

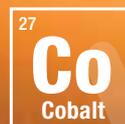
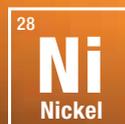
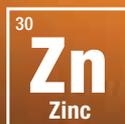
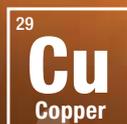


Orion Minerals

*Developing a 21<sup>st</sup> century South African base metals business*

# ANNUAL REPORT

# 2019



ASX: ORN | JSE: ORN

## ABOUT THIS REPORT

*This Annual Report is a summary of the operations, activities and performance of Orion Minerals Limited ABN 76 098 939 274 and its financial position for the period ended 30 June 2019.*

In this report, unless otherwise stated, references to Orion Minerals or Orion and 'the Company', 'we', 'us' and 'our' refer to Orion Minerals Limited.

Monetary amounts in this document are reported in Australian dollars (AUD, \$), unless otherwise stated.

### Forward-looking statements

This report 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 report.

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 report.

All information in respect of exploration results and other technical information should be read in conjunction with Competent Person Statements in this report (where applicable).

To the maximum extent permitted by law, Orion and any of its related bodies corporate and affiliates and their officers, employees, agents, associates and advisers, disclaim any obligations or undertakings 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 report, 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).

## CORPORATE DIRECTORY

### COMPANY SECRETARY

Martin Bouwmeester

### REGISTERED OFFICE AND PRINCIPAL PLACE OF BUSINESS

Suite 617  
530 Little Collins Street  
Melbourne, Victoria, 3000

### CONTACT DETAILS

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Website: [www.orionminerals.com.au](http://www.orionminerals.com.au)

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QV1, Level 2, 250 St Georges Terrace  
Perth, Western Australia 6000  
Telephone: +61 1300 306 089

### AUDITOR

BDO East Coast Partnership  
Level 18, Tower 4  
727 Collins Street  
Docklands, Victoria 3008

### STOCK EXCHANGE

#### Primary listing:

Australian Securities Exchange (ASX)  
ASX Code: ORN

#### Secondary listing:

JSE Limited (JSE)  
JSE Code: ORN

### JSE SPONSOR

Merchantec Capital  
2nd Floor, North Block  
Corner 6th Road & Jan Smuts Avenue  
Hyde Park  
Johannesburg 2196

# FINDING, PLANNING AND BUILDING THE MINES OF THE FUTURE



Orion Minerals is a minerals exploration and development company focusing on copper, zinc, nickel, cobalt, gold and silver as well as platinum group metals in South Africa and Australia



Listed on the Australian Securities Exchange (ASX: ORN) with a secondary listing on the Main Board of the Johannesburg Stock Exchange (JSE: ORN)

Scan the QR code to download the PDF.



**ANNUAL REPORT**  
**2019**

[www.orionminerals.com.au](http://www.orionminerals.com.au)

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SECTION

1

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# CORPORATE PROFILE

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*Orion Minerals focuses on world-class Volcanogenic  
Massive Sulphide multi-commodity mineral deposits to  
meet increasing industrial demand fueled by ongoing  
technological innovation*

## ORION AT A GLANCE



# ON TRACK

Orion Minerals is a globally diversified metal explorer and developer which is on track to become a new generation base metals producer through the development of its flagship Prieska Copper-Zinc Project (Prieska Project) in South Africa's Areachap geological terrane, in the Northern Cape province.

The highly prospective Areachap Terrane provides Orion with a world-class exploration pipeline with its characteristic Volcanogenic

Massive Sulphide (VMS) that contains copper-zinc and intrusive nickel-copper-cobalt-PGE (platinum group elements) mineralisation. There has been virtually no exploration in the region for more than three decades. In Australia, Orion has an exploration joint venture with Independence Group (ASX: IGO) in the world-class Fraser Range Province.

Orion's biggest shareholder is London-based Tembo Capital.

## VALUES



Prioritising **employee health and safety**



Committed to **community engagement and corporate social responsibility**



Promoting **technology advancement**



Driving **education and skills development**



Adopting a **pioneering spirit**

# ORION's investment case for the Prieska Project



## THE OREBODY

- Globally significant VMS Resource: **30.49Mt @ 1.2% Cu, 3.7% Zn**
- Mineral Reserve: **13.62Mt @ 1.06% Cu, 3.18% Zn**



## FOUNDATION PHASE BANKABLE FEASIBILITY STUDY OUTCOMES

- Initial 10-year, 2.4Mtpa operation targeting **22ktpa Cu and 70ktpa Zn**
- **Strong** operating margins and financials

## KEY achievements in 2019



- Foundation Phase **bankable feasibility study (BFS) completed June 2019** on 2.4Mtpa underground and open pit mining operation at Prieska Project
- Post BFS trials, **optimisation** and **operational readiness activities underway**
  - Final investment decision targeted for H2 FY2019
  - Project approvals nearing completion, with **Repli Environmental Authorisation granted** post year end in July 2019 and **Repli Mining Right granted** in August 2019
- Strengthened growth pipeline through **Ayoba discovery**
- Landmark **black economic empowerment agreement** completed
- **Drilling commenced on Fraser Range Targets**
- Anglo American sefa Mining Fund becomes a shareholder
- **Employee and community trusts established** for Prieska Project
- Post year end on 2 September 2019, Masiqhame received **Ministerial consent** for the transfer of controlling interest to Orion

# ORION PROJECTS IN SOUTH AFRICA AND AUSTRALIA



## SOUTH AFRICA

Prieska Project, Northern Cape  
Total Mineral Resource of  
30.49Mt @ 1.2% Cu and 3.7% Zn

SOUTH AFRICAN OFFICES:  
Johannesburg, Gauteng  
Kimberley, Northern Cape

FRASER RANGE PROJECT:  
Western Australia

## AUSTRALIA

AUSTRALIA HEAD OFFICE:  
Melbourne, Victoria



# VALUE GROWTH

PROJECT	VISION	PROGRESS
<p><b>Prieska Project (South Africa)</b></p> 	<p>To fast-track to operational readiness and mine construction</p>	<ul style="list-style-type: none"> <li>• More than 80,000 metres of drilling resulted in JORC Mineral Resource of 30.49Mt @ 1.2% Cu, 3.7% Zn</li> <li>• Completed BFS in June 2019, based on a 10-year Foundation Phase 2.4Mtpa underground and open pit mining operation, delivering total payable metal production of 189kt of copper and 580kt of zinc in differentiated concentrates</li> <li>• Post BFS trials, optimisation and operational readiness activities underway</li> <li>• Post year end, on 3 July 2019, the Repli Environmental Authorisation was granted by the DMRE. This was followed by the awarding of the Repli Mining Right on 23 August 2019. Approval for the Vardocube Environmental Application and Mining Right is expected in FY2020</li> </ul>
<p><b>Development projects (South Africa)</b></p> 	<p>To maximise the opportunity provided by the world class Areachap minerals belt</p>	<ul style="list-style-type: none"> <li>• Focused ongoing explorational program</li> <li>• Secured mid-tier miner, Independence Group (ASX: IGO), as strategic partner               <ul style="list-style-type: none"> <li>• IGO have preferential rights should Orion decide to joint venture or sell any of its nickel projects</li> <li>• IGO increased its shareholding in ORN to 8% through a \$5 million share placement</li> </ul> </li> <li>• Airborne electromagnetic survey (AEM) identified several high priority targets for follow-up work</li> <li>• Ayoba VMS discovery, a zinc-copper bearing massive sulphide body discovered towards the end of 2018. Discovery drill hole intersected 9.5 metres of massive sulphides grading 0.63% Cu and 0.93% Zn, including 1.50 metres at 0.89% Cu and 4.98% Zn. Ayoba represents the first new VMS discovery in the Areachap Belt in over 36 years. Drilling continued in 2019</li> </ul>
<p><b>Fraser Range (Australia)</b></p> 	<p>To leverage existing joint venture partner</p>	<ul style="list-style-type: none"> <li>• Secured a mid-tier miner, Independence Group (ASX: IGO) as a joint venture partner in 2017               <ul style="list-style-type: none"> <li>• Free carried to completion of pre-feasibility study</li> <li>• IGO responsible for all exploration on the tenements, providing regular updates to Orion of its activities and results</li> </ul> </li> <li>• Drilling program begun to test two high-priority targets: North West Passage for intrusive hosted nickel-copper and Pike Prospect for nickel-copper intrusive mineralisation and VMS copper-zinc mineralisation</li> </ul>

# THROUGH FOCUSED EXPERTISE AND DEVELOPMENT



## STRATEGY

- Ongoing drilling designed to further increase and upgrade the Prieska Project Mineral Resource

*Orion is endeavouring to fast track the development of the mine. The latest technology and modern mining methods will be used to identify additional mineral resources*

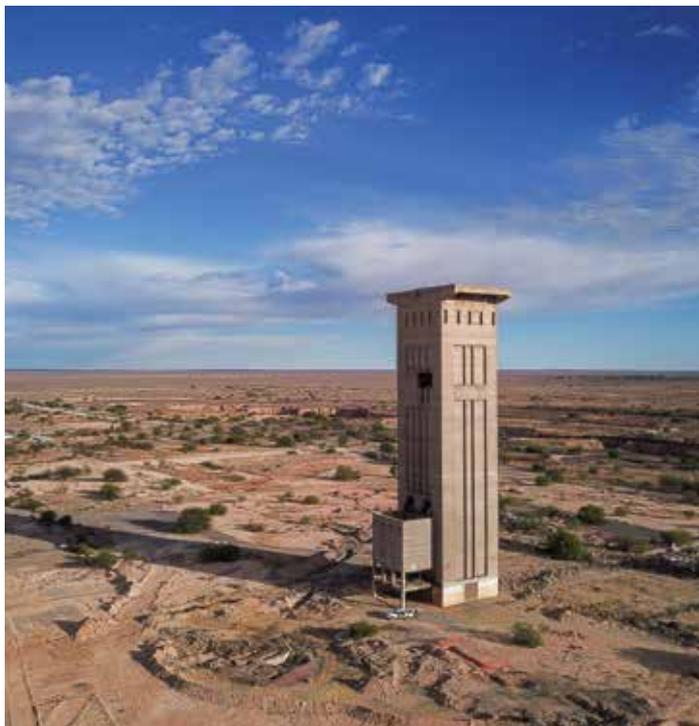
- Continue to pursue regional exploration opportunities surrounding Prieska
- Masiqhame and Namaqua-Disawell provide significant potential to operate as satellite deposits to Prieska in the future
- Progress highly prospective regional nickel-copper-cobalt and zinc-copper projects

- Targeting ultramafic nickel/copper discoveries

Orion's strategy is to focus on world-class VMS multi-commodity mineral deposits to meet increasing industrial demand fueled by ongoing technological innovation.

The Company has targeted geological terranes known for VMS potential and shortlisted world class mineral provinces, where modern exploration techniques would then be applied to prove its mining potential. This search has resulted in Orion securing large consolidated land packages, as Mining Rights, Prospecting Rights or under statutorily-acknowledged applications (3,000km<sup>2</sup>), in the proven Areachap Minerals Belt in South Africa. This includes the Prieska Project, as well as highly prospective zones with VMS copper-zinc, intrusive nickel-copper sulphides and precious metals potential.

The Prieska Project brings additional upside for Orion shareholders – due diligence of historical data shows unmined mineral resources exist around the current infrastructure footprint that includes a primary shaft (1,024m deep) in addition to links to power, transport and water. Fast-tracking development of these projects will deliver on Orion's growth strategy as mine development and time to market are significantly reduced. This offers the potential for more rapid returns for shareholders, which are generally not typical of early-stage exploration companies.



*Hutchings Shaft at Prieska Project*



# THE PRIESKA PROJECT

*The Prieska Project in the Northern Cape in South Africa is Orion's flagship project and is paving the way for further exploration of the valuable, geologically-rich Areachap Belt, which has been under-explored over the past 35 years.*

The Prieska Project is a globally-significant VMS Resource of 30.49Mt at 1.2% Cu, 3.7% Zn. The Project's BFS was completed in the second quarter of CY2019, based on an initial 10-year, 2.4Mtpa mining operation targeting 20-24ktpa Cu, 70-80ktpa Zn. Project approvals are nearing completion, with both the Environmental Authorisation and the Mining Right for the Repli portion of the deposit granted. The project investment decision is expected by late 2019/early 2020.

#### **Prieska's existing infrastructure**

- Sealed access roads to project site
- 50km tar road to existing rail siding
- Four high-voltage regional lines linked to the national electricity grid
- 175MW operational solar power plants in the area – with an additional 675MW approved and a further 300MW pending authorisation
- 800km rail link to major bulk commodity and deep-water ports at Coega and Saldanha Bay
- Bulk water pipeline supplies site from Orange River with all-year pumping capacity
- Good contractor accommodation available in the private village of Copperton, ~3km from project site



The area's infrastructure is sound with intact power and water supplies, and roads. Based on the world-class orebody at Prieska, the exploration results being generated and the benefits of the existing infrastructure, Orion is endeavouring to fast track the development of the mine. The latest technology and modern mining methods will be used to identify additional mineral resources.

After the Prieska mine closed in 1991, the communities and industry in the area, the closest of which is 65km from the project site, were left isolated. Orion is fully committed to a wide-ranging community engagement program in preparation for a revitalisation of the region, with a focus on skills and enterprise development. For more information, see *Corporate social responsibility* on page 22.

### **BEE partnership**

In August 2019, Orion further strengthened its black economic empowerment (BEE) partnership by introducing Safika Resources, a prominent BEE mining and exploration company, as a key BEE partner at Prieska. The agreement followed Orion's announcement of a pivotal BEE equity participation deal and capital raising in April 2019 and sees Safika Resources included as a shareholder alongside the founding members of Prieska Resources, Orion's BEE holding company. Prieska Resources will hold a 20% stake in the project. Safika Resources joins founding BEE partners Black Star Minerals and Kolobe Nala Investment Company as holders in Prieska Resources. All of Orion's BEE partners will be aligned as shareholders at the ASX-JSE listed level, sharing the equity risk and reward on equal terms with other Orion shareholders. See *Corporate* section on page 61 for more information.

## Environmental footprint

The Prieska Project encompasses the historic Prieska Copper Mine whose footprint was rehabilitated and a mine closure certificate issued in 1995. The project area is thus regarded as having low environmental sensitivity given this previous mining activity.

The Northern Cape province, being a water-scarce region, relies heavily on the Orange and Vaal Rivers for its water supply. The Project area is well served by a pipeline from the Orange River and the dryness of the region means a dry mine, with low groundwater inflows into mine excavations. In line with Orion's commitment to sustainable operations, water treatment trials have been commissioned to investigate ways to maximise the use of accumulated groundwater and so best apply available water resources.



*Cuprum Substation at the Prieska Project Site, offering access to the national power grid*

### Renewable energy supply for Prieska

A collaboration agreement is in place that provides the framework for advancing the plan to have over 50% of Prieska's power needs supplied from renewable energy sources.

The collaboration agreement was signed with the leading global renewable energy company juwi Renewable Energies (Pty) Ltd in March 2019 with a preliminary scope to assess the feasibility of establishing a dedicated solar and wind hybrid power plant for the Project. The results of this work will inform the Project's long-term power supply strategy and are in line with local government Integrated Development Plans (IDPs).

The agreement fits in with the Company's strategy to make best use of its geographic advantage in the semi-arid Northern Cape province of South Africa. This region has the highest irradiance levels in the country with its hot, dry climate and is also very well-suited for wind farms. It is already a well-established renewable energy generating region with 190MW of solar power plants in operation and 240MW of wind power currently under construction immediately adjacent to the Prieska Project.

Implementing this renewable energy plan will improve Orion's long-term power supply security, lessening the burden on the national electricity grid and reducing the Company's carbon and water footprint.

*“Our decision to pursue renewable power supply options is another illustration of our commitment to build a modern 21st century mine at Prieska that employs innovative technologies and embraces sustainability. Investing in a long-term renewable energy solution also makes perfect sense for a long-life production asset such as Prieska.”*

#### **Errol Smart, Managing Director and CEO**

Developing the renewable energy potential of the region is also a strategic goal of local government, as communicated in its IDPs. Orion and juwi intend to continue to work closely with local government, under the auspice of the collaboration agreement entered into with the Siyathemba Municipality in October 2017, to maximise the employment and enterprise development in local communities.

SECTION

# 2

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# LEADERSHIP

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*This year has been a significant one for Orion Minerals – the culmination of three years of exploration and engineering studies, stakeholder engagements and sheer determination to get the Prieska Project back on the map*

## CHAIRMAN'S STATEMENT



*Orion's commitment to the development of the Prieska Project goes well beyond the technical aspects of completing the BFS. Our team has also engaged in intensive community relationships during the past three years which are designed to provide training, education and readiness for direct and indirect employment opportunities.*

**Denis Waddell**  
Chairman

*I am pleased to report on what has been another exceptionally busy and positive year for Orion, during which we have achieved major milestones towards becoming a diversified metal miner and explorer.*

Given our achievements, we are now on track to become a new generation base metals producer through the development of our flagship Prieska Copper-Zinc Project in South Africa's Areachap geological terrane, in the Northern Cape.

The constant and demanding workload successfully undertaken by our Managing Director, Errol Smart; Chief Operating Officer, Walter Shamu; and our leadership team, culminated in the completion of a very positive BFS in June 2019 followed by the grant of the Prieska Mining Right in August 2019. Both these achievements position the Company for major transformation.

Orion's commitment to the development of the Prieska Project goes well beyond the technical aspects of completing the BFS. Our team has also engaged in intensive community relationships during the past three years which are designed to provide training, education and readiness for direct and indirect employment opportunities. These initiatives are ongoing.

In addition, Errol has committed considerable time as a member of the Minerals Council of South Africa which has successfully negotiated the positive outcomes reflected in the new Mining Charter. Errol's role has been significant and has resulted in a robust yet constructive relationship with the Department of Mineral Resources and Energy.

We have also negotiated a very positive restructuring of our BEE obligations with a very strong BEE partnership now in place which meets Mining Charter 3 obligations. Importantly, this restructuring includes the establishment of the Employee and Community Trusts for the Prieska Project.

# POSITIVE

**Orion on the cusp of becoming a  
base metals producer**

We are now focusing our attention on post BFS trials, optimisation studies and operational readiness. With Project financing negotiations underway, we are working towards a final investment decision by the end of 2019.

In addition to the flagship Prieska Project, the Company has a large ground package in the Areachap Belt of the Northern Cape, which is highly prospective for VMS copper-zinc and intrusive nickel-copper-cobalt-PGE sulphide discoveries. Many advanced targets generated from Orion's major regional airborne geophysical surveys have been and will continue to be drill tested. We are very encouraged by the results to date and by the potential to make further significant base metal discoveries in this under-explored region.

The highly prospective Areachap Terrane provides Orion with a world-class exploration pipeline. In addition, Orion has an exploration joint venture with Independence Group (ASX: IGO) in the world-class Fraser Range Province in Australia. Numerous targets on the Orion/IGO joint venture ground, which is also prospective for VMS copper-zinc and intrusive nickel-copper mineralisation, are currently being drill tested by IGO. Orion is free carried to pre-feasibility on the Orion/IGO joint venture ground.

On behalf of the Board of Directors, I would like to thank Errol and his dedicated team for their significant achievements during the past year.

I also welcome Tom Borman and Godfrey Gomwe as new Board members and thank my fellow directors for their contribution and support and you, our shareholders, for your ongoing support of the Company.



**Denis Waddell**  
Chairman



## CHIEF EXECUTIVE'S REVIEW



*With full development targeted in early 2020, subject to securing of financing and a final investment decision, the Prieska Project is the platform for us to progress the development of what will be a new-generation mining project for South Africa.*

**Errol Smart**  
Chief Executive Officer

*It's been an exhilarating year – perhaps the most significant in Orion Minerals' history, with huge strides taken to deliver our flagship Prieska Copper-Zinc Project as a development ready asset.*

But as many of you know, this is not just the story of 12 months but rather the culmination of three years of exploration and engineering studies, stakeholder engagements and sheer determination to get this project back on the map.

The marked progress made during the year was rewarded post year end when Orion subsidiary Repli, holder of the Prieska Project, was granted a Mining Right by the South African Department of Mineral Resources and Energy. This much anticipated permitting milestone is key to the development of the project and is a testament to the Company's growth over the past few years.

Each of the months preceding the awarding of the Mining Right were used to progress the project along its pathway. Among the many milestones achieved this year were the granting of the Environmental Authorisation and the release of a positive BFS. We also restructured and grew our support base of top-class BEE investors and engaged in very intense community engagement programs.

Completed in June, the BFS confirmed what we have long believed – that Prieska represents a highly valuable strategic asset with the potential to become a significant source of high-quality copper and zinc concentrates under conditions of rapidly-growing demand in global markets.

As detailed further in this report, the BFS demonstrates that Prieska will be a high-margin, long-life asset, delivering an estimated AUD1.1 billion of pre-tax free cash flow during the first 10-year Foundation Phase. With a payback period of just under three years from first production, the project yields a pre-tax Net Present Value of AUD574 million (at an 8% discount rate) and an all-in-sustaining operating margin of 44% during the 10-year Foundation Phase.

# PROGRESS

**Each of the months preceding the awarding of the Mining Right were used to progress the project along its pathway.**

Its low unit operating costs also mean the project would remain profitable in a depressed metal price environment. We are in a perfect state, the copper production is subsidised and almost paid for by zinc production, making this an exceptionally low-cost copper production asset.

Importantly, there is also ample scope to significantly extend the mine life by embarking on drilling programs to test beyond the current limits of the resource, which remains open at depth and along strike and has also been shown to host satellite deposits in the near-mine hinterland.

With full development targeted in early 2020, subject to securing of financing and a final investment decision, the Prieska Project is the platform for us to progress the development of what will be a new-generation mining project for South Africa.

Backed by a strong group of BEE investors with host communities and employees invested in the Company through trusts that will directly benefit them and their families, we like to think the project has become the poster child for junior mining in South Africa, demonstrating the potential for revival of and modernisation of the South African mining sector.

There is no denying that South Africa still has some of the best untested geological potential in the world. Furthermore, Prieska is one of the few permitted, mid-tier base metal development assets globally and is well positioned to become a hub for base metals production supplying into the world's growing demand for green metals.

We are delighted with Prieska's progress and look forward to the next chapter in this journey.

I would like to thank the Orion team and our service providers for their ongoing tireless efforts. Special recognition and thanks go to our Chairman, Denis, for his ongoing guidance and support and our stellar leadership team for their significant contribution to what has been a watershed year.



**Errol Smart**  
Chief Executive Officer



## BOARD OF DIRECTORS

### BOARD OF DIRECTORS



**Denis Waddell**  
Chairman



**Errol Smart**  
Managing Director and  
Chief Executive Officer



**Tom Borman**  
Non-Executive Director



**Alexander Haller**  
Non-Executive Director



**Godfrey Gomwe**  
Non-Executive Director



**Mark Palmer**  
Non-Executive Director

#### Denis Waddell

##### Chairman

Denis is a chartered accountant with more than three decades of experience in corporate finance and management of exploration and mining companies. He founded Tanami Gold NL in 1994 where he was first managing director, then chairman and non-executive director until 2012. Prior to this, Denis was finance director of the Metana Minerals NL group.

#### Errol Smart

##### Managing Director and Chief Executive Officer

Errol is a geologist, registered for JORC purposes. He has some 25 years of industry experience across all aspects of exploration, mine development and operation, with a key focus on gold and base metals throughout Africa and in Australia. Errol has held positions in African Stellar, LionGold Corporation, Clarity Minerals, Metallon Gold, Cluff Mining and AngloGold.

#### Tom Borman

##### Non-Executive Director

Tom is a highly-experienced global mining executive who served more than 11 years working for the BHP Billiton Group in various senior managerial roles, including that of chief financial officer. He also held senior roles in strategy and business development, and served as the project manager for the merger integration transaction between BHP Limited and Billiton. After leaving BHP Billiton in 2006, Tom joined Warrior Coal Investments, where he was part of the executive team which established the portfolio of assets which became the Optimum Group of companies.

#### Alexander Haller

##### Non-Executive Director

Alexander is a partner of Zachary Capital Management, providing advisory services to several private investment companies, including Silja Investment Ltd, focusing on principal investment activities. From 2001 to 2007 Alexander worked in the corporate finance division at JP Morgan Chase & Co. in the USA, as an advisor on mergers and acquisitions, and financing, in both equity and debt capital markets.

#### Godfrey Gomwe

##### Non-Executive Director

Godfrey is the former chief executive officer of Anglo American's Thermal Coal business, where his responsibilities included oversight of the company's manganese interests in the joint venture with BHP. Until August 2012, Godfrey was an executive director of Anglo American South Africa, where he held the positions of head of group business development Africa, finance director and chief operating officer. He was also chairman and chief executive of Anglo American Zimbabwe Limited and served on a number of Anglo American operating boards and executive committees including Kumba Iron Ore, Anglo American Platinum, Highveld Steel & Vanadium and Mondi South Africa.

#### Mark Palmer

##### Non-Executive Director

Mark has 13 years of experience working with entities in Australia, including eight years with Dominion Mining. He previously worked with NM Rothschild & Sons Limited for the London mining project as part of the finance team where he was responsible for assessing mining projects globally. He later moved to the investment banking team at UBS, where his focus was global mergers and acquisitions, and equity and debt financing. He also ran the EMEA mining team at UBS, later joining Tembo Capital in 2015 as investment director.



## SENIOR MANAGEMENT

### SENIOR MANAGEMENT



**Errol Smart**  
Managing Director and  
Chief Executive Officer



**Walter Shamu**  
Chief Operating Officer



**Martin Bouwmeester**  
Chief Financial Officer  
and Company Secretary



**Michelle Jenkins**  
Executive: Finance and  
Administration



**Louw van Schalkwyk**  
Executive: Exploration



**Nelson Mosiapo**  
Group Corporate Social  
Responsibility Advisor



**Marcus Birch**  
Commercial and  
Business Support  
Manager



**Pottie Potgieter**  
Geology Manager



**Pieter Roux**  
Group Financial  
Controller

#### Errol Smart

##### Managing Director and Chief Executive Officer

Errol is a geologist, registered for JORC purposes. He has some 25 years of industry experience across all aspects of exploration, mine development and operation, with a key focus on gold and base metals throughout Africa and in Australia. Errol has held positions in African Stellar, LionGold Corporation, Clarity Minerals, Metallon Gold, Cluff Mining and AngloGold.

#### Walter Shamu

##### Chief Operating Officer

Walter is a mining engineer with a BEng (Mining Engineering) and a Masters in Engineering (Rock Mechanics) from Curtin University as well as an LLB (Law) from Macquarie University in Australia. He spent 12 years in the Australasian mining industry with Henry Walker Eltin, Western Mining and Gold Fields before moving to South Africa, where he has held technical and corporate roles with Gold Fields, ERG and Taurus Gold on exploration projects, mine development and mining operations throughout Africa.

#### Martin Bouwmeester

##### Chief Financial Officer and Company Secretary

Martin is an FCPA with over 20 years' industry experience in exploration, mine development and operation. He was previously the chief financial officer, business development manager and company secretary of Perseverance Corporation Limited. Martin was a key member of the team that successfully completed feasibility studies, funding and development of the Fosterville Gold Mine in Australia.

#### Michelle Jenkins

##### Executive Finance and Administration

Michelle is both a geologist and a chartered accountant with over 20 years' experience in exploration and mining. She holds an Honours Degree in Geology from the University of the Witwatersrand and BSc Hons in Accounting Science from the University of South Africa. Michelle has substantial experience working as a geologist prior to joining KPMG's mining group as a chartered accountant. She was also the chief financial officer at Taurus Gold and held the role of chief financial officer with several exploration and mining companies throughout Africa. She was previously a director within the Clarity Capital Group and an executive director of Pangea Exploration. Michelle offers a wealth of knowledge in resource risk management and mitigation as well as strategic leadership and has been involved in operating resources ventures.

#### Louw van Schalkwyk

##### Executive: Exploration

Louw holds a BSc Geology Honours degree from the University of Stellenbosch. He started his career as a geologist with Gold Fields of South Africa, then worked as an exploration consultant for Anglo American. He served as technical director on the boards of two junior exploration companies before joining Vedanta Zinc International. Louw specialises in structural and exploration



## Leadership

### SENIOR MANAGEMENT *continued*

geology and was part of the team that discovered the 60 Mt Gamsberg East Zinc Deposit in 2005, which is one of the highlights of his career. Other notable achievements include the discovery and drill out of the 250,000oz Byumba Gold deposit in Rwanda in 2008.

#### **Nelson Mosiapo**

##### **Group Corporate Social Responsibility Adviser**

Nelson studied chemical engineering at the Cape Peninsula University of Technology. As an advanced policy scholar of science and technology, he served on the policy unit of the governing party in South Africa prior to the first democratic elections. His professional career started at Sasol Petroleum as a gasification process controller and then a learner official at Anglo American/De Beers. He is also the founder and trustee of the Mosiapo Family Trust, a private and investment equity company in the resources sector with assets featured on the JSE.

#### **Marcus Birch**

##### **Commercial and Business Support Manager**

Marcus holds a BSc Honours Geology degree from the University of Exeter and a BCom from the University of South Africa. He has over 25 years' experience in the mining and minerals exploration industry, initially as a geologist in the South African gold mining sector. Marcus subsequently moved into the field of procurement and supply chain with Anglo Gold Ashanti, where he led a team of commodity specialists. During the last decade, Marcus has held senior general management positions in the junior exploration sector, with Clarity Minerals and High Power Exploration, responsible for the establishment and growth of minerals service

companies and the management of the logistical aspect of exploration projects across Africa, Australia and South America.

#### **Pottie Potgieter**

##### **Geology Manager**

Pottie obtained an MSc Exploration Geology at Rhodes University and is registered with the South African Council of Natural Scientific Professionals, a Recognised Overseas Professional Organisation for JORC purposes. He has 17 years of exploration experience with Gold Fields of South Africa and was the chief geologist and mineral resources manager for Black Mountain Mining from 1995 until retiring in 2016. During his time at Black Mountain, Pottie was part of the feasibility teams responsible for the development of the Broken Hill Deeps Mine and the Gamsberg Zinc Mine.

#### **Pieter Roux**

##### **Group Financial Controller**

Pieter holds a BCom (Management Accounting) and DipCIMA. He has 15 years' experience in finance team leadership and management in mining and exploration in Zimbabwe, Zambia, Namibia and South Africa. Pieter has implemented and operated real-time web-based financial control systems for companies across the African continent. He has also developed various funding models, applied for fund raising, budgeting and operational control purposes. Most recently, Pieter has worked with Taurus Gold as group financial controller, providing leadership within the finance team and management reporting for the Taurus Gold Group. Prior to that he was the finance unit manager for Evraz Highveld & Vanadium's Mapochs Mine and group management accountant for Clarity Capital Group.



SECTION

3

# BUSINESS REVIEW

*Orion Minerals believes that the development of the Prieska Copper-Zinc Project will be a catalyst to the economic and socio-economic revival underway in South Africa's Northern Cape province*

**SAFETY, HEALTH AND ENVIRONMENT**

*The high standard of workplace safety and health management performance on all Company projects continued in 2019, with no lost-time injuries reported during the year. A zero lost-time injury frequency rate was achieved. Health and safety management focused on maintaining the relevant Company health and safety systems as activities at the various work sites and workforce profiles transitioned rapidly through the different phases of exploration and mining studies.*

An aggregate of approximately 205,000 hours was worked on project sites throughout the year.

Category of work	FY 2019 (hours)
Exploration	195,962
Mine re-entry	9,439
<b>Total</b>	<b>205,401</b>

**Prieska Project**

In line with Orion’s commitment to industry-wide safety and Zero Harm, a number of safety initiatives were undertaken throughout the year including the observance of the inaugural National Day

of Safety and Health in Mining Day in August 2018 as promoted by the Minerals Council South Africa. The event, attended by 200 staff and contractors, aimed to re-emphasise that safety in the workplace was every individual’s responsibility and to re-affirm employees’ legal rights to leave a dangerous workplace without being prejudiced.

Though still largely an exploration site, scheduled inspections and record keeping by statutory appointees for the Prieska Project continued, to a standard normally reserved for fully-operational, producing mine sites.

Proactive and cooperative engagement with statutory authorities was maintained, with representatives of the Department of Mineral Resources and Energy (DMRE) invited for familiarisation tours of the Prieska Project site. Advice on improving hydrocarbon management received from the DMRE has been incorporated into general site work practices, as have guidelines on regulatory mine health and safety practices.

As the Prieska Project falls inside a legislated zone around the Square Kilometre Array (SKA) radio telescope project, the South African Astronomy Management Authority (AMA), the governing body managing the SKA, places operating restrictions on the electromagnetic emissions from any equipment to be used at the Project site. Constructive engagement with AMA resulted in the authorities approving, in April 2019, the Electromagnetic Capability (EMC) Plan for the Prieska Project. The EMC Plan details how electromagnetic emissions from equipment planned for use in the mining operations would be managed so that it does not interfere with the operation of the SKA radio telescope. This EMC Plan approval is an important milestone to obtaining full AMA approval for mining operations to proceed.



Committing to health and safety at the Minerals Council Safety Day at the Prieska Project



*Orion works with the community to help preserve the historic and culturally-significant Kopje site near Prieska*



*Community Arbour Day initiative in Prieska town*



*Dust monitoring station with the Hutchings Shaft in the background*

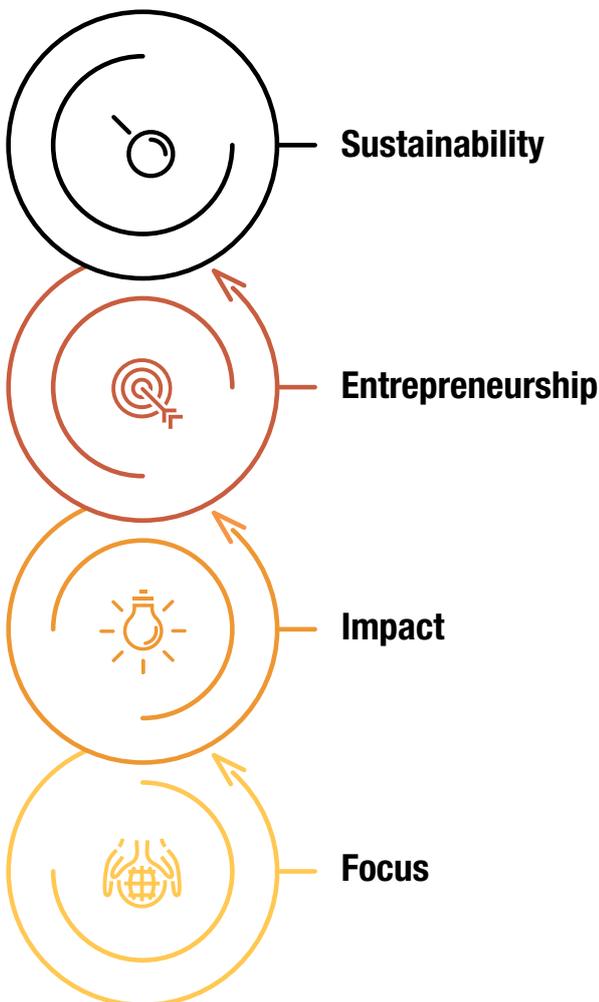
**CORPORATE SOCIAL RESPONSIBILITY**

**Orion is a catalyst for socio-economic development**

South Africa’s Northern Cape province has the potential for a mining boom, particularly in new technology and green energy minerals like copper and zinc. A rebirth of this historic mining region would translate into increased social upliftment, and Orion believes that the development of the Prieska Project will be a catalyst for both the economic and socio-economic revival of the region.

The Company’s leadership considers relationships with local communities as equally important as the technical and commercial needs of the organisation and to this end, has worked hard at establishing and maintaining stakeholder engagement ahead of the Project’s development. As the Project progresses through construction and into production, the Company will work with the community to ensure that they share in the value created by the Project’s presence in the region. Through responsible corporate citizenship, the Company seeks sustainable socio-economic approaches to the challenges facing those who are impacted by the Company’s operations.

**A catalyst for socio-economic development, Orion Minerals’ community development initiatives are centred on:**



**Key predicted social impacts of the Prieska Project**

**Employment creation**

- Estimated that 900 people will be employed by the mine
- Empirical multiplier effect potentially creates 2,500 associated jobs
- This could absorb 15% of total unemployed and underemployed in Siyathemba

**Increase in Gross Domestic Product**

- District GDP increase of at least 20% expected under optimal mining conditions
- Combined multipliers may improve local economy by 30%
- Local sourcing of select services

**Create the potential for beneficial multipliers**

- Mine support services will develop locally
- Increase in residents promoting infrastructure upgrades
- Stimulation of related synergic industries

**Local and BEE enterprise development**

- Creation of opportunities for local entrepreneurs



*Independent renewable energy solar projects close to the Prieska Project*

## Community and stakeholder engagement

During the 2019 financial year, the Company continued constructive engagements with local government and communities in preparation for mine development and revitalisation of the Siyathemba Municipal area within the Northern Cape province.

Community participation is vital to the success of the business and the Company has proactively hosted open public meetings to inform the community of the Company's progress and intended work plans. Orion has received an enthusiastic local response to its planned operations and will continue to seek community involvement as these projects progress.

In the 2019 financial year, Orion formalised its commitment to community participation by setting up a Stakeholder Engagement Forum (SEF). The process was initiated by a public participation workshop, which was held in February. Facilitated by human resources and community development consultancy Beulah Africa, the workshop attracted more than 250 members of the community from Prieska, Marydale and Niekerkshoop.

Through the workshop, the community nominated SEF representatives and eight key representative roles were identified based on community needs, these being: education, social development, unemployed, skilled elders, sports and recreation, safety and security, religious groups and business. All five administrative wards making up the Siyathemba Municipality are represented in the SEF.

Nominated community representatives have been allocated almost half of the seats on the SEF, with the balance of the 20 seats being filled by representatives of local government, Orion's BEE shareholders, employees and Company management.

The SEF will serve as a platform for representative community interest groups to keep apprised of developments at the Prieska

Project. The inaugural meeting of the newly-established SEF was held in July 2019 at which representatives identified areas where they and the Company can work together more closely.

## Engagement with local authorities

Collaboration between the Company and the Siyathemba Municipality continued throughout the 2019 financial year and good progress has been made towards the delivery of several initiatives identified in terms of a Memorandum of Understanding (MoU) signed in October 2017.

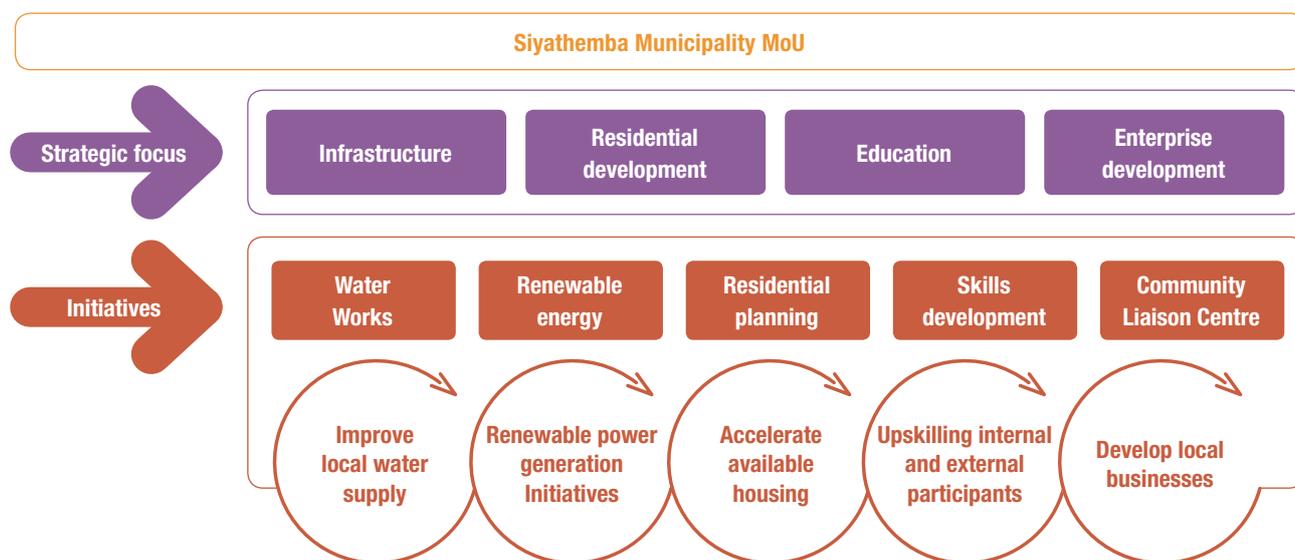
This MoU is used as a formal framework for the parties to establish mutually-beneficial ventures. This year's collaboration with the municipality focused on water infrastructure upgrades and residential development to accommodate the Prieska Project plans.

During the year the parties progressed with the formulation of the terms of collaborating on water supply infrastructure upgrades and use, with the aim of concluding an agreement before year end. This water supply agreement will set out water tariffs and specific scopes of work for water infrastructure upgrades.

To secure a long-term water supply for the Prieska Project, the Company agreed to upgrade the municipal waterworks to meet the project's requirements. This arrangement is expected to benefit the community at large.

Discussions regarding a mining residential development continued into the year after initial consultation with the Siyathemba Municipality, landowners and various technical service providers were initiated late in 2018.

A Spatial Planning and Land Use Management Act application process was initiated during the year with the aim of securing town planning permissions for the development of this residential area within the Prieska town surrounds.



### Preparing the community for the Prieska Project

The Company successfully held introductory mining familiarisation short courses during the year, with participation and successful completion by 290 high school graduates from the Siyathemba Municipal area. The program was aimed at raising public awareness of the mining industry and the employment opportunities the industry creates.

The five-day short courses were offered free of charge in Prieska, Marydale and Niekerkshoop, to residents who have completed their grade 12 and have an interest in mining.

Course attendees were provided with:

- an overview of minerals mined in South Africa;
- an insight into how mining operations are conducted;
- an understanding of the career options available within the mining industry; and
- a visit to the Prieska Project, where they got to witness first-hand the early phases of a mine development project.

The training was facilitated by an accredited service provider, Mathome Training and Development (Pty) Ltd, and participants earned credits towards industry-recognised mining-related qualifications. This initiative is in line with Orion's firm commitment to ensure that local communities benefit from its operations.

The initiative was exceptionally well received, and the Company was encouraged by the number of residents that applied to attend. The training was the first step in the process to equip residents with skills that will enable them to participate in future mining-related job opportunities at the Project. Assessments will be carried out to identify candidates for further training. The Company will also consider running a second round of training in the future.

Orion's new generation base metals mine at Prieska will require a highly-skilled workforce. The operation aims to prioritise local employment wherever possible and the Company is confident

that its presence will encourage entrepreneurship and the establishment of mining-related businesses in the region.

While the Company has not started recruitment, it has introduced a career portal to its website. The portal will be used for posting vacancies and encouraging potential employees to submit their CVs. Vacancies are also advertised through social media platforms.

To support the stimulation of economic growth through enterprise development, the Company continued to encourage potential local suppliers of goods and services to register online via the Supply Chain Network (SCNet) portal. Like the Career Portal, this portal redirects potential suppliers to an internet-based supplier registration and enterprise development platform. SCNet then collects the details of potential suppliers, whose capabilities can later be assessed to fulfil the future requirements of the mine. By the end of the 2019 financial year, over 115 businesses were registered, of which 65 were in the Siyathemba area.

At the end of 2018, the Company arranged an educational seminar for small, medium and micro-sized enterprises (SMMEs) and non-governmental organisations (NGOs) in Prieska. Seminar presenters included the Department of Economic Development and Tourism, South African Revenue Services and the Industrial Development Corporation. The event was well attended with more than 70 representatives from the Prieska business and NGO communities. Orion intends to continually invest in skills development and the facilitation of local enterprise development.

### Prieska Project Social and Labour Plans (SLPs)

Endorsed by the Siyathemba Municipal Council in March 2018, and further refined through engagement with the municipality and DMRE during the year, Orion's SLPs have been updated to include inputs from these stakeholders. The SLP encompasses the Company's commitments to local economic development and the skilling of its workforce when mining operations commence. The SLP is an integral and mandatory component of all mining right applications.



