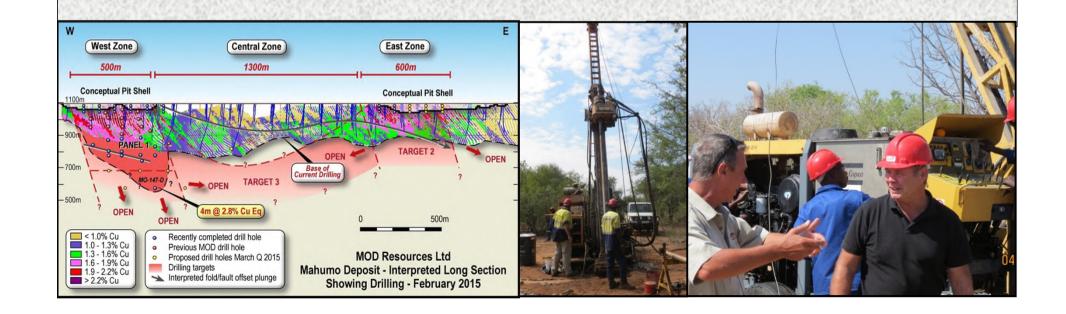


# MOD RESOURCES LTD – March 2015

## MAHUMO COPPER/SILVER PROJECT, BOTSWANA







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Information in this presentation which relate to mineral resources, drilling and exploration at the Botswana Copper Project is reviewed and approved by Jacques Janse van Rensburg, BSc (Hons), General Manager Exploration (Africa) for MOD Resources. He is registered as a Professional Natural Scientist with the South African Council for Natural Scientific Professions (SACNASP) No. 400101/05 and has reviewed the technical information in this report. Mr Janse van Rensburg has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity which it is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves. Mr Janse van Rensburg consents to the inclusion in this presentation of the matters based on information in the form and context in which it appears.

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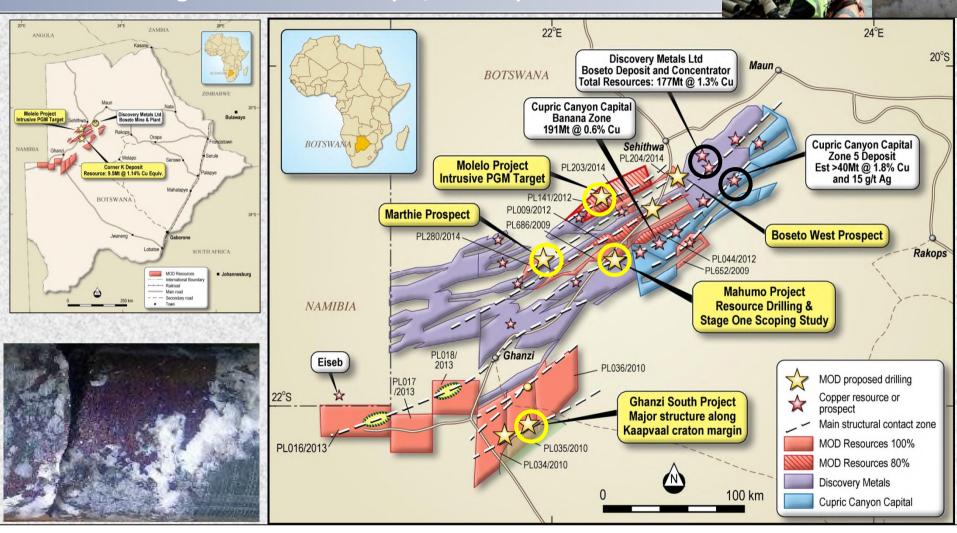
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## KALAHARI COPPER BELT MOD is 2<sup>nd</sup> largest licence holder (~6,920km²)



- Kalahari Copper Belt: >4Mt Cu in resources. Excellent potential for new discoveries below sand cover
- <u>Cupric Canyon: Zone 5 Project</u> announced production target up to 50,000tpa Cu starting 2018
- DML: Boseto Project recent open pit production, 3Mtpa flotation plant. Care & Maintenance
- MOD: Mahumo Project drilling in progress. Stage One resource end March. Scoping Study June Q

