



MACPHERSONS

## ASX Announcement

25 July 2013

# Nimbus Resource Up 27% to 23.4 Million oz Silver-Eq\*

### ASX Code: MRP

MacPhersons Resources Ltd

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ACN 139 357 967

### Contact Details

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### Capital Structure

Ordinary Shares on issue:  
249 M

Options on issue:  
22 M  
Exercise Price \$0.30  
Expiry 31 December 2013

### Board of Directors

**Ashok Parekh**  
Chairman – Executive Director

**Morrie Goodz**  
Managing Director – Executive Director

**Jeff Williams**  
Non-Executive Director

#### Highlights:

- **Nimbus Resource Upgrade in both size and classification:**
  - ❖ **>27% increase to 4.9Mt @ 149g/t for 23.4 million ounces (Moz) Silver-Eq\*, includes:**
    - **>6% increase to 12.4 million ounces silver;**
    - **>32% increase to 65,000 tonnes zinc; and**
    - **>38% increase to 46,000 ounces gold.**
- **30% of 2013 Resource converted to Measured Category;**
- **Ore Reserve Classification to be completed this month;**
- **Two new pit and underground mine designs near completion;**
- **Further extensions open along strike and at depth within pit shells;**
- **Metallurgical testwork shows higher silver and zinc recoveries.**

The Directors of **MacPhersons Resources Limited (ASX:MRP)** are pleased to announce another significant increase to the JORC Mineral Resource at its 100 per cent owned Nimbus Silver-Zinc-Gold Project located 10km east of Kalgoorlie's Super Pit gold mine.

The JORC Mineral Resource has increased to **4.9Mt @149g/t Ag-Eq\* for 23.4Moz**, including 65,000t Zn and 46,000oz Au. This is a **26% increase** to the Resource upgrade announced on 15 January 2013.

Importantly, in a major step forward for the Company, 30 per cent of the 2013 Resource has now been converted to the **Measured** category, with the balance of the silver-zinc zones in the **Indicated** category. These are the highest JORC classifications of geological confidence and represent certainty in the technical understanding of the Nimbus mineralisation. The Company is finalizing the **Ore Reserve Classification** which will be reported before the end of July 2013.

This is a significant milestone for the Company and still the Nimbus project has more exploration upside with mineralisation open along strike and at depth.

The resource has herein been described as a silver-zinc-gold zone (100% Measured and Indicated JORC Classification) and a gold-zinc-silver zone (initially classified as Inferred Resource). Both zones constitute the one mineral deposit and both would be mined and processed together at the Nimbus processing facility. The resources are subdivided by mineralisation and oxidation type in Table 2 (on page 3) and are summated as follows:

Table 1: Nimbus MRE

Category	Tonnes	Ag (g/t)	Ag-Eq (g/t)	Ag (oz)	Ag-Eq*(oz)
<b>Silver Zone</b>					
Measured	1,041,000	112	219	3.7Moz	7.3Moz
Indicated	2,502,000	103	168	8.3Moz	13.5Moz
<b>Gold Zone</b>					
Inferred	1,333,000	10	59	0.4Moz	2.5Moz
<b>TOTAL</b>	<b>4,876,000</b>		<b>149</b>	<b>12.4Moz</b>	<b>23.4Moz</b>

(also containing 65,000t Zinc; 46,000oz Gold)

#### MacPhersons Resources Managing Director Morrie Goodz commented:

*"Continued drilling of Nimbus has extended the high-grade Resource," Mr Goodz said.*

*"In light of market conditions, we have been able to complete a new higher grade mine design, with the ore reserve statement and mine design to be released before month end."*

*Metallurgical testwork has continued to show increased silver and zinc recoveries".*

Note\* refers to silver-equivalent (Ag-Eq). The tables relating to the details of the classification and all calculations are enclosed in this report.

## Inputs

The current resource update supersedes that released on the 15<sup>th</sup> January 2013. It relates to an update of the geological model, setting constraints from lithological and structural controls and partial results from late 2012 drilling. Drilling included 3 diamond drillholes and 4 diamond geotechnical holes.

The purpose of the drill program was to focus on providing inputs to the feasibility studies including ongoing metallurgical testwork, finalising pit wall slope angles, hydrological modelling, and waste characterisation.