*An intensive Prieska Project drilling campaign was completed in 2018*

**Areachap Belt Projects – a summary**

Orion’s operational efforts for the year have focused primarily on advancing its flagship project, the Prieska Project in the Northern Cape, South Africa. Work to consolidate the Areachap Belt tenements and improve understanding of the relative prospectivity of these areas was also undertaken throughout the year.

The Prieska Project is situated approximately 290km south-west of the city of Kimberley. The Project encompasses the historic Prieska Copper Mine which was operated between 1971 and 1991 as a profitable underground mine. Mining operations exploited parts of the Prieska deposit to produce 430,000 tonnes of copper and 1.01 million tonnes of zinc in concentrates<sup>1</sup> with known deposit extensions remaining unmined at mine closure (refer ASX release 15 November 2017).

Figure 1: Location of Prieska Project



The Prieska deposit is a VMS style deposit of which the full extent of copper and zinc mineralisation is yet to be determined. In October 2018, Orion completed a verification and infill drilling campaign that aimed to confirm and quantify those portions of the Prieska deposit that had been identified though not extracted during previous mining operations. The drilling campaign resulted in the delineation of both near-surface and deeper underground copper and zinc Mineral Resources, all estimated, classified and reported in accordance with JORC 2012 guidelines.

By June 2019, the Company had completed a BFS based on the delineated Mineral Resource to establish a new mining operation in the footprint of the previous Prieska Copper Mine, premised on using the extensive mine servicing infrastructure still in place. Work is in progress to advance the BFS towards mine construction.

In addition to mine development studies, further exploration work targeting VMS style copper-zinc deposits has been ongoing to:

- follow the mineralised extensions of the Prieska deposit;
- assess the brownfields, near-mine potential in the vicinity of the Prieska Project; and
- assess the greenfields, regional potential further afield to the north of the Prieska deposit, within the prospective Areachap Belt.

Orion is also exploring for mafic hosted nickel-copper deposits on the Masiqhame and Namaqua-Disawell tenements, where field mapping, soil geochemical analyses, diamond drilling and geophysical surveying have been and continue to be undertaken on high potential nickel targets.

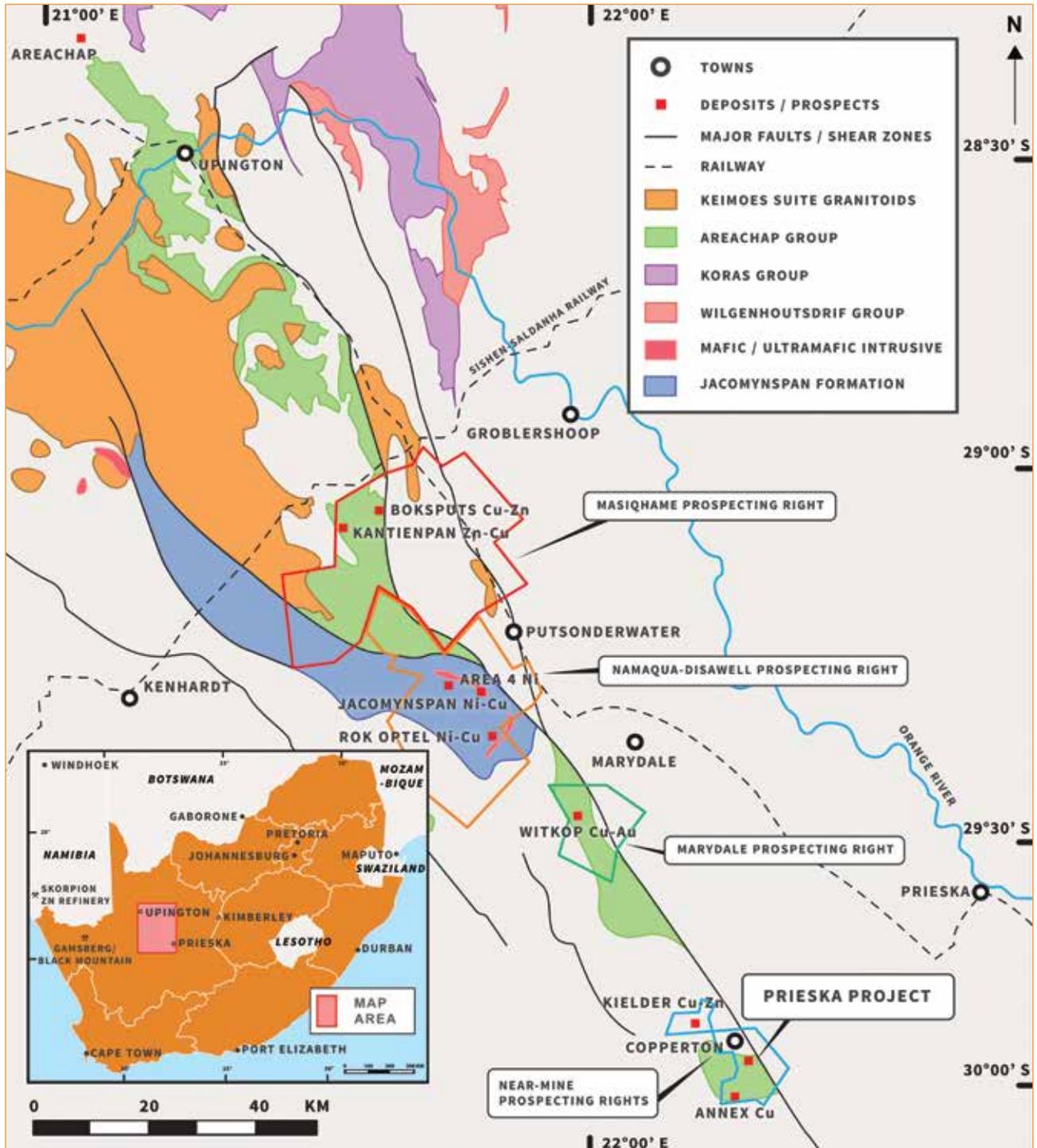
Work also continues at the Marydale gold-copper project, where historical geological data is being re-interpreted and the economic potential of the targets re-assessed.



A member of Orion’s geological team examines core at the Prieska Project

<sup>1</sup> Not a JORC compliant figure. Source: Prieska Copper Mines Limited Annual Report 1970

Figure 2: Orion projects in the Areachap Belt with the Prieska Project location highlighted



# PRIESKA PROJECT

## Bankable Feasibility Study outcomes

The Prieska Project remains the primary focus of Orion's activities. A BFS was completed on the Project and published on 26 June 2019 (refer ASX release 26 June 2019). The BFS investigates both underground and open pit mining methods, along with associated ore processing, establishment of supplementary mine infrastructure, environmental, community and social impact studies and product sales arrangements.

Key outcomes from the BFS are listed below:

- Undiscounted free cash flows of AUD1.1 billion pre-tax (AUD819 million post-tax)
- NPV of AUD574 million pre-tax (AUD408 million post-tax) at an 8% discount rate
- IRR of 38% pre-tax (33% post-tax)
- Peak funding requirement of AUD378 million
- Payback period from first production of 2.9 years
- All-in-sustaining margin of 44%
- All-in-sustaining unit costs of AUD5,470/t (USD3,773/t) of copper-equivalent metal sold

- A maiden Probable Ore Reserve of 13.62Mt at 1.1% Cu and 3.2% Zn for 143kt of contained copper and 433kt of contained zinc
- Total planned milled production of 20.8Mt at 1.1% Cu and 3.4% Zn (comprising 65% Probable Ore Reserves and 35% Inferred Mineral Resources)

The BFS investigated the commercial viability of an initial 10 years of mining operation (Foundation Phase). The Foundation Phase would result in the establishment of mine infrastructure and operational capacity that is intended to become the platform for further mining of deposit extensions, as well as the exploration and mine development of neighbouring prospects.

The Foundation Phase targets a design ore processing rate of 2.4Mtpa. The Production Target is composed of 65% Probable Ore Reserves and 35% Inferred Mineral Resources, with Ore Reserves predominating during the early stages of the mining plan. The Ore Reserves and Mineral Resources underpinning the Production Target have been prepared by Competent Persons in accordance with the requirements in the JORC Code (2012) (refer ASX release 26 June 2019).



The core handling and storage facility based at the Prieska Project

**REVIEW OF OPERATIONS** *continued*  
**South Africa (Prieska Project)** *continued*

Table 1: Summary of main production results, financial results and assumptions used in the BFS

Executive dashboard					
Production and financial summary			Model: OR + IMRE		
Price and FX assumptions	Unit	Value	Financial performance	Unit	Value
Metal price – Cu	USD/t	6,834	NPV pre-tax (post-tax) @ 8% discount rate	AUD million	574 (408)
Metal price – Zn	USD/t	2,756	IRR pre-tax (post-tax)	%	38 (33)
Exchange rate	ZAR:USD	14.5:1	Payback from first production	years	2.9
Exchange rate	ZAR:AUD	10:1	Undiscounted free cash flow pre-tax (post-tax)	AUD million	1,127 (819)
Exchange rate	AUD:USD	1.45:1	Peak funding	AUD million	378
Production metrics	Unit	Value	Project cost metrics	Unit	Value
Life of Mine	Years	9.7	Average cash operating unit cost (C1)	AUD/t	80
Treatment plant capacity	Mtpa	2.4	All-in-sustaining cost per unit ROM t	AUD/t	94
ROM plant feed – tonnage	kt	20,827	All-in-sustaining cost per unit Cu_Eq t sold	AUD/t Cu	5,470
ROM plant feed – grade – Cu	%	1.10	All-in-sustaining cost per unit Zn_Eq t sold	AUD/t Zn	1,582
ROM plant feed – grade – Zn	%	3.35	Price received (net of NSR) – Cu	AUD/t Cu	9,785
Overall plant recovery – Cu	%	82.7	Price received (net of NSR) – Zn	AUD/t Zn	2,830
Overall plant recovery – Zn	%	83.0	All-in-sustaining margin	%	44
Concentrate tonnage – Cu	kt	790	Operating breakeven grade (Cu_Eq)	%	1.2
Concentrate tonnage – Zn	kt	1,180	Level of accuracy of financial model: ± 15%		
Concentrate grade – Cu U/G (O-Pit)	%	23.8 (25.6)	LoM = Life of Mine		
Concentrate grade – Zn U/G (O-Pit)	%	49.9 (35.5)	RoM = Run of Mine		
NSR as % of metal price – Cu U/G (O-Pit)	%	98.7 (91.2)	NSR = Net Smelter Return		
NSR as % of metal price – Zn U/G (O-Pit)	%	71.3 (53.7)	NPV = Net Present Value		
			IRR = Internal Rate of Return		
			Project cash flows	Unit	Value
Metal sold (in concentrates) – Cu	tonnes	189,000	LoM net revenue	AUD million	3,284
Metal sold (in concentrates) – Zn	tonnes	580,000	LoM operating costs (+ royalty and tax)	AUD million	1,673
Total sales as Cu equivalent	tonnes	357,000	Project start-up capital expenditure	AUD million	402
Total sales as Zn equivalent	tonnes	1,233,000	Sustaining capital expenditure	AUD million	83

There is a low level of geological confidence associated with Inferred Mineral Resources included in the Production Target and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target or financial forecast information will be realised.

**Ownership and mineral tenements**

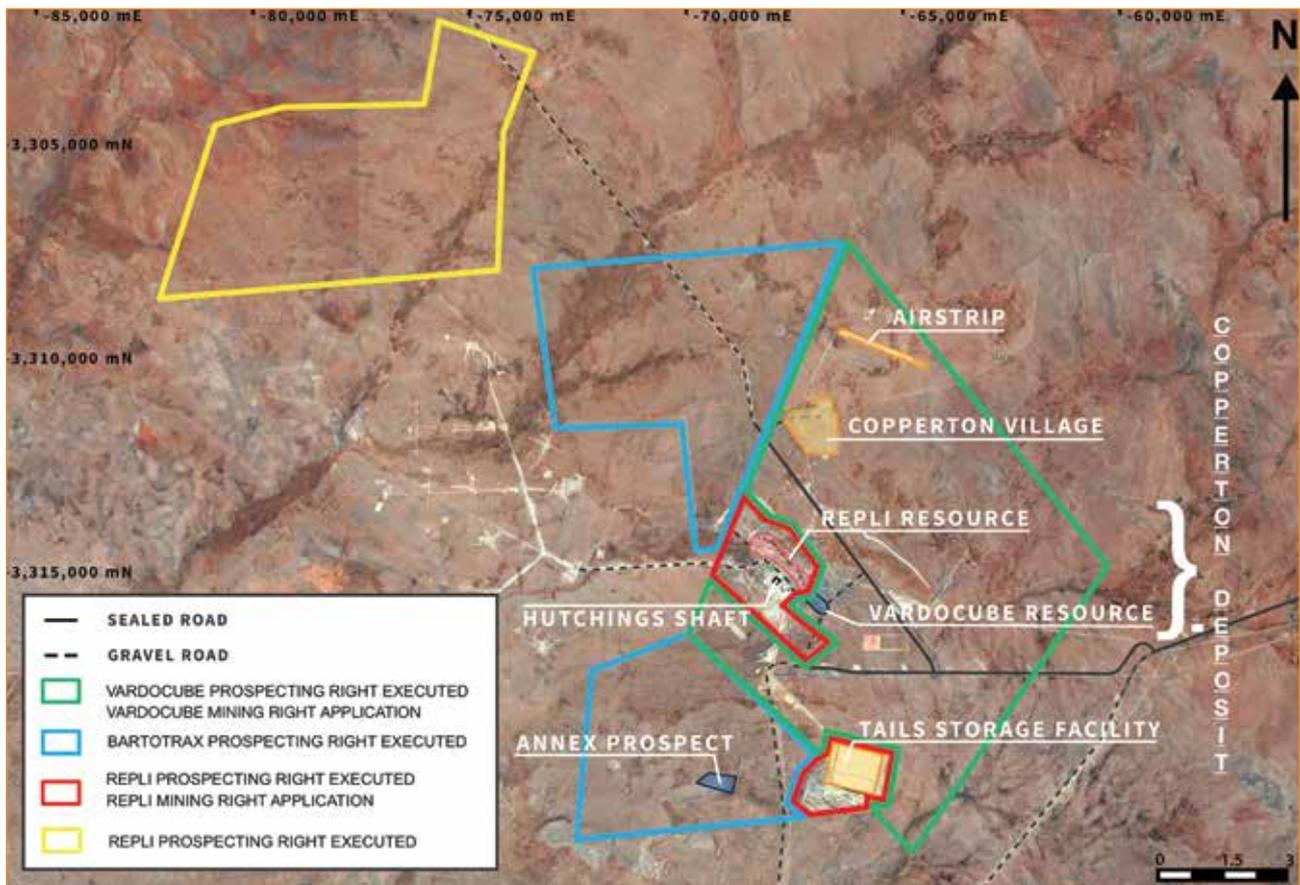
Through subsidiary companies, Repli Trading No 27 (Pty) Ltd (Repli) and Vardocube (Pty) Ltd (Vardocube), Orion will hold a 70% interest in both the Repli Prospecting Right and the Vardocube Prospecting Right, after reducing its shareholdings in line with South African policy relating to BEE (refer ASX releases 16 April 2019 and 3 June 2019). Together these tenements encompass the Prieska Project.

The remaining ownership of the Project is to be held by BEE companies (20%), a community trust (5%) and an employee trust

(5%), as guided by legislative and Mining Charter 3 prescriptions for promoting transformation.

Applications for the Environmental Authorisation, Mining Right, Integrated Waste and Water Management Plan licence and Integrated Water Use Licence for the Repli project area were submitted to the relevant authorities in April 2018 (refer ASX release 9 April 2018). Applications for the Vardocube project area were submitted in September 2018. This suite of permits, the first two of which were granted post FY2019, clears the way for mine construction to commence subject to funding and investment approval.

Figure 3: Mineral tenement map for the Project area



### Existing infrastructure

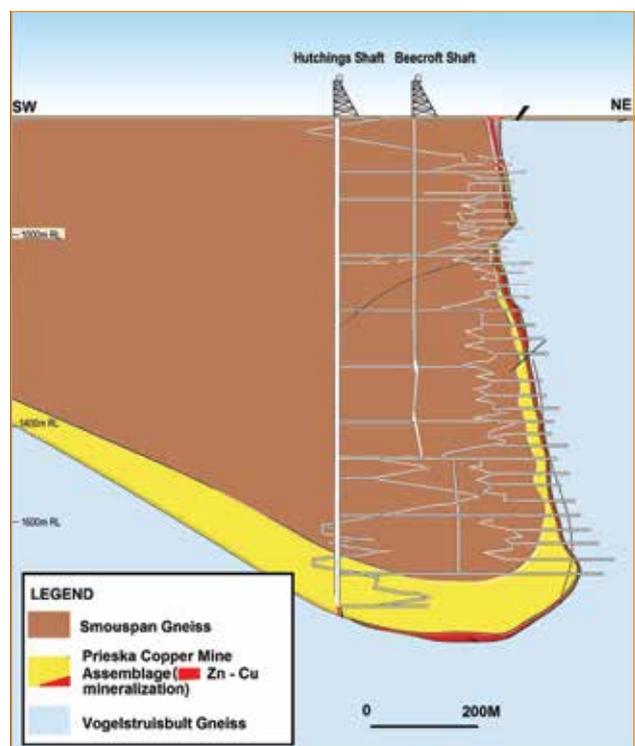
Despite the Project site being located in a remote part of South Africa, with no nearby large human settlements, it is well-served by infrastructure that was established for the previous mining operation. Existing infrastructure includes a water pipeline from the Orange River, tarred roads, national grid power supply and a 1.7km-long air strip. The village of Copperton, which is located 4km by road from the main rock hoisting shaft, used to be the principal residence for the Prieska Copper Mine community. The town is still in use, though only 40 of the original 300 houses remain. The farming service town of Prieska, with a population of 16,000, lies 60km north-east of the Project site. The operating rail siding of Groveput, located 50km from the Project site, en route to the town of Prieska, provides rail access to the main Kimberley-De Aar railway line.

The main hoisting shaft, which is 1,024m deep, 8.8m in diameter and concrete-lined, along with associated concrete headgear, remain intact. New infrastructure, such as rock-and-materials winders, underground rock-handling facilities, an ore processing plant and related surface infrastructure, is designed to be purpose-built for the new mine. The mine is currently flooded to a depth of 330m below surface and 14 months of pumping is planned to dewater the mine.

### Geology and Mineral Resources

The Prieska Deposit is a VMS-style deposit, with mineralisation defined along 2.4km of a northwest-southeast trending strike extent and down to a depth of 1.25km. Mineralisation of copper (Cu), zinc (Zn), silver (Ag) and gold (Au) is in massive sulphides distributed as a persistent lens within gneiss rock assemblages.

Figure 4: Geological cross-section through the Prieska Deposit (modified after Theart et al, 1989 and Wagner and Van Schalkwyk, 1986)



## REVIEW OF OPERATIONS *continued*

### South Africa (Prieska Project) *continued*

By the time the mine closed, the deposit had been exploited to a depth of 900m below surface. However, strike and dip extensions had been identified, Mineral Resource Estimates prepared, and access development partially established into some of the deposit extensions.

Orion used the extensive catalogue of historical data to guide its verification and infill drilling campaigns on both the near-surface +105 Level supergene deposit (+105 Level Deposit) and the Deep Sulphide hypogene deposit (Deep Sulphide Deposit). These programs culminated in the declaration of Mineral Resources estimated in accordance with the 2012 addition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) for both the Deep Sulphide Mineral Resource and the +105 Level Mineral Resource. The Mineral Resources estimate was updated and Ore Reserves were estimated and reported during FY2019, as tabled individually below (refer ASX releases 18 December 2018 and 15 January 2019).

**Table 2: Mineral Resource Estimate – Deep Sulphide Resource**

Deep Sulphide Mineral Resource for Repli + Vardocube Tenements (Effective Date: 15 December 2018) <sup>1</sup>						
Tenement	Classification	Tonnes	Cu (metal tonnes)	Cu (%)	Zn (metal tonnes)	Zn (%)
Repli	Indicated	15,052,000	170,000	1.15	510,000	3.38
	Inferred	6,998,000	80,000	1.09	270,000	3.86
	<b>Total</b>	<b>22,050,000</b>	<b>249,000</b>	<b>1.13</b>	<b>779,000</b>	<b>3.53</b>
Vardocube	Indicated	3,455,000	44,000	1.27	158,000	4.57
	Inferred	3,221,000	41,000	1.27	147,000	4.56
	<b>Total</b>	<b>6,676,000</b>	<b>85,000</b>	<b>1.27</b>	<b>305,000</b>	<b>4.57</b>
Deep Sulphide Total	Indicated	18,507,000	217,000	1.17	667,000	3.60
	Inferred	10,219,000	117,000	1.14	417,000	4.08
	<b>Total</b>	<b>28,726,000</b>	<b>334,000</b>	<b>1.16</b>	<b>1,084,000</b>	<b>3.77</b>

Deep Sulphide Resource bottom cut-off = 4% Equivalent Zn. Mineral Resources stated at zero % cut-off. Tonnes are rounded to thousands, which may result in rounding errors.

**Table 3: Mineral Resource Estimate – +105 Level Mineral Resource**

+105 Updated Mineral Resource for the Repli Tenement (Effective Date: 11 January 2019) <sup>2</sup>						
Classification	Mineralised Zone	Tonnes	Cu (metal tonnes)	Cu (%)	Zn (metal tonnes)	Zn (%)
Indicated	Supergene	624,000	10,000	1.54	19,000	3.05
	<b>Total</b>	<b>624,000</b>	<b>10,000</b>	<b>1.54</b>	<b>19,000</b>	<b>3.05</b>
Inferred	Oxide	511,000	3,000	0.6	4,000	0.9
	Supergene	627,000	14,000	2.2	11,000	1.8
	<b>Total</b>	<b>1,138,000</b>	<b>17,000</b>	<b>1.5</b>	<b>16,000</b>	<b>1.4</b>
<b>Total</b>	<b>+105 Mineral Resource</b>	<b>1,762,000</b>	<b>27,000</b>	<b>1.5</b>	<b>35,000</b>	<b>2.0</b>

+105m Level Mineral Resource bottom cut-off = 0.3% Cu. Mineral Resources stated at zero % cut-off. Tonnes are rounded to thousands, which may result in rounding errors.

<sup>1</sup> Mineral Resource reported in ASX release of 18 December 2018: "Landmark Resource Upgrade Sets Strong Foundation" available to the public on [www.orionminerals.com.au/investors/market-news](http://www.orionminerals.com.au/investors/market-news). Competent Person Orion's exploration: Mr. Errol Smart. Competent Person: Orion's Mineral Resource: Mr. Sean Duggan. Orion confirms it is not aware of any new information or data that materially affects the information included above. For the Mineral Resources, the Company confirms that all material assumptions and technical parameters underpinning the estimates in the ASX release of 18 December 2018 continue to apply and have not materially changed. Orion confirms that the form and context in which the Competent Person's findings are presented here have not materially changed.

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

Table 4: Mineral Resource Estimate – Combined

Combined Prieska Project Mineral Resource for Repli + Vardocube Tenements (Effective Date: 11 January 2019)							
Mineral Resource	Classification	Tonnes	Cu (metal tonnes)	Cu (%)	Zn (metal tonnes)	Zn (%)	
Deep Sulphide Resource	Indicated	18,507,000	217,000	1.17	667,000	3.60	
	Inferred	10,219,000	117,000	1.1	417,000	4.1	
+105m Level Resource	Indicated	624,000	10,000	1.54	19,000	3.05	
	Inferred	1,138,000	17,000	1.4	16,000	1.4	
	Indicated	19,131,000	227,000	1.18	686,000	3.59	
Total	Inferred	11,357,000	134,000	1.2	433,000	3.8	
<b>Grand total</b>		<b>30,488,000</b>	<b>361,000</b>	<b>1.2</b>	<b>1,119,000</b>	<b>3.7</b>	

Deep Sulphide Resource bottom cut-off = 4% Equivalent Zn; +105m Level Mineral Resource bottom cut-off = 0.3% Cu. Mineral Resources stated at zero % cut-off. Tonnes are rounded to thousands, which may result in rounding errors.

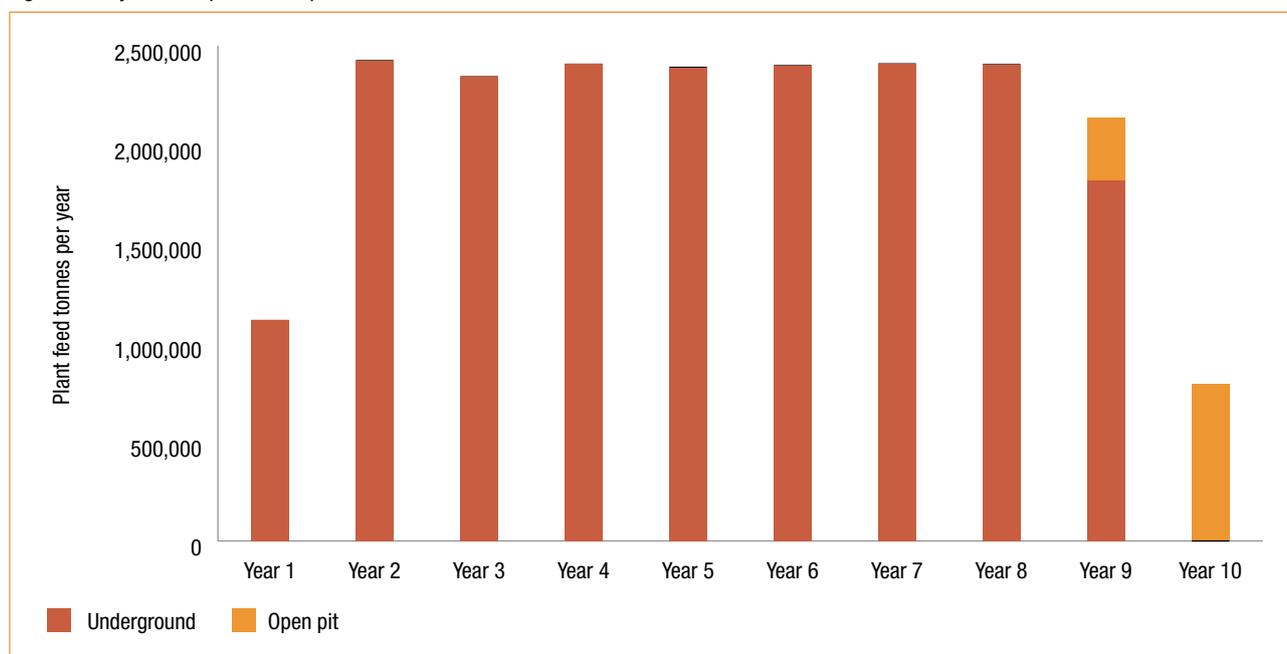
The Mineral Resources are inclusive of Ore Reserves.

Satellite deposit potential has been demonstrated with recent intersections of sulphide mineralisation at Ayoba, 5km from the proposed Prieska ore processing plant. Further afield, available historical data and recent exploration work by Orion has confirmed the existence of numerous follow-up massive sulphide copper-zinc rich targets within the nearby mineral tenements also held by Orion (refer ASX releases 16 January 2019 and 25 February 2019).

### Ore reserves and mine plan

Both open pit and underground mining are planned for the duration of the Foundation Phase (see Figure 5). Underground mining is planned to commence on completion of mine dewatering, shaft refurbishment and underground infrastructure establishment, some 24 months from site mobilisation. Underground mining is then scheduled to build up over 14 months to a steady-state run-of-mine production rate of 200ktpm (kilo tonnes per month) or 2.4Mtpa (million tonnes per annum).

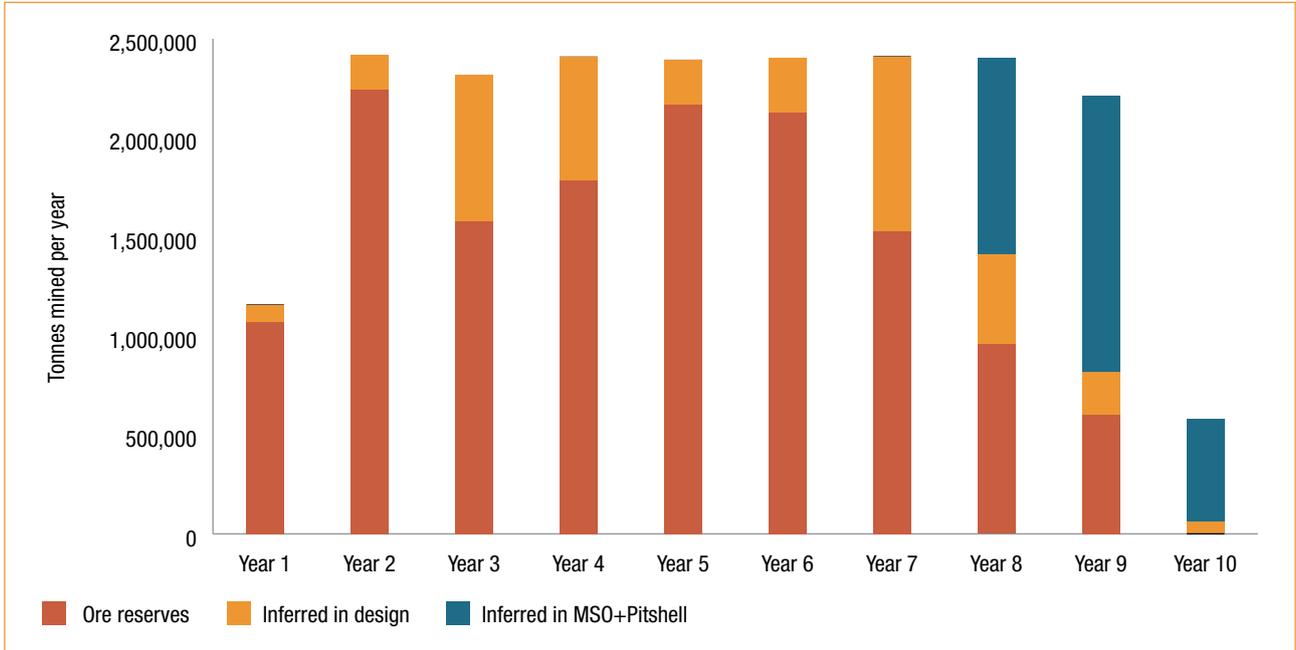
Figure 5: Project mine production profile



**REVIEW OF OPERATIONS** *continued*  
**South Africa (Prieska Project)** *continued*

Mining of Ore Reserves has been prioritised in the production schedule, with Inferred Mineral Resources contributing no more than 21% in the first eight years of production. Thereafter, the remainder of the Inferred and Indicated Mineral Resources evaluated in Mine Stope Optimiser and Whittle Pit Optimisation is incorporated into the plan (see Figure 6).

Figure 6: Production profile illustrating the comparative contributions from Ore Reserves, Indicated Mineral Resources and Inferred Mineral Resources



Tunnel development remaining from the previous mining operations allows for early access to underground production mining areas. A combination of Longhole Open Stopping with Fill (LHOSF) and Drift-and-Fill (D&F) mining methods will be used, supported with paste back-filling. Some low-profile, D&F mining is planned in the latter years, along with open pit mining of the near-surface +105 Level Supergene Deposit in the last two years of the Foundation Phase.

Figure 7: Planned underground mining zones

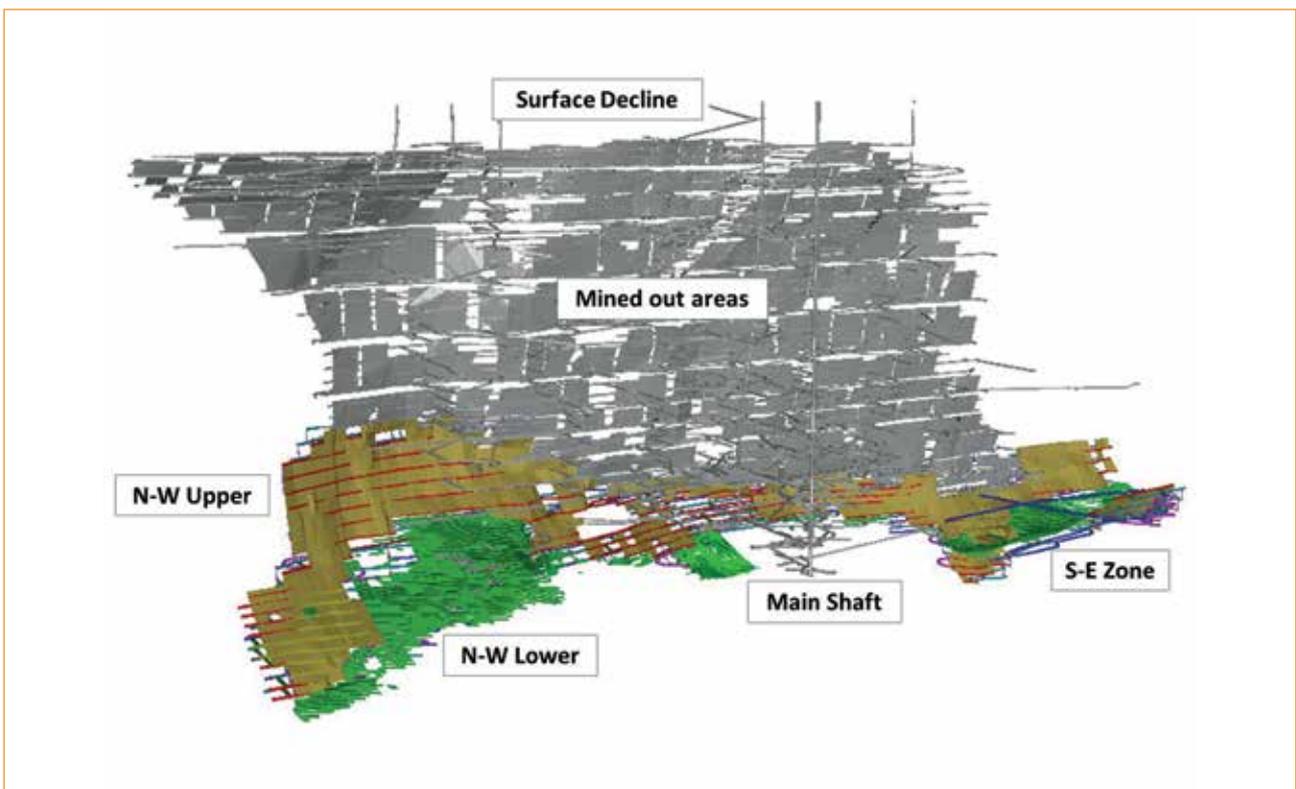
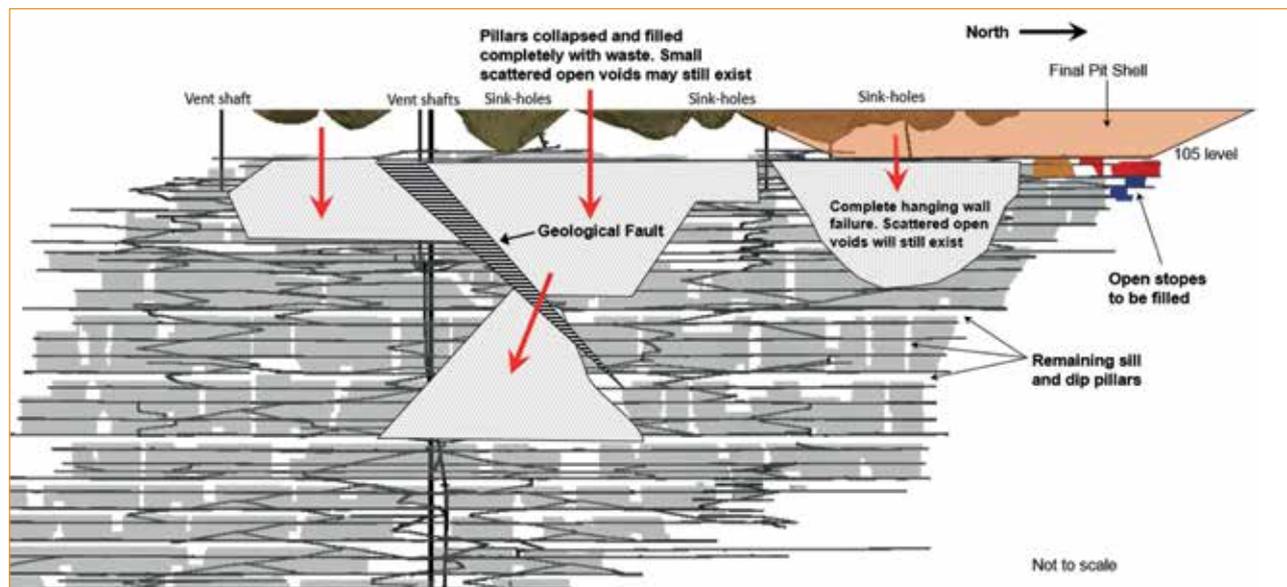


Figure 8: Longitudinal section showing location of proposed open pit and voids



Some 20.8Mt of material at an average grade of 1.1% Cu and 3.4% Zn is planned to be mined and processed to produce 189kt of Cu and 580kt of Zn contained in differentiated concentrates during the Foundation Phase.

Probable Ore Reserves, make up 65% of the Production Target. Inferred and Indicated Mineral Resources incorporated in the detailed mine plans make up 21% of the Production Target. Inferred and Indicated Mineral Resources make up the remaining 14%. The Probable Ore Reserves are tabulated below.

The estimated Deep Sulphide Probable Ore Reserve amounts to 13.14Mt grading 1.0% Cu and 3.2% Zn, including 136kt copper metal tonnes and 417kt zinc metal tonnes (copper equivalent of 257kt metal tonnes at 2.0%). The Ore Reserves are reported and classified in accordance with the guidelines of the JORC Code, 2012 (refer ASX release 26 June 2019).

Table 5: Ore Reserve Estimate for the Deep Sulphide Mineral Resource

Prieska Project Deep Sulphide Ore Reserves (Effective Date: 16 June 2019)								
Deposit	Ore Reserve classification	Tonnage (Mt)	Cu		Zn		Cu equivalent <sup>1</sup>	
			Metal tonnes (Kt)	Grade (%)	Metal tonnes (Kt)	Grade (%)	Metal tonnes (Kt)	Grade (%)
Deep Sulphide	Probable	13.14	136	1.0	417	3.2	257	2.0
<b>Total</b>	<b>Probable</b>	<b>13.14</b>	<b>136</b>	<b>1.0</b>	<b>417</b>	<b>3.2</b>	<b>257</b>	<b>2.0</b>

Deep Sulphide Ore Reserves calculated using financial assumptions and modifying factors stated in the Study. Tonnes are rounded to thousands, which may result in rounding errors.

The estimated +105 Level Probable Ore Reserves amount to 484kt grading 1.5% Cu and 3.3% Zn, including 7kt copper metal tonnes and 16kt zinc metal, (Cu-Eq of 11kt metal at 2.2%). The Ore Reserves are reported and classified in terms of the JORC Code, 2012 (refer ASX release 26 June 2019).

<sup>1</sup> Method used to determine Cu equivalent Zn grades:

$$1\% \text{ Zn} = \frac{(\text{Zn price} \times \text{Zn payability}) \times (\text{Zn plant recovery})}{(\text{Cu price} \times \text{Cu payability}) \times (\text{Cu plant recovery})} = \frac{(2,756 \times 71.3\%) \times (84.4\%)}{(6,834 \times 98.7\%) \times (83.9\%)} = 0.29\% \text{ Cu grade}$$

$$\text{Cu Equivalent Grade} = \text{Cu Grade} + 0.29 \times \text{Zn Grade}$$

Plant recovery assumptions are based on metallurgical test work completed to date at Mintek Laboratories (South Africa) under the supervision of DRA.

**REVIEW OF OPERATIONS** *continued*  
**South Africa (Prieska Project)** *continued*

Table 6: Ore Reserve Estimate for the +105 Level Mineral Resource

Prieska Project +105 Level Ore Reserves (Effective Date: 15 June 2019)								
Deposit	Ore Reserve classification	Tonnage (Mt)	Cu		Zn		Cu equivalent <sup>1</sup>	
			Metal tonnes (Kt)	Grade (%)	Metal tonnes (Kt)	Grade (%)	Metal tonnes (Kt)	Grade (%)
+105 Level	Probable	484	7	1.5	16	3.3	11	2.2
<b>Total</b>	<b>Probable</b>	<b>484</b>	<b>7</b>	<b>1.5</b>	<b>16</b>	<b>3.3</b>	<b>11</b>	<b>2.2</b>

+105m Level Ore Reserves calculated using financial assumptions and modifying factors stated in the Study. Tonnes are rounded to thousands, which may result in rounding errors.

$$^1 1\% \text{ Zn} = \frac{(\text{Zn price} \times \text{Zn payability}) \times (\text{Zn plant recovery})}{(\text{Cu price} \times \text{Cu payability}) \times (\text{Cu plant recovery})} = \frac{(2,756 \times 53.7\%) \times (59.4\%)}{(6,834 \times 91.2\%) \times (66.7\%)} = 0.2\% \text{ Cu}$$

Cu-Equivalent grade = Cu grade + 0.2 x Zn grade

Plant recovery assumptions are based on metallurgical test work completed to date at Mintek Laboratories (South Africa) under the supervision of DRA.

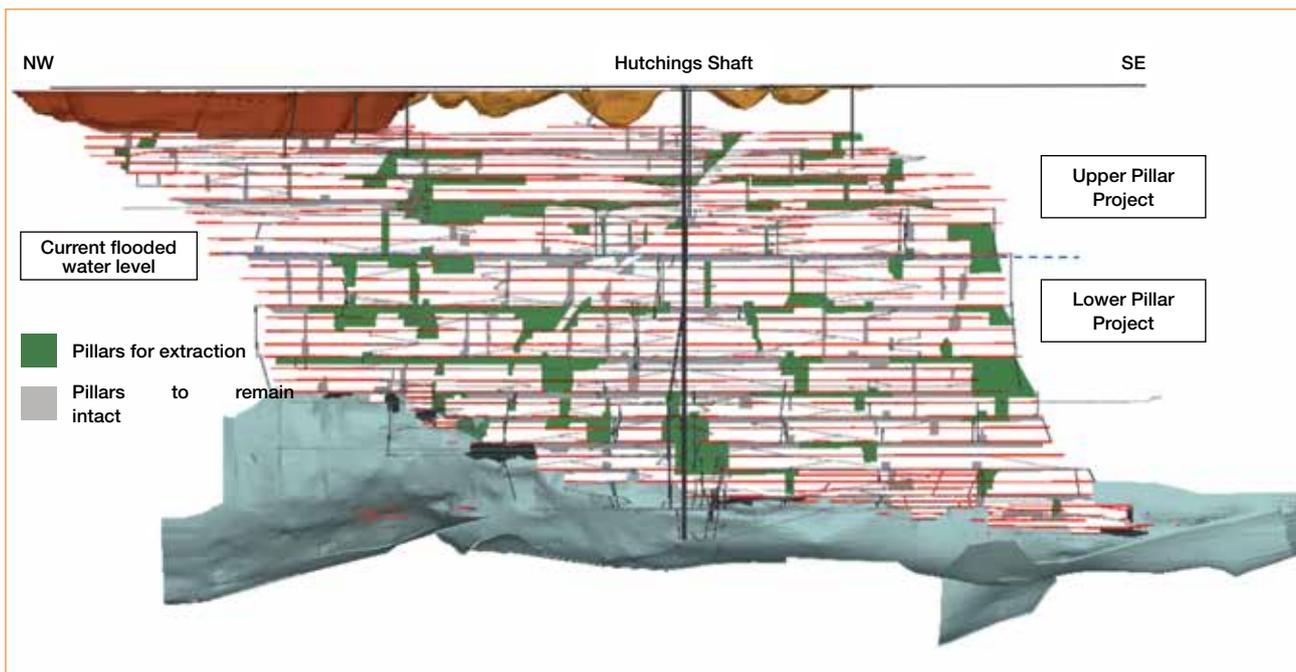
The combined Project Probable Ore Reserves amount to 13.62 grading 1.1% Cu and 3.2% Zn, including 143kt copper metal and 433kt zinc metal, (Cu-Eq of 268kt metal tonnes at 2.0%), (refer ASX release 26 June 2019).