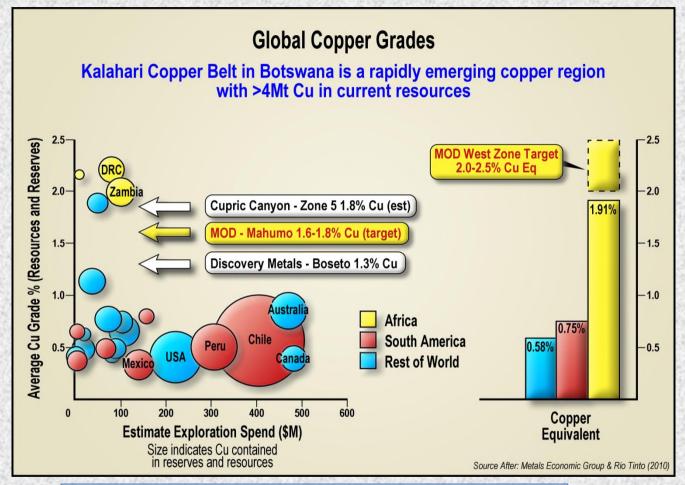
## KALAHARI COPPER BELT – What sets it apart?

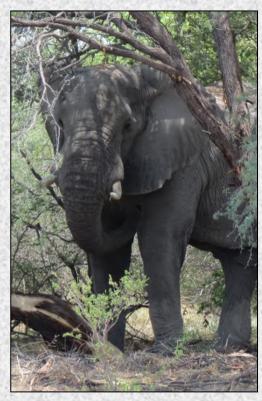


- 1. GEOLOGY 'Zambian Type' sediment hosted, structurally controlled Cu/Ag deposits
- 2. DISCOVERIES large, medium grade deposits. Known deposits >2km strike length
- 3. GRADE 1.3 to 2.0% Cu. Occupies 'global niche' between Porphyry Cu & Zambian/DRC Cu
- 4. MINERALOGY dominated by high tenor chalcocite & bornite. Significant silver credits
- 5. HIGH QUALITY CONCENTRATES average grade ~40% Cu in concentrate
- 6. PREFFERED MINING decline underground mining to access primary sulphide ore
- 7. BOTSWANA stable, safe jurisdiction. Government encouraging long term Cu industry
- 8. COST STRUCTURE capital and operating costs substantially lower than in Australia

#### **GLOBAL COPPER GRADES – Where does Botswana sit?**







Note: This slide is based on other company sources. Requires verification.

• DML: Boseto <u>resource grades (approx)</u>: 1.3% Cu, 15g/t Ag

• Cupric: Zone 5 deposit <u>estimate (approx)</u>: 1.8% Cu, 15g/t Ag

MOD: Mahumo West Zone <u>avge intersection</u>: 1.8% Cu, 47g/t Ag (2.4% CuEq)

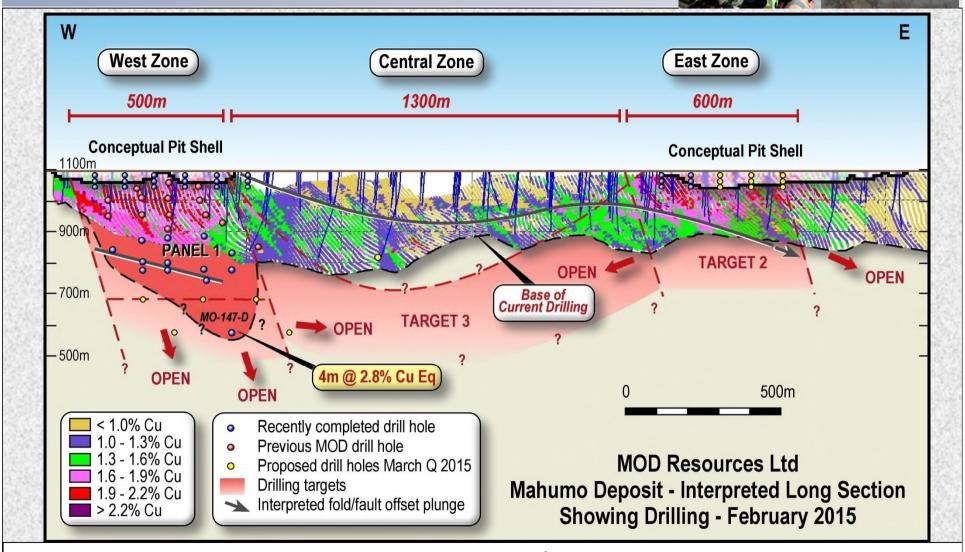
## MOD RESOURCES - Mahumo Project (100%)



