

#### **ASX Announcement**

24 May 2018

# More Significant Gold Hits at Boorara Project Crown Jewel Hole Returns 30m at 1.50 g/t

Reverse Circulation (RC) drilling at Crown Jewel continues to intersect significant gold results along strike (see figure 3).

- Results from 13 more drill holes at the MacPhersons Crown Jewel deposit within the Boorara Gold Project reported included excellent results (uncut) of:
  - BORC 387 30 metres at 1.5 g/t Au incl 1m at 5.92 g/t Au
  - BORC 298A 11 metres at 2.02 g/t Au incl 1m at 6.96 g/t Au & 1m at 8.78 g/t Au
  - BORC 389 25 metres at 1.60 g/t Au incl 10m at 3.48 g/t Au
  - BORC 390 16 metres at 1.40 g/t Au incl 1m at 7.18 g/t Au & 1m at 6.47 g/t Au
- Company confidence in its efforts to expand the size and increase the grade of the current Boorara Gold Resource is high.
- We have reviewed the recent Boorara 507,000 ounce gold resource estimate and believe it has been potentially excessively diluted with waste. Manual wire framing of gold mineralisation is now being completed coupled with evaluating alternative resource estimation methods. MacPhersons will be estimating a revised Mineral Resource Estimate expected to be completed by August or September 2018 (completion of drilling) that will include the current 20,000 metre RC program and be used in future open pit optimisations.



MacPhersons Resources Limited ("the Company") (ASX: MRP) is pleased to announce more excellent RC results to follow up on our recent announcement of 30 April 2018. This drilling is the first part of the current 20,000 metre RC program at the 100% owned Boorara Gold Project 10 kilometres east of Kalgoorlie, Western Australia. One RC drill rig commenced drilling north of the Southern Stockwork deposit on Friday the 13th of April 2018; we are reporting the results of another 13 holes (1,983 metres of RC drilling) to 21 May 2018.

#### **RC Drilling Program Summary**

These latest gold results relate to 13 RC drill holes (1,983 m) that extend from north of the Southern Stockwork deposit to the Crown Jewel Deposit of the 1.8 km Boorara discovery zone (see Table 1, Figures 3). This area has not been subject to close spaced drilling in the past.

The reported drilling results represent the results of infill 40m x 10m RC drilling designed to extend gold mineralisation at Southern Stockwork to the Crown Jewel deposit. Infill RC drilling on a 10m hole spacing at Crown Jewel has continued to intersect high gold grade quartz vein arrays that will be amenable to open pit mining. All the results reported in this release are downhole length and do not reflect the true width of mineralisation. Down hole deviation of drill traces has resulted in some holes reported being closer than designed 8m downhole.

Previously drilled RC and diamond holes at Crown Jewel that intersected high grade dolerite hosted quartz vein array mineralisation are being targeted in the current infill drilling phases (40m x 10m and 20m x 10m). The aim of this planned drilling will be to define a potentially continuous zone of open pittable mined gold mineralisation that will enable all three deposits to be joined together.

A gold mineralisation zone has been outlined by close spaced auger gold geochemistry +100ppb Au anomalism that links all deposits together and extends to north of the Northern Stockwork Deposit (see figure 3) along strike for almost 1 km.

The planned RC drilling is part of a resource development program that is planned to potentially expand the existing Boorara gold resource that targets the mineralisation above a vertical depth of 250 metres.

All holes have been drilled at a 060° azimuth and although these holes are drilling down dip of the Boorara dolerite at Crown Jewel, the extensive independent structural work undertaken at Boorara clearly demonstrates that this azimuth is preferred as it intersects the three dominant vein geometries and therefore provides an accurate estimate of the grade of the quartz veins and quartz vein arrays.

#### Significant results from recent drilling include:

$\checkmark$	BORC 297: 22m at 0.94 g/t Au from 20m	060° Azi
$\checkmark$	BORC 298A: 37m at 1.18 g/t Au from 22m, including 19m at 1.74 g/t Au	060° Azi
$\checkmark$	BORC 298A: 11m at 2.02 g/t Au from 136m, including 1m at 6.96 g/t Au & 1m at 8.78 g/t Au	060° Azi
$\checkmark$	BORC 386: 8m at 1.22 g/t Au from 81m,	060° Azi
$\checkmark$	BORC 386: 4m at 1.69 g/t Au from 95m,	060° Azi
$\checkmark$	BORC 387: 8m at 1.68 g/t Au from 10m, including 1m at 6.11 g/t	060° Azi
$\checkmark$	BORC 387: 30m at 1.5 g/t Au from 23m, including 1m at 5.92 g/t	060° Azi
$\checkmark$	BORC 387: 22m at 1.3 g/t Au from 97m, including 1m at 6.12 g/t	060° Azi
$\checkmark$	BORC 388: 4m at 2.9 g/t Au from 77m, including 1m at 5.99 g/t	060° Azi
$\checkmark$	BORC 389: 25m at 1.6 g/t Au from 71m, including 10m at 3.48 g/t	060° Azi
✓	BORC 390: 16m at 1.4 g/t Au from 15m including 1m at 7.18 g/t & 1m at 6.47 g/t	060° Azi



