

Proposed Acquisition of the Okiep Copper Complex

An exceptional growth opportunity in South Africa's Northern Cape

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ASX/JSE: ORN

Orion Minerals

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update, this presentation. It should be read in conjunction with the Company's other periodic and continuous disclosure announcements lodged with the Australian Securities Exchange (ASX), which are available at www.asx.com.au and the

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- are necessarily based upon a number of estimates and

 may include, among other things, statements regarding capital expenditures, mineral reserves and mineral and are or may be based on assumptions and

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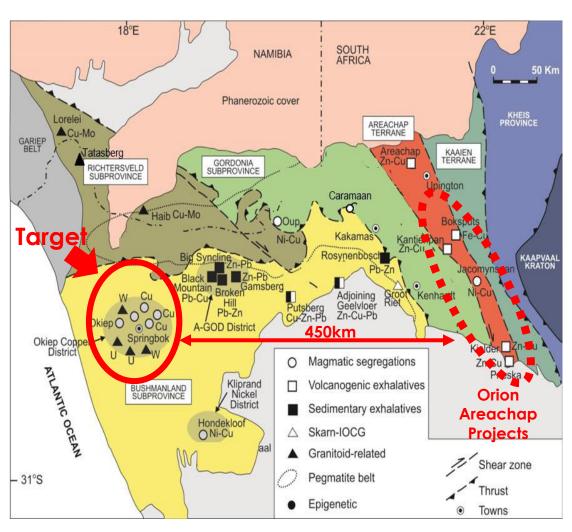
relation to the information and any action taken on the basis of

A Standout Growth and Diversification Opportunity



- Exclusive option to acquire extensive mineral interests in the Okiep Copper Complex (OCC):
 - Historical production of +2Mt of copper
 - Significant historic resource estimates and mining studies await due diligence review
 - Outstanding exploration upside
 - Well-serviced by existing services and infrastructure
 - Rapid pathway to production in next 18-24 months
- Many similarities with Prieska Project: large, infrastructure rich, data rich
- Promises outstanding operational synergies with Orion's Prieska Copper-Zinc Project, located 450km east of OCC
- Total acquisition cost, payable in stages in cash and shares, of:
 - * Purchase price: ~A\$7.5million
 - * Deferred Payment subject to exploration success ~A\$8.5m

Significant opportunity for Orion to develop a second base metal production hub alongside Prieska



Option Agreement: Overview



- Option to acquire mineral interests in the OCC held by three Target Entities
- 56.25% of South African Tantalum Mining (Pty) Ltd (SAFTA)
 - Remaining 43.75% held by Industrial Development corporation (IDC)
 - IDC remains an active supporter and financier of SAFTA
 - IDC and Orion will co-operate to ensure Mining Charter 2018
 Compliance
- 100% of Nababeeb Copper Company (Pty) Ltd (NCC)
- 100% of Bulletrap Copper Company (Pty) Ltd (BCC)



Carolusberg Mine (BCC) main headframe and decline portals.

Produced 37.5Mt at 1.55% Cu¹

Acquisition Consideration



Option Period Financial Commitments

Option Payments (to be deducted from purchase consideration)

Payment Date	Exclusivity Period	Exclusivity Payment		
		SAFTA	NCC	всс
Acceptance Date	until 31 Mar 2021	ZAR200,000	ZAR200,000	ZAR200,000
1 April 2021	until 30 Apr 2021	ZAR100,000	ZAR100,000	ZAR100,000
1 May 20201	until 31 May 2021	ZAR100,000	ZAR100,000	ZAR100,000
1 June 2021	until 30 Jun 2021	ZAR100,000	ZAR100,000	ZAR100,000
1 July 2021	until 31 Jul 2021	ZAR100,000	ZAR100,000	ZAR100,000

