



NEWCREST  
MINING  
LIMITED

ACN 005 683 625

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**to:** Company Announcements Office

**from:** **Bernard Lavery**

**date:** 18 September 2009

**subject:** **International Tungsten Industry Association Annual Conference - Presentation**

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Please find attached the Company's presentation to the International Tungsten Industry Association Annual Conference for release to the market.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Bernard Lavery', with a stylized flourish at the end.

Bernard Lavery  
Company Secretary

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## O'Callaghans Project Western Australia



**Tao Li**  
**Group Manager Geotechnical Engineering**

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# Disclaimer

## **Forward Looking Statements**

These materials include forward looking statements. Forward looking statements inherently involve subjective judgement and analysis and are subject to significant uncertainties, risks and contingencies, many of which are outside of the control of, and may be unknown to, the company. Actual results and developments may vary materially from those expressed in these materials. The types of uncertainties which are relevant to the company may include, but are not limited to, commodity prices, political uncertainty, changes to the regulatory framework which applies to the business of the company and general economic conditions. Given these uncertainties, readers are cautioned not to place undue reliance on such forward looking statements.

Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, the company does not in providing this information undertake any obligation to publicly update or revise any of the forward looking statements or any change in events, conditions or circumstances on which any such statement is based.

## ***Competent Persons Statement***

The information in this report that relates to Exploration Results is based on information compiled by C. Moorhead, EGM Minerals for Newcrest Mining Limited who is a Member of The Australasian Institute of Mining and Metallurgy, and a full-time employee of Newcrest Mining Limited. Mr Moorhead has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Moorhead consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

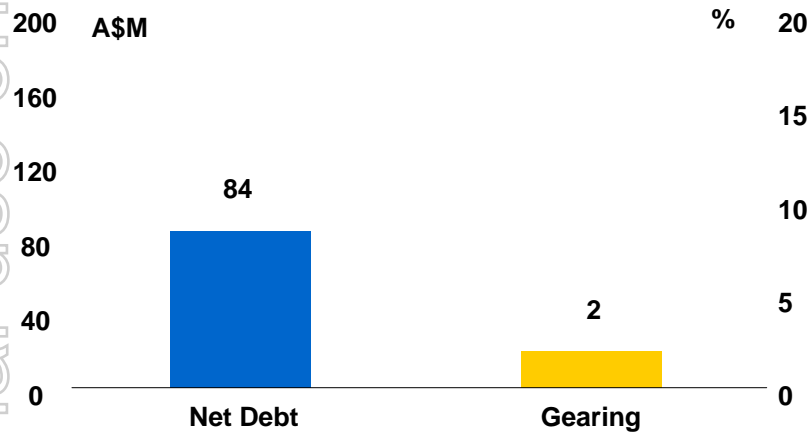
# Newcrest

- **Top 10 global gold producer**
- **Top 20 ASX listed company (US\$12–14 Billion)**
- **Proven ability to find, build and operate world class gold mines**
- **Multiple growth options**

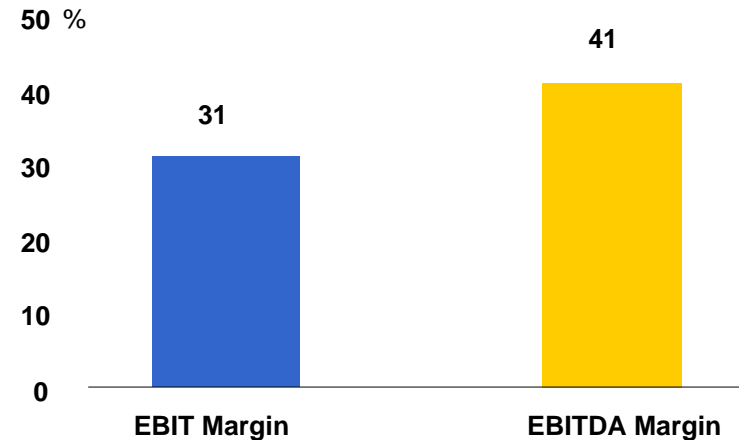
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# Financial Year Ended 30 June 2009