$\checkmark$	BORC 390: 10m at 1.63 g/t Au from 219m, including 10m at 1.63 g/t	060° Azi
$\checkmark$	BORC 392: 5m at 1.47 g/t Au from 74m	060° Azi
$\checkmark$	BORC 392: 32m at 1.3 g/t Au from 142m, including 1m at 5.95 g/t & 3m at 6.74 g/t	060° Azi
$\checkmark$	BORC 394: 12m at 1.29 g/t Au from 48m, including 1m at 7.33 g/t	060° Azi

The RC drilling results to date demonstrate that gold mineralisation extends at three main ore zones that has not been adequately drill tested and additional drilling is required that could potentially link all three deposits into one (see figure 3). Close spaced auger gold geochemistry anomalism (+ 100 ppb Au contour) defines a gold mineralisation zone that is continuous through all deposits and extends north from the Northern Stockwork Deposit along strike for almost 1 km.

Combined with the Gold Resource Estimate, the Company has ongoing studies that will contribute to the Definitive Feasibility Studies for the Boorara Project.

- Metallurgical sighter test work- The aim of the sighter test work is to identify gold recoveries over varying grind sizes. In essence, looking at gold recoveries for different ore sizing to determine type of grinding mills suited to the Boorara mineralised material. Following the preliminary work, we will seek to complete more exhaustive testing using a well-known metallurgical group.
- 2. Geotechnical studies nearing completion with independent consultant (estimating rock strengths, open pit wall stability which ultimately assist in open pit design engineering).

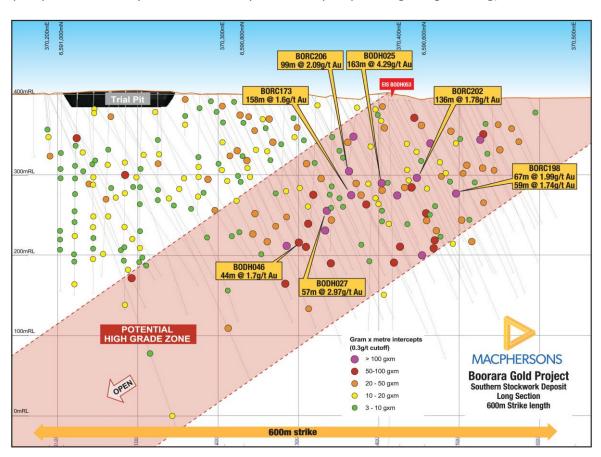


Figure 1: Boorara Southern Stockwork deposit - long section with gram x metre intercepts.



#### **Achievements to date:**

- Upgraded independent Boorara Gold Resource up 118% to 507,000 ounces (16.45 Million tonnes grading 0.96 g/t cut-off 0.5 g/t), see ASX release 6<sup>th</sup> March 2018.
- Mining Leases granted totalling 3560 Ha.
- Aboriginal heritage clearance completed.
- Fully permitted and approved tailings dam facility 4.8 million tonne capacity.
- DMIRs (Dept of Mines, Industry Regulation and Safety) approved Boorara open pit and heap leach mining proposal.
- Mains power connected 1.5 Mw allocation.
- Licenced borefield to extract 1.5 million kilolitres per year.
- Flora and Fauna surveys completed.
- Established site offices and associated infrastructure onsite.
- Sterilisation drilling completed.
- Sighter metallurgical testwork ongoing.
- Geotechnical study nearing completion.

### **Boorara Trial Open Pit;**

- Grade control drilling and mill processing reported a grade overcall in November 2016 from the 20 metre deep Boorara trial open pit at the Southern Stockwork deposit, when compared with the overall resource grade for that deposit.
- The Southern Stockwork deposit wire framed resource grade at 0.4 g/t cutoff was 1.20 g/t (see ASX release 25<sup>th</sup> January 2017).
- Close spaced 4m x 4m vertical RC grade control pattern resulted in defining a resource of 28,673 t at 2.00 g/t and a diluted reserve of 30,572 t at 1.78 g/t.



