



**MACPHERSONS**

Operations Update

KALGOORLIE



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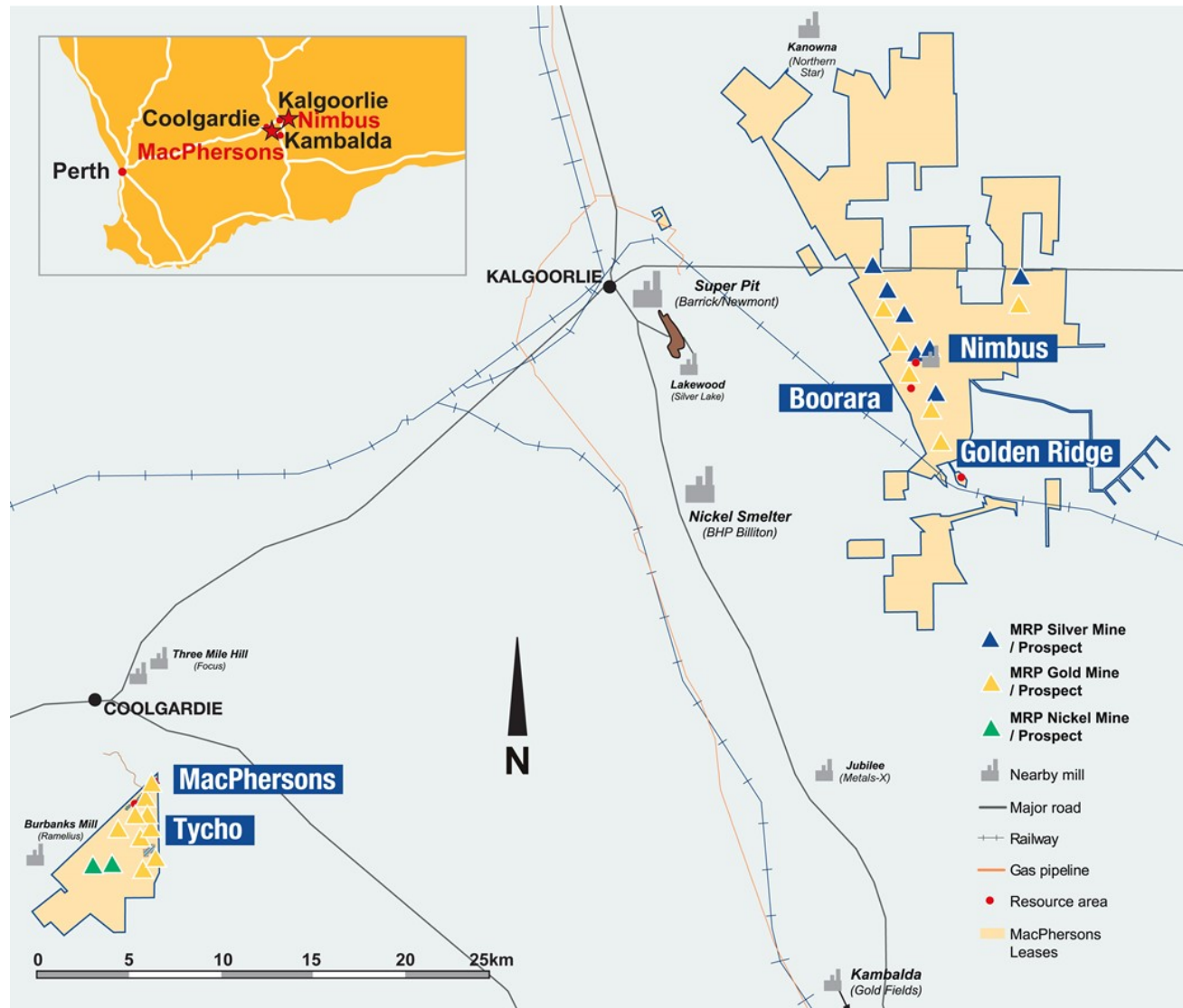
## **Forward looking Statements**

This presentation may contain statements that may be deemed 'forward looking statements'. Forward risks, uncertainties and other factors, many of which are outside the control of MRP, can cause actual results to differ materially from such statements. Such risks and uncertainties include, but are not limited to, commodity price volatility, increased production costs and variances in ore grade recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. MRP makes no undertaking to update or revise such statements, but has made every endeavour to ensure that they are fair and reasonable at the time of making the presentation.

Investors are cautioned that any forward looking statements are not guarantees of future performance and that actual results or developments may differ materially from those projected in any forward looking statements made.

Exploration targets are conceptual in nature and drilling may not convert these to resources.

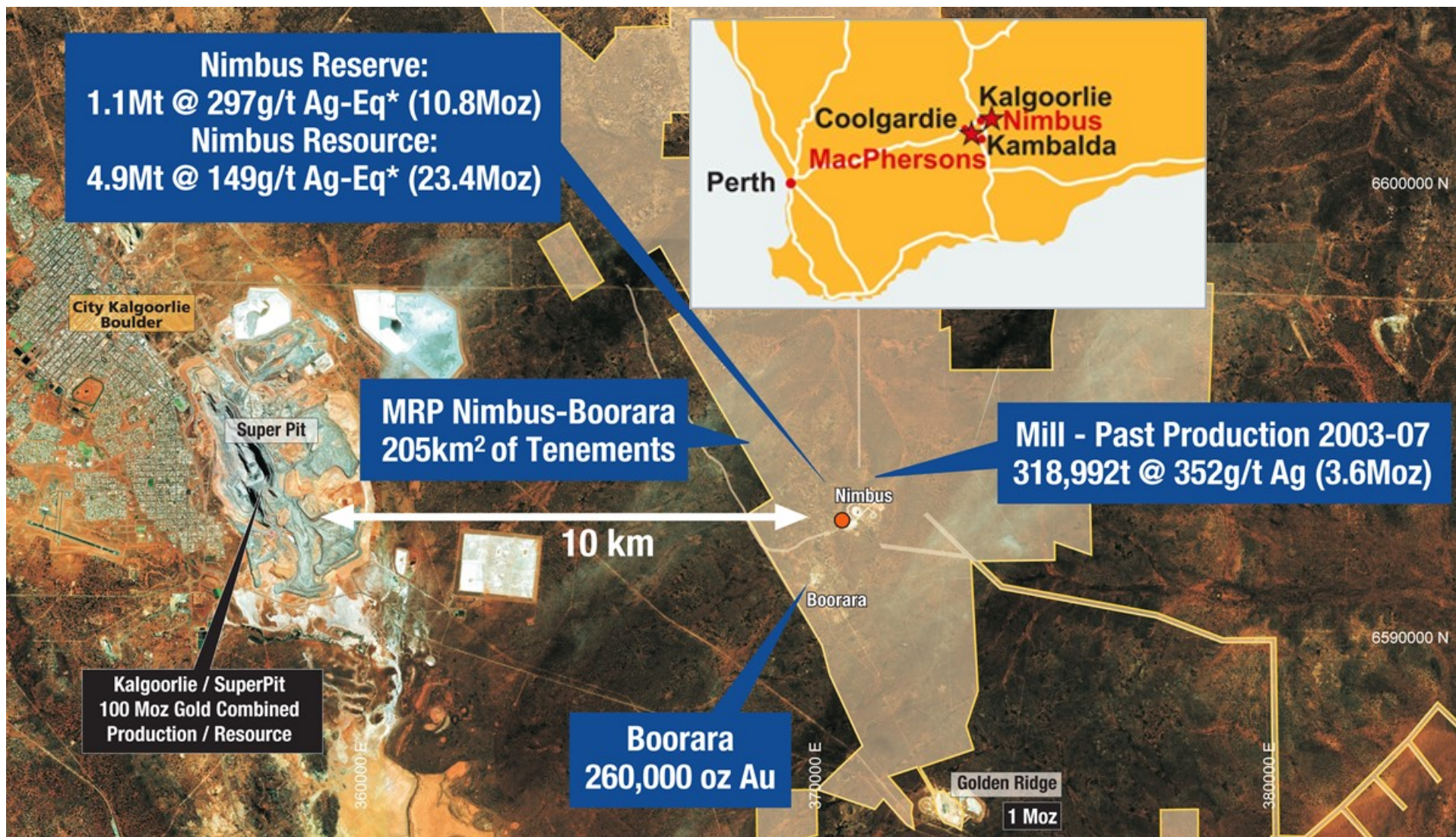
# Prime Location, Extensive Infrastructure