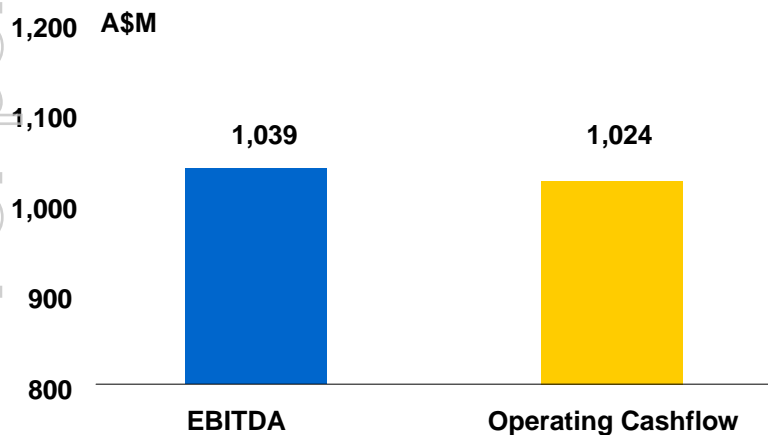
## Net Debt and Gearing Declined



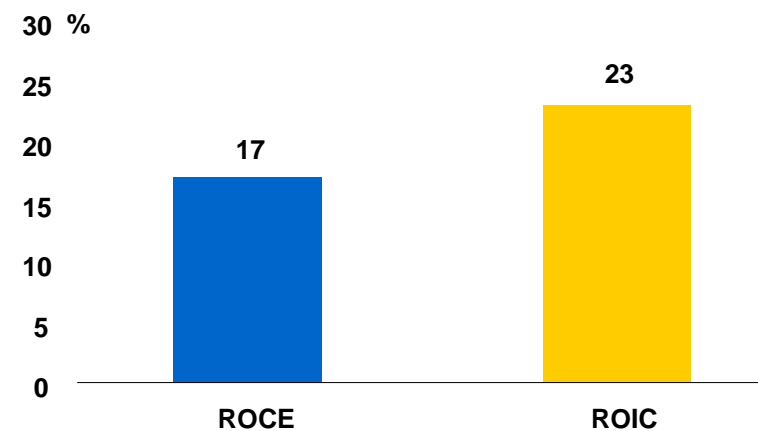
## EBIT and EBITDA Margin



## Record EBITDA and Cash Flow from Operations



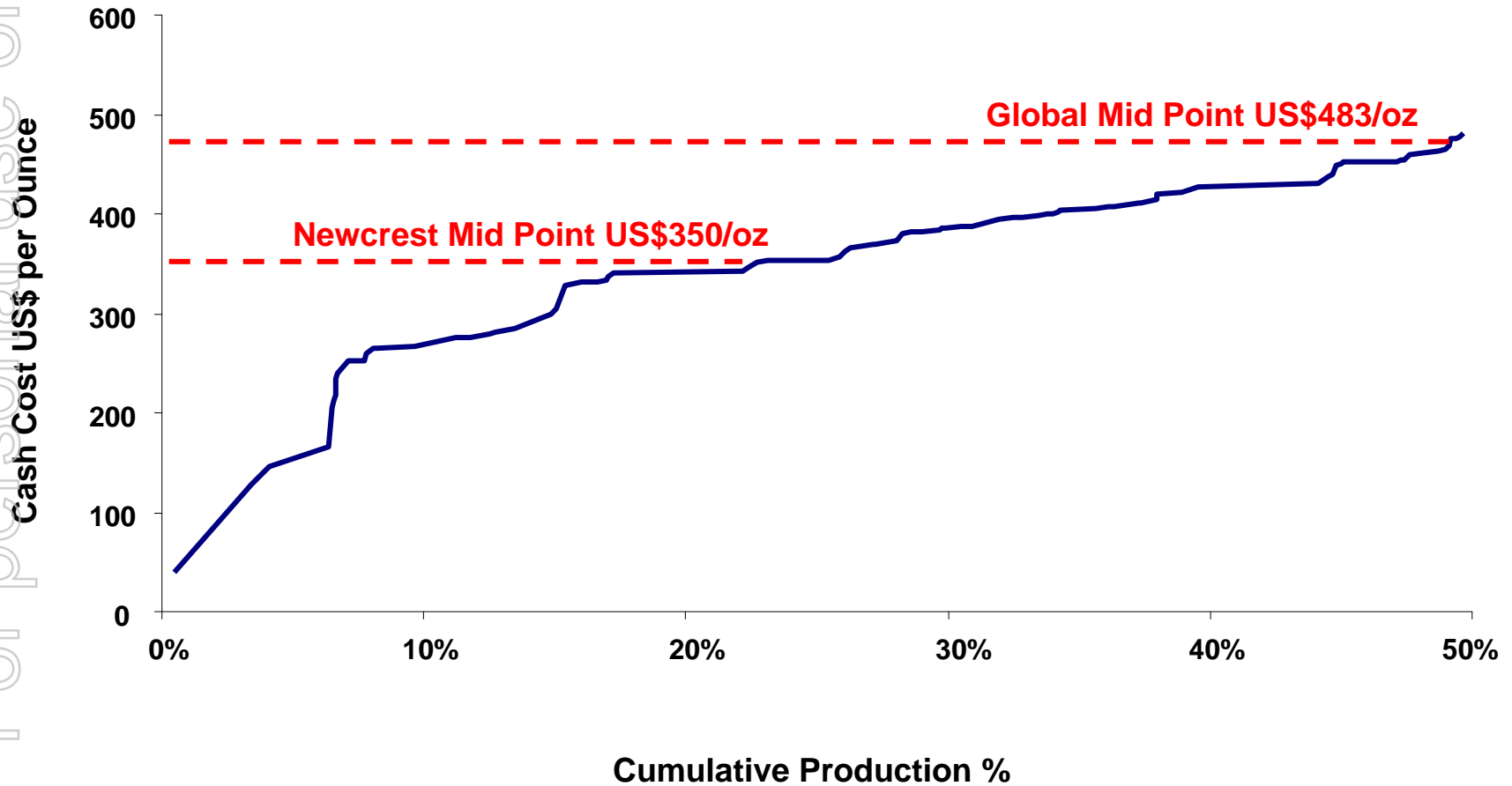
## Strong Capital and Cash Returns



ROCE = EBIT / Shareholder Equity + Net Debt  
 ROIC = EBITDA / Shareholder Equity + Net Debt