#### **Boorara Geology**

The re-logging program has continued to be undertaken on all MRP Boorara diamond drill hole core and RC drill chips at the Southern Stockwork, Crown Jewel and Northern Stockwork areas. Following recent re-logging and interpretation combined with the last 34,000 metre RC drilling program for the first time we now clearly better understand the geology and mineralisation at the Boorara Gold Project.

Previously unrecognised ultramafic and sediment lithologies have been identified adjacent to the Boorara dolerite. The Boorara dolerite can be divided into up to 7 individual units with the quartz granophyric unit being unit 5.

Structural logging and measurements of quartz veins taken from current diamond holes and previous MRP drilled holes has determined three dominant quartz vein geometries:

- 1. Striking 020° and dipping 48° west
- 2. Striking 060° and dipping 40° north west
- 3. Striking 100° and dipping 43° north

#### **Boorara Gold Resource**

A review of the recent 507,000 oz Boorara Mineral Resource Estimate, 16.45 Million tonnes at 0.96 g/t - 0.5 g/t cutoff, (see ASX announcement dated  $6^{th}$  March 2018) has been undertaken. The outcome of the review is that potentially excessive waste has been included in the resource which has resulted in dilution of the gold resource.

Currently MacPhersons is undertaking hard boundary wireframing of the Boorara gold mineralisation. Once complete, we will investigate a number of resource estimation techniques to determine the method that is most suited to the Boorara dolerite orebody. Resource estimation techniques that have been used on similar gold deposits are being evaluated and initial work suggests potentially ordinary kriging could be suitable.

Once this work has been completed and combined with the completion of the current 20,000 metre RC drilling program, a revised gold resource will be released. This is expected to be completed by August or September 2018.



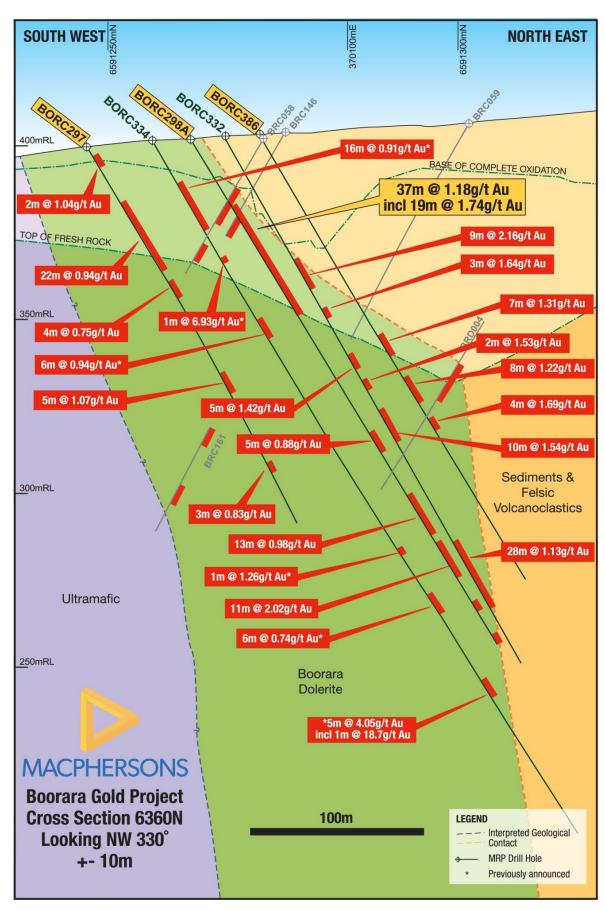


Figure 2: Cross section view of Boorara drill holes with interpreted geology.