## Key Outcomes

The program was successful in that:

- 100% of the Mineral Resource for the silver-zinc (Ag-Zn) blocks was converted to Measured and Indicated JORC Categories, with 30% now classified as Measured.
- The geological model was rotated slightly which gave it much more robustness and allowed for extensions to be observed and tested. The individual lens shapes were tightened up and intersecting bodies were more clearly understood and tracked.
- The mineralisation lenses were shown to remain open along strike and open to depth;
- Weathering profiles were re-assessed based on a combination of geological observations, geochemical signatures, and metallurgical properties. A more clear understanding was developed between weathering profiles and silver-bearing mineralisation and grade distribution.
- There remains areas within the current proposed optimised pits, that are relatively untested and therefore further opportunity to increase the mineral resource within the optimised pit, as well as the opportunity to enlarge the pit; and other new lenses and various surface geochemical anomalies have been identified within 500m of the existing pits.
- New mine design work is being finalised with the view of releasing a full mine plan and ore reserve statement by the end of the current month (July 2013).

The mineral resource review is summarised on page 3. Figure 1 (below) shows the site location 10km east of Kalgoorlie's superpit.

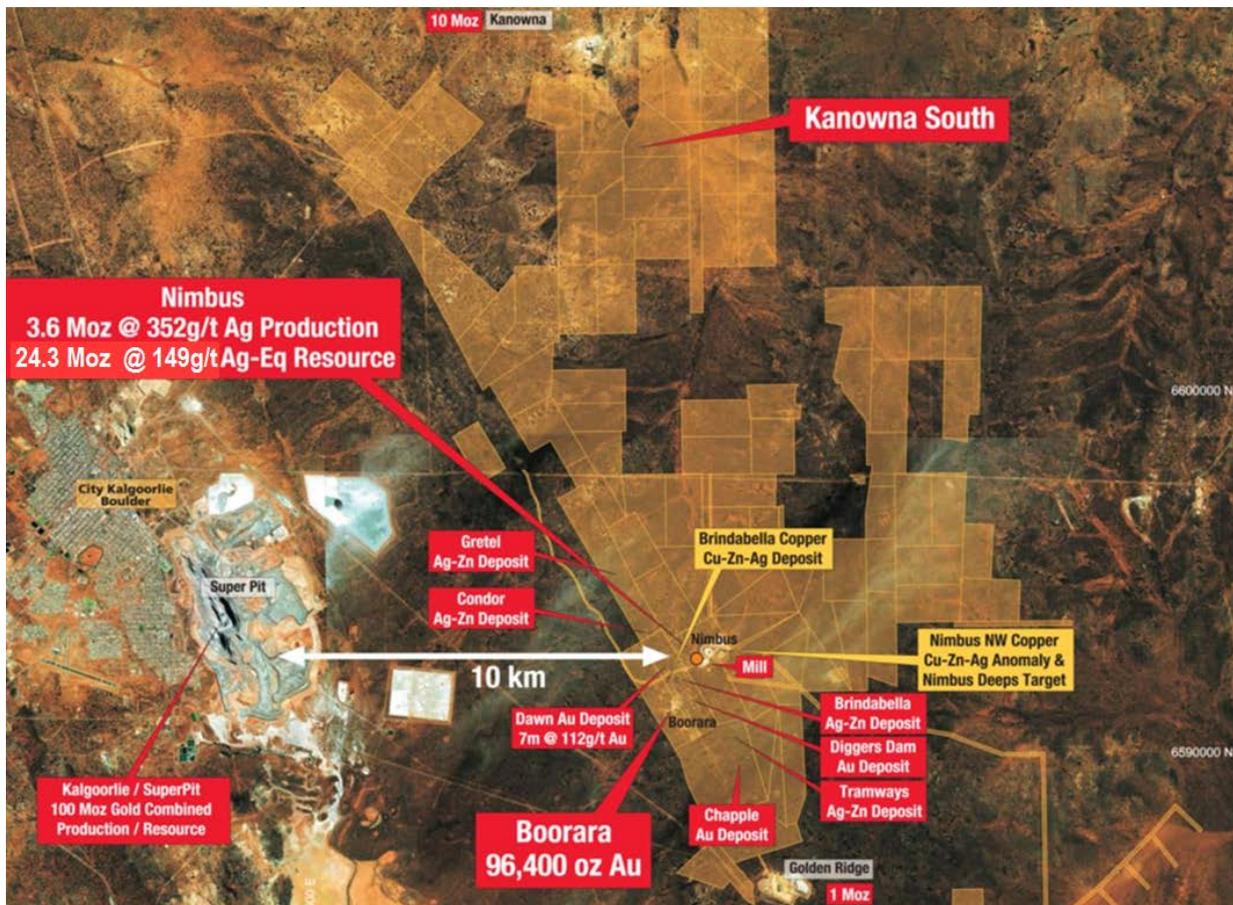


Table 2 – Detailed Mineral Resource Inventory by JORC Classification Category, Resource Type, and Oxidation State of both in-situ material and stockpiles.