# First Cost Quartile Producer

Gold Industry Costs for Twelve Months ended June 30 2009

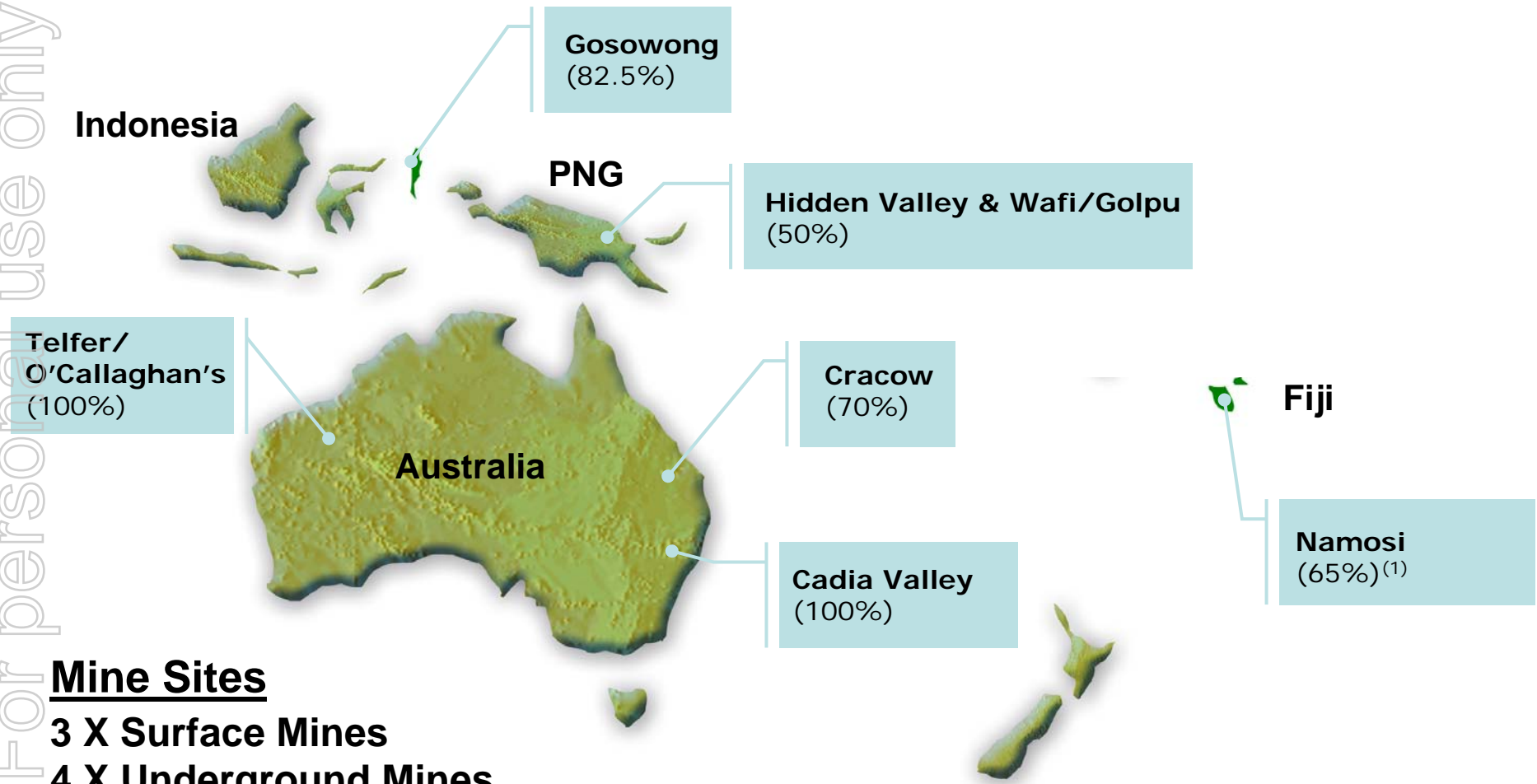


Source: GFMS



# Newcrest Operations & Projects

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## Mine Sites

3 X Surface Mines

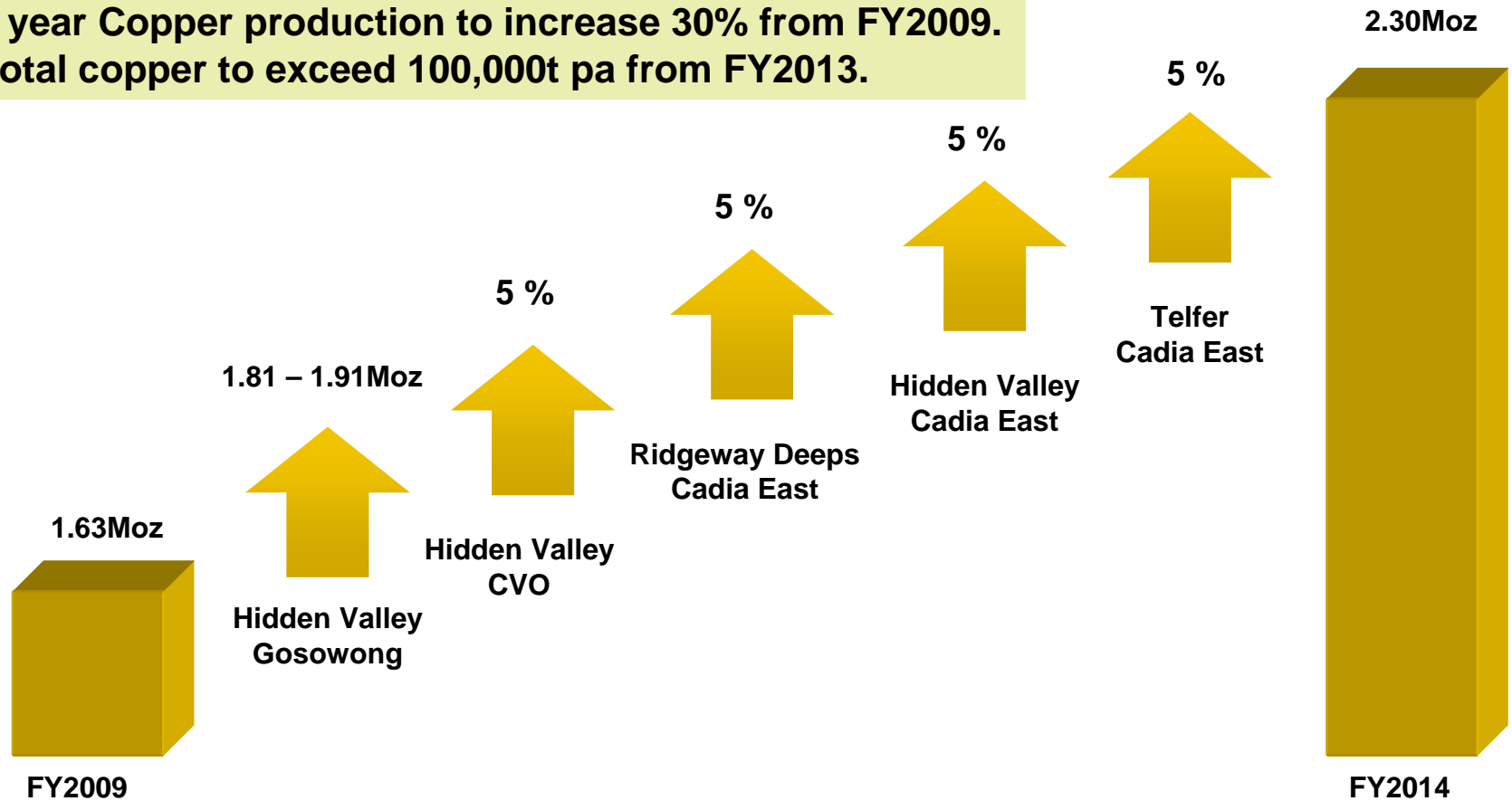
4 X Underground Mines

4 X Major Advanced Exploration Targets

(1) Increasing to 69.94% subject to Fiji government approval

# Gold production to increase 40% over 5 years

5 year Copper production to increase 30% from FY2009.  
Total copper to exceed 100,000t pa from FY2013.



Excludes future production from the following internal opportunities :  
Wafi/Golpu, O'Callaghans, Namosi, Camp Dome, Gosowong 2  
Vertical Stockwork Corridor, West Dome Deeps, Marsden.

