

ASX Code: MRP

Contact Details

PO Box 10977
109 Maritana Street
Kalgoorlie WA 6430

T +61 (0) 8 9068 1300
F +61 (0) 8 9068 1310
E info@mrpresources.com.au

ABN 98 139 357 967

**Board of Directors &
Senior Management**

Ashok Parekh
Non-Executive Chairman

Jeff Williams
Non-Executive Director

Peter Rozenauers
Non-Executive Director

Brendan James
Chief Executive Officer

Boorara Gold Project Stage-1 Bankable Feasibility Study Commences

Highlights:

- ❖ **MacPhersons Resources Ltd (MRP) Board agrees to immediately initiate Boorara Gold Project Stage-1 Bankable Feasibility Study (BFS).**
 - ❖ **The Boorara Gold Project Stage 1 BFS is based on near surface open-cut mining producing 3.0-3.5 Mt Ore @ 1.01 g/t Au producing circa 86,000-91,000 ounces of gold over 3 years from a standalone Heap-Leach Merrill Crowe production facility.**
 - ❖ **Boorara Gold Project Stage 1 situated on granted mining leases with many statutory approvals and permits already granted which shortens the timeline to potential gold production.**
 - ❖ **The BFS is expected to be completed for under A\$2 million, taking 6 months to complete including all MRP operational and administration expenses.**
 - ❖ **The BFS will be fully funded from the company's strong existing cash position.**
 - ❖ **Anticipated capital cost for the Boorara Gold Project Stage 1 are less than \$20 million, by utilising substantial existing infrastructure at Nimbus, and the proximity to the City of Kalgoorlie Boulder.**
-



Figure 1: Stoneville water bore drilling.

Overview

MacPhersons Resources Limited (ASX: MRP) is pleased to report that a decision has been made to progress the Boorara Gold Project Stage 1 to a Bankable Feasibility Study (BFS). The study will be based on an open pit mining operation producing 3.0-3.5 million tonne of ore grading 1.01 g/t Au recovering circa 86,000 to 91,000 ounces of gold via a standalone heap leach operation. This decision is in line with previous information released to the market regarding options for treatment of the Boorara Gold Deposit. Information relating to the Boorara Ore Reserves can be found in MRP ASX release dated 29 June 2015, *"Boorara-Nimbus Update- Continued Growth of Boorara Ore Reserves"*. This previous ore reserve was based on an integrated Boorara Nimbus development model.

The anticipated capital cost for the Boorara Stage 1 project is expected to be less than \$20 million based on utilising substantial existing infrastructure at Nimbus (1 km north east of Boorara), and proximity of the project to the nearby City of Kalgoorlie-Boulder.

Significant infrastructure capital cost saving will be made using the existing Nimbus office complex, the previously purchased Merrill Crowe plant, mains power line to Nimbus, Chappell Bore water supply and existing road access.

The Boorara project is situated 20.5 km east of Kalgoorlie-Boulder by road which also offers significant benefits and cost savings in regard to close proximity to a stable workforce and service industries.

The BFS is expected to take six (6) months to complete and budgeted cost is less than \$2 million which includes ongoing routine operating costs of MRP.

Statutory permits and approvals that have already been granted relating to the Boorara Stage 1 project include;

- WA Department of Mines and Petroleum - Boorara Mining Proposal
- WA Department of Mines and Petroleum - clearing permits covering the Boorara Project
- WA Department of Mines and Petroleum - consent to mine on Boorara Townsite and associated reserves
- City of Kalgoorlie-Boulder- consent to mine on Boorara Townsite and associated reserves
- WA Department of Water- licence to take groundwater from Chappell Bore and Golden Ridge open pit
- WA Department of Water - licence to construct or alter a well at Stoneville

The Boorara heap leach BFS will incorporate the MRP owned Merrill Crowe plant components into the heap leach design. These components are now being prepared ahead of transportation to Kalgoorlie in the following months. FLSmidth the manufacturer of the Merrill Crowe plant has been contracted to transport the Merrill Crowe components and a final delivery date is expected shortly.