Nimbus	TONNES	Ag ppm	Ag Oz	Zn %	Zn (t)	Au ppm	Au Oz	Hg ppm	Hg (t)	Ag Eq	Ag Eq oz
<b>Measured</b>											
TSF1 Stockpile	82,039	67.00	176,719	-	0.180	475	31	3	83.0	<b>218,822</b>	
TSF2 Stockpile	132,464	63.00	268,305	0.150	199	0.050	213	276	37	112.2	<b>477,888</b>
ROM Stockpile	9,100	101.00	29,550	-	0.080	23	22	0	109.3	<b>31,989</b>	
Oxide	9,976	71.59	22,961	0.130	13	0.430	138	7	0	103.3	33,141
Transitional	7,917	98.70	25,123	0.910	72	0.320	81	88	1	158.3	<b>40,295</b>
Primary	799,942	125.11	3,217,671	2.980	23,838	0.110	2,829	241	193	254.4	6,543,786
<b>Subtotal</b>	<b>1,041,438</b>	<b>111.71</b>	<b>3,740,329</b>	<b>2.316</b>	<b>24,122</b>	<b>0.112</b>	<b>3,760</b>	<b>224</b>	<b>233</b>	<b>219.4</b>	<b>7,345,984</b>
<b>Indicated</b>											
Oxide	303,914	90.96	888,776	0.110	334	0.120	1,173	15	5	103.9	<b>1,015,390</b>
Transitional	604,162	59.57	1,157,103	0.160	967	0.200	3,885	21	13	79.9	<b>1,551,774</b>
Primary	1,593,807	121.24	6,212,590	2.330	37,136	0.170	8,711	99	158	214.1	<b>10,970,361</b>
<b>Subtotal</b>	<b>2,501,883</b>	<b>102.67</b>	<b>8,258,469</b>	<b>1.536</b>	<b>38,437</b>	<b>0.171</b>	<b>13,769</b>	<b>70</b>	<b>175</b>	<b>168.3</b>	<b>13,537,663</b>
<b>Silver Zone</b>	<b>3,543,321</b>	<b>105.33</b>	<b>11,998,799</b>		<b>62,559</b>		<b>17,528</b>		<b>408</b>	<b>183.3</b>	<b>20,883,647</b>
<b>Inferred</b>											
TSF1 Stockpile	126,211	67.00	271,872	-	0.180	730	31	4	83.0	336,644	
Oxide	136,746	2.10	9,233	0.040	55	0.910	4,001	-	-	60.2	<b>264,862</b>
Transitional	124,043	4.31	17,189	0.040	50	0.700	2,792	-	-	49.3	<b>196,622</b>
Primary	945,809	4.36	132,581	0.220	2,081	0.690	20,982	20	19	56.9	<b>1,731,615</b>
<b>Gold Zone Subtotal</b>	<b>1,332,809</b>	<b>10.06</b>	<b>430,874</b>	<b>0.164</b>	<b>2,185</b>	<b>0.665</b>	<b>28,505</b>	<b>17</b>	<b>23</b>	<b>59.0</b>	<b>2,529,750</b>
<b>Nimbus Total</b>	<b>4,876,130</b>	<b>79.29</b>	<b>12,429,673</b>	<b>1.328</b>	<b>64,744</b>	<b>0.294</b>	<b>46,033</b>	<b>88</b>	<b>431</b>	<b>149.3</b>	<b>23,413,397</b>
<b>Nimbus</b>	<b>TONNES</b>	<b>Ag ppm</b>	<b>Ag Oz</b>	<b>Zn %</b>	<b>Zn (t)</b>	<b>Au ppm</b>	<b>Au Oz</b>	<b>Hg ppm</b>	<b>Hg (t)</b>	<b>Ag Eq</b>	<b>Ag Eq oz</b>

Note – differences may occur due to rounding. For the purposes of overall reporting and financial modelling the Measured and Indicated resources for both the insitu and stockpile material have been tabulated together (as shown in Table 1) on the cover page.

The calculation of silver equivalent is based on the metal prices which were 3-9% lower than current spot price, as well as depreciation in the AUD\$ FX; thereby providing for further upside in margins. The value ratio is back calculated for each metal on a per gram basis. The silver-equivalent value (Ag-Eq) is then calculated by the ratio of the additional metal price per gram to the silver price per gram for only those metals being recovered in the plant.

Table 3 – Metal Prices set for modelling.

Spot Price 20130725	USD\$	Ag (oz)	Zn (t)	Au (oz)	Hg (t)
	AUD\$	20.40	1,863.12	1,346.70	105,400.00
MRP 20130701 Model	USD\$	22.15	2,013.50	1,455.40	113,907.00
	USD\$	19.80	1,836.70	1,240.00	96,300.00
20130701 Value/gram	USD\$	0.637	0.00184	39.867	0.0963
		<b>Ag/Ag ratio</b>	<b>Zn%/Ag ratio</b>	<b>Au/Ag ratio</b>	<b>Hg/Ag ratio</b>
20130701 Value ratios		<b>1.000</b>	<b>28.852</b>	<b>62.626</b>	<b>0.151</b>

**Note 1:** Price model set at the time the resource model and mine design study, and ore reserve classification sign off commenced being 01<sup>st</sup> July 2013.