Due Diligence Expenditure Commitment

Due Diligence	Minimum Due Diligence	Cumulative Due	
Period	Expenditure Amount	Diligence Expenditure	
		Amount	
Acceptance Date to	not less than ZAR500,000	ZAR500,000	
31 March 2021			
1 April 2021 to 30	ZAR1,000,000	ZAR1,500,000	
April 2021			
1 May 2021 to 31	ZAR3,500,000	ZAR5,000,000	
July 2021			

Purchase Consideration

Initial Acquisition Consideration

Target Entity	Option Exer	Total	
	Cash	Shares	Total
SAFTA	ZAR7,593,750	ZAR37,968,750	ZAR45,562,500
NCC	ZAR10,500,000	ZAR10,000,000	ZAR20,500,000
всс	ZAR6,000,000	ZAR14,000,000	ZAR20,000,000

Deferred Consideration "Agterskot" payable only on tonnes greater than baseline of 8.9Mt (conditional on exploration success)

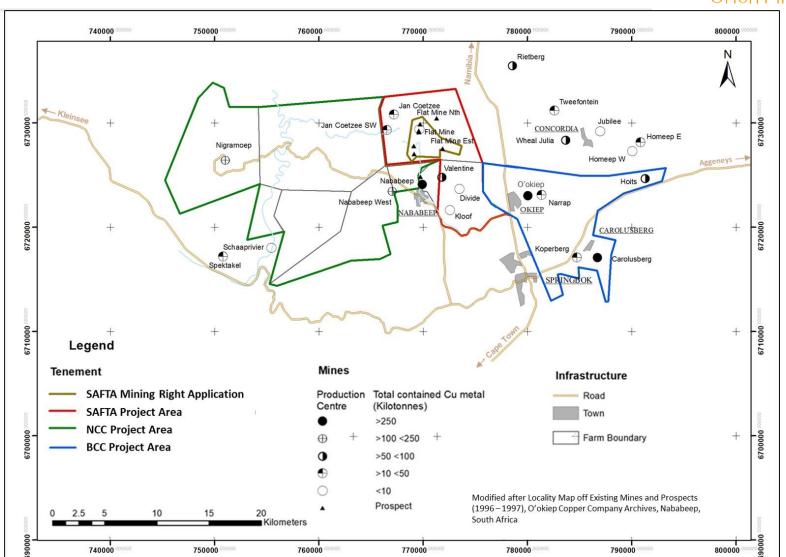
	SAFTA	NCC	ВСС	TOTAL
Agterskot Cap value	ZAR38,812,500	ZAR29,500,000	ZAR30,000,000	ZAR98,312,500
Agterskot payment per tonne of ore	ZAR11.00	ZAR20.00	ZAR20.00	-
Maximum tonnes ore to be paid	3,528,409	1,475,000	1,500,000	6,503,409
Lower Cut Off Grade: Ore 0 - 400m below surface (% Cu)	1%	1.1%	1.1%	-
Lower Cut Off Grade: Ore more than 400m below surface (% Cu)	1.2%	1.2%	1.2%	-

Orion to spend a minimum of R4million on exploration on each of SAFTA, BCC and NCC, within 12 moths of closing

Option Agreement: Overview



- Target entities hold the majority of large historical mines within the OCC district
- Extensive historic foreign Mineral Resource Reports (non JORC – subject to due diligence)
- Preliminary Feasibility study reported with positive outcomes (subject to due diligence)
- Several drilled orebodies with decline mine access and services in place
- Enormous historical data archive, including approximately 150,000 technical reports and data for 26,000 drill holes (surface and underground)



Strategic Rationale: The Opportunity for Orion



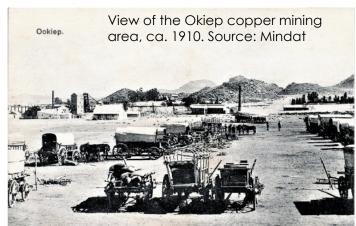
- Substantial drilled mineralisation that can rapidly be upgraded to JORC-compliant status at moderate cost
- Potential early mine development opportunity
- Potential to commence production at OCC within 18 24 months
- Potential to supplement Prieska production and expand Orion's base metal mining operations in the Northern Cape
- Potential for shared management, logistics and expertise with Prieska and other Areachap base metal development targets
- Exceptional exploration upside virtually no exploration since 1993, no previous use of EM