First stage drilling at the Stoneville prospect, investigating additional potential process water sources, has confirmed the presence of water bearing paleochannel sands. Drilling is currently underway to install a bore and undertake initial airlift bore flow rate tests using drill rig air. Pump testing will be required to determine actual bore production rates and aquifer draw down levels.

The studies of the standalone heap-leach Merrill Crowe production facility referred to in this report are based on low level technical and economic assessments and are insufficient to support estimation of an Ore Reserve specifically in relation to that production option, or to provide assurance of an economic development case or to provide certainty that the conclusions of the studies will be realised.

BOORARA OPEN PIT DESIGNS

3.0-3.5 MT @ 1.01 g/t Au

PRODUCING CIRCA 86,000 TO 91,000 ozs Au

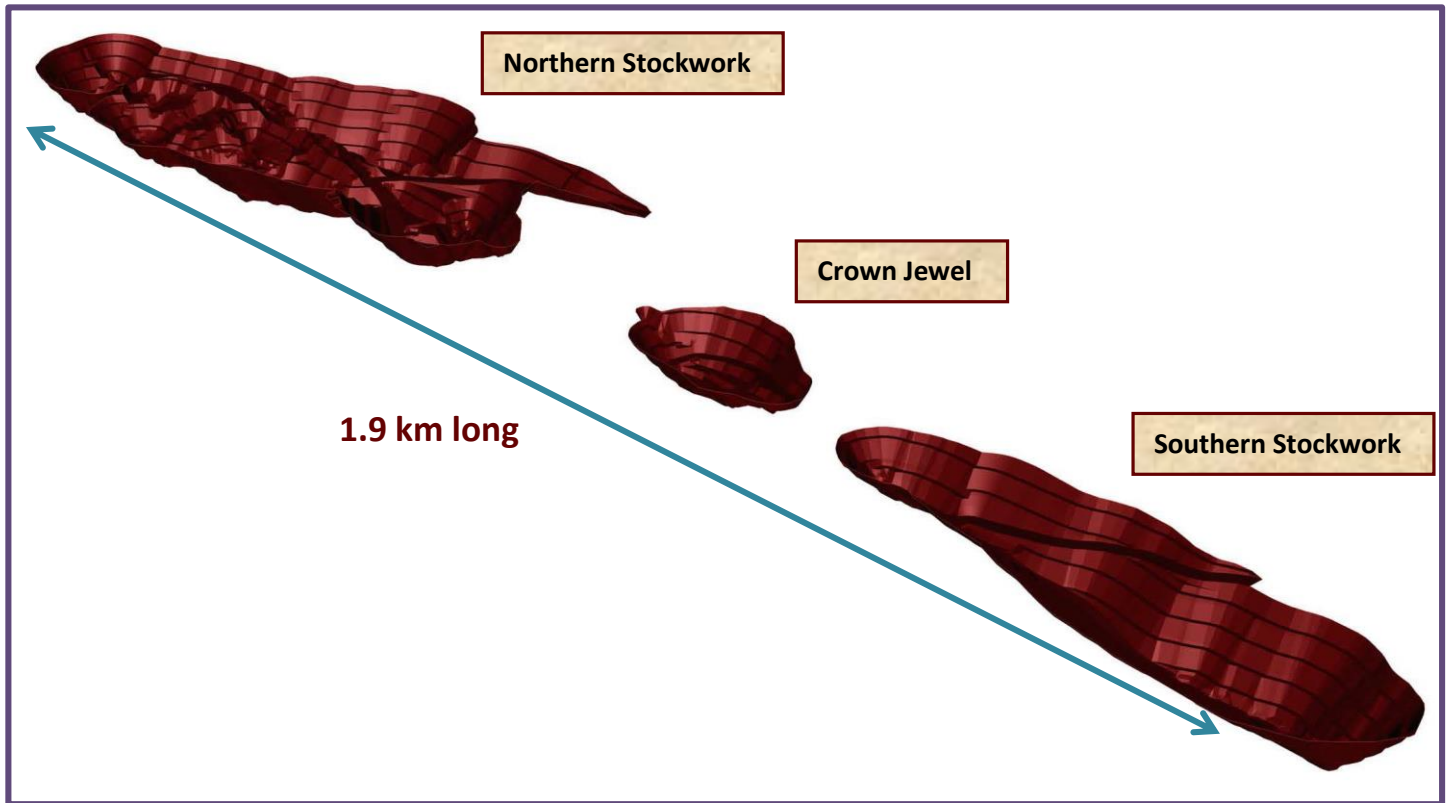


Figure 2: Boorara pit designs

BOORARA STAGE 1 PROPOSED HEAP LEACH SITE LAYOUT INCLUDING BOORARA OPEN PITS AND WASTE DUMP LOCATION

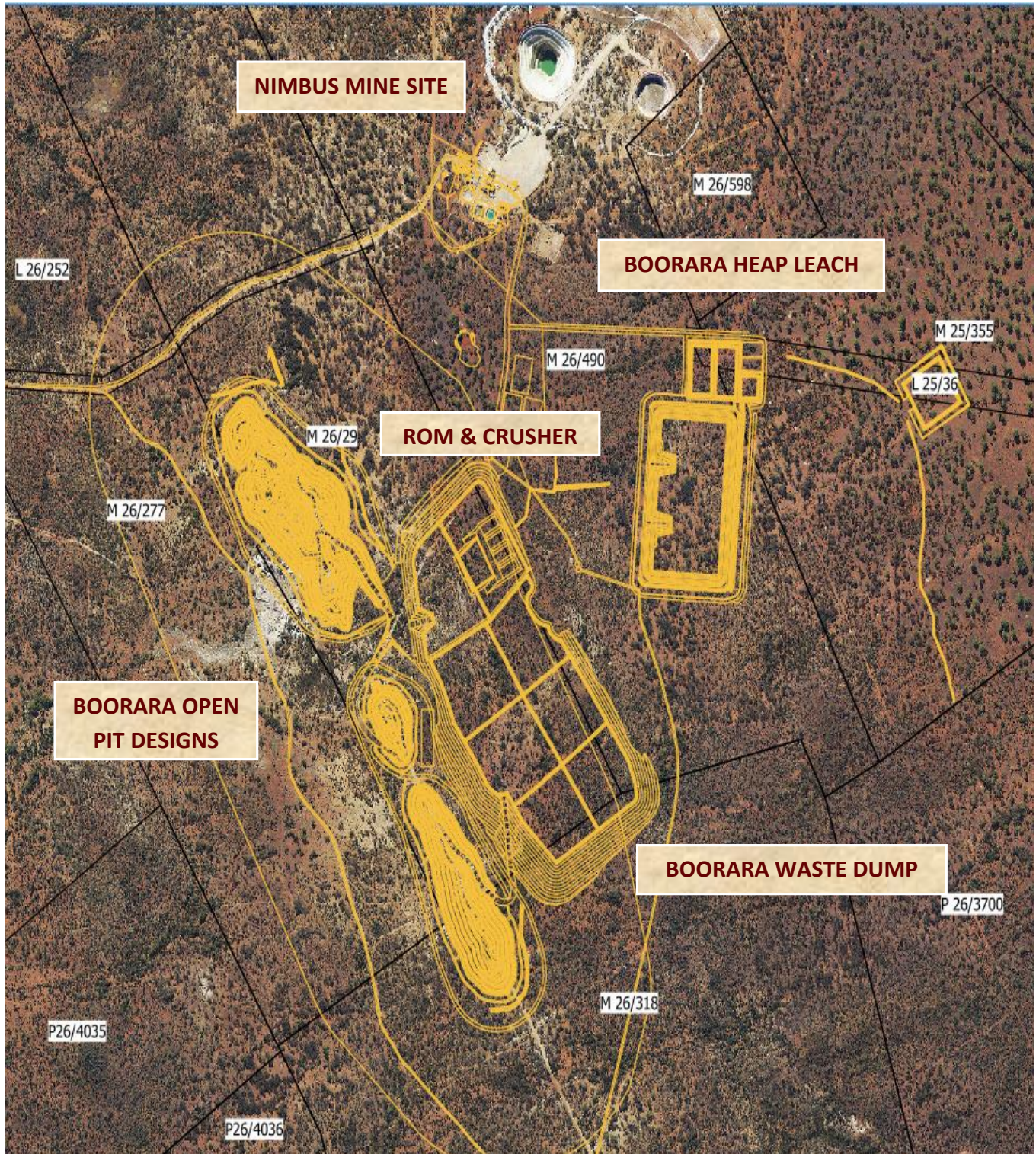


Figure 3: Boorara Stage 1 proposed site layout.

