horizontal, the holes have been manipulated to intersect the mineralisation at an optimal angle. While these intersections lie between 50m and 70m vertically below surface they are usually greater than 150m downhole as the drill hole is sited in a readily accessible area away from historical mine related voids.

With the re-establishment of underground access, underground drilling will now be used to complete infill drilling in areas that could not be accessed from surface (Figure 6). This will enable a substantial strike portion of the +105 Level Target to be delineated and incorporated into the maiden Mineral Resource Estimate for the +105 Level Target, now targeted for completion at the end of Q3 2017. Underground drilling commenced at the end of July 2017 (Figure 7).

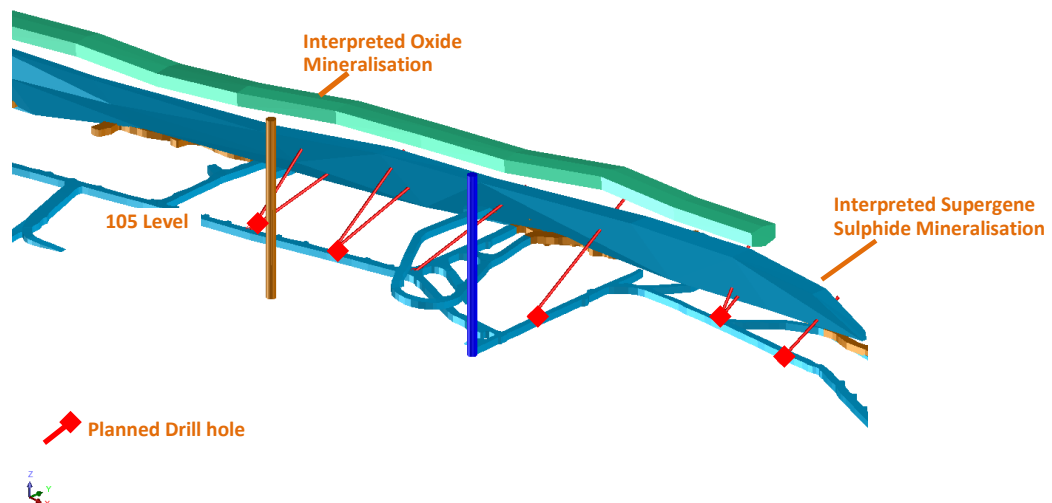


Figure 6: Oblique view showing proposed underground drilling.



Figure 7: Underground drilling commenced at 105 level.

Background on Prieska Copper – a significant 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⁽²⁾ 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 power 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.

As part of its due diligence process, Orion has digitally captured, validated and modelled all available project drilling data from hard-copy sources. (refer ASX release 18 November 2015). As a result of this work, 182 drill intersections can be relied on for width and depth of mineralisation, while 88 boreholes provide information on grade of mineralisation (Figure 8 and Table 1). 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.

⁽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.