# O'Callaghans Key Highlights

- **One of the world's largest Tungsten resources**
- **Significant Zinc, Copper and Lead co-products**
- **Located near Telfer Gold mine and existing key infrastructure such as plant, camp, gas power, access road and major port**
- **100% owned by Newcrest**
- **Newcrest has technical and financial capacity to fast track development**

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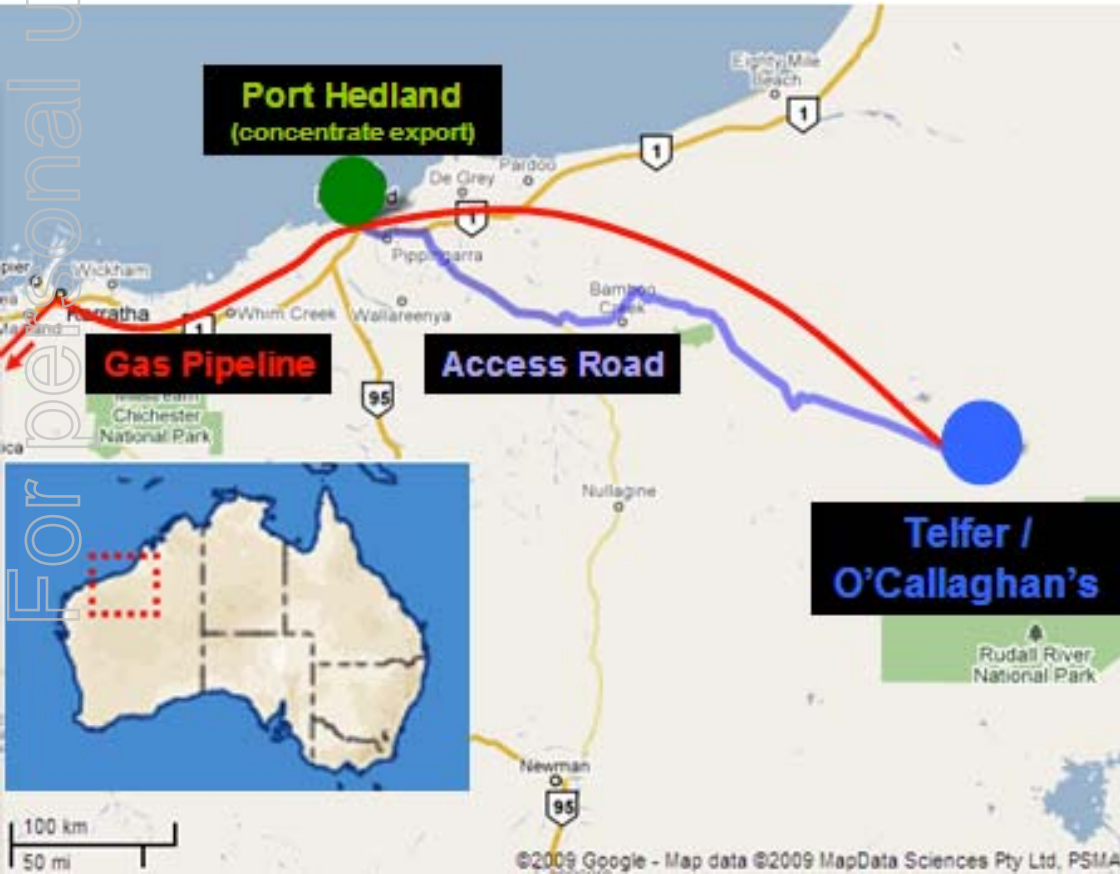
# O'Callaghans Location

Located in North Western Australia's Pilbara region

Situated on granted Mining leases, 9km from Telfer Gold mine

500km by road to Port Hedland

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# Supporting Infrastructure at Telfer

## Telfer is Australia's largest gold mine

- FY 2009 Telfer production: 628koz Gold, 33Kt Copper

## Telfer has US\$1.5bn invested capital including;

- Process Plant
- Mining equipment supporting large scale Pit and Underground operation
- Extensive camp facilities with spare capacity to accommodate a construction workforce
- Secure utilities including;
  - > Water
  - > Natural gas pipeline
  - > Natural gas fired power station
  - > Long term natural gas supply contract

# Main Dome Pit



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# Process Plant

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# Underground Winder Headframe

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# First class Camp facilities

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# Infrastructure at Port Hedland

- **Port Hedland is Australia's largest bulk minerals Port**
  - **throughput of 160Mt in 2008**
- **Newcrest currently exports Telfer concentrate from Port Hedland**
- **Newcrest has dedicated storage and handling capacity under long term lease**
- **Heavy haulage road connects Telfer to Port Hedland**

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# Port Hedland – 160Mtpa export facility

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# Heavy haulage road from Telfer to Port Hedland