- ▶ Strategic tenement holding
- ▶ Readily available infrastructure: gas, power, rail, water
- ▶ Mining engineering services and workforce
- ▶ Kanowna – Boorara shear zone



# Prime Location, Recognised Production Area





# Strategic Achievements



- ▶ 15,732m (processed 55 drillcore holes)
- ▶ Mine design and Ore Reserve statement
- ▶ 1.1 Mt @ 297 g/t Ag Eq.\* recovered grade
- ▶ Significant increase in Mineral Resource

	2013		2014
Silver Eq.	18.3 Moz	▶	23.4 Moz
Gold	330,000 oz	▶	460,000 oz
Zinc	49,000 t	▶	65,000 t

- ▶ Extension drilling confirmed 600m down plunge
- ▶ Project independent technical review (SRK) identified no fatal flaws
- ▶ Progressing to Bankable Feasibility Study (Sedgman)

- Ag Eq is calculated using metal credits:  $\text{Ag Eq.} = \text{Ag} + \text{Zn} \times 28.852 + \text{Au} \times 62.626 + \text{Hg} \times 0.15$
- Full details of Ag Eq calculations and input parameters detailed in the Appendices.

# Corporate Overview



ASX Code:	MRP
ASX Listed:	December 2010
Ordinary Shares:	252 million
Options:	Nil
Market Cap:	A\$50m (at 20 cents)
Cash:	A\$4.2m (31 Mar 2014)
Debt:	Nil

## Projects

- ▶ 100% Nimbus Silver-Gold-Zinc VHMS
- ▶ 100% Boorara/Coolgardie gold assets

## Substantial Shareholders

- ▶ Directors/Management: 37%
- ▶ Orion Mine Finance: 8%
- ▶ Top 20 shareholders: 65%

## 12 Month Performance



## Board of Directors & Management

Ashok Parekh, Chairman

*Accounting & Mining Company Management*

Morrie Goodz, Managing Director

*Geology, Chemistry, Mine Development & Management*

Jeff Williams, Non-Executive Director

*Mining Engineering, Mine Planning, Development & Operation*

Randell Ford, Operations Manager

*Mining Engineering, Processing & Operational Management*

Stephen Hewitt-Dutton, Company Secretary

*Accounting, Mergers & Acquisitions, Compliance*





## Plant

- ▶ Operated from 2003 to 2007
- ▶ Processed 319,000 t at a head grade of 352 g/t Ag to produce 3.6 Moz silver
- ▶ Larger resource needs larger mill capacity
- ▶ Conventional plant
  - ▶ Grind / Gravity
  - ▶ Leach / Flotation
  - ▶ Flowsheet in Appendix

### Key Parameter

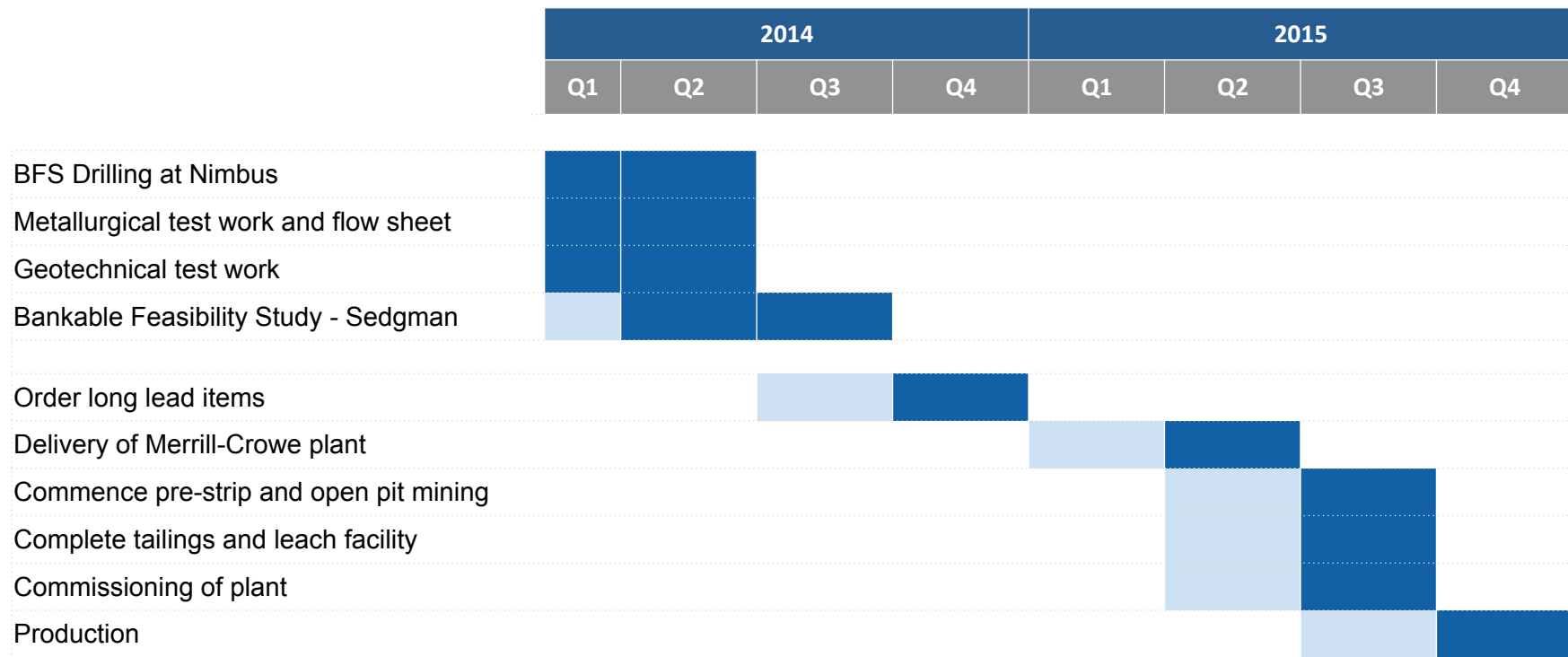
### Input

Stope design	2 to 20m wide
Expanded Plant capacity (from 160,000 tpa to 480,000 tpa)	480,000 tpa
New Heap Leach Plant	1,000,000 tpa