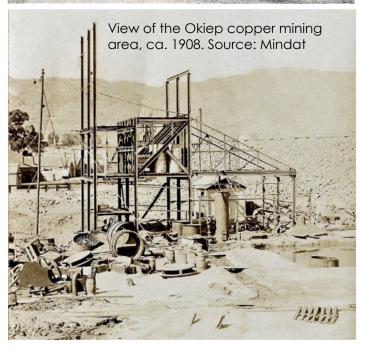


OCC: A Major Historical Copper Production Centre



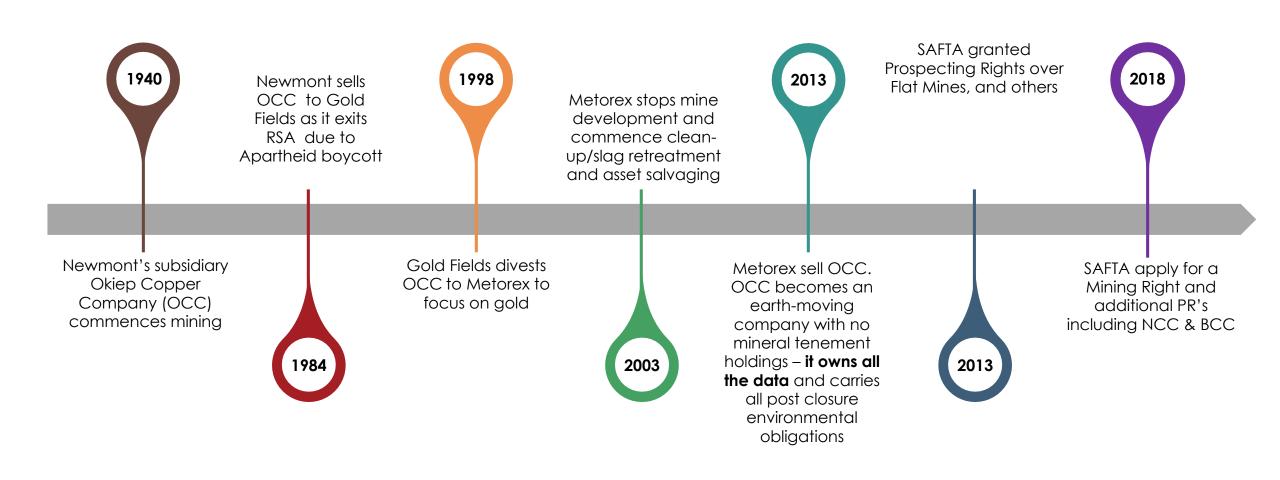
- +2Mt Cu produced over 150-year period ending 2006
- ~20% of historical production delivered pre-1920 O'okiep Copper Co
 produced ~2.2Mt of hand-sorted ore and concentrates at av. grade of 14% Cu¹
- Main sources of ore prior to 1920 were¹:
 - Okiep Mine (907,000 tonnes at 21% copper),
 - Tweefontein (at least 139,000 tonnes at 25% copper)
 - Nababeep South (816,000 tonnes at 5.5% copper)
- Newmont mined at up to 40ktpa Cu @ an average grade of 1.9% Cu RoM between 1940 and 1984
- Goldfields and later Metorex focused on lower-cost, massive mechanised mining yielding diluted lower grades
- Massive data library detailing extensive remaining mineralisation with potential for rapidl upgraded to JORC Mineral Resources
- Area is infrastructure rich, with good roads, grid power, water pipeline and wellserviced mining towns
- Close to Vedanta's mines and mining services/contractors