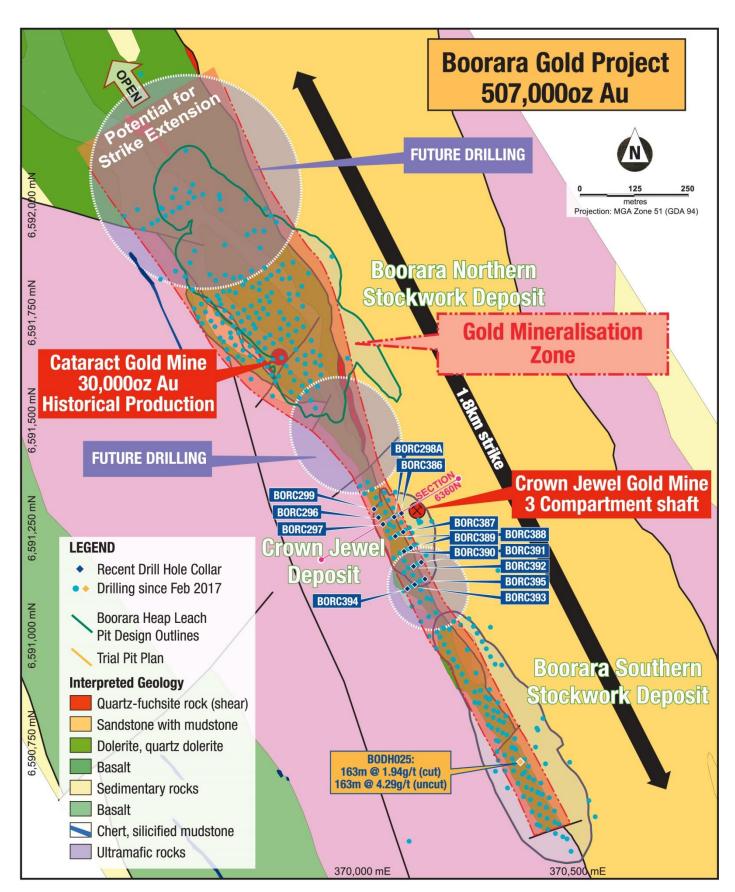


Figure 3: Plan view of Boorara drill holes with interpreted geology.



#### For further information please contact:

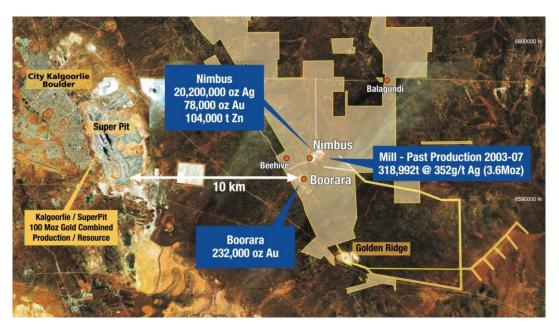
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#### **About MacPhersons**

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

For more information on MacPhersons Resources Limited and to subscribe for regular updates, please visit our website at: <a href="www.mrpresources.com.au">www.mrpresources.com.au</a> or contact our Kalgoorlie office via email on <a href="mailto:info@mrpresources.com.au">info@mrpresources.com.au</a> or telephonically on 08 9068 1300



#### **Competent Person's Statement**

The information is 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 and is a Member of the Australasian Institute of Mining and Metallurgy. 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.



Table 1: Boorara RC significant composite intervals > 0.7 g/t Au, 0.3 g/t Au cut off – max 2m internal dilution at zero grade.