Table 7: Combined Ore Reserve Estimate for the Prieska Project

Prieska Project Ore Reserves estimate (Effective Date: 16 June 2019)								
Deposit	Ore Reserve classification	Tonnage (Mt)	Cu		Zn		Cu equivalent	
			Metal tonnes (Kt)	Grade (%)	Metal tonnes (Kt)	Grade (%)	Metal tonnes (Kt)	Grade (%)
<b>+105 Level</b>	Probable	0.48	7	1.5	16	3.3	11	2.2
<b>Deep Sulphide</b>	Probable	13.14	136	1.0	417	3.2	257	2.0
<b>Total</b>	<b>Probable</b>	<b>13.62</b>	<b>143</b>	<b>1.1</b>	<b>433</b>	<b>3.2</b>	<b>268</b>	<b>2.0</b>

Project Ore Reserves calculated using financial assumptions and modifying factors stated in the Study. Tonnes are rounded to thousands, which may result in rounding errors.

Figure 9: Views showing the remnant pillars and the accumulated water level



## Shaft refurbishment and mine dewatering

The Hutchings Shaft and underground workings are currently flooded to a depth of 330m below surface and contain a volume of 8.7 million m<sup>3</sup> of accumulated water. Dewatering of the workings via a pumping system to be installed in the Hutchings Shaft is planned. Water will be pumped into a one million m<sup>3</sup> volume dewatering dam on surface, from where mechanical evaporators will be used to accelerate evaporation.

Examinations and testing of the shaft steelwork from surface down to 30m below the water level, along with the use of video camera inspection down to 200m below the water surface, as well as shaft probing and water quality testing to within 100m of the shaft bottom helped determine that the majority of the shaft is in good order (refer ASX release 2 February 2018). Sections of the shaft will be refurbished. A pre-owned Koepe rock winder and a double-drum men and material winder with new ropes and equipment have been identified for purchase and installation. The steelwork refurbishment will be carried out concurrently with the underground dewatering campaign to reduce the Project construction time and make optimal use of the available construction crews.

## Ore processing

Ore processing is planned to involve conventional differential froth flotation to produce separate copper and zinc concentrates at average grades of 24% Cu and 50% Zn from underground

mined material. Minor modifications to the processing plant will allow the open pit material to be treated at the end of the mine life, on a campaign basis, to produce separate copper and zinc concentrates at average grades of 26% copper and 36% zinc.

The flowsheet for processing underground material is similar to the flowsheet used during previous mining operations. Life-of-mine metal recoveries into concentrates are anticipated to be 84.4% for Cu and 83.9% for Zn from treating underground mined material and 66.7% and 59.4% for Cu and Zn, respectively, for open pit mined material (refer ASX releases 15 November 2017, 1 March 2018 and 25 October 2018).

The concentrates will be trucked to Grovewat, 50km from site, and then railed to the Port of Ngqura (at Coega) for export to smelters in Asia and Europe. Net smelter returns for the copper and zinc concentrates (accounting for metal payabilities, treatment and refining charges, and penalty provisions) are expected to be 98.7% and 71.3% of market metal prices for Cu and Zn, respectively, for underground sourced metal; and 91.2% and 53.7% for Cu and Zn, respectively, for open pit sourced material.

Recent changes in benchmark treatment costs for zinc concentrate and treatment and refining costs for copper concentrates have been applied, with the discounts on benchmark charges being offered by potential off-takers for the clean Project products. A 3-D view of the plant area is shown below.

Figure 10: Project site general layout



**REVIEW OF OPERATIONS** *continued*  
**South Africa (Prieska Project)** *continued*

**Support infrastructure and workforce**

Water for the mining operations is planned to be supplied from the Orange River, at a rate of 4.1ML per day, via the existing water pipeline. Power requirements of 38MW are expected to be sourced from the national power utility company, Eskom, via the onsite Cuprum Substation. Plans are at an advanced stage to commission the establishment of a renewable energy alternative source to national grid power supply, capable of potentially providing 52% of the mine's energy needs in the near term (refer ASX release 5 March 2019).

A tailings storage facility (TSF) that will initially serve as a dewatering reservoir will be constructed to service the Foundation Phase. Accommodation for some of the 893-strong workforce, (including allowance for training and personnel on leave), will initially be at Copperton, with plans to establish the permanent mine village in Prieska once planning approvals allow for such migration to occur. No new roads will be required to access the site, though some internal roads are planned in order to access site infrastructure.

**Compliance**

All environmental studies and applications for authorisations have been completed and the Repli Environmental Authorisation already granted. Environmental management is planned in compliance with the National Environment Management Act (NEMA) as well as the Equator Principles and International Finance Corporation (IFC) standards. Community engagement has commenced with the establishment of an active Stakeholder Engagement Forum to guide the mine development process.

**Operating costs**

The estimated operating costs for the underground phase were built up from first principles. Open pit mining operating costs were a combination of contractor quotations and first principles. The average unit operating costs over the Foundation Phase for underground mining are shown below:

*Table 8: All-in-sustaining unit costs for underground mining*

Operating cost element	AUD/t ROM
Mining	48.10
Processing	16.10
Surface and in-directs	6.70
Concentrate transport	9.40
Corporate costs	1.40
Off-mine costs	2.30
Royalty (Government)	5.70
Sustaining Capex	4.00
<b>Total</b>	<b>93.70</b>

The all-in sustaining cost (AISC) per pound of copper equivalent metal sold is estimated at AUD 5,470/t (USD3,773/t) or AUD 1,582/t (USD1,091/t) in terms of equivalent zinc metal sold.

**Capital expenditure and construction schedule**

While the total capital cost to construct the mine is estimated to be AUD402 million which includes a 10% contingency, peak funding required is marginally less at AUD398 million. Capital costs were derived from vendor quotations, detailed bills of quantities and labour rates from construction contractors.

*Table 9: Capital expenditure*

Capex area	AUD (million)
Power supply	45.0
Water supply	2.4
Tailing storage facility	31.4
Shaft refurbishment	45.7
Mine dewatering and construction power	37.1
Surface infrastructure	36.7
Underground infrastructure	34.0
Open pit establishment and equipping	2.5
Processing plant	89.6
Project management (EPCM and owner)	41.0
<b>Subtotal</b>	<b>365.3</b>
Contingency 10%	36.5
<b>Total capex</b>	<b>401.8</b>

*Table 10: Capital expenditure spend schedule*

Parameter	Unit	Total	Year 1	Year 2	Year 3	Year 4	Year 10
Project capital	AUD million	401.8	25.3	150.4	220.5	3.5	2.1



*Exploration drilling at the Prieska Project*

Table 11: Project execution schedule

Prieska Cu and Zn project schedule	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
<b>Evaporation dam and TSF</b>																																
Construct evaporation dam 1	█																															
Install evaporators dam 1								█																								
Construct evaporation dam 2									█	█																						
Install evaporators dam 2											█																					
Construct TSF											█	█	█	█																		
<b>Shaft dewatering and construction</b>																																
Shaft sinkers mobilisation	█																															
Shaft preparation work		█	█	█	█	█	█																									
Shaft dewatering								█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	
UG construction																						█	█	█	█	█	█	█	█	█	█	
<b>Mining</b>																																
Mobilise mining contractor																						█	█	█	█	█	█	█	█	█	█	
Mining UG																																
Shaft hoisting																																
<b>Processing and paste plant</b>																																
Process plant construction										█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	
Process plant commissioning																																
Paste plant																																
<b>Surface infrastructure</b>																																
Bulk water supply works																																
Eskom temporary power	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Cuprum feeder bay		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
40 MVA mine sub-station		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Surface ventilation fans (1 and 2)																																
Build construction camp		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Mining offices																																
Change house and lamp room																																

**Financial evaluation**

The Foundation Phase is expected to generate AUD819 million of post-tax, free cash flow, with the capex program, production profile and expected cash flows as shown in the tables and figures overleaf (refer ASX release 26 June 2019).



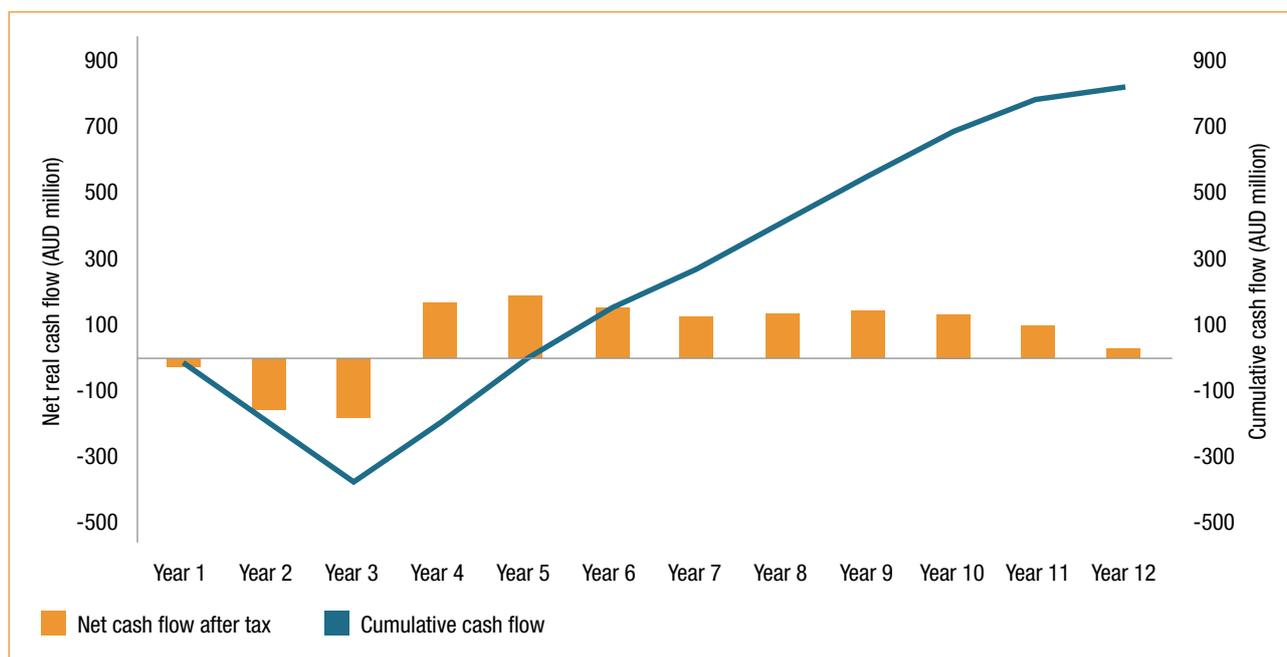
Preliminary site preparation work on the Prieska Project

**REVIEW OF OPERATIONS** *continued*  
**South Africa (Prieska Project)** *continued*

Table 12: Project production and cash flow profiles for the Foundation Phase

Parameter	Unit	Phase 1	Capex Yr1	Capex Yr2	Year 1	Year 2
ROM tonnage (processed)	Mt	20.83			1.49	2.44
Concentrates sold – Zn	tonnes	1,175,713			71,618	126,476
Concentrates sold – Cu	tonnes	788,811			55,973	90,200
Metal contained – Zn	tonnes	579,677			34,301	63,238
Metal contained – Cu	tonnes	189,002			12,213	21,648
Revenue (post-NSR)	AUD million	3,479			216	392
Selling and realisation charges	AUD million	(195)			(13)	(21)
<b>Net revenue</b>	<b>AUD million</b>	<b>3,284</b>			<b>204</b>	<b>371</b>
Mining, development, services cost	AUD million	(1,002)		(6)	(116)	(123)
Processing cost	AUD million	(336)			(24)	(38)
General and administration	AUD million	(138)		(2)	(15)	(15)
Off-mine costs	AUD million	(77)	(2)	(2)	(10)	(8)
Royalties (Government)	AUD million	(119)			(1)	(2)
<b>Cash operating costs</b>	<b>AUD million</b>	<b>(1,673)</b>	<b>(2)</b>	<b>(11)</b>	<b>(166)</b>	<b>(186)</b>
<b>Cash operating profit</b>	<b>AUD million</b>	<b>1,612</b>	<b>(2)</b>	<b>(11)</b>	<b>38</b>	<b>185</b>
Project capital	AUD million	(402)	(25)	(150)	(220)	(3)
Sustaining capital	AUD million	(83)		(1)	(2)	(10)
<b>Net cash flow pre-tax</b>	<b>AUD million</b>	<b>1,127</b>	<b>(27)</b>	<b>(161)</b>	<b>(185)</b>	<b>171</b>
Income tax	AUD million	(308)				
<b>Net cash flow after tax</b>	<b>AUD million</b>	<b>819</b>	<b>(27)</b>	<b>(161)</b>	<b>(185)</b>	<b>171</b>

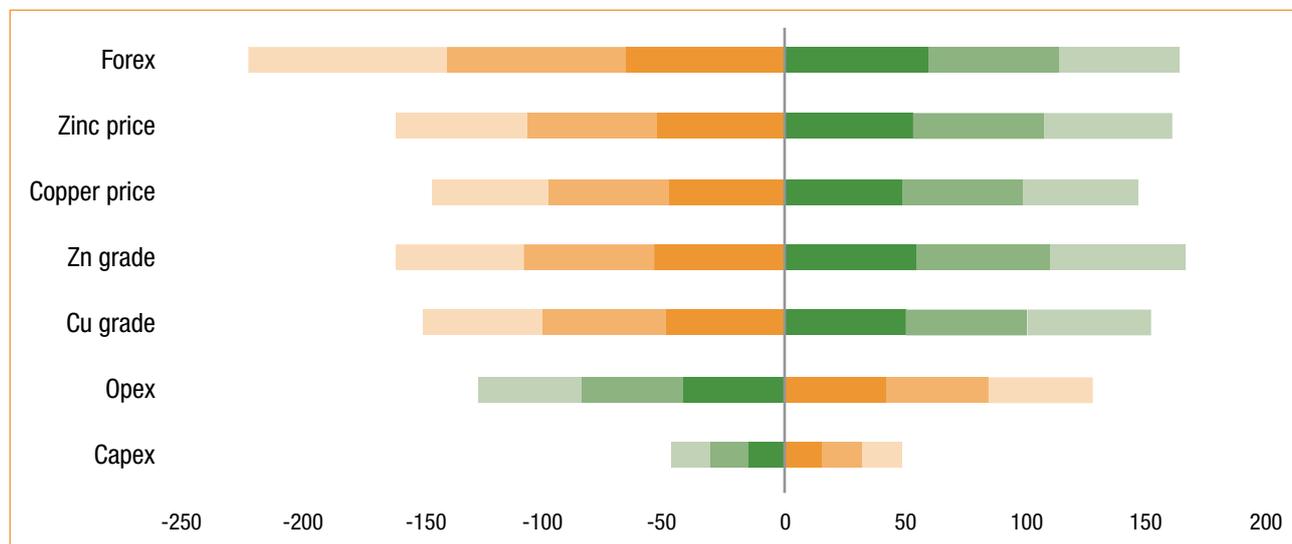
Figure 11: Project net cash flow post-tax profile



	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	2.33	2.40	2.43	2.40	2.40	2.40	1.95	0.57
	141,695	142,212	137,593	138,802	145,078	139,019	121,783	11,436
	85,864	88,910	87,832	90,407	91,035	90,917	72,439	35,235
	70,848	71,106	68,796	69,401	72,539	69,510	55,689	4,249
	20,607	21,338	21,080	21,698	21,848	21,820	17,485	9,264
	404	412	402	410	421	412	318	93
	(23)	(23)	(22)	(23)	(23)	(23)	(19)	(5)
	<b>381</b>	<b>389</b>	<b>380</b>	<b>387</b>	<b>397</b>	<b>389</b>	<b>298</b>	<b>88</b>
	(115)	(113)	(108)	(108)	(111)	(110)	(80)	(13)
	(37)	(37)	(38)	(37)	(37)	(37)	(35)	(15)
	(15)	(15)	(15)	(15)	(15)	(15)	(12)	(3)
	(8)	(8)	(8)	(7)	(7)	(7)	(6)	(5)
	(2)	(8)	(20)	(20)	(21)	(21)	(17)	(6)
	<b>(176)</b>	<b>(182)</b>	<b>(188)</b>	<b>(188)</b>	<b>(191)</b>	<b>(190)</b>	<b>(149)</b>	<b>(42)</b>
	<b>205</b>	<b>207</b>	<b>192</b>	<b>199</b>	<b>206</b>	<b>199</b>	<b>149</b>	<b>46</b>
						(2)		
	(10)	(10)	(10)	(10)	(10)	(10)	(8)	(2)
	<b>194</b>	<b>196</b>	<b>1821</b>	<b>189</b>	<b>195</b>	<b>186</b>	<b>142</b>	<b>45</b>
		(45)	(51)	(53)	(55)	(52)	(40)	(13)
	<b>194</b>	<b>152</b>	<b>131</b>	<b>136</b>	<b>141</b>	<b>134</b>	<b>102</b>	<b>32</b>

Higher cash flows in the early years of production are due to low tax and royalty rates resulting from carry-over of capital costs. The Foundation Phase NPV estimate is most sensitive to the ZAR-USD exchange rate, followed by the zinc price and the copper price as shown below.

Figure 12: Chart of the sensitivity of pre-tax NPV to variances in key input elements



Copper contributes 54% of the net revenue (after allowing for concentrate logistics, treatment costs and refining charges). The main production and financial metrics for the Project are shown in Table 12.

**Risk assessment**

Headline risks were identified during a facilitated inter-disciplinary risk assessment workshops for the Project. These are summarised in Table 13.

*Table 13: Headline risks*

Risk	Mitigation
1. Mine equipment and activities exceeding the Square Kilometre Array (SKA) electromagnetic interference (EMI) protection levels, resulting in the authorities placing operating restrictions on the mine	<ul style="list-style-type: none"> <li>• Electromagnetic Capability (EMC) Plan was formulated.</li> <li>• Written approval of the EMC plan was received from SKA authorities.</li> <li>• Designing taking into account key EMI emitters is planned.</li> <li>• Submission of the AMA permit application will be done within the prescribed timeframe.</li> <li>• Appointment of specialist consultants to assist in the permit application process has been done.</li> </ul>
2. Influx of people from outside of the Prieska municipal area looking for employment negatively affecting the local community	<ul style="list-style-type: none"> <li>• A community liaison office has been established. As has a Stakeholder Engagement Forum with broad community representation. A collaboration agreement has been entered into with local government (Siyathemba Municipality). These platforms will assist with identifying and dealing with migrant population challenges.</li> <li>• Preferential hiring of local residents will be encouraged.</li> </ul>
3. Number of employment and business opportunities created by the Project for Siyathemba Municipality residents and businesses not meeting public expectations and causing disharmony	<ul style="list-style-type: none"> <li>• Informing, training and upskilling of the local community has commenced.</li> <li>• An on-line procurement management portal, Supply Chain Network™, is being used to allow potential local suppliers to the Project to register with the Project.</li> <li>• Procurement procedures to prioritise local businesses.</li> </ul>
4. Delays to the shaft dewatering and shaft and mine refurbishment	<ul style="list-style-type: none"> <li>• 40% contingency allowance made to water volumes expected to have accumulated in the mine workings.</li> <li>• Shaft examined by experts; continuous tests and examinations as dewatering progresses. Pilot trials commenced to test various activities relating to dewatering. Delayed start-up insurance included in the capital budget.</li> </ul>
5. Mine production rates assumed in financial modelling are not achieved in practice	<ul style="list-style-type: none"> <li>• A practical and achievable production plan is in place.</li> <li>• A monthly mining plan has been prepared.</li> <li>• Contract mining to be used to establish the mine, whereby skilled and experienced operators will operate the underground mine to ensure a high productivity start-up.</li> </ul>
6. Potential for mud and water rushes while dewatering and cleaning out the lower mining levels	<ul style="list-style-type: none"> <li>• Pumping plan for safe dewatering has been prepared.</li> <li>• Level inspection procedures will be developed.</li> </ul>
7. Unplanned power interruptions and escalation of power tariffs. Delays in availability of power for the Project	<ul style="list-style-type: none"> <li>• Temporary power from the Cuprum Substation (15 MVA) is planned. Emergency (diesel) power installed – currently set at 5MW. Investigating renewable energy sources as an alternative source to grid power. Operating shutdown procedure in place.</li> </ul>

Risk	Mitigation
8. Ability to attract and retain skills at a remote site.	<ul style="list-style-type: none"> <li>• Attractive salary levels set.</li> <li>• Provision of suitable accommodation and recreational facilities.</li> <li>• Staff Turnover Plan. Attractive roster system and allowance for fly-in fly-out employees.</li> </ul>
9. Availability of service providers and goods suppliers to meet Mining Charter 3 Procurement policies	<ul style="list-style-type: none"> <li>• Proactive engagement with service providers meeting Mining Charter 3 criteria as BEE entities. Use of online procurement portal to keep register of businesses. Enterprise resource planning tools to record procurement spend on compliant suppliers.</li> </ul>
10. Production grades are lower than planned	<ul style="list-style-type: none"> <li>• Peer reviews of the Mineral Resource Estimates done.</li> <li>• Comprehensive grade control program planned.</li> <li>• Blasting design to minimise overbreak.</li> </ul>
11. Availability of specialised crane for installation of head gear and the Koepe winder	<ul style="list-style-type: none"> <li>• Identify the specialised crane required as early as possible</li> <li>• An early contract is required for a 500-tonne crane.</li> </ul>

### Post-Feasibility Study activities

On completion of the BFS, efforts focused on works relating to refining the study further in line with specific funding requirements, pilot-scale field trials of key activities, business plan optimisation work, securing of long-lead time items, formalising key service and supply contracts and developing the Prieska Project execution capacity.

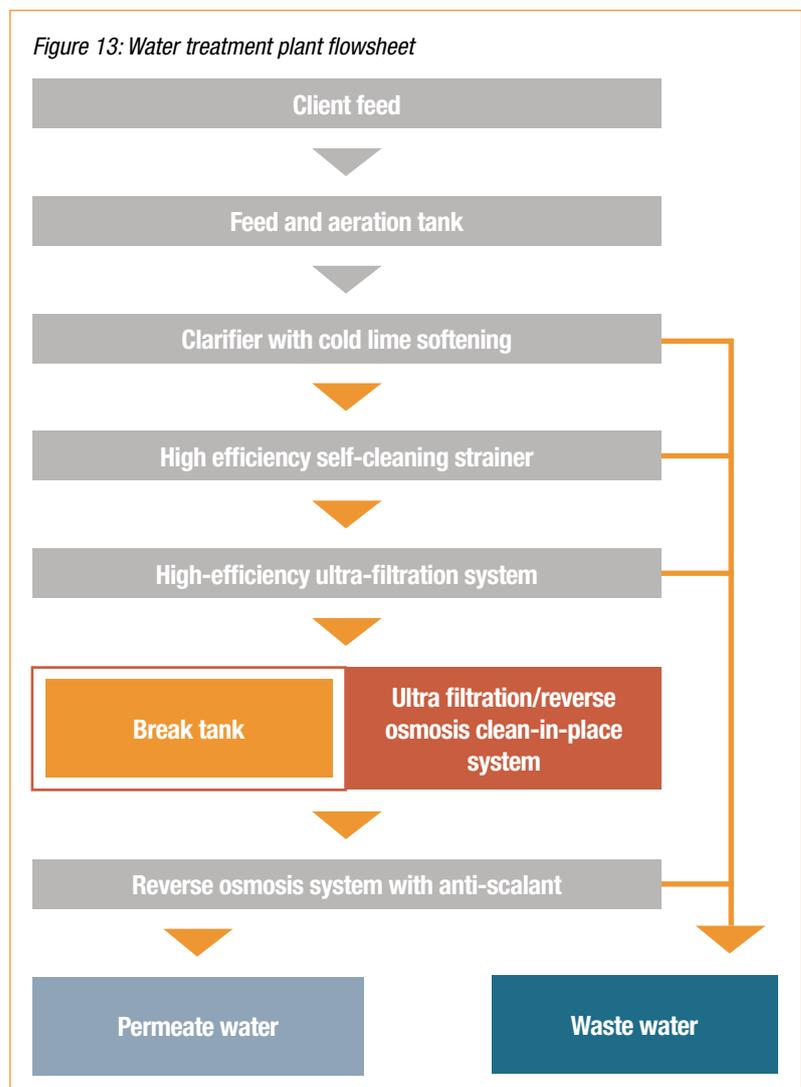
#### Water treatment field trials

Pilot-scale trials were commissioned to further test water qualities, refine the proposed pumping system, investigate means of cost-effective water treatment and to confirm the size and arrangement of evaporator units to be used.

Water treatment trials aim to provide engineering data to allow detailed design and costings for treating the accumulated water to a range of water purification specifications.

Water treatment would allow offsite discharge and other secondary uses of water to be considered and so reduce the volume of water that needs to be evaporated. A 5m<sup>3</sup> per hour, pilot water treatment plant, bespoke for the Prieska Project's water and schedule requirements, has been constructed and commissioned. The dewatering pumping system, supplying the water for the treatment trials, forms part of the field trials.

Figure 13: Water treatment plant flowsheet



## REVIEW OF OPERATIONS *continued* South Africa (Prieska Project) *continued*



*(Left) Water treatment pilot plant mobilisation. (Right) Commissioning the chemical treatment, filtration and reverse osmosis components of the pilot water treatment plant, setup to operate at 5m<sup>3</sup>/hr of feed water.*

On completing the water treatment trials, pilot-scale trials of the proposed mechanically-assisted evaporation assembly are planned using 75kW and 90kW evaporator units. Results from the trials are expected to refine the number of and improve the operating efficiency expected from the evaporation units to be installed.



*Feasibility study field trial of effectiveness of a 15kW evaporator at the Prieska Project. The planned pilot trials aim to test 75kW and 90kW units as the next phase of the program.*

### **BFS optimisation studies**

Several opportunities are being followed up that are expected to significantly improve the overall project economics and project risk profile. The optimisation process is expected to be completed by the end of CY2019, resulting in a refined mining plan. These opportunities include:

#### **The enterprise mapping and optimisation process.**

This process involves using software to map the entire mine to market value chain to identify optimal combinations. It is expected to significantly improve project economics whilst also mapping out key business processes to aid operational control and a better understanding of the real value drivers unique for the Prieska Project business plan.

#### **Review of the processing plant flowsheet and layout.**

This is being done with the aim of refining and reducing the plant's footprint and simplifying the layout to make the facility more easily operable.

#### **Mine design and scheduling refinements.**

Mine design layout, sequencing and scheduling refinements continue to be made as part of the enterprise optimisation process.

#### **Key supply contracts and long lead time order placement**

The negotiations for key supply contracts and to secure long lead time plant and equipment are taking place.

Contracts under consideration include:

- obtaining grid power from the national power utility, Eskom. While Eskom has given approval for the Company to undertake the power connection works as a self-build program, administrative connection charges and power tariffs are yet to be finalised
- commissioning the next phase of renewable energy supply studies. A collaboration agreement is already in place that provides the framework for advancing the plan to have over 50% of project power needs supplied from renewable energy sources
- securing water supply infrastructure and tariffs
- placement of orders or down-payments for long lead time items, including rock hoisting and materials transportation winders and ball mills
- engagement of project management personnel, contractors and key workstreams service providers
- marketing of copper and zinc concentrates

Post financial year end, on 3 September 2019, Orion concluded a Memorandum of Agreement with Byrncut Offshore, an internationally recognised underground mining contractor, on the mining of the Prieska deposit.

Key terms of the agreement are that the parties will seek to enter an alliance related to underground mining at the Prieska Project, where Byrncut would provide underground mine development and mine production services; commit to promoting local employment and skills transfer in support of transformation of the industry; and collaborate with local BEE enterprises, in line with Orion's commitment to the progressive transformation and modernisation of the South African mining industry (refer ASX release 3 September 2019).

#### *In-house project execution capacity*

Various entities are being considered to assist with managing the project execution and supplementing the Orion team responsible for executing the BFS. A detailed project execution strategy is to be formulated.

#### **Permits and licensing**

Post year end, on 3 July 2019, the Repli Environmental Authorisation was granted by the DMRE in accordance with Environmental Impact Assessment Regulations, 2014 (refer ASX release 8 July 2019). The Repli Mining Right was awarded on 23 August 2019 (refer ASX release 3 September 2019). Granted under the MPRDA, the Mining Right is valid for an initial period of 24 years and can be renewed on application for further periods, each of which may not exceed 30 years.

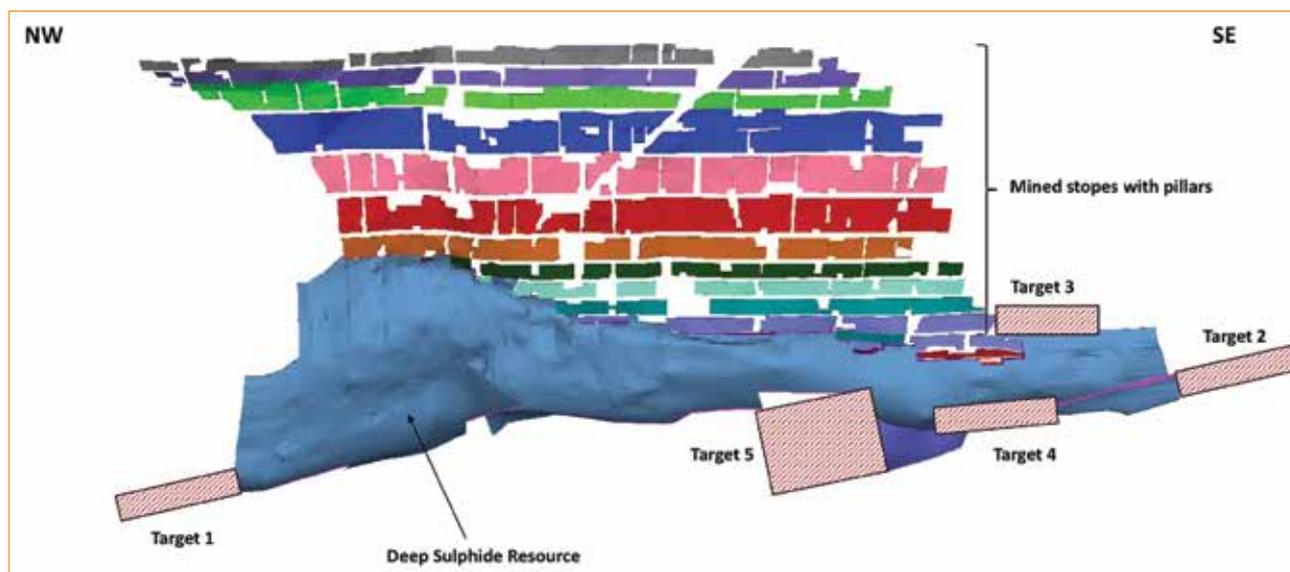
Grant of the Environmental Authorisation and Mining Right to the south eastern strike extension of the Prieska orebody on the Vardocube prospecting right area, which was submitted after the Repli application, is expected in FY2020.

#### **Prieska Deposit extensional exploration**

##### **Deep Sulphide Target Resource drilling program**

Orion completed the intensive Deep Sulphide Target drill program during the second quarter of FY2019. At the height of activity, 18 surface diamond drill rigs were in operation. The drill program aimed to provide statistical validation of historical drill data available, as well as to obtain a drill spacing to allow classification of the Mineral Resource in accordance with the JORC Code (2012) (refer ASX release 15 October 2018). Drilling tested limited new targets that extended the known mineralisation outside of the historical drill grid. A total of 85,424 metres was drilled. The drilling program was successful in providing the data required for the Mineral Resource Estimate and in addition indicated that potential exists to increase the Resource with additional drilling (Figure 14).

*Figure 14: Longitudinal section of the Deep Sulphide Mineral Resource showing potential extensions*



**BUSINESS REVIEW**

**REVIEW OF OPERATIONS** *continued*  
**South Africa (Prieska Project)** *continued*

Drill targets in the south-eastern section promise thicker and higher-grade mineralisation and are a priority once underground exploration begins. Drilling can be conducted from underground drill platforms from existing exploration drives and will commence upon completion of dewatering and equipping of these levels.

***+105 Level Target (open pit) Resource drilling program***

The +105 Level drilling program, targeting mineralisation expected to be amenable to open pit mining, was completed in October 2017 (refer ASX release 15 October 2018).

The geological wireframe and resource estimate have been updated during the third quarter of FY2019 to include refinements to modelling of metallurgical zonation. The Mineral Resource Estimate is discussed previously in this report.

Only 50% of the current supergene resource in the +105 Level Mineral Resource Estimate falls within the Indicated Mineral Resource category. Orion plans to upgrade this Inferred Mineral Resource to an Indicated level by infill drilling from the existing +105 level underground mine development.



*Oxidised lead and zinc mineralisation from the Prieska Project*

# NEAR MINE EXPLORATION

*Geophysical surveys have identified numerous compelling targets for both VMS style copper-zinc mineralisation and nickel-copper sulphide mineralisation within a 15km radius of Prieska. Despite Prieska being one of the single largest VMS exhalite bodies known in the world, the area around the deposit has had virtually no exploration in over 35 years.*

Orion believes that, with the application of advanced, modern geophysics and the latest geological thinking, there are outstanding opportunities for new VMS discoveries. The near-mine projects are those within prospecting tenements Repli, Repli (Doonies Pan), Vardocube and Bartotrax (Figure 15). VMS

deposits worldwide tend to occur in clusters, and apart from the giant Prieska Deposit, five smaller deposits occur on the near-mine project areas. These are Annex, Ayoba and the three Kielder deposits referred to as the PK1, PK3 and PK6 Deposits.

During FY2019, Orion completed five fixed loop time-domain electromagnetic (FLTDEM) surveys, drilled two diamond drill holes to test a FLTDEM conductor and completed a SkyTEM™ survey that covers the near mine prospecting rights. The highlight of this work was the discovery of massive sulphide mineralisation at Ayoba (refer ASX releases 16 January 2019 and 25 February 2019).

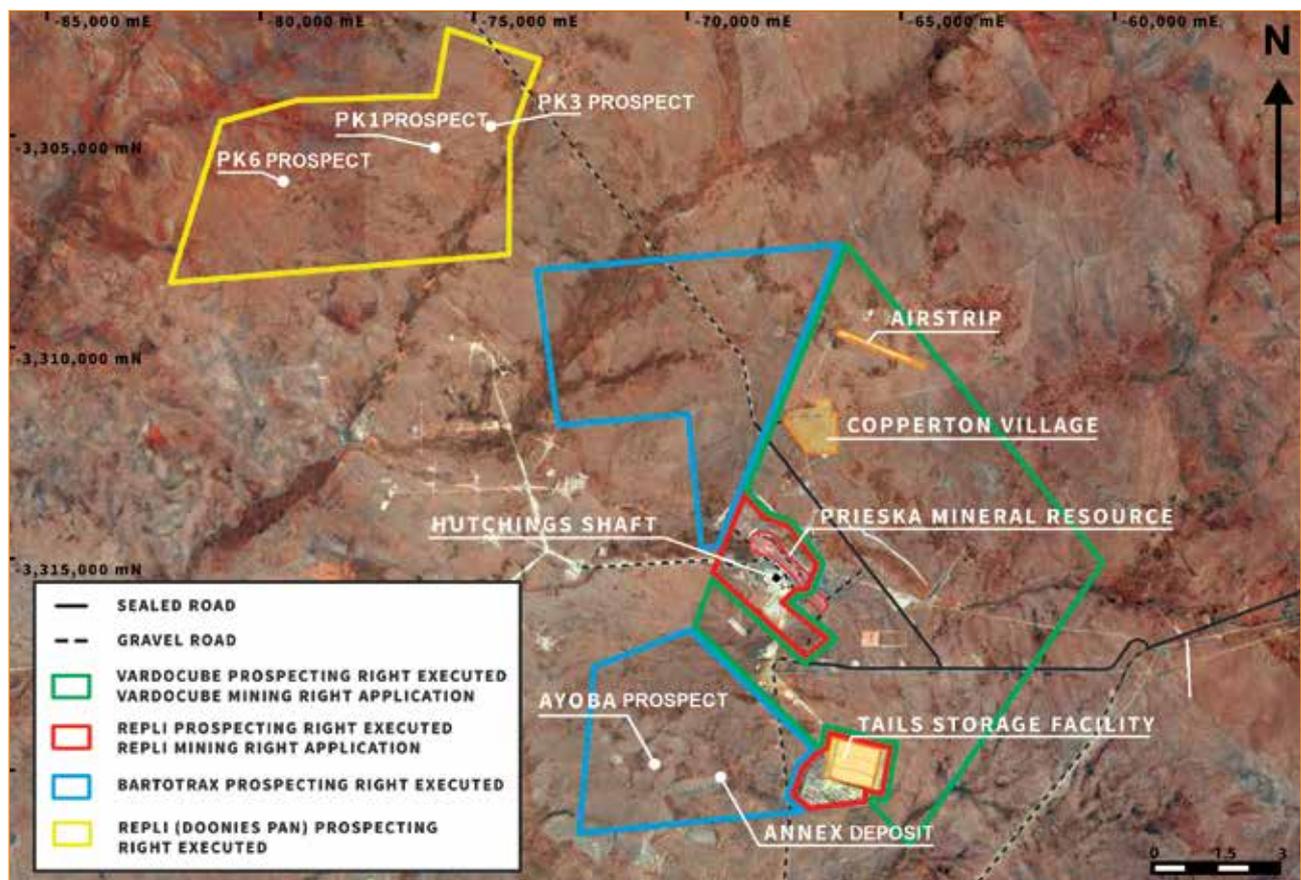
Exploration is currently being conducted over 14 SkyTEM™ anomalies prioritised for follow-up. In addition, the newly-acquired magnetic data together with field mapping and historic data compilations are being used to identify areas of high prospectivity.



Deep drilling rig at the Ayoba Target

**REVIEW OF OPERATIONS** *continued*  
**Near mine exploration (South Africa)** *continued*

Figure 15: Surface plan showing the prospecting rights over and adjacent to the Prieska Project, and the location of the Annex and Kielder (PK1, PK3 and PK6) deposits



**Annex Copper Deposit**

The Bartotrax Prospecting Right (Bartotrax), which includes the Annex VMS Copper Deposit (Annex), was granted by the DMRE in November 2018. Annex, located approximately 6km south of the Prieska Project, was discovered by Anglovaal in 1969. Mineralisation was identified over a strike length of 1,000 metres and drilled down to 550 metres below surface. The deposit remains open in depth down-plunge.

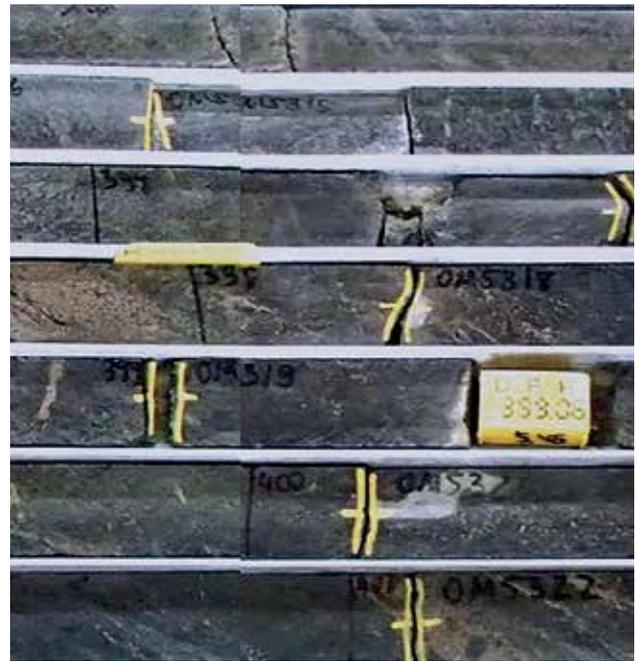
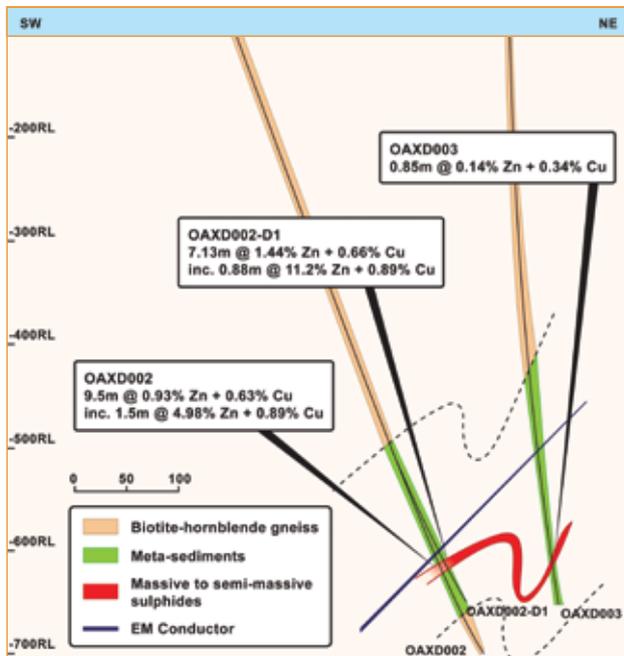
Orion completed four FLTDEM surveys to explore for possible strike and depth extensions of the Annex Deposit in the first quarter of FY2019. Drill testing of an electromagnetic conductor detected approximately 1,600m west along strike of the Annex Deposit led to the discovery of Cu-Zn mineralisation at Ayoba.

**Ayoba Target**

A new zinc-copper bearing massive sulphide body, was discovered at the Ayoba Prospect at the end of 2018. The massive sulphide intersection was made 5.3km south-southwest of Orion’s Hutchings Shaft on the Prieska Project and 1.6km west and along strike of the known copper mineralisation at Annex. The discovery drill hole intersected 9.5m of massive sulphides from 654.00m grading 0.63% Cu and 0.93% Zn, including 1.50m from 654.50m at 0.89% Cu and 4.98% Zn (Figures 16 and 17) (refer ASX release 16 January 2019).