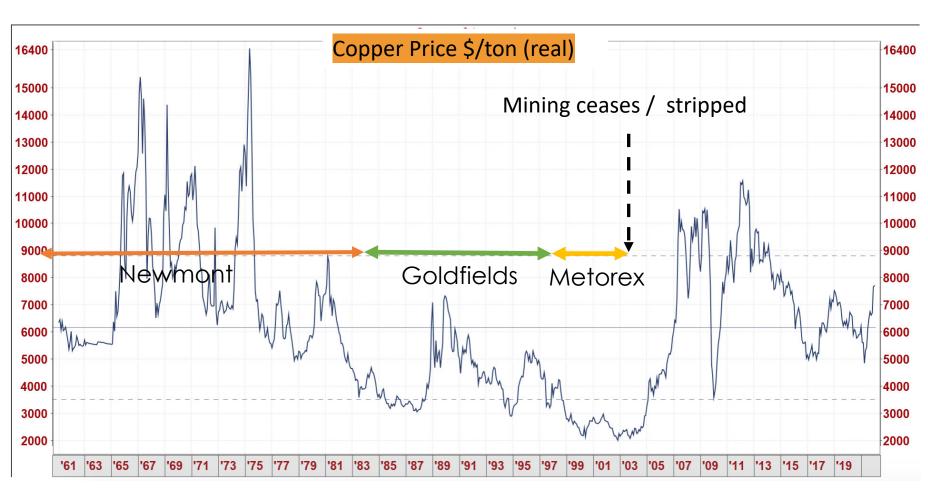
OCC: Recent Ownership History







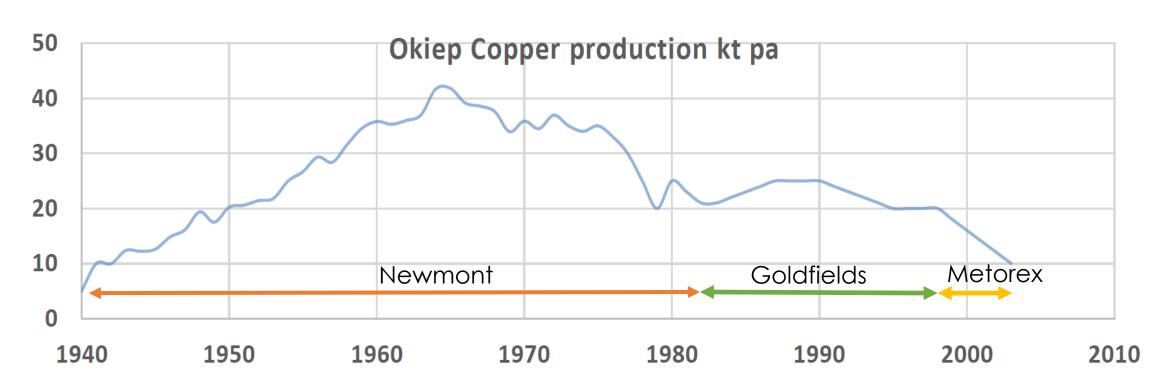
OCC: Ownership changes coincided with Cu lows



Source: Mergence Capital PAGE 10

Okiep District: Industrial Era Production





Produced 2.1Mt Cu from 121Mt RoM @ 1.9% Cu

- Peaked at 2.4Mtpa ROM, mainly from underground mining
- Ore sourced from 42 separate mines within the district
- Consistently achieved >90% plant recoveries



Near Term Production Potential





- SAFTA has applied for a Mining Right on Flat Mine
- This was Metorex's last producing section (Wheel Flat) when the central processing plant was closed
- Mine records show ROM of 1.2 1.4% Cu until closure*
- Production stopes at 150m below surface remain open and prepared