**Note 2:** The mine design and ore reserve statement will be released in July 2013.

**Note 3:** Although there is substantial enrichments in copper (Cu) and lead (Pb) across this deposit, no factor has been added for copper and lead valuations. This will be part of future modelling.

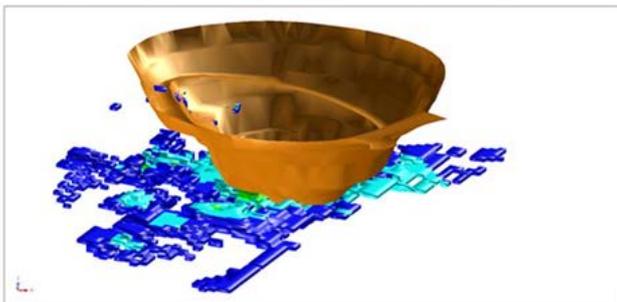
Table 4 – The silver equivalent of the main metal constituents calculated back into equivalent grams of silver.

Nimbus	Silver			Metal Equivalent Contributions				Totals	
	TONNES	Ag ppm	Ag Oz	Ag	Zn	Au	Hg	Ag Eq	Ag Eq oz
<b>Measured</b>									
TSF1 Stockpile	82,039	67.00	176,719	67.0		11.3	4.7	83.0	218,822
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Oxide	9,976	71.59	22,961	71.6	3.8	26.9	1.1	103.3	33,141
Transitional	7,917	98.70	25,123	98.7	26.3	20.0	13.3	158.3	40,295
Primary	799,942	125.11	3,217,671	125.1	86.0	6.9	36.5	254.4	6,543,786
<b>Subtotal</b>	<b>1,041,438</b>	<b>111.71</b>	<b>3,740,329</b>	<b>111.7</b>	<b>66.8</b>	<b>7.0</b>	<b>33.8</b>	<b>219.4</b>	<b>7,345,984</b>
<b>Indicated</b>									
Oxide	303,914	90.96	888,776	90.96	3.17	7.52	2.27	103.92	1,015,390
Transitional	604,162	59.57	1,157,103	59.57	4.62	12.53	3.18	79.89	1,551,774
Primary	1,593,807	121.24	6,212,590	121.24	67.23	10.65	14.98	214.09	10,970,361
<b>Subtotal</b>	<b>2,501,883</b>	<b>102.67</b>	<b>8,258,469</b>	<b>102.67</b>	<b>44.33</b>	<b>10.72</b>	<b>10.58</b>	<b>168.30</b>	<b>13,537,663</b>
<b>Silver Zone</b>	<b>3,543,321</b>	<b>105.33</b>	<b>11,998,799</b>					<b>183.3</b>	<b>20,883,647</b>
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Primary	945,809	4.36	132,581	4.4	6.3	43.2	3.0	56.9	1,731,615
<b>Gold Zone Subtotal</b>	<b>1,332,809</b>	<b>10.06</b>	<b>430,874</b>	<b>10.1</b>	<b>4.7</b>	<b>41.7</b>	<b>2.6</b>	<b>59.0</b>	<b>2,529,750</b>
<b>Nimbus Total</b>	<b>4,876,130</b>	<b>79.29</b>	<b>12,429,673</b>	<b>79.3</b>	<b>38.3</b>	<b>18.4</b>	<b>13.4</b>	<b>149.3</b>	<b>23,413,397</b>
<b>Nimbus</b>	<b>TONNES</b>	<b>Ag ppm</b>	<b>Ag Oz</b>	<b>Ag</b>	<b>Zn</b>	<b>Au</b>	<b>Hg</b>	<b>Ag Eq</b>	<b>Ag Eq oz</b>

Figure 2 – Plan view of insitu mineralisation blocks showing 3D-views of the existing Discovery and East Pits (300m apart) with oxide and sub-horizontal supergene mineralisation at the base of oxidation in the upper images and 2D-plan views of the sub-vertical primary massive sulphide lens extending below the bits into fresh rock.