- 2 x 500m long high grade Cu/Ag zones. Open along 2.4km, resource drilling in progress
- Average intersection to date: 1.8% Cu & 47g/t Ag in West Zone deposit
- Stage One resource due end March 2015. Followed by Scoping Study June Q15
- New structural interpretation opens up potential for significant resource extensions
- Decision to proceed with pre-feasibility study (PFS) due Sept Q15
- Potential for early cash flow from two conceptual pits. May provide underground access
- Outstanding preliminary met test work results (up to 59% Cu & 1900ppm Ag in conc)
- Discussions underway re funding for scoping/feasibility studies & ore processing options
- Processing options being evaluated include on-site modular flotation plant

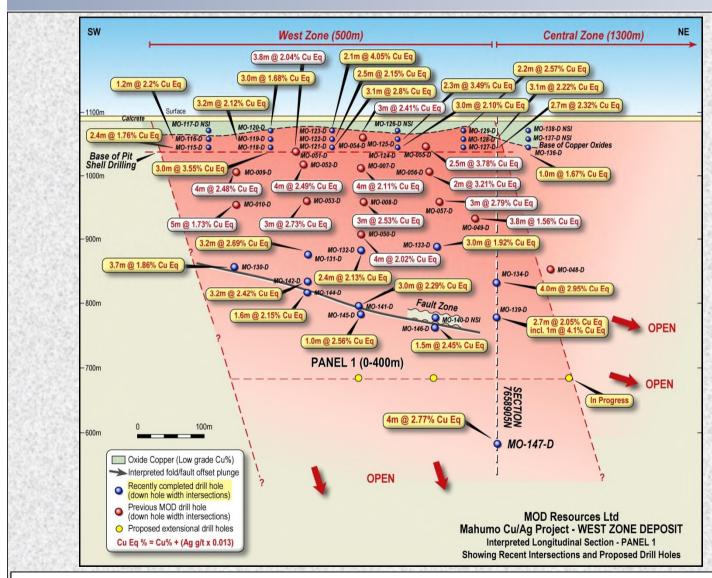
### MAHUMO PROJECT – 2.4km Longitudinal Section





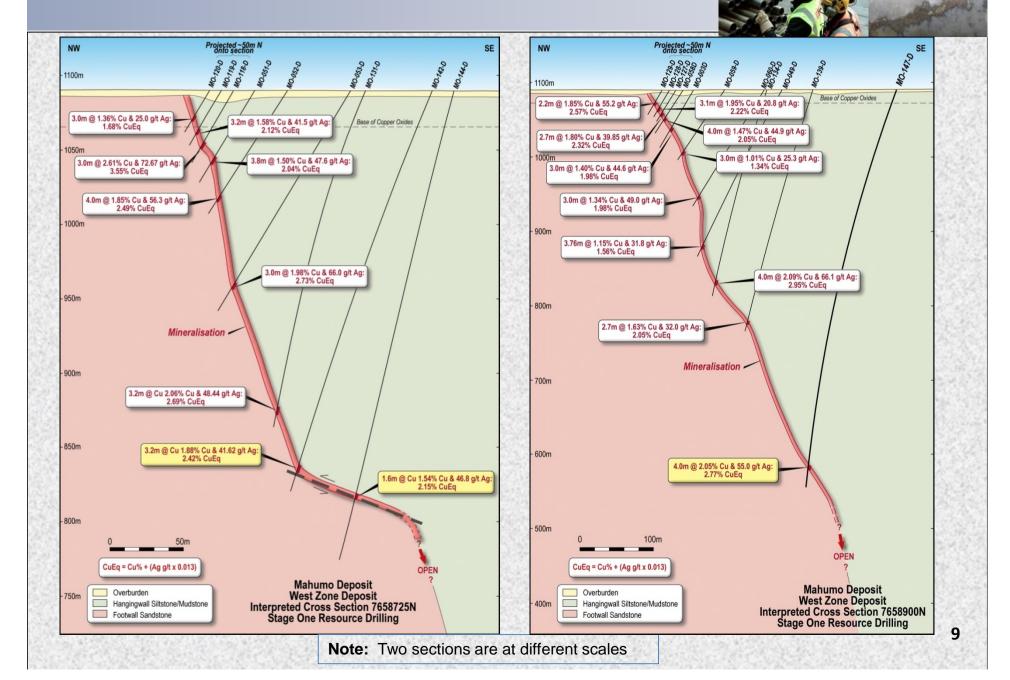
- Two 500m long high grade vein & disseminated type Cu/Ag deposits open at depth & down plunge
- Outstanding mineralogy & metallurgy from results to date dominated by high tenor Cu sulphides
- West Zone resource estimate to ~400m depth due end March 2015. Drilling ongoing (March 2015)