# Timeline to Production

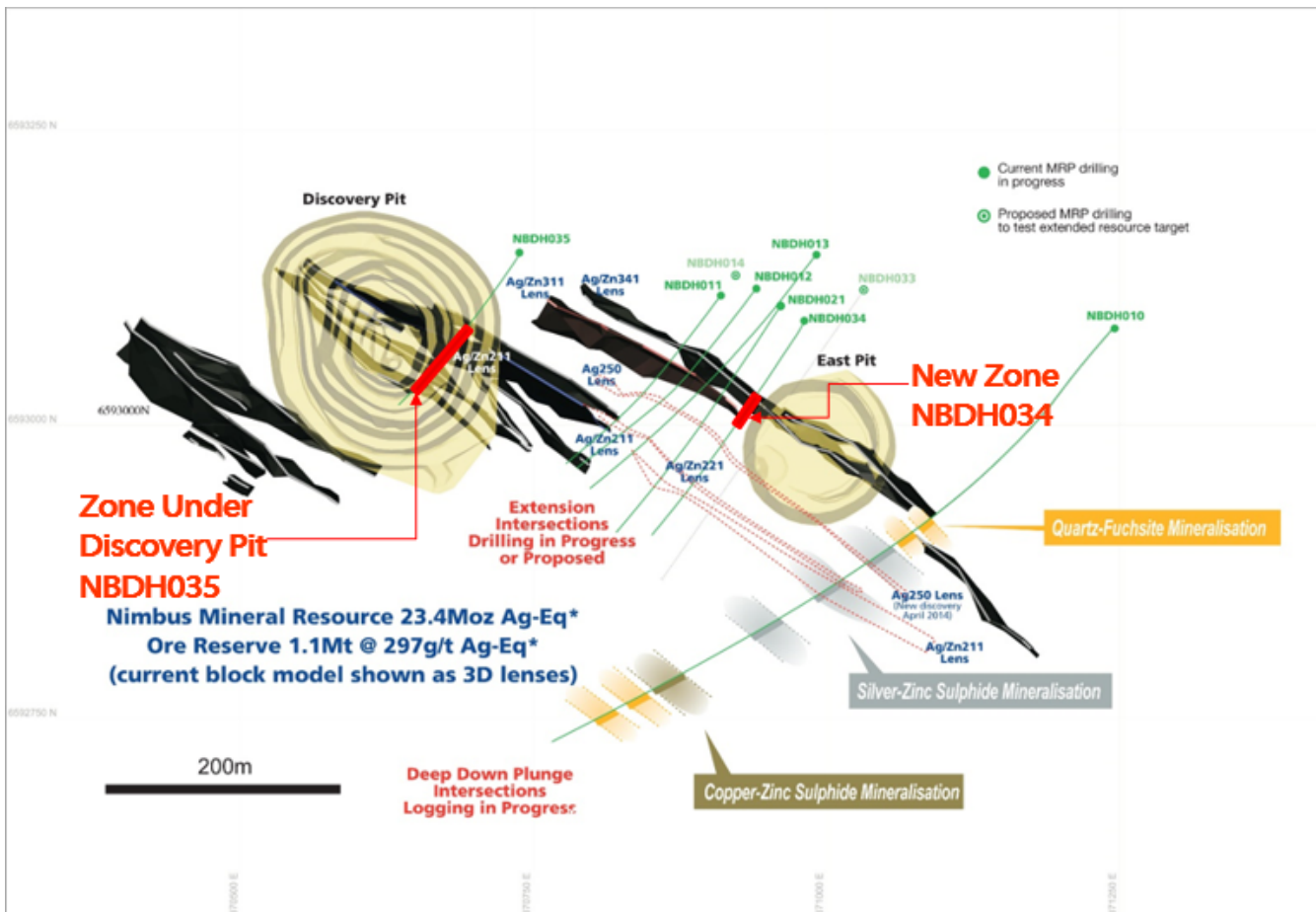


## Production Target Q3/Q4 2015





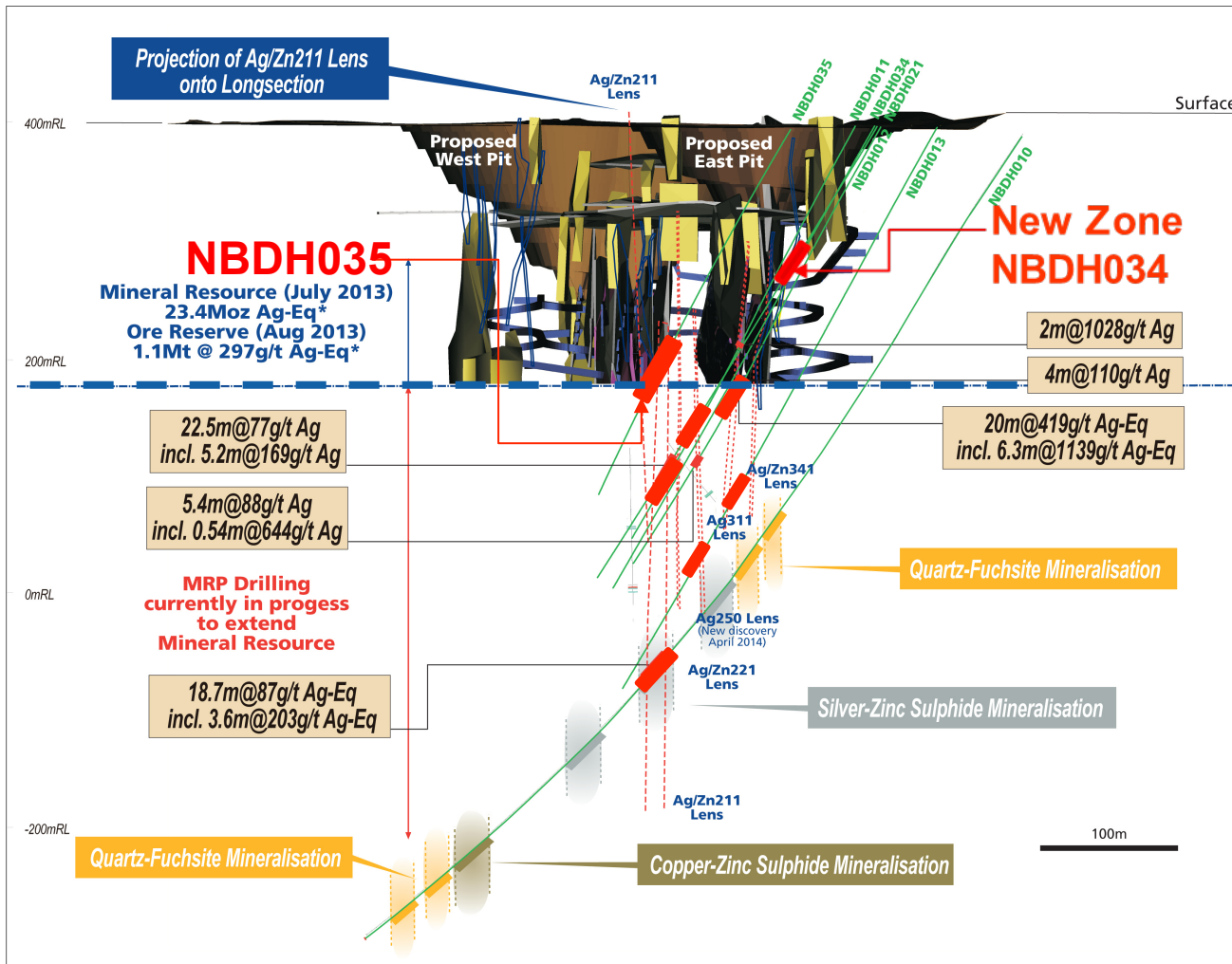
# Upside - BFS Drillholes



## VHMS deposit

- ▶ Volcanogenic Hosted Massive Sulphide
- ▶ Existing mineral resource limited only by drilling
- ▶ Mineralisation remains open in both in strikelength and depth
- ▶ multiple lenses, such as AG211

