

# Orion Minerals Ltd

## (ORN \$0.035) Speculative Buy



Analyst	Date	Price Target
Andrew Clayton	12 <sup>th</sup> February 2019	\$0.10/sh

### Prieska Site Visit

#### Investment case

ORN has made excellent progress at Prieska. Its ambition to create a modern day mining operation remains intact. The potential scale, infrastructure and exploration upside is impressive. Financing, without significant equity dilution remains the key, but there are few projects of this scale and life currently controlled by juniors. We expect a significant portion of the capital will be debt funded. The DFS and mining rights are positive catalysts in the next few months and we still see potential for ORN to become a mid-cap base metal producer and be worth multiples of its current price.

#### Key points

- We visited Prieska on the 3rd of Feb'19, as one of four site visits that straddled the Annual Indabba African Mining Conference.
- It was hard not to be impressed with the scale, infrastructure, location, site personnel, work completed and exploration upside. Whilst many companies talk about 'belt scale opportunities', ORN genuinely has it.
- A scoping study, released just prior to Xmas, confirms the economic viability of redeveloping Prieska. The study envisaged a 2.4mtpa operation producing 70-80kt of Zn and 22kt of Cu in concentrate for 10yrs with AISC costs of US\$0.55/lb (zinc metal sold). Peak funding of \$300-330m is estimated and an NPV12.5 of \$400-440m pre tax.

Price and FX assumptions	Unit	Estimated value	Financial performance	Unit	Estimated value
Metal price – Cu (USD3.00/lb)	USD/t	6,614	NPV (pre-tax) @12.5% discount rate	AUD m	400 – 440
Metal price – Zn (USD1.30/lb)	USD/t	2,866 <sup>1</sup>	IRR (pre-tax)	%	38
Exchange rate	ZAR:USD	14 : 1	Payback from first production	years	3
Exchange rate	ZAR:AUD	10 : 1	Undiscounted free cash flow (pre-tax)	AUD bn	1.2 – 1.3
Exchange rate	AUD:USD	1.4 : 1	Peak funding	AUD m	300 – 330
Production metrics	Unit	Estimated value	Project cost metrics	Unit	Estimated value
Life of Mine (Phase 1)	years	10	Average cash operating unit cost (C1)	AUD/t	83
Treatment plant capacity	ktpa	2,400	All-in-sustaining cost per unit ROM t	AUD/t	100
Phase 1 tonnage – ROM	mt	22	All-in-sustaining cost per unit Zn eq t sold	AUD/t Zn	1,701
Phase 1 tonnage – processed	mt	22	All-in-sustaining cost per unit Cu eq t sold	AUD/t Cu	4,849
Concentrate tonnage – Zn	mt	1.4	Price received (net of NSR) - Zn	AUD/t Zn	2,882
Concentrate tonnage – Cu	mt	0.9	Price received (net of NSR) - Cu	AUD/t Cu	8,677
Concentrate grade – Zn	%	50.0	All-in-sustaining margin	%	43
Concentrate grade – Cu	%	24.0	Operating breakeven grade (Zn eq)	%	4.1
NSR as % of metal price – Zn	%	74.3			
NSR as % of metal price – Cu	%	93.7	Project cash flows	Unit	Estimated value
Metal sold (in concentrates) – Zn	kt	888	LoM net revenue	AUD m	3,457
Metal sold (in concentrates) – Cu	kt	206	LoM operating costs	AUD m	1,740
Total sales as Zn equivalent	kt	1,285	Project start-up capital expenditure	AUD m	360 - 390
Total sales as Cu equivalent	kt	442	Sustaining capital expenditure	AUD m	65 - 75
Parameter	Source	Tonnage	Zn equivalent metal contained		
Mineral Resources (below Cut-off: 4.5% Zn Eq.)	Estimated	12%	8%		
Mine design losses	MSO	10%	11%		
Design stope dilution	MSO	10%	n/a		
Geological/pillar losses	Assumed	5%	5%		
Mining extraction factor (Mining recovery factor)	Assumed	95%	95%		

Refer ASX release 19 December 2018

- What was very clear from the site visit is that the mine life is highly likely to extend. Mineralisation remains open beyond the current resource and the most SE drilled hole in the Vardocube Deep Sulphide Resource returned 11.3m @ 4.4% Zn, 3.7% Cu, 0.51 g/t Au and 32.7 g/t AG from 1071m.
- In addition, the current resource of 30.5mt @ 3.77% Zn and 1.2% Cu excludes any historical pillar extraction (~ 8mt of ore in pillars). The scoping study assumes a 72% conversion of the total resource.