## MAHUMO – West Zone. Stage One drill hole intersections



- Excellent continuity of high grade Cu/Ag sulphides from ~15m to 500m depth (limit of drilling)
- New interpretation suggests potential may extend below Central Zone. Drilling required to test

## MAHUMO – West Zone drill sections (300m apart)



## MINERALOGY – High tenor Cu sulphides

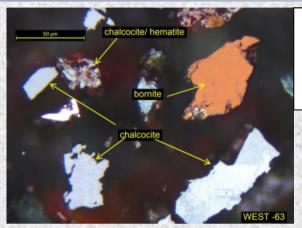


Mineral	<b>Chemical Formula</b>	Cu	Fe	S	О	С	Н	As
Chalcopyrite	CuFeS <sub>2</sub>	34.6%	30.4%	34.9%				
Bornite	Cu <sub>5</sub> FeS <sub>4</sub>	63.3%	11.1%	25.6%				
Chalcocite	Cu <sub>2</sub> S	79.9%		20.1%				
Digenite	Cu <sub>9</sub> S <sub>5</sub>	78.1%		21.9%				
Covellite	CuS	66.5%		33.5%				
Malachite	Cu <sub>2</sub> (CO <sub>3</sub> )(OH) <sub>2</sub>	57.5%			36.2%	5.4%	0.9%	
Enargite	Cu <sub>3</sub> AsS <sub>4</sub>	48.4%		32.6%				19.0%

- Cu content of chalcocite and bornite sulphides results in high grade Cu concentrates (>40% Cu)
- High grade concentrate reduces transport and energy costs. Premium for blending in smelters

### MAHUMO – Outstanding results from initial test work





#### **WEST ZONE**

Chalcocite, bornite and malachite

#### **EAST ZONE**

Chalcocite, bornite, digenite, chalcopyrite and malachite



	Depth (m)	Conc Mass Pull %	Concentr	ate Grade	Recovery	
Composite			Cu (%)	Ag (ppm)	Cu (%)	Ag (%)
WEST ZONE	40-52.5	2.7	59.0	1,900	87.2	90.0
EAST ZONE	45-61	2.7	57.2	1,550	73.4	84.3

MAHUMO - Initial flotation test work produced exceptionally high grade concentrates

• West Zone: 59% Cu and 1,900g/t Ag, at 87% Cu recovery. Low As levels

• East Zone: 57% Cu and 1,550g/t Ag, at 73% Cu recovery. Low As levels

Optimisation test work starting March 2015 will target higher Cu recoveries (>90%)

## SILVER CREDITS – Avge silver grades in recent drilling ~47g/t



6					•		
	Mahumo Composite	Depth (m)	Conc Mass Pull %	Concentr	ate Grade	Recovery	
				Cu	Ag	Cu	Ag
				(%)	(ppm)	(%)	(%)
	WEST ZONE	40-52.5	2.7	59.0	1,900	87.2	90.0
	<b>EAST ZONE</b>	45-61	2.7	57.2	1,550	73.4	84.3