# Nimbus Silver-Gold-Zinc Project – 500m Deep



## VHMS deposit

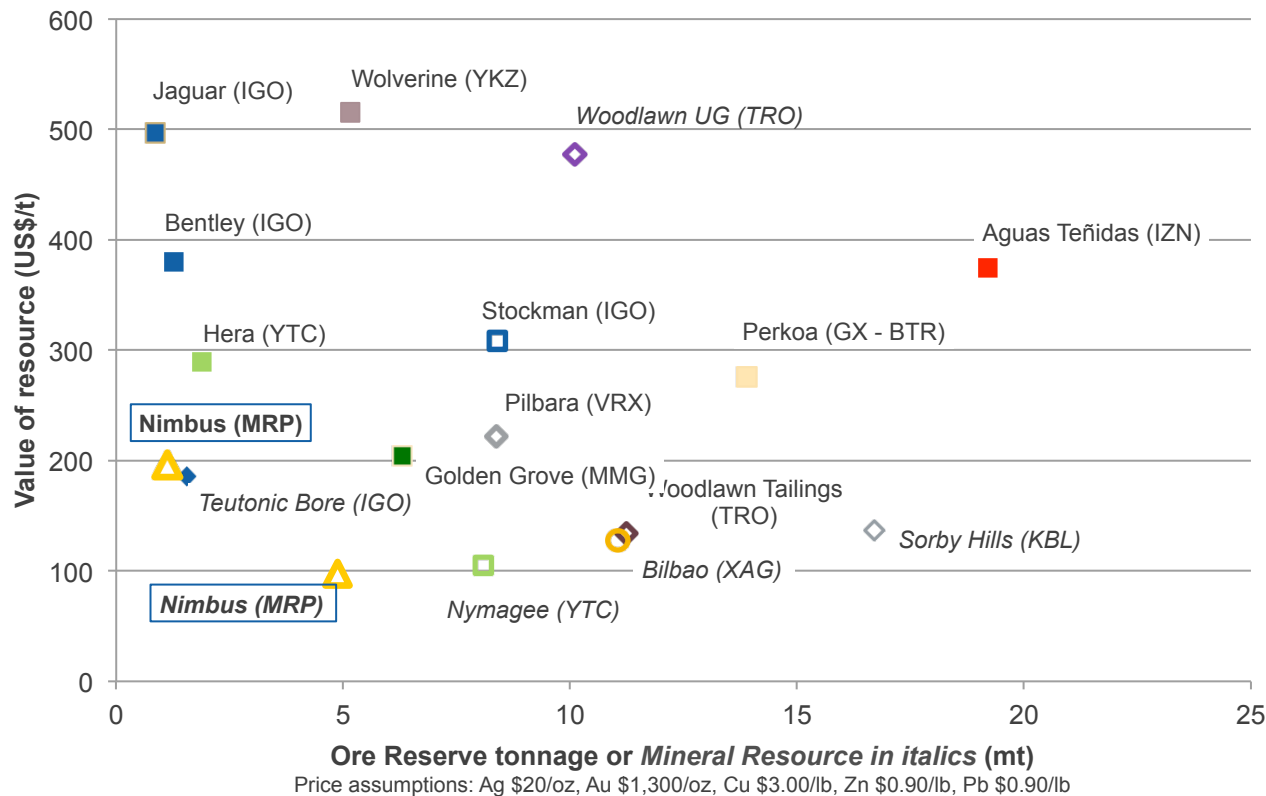
- ▶ 500m deep intercept
- ▶ Analogous to 850m deep Jaguar/Bentley (IGO) and Golden Grove (MMG) deposits
- ▶ 30+ lenses identified to date
- ▶ Zinc massive sulphide mineralisation consists mainly of sphalerite, pyrite and silver bearing minerals with byproduct quantities of gold, copper & lead-bearing



# Project Benchmarking



## Polymetallic Projects & Mines Comparison



- ▶ Value of Nimbus ore in the ground is similar to the one from Golden Grove (GG)
- ▶ GG operating continuously since 1990

Source: Lincoln Crowne & Company

# Video Flyover



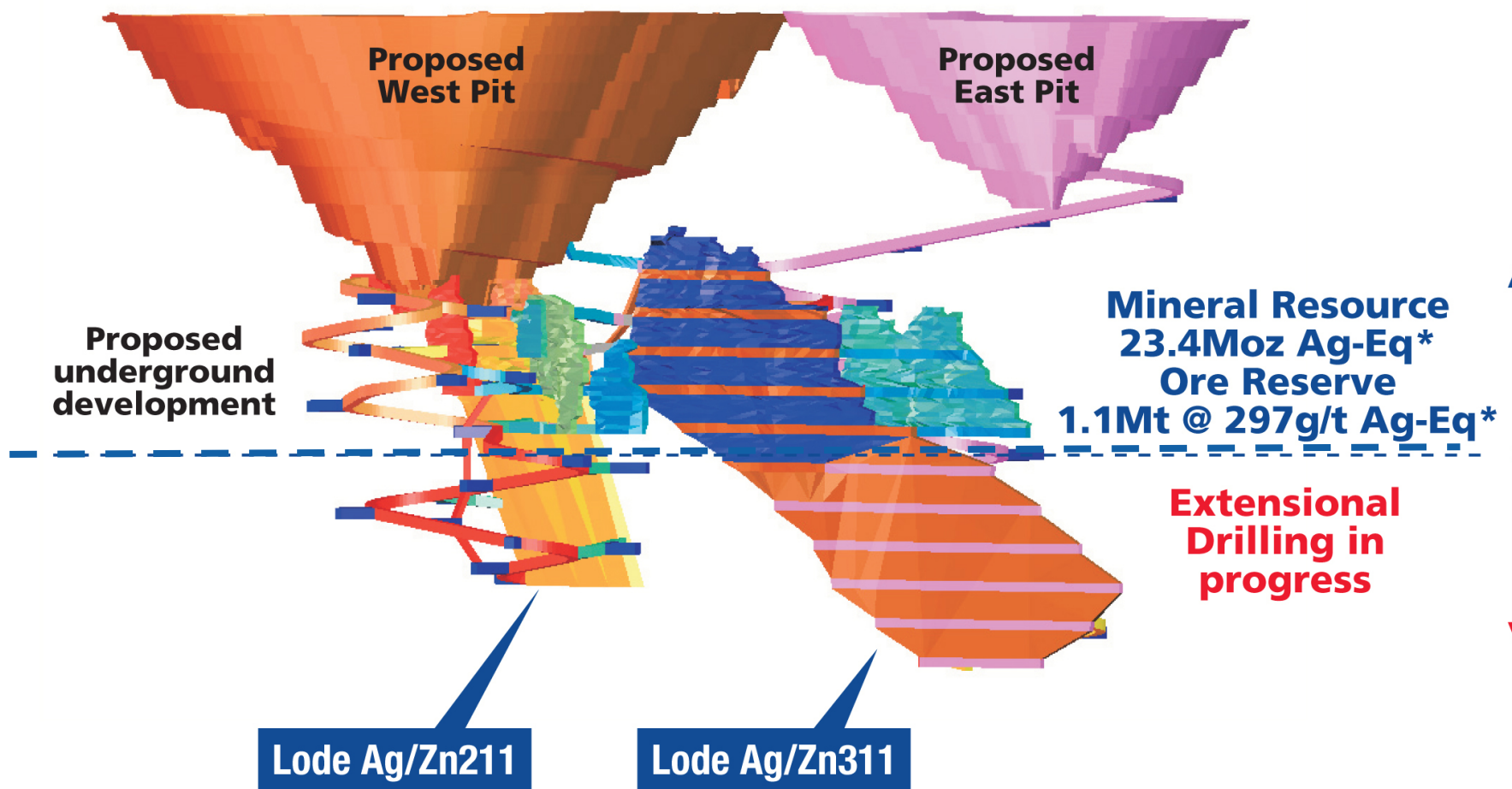




# Upside Potential



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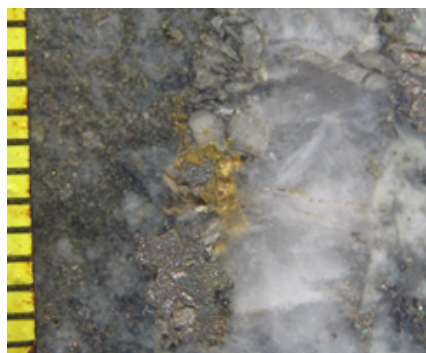


# Grade is King – Massive Sulphides



## VHMS deposit

- ▶ Existing mineral resource limited by drilling
- ▶ Mineralisation remains open in multiple lenses, such as Ag/Zn211