Orion Minerals Ltd	Year End 30 June	
Share Price	0.035	\$/sh
Issued Capital		
Ordinary	1874.0	m
Options (In money)	61.2	m
Options (O-O-M)	156.5	m
Bridge loan	1.3	m
Con note (@ 2.6cps)	232	
Total Diluted	2059	
Mkt Capital'n	72	\$m
Enterprise Value	73	\$m
Debt	4	\$m
Cash	3	\$m
Turnover	1.03 m sh / day	
12 mth Hi-Lo	4.8-1.7 cps	
Balance Date	June 30th	

#### Directors

D.Waddell	NE Chrm
E.Smart	CEO, Mgr Dir
M.Hulmes	NE Dir
A.Haller	NE Dir
M. Palmer	NE Dir

#### Shareholders

Tembo Capital	22.90%
Independence Group NL	8.28%
Tarney Holdings	6.0%

#### Company Details

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#### Share Price Chart



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- We went - 240m below surface via the decline and were able to inspect the 8.8m diameter shaft which is sitting above the water table. At first glance, the shaft and pipeworks looks in bad condition but this is due to the protective coating applied to the steel at construction. Once cleaned up it looked fine and tests revealed only a 7% degradation in the past thirty years. ORN has done extensive testing of the steel in the shaft both above and below the water table.
- Ground conditions underground were excellent with no sign of rock stress in areas that were last mined more than 25 yrs ago.
- The scoping study assumed 30% of the shaft will need to be refurbished.
- The site personnel were particularly impressive. COO, Walter Shamu, is ex WASM and has extensive operational experience throughout Africa and the team has achieved a lot (drilled 85,000m, completed a detailed scoping study, consolidated the ground position) in - 2yrs.
- The level of community engagement for a project at this stage of development was pleasing to see and ORN will introduce some skills training programs over 2019 to help prepare some of the Prieska residents (60km from site and a town of 16,000) ready for operations.
- The exploration package ORN has consolidated is excellent with little exploration in the past 30yrs. Prieska is rated as one of the top five VMS deposits in the world (historical mining + remaining resource) yet there has been no other deposits found. This is an anomaly in VMS deposits with the rule of thumb that the clusters (other deposits) will add up to the total of the major deposit.

### Analysis

ORN's ambition to create a modern day mining operation at Prieska remains on track. With no township nearby or requirement to relocate communities and no legacy employment contracts, ORN is starting with a clean slate. However, it can leverage off the existing infrastructure which includes;

- Primary shafts and underground decline roadways
- Sealed access roads, 48km via bitumen to existing rail siding
- 175MW operational solar power plants
- 800km rail link to major bulk commodity ports
- Bulk water pipeline supplies to site

The reality is the entrenched large miners like Anglo etc couldn't do what ORN are proposing.

The BFS study is due in the 2<sup>nd</sup> Q CY'19 and we believe any changes to the scoping will be minimal as the detail in the scoping study is probably more at a PFS level than a true scoping study. In addition, ORN are hopeful of the mining rights in the next 2-3 months as well.

The key is to fund Prieska without massive dilution to existing holders. We understand that ORN has had significant interest from development banks and Sth African banks and recently appointed Endeavour Capital to assist with the financing.

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# Orion Minerals Ltd

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ORN has set itself a ambitious timetable to fast track Prieska into production and is board approved decision in Sept/Oct'19 as outlined in the figure below

### PRIESKA: TIMELINE TO DEVELOPMENT



	CY17		CY18				CY19			CY20				C2021	C2022		
Milestone activities	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Maiden Mineral Resources estimates			ASX/USE releases 8 Feb & 9 April 2018														
Mining Right application			Submitted 6 April 2018				Anticipated Grant of Mining Right										
Mineral Resource upgrade							ASX/USE releases 18 Dec 2018										
Bankable Feasibility Studies																	
Project construction																	
Ore production																	

The exploration package is significant with little exploration activity over the past 30 years and now consolidated under ORN for the first time. The first drill hole at Ayoba, 5.3km SW of Prieska intersected 9.5m of massive sulphides grading 0.93% Zn and 0.63% Cu. This hole tested an EM plate with a 1.1km strike and 450m dip extent.