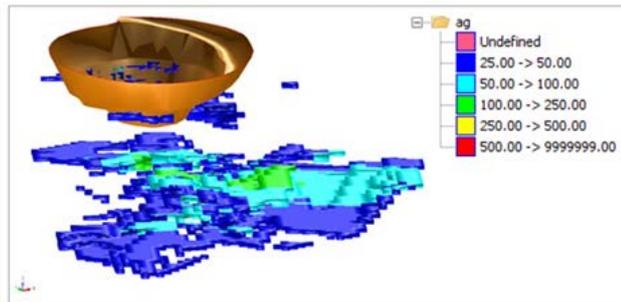
03\_PIT\_DISCOVERY

Nimbus Project, Discovery pit, Oxide Mineralisation lodes, coloured by Ag grad, Oblique view

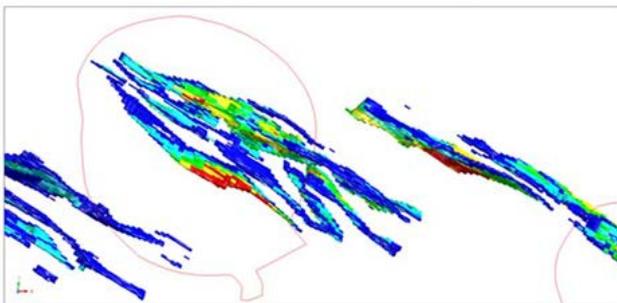


04 EAST PIT

Nimbus Project, East Pit, Oxide Mineralisation lodes, coloured by Ag grade, Oblique view



Nimbus Project, Discovery Pit, Primary mineralisation Lodes, Coloured by Ag grade, Plan view



Nimbus Project, East Pit, Primary mineralisation Lodes, Coloured by Ag grade, plan view

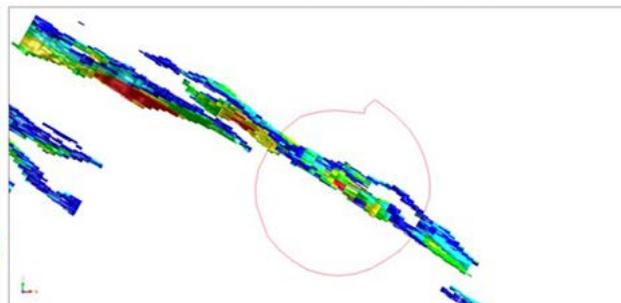
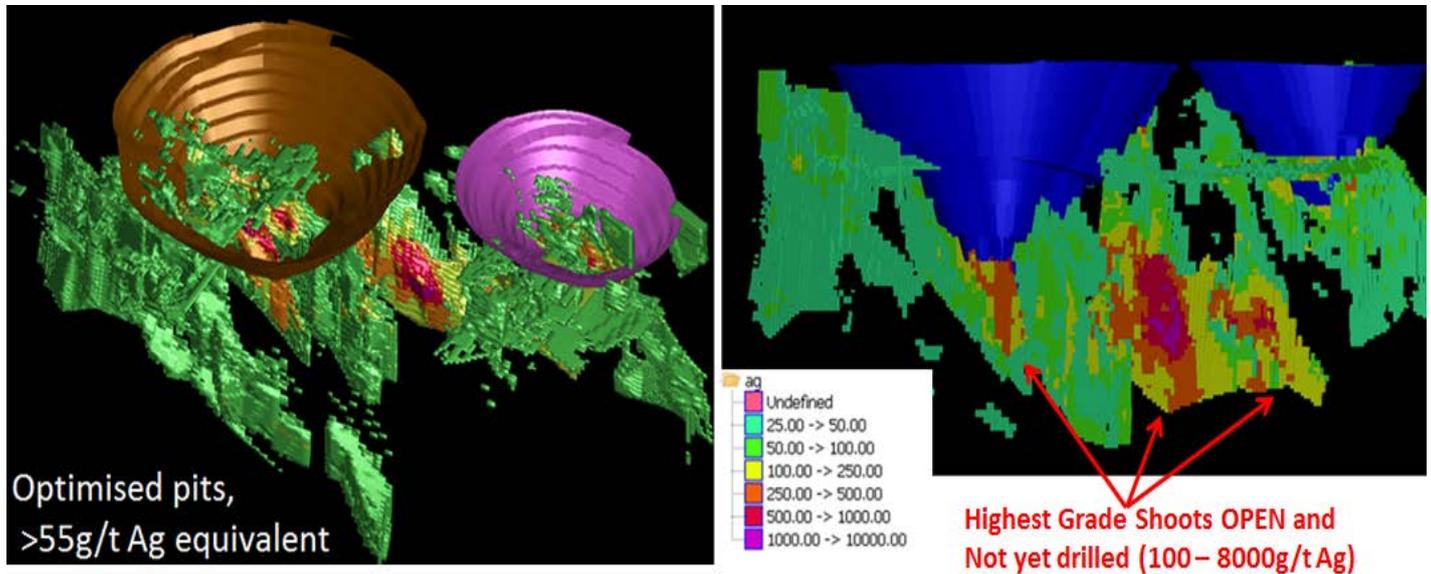


Figure 3 – Longsection view of insitu mineralisation blocks showing initially an inclined view of the proposed pit cutbacks on the original Discovery and East Pits (left image) and a side-on long view in the right image. Horizontal shapes represent the supergene zone and the primary mineralisation is sub-vertical.