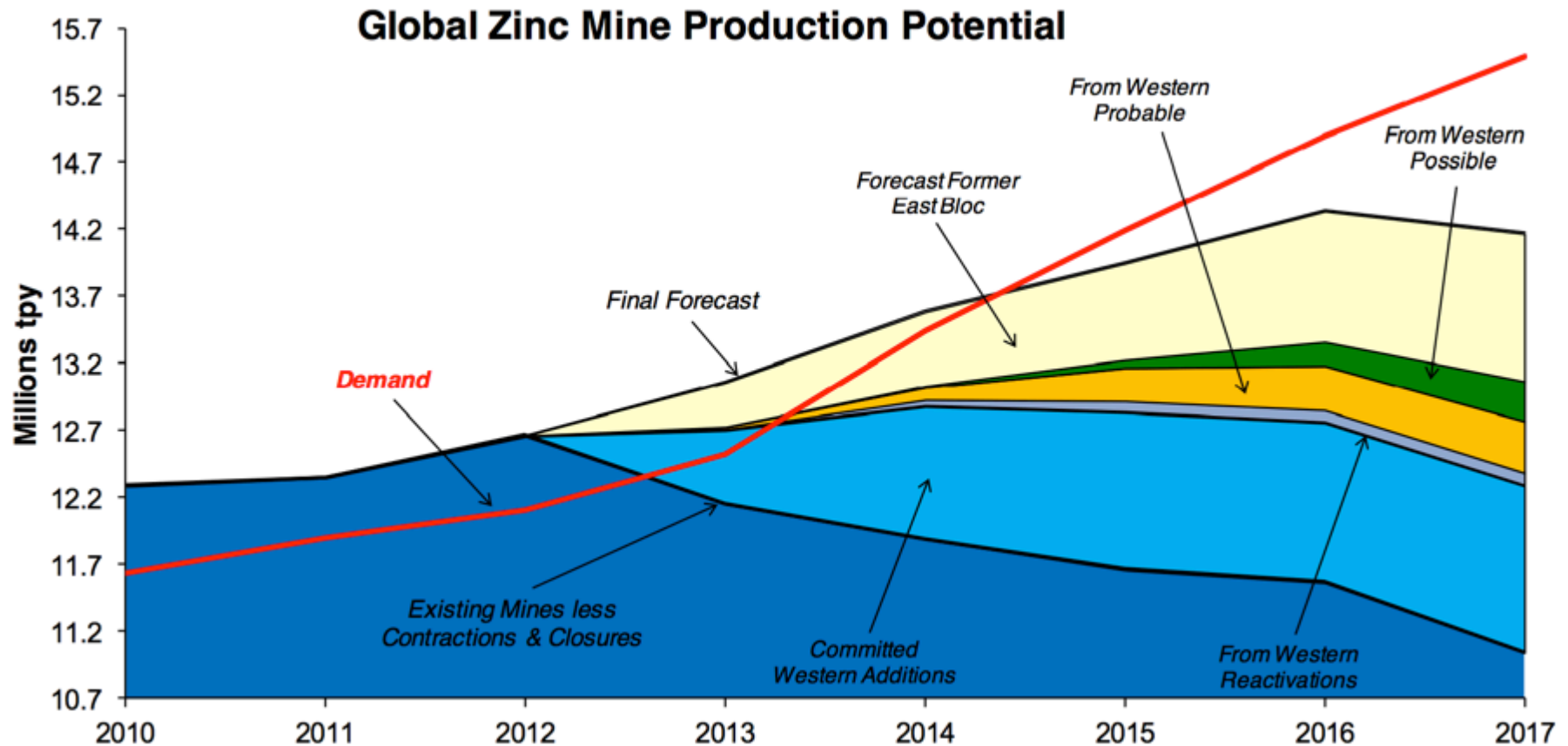


## Polymetallic

- ▶ Silver
- ▶ Zinc
- ▶ Gold



# Zinc Market Supply Demand Curves

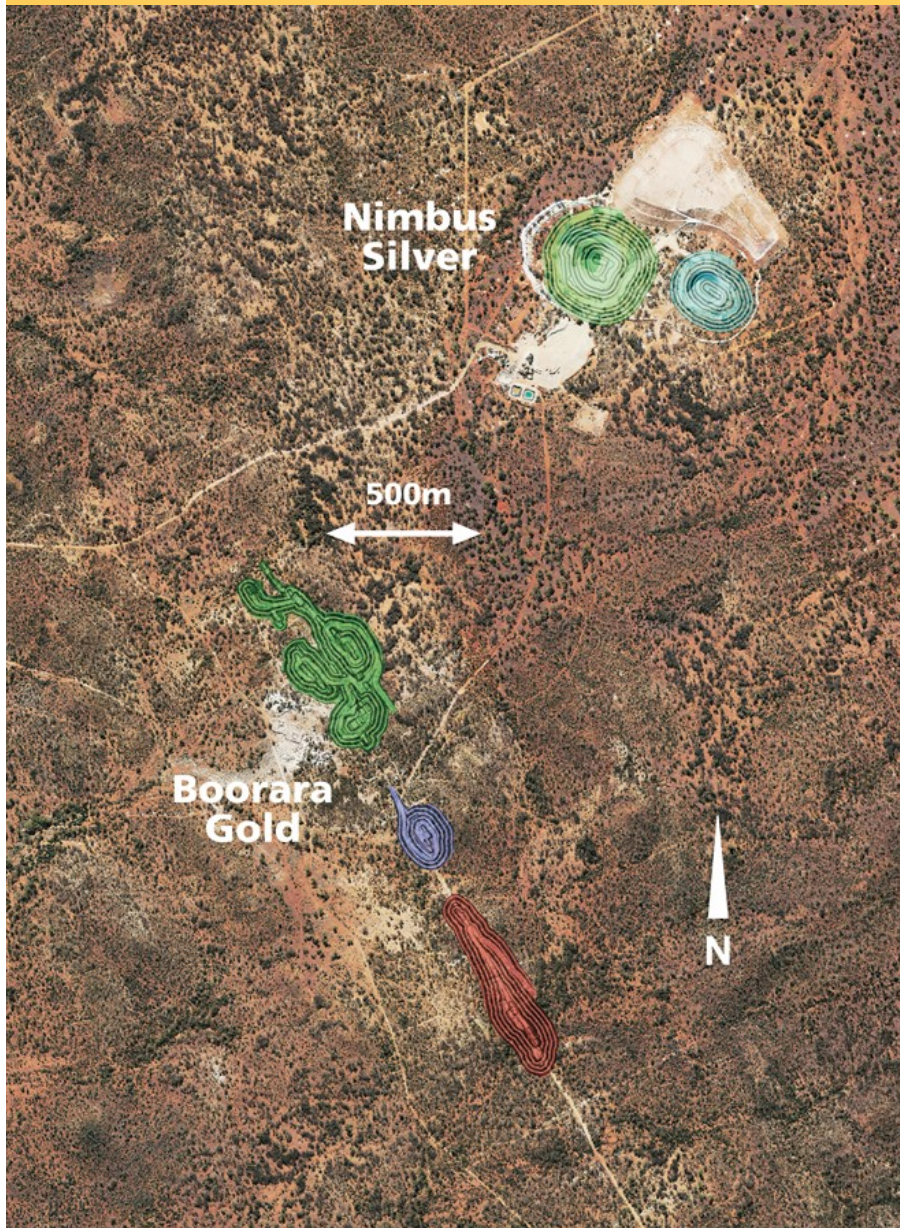


Source: CRU

▶ Zinc Price has ranged up 5-10% in 2014



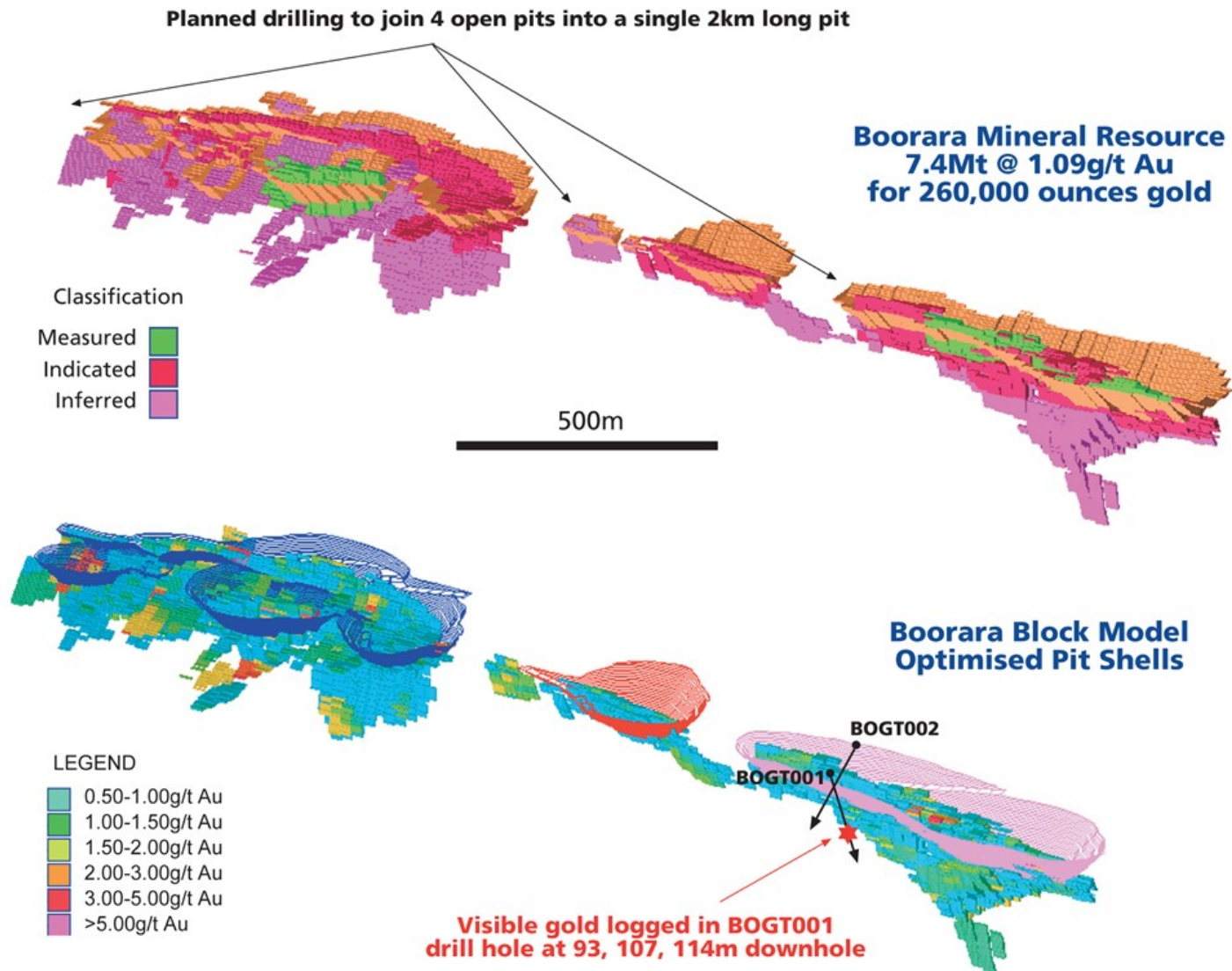
# Mine Schedule at Nimbus – Boorara



## Single Fleet

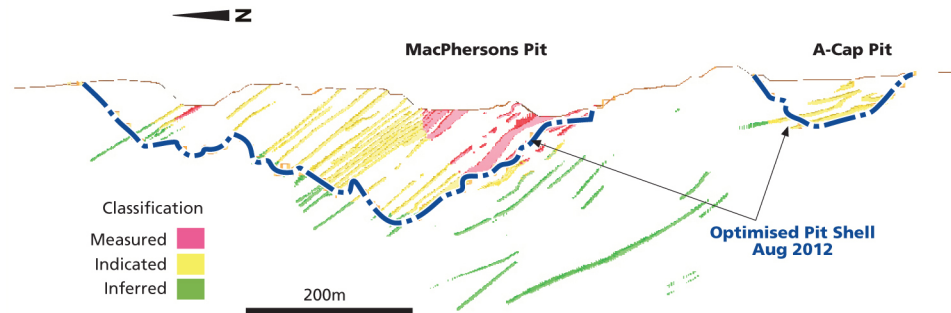
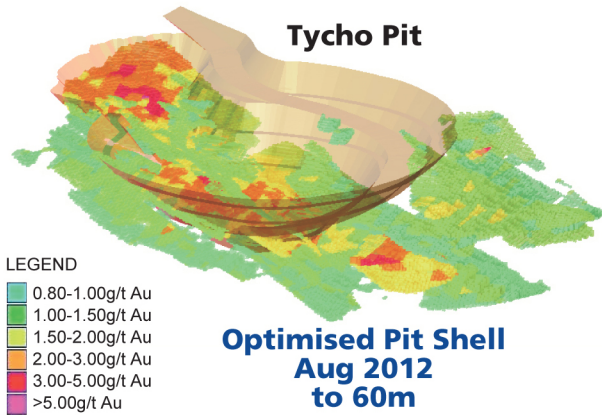
- ▶ 2 Nimbus Pits start with East Pit (Blue) moving to underground after 8 months;
- ▶ West Pit (Green) moves underground after 20 months
- ▶ As Nimbus mining fleet becomes available mining commences at Boorara (<2km away) and runs in parallel with Nimbus
- ▶ Coolgardie gold ore will be fed into the Nimbus mill schedule later in the mine schedule