Our valuation, risk adjusted by 30% equates to \$0.10/sh for its 73.3% interest in Prieska. The key remains the ultimate funding package that ORN can negotiate.

We were impressed with the size, scale and opportunity at Prieska. There are few projects of this size in the hands of juniors and whilst Sth Africa is a tough place to do business, the progress and momentum that ORN has made puts them in good stead to ultimately achieve its ambition.

We maintain our Speculative Buy and believe as ORN continues to deliver then the discount to valuation will reduce.

		FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Zinc	US/lb	1.14	1.29	1.35	1.30	1.30	1.30	1.30	1.30
Copper	US/lb	3.25	2.89	3.38	3.40	3.40	3.40	3.40	3.40
A\$1.0=US\$		0.75	0.78	0.74	0.75	0.75	0.75	0.75	0.75
Ore Mined	mtpa	0.00	0.00	0.87	2.40	2.40	2.40	2.40	2.40
Prod'n Zn	ktpa	0	0	26	71	71	71	71	71
Prod'n Cu	ktpa	0	0	8	22	22	22	22	22
C1 Cash Costs	US\$/lb	0.00	0.00	0.25	0.07	0.07	0.07	0.07	0.07
Revenue	A\$m	0	0	150	401	401	401	401	401
EBITDA	A\$m	0	0	68	209	209	209	209	209
EBIT	A\$m	0	0	68	155	155	155	155	155
Capex	A\$m	0	114	68	40	27	27	27	27
Net CF (pretax)	A\$m	0	-232	1	169	182	182	182	182
NPV (10% posttax)	A\$m	651							
IRR (AT, ungeared)	%	25%							

Prieska (30% risk aj)	A\$m	143
Exploration	A\$m	30
Aust Expln	A\$m	10
Corporate	A\$m	-10
WC & Inv	A\$m	0
Debt	A\$m	-4
Un paid capital	A\$m	2
Cash	A\$m	6
Total	A\$m	176
Total	A\$/sh	0.10

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Figure 1: Steel before being cleaned Source: Euroz



Figure 2: Steel after being cleaned Source: Euroz

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Figure 3: Looking down the 8.8m diameter shaft Source: Euroz



Figure 4: Prieska underground - note no meshing/bolting and good ground conditions

Source: Euroz

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Figure 5: High grade drill core from Prieksa. Source: Euroz

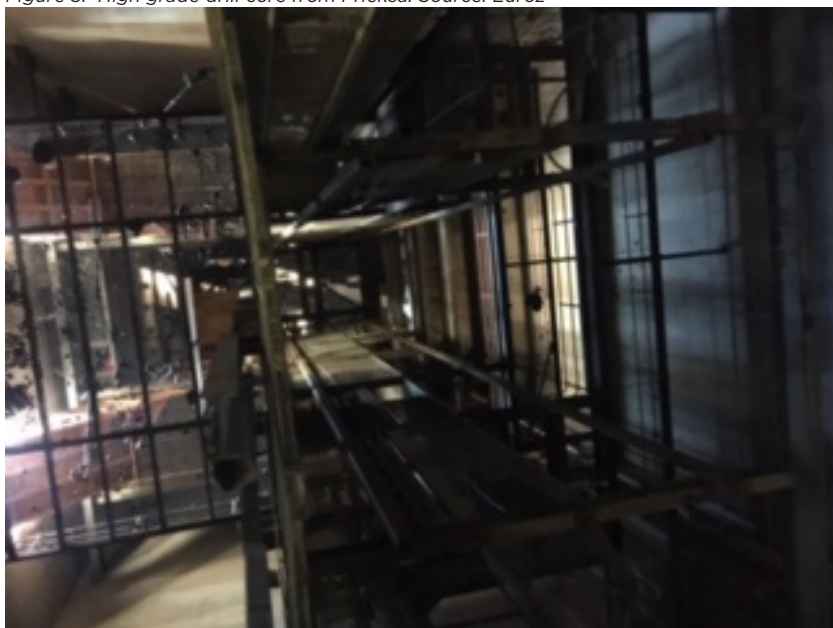


Figure 6: Looking up the shaft winder Source: Euroz

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