# Drilling at O'Callaghans

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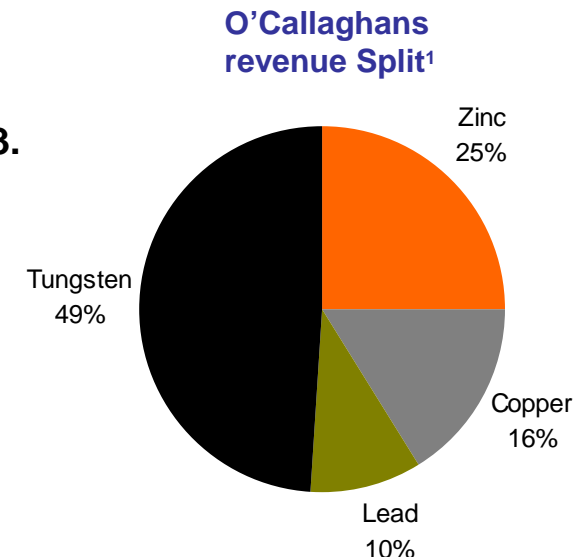
# O'Callaghans Inventory

JORC Inferred Mineral Resource 59 million tonnes containing:

- 0.29% WO<sub>3</sub>: 170,000t Tungsten Trioxide
- 0.77% Zn: 450,000t Zinc
- 0.27% Cu: 160,000t Copper
- 0.39% Pb: 230,000t Lead

Anticipated annual production is in the range<sup>1</sup>;

- Tungsten Concentrate: 800,000 – 1,000,000 mtu pa, 60-65% WO<sub>3</sub>.
- Zinc Concentrate<sup>1</sup>: 45,000-55,000t pa, 50% Zn
- Copper Concentrate: 25,000-35,000t pa, 25% Cu
- Lead Concentrate<sup>1</sup>: 15,000-20,000t pa, 65% Pb



1: Indicative production schedule & revenue split is based on;

- 3mtpa processing rate,
- first 8yrs of production, where high grade zinc and lead zones are selectively mined.
- commodity prices; US\$9.00/lb W, US\$0.75/lb Zn, US\$1.90/lb Cu, US\$0.60/lb Pb

# O'Callaghans - Accelerated Drill Program

## Program:

- Upgrade confidence in the O'Callaghans Resource to Indicated status
- Provide drill core for further metallurgical testwork

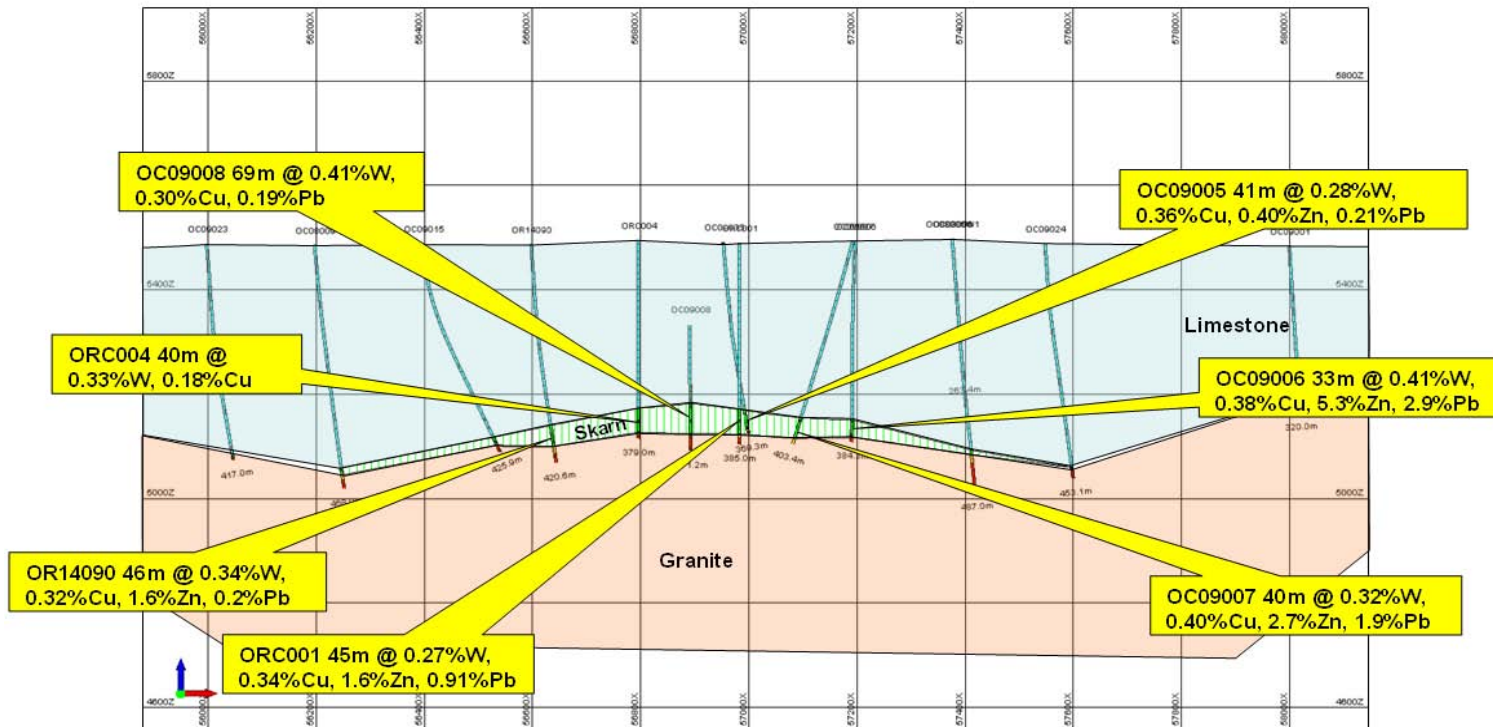
## Program Parameters:

- 10 rigs, 2 contractors
- working 24/7
- ~ 55,000m combined Reverse Circulation and Core drilling



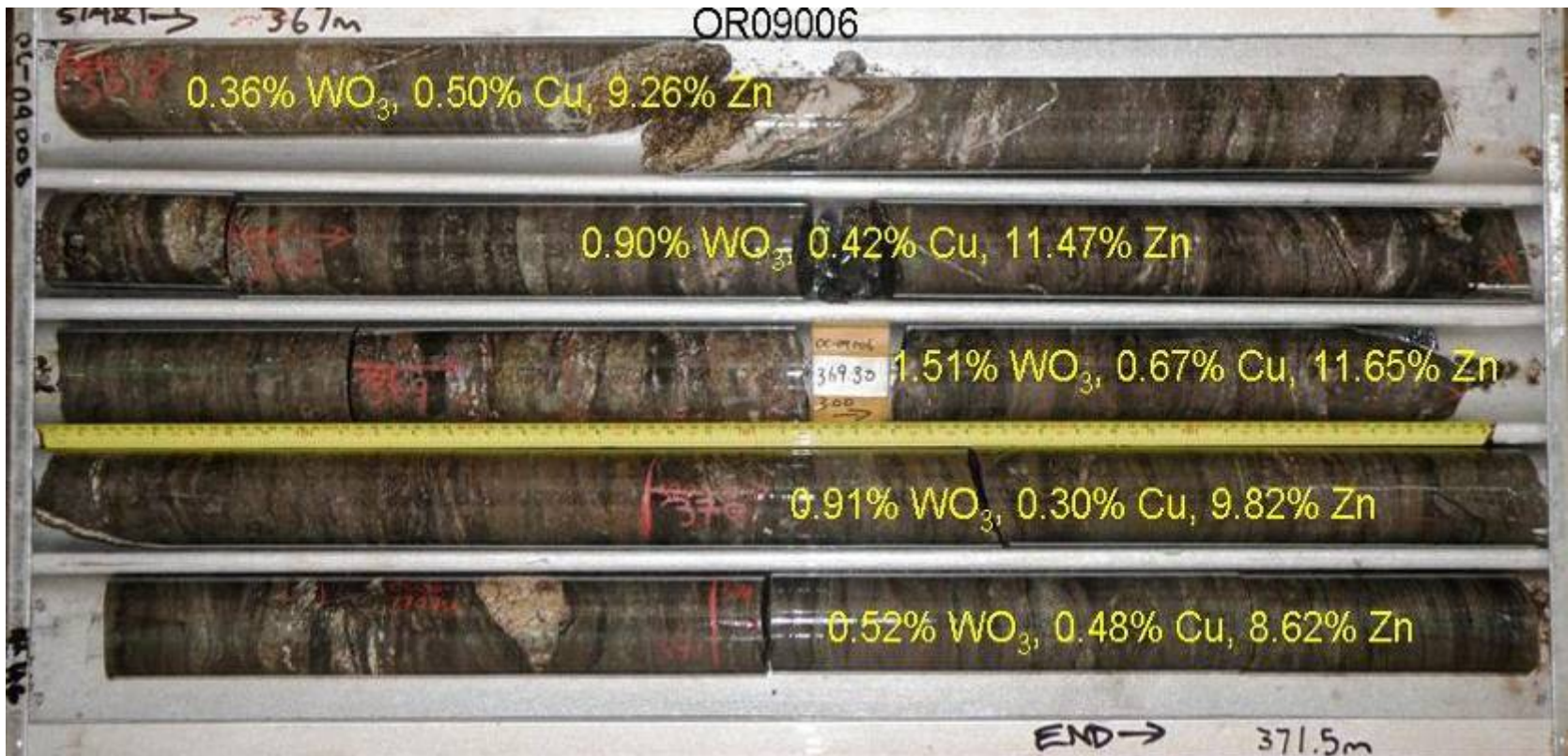
# O'Callaghans Geology

- O'Callaghans is a large, flat, laterally extensive polymetallic skarn deposit
- 350m below surface and 5 to 70m approximate thickness
- Sharp grade contact with hangingwall and footwall
- Distinct high grade Zinc and Lead zones
- Other regional Tungsten targets within Newcrest leases



# High Grade Zones

- The core below is an example of high grade zones that occur throughout the ore body
- Continuous high grade zones allow for selective mining to increase early metal production and reduce costs (assays showing 1m composite grades)