# Boorara Resource, Block Model & Mine Design

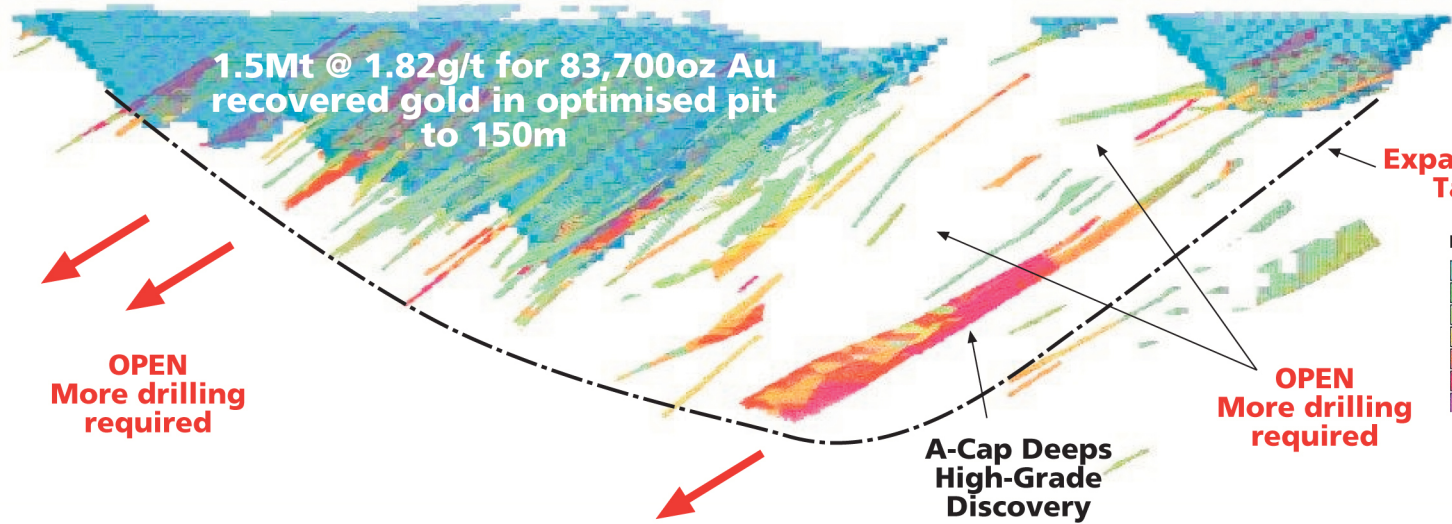




# Coolgardie Resource, Block Model & Mine Design

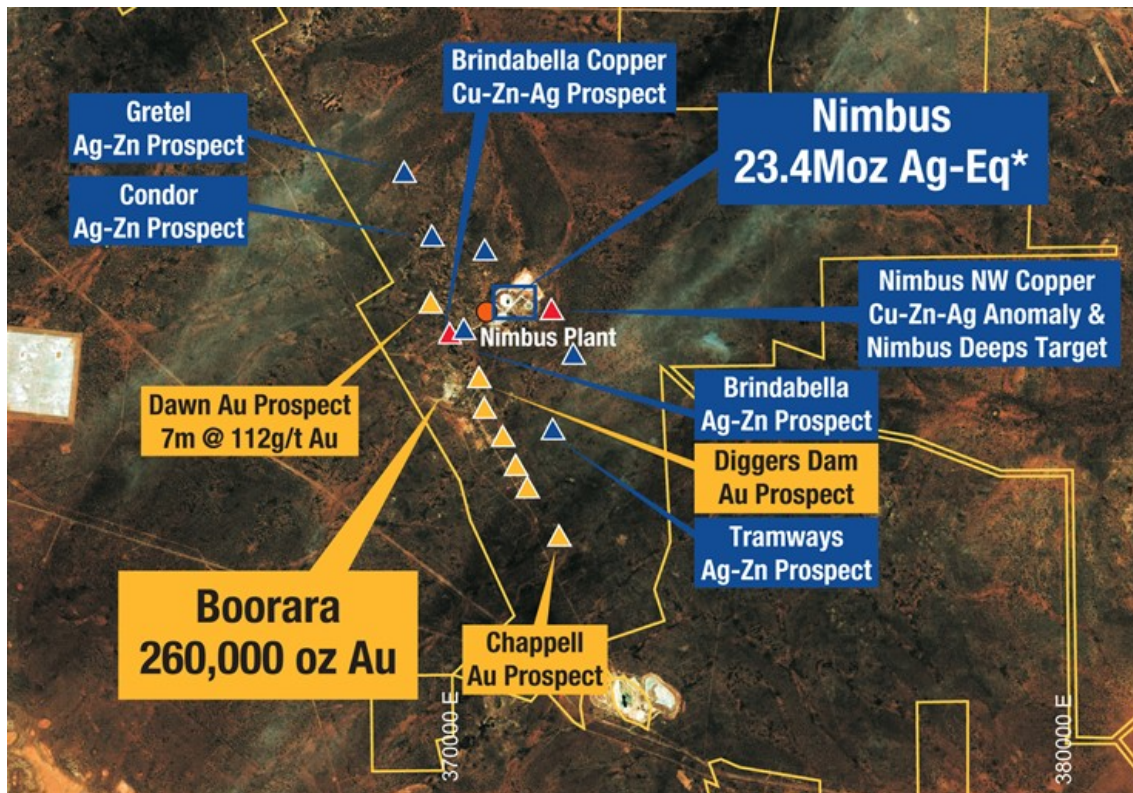


## Blue - Optimised Pit Shell Aug 2012





# Exploration Project Areas – 5km Project Pipeline



- ▶ Copper Potential : analogies with the geology of nearby Golden Grove and Jaguar-Bentley mines support the high likelihood of copper-zinc-silver-gold feeder lenses being identified nearby
- ▶ Nickel Potential: both the Coolgardie and Golden Ridge tenements are at the northern extension of the Kambalda Nickel Dome and have known nickel occurrences where helicopter EM has detected 3 EM conductors – drilling of these will be undertaken in future exploration

# Points of Difference



- ▶ Experienced operational mine  
mangers

- ▶ Grade is king (297g/t Ag-Eq)

- ▶ Move to Producer

- ▶ Polymetallic

- ▶ Silver - Gold – Zinc

- ▶ Copper – Nickel

- ▶ ASX Code: MRP [www.mrpresources.com.au](http://www.mrpresources.com.au)

Historical silver doré bars  
produced at Nimbus



# Competent Person Statement



The information in this presentation that relates to mineral resources and exploration results is based on information compiled by Mr Morrie Goodz, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Morrie Goodz is a full time officer of MacPhersons Resources Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he is undertaking, 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 Goodz has given his consent to the inclusion in this presentation of the matters based on the information in the form and context in which it appears.

- ▶ Table 1 Sections 1 and 2 as per JORC Code 2012 for Reporting of Exploration Results is included in the ASX Announcement dated 17<sup>th</sup> February 2014 on the MacPhersons Resources Limited website.
- ▶ Table 1 Sections 1 thru 4 as per JORC Code 2012 for Reporting of Ore Reserves and Mineral Resources is included in the ASX Announcement dated 3<sup>rd</sup> December 2013 on the MacPhersons Resources Limited website.

## Further Information

- ▶ For further information on MacPhersons and its projects or to subscribe for regular updates, please visit our website at [www.mrpresources.com.au](http://www.mrpresources.com.au) or contact our Kalgoorlie office.
- ▶ MacPhersons Resources Managing Director, Morrie Goodz, is available for comment and can be contacted on +61 429 834 912

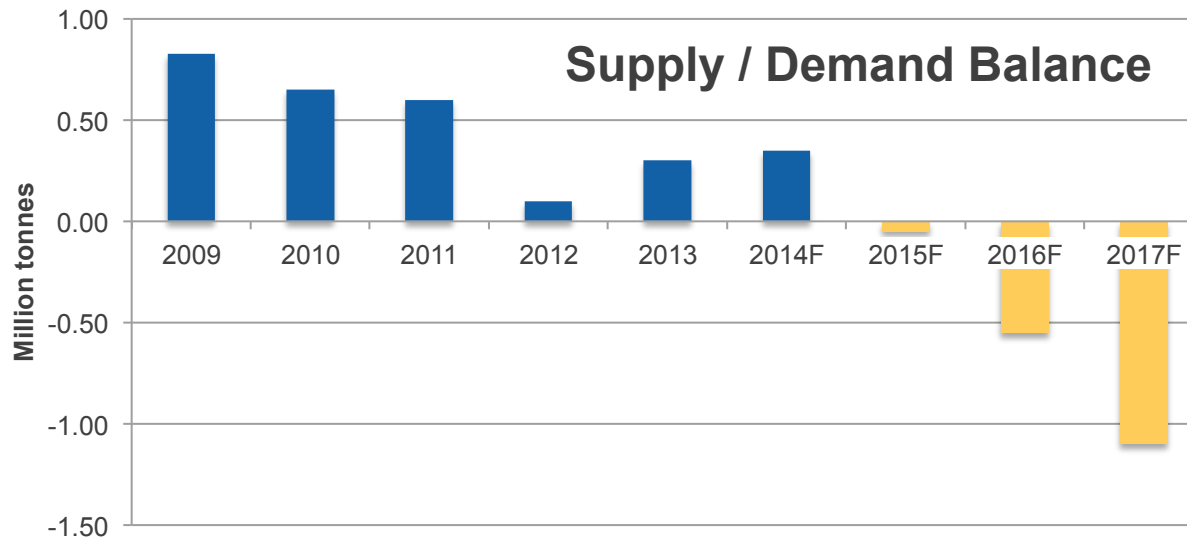


# Zinc Mine Closure and Growing Deficit



Mine	Location	Closing	Capacity
Brunswick	Canada	2013	200,000 t
Perseverance	Canada	2013	110,000 t
Century	Australia	2013/2014	510,000 t
Skorpion	Namibia	2014	164,000 t

- ▶ Zinc has compelling market fundamentals among the base metals
- ▶ Significant mine closures are expected to result in a deficit in excess of 1 mt in 2017
- ▶ China is a growing net importer since 2008