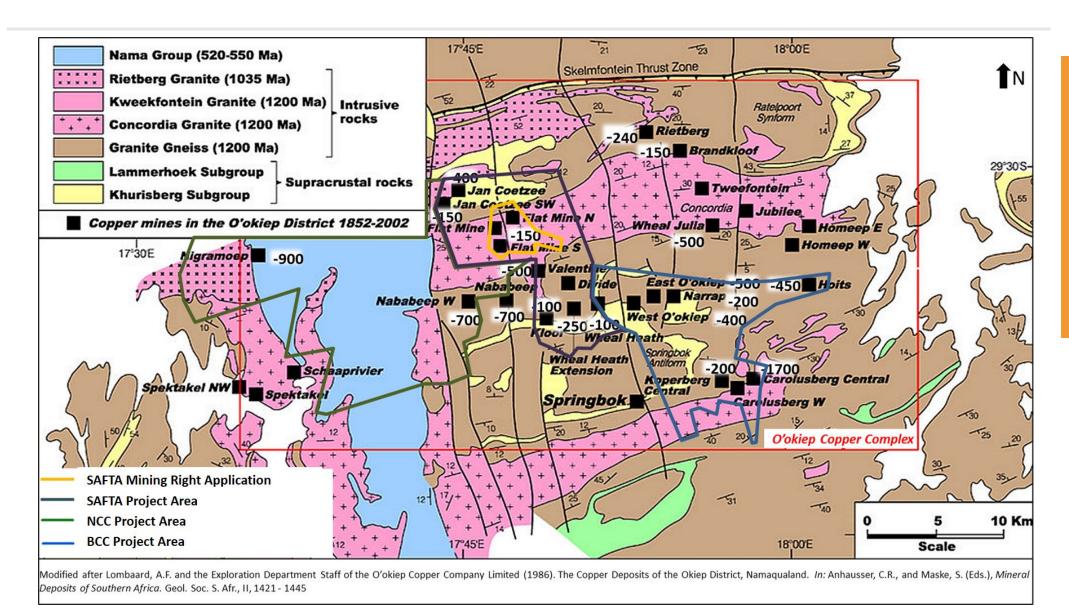
Okiep District: Geology



- Copper deposits hosted by easterly-trending mafic dykes, with plug like bodies forming at Dyke intersection with minor NE-trending dyke swarm
- Large dimension orebodies amenable to bulk mechanised mining, simple favourable metallurgy, very strong ground conditions
- Structural control on intrusives with "steep structures" in country rock associated with monoclinal folds
- Copper mineralisation occurs as disseminations of chalcopyrite and bornite with local massive sulphide concentrations within and adjoining mafic intrusive bodies
- Strong correlation between high-grade massive ore and dykes cutting favourable lithological target horizons:
 - Springbok Quartzite and Schist bulk of past copper production
 - Mixed Zone or Wolfram Schist
 - Ratelpoort Quartzite and Schist
- Copper sulphides mostly associated with the more mafic parts of the intrusions
- Individual orebodies mined varied in size from 25kt 38Mt (Carolusberg Complex)
- 27 larger mines within a 25km radius produced a total of 105.6Mt at 1.71% Cu 1940 -1998 (Newmont, Goldfields)
- Between 1939 and 1993, nineteen new deposits were discovered and mined regional exploration stopped in 1993