# O'Callaghans Mining

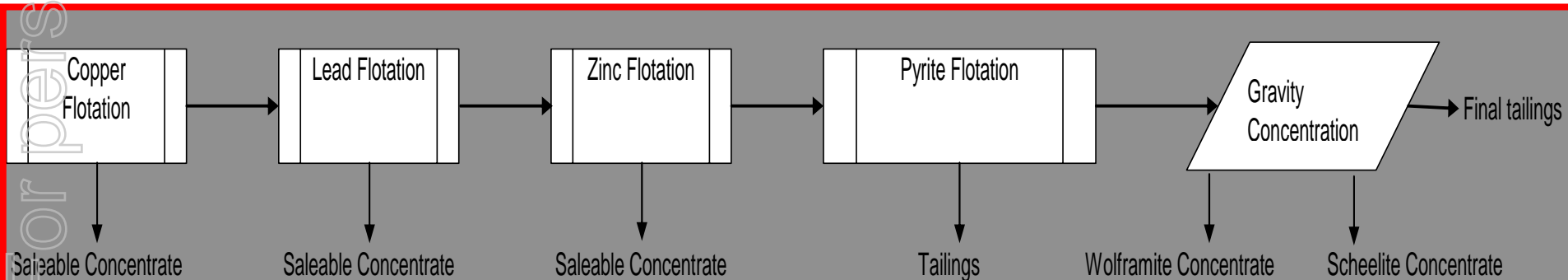
Newcrest has world class expertise in underground mining methods, from selectively mining high grade underground deposits such as Gosowong and Cracow to bulk underground caving of lower grade ore bodies at Ridgeway and Telfer.

The ongoing feasibility studies will determine the optimum mining method for O'Callaghans



# O'Callaghans Ore Processing

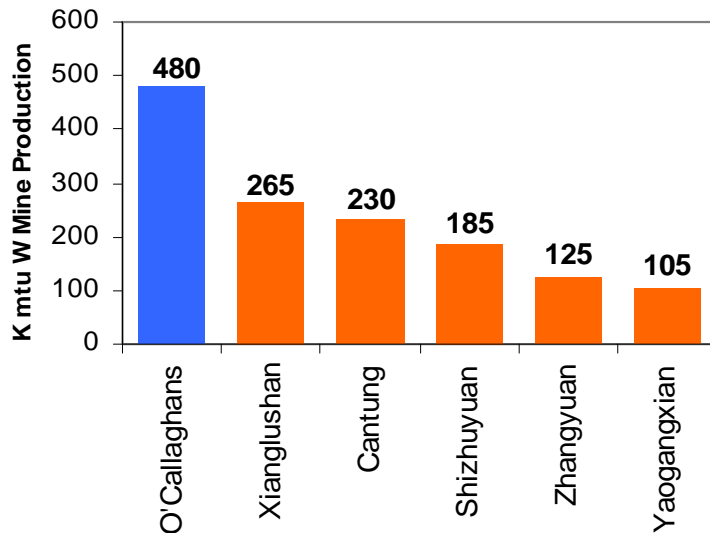
- Tungsten Concentrates anticipated to be high quality, free of significant impurities;
  - Wolframite and scheelite appear co-dominant tungsten minerals
- Use of conventional flotation and gravity concentration
  - conventional flotation for Copper, Lead and Zinc
  - gravity concentration for Tungsten
- Metallurgical testwork to date has demonstrated good recovery to concentrates



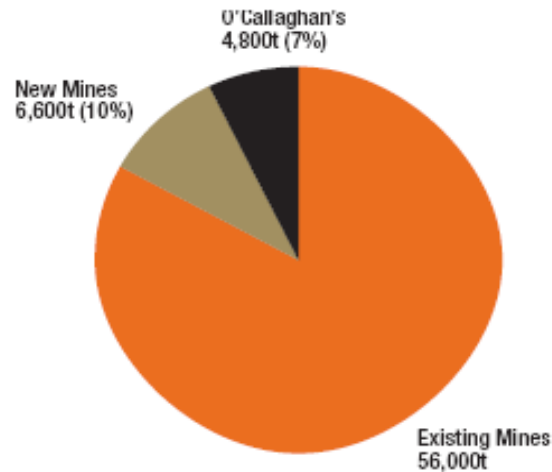
# O'Callaghans Tungsten inventory in context

- O'Callaghans is forecast to produce 480,000mtu pa W (4,800tpa W)
  - Tungsten will account for ~50% of revenue from O'Callaghans
- At 480,000mtu pa, O'Callaghans;
  - is twice the size of any mine in production in 2008
  - will constitute approximately 7% of global supply

O'Callaghans forecast vs 2008 producers



2013 Global Tungsten Production forecast<sup>2</sup>



Source:  
1&2: Internal Analysis for O'Callaghans, CRU Analysis; 'Tungsten, reviving the Tungsten industry outside China' for all other data