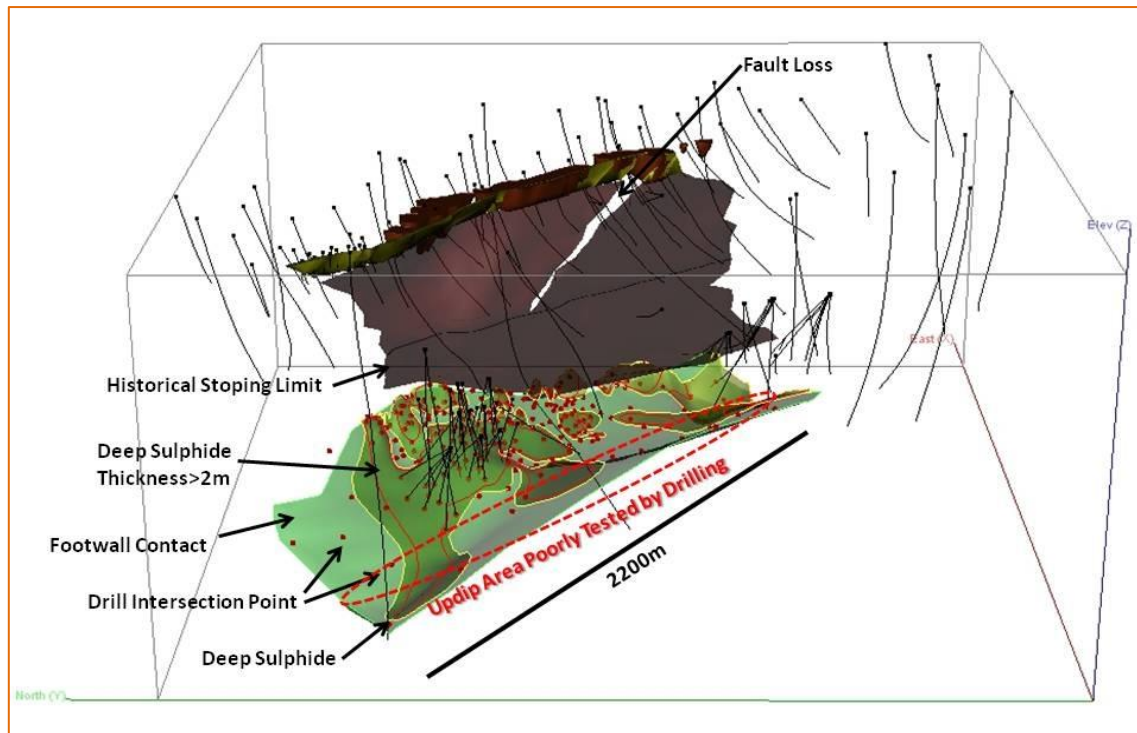


Figure 8: Three dimensional view of drilling and 3D mineralisation model for the Prieska Project.

Area	Item	Arithmetic Mean Value	Weighted Mean	Max Value	Count
NW Trough	Cu%	1.59	1.49	4.29	42
	Zn%	4.19	4.12	6.52	42
	SG	3.54	3.65	N/A	17
	Thickness	7.71	N/A	N/A	75
NW Hinge	Cu%	1.52	1.27	3.13	4
	Zn%	3.73	3.81	4.27	4
	SG	3.41	3.41	N/A	4
	Thickness	5.76	N/A	N/A	39
SE Trough	Cu%	1.34	1.38	2.76	28
	Zn%	5.58	5.54	7.68	28
	SG	3.64	3.62	N/A	24
	Thickness	4.97	N/A	N/A	36
SE Hinge	Cu%	1.63	1.75	2.69	12
	Zn%	6.94	7.04	12.62	12
	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
	SG	3.57	3.62	N/A	49
	True Thickness	6.74	N/A	N/A	182

Notes

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

"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.

Table 1: Summary of drill hole intersections available for the Prieska Project

Regional Exploration

With the completion of the Agama Transaction in March 2017 the focus of the Company has been on rapidly advancing the Prieska Project through feasibility studies towards a development decision point. The Company maintains a substantial and prospective landholding in the Areachap Belt and intends to continue systematic exploration for potential satellite deposits to feed into the life of mine plan for the Prieska Project. It is noteworthy that Volcanogenic Massive Sulphide (**VMS**) deposits almost always occur as "clusters" associated with volcanic centres with four such centres having been identified in the Areachap Belt. The Company's prospecting rights overlie the bulk of the Copperton and Bokspuits Volcanic Centres. Further details of the work programs will be released as they are designed and implemented, with results to be released as they are received.

Kantienpan Zinc-Copper Deposit (Masiqhame)

Drilling at the Kantienpan Deposit in 2016 targeted the KN1 conductor delineated by Orion in a high powered ground electromagnetic (**EM**) survey. Previous results from Orion drilling included:

- 2.05m at 9.93% Zn + 0.09% Cu from 404.87m (OKND016);
- 3.55m at 2.13% Zn + 0.35% Cu from 409.75m (OKND016); and
- 1.91m at 4.35% Zn + 0.32% Cu from 404.12m (OKND017).

(refer ASX release 25 January 2017)

During the Quarter, results were received from OKND018B which intersected a similar sulphide bearing zone. An intersection of 1.26m at 3.54% Zn and 0.30% Cu was returned. Downhole EM surveys were completed but unfortunately the hole had collapsed before the final depth.