Mostly Shallow Mining, Many Deposits Open Down-Dip



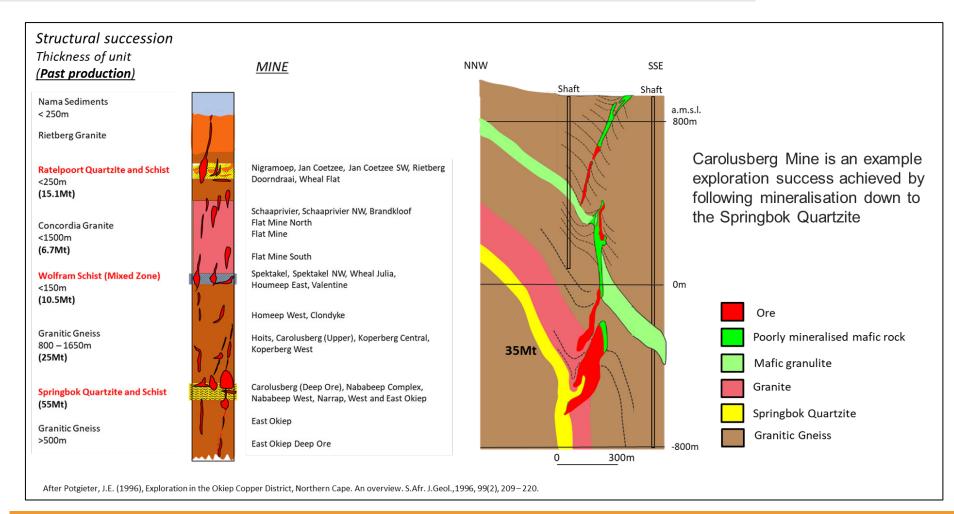


Major copper mines in the Okiep district, with final mining depth shown in metres

Compelling Exploration Targets



- Favourable host horizons below known occurrences of mineralisation
- Potential for new discoveries below thin Nama cover
- Intersection of ultramafic dykes with specific host lithologies results in blows of highgrade – large tonnage



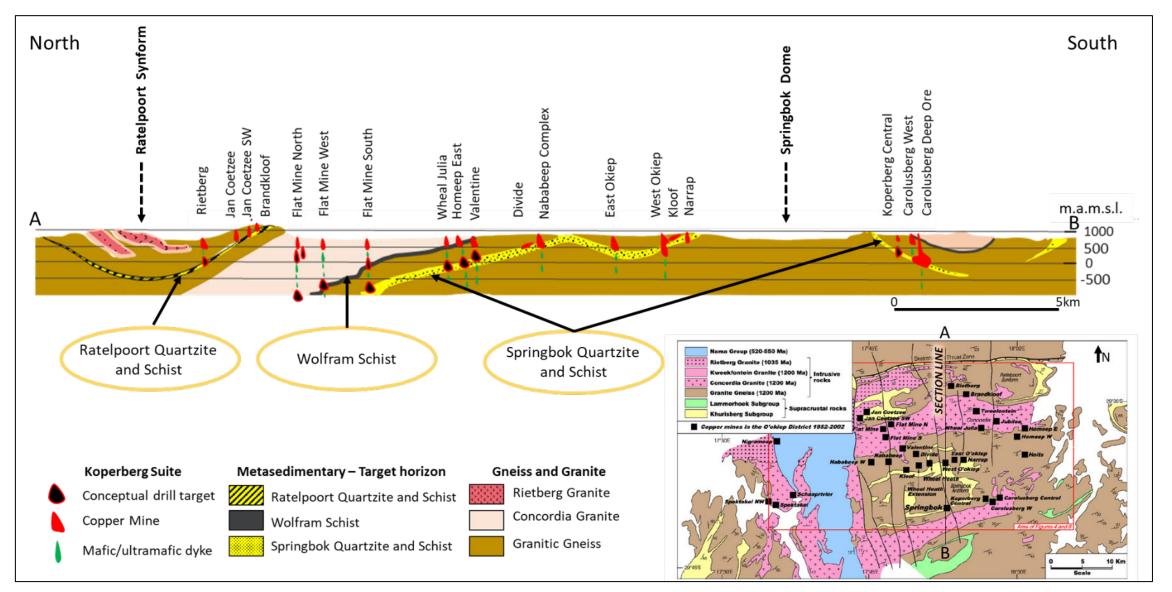
Carolusberg Mine is an example of exploration success achieved by following