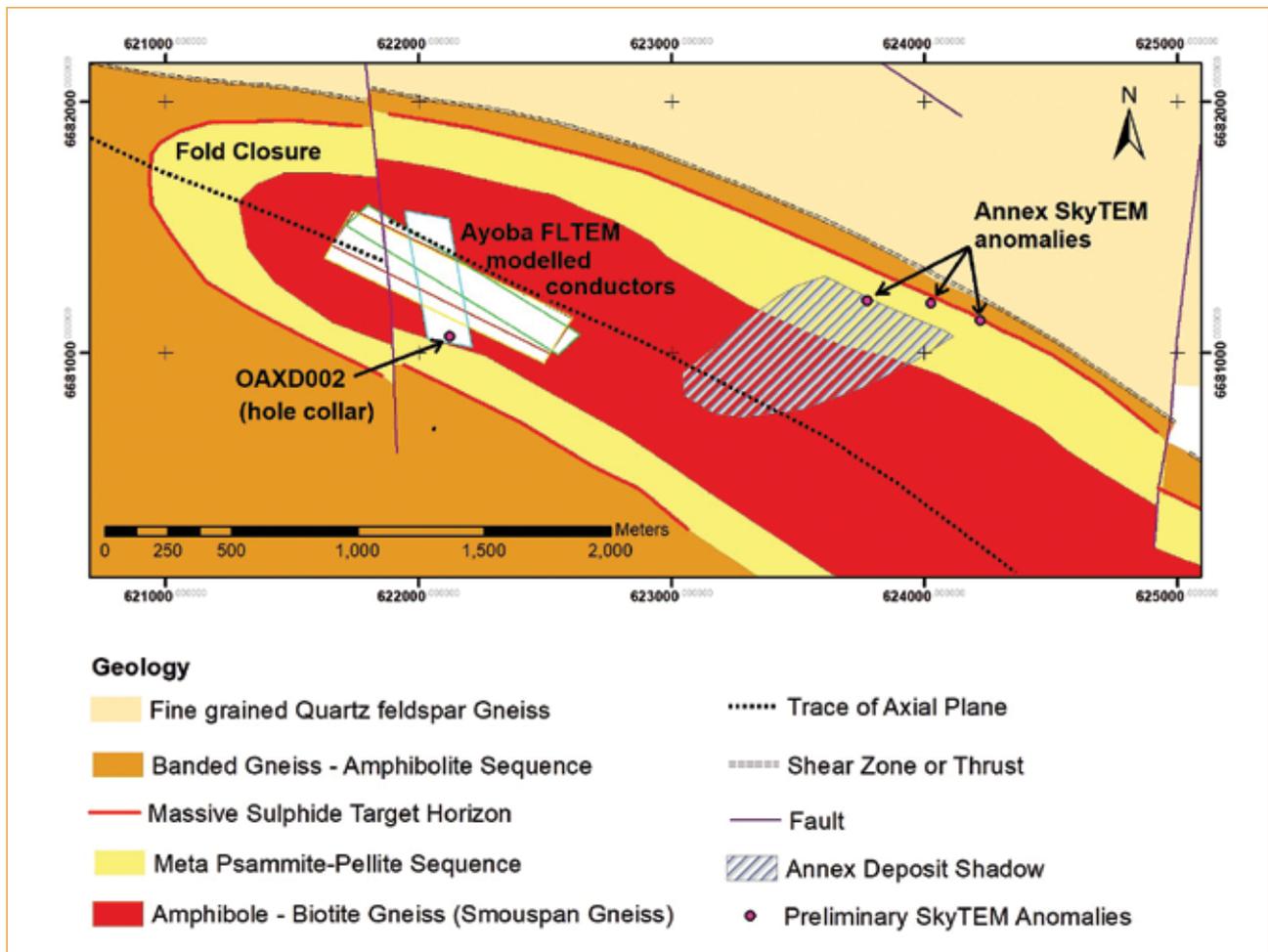
Ayoba represents the first new VMS discovery in the Areachap Belt in over 36 years. Further exploration at Ayoba will target the high-grade Zn zone in the upper part of the mineralisation.

Figure 16: Section through holes OAXD002 and OAXD002\_D1 showing the mineralisation intersected



Drill core sampled as part of the exploratory drill campaign on the Rok Optel Prospect.

Figure 17: Geological map interpreted from the newly-acquired aeromagnetic and drill data showing Annex, the Ayoba FLEM conductor and the fold closure target to the west-northwest



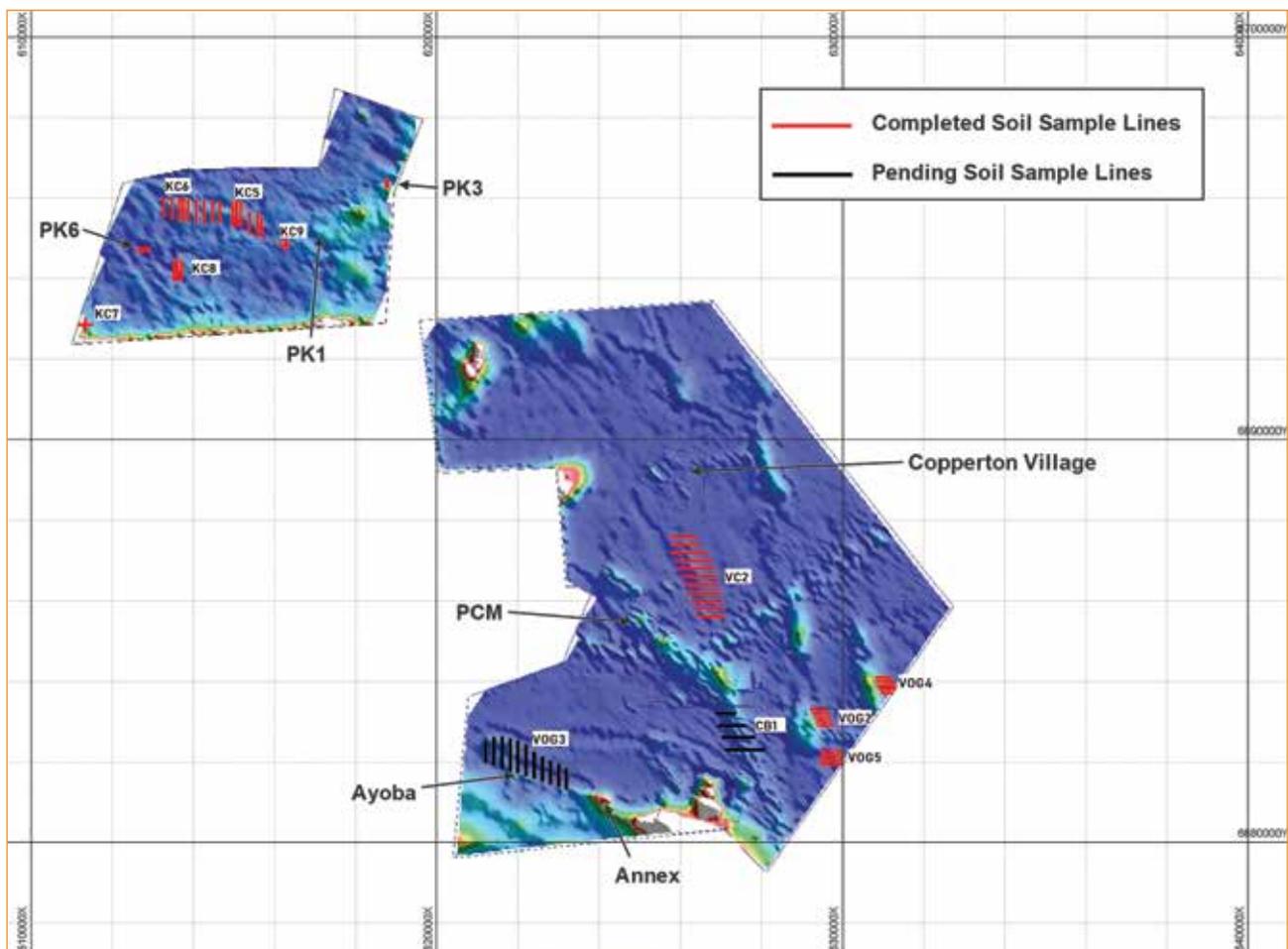
**REVIEW OF OPERATIONS** *continued*  
**Near mine exploration (South Africa)** *continued*

**SkyTEM™ survey and follow-up**

Final results of the SkyTEM™ (AEM) survey, conducted in December 2018 over the Repli, Repli (Doonies Pan), Vardocube and Bartotrax Prospecting Rights (refer ASX release 16 January 2019), were received from the Company's Perth-based geophysical consultants, Southern Geoscience Consultants (SGC), during the last quarter of FY2019. Fourteen AEM conductors were prioritised for follow-up work (Figure 18).

Based on the known mineral occurrences and aero-magnetic interpretation, the AEM anomalies are classified as VMS and magmatic Ni-Cu targets. The VMS targets are located on key stratigraphic horizons that mark a paleo-seafloor setting. Some of these conductors were detected over known VMS deposits, confirming the SkyTEM™ system to be effective in detecting the styles of mineralisation for which Orion is prospecting.

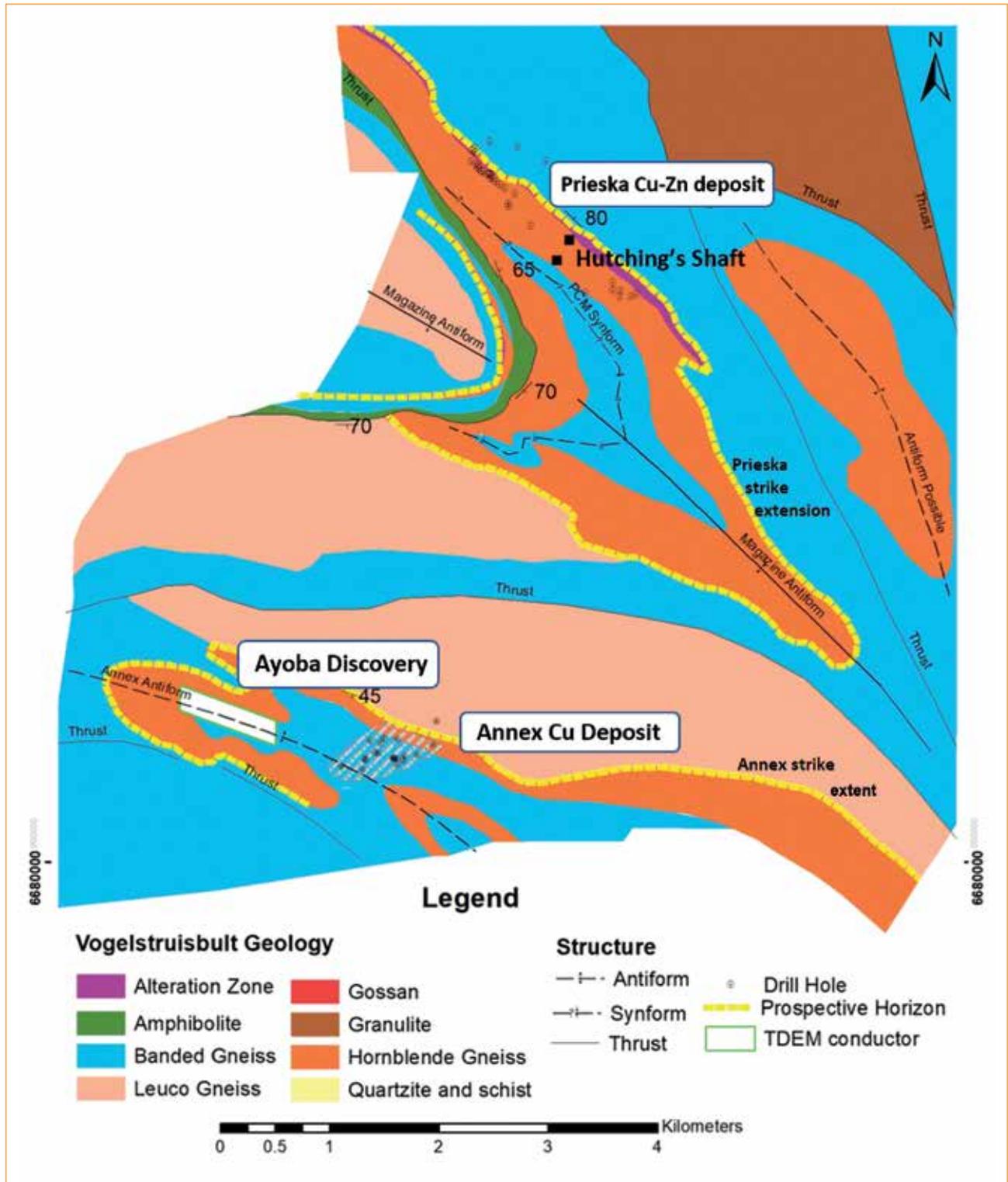
*Figure 18: Airborne EM anomalies and known base-metal deposits and occurrences shown on the AEM Channel 25 map. Anomalies considered by SGC as follow-up targets are labelled (COP and VOG) whereas those without labels are considered low potential targets. The large, linear features south and east of the Prieska Project (PCM) are caused by power lines and other infrastructure.*



The Company is currently exploring these targets. Soil sampling and geological mapping are being carried out in order to prioritise targets for ground EM and drill follow-up.

The geological map of the Near Mine Area has been updated by integrating the new SkyTEM™ airborne magnetic data and field mapping (Figure 19). The current interpretation suggests the prospective horizon to be developed over some 20km on the north-western and south-eastern strike extent of the Prieska Deposit, the western and eastern strike extent of the Annex Deposit, the Ayoba Discovery and in the Magazine Antiform shown below.

Figure 19: Updated geological plan showing near-mine prospective horizons based on surface geology and aeromagnetic data



# REGIONAL EXPLORATION

## MASIQHAME PROJECT AREA

NAMAQUA-DISAWELL PROJECT AREA (Jacomynspan Nickel-Copper-Cobalt-PGE Project, Rok Optel Prospect)

MARYDALE GOLD-COPPER PROJECT AREA (Witkop)

*Orion maintains a substantial and prospective land holding in the Areachap Belt. The Areachap Belt is analogous to other Proterozoic mobile belts hosting major VMS and magmatic Ni-Cu-Co-PGE deposits.*

*(See Figure 2 for map of Areachap Belt showing prospecting rights held by, or currently under option to, Orion, and noted mineral occurrences.)*

VMS deposits almost always occur in clusters or 'districts' associated with volcanic spreading centres, with four such centres having been identified in the Areachap Belt. In addition to the near-mine projects, Orion is also prospecting for VMS deposits on the Masiqhame Prospecting Right. Contiguous to the north of the Namaqua-Disawell Project (Ni-Cu), this project is defined in terms of the Masiqhame tenement holding and includes the Kantienpan and Bokspuits Zn-Cu VMS deposits. With its known VMS deposits, numerous Cu-Zn mineral occurrences and regional geological setting, the area offers potential for economic VMS Cu-Zn and magmatic Ni-sulphide discoveries. It is common for VMS districts to have small Cu-Zn deposits clustering close to a large deposit; on the Masiqhame Prospecting Right, the larger deposit is still to be discovered.

Similarly, world-class nickel deposits tend to also occur in clusters both on prospect and regional scale. Within these intrusive centres, a small number of the intrusions tend to host the best mineralisation depending upon the intrusion magma-flow dynamics and timing of magmatic sulphide immiscibility and transport. Several mafic intrusive bodies with nickel and associated metals are known on the Namaqua-Disawell prospecting rights. The setting of mineralisation has been confirmed to be analogous to other orogenic-hosted, deep-

seated magma conduit complexes in Africa, Australia and South America. Conduit style mineralisation is currently the top priority global target for magmatic Ni-Cu-PGE sulphide exploration. Electromagnetic geophysical methods are the primary tool for discovery of massive magmatic Ni-Cu-Co-PGE deposits. Due to the complexity of these intrusions, an innovative approach to exploration is required to resolve the locations of economic mineralisation. This entails usage of airborne, ground, and down-hole surveying systems.

Regional exploration on the Masiqhame and Namaqua-Disawell prospecting rights continued in FY2019, along with field mapping and interpretation of drill information and geochemical data.

### Masiqhame Project Area

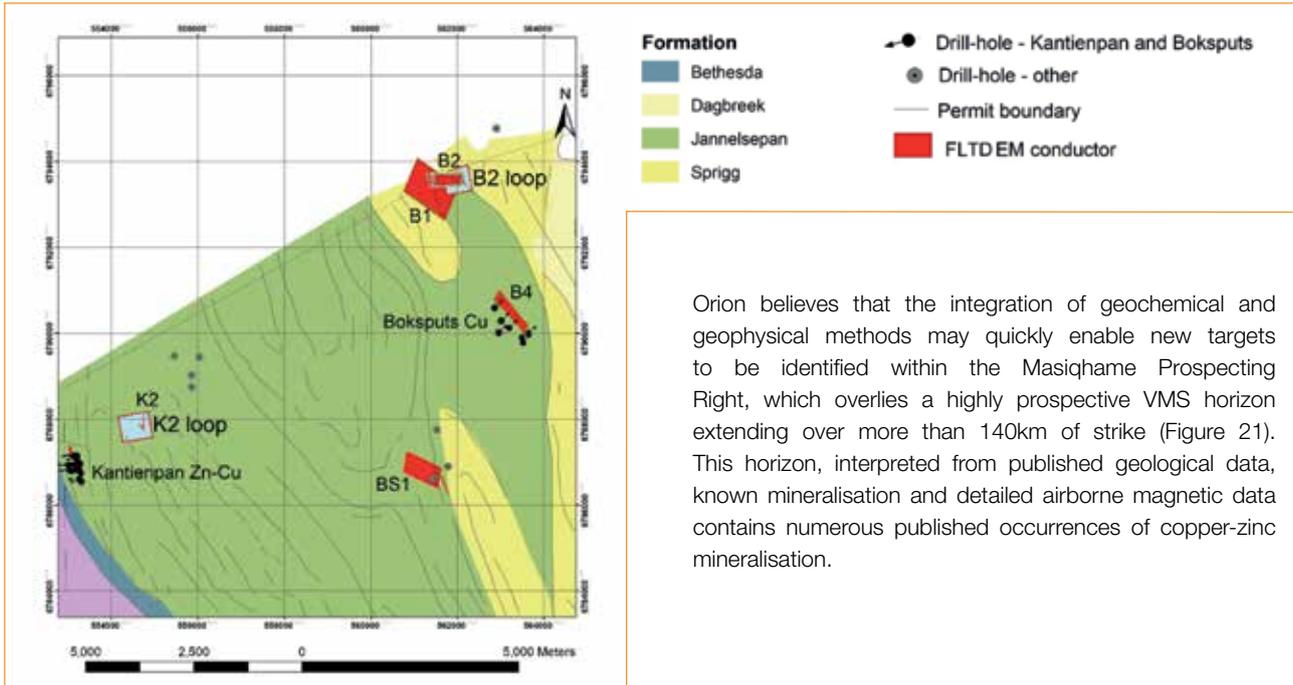
In March 2018, Orion entered into an earn-in agreement to earn up to a 73% interest in Masiqhame Trading 855 (Pty) Ltd (Masiqhame), which holds a prospecting right covering an area of almost 980km<sup>2</sup>. Orion currently holds a 49% stake and has received Ministerial consent to transfer a controlling interest in the company to Orion in terms of Section 11 of the Mineral and Petroleum Resources Development Act, No. 28 of 2002 (MPRDA).

As a result of the receipt of Section 11 consent from South Africa's DMRE, Masiqhame will issue an additional 1% of its shares to Orion, resulting in Orion holding 50% of the total Masiqhame shares (refer ASX release 2 September 2019). Under the earn-in agreement between the parties, Orion has the opportunity to earn in an additional 23% of the shares to bring its holding to a total of 73% by completing a feasibility study on any mineral project on the property. Orion's exploration spend up to 31 July 2019 on the tenements amounted to ZAR16 million (~\$1.6 million).

The Masiqhame Prospecting Right is located 90km north of the Prieska Project in easily accessible flat-lying countryside and is well situated with regional grid power and rail lines within 10km of the site (Figure 20).

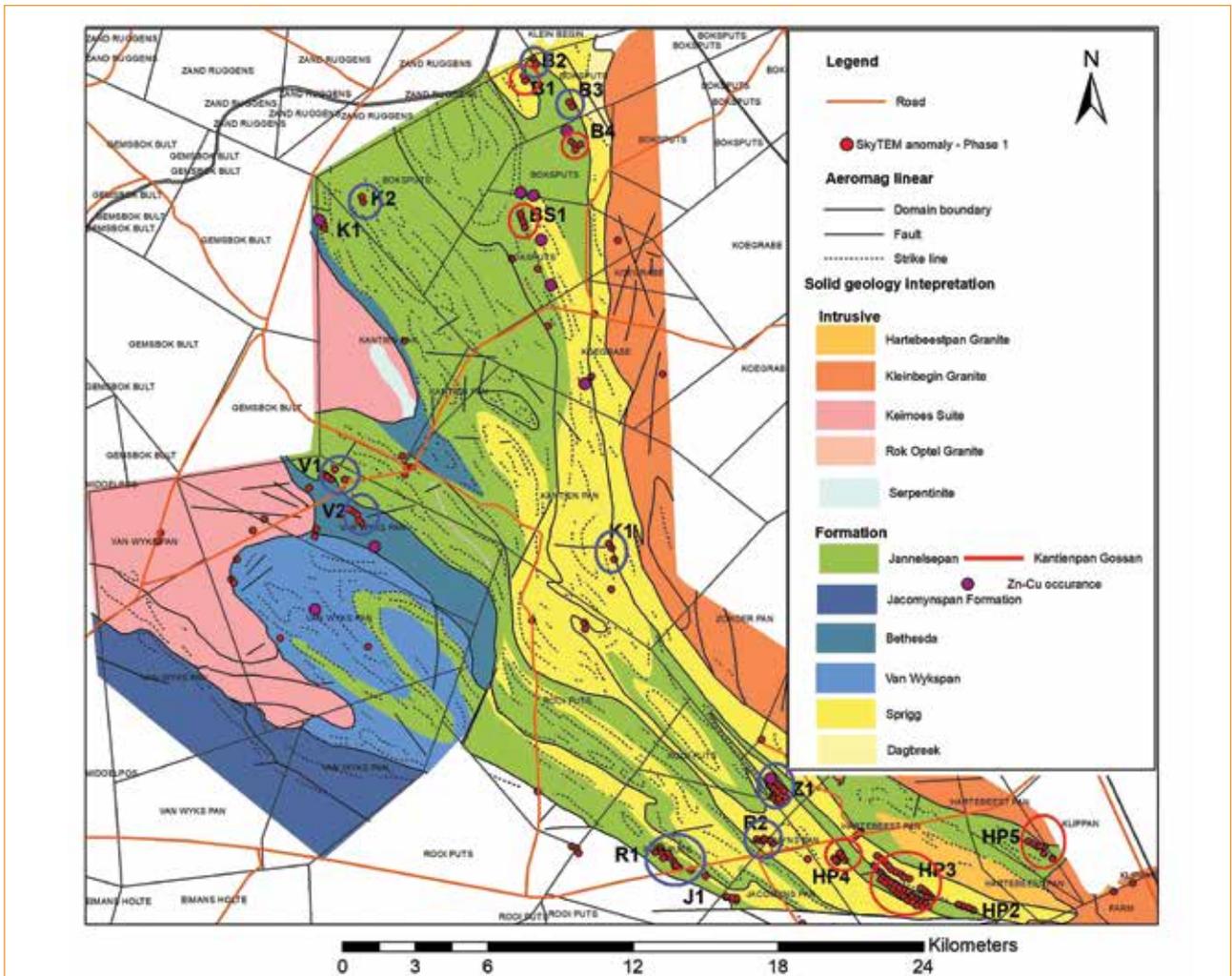
Orion is currently focusing on VMS-style mineralisation on Masiqhame, following up on selected anomalies detected by a regional SkyTEM™ survey completed in early 2018 over the prospecting right. During FY2019, five FLTDEM surveys, geological mapping and soil sample surveys were conducted to prioritise drill targets. Integration of the data defined two compelling drill targets with strong conductors on the B1 and B4 prospects located in the Bokspuits area, an area known to host VMS mineralisation (Figure 20) (refer ASX release 24 September 2018). While B1 was never drill tested, drilling at B4 was reported to intersect Cu mineralisation but did not test the FLTDEM conductor.

Figure 20: FLTDEM conductors and loops on Masiqhame



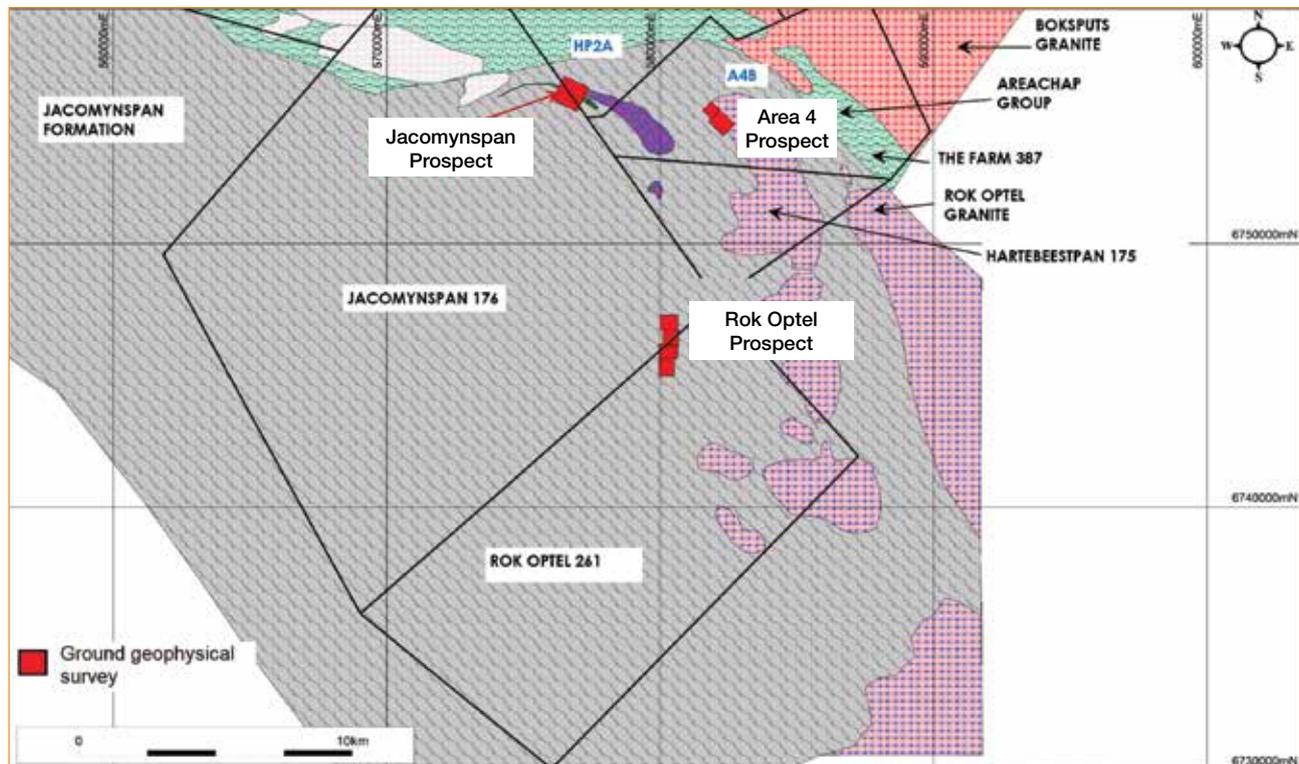
Orion believes that the integration of geochemical and geophysical methods may quickly enable new targets to be identified within the Masiqhame Prospecting Right, which overlies a highly prospective VMS horizon extending over more than 140km of strike (Figure 21). This horizon, interpreted from published geological data, known mineralisation and detailed airborne magnetic data contains numerous published occurrences of copper-zinc mineralisation.

Figure 21: Interpreted geological map with the prospective horizon (paleo-seafloor), Cu-Zn occurrences and EM anomalies



## Namaqua-Disawell Project Area

Figure 22: The Namaqua-Disawell Prospecting Rights showing known Ni-Cu prospects.



### Jacomynspan Nickel-Copper-Cobalt-PGE Project

The Namaqua-Disawell Project area, within which the Jacomynspan intrusion is located, is 65km northwest of the Prieska Project, within the central part of the Areachap Terrane (Figure 22). The Project area is highly prospective for magmatic nickel-copper-cobalt-PGE sulphide mineralisation within syn- to late-tectonic ultramafic intrusions, of which several have been identified.

The JORC compliant Mineral Resource for the Jacomynspan Deposit announced in March 2018 is 6.8Mt containing 39,480 tonnes nickel, 22,800 tonnes copper, 1,800 tonnes cobalt at a 0.4% Ni cut-off with grades of 0.57% Ni, 0.33% Cu and 0.03% Co (refer ASX release 08 March 2018). No changes to the Mineral Resource were reported in FY2019. The Company has reviewed the Jacomynspan Mineral Resources and no material changes have occurred during the reporting period that affect the Mineral Resource Estimate.

In 2018, Orion completed FLTDEM, four diamond drillholes and two down-hole time domain electromagnetic (DHTDEM) surveys.

Orion believes a substantial exploration opportunity exists within the project area with VMS copper-zinc and Intrusive Ni-Cu-Co-

PGE potential superimposed. The suite of intrusions on the Namaqua-Disawell Rights is located within the Meso to Neo-Proterozoic Namaqua-Natal Orogenic Belt. This is a complex, long-lived, multi-phase, orogenic assembly zone, related to the amalgamation of the Rodinia Supercontinent. This tectonic setting is favourable for production and ascent of metal-enriched mantle-derived magma that utilises deep-seated structural zones as pathways to intrude the upper crust.

### Rok Optel Prospect and Area 4

Two other Ni-Cu deposits, Area 4 and Rok Optel, were investigated during the 1970s by Anglo American Prospecting Services (AAPS), Newmont, Phelps Dodge and Hoch Metals. These prospects were covered by the SkyTEM™ survey completed FY2018.

In 2018, Orion completed FLTDEM surveys, diamond drilling and DHTDEM surveys.

Four diamond holes were drilled to test the more conductive FLTDEM anomalies and subsequent DHTDEM conductors on Rok Optel. The best intersections were made in drill-holes OROD001 and OROD003.

Intersections in OROD001 include:

- 8.99m from the 201.05m down-hole depth at 0.24% Ni, 0.16% Cu, 0.02% Co and 0.22g/t 2PGE & Au; and
- 7.29m from the 292.09m down-hole depth at 0.28% Ni, 0.11% Cu, 0.01% Co and 0.66g/t 2PGE & Au (refer ASX release 24 October 2018).

The best intersections in OCOD003 include:

- 10.51m from the 397m down-hole depth at 0.29% Ni, 0.23% Cu, 0.04% Co and 0.15g/t 2PGE & Au; and
- 3.24m from 404.54m down-hole at 0.36% Ni, 0.25% Cu, 0.05% Co and 0.18g/t 2PGE & Au.

The transgressive vein and stringer-style mineralisation intersected in the drill holes is genetically very significant (Figure 23). Most massive sulphide ore deposits are characterised by magma chamber dynamics that cause repeated mineralising

events within a constrained locality. The identification of magmatic sulphide veins injected into the country rock is also particularly encouraging as it highlights the potential to discover bulk massive sulphide mineralisation.

#### **Marydale Gold-Copper Project (Witkop)**

Orion holds prospecting rights over the Marydale Gold-Copper Project, a deposit of possible high sulphidation epithermal origin located 60km from the Prieska Project. Historical drilling was carried out at various orientations and, despite wide zones of mineralisation being intersected, the majority of these are now seen to be sub-optimal.

Drilling by Orion in 2016 confirmed historic drill results. Initial interpretations, based on data from oriented core, revealed that the host lithology is in a structurally complex, folded and sheared package. Orion is currently reinterpreting the drill data and assessing the economic potential of the deposit.

No field work was carried out on the Marydale Gold-Copper Project during FY2019.

*Figure 23: Vein style mineralisation intersected in ultramafic rocks at the Rok Optel Prospect*



*Massive sulphide veins intruding lithified pyroxenite along grain boundaries and stopping/entraining silicate autoliths*



*Massive sulphide intruding and brecciating pyroxenite*



*The SkyTEM™ geophysics survey at the Namaqua-Disawell 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 into via a joint venture agreement (JVA). Under the JVA, IGO is responsible for all exploration on the tenements and provides regular updates to Orion on activities and results.

The combination of magmatic Ni-Cu-Co and VMS Cu-Zn mineralisation in the Fraser Range is analogous to the Areachap Belt in South Africa where the Company holds Prospecting Rights over both magmatic Ni-Cu and VMS style Cu-Zn deposits.

Orion has been informed by IGO that a drilling program has begun to test two high-priority targets selected based on ground geophysics and geochemistry carried out by IGO (refer ASX release 10 March 2017). The projects being prioritised for drill testing are North West Passage for intrusive hosted Ni-Cu and Pike Prospect where potential exists for both Ni-Cu Intrusive mineralisation and VMS Cu-Zn mineralisation (Figure 24)

**The North West Passage**

The target was initially identified by Orion in a 2014 versatile time domain electromagnetic (VTEM) survey and was interpreted further by IGO using additional geophysical data, including aeromagnetics and ground gravity. IGO commissioned a five-line moving loop electromagnetic (MLEM) survey across the prospect in 2017 (refer ASX release 30 July 2019). IGO plan to drill two diamond drill holes totalling 700m to test the conductor.

**Pike Prospect – E28/2367**

Four conductors were identified from the Pike MLEM survey. Based on electromagnetic, geochemistry and magnetic structural data, six diamond drill holes for 2,380 metres have been planned across three prospects. Drilling is anticipated to be conducted in the second quarter of FY20. The Pike conductors offer both Cu-Zn VMS targets and magmatic hosted Ni-Cu targets.

Government funded Exploration Incentive Scheme (EIS) funding up to \$150,000 has been secured.

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

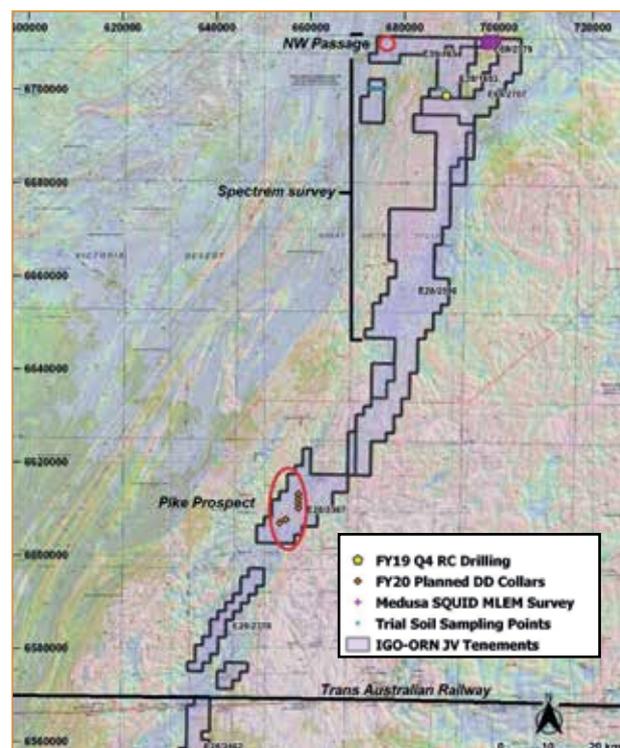
While the Walhalla-Woods Point District is best known for gold mining, high-grade copper-nickel and PGE mineralisation also occurs within the belt. Both the gold and copper-nickel-PGE

mineralisation within this district is hosted within dykes from the Woods Point Dyke Swarm (WPDS), a series of ultramafic to felsic dykes occurring over a 75km long north-south belt. Key Cu-Ni-PGE occurrences are known within the WPDS and three of these lie within Orion’s tenement package.

Drilling conducted by Orion at the key Coopers Creek Polymetallic Prospect during 2014 confirmed the presence of PGE mineralisation.

On 11 August 2015 Orion announced to the ASX that it had entered into a sale agreement with Centennial Mining Ltd for Centennial to acquire Orion’s Walhalla Project mining licence 5487. The original sale agreement contained a number of conditions that were required to be satisfied before the transfer of MIN 5487 could be effected. For various reasons, these conditions are unlikely to be satisfied and Centennial, acting through its administrators, are not contending that Centennial has any right, title or interest in MIN 5487 or that the original sale agreement remains. Consequently as at June 2019, MIN 5487 remained under Orion’s ownership and control.

Figure 24: IGO-ORN Fraser Range JV Tenements



## ORE RESERVE AND MINERAL RESOURCE STATEMENTS

*Orion has a dual listing with the Australian Securities Exchange (ASX) and the Johannesburg Stock Exchange (JSE) and reports Exploration Results, Mineral Resource and Ore Reserve Estimates in accordance with the ASX listing rules and the requirements and guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2012 (the JORC Code).*

The JSE requires reporting in terms of the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves, 2016 (SAMREC Code), however the JORC Code requirements are considered similar enough to be accepted by the JSE. The Orion financial year end is 30 June and most of its subsidiaries have been aligned to this annual reporting date.

The 2019 Annual Report covers Orion's five exploration projects in the Northern Cape province of South Africa as well as its interest in a number of Australian projects. By the end of FY2018, Indicated and Inferred Mineral Resources were classified and reported from both Orion's flagship Prieska VMS Project (refer ASX releases 8 February 2018 and 9 April 2018) as well as the Jacomynspan Nickel-copper Project (refer ASX release 8 March 2018). By the end of FY2019, the Prieska Project's Mineral Resources had been upgraded to Probable Mineral Reserves, Indicated Mineral Resources and Inferred Mineral Resources for both the surface +105 Level Mineral Resources (refer ASX releases 15 January 2019 and 26 June 2019) and the underground Deep Sulphide Mineral Resource (refer ASX releases 18 December 2018 and 26 June 2019). A comparison of the FY2018 and FY2019 estimates are summarised below on a project by project basis.

Listings of the respective estimates as they stand at the end of FY2019 are tabulated below for Orion's total interests and for the operational and project divisions. The tables are accompanied by the relevant JORC Code Competent Person statements. Refer to the *Corporate* section for Orion's interest in each project.

Orion's procedures for public reporting ensures transparency, materiality and competence in its governance of Mineral Resource and Mineral Reserve Estimates and release of results requires several assurance measures.

Firstly, the Competent Persons responsible for public reporting:

- Must be current members of a professional organisation that is recognised in the JORC Code framework;
- Must have at least five years relevant experience in the style of mineralisation and reporting activity for which they are acting as Competent Person;
- Must have given a written consent to inclusion of the results and estimates that are reported, stating that the report agrees with supporting documentation regarding the results or estimates prepared by each Competent Person; and
- Must have prepared supporting documentation for results and/or estimates to a level consistent with standard industry practices. This includes JORC Table 1 Checklists for any results and/or estimates reported.

Orion also ensures that any publicly reported results and/or estimates are prepared using JORC and ASX guidelines, accepted industry methods and using specialised guidance for aspects where required, such as metal prices and foreign exchange rates. Estimates and results are also peer reviewed internally by Orion's senior technical staff before being presented to Orion's Board for approval and subsequent ASX reporting. Market sensitive or production critical estimates may also be audited by suitably qualified external consultants to ensure the precision and correctness of the reported information. Once operational, Orion plans to ensure that the estimation precision of actual mine and process production is compared to the Mineral Resource and Ore Reserve forecasts.



ORE RESERVE AND MINERAL RESOURCE STATEMENTS *continued*

## Prieska Project Mineral Resources and Reserves

The BFS reported on herein contains production targets and forecast financial information supported by a combination of Probable Ore Reserves, Indicated Mineral Resources and Inferred Mineral Resources, all as defined, compiled and disclosed in compliance with ASX Listing Rules and The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (JORC (2012) or JORC Code) reporting standards. The Ore Reserves and Mineral Resources underpinning the production target in this report have been prepared by competent persons in accordance with the requirements in Appendix 5A (JORC (2012)).

## Mineral Resources

The Mineral Resource Estimates classified and reported in terms of the JORC Code, 2012 guidelines, for both the Deep Sulphide Mineral Resource<sup>1</sup> and the +105 Level Mineral Resource<sup>2</sup> are as tabled individually below and then combined in the final table<sup>2</sup>.

Deep Sulphide Mineral Resource for Repli + Vardocube Tenements (Effective Date: 15 December 2018) <sup>1</sup>						
Tenement	Classification	Tonnes	Cu (metal tonnes)	Cu (%)	Zn (metal tonnes)	Zn (%)
Repli	Indicated	15,052,000	170,000	1.15	510,000	3.38
	Inferred	6,998,000	80,000	1.09	270,000	3.86
	<b>Total</b>	<b>22,050,000</b>	<b>249,000</b>	<b>1.13</b>	<b>779,000</b>	<b>3.53</b>
Vardocube	Indicated	3,455,000	44,000	1.27	158,000	4.57
	Inferred	3,221,000	41,000	1.27	147,000	4.56
	<b>Total</b>	<b>6,676,000</b>	<b>85,000</b>	<b>1.27</b>	<b>305,000</b>	<b>4.57</b>
Deep Sulphide Total	Indicated	18,507,000	217,000	1.17	667,000	3.60
	Inferred	10,219,000	117,000	1.14	417,000	4.08
	<b>Total</b>	<b>28,726,000</b>	<b>334,000</b>	<b>1.16</b>	<b>1,084,000</b>	<b>3.77</b>

Deep Sulphide Resource bottom cut-off = 4% Equivalent Zn. Mineral Resources stated at zero % cut-off. Tonnes are rounded to thousands, which may result in rounding errors.

+105 Updated Mineral Resource for the Repli Tenement (Effective Date: 11 January 2019) <sup>2</sup>						
Classification	Mineralised zone	Tonnes	Cu (metal tonnes)	Cu (%)	Zn (metal tonnes)	Zn (%)
Indicated	Supergene	624,000	10,000	1.54	19,000	3.05
	<b>Total</b>	<b>624,000</b>	<b>10,000</b>	<b>1.54</b>	<b>19,000</b>	<b>3.05</b>
Inferred	Oxide	511,000	3,000	0.6	4,000	0.9
	Supergene	627,000	14,000	2.2	11,000	1.8
	<b>Total</b>	<b>1,138,000</b>	<b>17,000</b>	<b>1.5</b>	<b>16,000</b>	<b>1.4</b>
<b>Total</b>	<b>+105 Mineral Resource</b>	<b>1,762,000</b>	<b>27,000</b>	<b>1.5</b>	<b>35,000</b>	<b>2.0</b>

+105m Level Mineral Resource bottom cut-off = 0.3% Cu. Mineral Resources stated at zero % cut-off. Tonnes are rounded to thousands, which may result in rounding errors.

<sup>1</sup> Mineral Resource reported in ASX release of 18 December 2018: "Landmark Resource Upgrade Sets Strong Foundation" available to the public on [www.orionminerals.com.au/investors/market-news](http://www.orionminerals.com.au/investors/market-news). Competent Person Orion's exploration: Mr. Errol Smart. Competent Person: Orion's Mineral Resource: Mr. Sean Duggan. Orion confirms it is not aware of any new information or data that materially affects the information included above. For the Mineral Resources, the Company confirms that all material assumptions and technical parameters underpinning the estimates in the ASX release of 18 December 2018 continue to apply and have not materially changed. Orion confirms that the form and context in which the Competent Person's findings are presented here have not materially changed.

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

**Combined Prieska Project Mineral Resource for Repli + Vardocube Tenements (Effective Date: 11 January 2019) <sup>2</sup>**

Mineral Resource		Classification	Tonnes	Cu (metal tonnes)	Cu (%)	Zn (metal tonnes)	Zn (%)
Deep Sulphide Resource		Indicated	18,507,000	217,000	1.17	667,000	3.60
		Inferred	10,219,000	117,000	1.1	417,000	4.1
+105m Level Resource		Indicated	624,000	10,000	1.54	19,000	3.05
		Inferred	1,138,000	17,000	1.4	16,000	1.4
Total		Indicated	19,131,000	227,000	1.18	686,000	3.59
		Inferred	11,357,000	134,000	1.2	433,000	3.8
<b>Grand total</b>			<b>30,488,000</b>	<b>361,000</b>	<b>1.2</b>	<b>1,119,000</b>	<b>3.7</b>

Deep Sulphide Resource bottom cut-off = 4% Equivalent Zn; +105m Level Mineral Resource bottom cut-off = 0.3% Cu. Mineral Resources stated at zero % cut-off. Tonnes are rounded to thousands, which may result in rounding errors.

The Mineral Resources are inclusive of Ore Reserves.

### Ore Reserves

The Ore Reserves that follow are classified and reported in accordance with JORC Code, 2012.

The Deep Sulphide Probable Ore Reserve<sup>1</sup> estimate amounts to 13.14Mt grading 1.0% Cu and 3.2% Zn, including 136kt copper metal tonnes and 417kt zinc metal tonnes (Cu-Eq of 257kt metal tonnes at 2.0%) as tabulated below.

**Prieska Project Deep Sulphide Ore Reserves (Effective Date: 16 June 2019) <sup>1</sup>**

Deposit	Ore Reserve classification	Tonnage (Mt)	Cu		Zn		Cu equivalent <sup>2</sup>	
			Metal tonnes (Kt)	Grade (%)	Metal tonnes (Kt)	Grade (%)	Metal tonnes (Kt)	Grade (%)
Deep Sulphide	Probable	13.14	136	1.0	417	3.2	257	2.0
<b>Total</b>	<b>Probable</b>	<b>13.14</b>	<b>136</b>	<b>1.0</b>	<b>417</b>	<b>3.2</b>	<b>257</b>	<b>2.0</b>

Deep Sulphide Ore Reserves calculated using financial assumptions and modifying factors stated in the Study. Tonnes are rounded to thousands, which may result in rounding errors.