The potential of the KN1 zone is demonstrated by the results in OKND016. The KN1 zone appears to be a separate mineralised horizon to the mineralisation intersected in historical drilling (refer ASX release 31 May 2016) and the results from KN1 will now be reviewed along with results from the broader Kantienpan area. Future exploration is likely to target both horizons utilising both geochemical and geophysical means.

The Kantienpan Deposit lies within the prospecting right held by Masiqhame Trading 855 Pty Ltd, in which Orion has exercised its option to acquire a 50% interest (subject to regulatory approval) and under the option agreement can earn up to a 73% interest (refer ASX release 29 September 2016, Figure 1).

Marydale Gold-Copper Project

At Marydale results were received from drilling targeted a 1.7km long semi circular arcuate chargeability anomaly detected in the Company's high powered IP survey. As reported in ASX announcements of 7 December 2016 and 25 January 2017 drilling intersected several zones of disseminated sulphides, a number of which returned anomalous levels of copper and gold in assays. All results have now been received and no significant results (greater than 0.3g/t Au or 0.1% Cu) were returned. Based on results to date there seems to be a metal bearing system of reasonable size at the Marydale Project with further exploration to comprise lithogeochemical and structural studies with the aim of identifying potential trap sites.

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 pre-digital data exists from exploration pre 2000 by (amongst others) Anglo American/AAPS, Phelps Dodge, Anglovaal and Iscor (now Kumba).

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 9).

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.

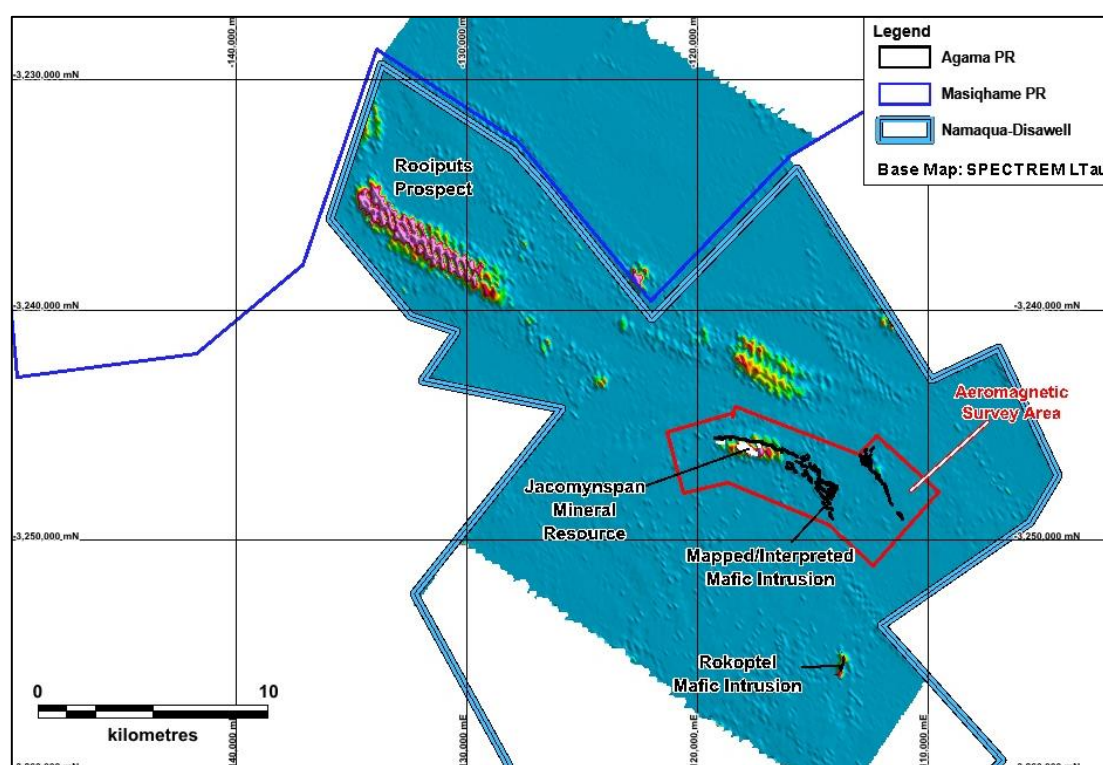


Figure 9: Late time constant (Tau) data from the Namaqua – Disawell SPECTREM airborne EM survey showing the high resolution magnetic survey area including the Jacomynspan Mineral Resource and hartzburgite hosted Nickel-Copper targets. three dimensional view of drilling and 3D mineralisation model for the Prieska Project.