Final mine designs and ore reserve statement to be released in July 2013.

Table 5 –Densities were assigned to the block model based on site and independent measurements and independent review by CSA Global.

Mineralisation Domains	Weathering Profile	Densities used
Background (Waste)	Oxide	2.13
	Transitional	2.17
	Fresh	2.73
Mineralisation (Ag and Zn)	Oxide	2.32
	Transitional	2.39
	Fresh	2.86
East Pit Tails	Compacted sands	1.7

The current Mineral Resource estimate represents a step change from the previous (January 2013) resource model, in terms of quality of the geological model. The following have been incorporated into the July 2013 model:

- Extensively re-interpreted geological model based upon lithological controls, structural mapping and detailed analysis of the impact of weathering profiles;
- Geochemical and metallurgical properties of mineralised lenses showing a variation of grade and metal ratios within the multiple mineralisation styles observed;
- Observed relationships between mineralisation and weathering profiles and identifying / tracking where primary mineralisation crossed supergene mineralisation;
- Revised orientations of mineralisation surfaces and tightening of mineralisation shapes between intersecting zones;
- Weathering profiles updated.

Although most mineralisation shapes were tightened (thinned), the mineralisation lenses have been extended in strikelength, in particular, and remain open both along strike and at depth.

## Historical Overview

Nimbus silver mine operated from 2003 to 2007, producing 3.6 million ounces of silver at an average grade of 352g/t silver (11.7 oz/t).

- Nimbus Statistics (2007):
  - ❖ Tonnes Processed: 318,992 tonnes
  - ❖ Average Grade: 352g/t silver
  - ❖ Production: 3.616 Million ounces of silver
  - ❖ Operating Cost: \$ 6.54 / ounce
  - ❖ Average Price: \$ 9.07 / ounce
  - ❖ Current Price: \$ 18 - \$ 34 / ounce silver (12-month range)
- Nimbus had various additional silver and polymetallic deposits in the advanced stages of exploration.

A review of the historical project economics has shown that the cost curve from 2007 has remained relatively flat, whilst the silver sale price is 400% of that obtained by the operations.

To maintain lower costs, in 2011, MacPhersons completed the construction of a 5.5km HV electricity line to connect the Nimbus mill to the state electricity grid, which would reduce 2007 costs where power was from diesel generation.

In late 2011, MacPhersons commenced a diamond drilling program to test a multi-million ounce exploration target associated with up to nine VHMS massive sulphide lenses. Targets include various silver, silver-gold, silver-zinc-gold-lead deposits and the Boorara Shear Zone which includes several gold deposits at Boorara and Nimbus.

The Directors have included the following extracts as an overview of the current project status. Recent diamond drilling has defined additional thickness and continuity of the silver (Ag) bearing VHMS zones, and the extension of mineralisation between the Discovery and East Pits. This mineralisation is associated with large haloes of disseminated sulphides carrying in excess of 12g/t Ag as background.