Boorara Geology Overview

The Boorara Gold Project is a structurally complex Archaean gold deposit with gold mineralisation found in shear zones and quartz veining at various orientations. The Archaean greenstone sequence host lithologies at Boorara consist of ultramafic, dolerite, sediment and felsic units. The main host unit to gold mineralisation at Boorara is a differentiated dolerite that is central to current pit designs. Within this differentiated dolerite, a granophyric zone has been preferentially gold mineralised due its high iron and silica content. Shear zone hosted gold mineralisation is found on the lithological contacts of the dolerite with ultramafic (western contact) and sediment/felsic volcanoclastic (eastern contact). Cross-cutting and overprinting the shear zone and granophyric gold mineralisation is mineralised quartz veining that is generally striking north-east and shallow dipping to the north-west.

The width of quartz veins varies from stringers (1-2 cm wide) up to a metre wide as seen at the historic Boorara Cataract underground gold mine. As the quartz vein density per metre increases and the geometry of veining changes, the quartz veining becomes a stockwork system. Intersections of quartz veins and shear zones form plunging high grade ore shoots. Supergene gold mineralisation in the oxide profile at Boorara are coherent blocks when modelled above 0.3 g/t Au, despite the structural complexity of quartz veining. Gold mineralisation at Boorara is associated with a carbonate–chlorite–silica ± sericite ± epidote hydrothermal alteration assemblage with associated pyrite and arsenopyrite mineralisation.

Historical gold production at Boorara Gold deposit produced 30,673 ounces from the treatment of 54,731 tonnes of ore with most of this production coming from the Cataract underground gold mine. Historical level and stope plans were digitised and used to build a 3D model of underground mine workings. The majority of the historic ore mined from stopes at the Cataract are orientated north-east and dipping approximately 35° to the north-west.

In the more recent times, the Boorara Gold Project has been subject to various campaigns of exploration drilling and subsequent resource estimates by Western Reefs Ltd, Windsor Resources NL, Fimiston Mining N.L, Newmont Australia Ltd, Newcrest Mining Ltd, New Hampton Goldfields Ltd and Polymetals (WA) Pty Ltd. The Boorara Gold Project has been separated into three areas Northern Stockwork, Crown Jewel and Southern Stockwork by previous explorers.

After acquiring the Boorara Gold Project in October 2011, MRP has undertaken a considerable amount of drilling and geological work at Boorara which has greatly increased the understanding of the project. The starting point for this work was collating and converting to digital format historical drill log information. Geological work included a structural study to determine quartz vein orientation and geometry. A 3D solid geological model has been constructed using historical and current drill hole information. All this work undertaken on the Boorara Gold Project gives MRP confidence in the project moving forward.

Very limited deep drilling has been undertaken at Boorara with the majority of drill holes (approx. 90%) less than 100 metres deep. Gold mineralisation at Boorara is open at depth, providing deeper gold targeting and exploration opportunities.