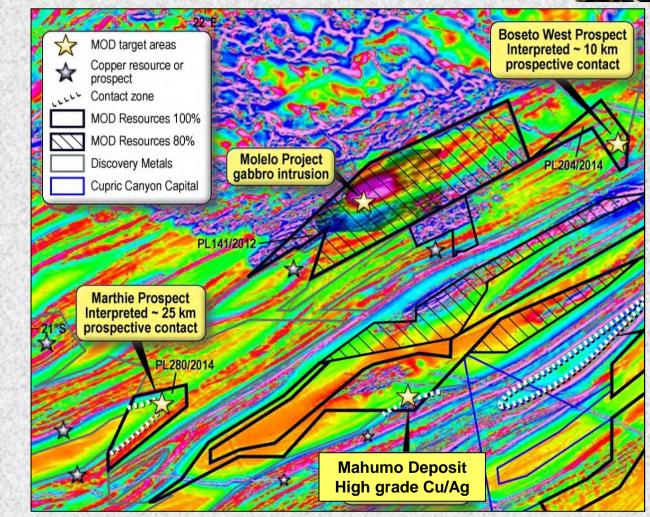
## MAHUMO – Target time frames (next 18 months)



Mahumo	Mar	June	Sept	Dec	Mar	June	Sept
Estimated timeframes	Q15	Q15	Q15	Q15	Q16	Q16	Q16
Resource (Stage One)							
Metallurgical test work							
Scoping Study (Stage One)							
PFS							
DFS							
Extension Drilling (Stage Two)							
Permitting + Mining Lease							

## **CENTRAL KALAHARI COPPER BELT – Magnetics**

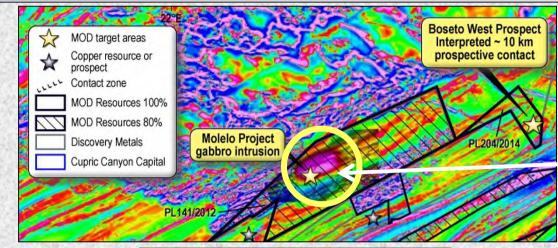


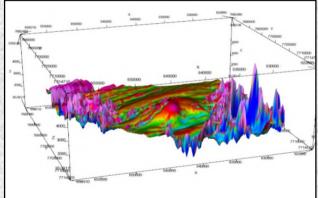


- MAHUMO 2.4km long vein hosted Cu/Ag deposit along major regional magnetic structure
- MOLELO INTRUSION 10km magnetic intrusion in centre of belt, elevated PGM in first drill hole
- MARTHIE PROSPECT ~25km interpreted Cu prospective contact on regional magnetic structure

## MOLELO INTRUSION – Priority drilling target





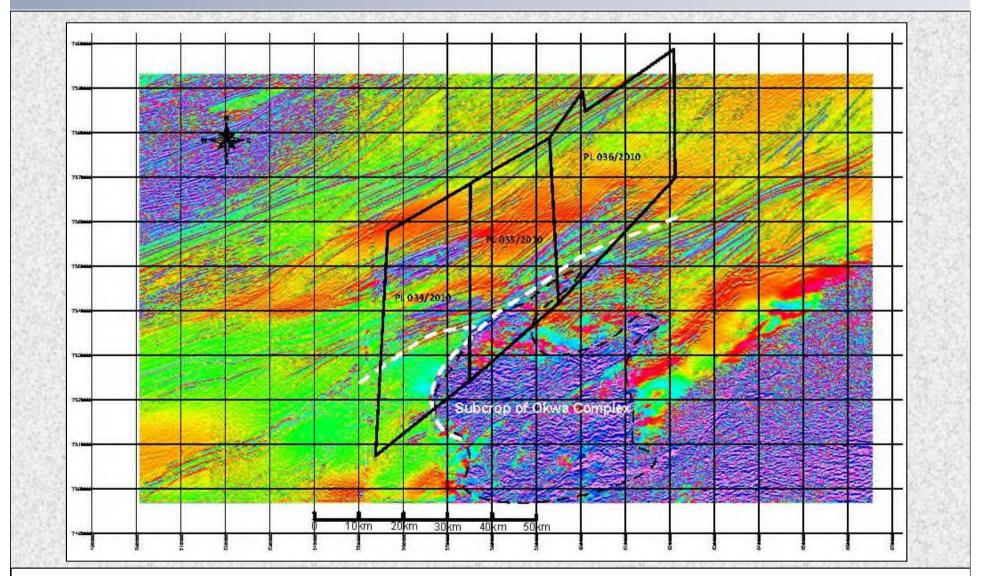


- 10km long magnetic anomaly with IOCG type hematite alteration above altered mafic intrusion. Elevated PGM values (~10 times background) intersected at end of first drill hole
- Drilling planned ~500m north of first hole to test interpreted magnetic core of intrusion for potential magmatic sulphides