The +105 Level Probable Ore Reserve<sup>1</sup> is estimated at 480kt grading 1.5% Cu and 3.3% Zn, including 7kt copper metal tonnes and 16kt zinc metal tonnes, (Cu-Eq of 11kt metal tonnes at 2.2%).

**Prieska Project +105 Level Ore Reserves (Effective Date: 15 June 2019) <sup>1</sup>**

Deposit	Ore Reserve classification	Tonnage (Mt)	Cu		Zn		Cu equivalent <sup>2</sup>	
			Metal tonnes (Kt)	Grade (%)	Metal tonnes (Kt)	Grade (%)	Metal tonnes (Kt)	Grade (%)
+105 Level	Probable	484	7	1.5	16	3.3	11	2.2
<b>Total</b>	<b>Probable</b>	<b>484</b>	<b>7</b>	<b>1.5</b>	<b>16</b>	<b>3.3</b>	<b>11</b>	<b>2.2</b>

+105m Level Ore Reserves calculated using financial assumptions and modifying factors stated in the Study. Tonnes are rounded to thousands, which may result in rounding errors.

<sup>1</sup> Ore Reserve reported in ASX release of 26 June 2019: "Prieska BFS – Long life, high margin project" available to the public on [www.orionminerals.com.au/investors/market-news](http://www.orionminerals.com.au/investors/market-news). Competent Person: Orion's Ore Reserve: Mr. William Gillespie. Orion confirms it is not aware of any new information or data that materially affects the information included above. For the Ore Reserves, the Company confirms that all material assumptions and technical parameters underpinning the estimates in the ASX release of 26 June 2019 continue to apply and have not materially changed. Orion confirms that the form and context in which the Competent Person's findings are presented here have not materially changed.

<sup>2</sup> Method used to determine Cu\_Equivalent Zn grades: Cu\_Equivalent

$$1\% \text{ Zn} = \frac{\text{Zn price} \times \text{Zn payability}}{\text{Cu price} \times \text{Cu payability}} \times \frac{\text{Zn plant recovery}}{\text{Cu plant recovery}} = \frac{(2,756 \times 71.3\%)}{(6,834 \times 98.7\%)} \times \frac{(84.4\%)}{(83.9\%)} = 0.29\% \text{ Cu}$$

ORE RESERVE AND MINERAL RESOURCE STATEMENTS *continued*

The combined estimated Probable Ore Reserves for the Prieska Project amount to 13.62Mt grading 1.1% Cu and 3.2% Zn, including 143kt copper metal tonnes and 433kt zinc metal tonnes, (Cu-Eq of 268kt metal tonnes at 2.0%).

Prieska Project Ore Reserves Estimate (Effective Date: 16 June 2019)								
Deposit	Ore Reserve classification	Tonnage (Mt)	Cu		Zn		Cu equivalent	
			Metal tonnes (Kt)	Grade (%)	Metal tonnes (Kt)	Grade (%)	Metal tonnes (Kt)	Grade (%)
+105 Level	Probable	0.48	7	1.5	16	3.3	11	2.2
Deep Sulphide	Probable	13.14	136	1.0	417	3.2	257	2.0
<b>Total</b>	<b>Probable</b>	<b>13.62</b>	<b>143</b>	<b>1.1</b>	<b>433</b>	<b>3.2</b>	<b>268</b>	<b>2.0</b>

Project Ore Reserves calculated using financial assumptions and modifying factors stated in the Study. Tonnes are rounded to thousands, which may result in rounding errors.

## Prieska Project Mineral Resource and Ore Reserve Annual Comparison

Prieska Project		Financial year	July 2017 – June 2018			July 2018 – June 2019			Refer ASX release
Tenement	Mineral Resource	Classification	Tonnage (Mt)	Cu (Kt)	Zn (%)	Tonnage (Mt)	Cu (Kt)	Zn (%)	
Repli and Vardocube	Deep Sulphide	Probable Ore Reserve	-	-	-	13.14	1.0	3.2	26 Jun 2019
		Indicated Mineral Resource	-	-	-	18.5	1.2	3.6	18 Dec 2018
		Inferred Mineral Resource	27.8	1.2	3.8	10.2	1.1	4.1	9 Apr 2018 18 Dec 2018
	+105m Level	Probable Ore Reserve	-	-	-	0.48	1.5	3.3	26 Jun 2019
		Indicated Mineral Resource	1.2	2.4	2.6	0.6	1.5	3.1	8 Feb 2018 15 Jan 2019
		Inferred Mineral Resource	0.3	0.6	0.9	1.1	1.4	1.4	8 Feb 2018 15 Jan 2019
	Totals	Probable Ore Reserve	-	-	-	13.6	1.1	3.2	26 June 2019
		Indicated Mineral Resource	1.2	2.4	2.6	19.1	1.2	3.6	9 Apr 2018 15 Jan 2019
		Inferred Mineral Resource	28.2	1.3	3.8	11.3	1.2	3.8	8 Feb 2018 15 Jan 2019

## Competent Persons' Statements – Prieska Project

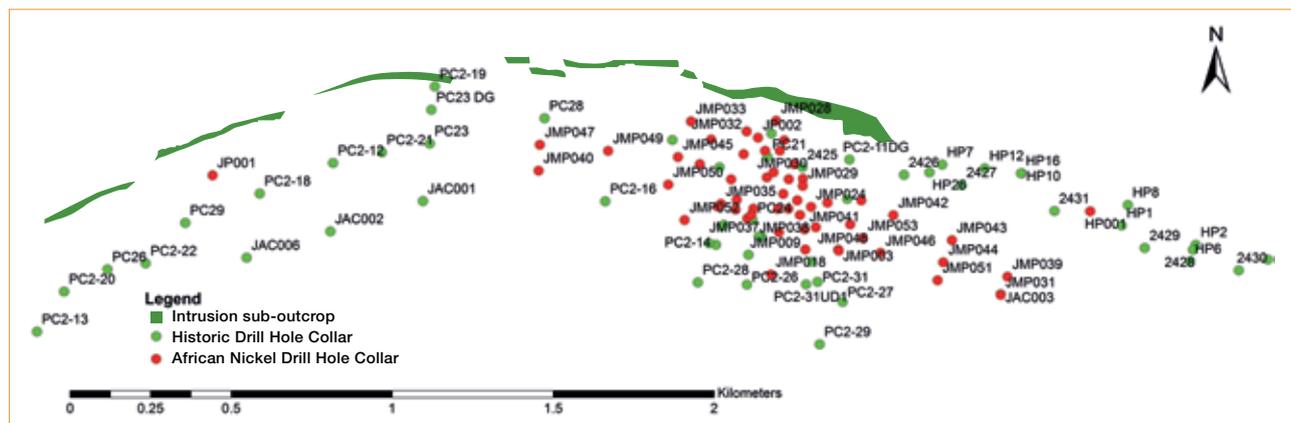
The information in this report that relates to Exploration Results is not in contravention of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Mr Errol Smart, Orion's Managing Director. Mr Smart (PrSciNat) is registered with the South African Council for Natural Scientific Professionals, a Recognised Overseas Professional Organisation (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 2012 Edition of the JORC Code. Mr Smart consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources is not in contravention of the JORC Code and has been compiled and assessed under the supervision of Mr Sean Duggan, a Director and Principal Analyst at Z Star Mineral Resource Consultants (Pty) Ltd. Mr Duggan (Pr. Sci.Nat) is registered with the South African Council for Natural Scientific Professionals (Registration No. 400035/01), an 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 2012 Edition of the JORC Code. Mr Duggan consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Ore Reserves is based on mining-related information incorporated under the supervision of Mr William Gillespie, a Competent Person who is a fellow of the Institute of Materials, Minerals and Mining (IMMM), a Recognised Overseas Professional Organisation, (ROPO). Mr Gillespie takes overall responsibility for the Ore Reserve aspects of the release as Competent Person. Mr Gillespie is an employee of A & B Global Mining Consultants (Pty) Ltd which contracts to Orion. Mr Gillespie has sufficient experience that is relevant to the type of mining and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Gillespie consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Metallurgy is based on mining information independently reviewed by Mr Val Coetzee (an employee of DRA Projects (Pty) Ltd), a registered Professional Engineer with the Engineering Council of South Africa, a Recognised Overseas Professional Organisation, (ROPO), as Competent Person. Mr Coetzee consents to the inclusion in this release of the Metallurgical and Processing matters based on his information in the form and context in which it appears.

Figure 25: Plan showing mafic intrusion sub-outcrop and drilling at the Jacomynspan resource area



## Jacomynspan Project Mineral Resources

The Mineral Resource Estimate for the Namaqua-Disawell Jacomynspan Project is as reported in the 2018 annual report. There are no material changes to the estimate.

A maiden Mineral Resource Estimate, based on drilling data from 1971 to 2012 (Figure 24), reported at a 0.4% Ni cut-off grade gives 6.8 Mt containing 39,000 tonnes Ni at 0.5% Ni, 22,000 tonnes Cu at 0.3% Cu and 1,800 tonnes Co at 0.03% Co (refer ASX release 8 March 2018). The Mineral Resources for the Jacomynspan Project were previously reported (refer ASX release 14 July 2016) in accordance with the SAMREC Code (2007) as a “qualifying foreign resource estimate” as defined in the ASX Listing Rules. The Mineral Resources have subsequently been reassessed by the MSA Group (Pty) Ltd on behalf of the Company and reported in compliance with the JORC Code, 2012.

### Indicated and Inferred Mineral Resource Statement for the Jacomynspan Project on the Namaqua Mining Right using a 0.4% Ni cut-off Mineral Resource Grade-Tonnage Table for the Jacomynspan Project at a 0.40% Ni cut-off grade

Classification	Cut off % Ni	Volume (m <sup>3</sup> )	Tonnes	Ni		Cu		Co		Pt		Pd		Au	
				Grade (%)	Metal tonnes	Grade (%)	Metal tonnes	Grade (%)	Metal tonnes	Grade (g/t)	Metal ounces	Grade (g/t)	Metal ounces	Grade (g/t)	Metal ounces
Indicated	0.40	584,000	1,780,000	0.55	10,000	0.29	5,000	0.03	1,000	0.17	10,000	0.11	6,000	0.07	4,000
Inferred	0.40	1,647,000	5,056,000	0.58	29,000	0.35	18,000	0.03	1,000	0.19	31,000	0.13	21,000	0.07	11,000

### Indicated and Inferred Mineral Resource for the Jacomynspan Project at various cut-offs

#### Indicated Mineral Resource for the Jacomynspan Project at various Ni cut-off grades

Cut off % Ni	Volume (m <sup>3</sup> )	Tonnes	Ni		Cu		Co		Pt		Pd		Au	
			Grade (%)	Metal tonnes	Grade (%)	Metal tonnes	Grade (%)	Metal tonnes	Grade (g/t)	Metal ounces	Grade (g/t)	Metal ounces	Grade (g/t)	Metal ounces
0.20	11,252,000	33,000,000	0.26	86,000	0.18	58,000	0.02	6,000	0.10	101,000	0.05	53,000	0.04	44,000
0.25	4,205,000	12,393,000	0.32	40,000	0.20	25,000	0.02	3,000	0.11	45,000	0.06	25,000	0.05	19,000
0.30	1,501,000	4,461,000	0.42	19,000	0.24	11,000	0.02	1,000	0.14	20,000	0.08	12,000	0.05	8,000
0.40	584,000	1,780,000	0.55	10,000	0.29	5,000	0.03	1,000	0.17	10,000	0.11	6,000	0.07	4,000
0.50	284,000	872,000	0.66	6,000	0.37	3,000	0.04	300	0.16	5,000	0.11	3,000	0.07	2,000

Note: Mineral Resource stated at 0.4% cut-off.

**ORE RESERVE AND MINERAL RESOURCE STATEMENTS** *continued*

*Inferred Mineral Resource for the Jacomynspan Project at various Ni cut-off grades*

Cut off % Ni	Volume (m <sup>3</sup> )	Tonnes	Ni		Cu		Co		Pt		Pd		Au	
			Grade (%)	Metal tonnes	Grade (%)	Metal tonnes	Grade (%)	Metal tonnes	Grade (g/t)	Metal ounces	Grade (g/t)	Metal ounces	Grade (g/t)	Metal ounces
0.20	11,022,000	32,304,000	0.29	94,000	0.20	63,000	0.02	6,000	0.10	108,000	0.06	60,000	0.04	44,000
0.25	3,974,000	11,863,000	0.42	49,000	0.26	31,000	0.02	2,000	0.15	55,000	0.09	34,000	0.05	20,000
0.30	2,303,000	7,008,000	0.52	36,000	0.31	22,000	0.02	2,000	0.19	42,000	0.12	27,000	0.06	14,000
0.40	1,647,000	5,056,000	0.58	29,000	0.35	18,000	0.03	1,000	0.19	31,000	0.13	21,000	0.07	11,000
0.50	982,000	3,041,000	0.67	20,000	0.41	13,000	0.03	1,000	0.17	16,000	0.12	11,000	0.07	7,000

Note: Mineral Resource stated at 0.4% cut-off.

*Namaqua-Disawell Project Mineral Resource and Ore Reserve Annual Comparison*

Namaqua-Disawell Project		Financial Year		July 2017 – June 2018					July 2018 – June 2019			Refer ASX release
Tenement	Mineral Resource	Classification	Tonnage Mt	Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	Tonnage Mt	Ni (%)	Cu (%)	
Namaqua-Disawell	Jacomynspan	Indicated Mineral Resource	1.78	0.6	0.3	0.03	0.2	0.1	No material change			8 Mar 2018
		Inferred Mineral Resource	5.06	0.6	0.4	0.03	0.2	0.1	No material change			8 Mar 2018
		Indicated Mineral Resource	1.78	0.6	0.3	0.03	0.2	2.6	No material change			8 Mar 2018
		Inferred Mineral Resource	5.06	0.6	0.4	0.03	0.2	3.8	No material change			8 Mar 2018

Note: Mineral Resource stated at 0.4% cut-off.

**Competent Person’s Statement – Jacomynspan Project**

The information in this report that relates to the Mineral Resource at the Jacomynspan Project is based on information compiled by Mr Jeremy Charles Witley (BSc Hons, MSC (Eng.)), a Competent Person who is registered with the South African Council for Natural Scientific Professionals (Registration No. 400181/05), a ‘Recognised Professional Organisation’ (RPO) included in a list posted on the ASX website from time to time. Mr Witley is a Principal Resource Consultant at the MSA Group Pty Ltd and a consultant to Orion. Mr Witley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Witley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



The Company recorded a loss of \$10.75 million after tax for the full year ended 30 June 2019. The Company continues to focus strongly on the development of the Prieska Project as well as exploration, evaluation and development within its Areachap exploration projects in South Africa. A total of \$15 million in exploration expenditure was incurred during the year. Cash received from financing activities totalled \$19 million.

Cash on hand at the end of the year was \$1.8 million.

### Capital raisings

During the financial year, the Company raised \$19.05 million before costs to fund its operations primarily in South Africa and for working capital. In summary, key capital raisings comprised:

- In June 2018, the Company announced an \$11 million capital raising at an issue price of 3.7 cents per fully paid ordinary share (Share). The capital raising occurred in two stages, being:
  - Tranche 1 – 91.6 million Shares to raise \$3.39 million were issued on 29 June 2018, using the Company's 15% placement capacity under ASX Listing Rule 7.1. The issue of Shares was subsequently ratified by shareholders at the Company's general meeting held on 3 August 2018; and
  - Tranche 2 – 212.5 million Shares to raise \$7.86 million were issued on 15 August 2018 as approved by shareholders at the Company's general meeting held on 3 August 2018.

In addition to the placements, the Company also obtained shareholder approval at the general meeting held on 3 August 2018, to enable the Company's Chairman, Denis Waddell, to subscribe for 6.8 million Shares at 3.7 cents per Share to raise \$0.25 million and for Tembo Capital Mining Fund II LP and its affiliated entities (Tembo Capital), Orion's cornerstone shareholder to subscribe for 172.9 million Shares at 3.7 cents per Share. The Shares issued to Tembo Capital were issued in consideration for reducing the amount repayable to Tembo Capital under the loan facility between the Company and Tembo Capital, pursuant to which Tembo Capital advanced \$6 million in funds to Orion (excluding capitalised interest and fees) (refer below for further detail).

- In April 2019, the Company announced a pivotal \$8 million capital raising underpinned by a group of high-profile South African investors as part of a proposed restructure of the Company's BEE equity participation at project level, achieving accelerated compliance with the ownership aspects of South African Mining Charter 3 (refer *BEE restructure* section below). The capital raising, conducted by way of placement, comprised the issue of 200.9 million Shares at an issue price of 4.0 cents per Share, together with one free attaching unlisted option for every two Shares issued (exercise price of \$0.05 and an expiry date of 31 October 2019). The placement included approximately \$4 million placed to experienced BEE entrepreneurs, of which \$2 million was placed to incoming BEE equity investors who will also invest at the Prieska Project

level. Tembo Capital also confirmed its continued support of Orion through subscribing for \$2 million in Tranche 1 of the placement. The placement occurred in two stages, being:

- Tranche 1 – In April 2019, the Company issued 117.23 million Shares and 58.61 million options, to raise \$4.69 million, resulting from a receipt of funds from investors for Tranche 1 commitments; and
- Tranche 2 – Following year end and completed in September 2019, a total of 83.71 million Shares and 41.85 million options were issued, to raise \$3.34 million.

Following the positive outcomes of the 10-year Foundation Phase BFS in June 2019, along with the focus to prepare the technical and administrative aspects of the Prieska Project for execution, the Company continues to advance project financing discussions with the intention of having the project in construction phase during calendar year 2020.

Additional information as to the Company's capital raising activities forms part of the Annual Financial Report.

### Loan facilities

#### 1. Bridge loan and convertible loan facilities

The Company announced on 18 August 2017 that it had entered into a loan facility agreement with Tembo Capital, pursuant to which Tembo Capital advanced \$6 million in funds to Orion (excluding capitalised interest and fees) (Bridge Loan).

In June 2018, the Company announced in addition to the \$11 million placement (refer above), that Tembo Capital had confirmed its continued support of Orion through subscribing for \$6.4 million in Shares, at an issue price of 3.7 cents per Share, being the issue price for Shares issued under the placement. Orion agreed with Tembo Capital, that Tembo Capital's Share subscription be issued in consideration for reducing the amount re-payable to Tembo Capital under the Bridge Loan at a deemed issued price of 3.7 cents per Share, being the same issue price as the shares being offered under the placements. The balance of the Bridge Loan (including accrued interest) following this repayment was \$0.58 million.

At the end of the reporting period, the Bridge Loan had been extinguished in full as the Company announced in January 2019, that Tembo Capital had continued its strong support of the Company, through providing a new unsecured \$3.6 million loan facility (Loan Facility). Under the terms of the Loan Facility, Tembo Capital may at its election, have the balance of the Loan Facility (including capitalised interest and fees) (Outstanding Amount) repaid by the issue of Shares to Tembo Capital at a deemed issue price of 2.6 cents per Share (subject to receipt of shareholder approval), being the same conversion price as the 2017 Convertible Notes (refer to Annual Financial Report for further detail). Should Tembo elect not to have repayment of the Outstanding Amount satisfied by the issue of Shares, the Outstanding Amount must be repaid by the Company on 25 January 2020.

Additional information as to the Bridge Loan and Convertible Loan Facility forms part of the Annual Financial Report.

## 2. Redeemable preference shares

A subscription agreement was entered into between Repli and Anglo American sefa Mining Fund (AASMF) on 2 November 2015. Under the terms of the agreement, AASMF subscribed for 15.75 million Repli redeemable preference shares at a subscription price of ZAR1 per redeemable preference share. On 5 November 2015, AASMF paid the subscription price of ZAR15.75 million (~\$1.6 million) to Repli and the preference shares were issued to AASMF by Repli. In March 2019, the Company announced that it had reached agreement with AASMF for Repli to redeem the preference shares held by AASMF for Shares. Shareholder approval was obtained at a general meeting held on 7 June 2019 and following reporting period end, on 5 July 2019, Repli voluntarily redeemed the preference shares, in consideration for which the Company issued 77.57 million Shares to AASMF (redemption amount payable ZAR25.05 million (~2.05 million)).

Additional information as to the redeemable preference shares forms part of the Annual Financial Report.

## BEE restructure

In April 2019, Orion entered into an MoU with each of the existing BEE participants (being the Mosiapo Family Trust (Mosiapo), Power Matla (Pty) Ltd (Power Matla) and African Exploration and Mining Finance Corporation (SOC) Ltd (AEMFC) in its South African subsidiaries (being Repli, Vardocube, Bartotrax (Pty) Limited (Bartotrax) and Rich Rewards Trading 437 (Pty) Limited (Rich Rewards)). In terms of those Memoranda of Agreements, the existing BEE participants agreed to exchange their shares in Orion's South African subsidiaries for approximately 135 million JSE-listed Orion shares. At the same time, Orion entered into a Memorandum of Agreement with two BEE entrepreneurs, Black Star Minerals (Pty) Ltd (Black Star) and Kolobe Nala Investment Company (Pty) Ltd (KNI), in terms of which they agreed to acquire a 20% interest in Repli, as well as a 20% interest in Orion's ownership interest in its Jacomynspan Project.

In August 2019, Orion concluded a Revised Memorandum of Agreement with Black Star, KNI and Safika Resources (Pty) Ltd (Safika) in terms of which Safika joined Black Star and KNI as part of the BEE consortium which would acquire the 20% interest in Repli and the 20% interest in Orion's ownership interest in its Jacomynspan Project.

On 11 September 2019, a major component of the BEE Restructure was implemented. In terms of these transactions, Mosiapo and Power Matla exchanged their shares in Repli, Rich Rewards and Bartotrax (as applicable) for 48.48 million and 37.58 million Orion Shares, respectively, at a deemed issue price of \$0.0314 per Share. In a simultaneous transaction, Prieska Resources (Pty) Ltd (Prieska Resources), acquired an effective 20% interest in Repli for a purchase consideration of ZAR142.78 million (~\$14.08 million), with this acquisition being

vendor financed by Orion. Prieska Resources is a BEE company whose shares are held by Black Star (17.31%), KNI (37.97%) and Safika (44.72%).

The vendor finance advanced by Orion to Prieska Resources comprises two parts, namely:

- a secured loan for ZAR10.14 million plus interest at South African Prime Interest Rate, repayable within 12 months after the project finance for the Prieska Project is closed; and
- preference shares in Prieska Resources issued to Orion to the value of ZAR132.64 million which are redeemable by Prieska Resources at any time prior to the 8th anniversary of their date of issue at an IRR of 12%, failing which any of the preference shares held by Orion remaining after the 8th anniversary, will be automatically converted *pro rata* into ordinary shares in Prieska Resources up to a maximum of 49% of the shares in Prieska Resources or, subject to compliance with South African laws, an equivalent number of shares directly in Repli.

Simultaneously with the acquisition by Prieska Resources, the Orion Siyathemba Community Trust (Prieska Community Trust) and the Orion Siyathemba Employees Trust (Prieska Employees Trust) each acquired an effective 5% interest in Repli. While this acquisition was for nominal consideration, in terms of prevailing Mining Charter 3 legislation, Orion and Prieska Resources will be entitled to recover the costs incurred on behalf of the two trusts in developing the Prieska Project from future project cash flows.

Of the remaining components of the BEE restructure, the proposed exchange of shares by Mosiapo and AEMFC in Vardocube remains subject to the satisfaction of certain conditions precedent which are being progressed. The other component of the BEE restructure, being the acquisition by Prieska Resources of its 20% interest in Orion's ownership interest in its Jacomynspan project is also being progressed and is expected to be implemented early in Q4 2019.

## Earn-in projects

During the financial year, the Company continued its regional exploration programs and progressed its two earn-in projects. The Namaqua-Disawell project reached the threshold for 50% earn in. The Company is in the process of obtaining required regulatory approvals to transfer control of the Namaqua-Disawell entities to the Company, at which point, Orion, through its subsidiary, will hold 50% of shares on issue.

In September 2019, the Company received confirmation that the Section 11 application was approved and an additional 1% holding in Masiqhame Trading 855 (Pty) Ltd was transferred to Orion. The additional 1% also gives the Company control of the project, which forms part of the regional exploration portfolio of ground holding by the Company. The earn-in agreement allows for an additional 23% to be earned by the Company, should it choose to do so, taking its overall stake in Masiqhame to 73%.

SECTION

# 4

# FINANCIAL STATEMENTS



## DIRECTORS' REPORT

Your directors submit their report for the year ended 30 June 2019.

## BOARD OF DIRECTORS

Director	Designation	Qualifications, experience & expertise	Directorships of other listed companied	Other roles held during the year
<b>Mr Denis Waddell</b> Appointed 27 February 2009	Non-executive Chairman	ACA, FAICD  Mr Waddell is a Chartered Accountant with extensive experience in the management of exploration and mining companies. Mr Waddell founded Tanami Gold NL in 1994 and was involved with the Company as Managing Director and then Chairman and Non-Executive Director until 2012. Prior to founding Tanami Gold NL, Mr Waddell was the Finance Director of the Metana Minerals NL group.  During the past 35 years, Mr Waddell has gained considerable experience in corporate finance and operations management of exploration and mining companies.	None	Chairman of the Audit Committee
<b>Mr Errol Smart</b> Appointed 26 November 2012	Managing Director	BSc(Hons) Geology (University of Witwatersrand) NHD Economic Geology (Technikon Witwatersrand) (PrSciNat)  Mr Smart is a geologist, registered with the South African Council of Natural Scientific Professionals, a Recognised Overseas Professional Organisation in terms of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC) purposes. Mr Smart has more than 25 years of industry experience across all aspects of exploration, mine development and operations with experience in precious and base metals. Mr Smart has held positions in Anglogold, Cluff Mining, Metallon Gold, Clarity Minerals LionGold Corporation and African Stellar Holdings. Mr Smart's senior executive roles have been on several boards of companies listed on both the TSX and ASX.	None	Chief Executive Officer Member of the Audit Committee
<b>Mr Alexander Haller</b> Appointed 27 February 2009	Non-executive Director	BSc Economics  Mr Haller is a partner of Zachary Capital Management, providing advisory services to a number of private investment companies, including Silja Investment Ltd, focusing on the principal investment activities for these companies. From 2001 to 2007 Mr Haller worked in the corporate finance division at JP Morgan in the U.S, advising on corporate mergers and acquisitions as well as financing in both the equity and debt capital markets.	UMS Limited  Shaft Sinkers PLC (former)	Member of the Audit Committee
<b>Mr Mark Palmer</b> Appointed 31 January 2018	Non-executive Director	BSc Mining Geology (Cardiff University)  Mr Palmer has 12 years' experience working with entities in Australia, including 8 years with Dominion Mining. In 1994 Mr Palmer joined NM Rothschild & Sons Limited in the London mining project finance team assessing mines and projects globally. In 1997, Mr Palmer moved to the investment banking team at UBS to focus on global mergers and acquisitions, equity and debt financing in the mining sector. Mark ran the EMEA mining team at UBS for 8 years. Mr Palmer joined Tembo Capital as Investment Director in 2015.	None	---

Director	Designation	Qualifications, experience & expertise	Directorships of other listed companied	Other roles held during the year
<b>Mr Thomas Borman</b> Appointed 16 April 2019	Non-executive Director	BCom (Hons) (University of Pretoria)  Mr Borman is a respected and highly experienced global mining executive who served more than 11 years working for the BHP Billiton Group in various senior managerial roles, including that of Chief Financial Officer of an Australian-listed mining company. He also held senior roles in strategy and business development, and served as the project manager for the merger integration transaction between BHP Limited and Billiton.  After leaving BHP Billiton in 2006, Mr Borman joined Warrior Coal Investments (Proprietary) Limited, where he formed part of the executive team which established and consolidated the portfolio of assets which became the Optimum Group of companies. Optimum listed on the Johannesburg Stock Exchange in 2010, and was subsequently acquired by Glencore for R8.5 billion in March 2012.	Nzuri Copper Limited	---
<b>Mr Godfrey Gomwe</b> Appointed 16 April 2019	Non-executive Director	Bachelor of Accountancy (Hons) (University of Zimbabwe) Masters Business Leadership (University of South Africa) CA (Zimbabwe)  Mr Gomwe has extensive experience as an executive in metals and mining industries. He is the former Chief Executive Officer of Anglo American's Thermal Coal business, whose responsibilities included oversight over Anglo's Manganese interests in the joint venture with BHP.  Previously Executive Director of Anglo American South Africa until August 2012, his career included roles as Head of Group Business Development Africa, Finance Director and Chief Operating Officer of Anglo American South Africa. Previously, Godfrey was Chairman and Chief Executive of Anglo American Zimbabwe Limited. He also served on a number of Anglo American Operating Boards and Executive Committees including Kumba Iron Ore, Anglo American Platinum, Highveld Steel & Vanadium and Mondi South Africa, the latter two in the capacity of Chairman.	AECI limited  Econet Wireless Zimbabwe Limited	---
<b>Mr Michael Hulmes</b> Appointed 17 April 2018 Resigned 15 April 2019	Non-executive Director	BSc Mining Engineering (Royal School of Mines) MBA  Mr Hulmes is a mining engineer with over 30 years' experience in the mining industry having held senior management roles in Australia, Papua New Guinea, Portugal, Spain, Saudi Arabia, Africa and China. He has extensive experience in zinc, copper, gold and nickel mining operations. As Managing Director, Mr Hulmes was responsible for the large Neves-Carvo – VMS Copper Zinc and Aguablanca – Copper Nickel Mines for Lundin Mining in Portugal and Spain respectively. Prior senior management positions include companies such as the Ok Tedi Mine in Papua New Guinea, Citadel Resources in Saudi Arabia and Barrick's Australian operations. Michael was most recently the General Manager of the Caijiaying Zinc/Gold Mine at Hua Ao Mining Industry Company in China.	Transatlantic Mining Corporation	---

## COMPANY SECRETARY

The name and details of the Company Secretary in office during the financial year and until the date of this report is as follows:

Name	Experience and qualifications
<b>Mr Martin Bouwmeester</b> Company Secretary (Appointed 1 April 2016)	Mr Bouwmeester is an FCPA with over 23 years' experience in exploration, mine development and operations and was Chief Financial Officer, Company Secretary and Business Development Manager of Perseverance Corporation Limited. Mr Bouwmeester was a key member of the team that evaluated the sulphide mineralisation at the Fosterville Gold Mine; an initiative that led to the discovery and definition of more than 3M ounces of gold and the funding for the development of the mine and processing plant to exploit those resources. Mr Bouwmeester also holds the position of Chief Financial Officer with the Company.

## CORPORATE STRUCTURE

Orion Minerals Ltd (**Orion or Company**) is a company limited by shares that is incorporated and domiciled in Australia. The Company has prepared a consolidated financial report incorporating the entities that it controlled during the financial year, including those newly acquired (referred to as the **Group**).

## NATURE OF OPERATIONS AND PRINCIPAL ACTIVITIES

The principal activity of the Group during the year was exploration, evaluation and development of base metal, gold and platinum-group element projects in South Africa (Areachap Belt, Northern Cape). The Company also holds interests in the Fraser Range Nickel-Copper and Gold Project in Western Australia and the Walhalla Polymetals Project in Victoria. There were no significant changes in the nature of the Group's principal activities during the year.

### Corporate

#### Results of operations – the Group

The Group recorded a loss of \$10.75M (2018: \$8.83M) after tax for the year. The result is driven primarily by exploration expenditure incurred of \$3.05M which, under the Group's deferred exploration, evaluation and development policy, did not qualify to be capitalised and was expensed and finance expenses of \$1.76M, principally related to bridge loan fees and interest of \$0.9M and convertible note interest of \$0.8M.

Net cash used in operating activities and investing activities totalled \$18.78M (2018: \$22.08M) and included payments for exploration and evaluation of \$15.06M (2018: \$17.65M). The Group continues to focus strongly on exploration within its Areachap Projects (South Africa). Net cash from financing activities totalled \$15.45M (2018: \$23.49M).

Cash on hand at the end of the year was \$1.4M (2018: \$4.8M).

The basic loss per share for the Group for the year was 0.53 cents and diluted loss per share for the Group for the year was 0.53 cents (2018: loss per share 0.76 cents and diluted loss per share 0.76 cents). No dividend has been paid during or is recommended for the financial year ended 30 June 2019.

### Business Strategies

The Company will continue to focus on exploration, evaluation and development of base metal, gold and platinum-group element projects in South Africa (Areachap Belt, Northern Cape).

### Risks to the Business

Risks to the business are rated on the basis of their potential impact on the Group as a whole after taking into account current mitigating actions. Investors should be aware that the below list is not an exhaustive list and that there are a number of other risks associated with an investment in the Company. The Group regularly reviews the possible impact of these risks and seeks to minimise their impact through its internal controls, risk management policy, and corporate governance. The following describes the principal risks and uncertainties that could materially impact the Group:

- **Capital** - Each of the Group's key exploration targets remain in the exploration and evaluation phase. Future exploration programs require substantial levels of expenditure to ensure that Group's tenements are held in good standing. The Group is currently reliant on the capital and debt markets to fund its ongoing operations and therefore any unforeseeable events in these markets may impact the Group's ability to finance its future exploration projects;

- Sovereign risk – The Group’s exploration, evaluation and development activities are carried out in South Africa and Australia. As a result, the Group is subject to political, social, economic and other uncertainties including, but not limited to, changes in policies or the personnel administering them, foreign exchange restrictions, changes of law affecting foreign ownership, currency fluctuations, royalties and tax increases in that country. Other potential issues contributing to uncertainty such as repatriation of income, exploration licensing, environmental protection and government control over mineral properties should also be considered. Potential risk to the Group’s activities may occur if there are changes to the political, legal and fiscal systems which might affect the ownership and operation of the Group’s interests in South Africa. This may also include changes in exchange control systems, expropriation of mining rights, changes in government and in legislative and regulatory regimes.
- Title risk and Native Title – One of the Group’s key projects, the Areachap Zinc-Copper and Gold Project, is located in South Africa. Interests in tenements in South Africa are governed by legislation and are evidenced by the granting of mining or prospecting rights. The Company also has an interest in several Australian exploration tenements. Interests in Australian tenements held by the Group are governed by Federal and State legislation and are evidenced by the granting of mining or exploration licences. These tenements are subject to periodic review and compliance, including the relinquishment of certain areas. As a result, there is no guarantee that these areas of interest will be renewed in the future or if there will be sufficient funds available to meet the attaching minimum expenditure commitments when they arise.
- Title risk and Native Title - It is also possible that in relation to the Australian tenements which the Group has an interest in or will in the future acquire such an interest, there may be areas over which legitimate common law native title rights of Aboriginal Australians exist. If native title rights do exist, the ability of the Group to gain access to tenements (through obtaining consent of any relevant landowner), or to progress from the exploration phase to the development and mining phases of operations may be adversely affected;
- Resources and Reserve estimates - There are inherent uncertainties in estimating reserve and resource estimates as it requires significant subjective judgements and determinations based on the available geological, technical, and economic information. Estimates and assumptions that were previously valid may change significantly when new information or techniques become available and therefore may require restatement; and
- Rehabilitation – The Group is required to close its operations and rehabilitate the lands that it disturbs during the exploration and operating phases in accordance with applicable mining and environmental laws and regulations. At the Prieska Project, a closure plan and estimate of closure and rehabilitation liabilities for prospecting activity has been prepared. These estimates of closure and rehabilitation liabilities are based on current knowledge and assumptions, however actual costs at the time of closure and rehabilitation may vary materially. In addition, adverse or deteriorating external economic conditions may bring forward closure and rehabilitation costs. The Group’s intention is to conduct its exploration and operating activities to the highest level of environmental obligations, however there are certain risks inherent in the Group’s activities which could subject the Group to future liabilities.

## SUBSEQUENT EVENTS AFTER THE BALANCE DATE

There has not arisen in the interval between the end of the financial year and the date of this report any item, transaction or event of a material and unusual nature likely, in the opinion of the directors of the Company, to affect the operations of the Group, the results of those operations or the state of affairs of the Group in subsequent financial years except for those matters referred to below:

- On 24 September 2019, the Company announced receipt of conversion notices from all Convertible Noteholders, requesting conversion of the Convertible Notes held by them into Shares. The Company will issue Shares to the Noteholders on or before the maturity date, being 30 September 2019. Upon issue of the Shares, the Group’s current liabilities will reduce by \$5.8M (as 10.3M notes were converted into Shares in April 2019) and the security held by Noteholders over certain assets of the Company and its subsidiaries will be released.
- On 12 September 2019, the Company announced completion of the BEE restructure, whereby 86M Shares were issued to satisfy, in full, the repurchase of shares held by existing BEE investors in the Company’s subsidiary entities Repli, Rich Rewards Trading 437 (Pty) Ltd and Bartotrax (Pty) Ltd. The final component of the BEE restructure is expected to be implemented shortly.
- The Company announced on 16 April 2019 an \$8M capital raising comprising the issue of 200.9M Shares at an issue price of \$0.04 per Share, together with one free attaching unlisted option for every two Shares issued (100.47M options at an exercise price of \$0.05 and an expiry date of 31 October 2019), to be conducted via a placement to sophisticated and professional investors (**Placement**). The Placement was made up of \$4.69M in Tranche 1 issued in April 2019 and, subject to shareholder approval, which was obtained at a general meeting on 7 June 2019, an additional \$3.34M in Tranche 2. Following year end:
  - 6 September 2019, the Company announced an issue of 20M Shares and 10M unlisted options as part of the placement under Tranche 2;

**DIRECTORS' REPORT** *continued*

- 9 August 2019, the Company announced an issue of 33.71M Shares and 16.85M unlisted options as part of the placement under Tranche 2; and
- 22 July 2019, the Company announced an issue of 30M shares and 15M unlisted options as part of the placement under Tranche 2;
- On 4 March 2019, the Company announced that it had reached agreement with AASMF for Repli to redeem the preference shares held by AASMF for Shares. Shareholder approval was obtained and following reporting period end, on 5 July 2019, Repli voluntarily redeemed the preference shares, in consideration for which the Company issued 77.57M Shares to AASMF (redemption amount payable ZAR25.05M (~\$2.5M)).

**DIRECTORS' MEETINGS**

The number of meetings attended by each Director of the Company during the financial year was:

	Board Meetings		Audit Committee Meetings	
	Held and entitled to attend	Attended	Held and entitled to attend	Attended
Mr Denis Waddell	25	25	2	2
Mr Errol Smart	25	25	2	2
Mr Alexander Haller	25	25	2	2
Mr Mark Palmer	25	25	---	---
Mr Thomas Borman	5	5	---	---
Mr Godfrey Gomwe	5	5	---	---
Mr Michael Hulmes	19	19	---	---

**DIRECTORS' INTERESTS**

The relevant interest of each director in the ordinary shares, or options over such instruments issued by the Company, as notified by the directors to the Australian Securities Exchange in accordance with S205G(1) of the Corporations Act 2001, at the date of this report is as follows:

	Ordinary Shares	Unlisted options over ordinary shares
Mr Denis Waddell	111,714,746	24,000,000
Mr Errol Smart	19,900,666	60,000,000
Mr Alexander Haller (i)	69,119,937	3,000,000
Mr Mark Palmer	---	---
Mr Thomas Borman	3,000,000	3,000,000
Mr Godfrey Gomwe	---	3,000,000

- (i) Mr Haller holds relevant interests as follows: Silja Investment Ltd 56,706,578 ordinary shares, Mr Haller 12,412,039 ordinary shares and Pershing Securities 1,320 ordinary shares.

**SHARE OPTIONS****Options granted to directors and executives of the Company**

During or since the end of the financial year, the Company has granted options for no consideration over unissued ordinary shares in the Company to key management personnel as part of their remuneration.

### Unissued shares under options and performance rights

At the date of this report unissued ordinary shares of the Company under option are:

Expiry Date	Exercise price	Number of ordinary shares
15 August 2019	\$0.037	1,520,270
15 August 2019	\$0.037	1,520,270
31 October 2019	\$0.05	58,613,402
30 November 2019	\$0.045	250,000
30 November 2019	\$0.06	250,000
30 June 2020	\$0.05	2,200,000
30 June 2020	\$0.035	1,900,000
30 November 2020	\$0.02	16,333,333
30 November 2020	\$0.035	18,333,333
30 November 2020	\$0.05	18,333,334
31 May 2022	\$0.03	12,100,000
31 May 2022	\$0.045	12,100,000
31 May 2022	\$0.06	12,100,000
31 March 2023	\$0.05	5,100,000
31 March 2023	\$0.06	5,100,000
31 March 2023	\$0.07	5,100,000
30 April 2024	\$0.04	30,500,000
30 April 2024	\$0.05	30,500,000
30 April 2024	\$0.06	30,500,000
17 June 2024	\$0.05	11,000,000
<b>Total</b>	<b>---</b>	<b>273,353,942</b>

### Shares issued on exercise of options

There were 2M options exercised during the financial year by a former director of the Company. There has been no options exercised since the end of the financial year.

### REMUNERATION REPORT - AUDITED

The Remuneration Report sets out remuneration information for Orion Minerals Ltd for the year ended 30 June 2019. The following were key management personnel of the Group at any time during the reporting period and unless otherwise indicated were key management personnel for the entire period.

## REMUNERATION REPORT - AUDITED (continued)

Key Management Personnel	Designation	Position held during the year
Mr Denis Waddell	Chairman – Non-Executive	Chairman
Mr Errol Smart	Director – Executive	Managing Director & Chief Executive Officer
Mr Alexander Haller	Director – Non-Executive	Director
Mr Michael Hulmes (ceased 15 April 2019)	Director – Non-Executive	Director
Mr Mark Palmer	Director – Non-Executive	Director
Mr Thomas Borman (from 16 April 2019)	Director – Non-Executive	Director
Mr Godfrey Gomwe (from 16 April 2019)	Director – Non-Executive	Director
Mr Walter Shamu	---	Chief Operating Officer
Mr Martin Bouwmeester	---	Chief Financial Officer & Company Secretary
Mr Louw van Schalkwyk	---	Executive: Exploration (South Africa)
Ms Michelle Jenkins	---	Executive: Finance & Administration (South Africa)

**Remuneration Policy**

Key management personnel have authority and responsibility for planning, directing and controlling the activities of the Group. Key management personnel comprise the directors and executives of the Company and the Group, which comprise executives that report directly to the Managing Director and CEO of the Company and the Group.

It is the Group's objective to provide maximum stakeholder benefit from the retention of a high quality Board and management by remunerating directors and executives fairly and appropriately with reference to relevant employment and market conditions. To assist in achieving the objective the Board links the nature and amount of executive directors' remuneration to the Group's financial and operational performance.

The expected outcome of the Group's remuneration structure is:

- Retention and motivation of directors and executives;
- Attraction of quality management to the Group; and
- Performance rewards to allow directors and executives to participate in the future success of the Group.

Remuneration may include base salary and fees, short term incentives, superannuation contributions and long term incentives. Any equity based remuneration for directors will only be made with the prior approval of shareholders at a general meeting. All base salary and fees, short term incentives, superannuation contributions granted to key management personnel during the year was fixed under service agreements between the Company and key management personnel and was not impacted by performance related measures. In relation to the payment of bonuses, options and other incentive payments, discretion is exercised by the Board, having regard to the overall performance of the Group and the performance of the individual during the period.

The Board of directors is responsible for determining and reviewing compensation arrangements for the executive and non-executive directors. The maximum remuneration of non-executive directors is the subject of shareholder resolution in accordance with the Company's Constitution, and the Corporations Act 2001 as applicable.

The total level of remuneration for the financial year for all non-executive directors of \$235,417 is maintained within the maximum limit of \$350,000 approved by shareholders. When setting fees and other compensation for non-executive directors, the Board may seek independent advice and apply Australian benchmarks. The Board may recommend additional remuneration to non-executive directors called upon to perform extra services or make special exertions on behalf of the Group.