Connors Arc Epithermal Gold Project (Queensland)

During the Quarter, no work was undertaken at the Connors Arc Project due to the fast tracking of feasibility studies and associated drilling at the Prieska Project. The Company is actively seeking opportunities to progress the Connors Arc Project through a JV or similar partnership.

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 10). 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.

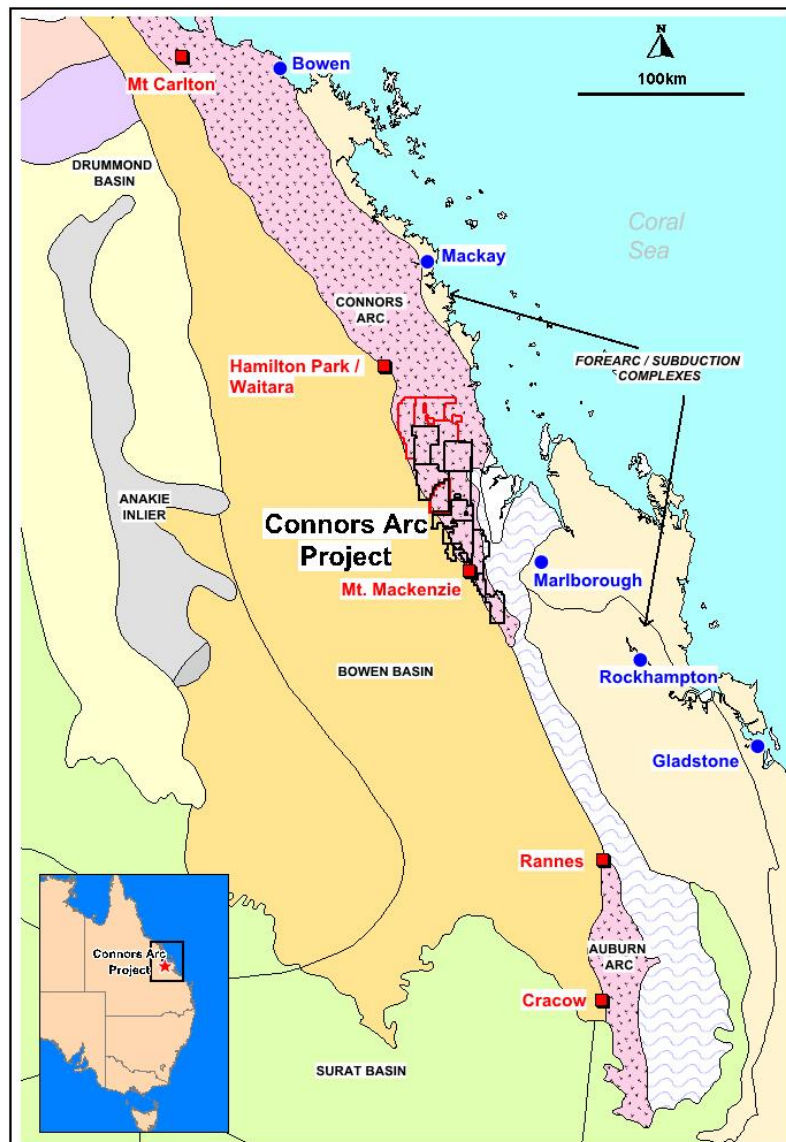


Figure 10: Location of tenements held in the Connors Arc Project.

Fraser Range - Nickel-Copper Projects (Western Australia)

Orion maintains a sizeable tenement package in the Fraser Range Province of Western Australia which Independence Group NL (ASX: IGO) is currently earning in to via a Joint Venture Agreement (**JVA**, refer ASX release 10 March 2017).