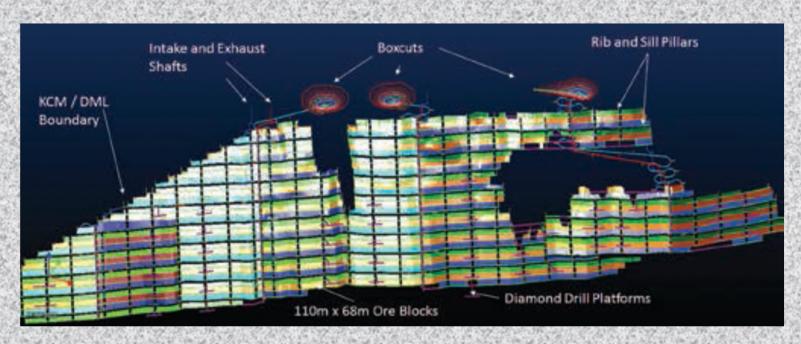
## GHANZI SOUTH (MOD 100%) – 2,650km<sup>2</sup> covering prospective structures



- Target: interpreted structural contact between Ghanzi Group sediments and Kaapvaal craton margin
- Proximity of ENE structures to basement seen as a key to formation of Kalahari Cu/Ag deposits

## OTHER DEPOSITS IN KALAHARI COPPER BELT eg CUPRIC CANYON CAPITAL - Zone 5 Deposit





## Zone 5 Deposit - 2.5km long section showing proposed mine design (sourced from Modern Mining magazine - Jan 2015, on Cupric Canyon website)

- Proposed Mine Design to 600m depth (above)
- Mine design assumes three decline mine access
- Cupric Target 3.6M tpa ore production
- Cupric Target up to 50,000tpa Cu in conc from 2018

#### **BOARD AND MANAGEMENT TEAM**



**Mark Clements** – Chairman & Company Secretary. 19 years' experience in corporate accounting and public company administration. CFO and Company Secretary of MOD before appointment as Executive Director in 2006 and Chairman on 2014. Company Secretary for a number of ASX listed companies.

**Julian Hanna** – Managing Director. Geologist with 35 years' experience in gold, nickel and base metal exploration, development and mining. Co-founder and former Managing Director for 12 years of Western Areas - Australia's 2<sup>nd</sup> largest underground nickel miner. Now non-exec director of Western Areas.

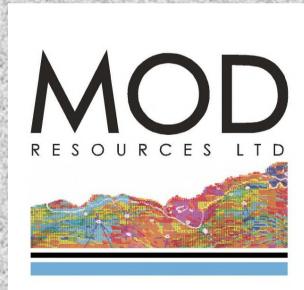
**Simon Lee AO** – Awarded Order of Australia. Director and MOD's largest shareholder (>17%). Singapore based investor with very successful track record as an investor and director of operating gold mining companies in Australia including Great Victoria Gold, Samantha Gold and Equigold.

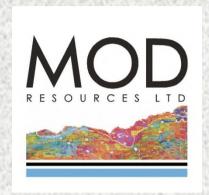
**Steve McGhee** – Non Executive Director. Metallurgist with >25 years experience in metallurgy, plant design, commissioning and ore processing. Co-founder and director of Independent Metallurgical Operations, Australia's largest metallurgical consulting group. Extensive experience in Australia, SE Asia, S America

**Jacques Janse van Rensburg** – General Manager Exploration, Botswana. Geologist with 27 years experience in planning and managing large scale resource projects in Africa. Formerly Project Manager for Hana Mining in Botswana building significant resources before acquisition by Cupric Canyon in 2012.

**Paul Angus** – Project Manager responsible for MOD's Sams Creek Gold Project in New Zealand. Geologist with >25 years' experience in exploration and mining. Formerly Mining, Exploration and Development Manager for OceanaGold Corp. based at New Zealand's largest gold producer, Macraes Gold Mine.







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