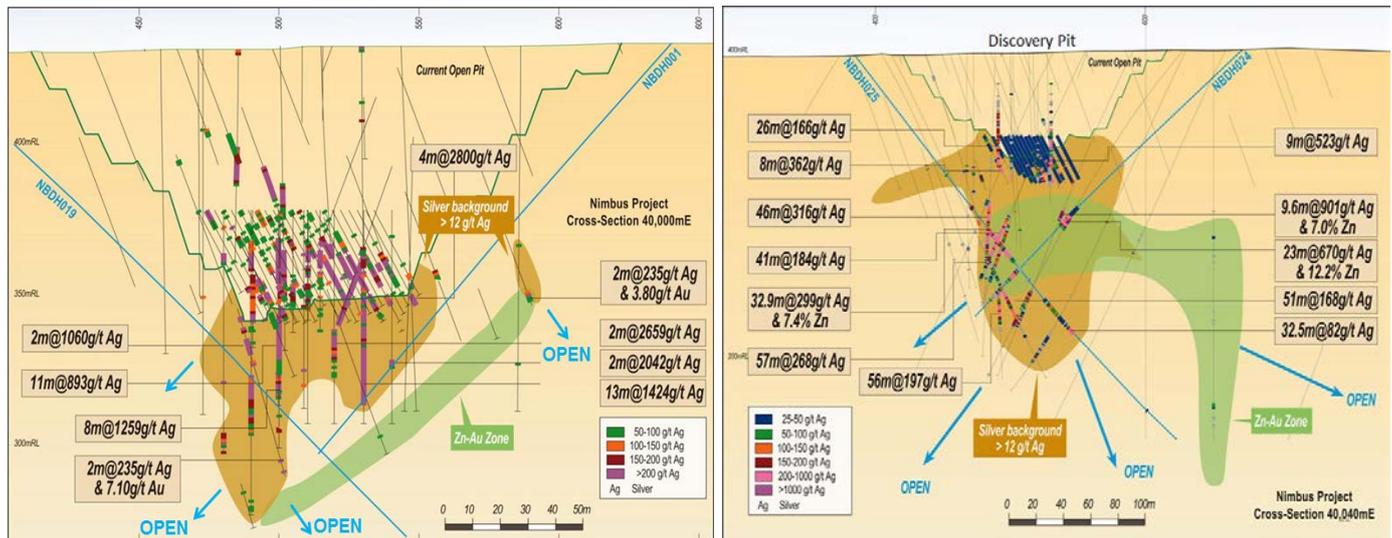


Figure 4 – Greater than 1000 g/m silver equivalent intersections within massive sulphides showing greater than 12g/t silver halo.

There are several zones of high grade polymetallic mineralisation which have been reported in detail in ASX reports (see MacPhersons website: <http://www.mrpresources.com.au/> ). A summary of the results from drillhole NBDH024 massive sulphide zone which intersected a downhole thickness of 17.4m are:

- 860g/t silver (27.6 ounces/tonne);
- 16.6% zinc
- 3.5% lead
- 0.3g/t gold

This included a central 7m portion (see Photo (Figure 3) below) with an average assay of:

- 1660g/t silver (53.4 ounces/tonne);
- 31.1% zinc
- 6.9% lead
- Individual metre thick samples assay up to 3270g/t silver and 41.1% zinc (see Table 2).
- This VHMS mineralisation is intersected from 20m to 70m below the existing Discovery Pit floor.

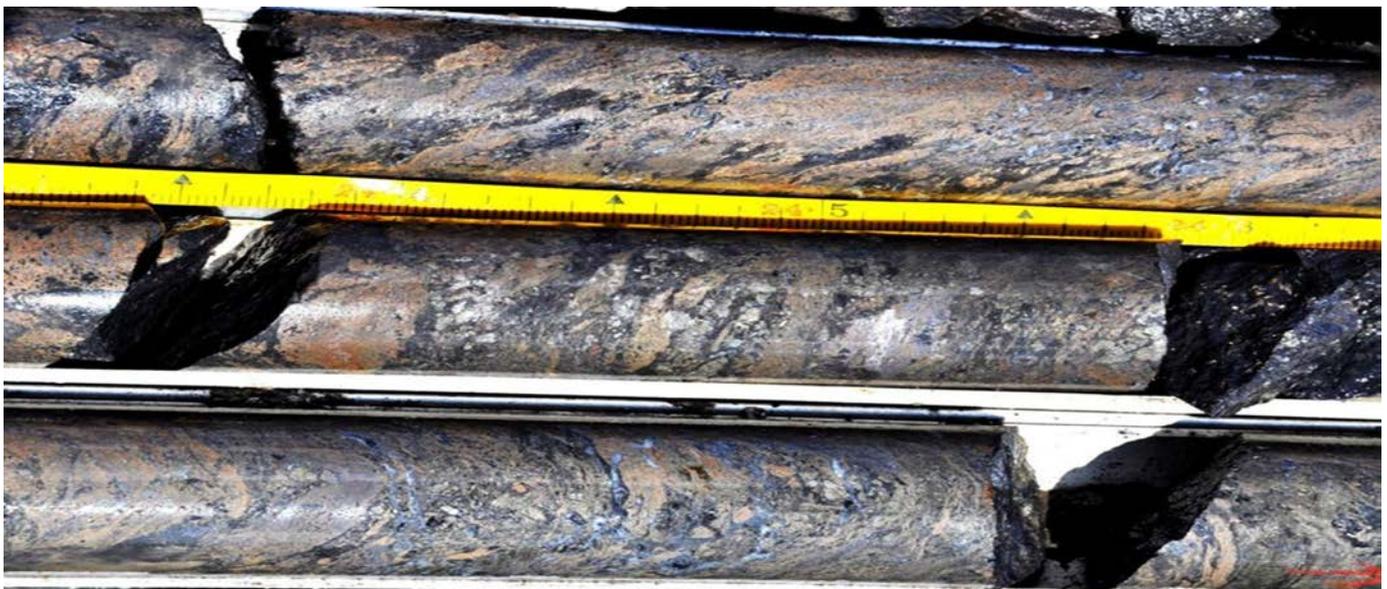


Figure 5 – Greater than 2000g/t silver intersections within massive sulphides grading in excess of 40% zinc and 14% lead (portion of NBDH024 intersection between 160-165m depth).