During the Quarter, Orion was advised by its joint venture partner that it had commenced aircore drilling on the tenements which form the JVA, specifically in the northern portion of the package. IGO stated that the exploration aims to better map the bedrock geology in the project area. Under the JVA, Orion will receive data from this drilling at the end of the program and will release any results which are material to the Company at this time.

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
South Africa				
NC30/5/1/1/2/10445PR	Prieska	73.33%	---	---
NC30/5/1/2/2/10244PR	Marydale	73.33%	---	---
Western Australia				
E28/2367	Fraser Range	30%	---	Independence Group NL
E28/2378	Fraser Range	30%	---	Independence Group NL
E28/2462	Fraser Range	30%	---	Independence Group NL
E28/2596	Fraser Range	30%	---	Independence Group NL
E39/1653	Fraser Range	35%	---	Independence Group NL & Geological Resources Pty Ltd
E39/1654	Fraser Range	10%	---	Independence Group NL & NBX Pty Ltd
E69/2379	Fraser Range	10%	---	Independence Group NL & Ponton Minerals Pty Ltd
E69/2380	Fraser Range	10%	---	Independence Group NL & Ponton Minerals Pty Ltd
E69/2707	Fraser Range	10%	---	Independence Group NL & 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%	---	---

Tenement	Project	Ownership Interest	Change in Quarter	Joint Venture Partner
EPM25764	Connors Arc	100%	---	---
EPM25813	Connors Arc	100%	---	---
EPM26081	Connors Arc	100%	---	---
EPM26082	Connors Arc	100%	---	---
EPM26083	Connors Arc	100%	---	---
Victoria				
MIN5487 ⁽¹⁾	Walhalla	100%	---	---
EL5340	Walhalla	100%	---	---
EL5348	Walhalla	100%	---	---

⁽¹⁾ MIN 5487 has been sold to Centennial Mining Ltd.

Corporate

Cash and Finance

Cash on hand at the end of the Quarter was \$3.4 million.

Tembo Capital and Share Placement

On 31 May 2017, the Company announced that leading mining-focused private equity group Tembo Capital Mining Fund II LP (**Tembo**), confirmed that it would become a cornerstone investor in Orion via a \$3 million share placement in the Company, providing a major boost to its base metal development strategy in South Africa. The confirmation of Tembo's cornerstone investment followed an extensive due diligence process which included site visits to the Company's Prieska Zinc-Copper Project.

On 12 April 2017, the Company announced that it had taken another important step in its base metal development strategy in South Africa after entering into an agreement (**Placement Agreement**) with Tembo (through its nominee Ndovu Capital X BV) which contemplated that Tembo would acquire a cornerstone stake in Orion and a strategic relationship would be formed between the two groups. The Placement Agreement provided for Tembo to subscribe for ordinary Orion shares (**Shares**) at an issue price of 2.4 cents per Share up to a maximum of \$4.7 million which would give Tembo a 19.9% holding in Orion, subject to the satisfaction of certain conditions including due diligence on Orion and its subsidiaries to Tembo's satisfaction (including with respect to the Company's operating budget and financing plan) and the Company's shareholders approving the Placement.

Tembo confirmed completion of satisfactory due diligence and nominated that it would subscribe for 125 million Shares in the Placement at an issue price of 2.4 cents per Share raising \$3 million, in addition to the \$3 million Orion Convertible Notes already held by Tembo.

At Orion's shareholder meeting held on 17 May 2017, Orion obtained approval for the issue of up to a maximum of 200 million Shares at an issue price of 2.4 cents per Share, to Tembo and/or other sophisticated or professional investors, to raise up to a maximum of \$4.8 million before costs (**Placement**), no later than 17 August 2017. In addition to Tembo's \$3 million subscription under the Placement, Orion may also seek to place Shares to sophisticated and professional investors at the same price of 2.4 cents Share, such that the total amount raised (including the amount subscribed to by Tembo under the Placement Agreement) will be up to \$4.8 million through the issue of up to 200 million Shares.