There is no scheme to provide retirement benefits, other than statutory superannuation when applicable, to non-executive directors.

## REMUNERATION REPORT - AUDITED (continued)

The Chairman will undertake an annual assessment of the performance of the individual directors and meet privately with each director to discuss this assessment. Basis for evaluation for assessing performance is by reference to Company charters and current best practice.

### Consequences of performance on shareholders wealth

In considering the Group's performance and benefits for shareholders wealth, the Board of directors has regard to the following indices in respect of the current financial year and the previous five financial years.

	2019 \$'000	2018 \$'000	2017 \$'000	2016 \$'000	2015 \$'000
Net loss attributable to equity holders of the Company	\$(10,750)	\$(8,833)	\$(7,930)	\$(2,528)	\$(3,363)
Dividends paid	---	---	---	---	---
Actual share price	\$0.031	\$0.04	\$0.025	\$0.016	\$0.023
Directors & KMP remuneration	\$2,533	\$1,835	\$1,151	\$822	\$603

### Long Term Incentive Based Remuneration

The Company has an option and performance rights based remuneration scheme for executives. In accordance with the provisions of the Orion Minerals Option and Performance Rights Plan, as approved by shareholders at a general meeting, executives may be granted options or performance rights to purchase ordinary shares. The number and terms of options or performance rights granted is at the absolute discretion of the Board, provided that the total number of options on issue under the scheme at the time of the grant does not exceed 5% of the number of ordinary shares on issue.

Unlisted options were granted during the year ended 30 June 2019 under the terms of the Orion Minerals Option and Performance Rights Plan to employees. The issue of options to directors and employees encourages the alignment of personal and shareholder interests.

### Service contracts

Key terms of the existing service contracts for key management personnel are as follows:

#### Managing Director and CEO

Unlimited in term but capable of termination on 3 months' notice. The Group retains the right to terminate the contract immediately, by making a payment of 3 months' remuneration in lieu of notice.

#### Chief Financial Officer and Company Secretary

Unlimited in term but capable of termination on 3 months' notice. The Group retains the right to terminate the contract immediately, by making a payment of 3 months' remuneration in lieu of notice.

#### Chief Operating Officer

Unlimited in term but capable of termination on 1 month's notice. The Group retains the right to terminate the contract immediately, by making a payment of 1 month's remuneration in lieu of notice.

#### Executive: Exploration (South Africa)

Unlimited in term but capable of termination on 3 months' notice. The Group retains the right to terminate the contract immediately, by making a payment of 3 months' remuneration in lieu of notice.

#### Executive: Finance & Administration (South Africa)

Unlimited in term but capable of termination on 1 month's notice. The Group retains the right to terminate the contract immediately, by making a payment of 1 month's remuneration in lieu of notice.

Key management personnel are also entitled to receive on termination of employment, redundancy benefits.

The service contract outlines the components of compensation paid to the key management personnel but does not prescribe how compensation levels are modified year to year. Compensation levels are reviewed each year to take into account cost-of-living changes, any change in the scope of the role performed by the senior executive and any changes required to meet the principles of the compensation policy.

## REMUNERATION REPORT - AUDITED (continued)

**Directors**

Total compensation for all non-executive directors, last voted upon by shareholders at the 2007 Annual General Meeting, is not to exceed \$350,000 per annum and is set based on advice from external advisors with reference to fees paid to other directors of comparable companies. From 1 January 2017, the Chairman receives \$75,000 per annum. Non-executive directors do not receive performance related compensation. Directors' fees cover all main board activities and membership of one committee. Directors may be paid additional amounts for consulting services provided in addition to normal director duties. Such additional amounts are paid on commercial terms.

**Remuneration report approval at the 2018 Annual General Meeting**

The 30 June 2018 Remuneration Report received positive shareholder support at the Company's Annual General Meeting with a positive vote of 94% in favour.

**Directors and Executive Officers' Remuneration – 2019**

Remuneration	Short term benefits			Post-employment benefit	Long-term benefits	Share-based payments (xiii)		Total remuneration	% of remuneration in options
	Cash salary and fees	Cash bonus	Non-monetary	Superannuation	Long service leave	Equity settled shares	Equity settled options		
2019	\$	\$	\$	\$	\$	\$	\$	\$	%
<b>Directors</b>									
Mr E Smart (i)	300,000	---	---	---	---	---	195,118	495,118	39
Mr W Oliver (ii)	---	---	---	---	---	---	---	---	---
<b>Non-executive Directors</b>									
Mr D Waddell (iii)	248,191	---	---	6,509	---	---	78,043	332,743	23
Mr A Haller (iv)	50,000	---	---	---	---	---	19,511	69,511	28
Mr M Palmer (v)	50,000	---	---	---	---	---	---	50,000	---
Mr T Borman (vi)	10,417	---	---	---	---	---	19,511	29,928	65
Mr G Gomwe (vii)	10,417	---	---	---	---	---	19,511	29,928	65
Mr M Hulmes (viii)	87,248	---	---	8,289	---	---	---	95,537	---
<b>Other Key Management Personnel</b>									
Mr W Shamu (ix)	285,000	---	---	---	---	---	137,966	422,966	33
Mr M Bouwmeester (x)	240,000	---	3,345	---	---	---	58,594	301,939	19
Mr L van Schalkwyk (xi)	270,000	---	---	---	---	---	82,768	352,768	23
Ms M Jenkins (xii)	270,000	---	---	---	---	---	82,768	352,768	23
<b>Total</b>	<b>1,821,273</b>	<b>---</b>	<b>3,345</b>	<b>14,798</b>	<b>---</b>	<b>---</b>	<b>693,790</b>	<b>2,533,206</b>	<b>27</b>

- (i) Effective from 1 May 2017, Mr Smart's fixed component of remuneration was revised to \$300,000 per annum (previous \$120,000 per annum).
- (ii) Effective from 18 April 2018, Mr Oliver resigned from the Board of Directors. Mr Oliver's remuneration is disclosed as at resignation date.
- (iii) Effective from 1 January 2017, Mr Waddell's fixed component of remuneration was revised to \$75,000 per annum (previous \$37,500 per annum). During the financial year, Mr Waddell also received additional amounts for consulting services provided to the Company, in addition to normal director duties.
- (iv) Mr Haller waived his entitlement to receive fees for his position as Non-Executive Director from 1 October 2013. Fees were reinstated by resolution of the Board from 1 July 2018.
- (v) Mr Palmer has held the position of Non-Executive Director from 1 February 2018.
- (vi) Mr Borman has held the position of Non-Executive Director from 16 April 2019.
- (vii) Mr Gomwe has held the position of Non-Executive Director from 16 April 2019.
- (viii) Effective from 15 April 2019, Mr Hulmes resigned from the Board of Directors. Mr Hulmes' remuneration is disclosed up to resignation date.

## REMUNERATION REPORT - AUDITED (continued)

- (ix) Mr Shamu has held the position of Chief Operating Officer from 1 April 2018. Prior to 1 April 2018, Mr Shamu held the positions of Exploration: Mining & Development (South Africa).
- (x) Mr Bouwmeester has held the position of Chief Financial Officer since 9 February 2017 and has held the position of Company Secretary since 1 April 2016.
- (xi) Mr van Schalkwyk has held the position of Executive: Exploration (South Africa) from 1 June 2017.
- (xii) Ms Jenkins has held the position of Executive: Finance & Administration (South Africa) from 1 June 2017.
- (xiii) Share based payments represent the fair values of options estimated at the date of grant using the Black Scholes option pricing model. These amounts are not paid in cash.

Remuneration	Short term benefits			Post-employment benefit	Long-term benefits	Share-based payments		Total remuneration	% of remuneration in options
	Cash salary and fees	Cash bonus	Non-monetary	Superannuation	Long service leave	Equity settled shares	Equity settled options		
2018	\$	\$	\$	\$	\$	\$	\$	\$	%
<b>Directors</b>									
Mr E Smart	300,000	---	---	---	---	---	19,648	319,648	6
Mr W Oliver	64,800	---	---	---	---	---	3,975	68,775	6
<b>Non-executive Directors</b>									
Mr D Waddell	182,400	---	---	---	---	---	7,875	190,275	4
Mr A Haller	---	---	---	---	---	---	---	---	---
Mr M Palmer	20,833	---	---	---	---	---	---	20,833	---
Mr M Hulmes	9,386	---	---	892	---	---	---	10,278	---
<b>Other Key Management Personnel</b>									
Mr W Shamu	270,000	---	---	---	---	---	56,967	326,967	17
Mr M Bouwmeester	240,000	---	---	---	---	---	3,878	243,878	2
Mr L van Schalkwyk	270,000	---	---	---	---	---	56,967	326,967	17
Ms M Jenkins	270,000	---	---	---	---	---	56,967	326,967	17
<b>Total</b>	<b>1,627,419</b>	<b>---</b>	<b>---</b>	<b>892</b>	<b>---</b>	<b>---</b>	<b>206,277</b>	<b>1,834,588</b>	<b>11</b>

Insurance premiums paid on behalf of directors and officers are not allocated to or included in total remuneration.

### Options and Rights over equity instruments granted as compensation

As at the date of this report, there were 149,000,000 unissued ordinary shares under option issued to directors and executives (2018: 72,000,000 unissued ordinary shares under option).

Details on options over ordinary shares in the Company that were granted as compensation to each key management personnel during the reporting period and details on options that were vested during the reporting period are as follows:

## REMUNERATION REPORT - AUDITED (continued)

	Number of options granted during FY2019 <sup>(i)</sup>	Grant date	Fair value per option at grant date	Exercise price per option (ii)	Expiry date	Number of options vested during FY2019
<b>Directors</b>						
Mr D Waddell	12,000,000	14 June 2019	\$0.01	\$0.04 \$0.05 \$0.06	30 April 2024	4,000,000
Mr E Smart	30,000,000	14 June 2019	\$0.01	\$0.04 \$0.05 \$0.06	30 April 2024	10,000,000
Mr A Haller	3,000,000	14 June 2019	\$0.01	\$0.04 \$0.05 \$0.06	30 April 2024	1,000,000
Mr T Borman	3,000,000	14 June 2019	\$0.01	\$0.04 \$0.05 \$0.06	30 April 2024	1,000,000
Mr G Gomwe	3,000,000	14 June 2019	\$0.01	\$0.04 \$0.05 \$0.06	30 April 2024	1,000,000
<b>Other Key Management Personnel</b>						
	---	31 May 2017	\$0.01	\$0.05 \$0.04	31 May 2022	2,000,000 2,000,000
Mr W Shamu	10,500,000	29 April 2019	\$0.01	\$0.04 \$0.05 \$0.06	30 April 2024	2,000,000
Mr M Bouwmeester	6,000,000	29 April 2019	\$0.01	\$0.04 \$0.05 \$0.06	30 April 2024	2,000,000
Mr L van Schalkwyk	6,000,000	29 April 2019	\$0.01	\$0.04 \$0.05 \$0.06	30 April 2024	2,000,000
	---	31 May 2017	\$0.01	\$0.05 \$0.04	31 May 2022	2,000,000 2,000,000
Ms M Jenkins	6,000,000	29 April 2019	\$0.01	\$0.04 \$0.05 \$0.06	30 April 2024	2,000,000

- (i) The options were provided at no cost to the recipient. Each option gives the option holder the right to subscribe for one ordinary share in the capital of the Company upon exercise of the option in accordance with the attaching terms and conditions.
- (ii) The options are exercisable between 1 and 5 years from grant date.

**Analysis of Options and Rights over equity instruments granted as compensation**

Details of the vesting profile of the options granted as remuneration to each key management personnel of the Group as at the end of the reporting period are detailed below.

## REMUNERATION REPORT - AUDITED (continued)

	Number	Date	% vested in current year	% lapsed in current year (i)	Date grant vests (ii)
<b>Directors</b>					
Mr D Waddell	4,000,000	26 November 2015	---	---	30 November 2015
	4,000,000	26 November 2015	---	---	30 November 2016
	4,000,000	26 November 2015	---	---	30 November 2017
	4,000,000	14 June 2019	100%	---	14 June 2019
	4,000,000	14 June 2019	---	---	30 April 2020
	4,000,000	14 June 2019	---	---	30 April 2021
Mr E Smart	10,000,000	26 November 2015	---	---	30 November 2015
	10,000,000	26 November 2015	---	---	30 November 2016
	10,000,000	26 November 2015	---	---	30 November 2017
	10,000,000	14 June 2019	100%	---	14 June 2019
	10,000,000	14 June 2019	---	---	30 April 2020
	10,000,000	14 June 2019	---	---	30 April 2021
Mr A Haller	1,000,000	14 June 2019	100%	---	14 June 2019
	1,000,000	14 June 2019	---	---	30 April 2020
	1,000,000	14 June 2019	---	---	30 April 2021
Mr T Borman	1,000,000	14 June 2019	100%	---	14 June 2019
	1,000,000	14 June 2019	---	---	30 April 2020
	1,000,000	14 June 2019	---	---	30 April 2021
Mr G Gomwe	1,000,000	14 June 2019	100%	---	14 June 2019
	1,000,000	14 June 2019	---	---	30 April 2020
	1,000,000	14 June 2019	---	---	30 April 2021
<b>Other Key Management Personnel</b>					
Mr W Shamu	2,000,000	31 May 2017	---	---	31 May 2018
	2,000,000	31 May 2017	100%	---	31 May 2019
	2,000,000	31 May 2017	---	---	31 May 2020
	1,000,000	21 Sept 2018	100%	---	31 May 2018
	1,000,000	21 Sept 2018	---	---	31 May 2019
	1,000,000	21 Sept 2018	---	---	31 May 2020
	2,500,000	29 April 2019	100%	---	30 April 2019
	2,500,000	29 April 2019	---	---	30 April 2020
	2,500,000	29 April 2019	---	---	30 April 2021
Mr M Bouwmeester	2,000,000	26 November 2015	---	---	30 November 2015
	2,000,000	26 November 2015	---	---	30 November 2016
	2,000,000	26 November 2015	---	---	30 November 2017
	2,000,000	29 April 2019	100%	---	30 April 2019
	2,000,000	29 April 2019	---	---	30 April 2020
	2,000,000	29 April 2019	---	---	30 April 2021
Mr L van Schalkwyk	2,000,000	31 May 2017	---	---	31 May 2018
	2,000,000	31 May 2017	100%	---	31 May 2019
	2,000,000	31 May 2017	---	---	31 May 2020
	2,000,000	29 April 2019	100%	---	30 April 2019
	2,000,000	29 April 2019	---	---	30 April 2020
	2,000,000	29 April 2019	---	---	30 April 2021
Ms M Jenkins	2,000,000	31 May 2017	---	---	31 May 2018
	2,000,000	31 May 2017	100%	---	31 May 2019
	2,000,000	31 May 2017	---	---	31 May 2020
	2,000,000	29 April 2019	100%	---	30 April 2019
	2,000,000	29 April 2019	---	---	30 April 2020
	2,000,000	29 April 2019	---	---	30 April 2021

DIRECTORS' REPORT *continued*

## REMUNERATION REPORT - AUDITED (continued)

- (i) The % lapsed in the year represents the reduction from the maximum number of options available to be exercised.
- (ii) The vesting conditions attached to each option granted require the key management personnel to remain in employment with the Company until the vesting date, unless the Board of directors elects to waive the expiry terms attached to the grant.

The Company issued certain options with immediate vesting conditions to Directors and KMPs during the reporting period as deemed appropriate by the Board to retain professionals with relevant expertise and provide incentives to members during our period of growth.

Analysis of movements in options

Changes during the reporting period, by value, of options over ordinary shares in the Company held by each current key management person, and each of the named current Company executives is detailed below.

	Value of options		
	Granted in year \$	Exercised in year \$	Lapsed in year \$
Mr D Waddell	78,043	---	---
Mr E Smart	195,118	---	---
Mr A Haller	19,511	---	---
Mr M Palmer	---	---	---
Mr T Borman	19,511	---	---
Mr G Gomwe	19,511	---	---
Mr W Shamu	137,966	---	---
Mr M Bouwmeester	58,594	---	---
Mr L van Schalkwyk	82,768	---	---
Ms M Jenkins	82,768	---	---

Options and rights over equity instruments

The movement during the reporting period, by number of options over ordinary shares in the Company held, directly, indirectly or beneficially, by each key management person, including their related parties, is as follows:

	Balance at beginning of period 1-Jul-18	Granted as remuneration	Purchased or acquired	Expired	Balance at end of period 30-June-19	Not vested and not exercisable	Vested and exercisable
<b>Directors</b>							
Mr D Waddell	12,000,000	12,000,000	---	---	24,000,000	8,000,000	16,000,000
Mr E Smart	30,000,000	30,000,000	---	---	60,000,000	20,000,000	40,000,000
Mr A Haller	---	3,000,000	---	---	3,000,000	2,000,000	1,000,000
Mr M Palmer	---	---	---	---	---	---	---
Mr T Borman	---	3,000,000	---	---	3,000,000	2,000,000	1,000,000
Mr G Gomwe	---	3,000,000	---	---	3,000,000	2,000,000	1,000,000
Mr M Hulmes	---	---	---	---	---	---	---
<b>Other Key Management Personnel</b>							
Mr W Shamu	6,000,000	10,500,000	---	---	16,500,000	9,000,000	7,500,000
Mr M Bouwmeester	6,000,000	6,000,000	---	---	12,000,000	4,000,000	8,000,000
Mr L van Schalkwyk	6,000,000	6,000,000	---	---	12,000,000	6,000,000	6,000,000
Ms M Jenkins	6,000,000	6,000,000	---	---	12,000,000	6,000,000	6,000,000
<b>Total</b>	<b>66,000,000</b>	<b>79,500,000</b>	<b>---</b>	<b>---</b>	<b>149,000,000</b>	<b>59,000,000</b>	<b>86,500,000</b>

## REMUNERATION REPORT - AUDITED (continued)

	Balance at beginning of period 1-Jul-17	Granted as remuneration	Purchased or acquired	Expired	Balance at end of period 30-June-18	Not vested and not exercisable	Vested and exercisable
<b>Directors</b>							
Mr D Waddell	18,000,000	---	---	(6,000,000)	12,000,000	---	12,000,000
Mr E Smart	45,000,000	---	---	(15,000,000)	30,000,000	---	30,000,000
Mr A Haller	---	---	---	---	---	---	---
Mr M Palmer	---	---	---	---	---	---	---
Mr M Hulmes	---	---	---	---	---	---	---
Mr B Oliver	9,000,000	---	---	(3,000,000)	6,000,000	---	6,000,000
<b>Other Key Management Personnel</b>							
Mr W Shamu	6,000,000	---	---	---	6,000,000	4,000,000	2,000,000
Mr M Bouwmeester	9,000,000	---	---	(3,000,000)	6,000,000	---	6,000,000
Mr L van Schalkwyk	6,000,000	---	---	---	6,000,000	4,000,000	2,000,000
Ms M Jenkins	6,000,000	---	---	---	6,000,000	4,000,000	2,000,000
<b>Total</b>	<b>99,000,000</b>	<b>---</b>	<b>---</b>	<b>(27,000,000)</b>	<b>72,000,000</b>	<b>12,000,000</b>	<b>60,000,000</b>

### Other transactions with key management personnel

A number of key management personnel, or their related parties, hold positions in other entities that result in them having control, joint control or a relevant interest over the financial or operating policies of those entities.

A number of these entities transacted with the Group during the year. The terms and conditions of the transactions with key management personnel and their related parties were no more favorable than those available, or which might reasonably be expected to be available, on similar transactions to non-key management personnel related entities on an arm's length basis (refer Note 24).

### Movement in shares

The movement during the reporting period in the number of ordinary shares in the Company held, directly, indirectly or beneficially, by each key management person, including their related parties, is as follows:

	Balance at beginning of period 1-Jul-18	Purchased or acquired during the year	On options exercised	Disposals of shares	Other transfers of shares	Balance at end of period 30-Jun-19
<b>Directors</b>						
Mr D Waddell	102,957,990	8,756,756	---	---	---	111,714,746
Mr E Smart	19,542,666	358,000	---	---	---	19,900,666
Mr A Haller (i)	69,119,937	---	---	---	---	69,119,937
Mr M Palmer	---	---	---	---	---	---
Mr T Borman	3,000,000	---	---	---	---	3,000,000
Mr G Gomwe	---	---	---	---	---	---
Mr M Hulmes	200,000	200,000	---	---	---	400,000
<b>Other Key Management Personnel</b>						
Mr W Shamu (ii)	2,083,333	---	---	---	---	2,083,333
Mr M Bouwmeester	4,867,360	---	---	---	---	4,867,360
Mr L van Schalkwyk	---	---	---	---	---	---
Ms M Jenkins (ii)	2,916,666	---	---	(379)	---	2,916,287
<b>Total</b>	<b>204,687,952</b>	<b>9,314,756</b>	<b>---</b>	<b>(379)</b>	<b>---</b>	<b>214,002,329</b>

- (i) Mr Haller holds relevant interests as follows: Silja Investment Ltd 56,706,578 shares and Pershing Securities 1,320 shares. Mr Haller personally holds interests of 12,412,039 shares.
- (ii) Mr Shamu and Ms Jenkins hold relevant interests as follows: WMP Mining Services Inc 2,083,333 shares (held equally) and Ms Jenkins holds additional interests of 832,954 shares.

## REMUNERATION REPORT - AUDITED (continued)

	Balance at beginning of period 1-Jul-17	Purchased or acquired during the year	On options exercised	Disposals of shares	Other transfers of shares	Balance at end of period 30-Jun-18
<b>Directors</b>						
Mr D Waddell	92,541,324	10,416,666	---	---	---	102,957,990
Mr E Smart	19,542,666	---	---	---	---	19,542,666
Mr A Haller (i)	69,119,937	---	---	---	---	69,119,937
Mr M Palmer	---	---	---	---	---	---
Mr M Hulmes	---	---	---	---	---	---
Mr W Oliver	6,582,199	---	---	(6,582,199)	---	---
<b>Other Key Management Personnel</b>						
Mr W Shamu (ii)	---	2,083,333	---	---	---	2,083,333
Mr M Bouwmeester	2,784,027	2,083,333	---	---	---	4,867,360
Mr L van Schalkwyk	---	---	---	---	---	---
Ms M Jenkins (ii)	---	2,916,666	---	---	---	2,916,666
<b>Total</b>	<b>190,570,153</b>	<b>17,499,998</b>	<b>---</b>	<b>(6,582,199)</b>	<b>---</b>	<b>201,487,952</b>

- (i) Mr Haller holds relevant interests as follows: Silja Investment Ltd 56,706,578 shares and Pershing Securities 1,320 shares. Mr Haller personally holds interests of 12,412,039 shares.
- (ii) Mr Shamu and Ms Jenkins hold relevant interests as follows: WMP Mining Services Inc 2,083,333 shares (held equally) and Ms Jenkins holds additional interests of 833,333 shares.

**Engagement of remuneration consultants**

The Board of Directors from time to time, seek and consider advice from independent remuneration consultants to ensure that the Company has at its disposal information relevant to the determination of all aspect of remuneration relating to key management personnel.

The Board follows a set of protocols when engaging remuneration consultants to satisfy themselves, that the remuneration consultants engaged are free from any undue influence by the members of the key management personnel to whom advice and recommendations relate and that the requirements of the Corporations Act 2001 are complied with. The set of protocols followed by the Board include:

- Remuneration consultants are engaged by and report directly to the Board; and
- Communication between remuneration consultants and the Company is limited to those KMPs whose remuneration is not under consideration.

No remuneration consultants were engaged during the year.

This is the end of the remuneration report which has been audited.

**ENVIRONMENTAL ISSUES**

The Group is required to close its operations and rehabilitate the lands that it disturbs during the exploration and operating phases in accordance with applicable mining and environmental laws and regulations. Where necessary, provision for rehabilitation liabilities is made based on the net present value of the estimated cost of restoring the environmental disturbance that has occurred up to the reporting date.

As part of the Group's environmental policy exploration and access sites are regenerated to match or exceed government expectations. Based on the results of enquires made, the board is not aware of any significant breaches during the period covered by this report.

**DIVIDENDS**

There were no dividends paid or declared during the financial year (2018: \$nil).

## INDEMNIFICATION OF DIRECTORS, OFFICERS AND AUDITORS

During the financial year, the Company paid a premium in respect of a contract insuring the directors of the Company and all office bearers of the Company and of any body corporate against any liability incurred whilst acting in the capacity of director, secretary or executive officer to the extent permitted by the Corporations Act 2001. The contract of insurance prohibits disclosure of the nature of the liability and the amount of the premium. Orion Minerals Ltd, to the extent permitted by law, indemnifies each director or secretary against any liability incurred in the service of the Group provided such liability does not arise out of conduct involving a lack of good faith and for costs incurred in defending proceedings in which judgement is given in favour of the person in which the person is acquitted. The Company has not provided any insurance or indemnity for the auditor of the Company.

## PROCEEDINGS ON BEHALF OF COMPANY

No person has applied for leave of Court to bring proceedings on behalf of the Company or intervene in any proceedings to which the Company is a party for the purpose of taking responsibility on behalf of the Company for all or any part of those proceedings.

## NON-AUDIT SERVICES

BDO East Coast Partnership, the Company's auditor, has not performed other non-audit services in addition to their statutory duties during the year ended 30 June 2019.

BDO Corporate Finance (Pty) Ltd has performed professional services for the board of directors of Bartotrax (Pty) Ltd, Repli Trading No 27 (Pty) Ltd, Rich Rewards Trading 437 (Pty) Ltd and Vardocube (Pty) Ltd, regarding a repurchase of the issued ordinary share capital in these entities.

The directors are satisfied that the provision of non-audit services during the financial year, by the auditor (or by another person or firm on the auditor's behalf), is compatible with the general standard of independence for auditors imposed by the Corporations Act 2001.

The directors are of the opinion that the services as disclosed in Note 25 to the financial statements do not compromise the external auditor's independence requirements of the Corporations Act 2001 for the following reasons:

- all non-audit services have been reviewed and approved to ensure that they do not impact the integrity and objectivity of the auditor; and
- none of the services undermine the general principles relating to auditor independence as set out in APES 110 Code of Ethics for Professional Accountants issued by the Accounting Professional and Ethical Standards Board, including reviewing or auditing the auditor's own work, acting in a management or decision-making capacity for the company, acting as advocate for the company or jointly sharing economic risks and rewards

## ROUNDING OF AMOUNTS

The company is of a kind referred to in Corporations Instrument 2016/191, issued by the Australian Securities and Investments Commission, relating to 'rounding-off'. Amounts in this report have been rounded off in accordance with that Corporations Instrument to the nearest thousand dollars, or in certain cases, the nearest dollar.

## AUDITOR'S INDEPENDENCE DECLARATION

The lead auditor's independence declaration is set out on page 81 and forms part of the Directors' Report for the financial year ended 30 June 2019.

**CORPORATE GOVERNANCE**

The Board of directors recognises the recommendations of the Australian Securities Exchange Corporate Governance Council for Corporate Governance Principles and Recommendations and considers that the Company substantially complies with those guidelines, which are of critical importance to the commercial operation of a junior listed resources company. The Company's Corporate Governance statement and disclosures can be viewed on our website, [www.orionminerals.com.au](http://www.orionminerals.com.au).

This report is made in accordance with a resolution of the directors.



**Denis Waddell**  
Chairman

**Perth, Western Australia**

Date: 24 September 2019

**DECLARATION OF INDEPENDENCE BY JAMES MOONEY TO THE DIRECTORS OF ORION MINERALS LIMITED**

As lead auditor of Orion Minerals Limited for the year ended 30 June 2019, I declare that, to the best of my knowledge and belief, there have been:

1. No contraventions of the auditor independence requirements of the *Corporations Act 2001* in relation to the audit; and
2. No contraventions of any applicable code of professional conduct in relation to the audit.

This declaration is in respect of Orion Minerals Limited and the entities it controlled during the period.



James Mooney  
Partner

**BDO East Coast Partnership**

Melbourne, 24 September 2019

## FINANCIAL STATEMENTS

**CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER  
COMPREHENSIVE INCOME**

AS AT 30 JUNE 2019

CONTINUING OPERATIONS	Notes	2019 \$'000	2018 \$'000
Other income	3	62	1,293
Exploration and evaluation costs expensed	9	(3,053)	(2,371)
Employee expenses		(1,329)	(1,366)
Provision for doubtful debt expense		---	(500)
Other operational expenses	3	(4,425)	(2,955)
(Loss) fair value of securities in other entities	7	(15)	(378)
<b>Results from operating activities</b>		<b>(8,760)</b>	<b>(6,246)</b>
<b>Non-operating expenses</b>	3	<b>(457)</b>	<b>(709)</b>
Finance income		227	214
Finance expense		(1,760)	(2,005)
<b>Net finance expenses</b>		<b>(1,532)</b>	<b>(1,791)</b>
Loss before income tax		(10,750)	(8,746)
Income tax (expense)/benefit	17	---	---
Loss from continuing operations attributable to equity holders of the Group		(10,750)	(8,746)
<b>Other comprehensive income</b>			
Foreign currency reserve		437	228
Other comprehensive income for the year		---	---
<b>Total comprehensive income for the year</b>		<b>(10,313)</b>	<b>(8,578)</b>
Loss for the year is attributable to:			
Non-controlling interest	23	(989)	(437)
Owners of Orion Minerals Ltd		(9,761)	(8,309)
		<b>(10,750)</b>	<b>(8,746)</b>
Total comprehensive loss for the year is attributable to:			
Non-controlling interest	23	(989)	(437)
Owners of Orion Minerals Ltd		(9,324)	(8,081)
		<b>(10,313)</b>	<b>(8,518)</b>
<b>LOSS PER SHARE (CENTS PER SHARE)</b>			
Basic loss per share	18	(0.53)	(0.76)
Diluted loss per share	18	(0.53)	(0.76)
Headline loss per share	18	(0.53)	(0.76)
Diluted headline loss per share	18	(0.53)	(0.76)

The notes on pages 86 to 123 are an integral part of these consolidated financial statements.

## CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 30 JUNE 2019

ASSETS	Notes	2019 \$'000	2018 \$'000
<b>Current assets</b>			
Cash and cash equivalents	4	1,395	4,811
Trade and other receivables	5	407	3,133
Rehabilitation bonds	6	276	215
Prepayments		68	65
Securities held in other entities	7	---	15
<b>Total current assets</b>		<b>2,146</b>	<b>8,239</b>
<b>Non-current assets</b>			
Other receivables	5	152	166
Rehabilitation bonds	6	2,372	2,139
Loan to joint venture partners	10	2,042	1,026
Plant and equipment	8	95	147
Deferred exploration, evaluation and development	9	40,991	29,119
<b>Total non-current assets</b>		<b>45,652</b>	<b>32,597</b>
<b>Total assets</b>		<b>47,798</b>	<b>40,836</b>
LIABILITIES	Notes	2019 \$'000	2018 \$'000
<b>Current liabilities</b>			
Trade and other payables	11	1,999	2,363
Loans	13	3,947	6,875
Convertible notes	15	5,724	6,001
Provisions	12	170	138
<b>Total current liabilities</b>		<b>11,840</b>	<b>15,377</b>
<b>Non-current liabilities</b>			
Provisions	12	2,363	1,965
Preference shares	14	2,529	2,169
Loans	13	1,748	1,539
<b>Total non-current liabilities</b>		<b>6,640</b>	<b>5,673</b>
<b>Total liabilities</b>		<b>18,480</b>	<b>21,050</b>
<b>NET ASSETS</b>		<b>29,318</b>	<b>19,786</b>
EQUITY	Notes	2019 \$'000	2018 \$'000
<b>Equity attributable to equity holders of the Company</b>			
Issued capital	16	121,530	102,460
Accumulated losses		(96,063)	(87,367)
Non-controlling interest - subsidiaries	23	1,244	2,233
Foreign currency translation reserve		(310)	127
Convertible note reserve		230	230
Share based payments reserve	16	2,687	2,103
<b>Total equity</b>		<b>29,318</b>	<b>19,786</b>

The notes on pages 86 to 123 are an integral part of these consolidated financial statements.

**CONSOLIDATED STATEMENT OF CASH FLOWS**

AS AT 30 JUNE 2019

	Notes	2019 \$'000	2018 \$'000
<b>Cash flows from operating activities</b>			
Payment for exploration and evaluation		(4,556)	(2,372)
Payments to suppliers and employees		(4,721)	(3,051)
Interest received		93	212
Interest expense		(1,757)	(627)
Covetable note – interest expense		---	(732)
Other receipts		236	3
<b>Net cash used in operating activities</b>	<b>4</b>	<b>(10,705)</b>	<b>(6,567)</b>
<b>Cash flows from investing activities</b>			
Purchase of plant and equipment		(4)	(101)
Payments for exploration and evaluation		(10,501)	(15,275)
Guarantees on deposit		(72)	(134)
Proceeds from sale of tenements		2,500	---
<b>Net cash used in investing activities</b>		<b>(8,077)</b>	<b>(15,510)</b>
<b>Cash flows from financing activities</b>			
Proceeds from issue of shares		19,234	17,331
Share issue expenses		(425)	(371)
Borrowings provided to joint venture operations		(858)	(1,030)
Proceeds from borrowings		3,000	9,001
Repayment of borrowings		(5,498)	(1,440)
<b>Net cash from financing activities</b>		<b>15,453</b>	<b>23,491</b>
Net increase in cash and cash equivalents		(3,329)	1,414
Cash and cash equivalents at the beginning of the financial year		4,811	3,412
Effects of exchange rate on cash at end of financial year		(87)	(15)
<b>CASH ON HAND AND AT BANK AT END OF YEAR</b>	<b>4</b>	<b>1,395</b>	<b>4,811</b>

The notes on pages 86 to 123 are an integral part of these consolidated financial statements.

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

AS AT 30 JUNE 2019

30 June 2019							
	Issued capital	Accumulated losses	Non-controlling interest	Foreign currency translation reserve	Convertible note reserve	Share based payments reserve	Total equity
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Balance at 1 July 2018	102,460	(87,367)	2,233	127	230	2,103	19,786
Loss for the year	---	(9,761)	(989)	---	---	---	(10,750)
Other comprehensive loss	---	---	---	---	---	---	---
<b>Total comprehensive loss for the year</b>	<b>---</b>	<b>(9,761)</b>	<b>(989)</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>(10,750)</b>
Transactions with owners in their capacity as owners:							
Contributions of equity, net costs	19,070	---	---	---	---	---	19,070
Foreign translation reserve	---	---	---	(437)	---	---	(437)
Transfer of share options expired	---	1,065	---	---	---	(1,065)	---
Share-based payments expense	---	---	---	---	---	1,649	1,649
<b>Total transactions with owners</b>	<b>19,070</b>	<b>1,065</b>	<b>---</b>	<b>(437)</b>	<b>---</b>	<b>584</b>	<b>20,282</b>
<b>Balance at 30 June 2019</b>	<b>121,530</b>	<b>(96,063)</b>	<b>1,244</b>	<b>(310)</b>	<b>230</b>	<b>2,687</b>	<b>29,318</b>

30 June 2018							
	Issued capital	Accumulated losses	Non-controlling interest	Foreign currency translation reserve	Convertible note reserve	Share based payments reserve	Total equity
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Balance at 1 July 2017	85,499	(79,883)	2,670	99	407	2,502	11,294
Loss for the year	---	(8,309)	(437)	---	---	---	(8,746)
Other comprehensive loss	---	---	---	---	---	---	---
<b>Total comprehensive loss for the year</b>	<b>---</b>	<b>(8,309)</b>	<b>(437)</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>(8,746)</b>
Transactions with owners in their capacity as owners:							
Contributions of equity, net costs	16,961	---	---	---	---	---	16,961
Convertible notes	---	---	---	---	(177)	---	(177)
Foreign translation reserve	---	---	---	28	---	---	28
Transfer of share options expired	---	825	---	---	---	(825)	---
Share-based payments expense	---	---	---	---	---	426	426
<b>Total transactions with owners</b>	<b>16,961</b>	<b>825</b>	<b>---</b>	<b>28</b>	<b>(177)</b>	<b>(399)</b>	<b>17,238</b>
<b>Balance at 30 June 2018</b>	<b>102,460</b>	<b>(87,367)</b>	<b>2,233</b>	<b>127</b>	<b>230</b>	<b>2,103</b>	<b>19,786</b>

The notes on pages 86 to 123 are an integral part of these consolidated financial statements.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

FOR THE YEAR ENDED 30 JUNE 2019

**1 CORPORATE INFORMATION**

Orion Minerals Limited (**Company**) is a company domiciled in Australia. The address of the Company's registered office is Suite 617, 530 Little Collins Street, Melbourne, Victoria, 3000. The consolidated financial statements as at and for the year ended 2019 comprised the Company and its subsidiaries, (together referred to as the **Group**). The Group is a for-profit group and is primarily involved in copper, zinc, nickel, gold and platinum group elements (**PGE**) exploration, evaluation and development.

**2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES****(a) Basis of preparation****(i) Statement of compliance**

The consolidated financial statements are general purpose financial statements which have been prepared in accordance with Australian Accounting Standards (**AASBs**) adopted by the Australian Accounting Standards Board (**AASB**) and the Corporations Act 2001. The consolidated financial statements comply with International Financial Reporting Standards (**IFRSs**) adopted by the International Accounting Standards Board (**IASB**). The consolidated financial statements were authorised for issue by the Board of directors on 24 September 2019.

**(ii) Basis of measurement**

The consolidated financial statements have been prepared on the historical cost basis except where otherwise stated.

The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements and have been applied consistently by the Group except as required by the new accounting standards and interpretations adopted as disclosed in Note 2(b).

Certain comparative amounts have been reclassified to conform with the current year's presentation.

**(iii) Going concern**

The financial statements have been prepared on the going concern basis, which contemplates continuity of normal business activities and the realisation of assets and discharge of liabilities in the normal course of business.

As disclosed in the financial statements, the Group recorded a net loss of \$10.75M for the year ended 30 June 2019 and the Group's position as at 30 June 2019 was as follows:

- The Group had cash reserves of \$1.4M and had negative operating cash flows of \$10.7M for the year ended 30 June 2019;
- The Group had negative working capital at 30 June 2019 of \$9.7M; and
- The Group's main activity is exploration, evaluation and development of base metal, gold and platinum-group element projects in South Africa (Areachap Belt, Northern Cape) and as such it does not have a source of income, rather it is reliant on debt and / or equity raisings to fund its activities.

These factors indicate a material uncertainty that may cast significant doubt as to whether the Group will continue as a going concern and therefore whether it will realise its assets and extinguish its liabilities in the normal course of business and at the amounts stated in the financial report.

Current forecasts indicate that cash on hand as at 30 June 2019 will not be sufficient to fund planned exploration and operational activities during the next twelve months and to maintain the Group's tenements in good standing. Accordingly, the Group will be required to raise additional equity, consider alternate funding options or a combination of the foregoing.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The Directors believe that there are reasonable grounds to believe that the Group will be able to continue as a going concern, after consideration of the following factors:

- They are confident that the Group will raise sufficient cash to ensure that the Group can meet its minimum exploration and operational expenditure commitments for at least the next twelve months and maintain the Group's tenements in good standing and pay its debts, as and when they fall due. The Company has previously been successful in raising capital as and when required as evidenced by capital raising initiatives of \$19.50M (before costs) during the year ended 30 June 2019 and following year end, a further \$3.34M to support the Company's exploration and plans.
- In March 2017, the Company issued 232.7M convertible notes, each with a face value of 2.6 cents. The convertible notes mature on 30 September 2019. The Company has received convertible note conversion notices from all noteholders requesting conversion of the convertible notes into Shares in the Company at an issue price of 2.6 cents per Share and the Company will issue Shares to the noteholders on or before the maturity date. Upon issue of the Shares, the Group's current liabilities will reduce by \$5.78M (as 10.3M notes were converted into shares April 2019) and the security held by noteholders over certain assets of the Company and its subsidiaries will be released (refer ASX release 24 September 2019) (refer Note 15).
- In January 2019, the Company announced that Tembo Capital has continued its strong support of the Company through providing a new unsecured \$3.6M Convertible Loan Facility (refer Note 13).
- Based on results to date from exploration programs, the high-margin bankable feasibility study released June 2019, with an initial 10 year Foundation Phase (refer ASX release 26 June 2019), the updated Prieska Project Mineral Reserve and the Company's ability to successfully raise capital in the past, the Directors are confident of obtaining the continued support of the Company's shareholders and a number of brokers that have supported the Company's previous capital raisings.

The amount and timing of any funding for operational and exploration plans, is the subject of ongoing review.

Accordingly, the financial statements for the year ended 30 June 2019 have been prepared on a going concern basis as, in the opinion of the Directors, the Group will be in a position to continue to meet its operating costs and exploration expenditure commitments and pay its debts as and when they fall due for at least twelve months from the date of this report.

However, the Directors recognise that if sufficient additional funding is not raised from the issue of capital or through alternative funding sources, there is a material uncertainty as to whether the going concern basis is appropriate with the result that the Group may relinquish title to certain tenements and may have to realise its assets and extinguish its liabilities other than in the ordinary course of business and at amounts different from those stated in the financial report. No allowance for such circumstances has been made in the financial report. Further details on these funding arrangements are given in Note 15 (Convertible Notes) and Note 13 (Borrowings with other entities and related parties).

### (b) New accounting standards and interpretations

#### (i) New accounting standards

A number of new standards, amendments to standards and interpretations issued by the AASB which are not yet mandatorily applicable to the Group have not been applied in preparing these consolidated financial statements. Those which may be relevant to the Group are set out below. The Group does not plan to adopt these standards early.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### AASB 16 Leases

This standard is applicable to annual reporting periods beginning on or after 1 January 2019. The standard replaces AASB 117 'Leases' and for lessees will eliminate the classifications of operating leases and finance leases. Subject to exceptions, a 'right-of-use' asset will be capitalised in the statement of financial position, measured at the present value of the unavoidable future lease payments to be made over the lease term. The exceptions relate to short-term leases of 12 months or less and leases of low-value assets (such as personal computers and small office furniture) where an accounting policy choice exists whereby either a 'right-of-use' asset is recognised or lease payments are expensed to profit or loss as incurred. A liability corresponding to the capitalised lease will also be recognised, adjusted for lease prepayments, lease incentives received, initial direct costs incurred and an estimate of any future restoration, removal or dismantling costs. Straight-line operating lease expense recognition will be replaced with a depreciation charge for the leased asset (included in operating costs) and an interest expense on the recognised lease liability (included in finance costs).

In the earlier periods of the lease, the expenses associated with the lease under AASB 16 will be higher when compared to lease expenses under AASB 117. However, EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) results will be improved as the operating expense is replaced by interest expense and depreciation in profit or loss under AASB 16. For classification within the statement of cash flows, the lease payments will be separated into both a principal (financing activities) and interest (either operating or financing activities) component. For lessor accounting, the standard does not substantially change how a lessor accounts for leases. The Group will adopt this standard from 1 July 2019 and the impact of its adoption is assessed as minimal due to the minimal operating leases as at 30 June 2019.

### AASB 9 Financial Instruments

The consolidated entity has adopted AASB 9 from 1 July 2018. The standard introduced new classification and measurement models for financial assets. A financial asset shall be measured at amortised cost if it is held within a business model whose objective is to hold assets in order to collect contractual cash flows which arise on specified dates and that are solely principal and interest. A debt investment shall be measured at fair value through other comprehensive income if it is held within a business model whose objective is to both hold assets in order to collect contractual cash flows which arise on specified dates that are solely principal and interest as well as selling the asset on the basis of its fair value. All other financial assets are classified and measured at fair value through profit or loss unless the entity makes an irrevocable election on initial recognition to present gains and losses on equity instruments (that are not held-for-trading or contingent consideration recognised in a business combination) in other comprehensive income ('OCI'). Despite these requirements, a financial asset may be irrevocably designated as measured at fair value through profit or loss to reduce the effect of, or eliminate, an accounting mismatch. For financial liabilities designated at fair value through profit or loss, the standard requires the portion of the change in fair value that relates to the entity's own credit risk to be presented in OCI (unless it would create an accounting mismatch). New simpler hedge accounting requirements are intended to more closely align the accounting treatment with the risk management activities of the entity. New impairment requirements use an 'expected credit loss' ('ECL') model to recognise an allowance. Impairment is measured using a 12-month ECL method unless the credit risk on a financial instrument has increased significantly since initial recognition in which case the lifetime ECL method is adopted. The Group adopted this standard from 1 July 2018, there has been no impact on the opening balances of the accounts and the comparative period has not been restated.