For more information on MacPhersons Resources Limited and to subscribe for regular updates, please visit our website at: [www.mrpresources.com.au](http://www.mrpresources.com.au) or contact our Kalgoorlie office.

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## About MacPhersons

MacPhersons Resources Ltd (MRP) is a Western Australian resource company with a number of advanced gold, silver and zinc exploration projects.

The Company's focus is to explore and extend the highly prospective Boorara and MacPhersons geological domains of which the Company holds 100% interest in 20km and 11km of strikelength, respectively, including the Nimbus silver-gold-zinc mine and the namesake MacPhersons open cut gold mine.

To fast track the opportunity to process MacPhersons' ore within the MRP business, the Company has acquired mill processing and mine assets at the Nimbus silver-gold-zinc mine, located 10 km east of Kalgoorlie's superpit. The assets come with an approved site for ore processing.

The assets have advanced exploration targets adjacent to and beneath 10 existing open cuts and with multiple polymetallic VHMS deposits carrying silver-gold- zinc-lead-copper mineralisation, and new greenfields discoveries.

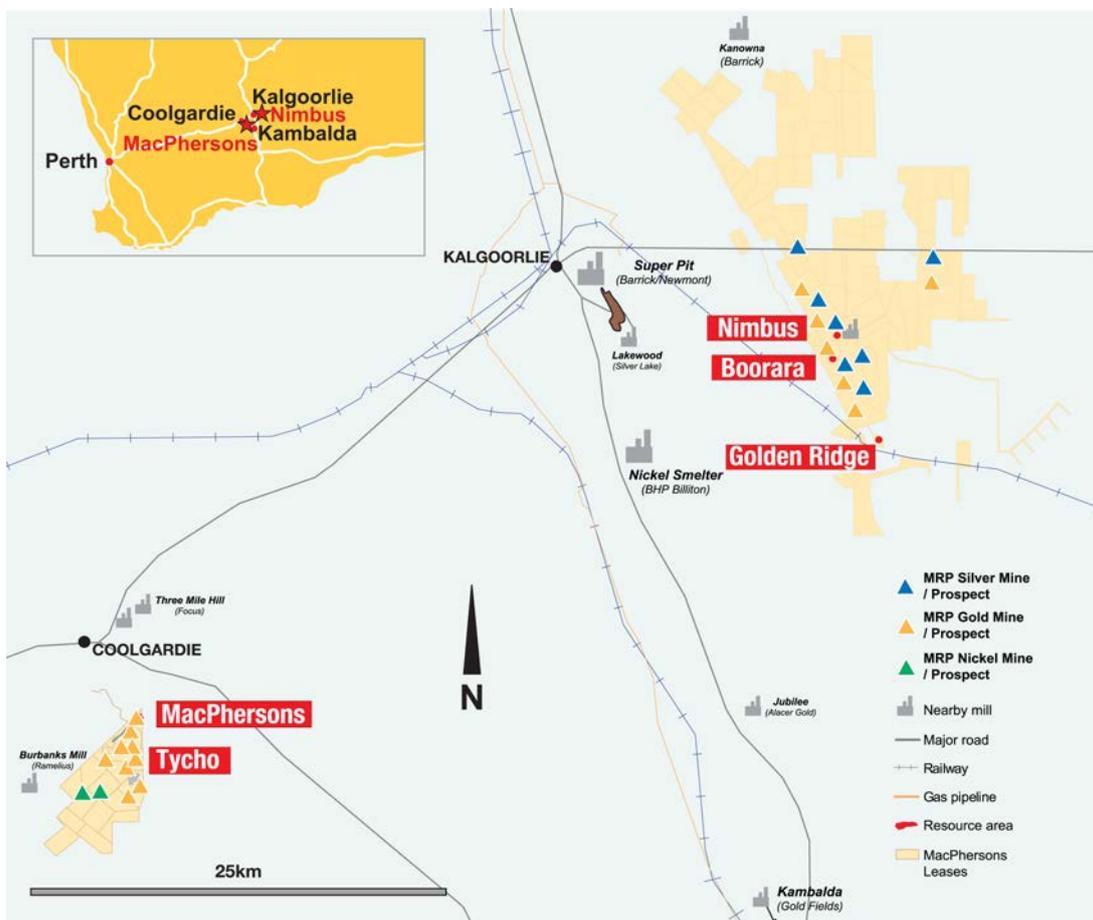


Figure 6 – Location of the Nimbus processing facility and silver mines, Boorara gold-silver-zinc projects, the MacPhersons Reward gold mine and Tycho gold project at Coolgardie.

## Competent Person's Statement

The information in this report 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 2004 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 report of the matters based on the information in the form and context in which it appears.