On the basis that Orion completes the entire \$4.8 million Placement:

- Tembo's \$3 million Share Placement will result in it holding a 12.6% stake in Orion following the Placement; and
- Tembo's stake in Orion when combined with the conversion of the Convertible Notes it holds (and assuming all Convertible Notes are converted to Shares), would give Tembo a 19.6% stake in the Company.

As at 30 June 2017, the Company had issued a total of 125 million Placement Shares, being the Shares issued to Tembo.

The Placement Agreement contemplated the formation of a strategic relationship between Orion and Tembo. As part of this, Orion announced on 17 May 2017 that the ASX has granted Orion a waiver from listing rule 6.18 to enable the Company to provide an anti-dilution right to Tembo should the Placement to Tembo proceed. Under the terms of the waiver, for so long as Tembo holds at least 12.5% of Orion's Shares on issue, Tembo will be granted an anti-dilution right to maintain its percentage holding in Orion if Orion conducts an equity capital raising by way of the issue of equity securities (**Top Up Right**).

As the issue of Placement Shares has been approved by shareholders, Orion also retains its 15% capacity for issues of equity securities without shareholder approval afforded by ASX Listing Rule 7.1. Tembo has also indicated that it intends to utilise its Top Up Right to maintain a minimum 12.5% stake in Orion following any placement of Shares by the Company that falls within this 15% capacity for issues of equity securities without shareholder approval (subject to terms and future circumstances).

Following the completion of the acquisition of Agama Exploration & Mining (Pty) Ltd in March 2017, Orion now holds an effective 73.33% interest in the Prospecting Rights over the historical Prieska Zinc-Copper Mine, located at Copperton in the Northern Cape Province of South Africa, as well as the nearby Marydale Gold-Copper Project. Proceeds from the Placement will be used principally to progress the resource drilling programs underway at the Prieska Project (refer ASX release 25 May 2017), exploration programs on the Company's Northern Cape South African tenements and for general working capital purposes.

The Company is in the process of reviewing the amount of funding required to rapidly advance the Prieska Project through to completion of a feasibility study leading to a development decision point. Following this review, the Company will determine what capital raising initiatives are required which Tembo has indicated it will support (subject to terms and future circumstances).

Under the terms of the Placement Agreement, following completion of the Placement, Orion will use best endeavours to undertake a rights issue to raise additional equity as soon as reasonably practicable, and in any event within 3 months after completion. If Orion undertakes a rights issue in the 6 months following completion, it must procure that (subject to pricing and structure) Tembo is offered the opportunity to participate in the sub-underwriting of the rights issue on standard market terms and conditions and Tembo agrees to consider the offer.

Upon completion of the Placement, consistent with its position as a significant shareholder in Orion, Tembo will have the right to appoint one non-executive director to the Company's Board for so long as it holds at least 12.5% of Orion's issued Shares (subject to the provisions of the Corporations Act, the ASX Listing Rules and the Company's Constitution).

Tembo's agreement to become a cornerstone investor in Orion via a \$3 million Share Placement, follows its initial \$3 million investment in Orion by way of a Convertible Notes issue in March 2017. On 17 March 2017, the Company announced that it had issued 232,692,294 Convertible Notes each with a face value of 2.6 cents per Convertible Note, raising \$6.05 million.

Strategic Relationship

The Placement Agreement also sets out the key terms of the strategic relationship between Orion and Tembo. Following the completion of the Placement:

- Orion will have access to Tembo's strategic and financing networks within emerging markets, which access will cease on Tembo ceasing to hold at least 12.5% of Orion's issued Shares;
- Tembo will have access to certain information about Orion and its assets, subject to Orion's confidentiality and disclosure obligations, which access will cease on Tembo ceasing to hold at least 12.5% of Orion's issued Shares;
- for so long as Tembo holds at least 12.5% of Orion's issued Shares, Tembo will be granted an anti-dilution right to maintain its percentage holding in Orion if Orion conducts an equity capital raising by way of the issue of equity securities;
- Orion will use best endeavours to undertake a rights issue to raise additional equity as soon as reasonably practicable (see above); and
- for so long as Tembo holds at least 12.5% of the issued Shares, Orion agrees to procure that the Board consults with Tembo in respect of any proposed changes to its key management personnel, provided that any Executive Director must not participate in any discussions in relation to him or her.