mineralisation down to the Springbok Quartzite

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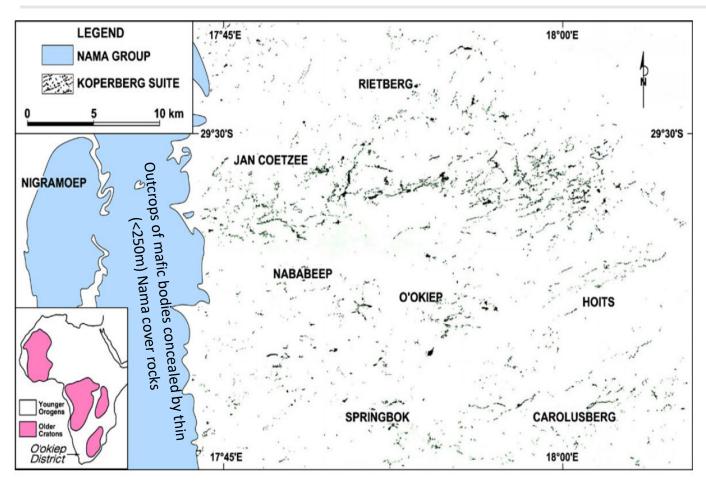
North-South Section through the Okiep Copper District Showing targets on favourable horizons





Okiep District: An Exceptional Exploration Opportunity





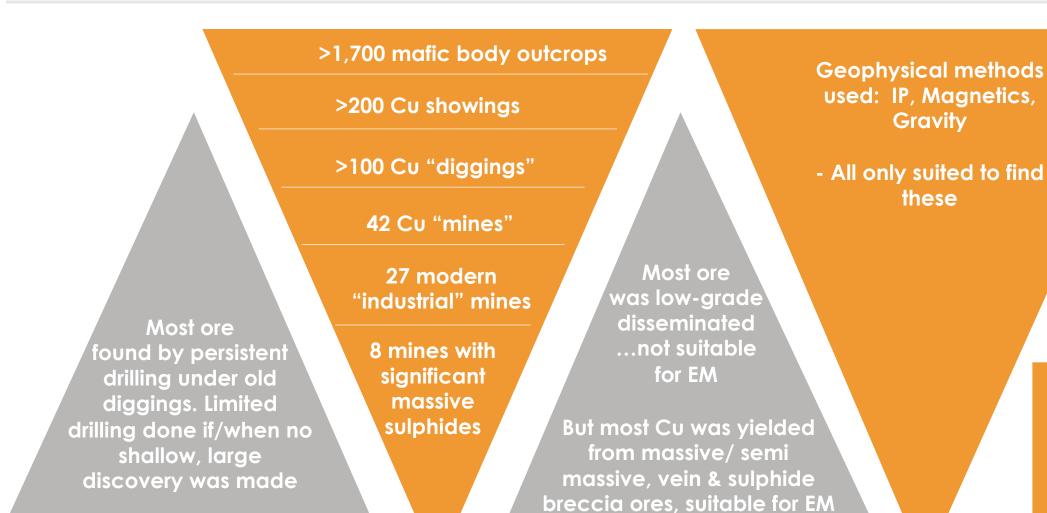
Identified prospective mafic intrusive outcrops in Okiep District

- Dozens of mineralised intrusive outcrops not tested down-dip where they should intersect favourable horizons
- No application of modern geophysics since 1980's
- Very little exploration at all since 1993
- **EM never used –** only IP, mag, gravity
- First-ever small EM survey completed recently very strong conductor down-dip of developed mine, yet to be drill tested
- 25% of the most prospective area is under shallow (<250m) Nama cover rocks and never tested
- Modern EM expected to be suitable for testing under thin Nama sequence cover

Geological potential for several deposits within 20km radius of a central plant facility