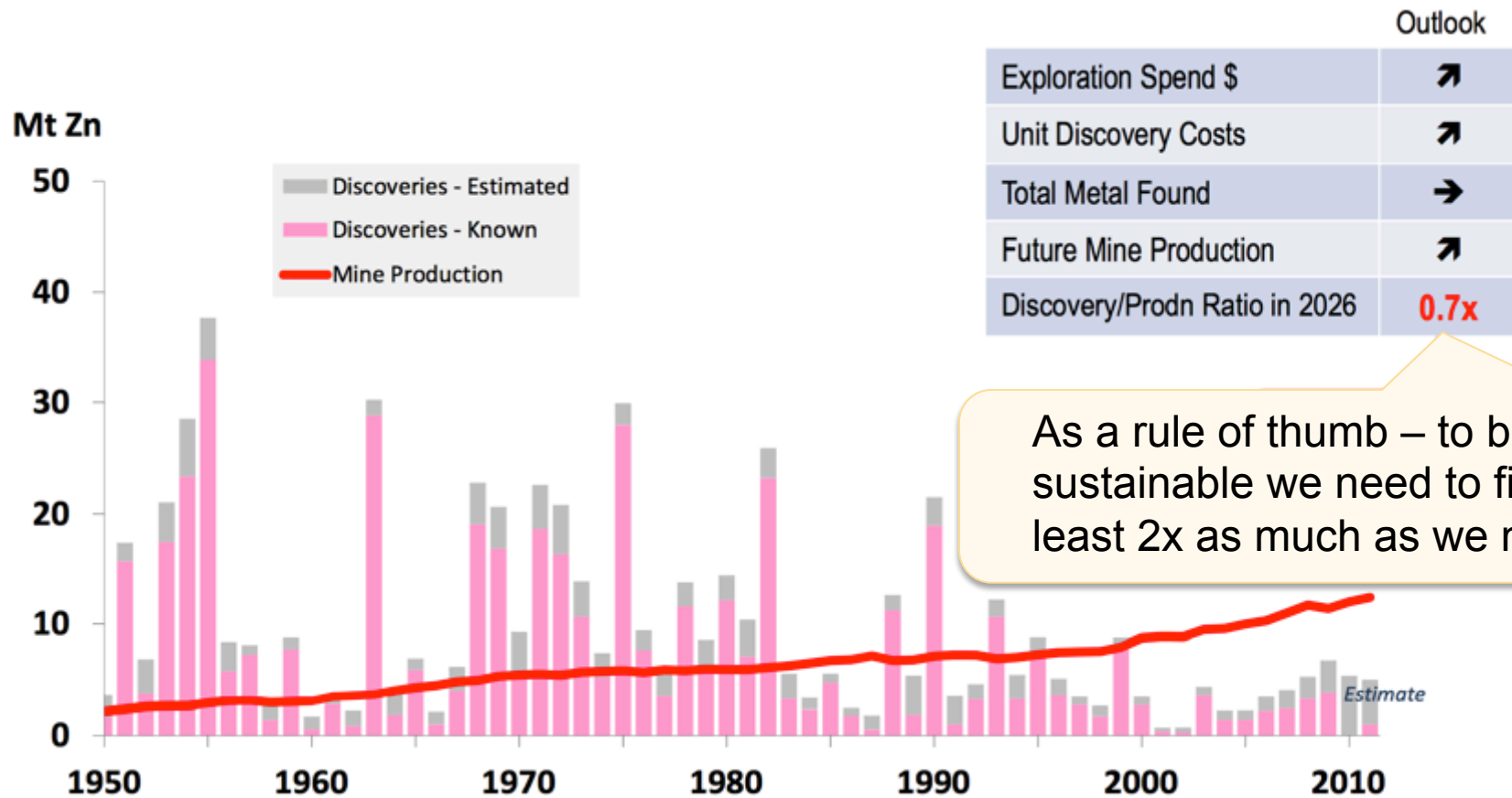


Source: CRU

# Mining and Discovery Rates for Zinc



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Source: MinEx Consulting © Feb 2012. Production data from USGS

# 23.4 million oz Ag equivalent Resource



Zone	Category	Tonnes <i>Mt</i>	Ag Grade <i>g/t</i>	Ag Equivalent <i>g/t</i>	Ag Metal <i>Moz</i>	Ag Metal Eq. <i>Moz</i>
<b>Mineral Resource as at 25<sup>th</sup> July 2013</b>						
Silver Zone	Measured	1.041	112	219	3.7	7.3
	Indicated	2.502	103	168	8.3	13.5
	Sub-total	3.543	105	183	12.0	20.9
Gold Zone	Inferred	1.333	10	59	0.4	2.5
	<b>Total</b>	<b>4.876</b>	<b>79</b>	<b>149</b>	<b>12.4</b>	<b>23.4</b>

## Ore Reserve as at 5<sup>th</sup> August 2013

	Proved	0.705	167	242	3.8	5.5
	Probable	0.420	263	396	3.6	5.3
	<b>Total</b>	<b>1.126</b>	<b>203</b>	<b>298</b>	<b>7.3</b>	<b>10.8</b>

Detailed mineral resource table available in the Appendix

\* Ag Eq is calculated using metal credits: Ag Eq. = Ag + Zn x 28.852 + Au x 62.626 + Hg x 0.15



# Nimbus Mineral Resource & Ore Reserve



Zone	Category	Tonnes Mt	Ag Grade g/t	Au Grade g/t	Zn Grade %	Hg Grade g/t	Ag Eq. g/t	Ag Metal Moz	Au Metal koz	Zn metal kt	Hg metal t	Ag Eq. metal t
<b>Mineral Resource as at 25<sup>th</sup> July 2013</b>												
Silver Zone	Measured	1.041	112	0.11	2.32	224	219	3.7	3.8	24	233	7.3
	Indicated	2.502	103	0.17	1.54	70	168	8.3	13.8	38	175	13.6
	Sub-total	3.543	105	0.15	1.77	115	183	12.0	17.5	63	408	20.9
Gold Zone	Inferred	1.333	10	0.67	0.16	17	59	0.4	28.5	2	23	2.6
	<b>Total</b>	<b>4.876</b>	<b>79</b>	<b>0.29</b>	<b>1.33</b>	<b>88</b>	<b>149</b>	<b>12.4</b>	<b>46.0</b>	<b>65</b>	<b>431</b>	<b>23.4</b>

## Ore Reserve as at 5<sup>th</sup> August 2013

	Proved	0.705	167	0.13	1.96	70	242	3.8	2.9	14	49	5.5
	Probable	0.420	263	0.07	4.13	57	396	3.6	1.0	17	24	5.3
	<b>Total</b>	<b>1.126</b>	<b>203</b>	<b>0.09</b>	<b>2.77</b>	<b>65</b>	<b>298</b>	<b>7.3</b>	<b>3.9</b>	<b>31</b>	<b>73</b>	<b>10.8</b>

Reported according to the 2012 JORC Code (mineral resource and ore reserve restated on the 3<sup>rd</sup> December 2013)

Mineral resource reported using Ag  $\geq$  25 g/t or Au  $\geq$  0.5 g/t or Zn  $\geq$  1.0%

Ore reserve estimated using a gold price of A\$1,353/oz, a silver price of A\$21.60/oz and a zinc price of A\$1,996/t

# Boorara Mineral Resource



Category	Oxidation	Tonnes	Au (g/t)	Au (oz)
Measured	oxide	640,000	1.13	23,000
	transitional	390,000	1.07	14,000
	fresh	90,000	1.02	3,000
	sub total	1,120,000	1.10	40,000
Indicated	oxide	1,030,000	1.06	35,000
	transitional	1,140,000	1.08	40,000
	fresh	1,450,000	1.07	50,000
	sub total	3,630,000	1.07	125,000
Inferred	oxide	170,000	1.39	7,000
	transitional	310,000	1.14	11,000
	fresh	2,150,000	1.10	76,000
	sub total	2,620,000	1.13	95,000
<b>Grand total</b>		<b>7,370,000</b>	<b>1.09</b>	<b>260,000</b>

As at 12<sup>th</sup> July 2013. Mineral resource reported at a cut-off of 0.5 g/t Au

# Indicative Processing Flowsheet

## Conventional processing route

- ▶ Crushing, grinding, gravimetric separation, leaching and flotation