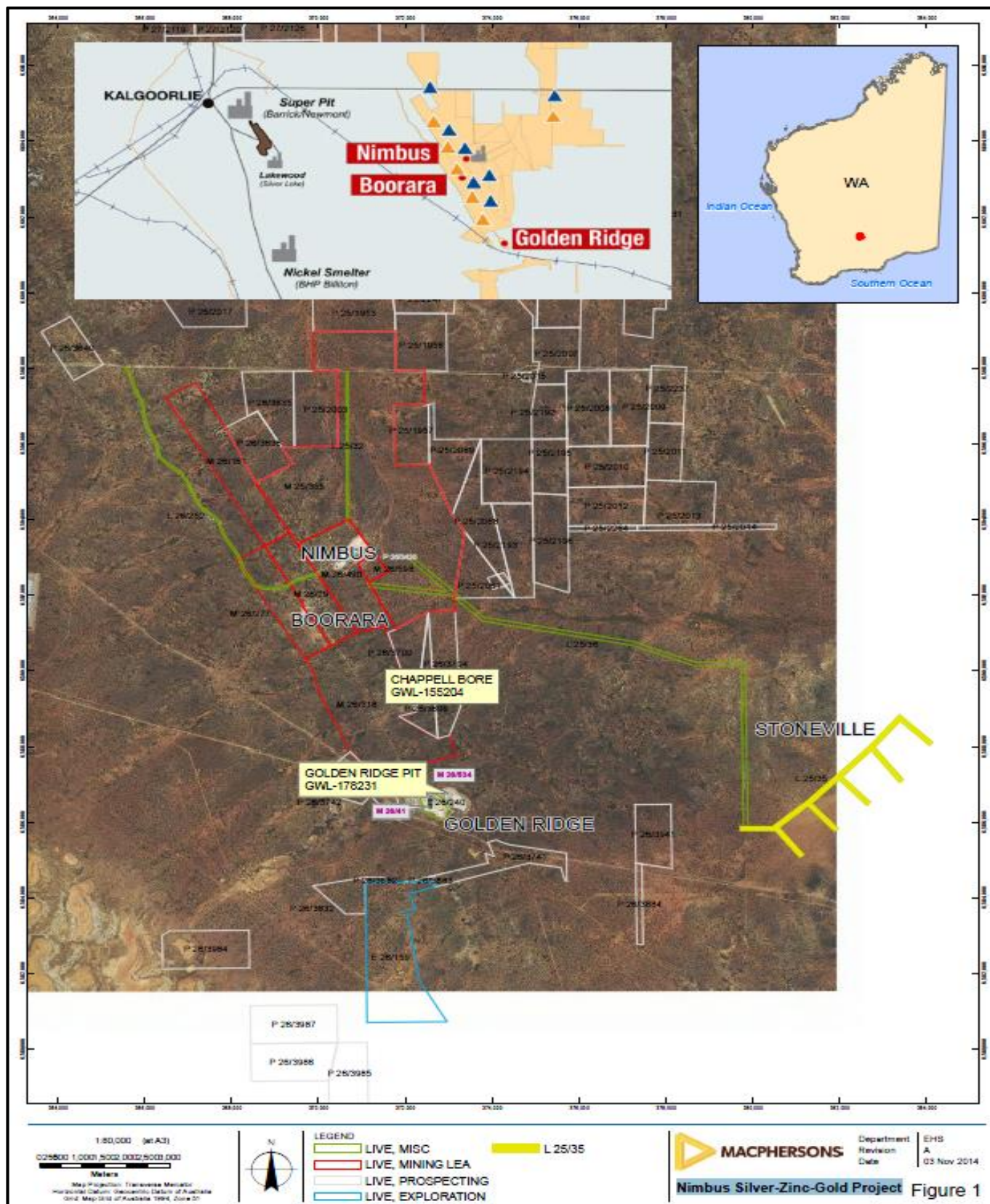


Figure 4: Stoneville Golden Ridge locations.

About MacPhersons

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

The company's long term objective is the development of its existing assets and unlocking the full potential of its 100% owned highly prospective Boorara/Nimbus and Coolgardie projects.

For more information on MacPhersons Resources Limited and to subscribe for regular updates, please visit our website at: www.mrpresources.com.au or contact our Kalgoorlie office on info@mrpresources.com.au or - 08 9068 1300.



Figure 5: Location of the Boorara-Nimbus projects area, 10km east of the Kalgoorlie Super Pit, showing the Nimbus Mill Site and the Boorara gold project with 1km of Nimbus.

Competent Person's Statement

The information in this report that relates to exploration results is based on information compiled by Andrew Pumphrey who is a Member of the Australian Institute of Geoscientists. Andrew Pumphrey is a full time employee 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 Pumphrey 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.