About Tembo

Tembo is a private equity group targeting junior and mid-tier mining investment opportunities in developing countries. Tembo has technical and financial experience with in-house expertise in the fields of geology, mine engineering, metallurgy, mining finance and private equity. This experience, coupled with a strong network of relationships in the mining industry, enables Tembo to add long-term value to its investments through technical input, strategic guidance, financial structuring advice and industry introductions. Tembo aims to work collaboratively with its investee companies through a long term partnership-type approach.

Board Changes

As stated above, with Tembo now able to appoint a member to the Orion Board and the Company's focus being on its South African Projects, effective from 1 August 2017 Mr Bill Oliver will change his role within the Company to become a Non-Executive Director. Mr Oliver will continue to consult to the Company on technical matters in his new role, including supervision of the Fraser Range JVA and the Connors Arc Project.

Agama settlement (South Africa)

As referred to in the Exploration section of this Report, on 30 March 2017, the Company announced that it had completed the acquisition of Agama Exploration & Mining (Pty) Ltd (**Agama**), resulting in Orion, through its subsidiary companies, holding an effective 73.33% interest in the company holding Prospecting Rights over the historical Prieska Zinc-Copper Mine, located at Copperton, Northern Cape province, South Africa, and the Marydale Gold-Copper Project, a volcanogenic gold-copper discovery located 60km from Prieska Project (Figure 1).

The purchase consideration paid on settlement of the acquisition was ZAR53 million (~A\$5.5 million), of which ZAR31.5 million (~A\$3.3 million) was paid in cash and ZAR21.5 million (~A\$2.2 million) was paid by issue of Orion shares (each share having an attached unlisted Orion option) (refer ASX release 29 March 2017).

In addition, Orion provided finance for Agama to enable it to settle all historical shareholder loans to an aggregate amount of approximately ZAR33.3 million (~A\$3.4 million).

Orion is well financed at project level to advance the Prieska Project, with a ZAR30 million (~A\$3.0 million) facility available from a South African Investment Fund. Importantly, the Prieska Project also has a cash-backed environmental fund of ZAR18.2 million (~A\$1.82 million) which has not been needed since the mine closed in 1991.

The projects have a well established Broad Based Black Economic Empowerment ownership structure (26.66% – 30% ownership) in place with strong local partners.

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

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 7 August 2017; and
 - The parties entering into a comprehensive earn-in agreement prior to 7 August 2017.
- 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:
 - Expenditure commitment of US\$0.25 million in the first 6 months; and
 - 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 earned the initial 25% interest:
 - 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
 - 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 earned a 50% interest:
 - 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
 - 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.

Should Orion fail to meet its earn in right commitments, then either the parties will re-negotiate 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.

Independent Investment Research Issue Research Report

On 9 June 2017, the Company announced that Independent Investment Research (**IIR**) had completed a research report on Orion.

To view a copy of the report, please visit our website at: www.orionminerals.com.au.

IIR is an independent investment research house based in Australia and the United States. IIR specialises in the analysis of high quality commissioned research for brokers, family offices and fund managers. IIR distributes its research in Australia, Asia, United States and the Americas. IIR does not participate in any corporate or capital raising activity and therefore it does not have any inherent bias that may result from research that is linked to any corporate/ capital raising activity. As disclosed in the report, IIR were commissioned by the Company to prepare the research report.

Shareholder Meeting and Change of Company Name

The Company held a meeting of its shareholders on 17 May 2017. At this General Meeting of the Company, shareholders approved the change of name from "Orion Gold NL" to "Orion Minerals NL", consistent with Orion embarking on a base metal development strategy after completing acquisition of its world-class VMS Zinc-Copper Project in South Africa.

All resolutions put to shareholders at the General Meeting, including the change of name and Placement, were carried on a show of hands.

Competent Persons Statement

The information in this report that relates to Orion's Exploration Results and historical Exploration Results at the Areachap Belt Projects complies with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code**) and has been compiled and assessed under the supervision of Mr Errol Smart, Orion Minerals 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 Exploration Results and other technical information for the Connors Arc and Fraser Range Projects 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 a director of Orion Minerals 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).