### AASB 15 Revenue from Contracts with Customers

The consolidated entity has adopted AASB 15 from 1 July 2018. It has elected to adopt AASB 15 using the cumulative effect method, with any adjustment required when transitioning to the new standard being recognised on 1 July 2018 (date of initial application) in retained earnings. Comparative figures have not been restated. There are no material changes in the Group's revenue recognition method, no adjustments to the opening retained earnings balance have been made.

- Other standards not yet applicable

There are no other standards that are not yet effective and that would be expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### (c) Basis of consolidation

The consolidated financial statements incorporate the assets and liabilities of all entities controlled by Orion Minerals Limited (**Parent Company**) from time to time during the year and at 30 June 2018 and the results of its controlled entities for the year then ended. The effects of all transactions between entities in the economic entity are eliminated in full.

The financial statements of the subsidiary are prepared for the same reporting period as the parent entity, using consistent accounting policies. Adjustments are made to bring into line any dissimilar accounting policies that may exist.

#### (i) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

#### (ii) Loss of control

When the Group loses control over a subsidiary, it derecognises the assets and liabilities of the subsidiary, and any related NCI and other components of equity. Any resulting gain or loss is recognised in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

#### (iii) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated. Unrealised gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

### (d) Foreign currency translation

The functional and presentation currency of the Company and its Australian subsidiary's is Australian Dollars. For comparative purposes, the consolidated financial statements may make reference to South African Rand (**ZAR**).

Transactions in foreign currencies are translated to the respective functional currency of the Group at exchange rates at the dates of the transactions.

Monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at the exchange rate at the reporting date. Non-monetary assets and liabilities that are measured at fair value in a foreign currency are translated to the functional currency at the exchange rate when the fair value was determined. Foreign currency differences are generally recognised in profit or loss. Non-monetary items that are measured based on historical cost in a foreign currency are not translated.

### (e) Investment and Other Financial Assets

Investments and other financial assets are initially measured at fair value. Transaction costs are included as part of the initial measurement, except for financial assets at fair value through profit or loss. Such assets are subsequently measured at either amortised cost or fair value depending on their classification. Classification is determined based on both the business model within which such assets are held and the contractual cash flow characteristics of the financial asset unless, an accounting mismatch is being avoided.

Financial assets are derecognised when the rights to receive cash flows have expired or have been transferred and the consolidated entity has transferred substantially all the risks and rewards of ownership. When there is no reasonable expectation of recovering part or all of a financial asset, its carrying value is written off.

**2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)****(i) Financial assets at fair value through profit or loss**

Financial assets not measured at amortised cost or at fair value through other comprehensive income are classified as financial assets at fair value through profit or loss. Typically, such financial assets will be either: (i) held for trading, where they are acquired for the purpose of selling in the short-term with an intention of making a profit, or a derivative; or (ii) designated as such upon initial recognition where permitted. Fair value movements are recognised in profit or loss.

**(ii) Financial assets at fair value through other comprehensive income**

Financial assets at fair value through other comprehensive income include equity investments which the consolidated entity intends to hold for the foreseeable future and has irrevocably elected to classify them as such upon initial recognition.

**(iii) Measurement**

At initial recognition, the Company measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss.

**(iv) Impairment**

The consolidated entity recognises a loss allowance for expected credit losses on financial assets which are either measured at amortised cost or fair value through other comprehensive income. The measurement of the loss allowance depends upon the consolidated entity's assessment at the end of each reporting period as to whether the financial instrument's credit risk has increased significantly since initial recognition, based on reasonable and supportable information that is available, without undue cost or effort to obtain.

Where there has not been a significant increase in exposure to credit risk since initial recognition, a 12-month expected credit loss allowance is estimated. This represents a portion of the asset's lifetime expected credit losses that is attributable to a default event that is possible within the next 12 months. Where a financial asset has become credit impaired or where it is determined that credit risk has increased significantly, the loss allowance is based on the asset's lifetime expected credit losses. The amount of expected credit loss recognised is measured on the basis of the probability weighted present value of anticipated cash shortfalls over the life of the instrument discounted at the original effective interest rate.

For financial assets measured at fair value through other comprehensive income, the loss allowance is recognised within other comprehensive income. In all other cases, the loss allowance is recognised in profit or loss.

**(f) Associates**

Associates are entities over which the consolidated entity has significant influence but not control or joint control. Investments in associates are accounted for using the equity method. Under the equity method, the share of the profits or losses of the associate is recognised in profit or loss and the share of the movements in equity is recognised in other comprehensive income. Investments in associates are carried in the statement of financial position at cost plus post-acquisition changes in the consolidated entity's share of the net assets of the associate.

When the consolidated entity's share of losses in an associate equals or exceeds its interest in the associate, including any unsecured long-term receivables, the consolidated entity does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

**(g) Plant and equipment**

Plant and equipment is stated at cost less accumulated depreciation and accumulated impairment losses. Depreciation is calculated on a reducing balance basis using estimated remaining useful life of the asset. The estimated useful lives for the current and comparative period are as follows:

Plant and equipment - over 3 to 15 years. Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

Subsequent expenditure is capitalised only when it is probable that the future economic benefits associated with the expenditure will flow to the Group.

Non-current assets classified as held for sale and the assets of a disposal group classified as held for sale are presented separately from the other assets in the balance sheet. The liabilities of a disposal group classified as held for sale are presented separately from other liabilities in the balance sheet.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### (h) Impairment

#### (i) Non-financial assets

At each reporting date, the Group assesses whether there is any indication that an asset may be impaired. Where an indicator of impairment exists, the Group makes a formal estimate of recoverable amount. Where the carrying amount of an asset exceeds its recoverable amount the asset is considered impaired and is written down to its recoverable amount.

Recoverable amount is the greater of fair value less costs to dispose and value in use. It is determined for an individual asset, unless the asset's value in use cannot be estimated to be close to its fair value less costs to dispose and it does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in profit and loss. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the units and then to reduce the carrying amount of the other assets in the unit (group of units) on a pro rata basis.

Impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

#### (i) Trade and other receivables

Trade receivables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest method, less any allowance for expected credit losses. Trade receivables are generally due for settlement within 30 - 60 days.

The consolidated entity has applied the simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance. To measure the expected credit losses, trade receivables have been grouped based on days overdue. An estimate for doubtful debts is made when collection of the full amount is no longer probable. Bad debts are written off when identified.

#### (j) Cash and cash equivalents

Cash and short-term deposits in the Statement of Financial Position comprise cash at bank and in hand and short-term deposits with an original maturity of three months or less.

For the purposes of the Statement of Cash Flows, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts.

Funds placed on deposit with financial institutions to secure performance bonds are classified as non-current other receivables and not included in cash and cash equivalents.

#### (k) Trade and other payables

These amounts represent liabilities for goods and services provided to the Group prior to the end of the financial year and which are unpaid. Due to their short-term nature they are measured at amortised cost and are not discounted. The amounts are unsecured and are usually paid within 30 days of recognition.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### (l) Borrowings and finance costs

Loans and borrowings are initially recognised at the fair value of the consideration received, net of transaction costs. They are subsequently measured at amortised cost using the effective interest method.

The component of the convertible notes that exhibits characteristics of a liability is recognised as a liability in the statement of financial position, net of transaction costs.

On the issue of the convertible notes the fair value of the liability component is determined using a market rate for an equivalent non-convertible bond and this amount is carried as a non-current liability on the amortised cost basis until extinguished on conversion or redemption. The increase in the liability due to the passage of time is recognised as a finance cost. The remainder of the proceeds are allocated to the conversion option that is recognised and included in shareholders equity as a convertible note reserve, net of transaction costs. The carrying amount of the conversion option is not remeasured in the subsequent years. The corresponding interest on convertible notes is expensed to profit or loss.

Finance costs attributable to qualifying assets are capitalised as part of the asset. All other finance costs are expensed in the period in which they are incurred.

### (m) Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability.

Where discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

### (n) Employee benefits

#### (i) Share based payments

The cost of equity-settled transactions with employees is measured by reference to the fair value at the date at which they are granted. The fair value is determined using the Black Scholes model. Further details are given in Note 28.

The cost of equity-settled transactions is recognised, together with a corresponding increase in equity, over the period in which the performance conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award (**Vesting Date**).

The cumulative expense recognised for equity-settled transactions at each reporting date until Vesting Date reflects (i) the extent to which the vesting period has surpassed and (ii) the number of awards that, in the opinion of the directors of the Group, will ultimately vest. This opinion is formed based on the best available information at balance date. No adjustment is made for the likelihood of market performance conditions being met as the effect of these conditions is included in the determination of fair value at grant date. No expense is recognised for awards that do not ultimately vest, except for awards where vesting is conditional upon a market condition. Where the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified. In addition, an expense is recognised for any increase in the value of the transaction as a result of the modification, as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. However, if a new award is substituted for the cancelled award and designated as a replacement award on the date that it is granted, the cancelled and new award are treated as if they were a modification of the original award, as described in the previous paragraph.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### (ii) Employee benefits

Annual leave liabilities are measured at the amounts expected to be paid when the liabilities are settled. Long service leave liabilities are measured at the present value of the estimated future cash outflows for the services provided by employees up to the reporting date.

Liabilities not expected to be settled within twelve months are discounted using market yields at the reporting date on high quality corporate bonds with terms to maturity that match, as closely as possible to the related liability.

### (o) Revenue

Revenue is recognised at an amount that reflects the consideration to which the Group is expected to be entitled in exchange for transferring goods or services to a customer. For each contract with a customer, the consolidated entity: identifies the contract with a customer; identifies the performance obligations in the contract; determines the transaction price which takes into account estimates of variable consideration and the time value of money; allocates the transaction price to the separate performance obligations on the basis of the relative stand-alone selling price of each distinct good or service to be delivered; and recognises revenue when or as each performance obligation is satisfied in a manner that depicts the transfer to the customer of the goods or services promised.

### (i) Interest

Revenue is recognised as the interest accrues (using the effective interest method, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial instrument) to the net carrying amount of the financial asset.

### (p) Income tax

#### (i) Tax consolidation

The Company and its wholly-owned Australian resident entity are part of a tax-consolidated group. As a consequence, all members of the tax-consolidated group are taxed as a single entity from that date. The head entity within the tax-consolidated group is Orion Minerals Ltd.

### (q) Other taxes

Revenues, expenses and assets are recognised net of the amount of goods and services tax (**GST**) or value added tax (**VAT**) except where the GST or VAT incurred on a purchase of goods and services is not recoverable from the taxation authority, in which case the GST or VAT is recognised as part of the cost of acquisition of the asset or as part of the expense item as applicable. Receivables and payables are stated with the amount of GST or VAT included. The net amount of GST or VAT recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the Statement of Financial Position.

Cash flows are included in the Cash Flow statement on a gross basis and the GST or VAT component of cash flows arising from investing and financing activities, which is recoverable from, or payable to, the taxation authority are classified as operating cash flows.

### (r) Exploration and evaluation expenditure

Exploration and evaluation expenditure incurred by or on behalf of the Group is accumulated separately for each area of interest. Such expenditure comprises net direct costs and an appropriate portion of related overhead expenditure which can be directly attributed to operational activities in the area of interest, but does not include general overheads or administrative expenditure not having a specific nexus with a particular area of interest.

Each area of interest is limited to a size related to a known or probable mineral resource capable of supporting a mining operation.

**2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)**

Expenditure incurred on activities that precede exploration and evaluation of mineral resources, including all expenditure incurred prior to securing legal rights to explore an area, is expensed as incurred. For each area of interest the expenditure is recognised as an exploration and evaluation asset where the following conditions are satisfied:

- such costs are expected to be recouped through successful development and exploitation of the area of interest or, alternatively, by its sale; or
- exploration activities in the area of interest have not, at balance date reached a stage which permits a reasonable assessment of the existence or otherwise of economically recoverable reserves.

Exploration and evaluation assets include:

- acquisition of rights to explore;
- topographical, geological and geophysical studies;
- exploration drilling, trenching and sampling; and
- activities in relation to evaluating the technical feasibility and commercial viability of extracting the mineral resources.

General and administrative costs are not recognised as an exploration and evaluation asset. These costs are expensed as incurred. Exploration and evaluation assets are classified as tangible or intangible according to the nature of the assets. As the assets are not yet ready for use, they are not depreciated. Assets that are classified as tangible assets include:

- piping and pumps;
- tanks; and
- exploration vehicles and drilling equipment.

Assets that are classified as intangible assets include:

- drilling rights;
- acquired rights to explore;
- exploratory drilling costs; and
- trenching and sampling costs.

Exploration expenditure which no longer satisfies the above policy is written off. In addition, a provision is raised against exploration expenditure where the directors are of the opinion that the carried forward net cost may not be recoverable under the above policy. The increase in the provision is charged against the profit or loss for the year.

When an area of interest is abandoned, any expenditure carried forward in respect of that area is written off in the year in which the decision to abandon is made, firstly against any existing provision for that expenditure, with any remaining balance being charged to profit or loss.

Expenditure is not carried forward in respect of any area of interest/mineral resource unless the economic entity's rights of tenure to that area of interest are current. Amortisation is not charged on areas under development, pending commencement of production.

Exploration and evaluation assets are assessed for impairment if:

- the term of exploration license in the specific area of interest has expired during the reporting period or will expire in the near future, and is not expected to be renewed;
- substantive expenditure on further exploration for and evaluation of mineral resources in the specific area are not budgeted nor planned;
- exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and a decision has been made to discontinue such activities in the specified area; or
- sufficient data exists to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

For the purposes of impairment testing, exploration and evaluation assets are allocated to cash-generating units to which the exploration activity relates. The cash generating unit shall not be larger than the area of interest. Each area of interest is reviewed at the end of each accounting period and accumulated costs are written off to the extent that they are not expected to be recoverable in the future.

### (s) Rehabilitation provision

A provision has been made for the present value of anticipated costs for future rehabilitation of land explored or mined. The Group's mining and exploration activities are subject to various laws and regulations governing the protection of the environment. The Group recognises management's best estimate for assets retirement obligations and site rehabilitations in the period in which they are incurred. Actual costs incurred in the future periods could differ materially from the estimates. Additionally, future changes to environmental laws and regulations, life of mine estimates and discount rates could affect the carrying amount of this provision.

### (t) Critical accounting judgements and key sources of estimation uncertainty

In the application of AASB'S management is required to make judgments, estimates and assumptions about carrying values of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstance, the results of which form the basis of making the judgments. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the year in which the estimate is revised if the revision affects only that year, or in the year of the revision and future years if the revision affects both current and future years.

Judgments made by management that have significant effects on the financial statements and estimates with a significant risk of material adjustments in the next year are disclosed, where applicable, in the relevant notes to the financial statements and include:

- Note 9 - Deferred exploration, evaluation and development  
Exploration and evaluation costs have been capitalised on the basis that mineral resource drilling is ongoing and that the Group may commence commercial production in the future, from which time the costs will be amortised in proportion to the depletion of the mineral resources. Key judgements are applied in considering costs to be capitalised which includes determining expenditures directly related to these activities and allocating overheads between those that are expensed and capitalised. In addition, costs are only capitalised that are expected to be recovered either through successful development or sale of the relevant mining interest.
- Note 12 – Provisions  
A provision has been made for the present value of anticipated costs for future rehabilitation of land explored or mined. The Group's exploration activities are subject to various laws and regulations governing the protection of the environment. The Group recognises management's best estimate for assets site rehabilitations in the period in which they are incurred. Actual costs incurred in the future periods could differ materially from the estimates.
- Note 28 - Measurement of share based payments  
The Group measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. The fair value is determined by using Black-Scholes model taking into account the terms and conditions upon which the instruments were granted. The accounting estimates and assumptions relating to equity-settled share-based payments would have no impact on the carrying amounts of assets and liabilities within the next annual reporting period but may impact profit or loss and equity.

**2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)****(u) Earnings per share**

The Group presents basic and diluted earnings per share (**EPS**) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period. Diluted EPS is determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding which have been issued for no consideration in relation to the dilutive potential ordinary shares, which comprise share options granted to employees, contract personnel, shareholders and corporate entities engaged by the Group, that are expected to be exercised.

**(v) Segment reporting****(i) Determination and presentation of operating segments**

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Group's other components. All operating segments' operating results are regularly reviewed by the Group's Managing Director and Chief Executive Officer to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available.

Segment results that are reported to the Managing Director and Chief Executive Officer include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Unallocated items comprise mainly corporate assets (primarily the Company's headquarters), head office expenses, and income tax assets and liabilities. Segment capital expenditure is the total cost incurred during the period to acquire plant and equipment, and intangible assets other than goodwill.

**(w) Share capital**

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of ordinary shares and share options are recognised as a deduction from equity, net of any tax effects. Dividends on ordinary shares are recognised as a liability in the period in which they are declared.

**(x) Determination of fair values**

A number of the Group's accounting policies and disclosures require the determination of fair value, for both financial and non-financial assets and liabilities. Fair values have been determined for measurement and / or disclosure purposes based on the following methods. When applicable, further information about the assumptions made in determining fair values is disclosed in the notes specific to that asset or liability.

**(i) Share-based payment transactions**

The fair value of the employee share options and the share appreciation rights is measured using the Black-Scholes formula. Measurement inputs include share price on measurement date, exercise price of the instrument, expected volatility (based on weighted average historic volatility adjusted for changes expected due to publicly available information), weighted average expected life of the instruments (based on historical experience and general option holder behavior), expected dividends, and the risk-free interest rate (based on government bonds). Service and non-market performance conditions attached to the transactions are not taken into account in determining fair value.

**(y) Fair value measurement hierarchy**

The Group is required to classify all assets and liabilities, measured at fair value, using a three level hierarchy, based on the lowest level of input that is significant to the entire fair value measurement, being: Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date; Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and Level 3: Unobservable inputs for the asset or liability. Considerable judgement is required to determine what is significant to fair value and therefore which category the asset or liability is placed in can be subjective.

The fair value of assets and liabilities classified as level 3 is determined by the use of valuation models. These include discounted cash flow analysis or the use of observable inputs that require significant adjustments based on unobservable inputs.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### (z) Rounding of amounts

The Company is of a kind referred to in the Corporations Instrument 2016/191, issued by the Australian Securities and Investment Commission, relation to 'rounding off'. Amounts in this report have been rounded off in accordance with that Corporations Instrument to the nearest thousand dollars or in certain cases, to the nearest dollar.

## 3 REVENUES AND EXPENSES

Other income	2019 \$'000	2018 \$000
Sundry revenue	---	6
Profit on sale of plant, equipment and tenement area	---	1,276
Services rendered to associate companies	62	11
<b>Total other income</b>	<b>62</b>	<b>1,293</b>
Other operational expenses	2019 \$'000	2018 \$'000
Contractor, consultants and advisory expense	2,595	1,555
Investor and public relations	624	403
Communications and information technology	82	65
Depreciation	47	45
Loss on disposal of plant and equipment	10	---
Occupancy	102	72
Travel and accommodation	480	498
Directors fees and employment expenses	405	196
Other corporate and administrative expenses	80	121
<b>Total other operational expenses</b>	<b>4,425</b>	<b>2,955</b>
Non-operating expenses	2019 \$'000	2018 \$'000
Net foreign exchange (gain)/loss	(1,152)	283
Other items written-off	(40)	---
Share based payment expense	1,649	426
<b>Total non-operating expenses</b>	<b>457</b>	<b>709</b>

## 4 CASH AND CASH EQUIVALENTS

	2019 \$'000	2018 \$'000
Cash and cash equivalents	1,391	4,782
Short term deposits	4	29
	<b>1,395</b>	<b>4,811</b>
<b>Reconciliation</b>	<b>2019 \$'000</b>	<b>2018 \$'000</b>
Net loss	(10,750)	(8,833)
<i>Adjustment for:</i>		
Depreciation	47	45
Loss on disposal of PPE	10	---
Movement in securities in other entities	---	440
Share base payments expense	1,649	426
(Loss) on movement in securities in other entities	(15)	---
Other items written off	(9)	---
Gain on disposal of plant and equipment	---	(1,276)
Gain on foreign exchange	(1,152)	283
<i>Changes in assets and liabilities:</i>		
Decrease in trade and other payables	(363)	1,122
Decrease/(Increase) other current assets	2,736	(7,798)
Decrease/Increase in other non-current liabilities	(3,288)	8,805
Increase in provisions	430	219
<b>Net cash used in operating activities</b>	<b>(10,705)</b>	<b>(6,567)</b>

## 5 TRADE AND OTHER RECEIVABLES

	2019 \$'000	2018 \$'000
<b>Current receivables:</b>		
Security deposits (a)	14	---
Other receivables	31	14
Sale of Connors Arc Project – Queensland	---	2,500
Interest receivable	2	3
Taxes receivables	360	616
	<b>407</b>	<b>3,133</b>
<b>Non-current receivables:</b>		
Security deposits (a)	29	43
Deposits	123	123
	<b>152</b>	<b>166</b>

Other receivables are non-interest bearing and are generally on 30-day terms.

- (a) Security deposits comprise cash placed on deposit to secure bank guarantees in respect of obligations entered into for office rental obligations in South Africa and Australia. These deposits are not available to finance the Group's day to day operations.

## 6 REHABILITATION BONDS

	2019 \$'000	2018 \$'000
<b>Current</b>		
Environmental bonds (a)	276	215
<b>Non-current</b>		
Environmental bonds (a)	2,372	2,139
<b>Total</b>	<b>2,648</b>	<b>2,354</b>

- (a) Environmental bonds are cash placed on deposit to secure bank guarantees in respect of obligations entered into for environmental performance bonds issued in favour of the relevant government body for projects located in Victoria, Australia and South Africa. The guarantees are held as both current and non-current receivables.

The Group also has environmental obligations for the Prieska Project. This amount is held on deposit via a call account with the bank and by bank guarantee issued to the government body. These funds can be applied by the government body for rehabilitation works should the Group fail to meet regulatory standards for environmental rehabilitation. This deposit offsets the provisional non-current liability held in the Groups accounts (refer Note 12).

## 7 SECURITIES HELD IN OTHER ENTITIES

	2019 \$'000	2018 \$'000
Opening balance – 1 July	15	455
<u>Revaluation movement</u>		
Unlisted securities in other entities (a)	---	(455)
Listed securities in other entities	(15)	15
<b>Closing balance – 30 June</b>	<b>---</b>	<b>15</b>

Securities held in other entities as an investment of unlisted options in a listed company on the ASX. The fair value of these securities is measured using an appropriate financial model, including the value of the entities share price, as published, in the relevant market domain. Securities held in other entities as an investment of shares are those listed on the ASX. Valuation as at period end is calculated using closing share price at that time.

- (a) As at 30 June 2018, there was an indication that the Company's carrying amount of unlisted securities held in other entities may not be fully recoverable. As the carrying amount exceeded the recoverable amount, the asset was impaired and written down to its recoverable amount.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS *continued*

FOR THE YEAR ENDED 30 JUNE 2019

## 8 PLANT AND EQUIPMENT

	2019 \$'000	2018 \$'000
Opening balance – 1 July		
Cost	445	1,069
Accumulated depreciation	(298)	(978)
<b>Opening written down value</b>	<b>147</b>	<b>91</b>
Additions	4	101
Disposals or write offs	(11)	---
Effect of movement in exchange rate	2	
Depreciation expense for the year	(47)	(45)
<b>Written down value at 30 June</b>	<b>95</b>	<b>147</b>
Closing balance – 30 June		
Cost	425	445
Accumulated depreciation	(330)	(298)

## 9 DEFERRED EXPLORATION, EVALUATION AND DEVELOPMENT

	2019 \$'000	2018 \$'000
<b>Acquired mineral rights</b>		
Opening cost	14,161	14,161
Exploration and evaluation acquired	---	---
<b>Exploration, evaluation and development</b>	<b>14,161</b>	<b>14,161</b>
<b>Deferred exploration and evaluation expenditure</b>		
Opening cost	14,958	915
Expenditure incurred	14,925	17,638
Exploration expensed	(3,053)	(2,371)
Impairment	---	---
Asset derecognised – sale of tenements (a)	---	(1,224)
<b>Deferred exploration and evaluation expenditure</b>	<b>26,830</b>	<b>14,958</b>
<b>Net carrying amount at 30 June</b>	<b>40,991</b>	<b>29,119</b>

- (a) On 2 May 2018, the Company signed a binding sale agreement with Evolution Mining Limited for 100% interest in Connors Arc Project tenements. Under the terms of the sale agreement, completion was achieved as at 30 June 2018 and as a result, the project was derecognised at its carrying value of \$1.224M.

## 10 LOAN - JOINT VENTURE PARTNERS

In September 2017, the Company entered into a binding earn-in agreement to acquire the earn-in rights over the Jacomynspan Nickel-Copper-PGE Project (South Africa) (**Jacomynspan Project**) from two companies, Namaqua Nickel Mining (Pty) Ltd and Disawell (Pty) Ltd (**Namaqua Disawell Companies**), which hold partly overlapping prospecting rights and mining right applications. The earn-in agreement is principally on the same terms as the binding term sheet entered into in July 2016.

Orion's earn-in right will be via a South African-registered special-purpose vehicle and subsidiary of the Company, Area Metals Holdings No 3 (Pty) Ltd (**AMH3**), which was established by the Company 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.

During the reporting period, the Group continued to advance exploration programs on the Jacomynspan Project, expending an additional \$1.02M. This expenditure, under the terms of the agreement, is held in the shareholder loan account and AMH3 is nearing the next stage earn-in right, which will see its shareholding increase by a further 25% interest (making its total interest 50% (Orion 37%)) by expending a further \$1.32M on the Jacomynspan Project (\$1.98M total expenditure) over a further 12 months (2 years from Earn-In Commencement) (**Second Earn In Right**).

Other key points of the agreement:

- The Namaqua Disawell Companies shareholders on the date of execution of the term sheet (**Signature Date**) are entitled to a 2% royalty in proportion to their beneficial interest in the Namaqua Disawell 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, Orion shall have the right at its sole discretion to buy out the Royalty for an aggregate value of \$2.65M.
- As noted above, all expenditure by Orion shall be advanced to the Namaqua Disawell Companies as an Orion loan. In addition to the Orion loan, the Namaqua Disawell Companies have existing shareholder loans of ZAR78.5M (~\$7.85M) as at the Signature Date.

As at 30 June 2019, the Orion loan totalled \$2.04M (2018: \$1.03M).

## 11 TRADE AND OTHER PAYABLES

	2019 \$'000	2018 \$'000
<b>Current</b>		
Trade payables	1,762	1,499
Other payables	237	864
	<b>1,999</b>	<b>2,363</b>

## 12 PROVISIONS

	2019 \$'000	2018 \$'000
<b>Current</b>		
Employee benefits – annual leave	170	138
Rehabilitation	---	---
	<b>170</b>	<b>138</b>
<b>Non-current</b>		
Rehabilitation (a)	2,353	1,963
Employee benefits – long service leave	10	2
	<b>2,363</b>	<b>1,965</b>
<b>Total</b>	<b>2,533</b>	<b>2,103</b>

- (a) In South Africa, long term environmental obligations are based on the Group's environmental plans, in compliance with current environmental and regulatory requirements. Full provision is made based on the net present value of the estimated cost of restoring the environmental disturbance that has occurred up to the reporting date. The estimated cost of rehabilitation is reviewed annually and adjusted as appropriate for changes in legislation. The rehabilitation provision for the Group's South African project is offset by a guarantee held on deposit (\$2,044M) (refer Note 6).

In Australia, the state government regulations in Victoria require rehabilitation of drill sites including any other sites where the Group has caused surface and ground disturbance. The estimated cost of rehabilitation is reviewed annually and adjusted as appropriate for changes in legislation. The rehabilitation provision for the Group's Victorian project is partially offset by a guarantee held on deposit (refer Note 6).

## 13 LOANS WITH OTHER ENTITIES AND RELATED PARTIES

	2019 \$'000	2018 \$'000
<b>Current</b>		
Bridge loan (a)	---	6,875
Convertible loan (b)	3,947	---
	<b>3,947</b>	<b>6,875</b>
<b>Non-current</b>		
AASMF loan (c)	1,748	1,539
	<b>1,748</b>	<b>1,539</b>
<b>Total</b>	<b>5,695</b>	<b>8,414</b>

- (a) Bridge Loan

The Company announced to the ASX on 18 August 2017 that a \$6.0M bridge loan facility agreement (**Bridge Loan Facility**) had been entered into with Tembo Capital Mining Fund II LP and its affiliates (**Tembo Capital**), a cornerstone shareholder of the Company.

The key terms of the Bridge Loan agreement are:

- Bridge Loan Amount - Up to \$6.0M, available in two tranches. The first tranche is to be in one instalment of \$3.0M and the second tranche is to be in minimum instalments of \$1.0M each;
- Interest - capitalised at 12% per annum accrued daily on the amount drawn down;

### 13 LOANS WITH OTHER ENTITIES AND RELATED PARTIES (continued)

- Repayment - repayable on the earlier of 15 December 2017(extended to 30 September 2018) and the completion of a capital raising(s) whether by way of a pro rata issue and/ or security purchase plan of Shares and/or a placement or placements of Shares undertaken by the Company to raise such amount as is required, in Tembo Capital's reasonable opinion, to progress the Prieska Project BFS, continue exploration programs at the Company's South African projects and for working capital (**Equity Capital Raising**);
- Equity Capital Raising - the Company will use its best endeavours to undertake an Equity Capital Raising before 15 December 2017. Orion shall procure that Tembo Capital (or its affiliate) is offered the right to underwrite or sub-underwrite any pro rata issue and/or security purchase plan which form part of an Equity Capital Raising, on standard market terms and conditions;
- Set-off under Entitlement Offer - repayment of the Bridge Loan will be set off against the amount to be paid by Tembo Capital for the issue and allotment of Shares to Tembo Capital under the Equity Capital Raising and/or at Tembo Capital's election against the underwriting amount payable by Tembo Capital in respect of any shortfall under any 'pro rata issue' which form part of an Equity Capital Raising in its capacity as underwriter or sub-underwriter. Any surplus amount owing by Tembo Capital after the set-off will be paid by Tembo Capital in accordance with the terms of the relevant Equity Capital Raising and the underwriting arrangements (as applicable);
- Establishment fee - capitalised at 5% of the Bridge Loan facility amount; and
- Security - the Bridge Loan is unsecured.

On 15 November 2017, an extension to the term of the Bridge Loan from 15 December 2017 to 31 May 2018, was agreed between the parties.

As part of the terms of amendment, the Company agreed to increase the establishment fee from 5% to 6.67% of the Bridge Loan facility amount (capitalised).

On 31 May 2018, an extension to the term of the Bridge Loan from 31 May 2018 to 30 September 2018 was agreed between the parties.

Under the terms of the Convertible Loan (refer below), the Bridge Loan was repaid in full on 4 February 2019.

#### (b) Convertible Loan

On 25 January 2019, the Company announced a \$3.6M loan facility with Tembo Capital (**Loan Facility**). The key terms of the Loan Facility are:

- Loan Facility Amount: Up to \$3.6M, available in two tranches. The first tranche of \$0.6M was used to repay all amounts owing under the previous Bridge Loan (refer above), with further tranches to be in minimum instalments of \$1M each;
- Interest: Capitalised at 12% per annum accrued daily on the amount drawn down;
- Repayment: Tembo Capital may elect for repayment of the outstanding amount to be satisfied by the issue of Shares by the Company to Tembo Capital at a deemed issue price of \$0.026 per Share, subject to receipt of Shareholder approval. The Outstanding Amount must be repaid by 25 January 2020, or if Tembo Capital elects to receive Shares in repayment of the outstanding amount in lieu of payment in cash, the date on which the Shares are to be issued to Tembo Capital (or such later date as may be agreed between Tembo Capital and Orion);
- Establishment fee:
  - Cash - capitalised 5% of the Loan Facility Amount, payable on the Repayment date; and
  - Options - 11M unlisted Orion options, exercisable at a price of \$0.03 per option, expiring on the 17 June 2024.
- Security: Loan Facility is unsecured.

At year end, the balance of the Loan Facility was \$3.95M (including capitalised interest and fees).

**13 LOANS WITH OTHER ENTITIES AND RELATED PARTIES (continued)**

## (c) AASMF Loan

On 2 November 2015, Repli Trading No 27 (Pty) Ltd (**Repli**) (a 73.33% owned subsidiary of Agama Exploration & Mining (Pty) Ltd (**Agama**)) and Anglo American Sefa Mining Fund (**AASMF**) entered into a loan agreement for the further exploration and development of the Prieska Project. Under the terms of the loan, AASMF shall advance ZAR14.25M to Repli. The key terms of the agreement are as follows:

- Loan amount ZAR14.25M;
- Interest rate will be the prime lending rate in South Africa;
- The disbursement of the loan will be subject to AASMF notifying Repli that it is satisfied with the results of the updated scoping study;
- Repayment date will be the earlier of 3 years from the date of the advance or on the date which Repli raises any additional finance for the further development of the Prieska Project; and
- On the advancement of the loan, 29.17% of the shares held in Repli by the Agama group (a wholly owned subsidiary of Orion), will be pledged as security to AASMF for the performance of Repli's obligations in terms of the loan.

On 1 August 2017, Repli drew down on the available AASMF loan in full and at year end, the balance of the Loan was \$1.75M (including capitalised interest).

**14 PREFERENCE SHARES**

	2019 \$'000	2018 \$'000
AASMF preference shares – principal	1,593	1,550
AASMF preference shares – provision for dividends and settlement premium	936	619
<b>Total</b>	<b>2,529</b>	<b>2,169</b>

Preference shares are classified as financial liabilities and therefore the accrued dividends and settlement premium are recorded as an interest expense in the consolidated statement of profit and loss and other comprehensive income

Repli, applied for a funding facility from the AASMF for the further exploration and development of the Prieska Project. On 14 November 2014, AASMF approved the funding facility for an amount of ZAR30.0M, subject to certain terms and conditions. The funding is provided in two tranches, the first tranche for ZAR15.75M by way of the issue of Repli preference shares and the second tranche for ZAR14.25M by way of a loan from AASMF (refer Note 13).

On 2 November 2015, a subscription agreement was entered into between Repli and AASMF, on 5 November 2015 the Subscription Price was paid to Repli and on the same day the Preference Shares were issued to AASMF. Under the terms of the agreement, AASMF subscribed for 15.75M Repli redeemable preference shares at a subscription price of ZAR1 per redeemable preference share. The key terms of the agreement are as follows:

- 15.75M cumulative redeemable non-participating preference shares;
- Subscription price ZAR15.75M (~\$1.59M);
- Dividend rate – prime lending rate in South Africa;
- Dividend payment – dividends accrue annually based on the subscription price. Fifty percent of the dividends which have accrued and accumulated from the date of issue until 2 years after the Prieska Project mining right (Mining Right) has been issued shall become due and payable on the scheduled dividend date (approximately 4 years after the issue date). Balance of the accrued and accumulated dividends to be paid at the relevant redemption date;

## 14 PREFERENCE SHARES (continued)

- Redemption date is the earlier of 7 years after the issue date or 4 years after the Mining Right has been issued;
- Redemption amount consists of:
  - ZAR15.75M;
  - any unpaid and accumulated dividends; and
  - Settlement premium based on internal rate of return (**IRR**) of 13.5%, taking into account all cash flows from the preference shares in order to get an overall IRR of 13.5% (IRR is fixed for the duration that the preference shares are outstanding).
- Preference shares are unsecured, but AASMF will hold 26% voting rights in Repli in the event that there is a default on the part of Repli; and
- Funding to principally used for a 12 month exploration program on the NW Oxide Zone at the Prieska Project and the use the results to update the scoping study.

On 4 March 2019, the Company announced it had reached agreement with AASMF to redeem the preference shares for Shares. Under the agreement, AASMF agreed to the redemption of the preference shares, in exchange for Orion Shares, the ASX and JSE listed parent company of Repli (**Share Exchange Agreement**).

Under the terms of the Share Exchange Agreement and following the receipt of Orion shareholder approval, in satisfaction of the redemption amount payable by Repli to AASMF of ZAR25.05M (~A\$2.5M), in connection with the voluntary redemption of the preference shares by Repli, on 5 July 2019, the Company issued 77.57M Shares to AASMF at a deemed issue price of \$0.0323 per Share.

## 15 CONVERTIBLE NOTES

	2019 \$'000	2018 \$'000
<b>Convertible note liability</b>		
Opening balance	6,001	5,824
Convertible note liability – movement	(7)	177
Convertible notes – converted	(270)	---
<b>Closing balance</b>	<b>5,724</b>	<b>6,001</b>

On 7 February 2017, the Company announced that it was proposing to conduct a capital raising through the issue of convertible notes to various sophisticated and professional investors, each with a face value of \$0.026 (**Convertible Notes**).

The Company obtained shareholder approval for the Convertible Notes issue at a meeting of shareholders held on 13 March 2017. Following obtaining approval, on 17 March 2017 the Company issued 232,692,294 Convertible Notes each with a face value of \$0.026, raising \$6.05M. Key terms of the Convertible Notes are summarised as follows:

- Maturity Date: 30 September 2019 (previously 17 March 2019);
- Interest: 12% per annum calculated and payable quarterly in arrears;
- Conversion Price: \$0.026 per Share;
- Conversion: holders of the Convertible Notes may elect to convert part or all of their Convertible Notes at any time prior to the Maturity Date, provided the total face value of the Notes is not less than \$0.25M;
- Early redemption by the Company: the Company may elect to redeem all or some of the Convertible Notes by notice to the noteholder, however the noteholder shall have the right, within 14 days of receipt of an early redemption notice from the Company, to convert the Convertible Notes the subject of the early redemption notice into Shares at the Conversion Price;

**15 CONVERTIBLE NOTES (continued)**

- Early redemption by the noteholder: the noteholders may require the Company to redeem the Convertible Notes if an event of default occurs and the noteholders by special resolution approve the redemption;
- At any time before the Maturity Date, a noteholder may elect to redeem and set off some or all of the Convertible Notes held by it for the redemption amount as part of an equity capital raising by the Company permitted by the note deed and in which the noteholder may have a right to participate in (**Equity Raising**), such that the redemption amount is set off against the amount payable by the noteholder to subscribe for securities under the Equity Raising,
- Redemption amount: the redemption amount is the outstanding facility amount with respect to each Convertible Note. If any Convertible Notes are redeemed by the Company within 12 months after their issue, an additional early repayment fee of 5% of the facility amount of the Convertible Notes being redeemed is payable by the Company;
- Transferrability: The Convertible Notes are not transferrable except to an affiliate of a noteholder; and
- Security: secured over certain assets of the Company and its subsidiaries.

On 23 April 2019, the Company issued 10.38M Shares to a noteholder to satisfy the Company's obligation to issue Shares following the conversion of Convertible Notes.

Further details as to the key terms of the Convertible Notes are set out in the Company's 8 March 2017 ASX release.

**16 ISSUED CAPITAL AND RESERVES**

	2019 \$'000	2018 \$'000
Ordinary fully paid shares	121,530	102,460
	<b>121,530</b>	<b>102,460</b>

The following movements in issued capital occurred during the reporting period:

	Number of shares	Issue price	\$'000
<b>Ordinary fully paid shares</b>			
Opening balance at 1 July 2018	1,481,603,768		102,460
<i>Share Issues:</i>			
Placement (18 August 2018)	212,454,055	\$0.037	7,861
Placement (23 August 2018)	172,918,918	\$0.037	6,398
Placement (23 August 2018)	6,756,756	\$0.037	250
Placement (23 April 2019)	50,625,000	\$0.040	2,025
Placement (23 April 2019)	10,384,615	\$0.026	270
Placement (23 April 2019)	2,000,000	\$0.020	40
Placement (30 April 2019)	66,601,805	\$0.040	2,664
Less: Issue costs	---	---	(438)
<b>Total</b>	<b>2,003,344,917</b>		<b>121,530</b>

## 16 ISSUED CAPITAL AND RESERVES (continued)

The following movements in issued capital occurred during the prior period:

	Number of shares	Issue price	\$'000
<b>Ordinary fully paid shares</b>			
Opening balance at 1 July 2017	917,420,440		85,497
<i>Share Issues:</i>			
Placement (17 August 2017)	73,000,000	\$0.024	1,752
Placement (3 November 2017)	144,583,329	\$0.024	3,470
Placement (18 December 2017)	84,583,333	\$0.024	2,030
Placement (19 December 2017)	10,416,666	\$0.024	250
Placement (29 December 2017)	60,000,000	\$0.024	1,440
Placement (21 May 2018)	100,000,000	\$0.050	5,000
Placement (29 June 2018)	91,600,000	\$0.037	3,389
Less: Issue costs	---	---	(368)
<b>Total</b>	<b>1,481,603,768</b>		<b>102,460</b>

### Share based payments reserve - movement

The employee share option and share plan reserve is used to record the value of equity benefits provided to employees and directors as part of their remuneration.

The following movements in the share based payments reserve occurred during the period:

	\$'000
Opening balance at 1 July 2017	2,502
Share based payments expense	426
Unlisted share options expired and transferred to accumulated losses (i)	(825)
<b>Closing balance at 30 June 2018</b>	<b>2,103</b>
Share based payments expense	1,649
Unlisted share options expired and transferred to accumulated losses (i)	(1,065)
<b>Closing balance at 30 June 2019</b>	<b>2,687</b>

- (i) During the year, previously recognised share based payment transactions for options which had vested but subsequently expired were transferred to accumulated losses.

The following options to subscribe for ordinary fully paid shares expired during the year:

Class	Number of options	Expiry date	Exercise price
Unlisted options	1,033,072	29/03/2019	\$0.462
<b>Total</b>	<b>1,003,072</b>		

## 17 INCOME TAX

	2019 \$'000	2018 \$'000
<b>Income tax expense</b>		
(Loss) before tax	(10,750)	(8,833)
Income tax using the corporation rate of 27.5% (2018: 27.5%)	(2,956)	(2,429)
Movements in income tax expense due to:		
Non deductible expenses	---	---
Non assessable income	---	---
Employee share based payments expensed	453	117
	<b>(2,503)</b>	<b>(2,312)</b>
(Under) / over provided in prior years	---	---
Tax effect of tax losses not recognised	2,503	2,312
<b>Income tax expense/(benefit)</b>	<b>---</b>	<b>---</b>

No income tax is payable by the Group. The directors have considered it prudent not to bring to account the future income tax benefit of income tax losses and exploration deductions until it is probable that future taxable profits will be available against which the unused tax losses can be utilised.

The Group has estimated un-recouped gross Australian income tax losses of approximately \$19.95M (2018: \$17.07M) which may be available to offset against taxable income in future years, subject to continuing to meet relevant statutory tests.

The Group also has carry forward tax losses in South Africa of approximately ZAR3.94M (~\$0.4M) (2018: ~\$0.37M) and unredeemed capital expenditure carried forward, which can be offset against future mining income, of ZAR367.13M (~\$37.12M) (2018: ~\$21.05M).

Completed in the prior financial year, the Group reviewed the Australian entities estimated un-recouped gross Australian income tax losses. Results of this review identified approximately \$17.0M which may be available to the Group to offset against future taxable income. Such benefits have not been recognised and will only be obtained if:

- the Group derives future assessable income of a nature and an amount sufficient to enable the benefit from the deductions for the loss to be realised;
- the Group continues to comply with the conditions for deductibility imposed by tax legislation; and
- no changes in taxation legislation adversely affect the economic entity in realising the benefit from the deductions for the losses.

To the extent that it does not offset a net deferred tax liability, a deferred tax asset has not been recognised in the accounts for these unused losses because it is not probable that future taxable profit will be available to use against such losses.

**Tax consolidation**

For the purposes of Australian income taxation, the Company and its 100% controlled Australian subsidiaries have formed a tax consolidation group. The parent entity, Orion Minerals Ltd, reports to the Australian Taxation Office on behalf of all the Australian entities.