Okiep District: Modern Exploration / EM Opportunity



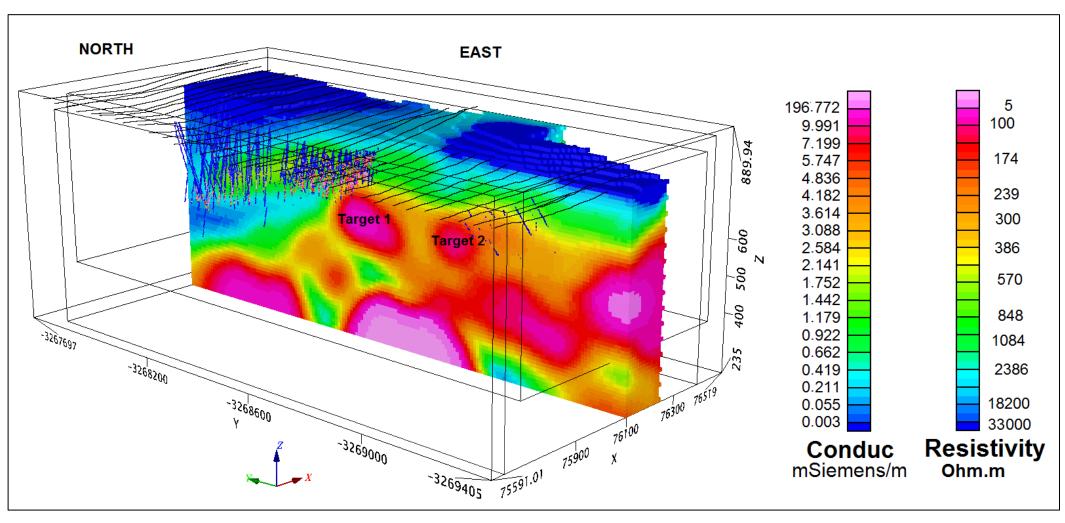


targeting

EM is the most suitable geophysics tool for the best ore mined in the district, but was never used

District's First-Ever EM Survey Completed Recently at SAFTA Strong conductors detected down-dip of Flat Mine North





Conductivity / resistivity Voxel cut-away to show the two targets at Flat Mine North beneath mineralisation already drilled

OCC: Next Steps



- Orion will apply its proven expertise in permitting and developing large-scale base metal projects gained at Prieska to the OCC
- Work to commence immediately on upgrading existing resources to JORC status
- Updated Resource and initial Scoping Study expected in the March 2021 Quarter
- Subject to success, the Scoping Study will then transition into a Bankable Feasibility Study for the restart of copper production at OCC as per Mine Works Program applied for allowing production in 18-24 months
- Exploration and feasibility programs at OCC will be undertaken in parallel with ongoing funding discussions and early works at the Prieska Copper-Zinc Project, with the aim of developing two base metals production hubs in the Northern Cape Province



The Town of Springbok

The OCC transaction is a significant growth opportunity for Orion Minerals in a Tier-1 mining district, with a clear pathway to establishing a second base metals production hub

Key Takeaways



- ✓ Significant opportunity to acquire a major interest in a large-scale copper complex in South Africa's Northern Cape Province
- ✓ +2Mt of historical production, with significant known mineralisation remaining unmined
- ✓ Maiden JORC Resource and Scoping Study targeted for delivery via due diligence validation of existing studies expected to delivered by the end of the March 2021 Quarter
- ✓ Existing mining infrastructure and services provides the opportunity for a rapid transition to production
- ✓ Opportunity to deliver first copper production from the OCC within the next 18-24 months
- ✓ Outstanding exploration opportunity, with virtually no modern exploration conducted and numerous high quality targets identified
- ✓ Highly complementary with the Company's existing Prieska Project, with the opportunity for SAFTA to deliver early cashflow and the potential for significant operational synergies
- ✓ Low-risk acquisition opportunity, with a series of staged payments throughout the Option Period and due diligence process and subject to progress of regulatory approvals.

A complementary combination of OCC and Prieska would transform Orion Minerals into a substantial base metals powerhouse in South Africa's Northern Cape Province