## 18 LOSS PER SHARE

Basic loss per share amounts are calculated by dividing the net loss for the year attributable to ordinary equity holders of the parent by the weighted average number of ordinary shares outstanding during the year.

Diluted earnings per share amounts are calculated by dividing the net loss attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the year (adjusted for the effects of potentially dilutive options and dilutive partly paid contributing shares).

The following reflects the income and share data used to calculate basic and diluted earnings per share:

### a) Basic and diluted loss per share

	2019 Cents	2018 Cents
Loss attributable to owners of the Company	(0.53)	(0.76)
Diluted loss attributable to owners of the Company	(0.53)	(0.76)

### b) Reconciliation of loss used in calculating earnings per share

	2019 \$'000	2018 \$'000
Loss from continuing operations attributable to equity holders of the Group	(10,750)	(9,270)
Loss attributable non-controlling interest	989	437
Loss attributable to owners of the Company	(9,761)	(8,833)

### c) Weighted average number of shares

	2019 Number	2018 Number
Weighted average number of ordinary shares used as the denominator in calculating basic earnings per share.	1,844,523,096	1,167,249,479
Weighted average number of ordinary shares and potential ordinary shares used as the denominator in calculating diluted earnings per share.	1,844,523,096	1,167,249,479

### d) Headline loss per share

	2019 \$'000	2018 \$'000
Loss before income tax	(9,761)	(8,833)
Impairment of non-current assets reversal	---	---
Plant and equipment written off	---	---
<b>Adjusted earnings</b>	<b>(9,761)</b>	<b>(8,833)</b>
Weighted average number of shares	1,844,523,096	1,167,249,479
Earnings / (loss) per share (cents per share)	(0.53)	(0.76)
Diluted earnings / (loss) per share (cents per share)	(0.53)	(0.76)

## 19 FINANCIAL INSTRUMENTS

### Financial Risk Management

#### Overview

The Group has exposure to the following risks from its use of financial instruments:

- Market risk.
- Credit risk.
- Liquidity risk.

This note presents information about the Group's exposure to each of the above risks, its objectives, policies and processes for measuring and managing risk, and the management of capital.

The Board of Directors has overall responsibility for the establishment and oversight of the risk management framework.

Risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities.

The Group's Audit Committee oversees how management monitors compliance with the Group's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Group.

The Group's principal financial instruments are cash, short-term deposits, receivables, loan and payables.

#### **Market risk**

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the Group's income and expenses or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return.

#### Equity price risk

The Group is currently not subject to equity price risk movement.

#### Interest rate risk

Interest rate risk is the risk that the value of a financial instrument or cash flows associated with the instrument will fluctuate due to changes in market interest rates. Interest rate risk arises from fluctuations in interest bearing financial assets and liabilities that the Group uses. Interest bearing assets comprise cash and cash equivalents which are considered to be short-term liquid assets and investment decisions are governed by the monetary policy.

During the year, the Group had no variable rate interest bearing liability.

It is the Group's policy to settle trade payables within the credit terms allowed and therefore not incur interest on overdue balances.

The Group is not materially exposed to changes in market interest rates. A 1% variation in interest rates would result in interest revenue changing by up to \$2,000 (2018: \$1,000) based on year-end cash balances, and \$nil (2018: \$nil) based on year-end security bonds and deposits balances, assuming all other variables remain unchanged.

The Group does not account for any fixed rate financial assets and liabilities at fair value through profit and loss.

#### **Credit risk**

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and investment securities.

The Group does not presently have customers and consequently does not have credit exposure to outstanding receivables. Other receivables represent GST refundable from the Australian Taxation Office, VAT refundable from South African Revenue Office and security bonds and deposits. Trade and other receivables are neither past due nor impaired.

## 19 FINANCIAL INSTRUMENTS (continued)

### Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation. Refer to Note 2(a)(iii) for a summary of the Group's current plans for managing its liquidity risk.

The Group's objective is to maintain a balance between continuity of funding and flexibility. The Group's exposure to financial obligations relating to corporate administration and projects expenditure, are subject to budgeting and reporting controls, to ensure that such obligations do not exceed cash held and known cash inflows for a period of at least 1 year.

### Fair value of financial assets and liabilities

The fair value of cash and cash equivalents and non-interest bearing financial assets and financial liabilities of the Group is equal to their carrying value.

The carrying amounts of trade and other receivables and trade and other payables are assumed to approximate their fair values due to their short-term nature.

The fair value of financial liabilities is estimated by discounting the remaining contractual maturities at the current market interest rate that is available for similar financial liabilities.

### Foreign currency risk

The Group is exposed to fluctuations in foreign currencies arising from expenditure in currencies other than the Group's measurement currency. The Group has foreign operations with functional currencies in South African Rand. The Group has not formalised a foreign currency risk management policy, however it monitors its foreign currency expenditure in light of exchange rate movements.

The Group has significant exposure to foreign currency risk, particularly between AUD/ZAR, at the end of the reporting period. Foreign exposure risk arises from future commercial transactions and recognised financial assets and financial liabilities which are denominated in a currency other than the Group's functional currency.

Consolidated	30 June 2019			30 June 2018		
	ZAR	EUR	GBP	ZAR	EUR	GBP
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Financial Assets</b>						
Trade and other receivables	391	---	---	633	---	---
Loan - Joint venture partner	2,042	---	---	1,026	---	---
<b>Financial Liabilities</b>						
Trade and other payables	1,544	23	21	1,874	---	2
Loan	1,748	---	---	1,539	---	---

The Group's exposure to foreign exchange is the predominately ZAR. Should the Australian dollar weaken by 10% / strengthen by 10% against the ZAR (2018: 5% weaken / 5% strengthen), with all other variables held constant, the Groups profit before tax for the year would have been \$0.09M lower / \$0.09M higher (2018: \$0.09M lower / \$0.09M higher). The change is the expected overall volatility of the ZAR:AUD, based on managements assessment of the possible fluctuations, with consideration given to the last 6 months of the reporting period and spot rate at reporting date.

### Commodity price risk

The Group's exposure to price risk is minimal at this stage of the operations. Commodity price risk is the risk that the value of a financial instrument or cash flows associated with the instrument will fluctuate due to changes in market rates. The risk arises from fluctuations in financial assets and liabilities that the Group uses.

### Capital management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders. The management of the Group's capital is performed by the Board.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS *continued*

FOR THE YEAR ENDED 30 JUNE 2019

## 19 FINANCIAL INSTRUMENTS (continued)

The Board manages the Group's liquidity ratio to ensure that it meets its financial obligations as they fall due and specifically allowing for the expenditure commitments for its mining tenements to ensure that the Group's main assets are not at risk.

Refer to Note 2(a)(iii) for a summary of the Group's current plan for managing its going concern.

None of the Group's entities are subject to externally imposed capital requirements.

The following table sets out the carrying amount, by maturity, of the financial instruments that are exposed to interest rate risk:

30 June 2019	Weighted average interest rate	Floating interest rate \$'000	Fixed interest rate maturing in 1 year or less \$'000	Fixed interest rate maturing in 2 to 5 years \$'000	Non-interest bearing \$'000	Total \$'000
Financial Assets						
Cash on hand and at bank	0.10%	1,395	---	---	---	1,395
Other receivables	1.90%	---	197	---	362	559
<b>Total</b>		<b>1,395</b>	<b>197</b>	<b>---</b>	<b>362</b>	<b>1,954</b>
Financial Liabilities						
Convertible note liability	12.00%	---	5,724	---	---	5,724
Loans	12.00%	---	3,947	1,748	---	5,695
Preference shares	13.50%	---	---	2,529	---	2,529
Trade and other payables	2.00%	---	---	---	1,999	1,999
<b>Total</b>		<b>---</b>	<b>9,671</b>	<b>4,277</b>	<b>1,999</b>	<b>15,947</b>

30 June 2018	Weighted average interest rate	Floating interest rate \$'000	Fixed interest rate maturing in 1 year or less \$'000	Fixed interest rate maturing in 2 to 5 years \$'000	Non-interest bearing \$'000	Total \$'000
Financial Assets						
Cash on hand and at bank	0.10%	4,811	---	---	---	4,811
Other receivables	2.40%	---	673	---	2,626	3,299
<b>Total</b>		<b>4,811</b>	<b>673</b>	<b>---</b>	<b>2,626</b>	<b>8,110</b>
Financial Liabilities						
Convertible note liability	12.00%	---	6,001	---	---	6,001
Loans	12.00%	---	6,875	1,539	---	8,414
Preference shares	13.50%	---	---	2,169	---	2,169
Trade and other payables	2.15%	---	---	---	2,363	2,363
<b>Total</b>		<b>---</b>	<b>12,876</b>	<b>3,708</b>	<b>2,363</b>	<b>18,947</b>

## 20 COMMITMENTS AND CONTINGENCIES

### Tenement commitments – South Africa and Australia

The Group has a portfolio of tenements located in South Africa and Victoria, which all have a requirement for a certain level of expenditure each and every year in addition to annual rental payments for the tenements. Future minimum expenditure commitments as at 30 June for the Australian tenements held, are as follows:

	2019 \$'000	2018 \$'000
Within one year	---	26
After one year but not more than five years	---	---
More than five years	---	---
	---	<b>26</b>

### Guarantees

The Company has the following contingent liabilities at 30 June 2019:

- The Group has bank guarantees in favour of the South African Government for rehabilitation obligations. The total of these guarantees at 30 June 2019 was \$2.64M (2018: \$2.35M).
- The Group also has negotiated bank guarantees in favour of the Victorian Government for rehabilitation obligations of mining and exploration tenements. The total of these guarantees at 30 June 2019 was \$0.25M (2018: \$0.25M). The Group has sufficient term deposits to cover the outstanding guarantees.
- It has guaranteed to cover the directors and officers in the event of legal claim against the individual or as a group for conduct which is within the Company guidelines, operations and procedures.

As part of the Group's environmental policy exploration and access sites are regenerated to match or exceed local government and state government expectations. The costs are not considered to be material by the group however this policy will be reviewed as exploration and development activities increase as the Company moves closer towards commercial production.

### Rental property commitments

The Group has entered into a commercial lease for office space in Melbourne, Victoria, for one year (expiring August 2019) and an office in Kimberley, South Africa for three years (expiring 31 May 2020).

There are no restrictions placed upon the lessee by entering into these leases apart from the 12 month commitment from the agreement dates.

Future minimum rentals payable under non-cancellable commercial leases as at 30 June are as follows:

	2019 \$'000	2018 \$'000
Within one year	46	53
After one year but not more than five years	3	36
More than five years	---	---
<b>Total</b>	<b>49</b>	<b>89</b>

### Guarantees

The Company has the following bonds at 30 June 2019:

- The Group has negotiated guarantees in favour of rental agreements. The total of these guarantees at 30 June 2019 was \$3,117 (2018: \$3,117).

**21 RESTATEMENT OF PRIOR PERIOD BALANCES**

Comparative amounts in the consolidated statement of profit or loss have been adjusted to reflect consistency in the presentation in the financial report for the financial year ended 30 June 2019. Effects of the reclassifications are:

Consolidated statement of profit or loss and other comprehensive income

Certain comparative figures have been reclassified in order to give a clearer reflection between the split of line items in the statement of profit or loss. The effects of the reclassification are as follows:

	June 2018 (reclassified) \$'000	June 2018 \$'000
Other income	11	---
Other expenses	---	(3,653)
Other operational expenses	(2,955)	---
Total non-operating expenses	(709)	---
<b>Total</b>	<b>(3,653)</b>	<b>(3,653)</b>

Consolidated statement of financial position

Comparative amounts in the consolidated statement of financial position have been adjusted to reflect consistency in the presentation in the financial report for the financial period ended 30 June 2018.

	June 2018 (reclassified) \$'000	June 2018 \$'000
<b>Current assets</b>		
Rehabilitation bonds	215	---
Other receivables	4	215
<b>Total</b>	<b>219</b>	<b>215</b>
<b>Non-current assets</b>		
Rehabilitation bonds	2,139	---
Other receivables	166	2,305
Loans to associates (Namaqua & Disawell)	---	4
<b>Total</b>	<b>2,305</b>	<b>2,309</b>

## 22 CONTROLLED ENTITIES

The consolidated financial statements include the financial statements of the Company and the subsidiary's listed in the following table.

Entity	County of Incorporation	Parent Ownership Interest		Non-controlling Interest	
		2019 %	2018 %	2019 %	2018 %
<b>Parent Entity</b>					
Orion Minerals Ltd	Australia				
<b>Subsidiaries</b>					
Goldstar Resources (WA) Pty Ltd	Australia	100	100	---	---
Kamax Resources Limited	Australia	100	100	---	---
Areachap Holdings No 1 Pty Ltd	Australia	100	100	---	---
Areachap Holdings No 2 Pty Ltd	Australia	100	100	---	---
Areachap Holdings No 3 Pty Ltd	Australia	100	100	---	---
RSA Services Ltd	Australia	100	100	---	---
Areachap Holdings No 1 (Mauritius) Ltd	Mauritius	---	100	---	---
Areachap Holdings No 2 (Mauritius) Ltd	Mauritius	---	100	---	---
Areachap Holdings No 3 (Mauritius) Ltd	Mauritius	---	100	---	---
Orion Group Services International Ltd	Seychelles	100	100	---	---
Areachap Investments 1 S.a r.l	Luxembourg	100	---	---	---
Areachap Investments 2 S.a r.l	Luxembourg	100	---	---	---
Areachap Investments 3 S.a r.l	Luxembourg	100	---	---	---
Areachap Investments 6 S.a r.l	Luxembourg	100	---	---	---
Agama Exploration & Mining (Pty) Ltd	South Africa	100	100	---	---
Area Metals Holdings No 1 (Pty) Ltd	South Africa	100	100	---	---
Area Metals Holdings No 2 (Pty) Ltd	South Africa	100	100	---	---
Area Metals Holdings No 3 (Pty) Ltd	South Africa	100	100	---	---
Area Metals Holdings No 4 (Pty) Ltd	South Africa	100	100	---	---
Area Metals Holdings No 5 (Pty) Ltd	South Africa	100	100	---	---
Orion Exploration No 1 (Pty) Ltd	South Africa	100	100	---	---
Orion Exploration No 4 (Pty) Ltd	South Africa	100	100	---	---
Orion Exploration No 5 (Pty) Ltd	South Africa	100	100	---	---
Orion Services South Africa (Pty) Ltd	South Africa	100	100	---	---
Nabustax (Pty) Ltd	South Africa	100	100	---	---
Itakane Trading 217 (Pty) Ltd	South Africa	100	100	---	---
Repli Trading No 27 (Pty) Ltd	South Africa	73.33	73.33	26.67	26.67
Rich Rewards Trading 437 (Pty) Ltd	South Africa	73.33	73.33	26.67	26.67
Vardocube (Pty) Ltd	South Africa	70.00	70.00	30.00	30.00
Bartotrax (Pty) Ltd	South Africa	74.00	74.00	26.00	26.00
Prieska Copper Mines Ltd	South Africa	97.46	97.46	2.54	2.54
<b>Associates</b>					
Namaqua Nickel Mining (Pty) Ltd	South Africa	25.00	25.00	N/A	N/A
Disawell (Pty) Ltd	South Africa	25.09	25.09	N/A	N/A

**Associates Note:**

Associates listed above are not controlled by the Group and have no material impact on the Consolidated Financial Statements as at 30 June 2019.

**23 NON-CONTROLLING INTEREST**

	2019 \$'000	2018 \$'000
Opening balance – 1 July	2,233	2,670
<u>Movement</u>		
Accumulated losses	(989)	(437)
<b>Closing balance – 30 June</b>	<b>1,244</b>	<b>2,233</b>

The non-controlling interest parties have the following interest in the Group South African subsidiaries:

Repli Trading No 27 (Pty) Ltd 26.67% (2018: 26.67%), Rich Rewards Trading 437 (Pty) Ltd 26.67% (2018: 26.67%), Vardocube (Pty) Ltd 30% (2018: 30%), Bartotrax (Pty) Ltd 26.00% (2018: 26.00%) and Prieska Copper Mines Ltd 2.54% (2018: 2.54%).

**24 RELATED PARTIES DISCLOSURE****Key management personnel compensation**

The key management personnel compensation included in administration expenses and exploration and evaluation expenses (refer Note 3) and deferred exploration, evaluation and development (refer Note 9) is as follows:

	2019 \$	2018 \$
Short-term employee benefits	1,824,618	1,627,419
Post-employment benefits	14,798	892
Share based payments	693,790	206,277
<b>Total</b>	<b>2,533,206</b>	<b>1,834,588</b>

**Individual directors and executives compensation disclosures**

Information regarding individual directors and executives' compensation and some equity instruments disclosures as required by Corporations Regulations 2M.3.03 are provided in the remuneration report section of the directors' report.

**Key management personnel and director transactions**

A number of key management personnel, or their related parties, hold positions in other entities that result in them having control, joint control or a relevant interest over the financial or operating policies of those entities.

A number of these entities transacted with the Group during the year. The terms and conditions of the transactions with key management personnel and their related parties were no more favourable than those available, or which might reasonably be expected to be available, on similar transactions to non-key management personnel related entities on an arm's length basis.

From time to time, Directors of the Group, or their related entities, may provide services to the Group. These services are provided on terms that might be reasonably expected for other parties and are trivial or domestic in nature. The following transactions occurred with related parties:

## 24 RELATED PARTIES DISCLOSURE (continued)

	2019 \$	2018 \$
Payments for services to Tarney Holdings Pty Ltd	179,700	164,673
<b>Total</b>	<b>179,700</b>	<b>164,673</b>

Tarney Holdings Pty Ltd is an entity associated with the Company's Chairman, Mr Denis Waddell. Mr Waddell provides consulting services to the Group through Tarney Holdings through an agreement between both parties.

On 14 June 2019, unlisted options in the Company were issued to the Directors of Orion Minerals Ltd. The Company issued 54,000,000 expiring on 30 April 2024. The issue was completed following receipt of shareholder approval at a general meeting held on 7 June 2019.

## 25 AUDITOR REMUNERATION

	2019 \$	2018 \$
<b>Amounts received or due and receivable by BDO East Coast Partnership for:</b>		
An audit or review of the financial report of the Company and any other entity in the Group	28,500	---
<b>Total amount for BDO East Coast Partnership</b>	<b>28,500</b>	<b>---</b>
<b>Amounts received or due and receivable by RSM Australia Partners for:</b>		
An audit or review of the financial report of the Company and any other entity in the Group	---	80,960
Tax compliance - Australia	---	13,840
<b>Total amount for RSM Australia Partners</b>	<b>---</b>	<b>94,800</b>
<b>Amounts received or due and receivable by BDO South Africa for:</b>		
An audit or review of the financial report of the Company and any other entity in the Group	98,650	59,965
Professional services - corporate finance	14,660	---
<b>Total amount for BDO South Africa</b>	<b>113,310</b>	<b>59,965</b>
<b>Total amount for auditors</b>	<b>141,810</b>	<b>154,765</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS** *continued*

FOR THE YEAR ENDED 30 JUNE 2019

**26 SEGMENT REPORTING**

The Group's operating segments are identified and information disclosed, where appropriate, on the basis of internal reports reviewed by the Company's Board of Directors, being the Group's Chief Operating Decision Maker, as defined by AASB 8. Reportable segments disclosed are based on aggregating operating segments where the segments have similar characteristics.

The Group's core activity is mineral exploration within South Africa and Australia. During the 2019 financial year, the Group has actively undertaken exploration in South Africa, with segment recording from 29 March 2017. No asset or liability, or income in relation to the South African project has been recognised prior to acquisition in this reporting period.

Reportable segments are represented as follows:

30 June 2019	Australia	South Africa	Total
	\$'000	\$'000	\$'000
<b>Segment net operating loss after tax</b>	(7,098)	(3,472)	(10,750)
Depreciation	(22)	(25)	(47)
Finance Income	45	183	228
Finance expense	(1,304)	(457)	(1,761)
Exploration expenditure written off and expensed	(613)	(2,440)	(3,053)
<b>Segment non-current assets</b>	<b>11,182</b>	<b>34,470</b>	<b>45,652</b>

30 June 2018	Australia	South Africa	Total
	\$'000	\$'000	\$'000
<b>Segment net operating loss after tax</b>	(5,115)	(3,718)	(8,833)
Depreciation	(26)	(19)	(45)
Finance Income	(32)	(182)	(214)
Finance Expense	(1,602)	(403)	(2,005)
Exploration expenditure written off and expensed	(267)	(2,104)	(2,371)
<b>Segment non-current assets</b>	<b>5,594</b>	<b>27,007</b>	<b>32,601</b>

## 27 PARENT ENTITY DISCLOSURES

As at, and throughout, the financial year ending 30 June 2019 the parent company of the Group was Orion Minerals Ltd.

	2019 \$'000	Restated 2018 \$'000
<b>Result of parent entity</b>		
Loss for the period	(4,604)	(4,319)
Other comprehensive income	584	---
<b>Total comprehensive loss for the period</b>	<b>(4,020)</b>	<b>(4,319)</b>
<b>Financial position of parent entity at year end</b>		
Current assets	1,405	4,273
Non-current assets	51,127	36,492
<b>Total assets</b>	<b>52,532</b>	<b>40,765</b>
Current liabilities	(10,186)	(13,747)
Non-current liabilities	(2,226)	(1,948)
<b>Total liabilities</b>	<b>(12,412)</b>	<b>(15,695)</b>
<b>Total net assets</b>	<b>40,120</b>	<b>25,070</b>
<b>Total equity of the parent entity comprising of:</b>		
Issued capital	121,530	102,460
Accumulated losses	(84,327)	(79,723)
Other reserves	2,917	2,333
<b>Total equity</b>	<b>40,120</b>	<b>25,070</b>

### Parent entity contingencies

The directors are of the opinion that provisions are not required in respect of these matters, as it is not probable that a future sacrifice of economic benefits will be required or the amount is not capable of reliable measurement.

### Parent entity commitments in relation to minimum expenditure on tenements

	2019 \$'000	2018 \$'000
<b>Tenements</b>		
Minimum expenditure requirements:	---	---
Within one year	---	26
One year later and no later than five years	---	---
Later than five years	---	---
<b>Total</b>	<b>---</b>	<b>26</b>

**27 PARENT ENTITY DISCLOSURES (continued)**Parent entity commitments in relation to rental property

	2019 \$'000	2018 \$'000
<b>Commitments</b>		
Rental property commitments	3	89
<b>Total</b>	<b>3</b>	<b>89</b>

**Contingent liabilities**

The Company has issued bank guarantees in respect of its rental agreements and mining tenements. Under the terms of the financial guarantee contracts, the Company will make payments to reimburse the guarantors upon failure of the Company to make payments when due. Refer to Note 20 for further detail.

Consolidated statement of profit or loss and other comprehensive income

Comparative amounts in the note relating to the parent entity's profit or loss have been adjusted to reflect the reversal of historical exploration expenditure exclusively incurred on behalf of Masiqhame in carrying out the exploration activities previously expensed in the parent entity. This has now been reversed and allocated to the project level. The reclassification only effect the parent entity and has no effect on the consolidated financial statements. The effect on the parent entity is as follow:

	June 2018 Reclassified \$	2018 \$
Expenses	---	794,278
<b>Total</b>	<b>---</b>	<b>794,278</b>

Consolidated statement financial position

Comparative amounts in the note relating to the parent entity's statement of financial position have been adjusted to reflect the reversal of historical exploration expenditure exclusively incurred on behalf of Masiqhame in carrying out the exploration activities previously expensed in the parent entity. This has now been reversed and allocated to the project level. The reclassification only effect the parent entity and has no effect on the consolidated financial statements. The effect on the parent entity is as follow:

	June 2018 Reclassified \$	2018 \$
Non-current assets	794,278	---
Accumulated losses	---	794,278
<b>Total</b>	<b>794,278</b>	<b>794,278</b>

## 28 SHARE BASED PAYMENTS

The Group has an Option and Performance Rights Plan (**OPRP**) for the granting of options or performance rights to employees. There were 52.8M options granted to employees and consultants during the financial year (2018: Nil options) under the Company's OPRP for a total transactional value of \$2.79M.

Outlined below is a summary of option movements during the financial year ended 30 June 2019 to employees under the OPRP:

30 June 2019								
Grant date	Expiry date	Exercise price	Balance at start of the year	Granted during the year	Exercised during the year	Expired during the year	Forfeited during the year	Balance at end of the year
Consolidated as at 30 June 2019								
29-Apr-19	30-Apr-24	\$0.04	---	12,500,000	---	---	---	12,500,000
29-Apr-19	30-Apr-24	\$0.05	---	12,500,000	---	---	---	12,500,000
29-Apr-19	30-Apr-24	\$0.06	---	12,500,000	---	---	---	12,500,000
21-Sep-18	31-Mar-23	\$0.05	---	5,100,000	---	---	---	5,100,000
21-Sep-18	31-Mar-23	\$0.06	---	5,100,000	---	---	---	5,100,000
21-Sep-18	31-Mar-23	\$0.07	---	5,100,000	---	---	---	5,100,000
31-May-17	31-May-22	\$0.030	12,300,000	---	---	---	(200,000)	12,100,000
31-May-17	31-May-22	\$0.045	12,300,000	---	---	---	(200,000)	12,100,000
31-May-17	31-May-22	\$0.060	12,300,000	---	---	---	(200,000)	12,100,000
12-Dec-14	30-Nov-19	\$0.045	250,000	---	---	---	---	250,000
12-Dec-14	30-Nov-19	\$0.06	250,000	---	---	---	---	250,000
<b>Total</b>			<b>37,400,000</b>	<b>52,800,000</b>	---	---	<b>(600,000)</b>	<b>89,600,000</b>
<b>Weighted average exercise price</b>			<b>0.044</b>	<b>0.053</b>	---	---	<b>0.045</b>	<b>0.050</b>

Outlined below is a summary of option movements during the financial year ended 30 June 2018 to employees under the OPRP:

30 June 2018								
Grant date	Expiry date	Exercise price	Balance at start of the year	Granted during the year	Exercised during the year	Expired during the year	Forfeited during the year	Balance at end of the year
Consolidated as at 30 June 2018								
31-May-17	31-May-22	\$0.030	12,300,000	---	---	---	---	12,300,000
31-May-17	31-May-22	\$0.045	12,300,000	---	---	---	---	12,300,000
31-May-17	31-May-22	\$0.060	12,300,000	---	---	---	---	12,300,000
24-Sep-13	31-May-18	\$0.15	1,000,000	---	---	(1,000,000)	---	---
24-Sep-13	31-May-18	\$0.25	1,000,000	---	---	(1,000,000)	---	---
24-Sep-13	31-May-18	\$0.35	1,000,000	---	---	(1,000,000)	---	---
12-Dec-14	30-Nov-19	\$0.045	250,000	---	---	---	---	250,000
12-Dec-14	30-Nov-19	\$0.06	250,000	---	---	---	---	250,000
<b>Total</b>			<b>40,400,000</b>	---	---	<b>(3,000,000)</b>	---	<b>37,400,000</b>
<b>Weighted average exercise price</b>			<b>0.060</b>	---	---	---	---	<b>0.044</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS *continued*

### FOR THE YEAR ENDED 30 JUNE 2019

#### 28 SHARE BASED PAYMENTS (continued)

Set out below are the unlisted options exercisable at the end of the financial year:

Grant date	Expiry date	2019	2018	2017
14 June 2019	30 April 2024	18,000,000	---	---
29 April 2019	30 April 2024	12,500,000	---	---
21 Sep 2018	31 May 2023	5,100,000	---	---
31 May 2017	31 May 2022	12,300,000	12,300,000	---
26 Nov 2015	30 Nov 2020	---	18,333,333	18,333,333
5 Jul 2013	30 Apr 2018	---	---	2,000,000
5 Jul 2013	31 May 2018	---	---	14,000,000
24 Sep 2013	31 May 2018	---	---	4,000,000
<b>Total</b>		<b>47,900,000</b>	<b>30,633,333</b>	<b>38,333,333</b>

The fair values of the options are estimated at the date of grant using the Black Scholes option pricing model. The following table outlines the assumptions made in determining the fair value of the options granted during the year:

Grant date	Expiry Date	Share price at grant date	Exercise price	Expected volatility	Risk-free interest rate	Fair value at grant date
29 April 2019	30 April 2024	\$0.034	\$0.04	93.72%	2.00%	\$0.024
29 April 2019	30 April 2024	\$0.034	\$0.05	93.72%	2.00%	\$0.023
29 April 2019	30 April 2024	\$0.034	\$0.06	93.72%	2.00%	\$0.022
21 Sep 2018	31 May 2023	\$0.034	\$0.05	94.27%	2.00%	\$0.022
21 Sep 2018	31 May 2023	\$0.034	\$0.06	94.27%	2.00%	\$0.021
21 Sep 2018	31 May 2023	\$0.034	\$0.07	94.27%	2.00%	\$0.020

The weighted average contractual life for the share options outstanding as at 30 June 2019 is between 1 and 4 years (2018: 1 and 4 years).

Total expenses arising from share-based payment transactions recognised during the year as part of employee benefit expense was \$1.65M (2018: \$0.43M). Options which expired during the financial year were written back to accumulated losses, \$1,064,932.

#### 29 SUBSEQUENT EVENTS AFTER THE BALANCE DATE

There has not arisen in the interval between the end of the financial year and the date of this report any item, transaction or event of a material and unusual nature likely, in the opinion of the directors of the Company, to affect the operations of the Group, the results of those operations or the state of affairs of the Group in subsequent financial years except for those matters referred to below:

- On 24 September 2019, the Company announced receipt of conversion notices from all Noteholders, requesting conversion of the Convertible Notes held by them into Orion fully paid ordinary shares in the Company. The Company will issue Shares to the Noteholders on or before the maturity date. Upon issue of the Shares, the Group's current liabilities will reduce by \$5.8M (as 10.3M notes were converted into Shares in April 2019) and the security held by Noteholders over certain assets of the Company and its subsidiaries will be released.
- On 12 September 2019, the Company announced completion of the BEE restructure, whereby 86M Shares were issued to satisfy, in full, the repurchase of shares held by existing BEE investors in the Company's subsidiary entities Repli, Rich Rewards Trading 437 (Pty) Ltd and Bartotrax (Pty) Ltd. The final component of the BEE restructure is expected to be implemented shortly.
- The Company announced on 16 April 2019 an \$8M capital raising comprising the issue of 200.9M Shares at an issue price of \$0.04 per Share, together with one free attaching unlisted option for every two Shares issued (100.47M options at an exercise price of \$0.05 and an expiry date of 31 October 2019) (**Options**), to be conducted via a placement to sophisticated and professional investors (**Placement**). The Placement was made up of \$4.69M in Tranche 1 issued in April 2019 and, subject to shareholder approval, which was obtained at a general meeting on 7 June 2019, an additional \$3.34M in Tranche 2. Following year end:

## 29 SUBSEQUENT EVENTS AFTER THE BALANCE DATE (continued)

- 6 September 2019, the Company announced an issue of 20M Shares and 10M unlisted options as part of the placement under Tranche 2;
- 9 August 2019, the Company announced an issue of 33.71M Shares and 16.85M unlisted options as part of the placement under Tranche 2; and
- 22 July 2019, the Company announced an issue of 30M shares and 15M unlisted options as part of the placement under Tranche 2;
- On 4 March 2019, the Company announced that it had reached agreement with AASMF for Repli to redeem the preference shares held by AASMF for Shares. Shareholder approval was obtained and following reporting period end, on 5 July 2019, Repli voluntarily redeemed the preference shares, in consideration for which the Company issued 77.57M Shares to AASMF (redemption amount payable ZAR25.05M (~\$2.5M)).

## DIRECTORS' DECLARATION

- 1 In the opinion of the directors of Orion Minerals Ltd (the Company):
  - (a) the consolidated financial statements and notes that are set out on pages 82 to 123 and the Remuneration report set out on pages 69 to 78, identified within in the Directors' report, are in accordance with the Corporations Act 2001, including:
    - (i) giving a true and fair view of the Group's financial position as at 30 June 2019 and of its performance for the financial year ended on that date; and
    - (ii) complying with Australian Accounting Standards (including the Australian Accounting Interpretations) and the Corporations Regulations 2001; and
- 2 The directors draw attention to Note 2(a)(iii) to the consolidated financial statements which the directors have considered in forming their view that there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.
- 3 The directors have been given the declarations required by Section 295A of the Corporations Act 2001 from the chief executive officer and chief financial officer for the financial year ended 30 June 2019.
- 4 The directors draw attention to Note 2 to the consolidated financial statements, which includes a statement of compliance with International Financial Reporting Standards.

Signed in accordance with a resolution of the directors:



**Denis Waddell**  
**Chairman**  
Perth, Western Australia

24 September 2019

## INDEPENDENT AUDITOR'S REPORT

To the members of Orion Minerals Limited

### Report on the Audit of the Financial Report

#### Opinion

We have audited the financial report of Orion Minerals Limited (the Company) and its subsidiaries (the Group), which comprises the consolidated statement of financial position as at 30 June 2019, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the financial report, including a summary of significant accounting policies and the directors' declaration.

In our opinion the accompanying financial report of the Group, is in accordance with the *Corporations Act 2001*, including:

- (i) Giving a true and fair view of the Group's financial position as at 30 June 2019 and of its financial performance for the year ended on that date; and
- (ii) Complying with Australian Accounting Standards and the *Corporations Regulations 2001*.

#### Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the Financial Report* section of our report. We are independent of the Group in accordance with the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's *APES 110 Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of the Company, would be in the same terms if given to the directors as at the time of this auditor's report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Material uncertainty related to going concern

We draw attention to Note 2(a)(iii) in the financial report which describes the events and/or conditions which give rise to the existence of a material uncertainty that may cast significant doubt about the Group's ability to continue as a going concern and therefore the Group may be unable to realise its assets and discharge its liabilities in the normal course of business. Our opinion is not modified in respect of this matter.

### Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report of the current period. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. In addition to the matter described in the *Material uncertainty related to going concern* section, we have determined the matters described below to be the key audit matters to be communicated in our report.

### EXPLORATION AND EVALUATION COSTS

<i>Key audit matter</i>	<i>How the matter was addressed in our audit</i>
<p>The Group has incurred significant exploration and evaluation expenditures which have been capitalised. As the carrying value of exploration and evaluation expenditures represents a significant asset of the Group, we considered it necessary to assess whether facts and circumstances existed to suggest that the carrying amount of this asset may exceed its recoverable amount.</p> <p>AASB 6 Exploration for and Evaluation of Mineral Resources contains detailed requirements with respect to both the initial recognition of such assets and ongoing requirements to continue to carry forward the assets.</p> <p>Note 2(q) and note 9 to the financial statements contains the accounting policy and disclosures in relation to exploration and evaluation expenditures.</p>	<p>Our audit procedures included, amongst others:</p> <ul style="list-style-type: none"> <li>• Obtaining evidence that the Group has valid rights to explore in the areas represented by the capitalised exploration and evaluation expenditures by obtaining independent searches;</li> <li>• Confirming whether the rights to tenure of the areas of interest remained current at reporting date as well as confirming that rights to tenure are expected to be renewed for tenements that will expire in the near future;</li> <li>• Agreeing a sample of the additions to capitalised exploration expenditure during the year to supporting documentation, and ensuring that the amounts were permissible and capitalised correctly;</li> <li>• Reviewing the directors' assessment of the carrying value of the exploration and evaluation expenditure, ensuring that management have considered the effect of potential impairment indicators, commodity prices and the stage of the Group's projects;</li> <li>• Reviewing public (ASX) announcements and reviewing minutes of directors' meetings to ensure that the Company had not decided to discontinue activities in any of its areas of interest.</li> </ul>



## **Other information**

The directors are responsible for the other information. The other information comprises the information in the Group's annual report for the year ended 30 June 2019, but does not include the financial report and the auditor's report thereon.

Our opinion on the financial report does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

## **Responsibilities of the directors for the Financial Report**

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the Group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

## **Auditor's responsibilities for the audit of the Financial Report**

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

A further description of our responsibilities for the audit of the financial report is located at the Auditing and Assurance Standards Board website at:

[http://www.auasb.gov.au/auditors\\_responsibilities/ar1.pdf](http://www.auasb.gov.au/auditors_responsibilities/ar1.pdf)

This description forms part of our auditor's report.

## **Report on the Remuneration Report**

### **Opinion on the Remuneration Report**

We have audited the Remuneration Report included on pages 69 to 78 of the directors' report for the year ended 30 June 2019.

In our opinion, the Remuneration Report of Orion Minerals Limited, for the year ended 30 June 2019, complies with section 300A of the *Corporations Act 2001*.



### **Responsibilities**

The directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the *Corporations Act 2001*. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.

### **BDO East Coast Partnership**

A handwritten signature in black ink, appearing to read 'James Mooney'. Above the signature is a stylized, handwritten 'BDO' logo.

James Mooney  
Partner

Melbourne, 24 September 2019

## ADDITIONAL ASX INFORMATION

## Shareholder Information for the year ended 30 June 2019

## Shareholdings

At 31 August 2019, the issued share capital of the Company was held as follows:

## Distribution of ordinary shares and option holders

	Fully paid ordinary shares		Options	
	No. of holders	No. of shares	No. of holders	No. of options
1 - 1,000	314	92,688	–	–
1,001 - 5,000	138	507,726	–	–
5,001 – 10,000	59	649,415	–	–
10,001 - 100,000	528	28,104,576	–	–
100,001 and over	572	1,848,155,239	44	302,166,749
	1,611	2,144,619,024	44	302,166,749

## Holders of non-marketable parcels

Shareholders holding less than a marketable parcel on the ASX register was 272.

## The names of the 20 largest holders of ordinary fully paid shares are:

	Ordinary shares	%
1 Ndovu Capital X BV	480,918,918	22.42%
2 Independence Group NL	154,166,666	7.19%
3 Tarney Holdings Pty Ltd	111,714,746	5.21%
4 Wyllie Group Pty Ltd	109,760,360	3.71%
5 Anglo American sefa Mining Fund	77,567,412	3.62%
6 JP Morgan Nominees Australia Pty Ltd	69,066,860	3.22%
7 Silja Investment Ltd	56,706,577	2.64%
8 Ilwella Pty Ltd	54,054,054	2.52%
9 Delphi Unternehmensberatung Aktiengesellschaft	49,506,280	2.31%
10 Ubhejane Resources	30,000,000	1.40%
11 Botsis Holdings Pty Ltd	29,816,666	1.39%
12 Perth Select Seafoods Pty Ltd	24,000,000	1.12%
13 Dr Leon Eugene Pretorius	24,000,000	1.12%
14 Power Matla Mining Pty Ltd	23,905,533	1.11%
15 Safika Resources Pty Ltd	22,500,000	1.05%
16 Belair Australia Pty Ltd	21,000,000	0.98%
17 Kinsella Holdings Ltd	19,366,666	0.90%
18 Baramakama Investments Holdings Pty	19,303,757	0.90%
19 Kolobe Nala Investment Company	19,101,805	0.89%
20 Berend van Deventer	18,631,065	0.87%
	<b>1,415,087,365</b>	<b>65.98%</b>
<b>Total issued ordinary share capital</b>	<b>2,144,619,024</b>	

## Substantial shareholders

The following shareholders are recorded in the Company's register of substantial shareholders:

Holders giving notice	Date of notice	Ordinary shares as at date of notice	% holding as at date of notice
Tembo Capital and Ndovu Capital X BV	30-04-2019	480,918,918	24.01
Denis Waddell	27-08-2018	109,714,746	5.86
Independence Group NL	27-08-2018	154,166,666	8.23
Wyllie Group	30-04-2019	109,760,360	5.67

This information is based on substantial holder notifications provided to the Company.

## Voting rights

The Company's issued shares are one class with each share being entitled to one vote.

## Franking credits

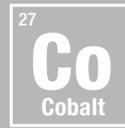
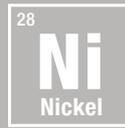
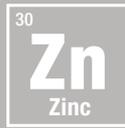
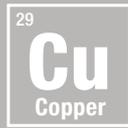
The Company has nil franking credits.

**SHAREHOLDERS INFORMATION**
**TENEMENT SCHEDULE**

Project	Right / tenement	Status	Ownership interest	Grant date	Expiry date	Holder <sup>1</sup>
<b>South Africa</b>						
Prieska	NC30/5/1/1/2/10445PR	Granted	ORN 73.33%	8/9/10	2/11/19	REP
Marydale	NC30/5/1/2/2/10244PR	Granted	ORN 73.33%	10/2/10	29/2/20	RPT
Vardocube	NC30/5/1/1/2/11841PR	Granted	ORN 70.00%	9/3/18	24/4/23	VAR
Bartotrax	NC30/5/1/1/2/11850PR	Granted	ORN 74.00%	9/3/18	8/3/23	BAR
Donnies Pan	NC30/5/1/1/2/11840MR	Granted	ORN 73.33%	29/9/18	Not executed	REP
Namaqua-Disawell	NC30/5/1/1/2/10032MR	Granted	ORN 18.50%	19/9/16	Not executed	NAM
Namaqua-Disawell	NC30/5/1/1/2/10938PR	Granted	ORN 18.50%	9/11/17	8/11/22	DIS
Namaqua-Disawell	NC30/5/1/1/2/11010PR	Granted	ORN 18.50%	9/11/17	8/11/22	DIS
Masiqhame	NC30/5/1/1/2/12292PR	Granted	ORN 50.00%	27/3/14	11/3/19 <sup>2</sup>	MAS
Prieska	NC30/5/1/1/2/10138MR	Granted	ORN 73.33%	23/8/19	22/8/43	REP
Prieska	NC30/5/1/1/2/12197PR	Application	–	–	–	–
Prieska	NC30/5/1/1/2/12196PR	Application	–	–	–	–
Vardocube	NC30/5/1/2/2/10146MR	Application	–	–	–	–
Jacomynspan	NC30/5/1/1/2/12216PR	Application	–	–	–	–
<b>Western Australia</b>						
Fraser Range	E28/2367	Granted	KMX 30%	7/5/15	6/5/20	IGO
Fraser Range	E28/2378	Granted	KMX 30%	22/7/15	21/7/20	IGO
Fraser Range	E28/2462	Granted	KMX 30%	27/7/15	26/7/20	IGO
Fraser Range	E28/2596	Granted	KMX 30%	6/9/16	5/9/21	IGO
Fraser Range	E39/1653	Granted	KMX 35%	20/4/12	19/4/22	IGO & GRPL
Fraser Range	E39/1654	Granted	ORN 10%	23/4/12	22/4/22	IGO & NBX
Fraser Range	E69/2379	Granted	ORN 10%	21/5/13	20/5/23	IGO & PON
Fraser Range	E69/2707	Granted	ORN 10%	19/6/15	18/6/20	IGO & PON
Fraser Range	E39/1658	Application	–	–	–	–
Fraser Range	E39/1818	Application	–	–	–	–
Fraser Range	E69/2706	Application	–	–	–	–
<b>Victoria</b>						
Walhalla	EL5042	Application	–	–	–	–
Walhalla	EL6069	Application	–	–	–	–

<sup>1</sup> Holder abbreviations – ORN (Orion Minerals Ltd); GRPL (Geological Resources Pty Ltd); IGO (Independence Group NL); KMX (Kamax Resources Limited); NBX (NBX Pty Ltd); PON (Ponton Minerals Pty Ltd); NAM (Namaqua Nickel Mining (Pty) Ltd); DIS (Disawell (Pty) Ltd); MAS (Masiqhame 855 (Pty) Ltd); REP (Repli Trading No 27 (Pty) Ltd); VAR (Vardocube (Pty) Ltd); BAR (Bartotrax (Pty) Ltd); RRT (Rich Rewards Trading 437 (Pty) Ltd); OE1 (Orion Exploration No 1 (Pty) Ltd); OE4 (Orion Exploration No 4 (Pty) Ltd).

<sup>2</sup> Renewal application lodged.



ASX: ORN | JSE: ORN



Orion Minerals

[www.orionminerals.com.au](http://www.orionminerals.com.au)