BORC297												
BORC297   20	HOLE-ID	From	То				Dip (°)				mRL	Area
BORC297   46   50   4   0.75   62.07   58.81   124   370035.516   6591246.273   399.923   C.I.	BORC297	4	6	2	1.04	62.07	-58.81	124	370035.516	6591246.273	399.923	CJ
BORC2997   79	BORC297	20	42	22	0.94	62.07	-58.81	124	370035.516	6591246.273	399.923	CJ
BORC297         106         109         3         0.83         62.07         -58.81         124         370035.516         6591246.273         399.923         CL           BORC298A         22         59         37         1.18         60.67         -59.25         170         370061.380         6591261.222         401.848         CL           BORC298A         99         104         5         0.88         60.67         -59.25         170         370061.380         6591261.222         401.848         CL           BORC298A         106         113         7         0.8         60.67         -59.25         170         370061.380         6591261.222         401.848         CL           BORC298A         120         133         13         0.98         60.67         -59.25         170         370061.380         6591261.222         401.848         CL           BORC298A         136         147         11         2.02         60.67         -59.25         170         370061.380         6591261.222         401.848         CL           incl         142         143         1         6.96         60.67         -59.25         170         370061.380         6591261.222         401.848	BORC297	46	50	4	0.75	62.07	-58.81	124	370035.516	6591246.273	399.923	CI
BORC299A   22   59   37	BORC297	79	84	5	1.07	62.07	-58.81	124	370035.516	6591246.273	399.923	CJ
Incl	BORC297	106	109	3	0.83	62.07	-58.81	124	370035.516	6591246.273	399.923	CJ
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BORC298A   106	incl	22	41	19	1.74	60.67	-59.25	170	370061.380	6591261.222	401.848	CJ
BORC298A         120         133         13         0.98         60.67         -59.25         170         370061.380         6591261.222         401.848         CI           BORC298A         136         147         11         2.02         60.67         -59.25         170         370061.380         6591261.222         401.848         CI           incl         142         143         1         6.96         60.67         -59.25         170         370061.380         6591261.222         401.848         CI           incl         145         146         1         8.78         60.67         -59.25         170         370061.380         6591261.222         401.848         CI           BORC298A         168         170         2         1.32         60.67         -59.25         170         370061.380         6591261.222         401.848         CI           BORC299         26         29         3         1.87         63.54         -59.19         120         370015.497         6591281.314         399.322         CI           BORC299         112         114         2         0.85         63.54         -59.19         120         370015.497         6591281.314         399.322 <td>BORC298A</td> <td>99</td> <td>104</td> <td>5</td> <td>0.88</td> <td>60.67</td> <td>-59.25</td> <td>170</td> <td>370061.380</td> <td>6591261.222</td> <td>401.848</td> <td>CJ</td>	BORC298A	99	104	5	0.88	60.67	-59.25	170	370061.380	6591261.222	401.848	CJ
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BORC298A         168         170         2         1.32         60.67         -59.25         170         370061.380         6591261.222         401.848         CJ           BORC299         26         29         3         1.87         63.54         -59.19         120         370015.497         6591281.314         399.322         CJ           BORC299         76         78         2         1.15         63.54         -59.19         120         370015.497         6591281.314         399.322         CJ           BORC386         67         74         7         1.31         60.04         -59.98         149         370078.592         6591271.437         403.156         CJ           BORC386         81         89         8         1.22         60.04         -59.98         149         370078.592         6591271.437         403.156         CJ           BORC387         10         18         8         1.68         63.12         -59.98         149         370082.064         6591226.852         402.443         CJ           BORC387         10         18         1         6.11         63.12         -59.48         149         370082.064         6591226.852         402.443	incl	145	146	1	8.78	60.67	-59.25	170	370061.380	6591261.222	401.848	CJ
BORC299         26         29         3         1.87         63.54         -59.19         120         370015.497         6591281.314         399.322         CJ           BORC299         76         78         2         1.15         63.54         -59.19         120         370015.497         6591281.314         399.322         CJ           BORC386         67         74         7         1.31         60.04         -59.98         149         370078.592         6591271.437         403.156         CJ           BORC386         81         89         8         1.22         60.04         -59.98         149         370078.592         6591271.437         403.156         CJ           BORC386         95         99         4         1.69         60.04         -59.98         149         370078.592         6591271.437         403.156         CJ           BORC387         10         18         8         1.68         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         23         50         30         1.5         63.12         -59.48         149         370082.064         6591226.852         402.443         <	BORC298A	157	160	3	0.99	60.67	-59.25	170	370061.380	6591261.222	401.848	CJ
BORC299         76         78         2         1.15         63.54         -59.19         120         370015.497         6591281.314         399.322         CJ           BORC299         112         114         2         0.85         63.54         -59.19         120         370015.497         6591281.314         399.322         CJ           BORC386         67         74         7         1.31         60.04         -59.98         149         370078.592         6591271.437         403.156         CJ           BORC386         81         89         8         1.22         60.04         -59.98         149         370078.592         6591271.437         403.156         CJ           BORC387         10         18         8         1.68         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         10         18         1         6.11         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           incl         17         18         1         6.11         63.12         -59.48         149         370082.064         6591226.852         402.443 <t< td=""><td>BORC298A</td><td>168</td><td>170</td><td>2</td><td>1.32</td><td>60.67</td><td>-59.25</td><td>170</td><td>370061.380</td><td>6591261.222</td><td>401.848</td><td>CJ</td></t<>	BORC298A	168	170	2	1.32	60.67	-59.25	170	370061.380	6591261.222	401.848	CJ
BORC299         112         114         2         0.85         63.54         -59.19         120         370015.497         6591281.314         399.322         CU           BORC386         67         74         7         1.31         60.04         -59.98         149         370078.592         6591271.437         403.156         CU           BORC386         81         89         8         1.22         60.04         -59.98         149         370078.592         6591271.437         403.156         CU           BORC386         95         99         4         1.69         60.04         -59.98         149         370078.592         6591271.437         403.156         CU           BORC387         10         18         8         1.68         63.12         -59.48         149         370082.064         6591226.852         402.443         CU           incl         17         18         1         6.11         63.12         -59.48         149         370082.064         6591226.852         402.443         CU           BORC387         23         50         30         1.5         63.12         -59.48         149         370082.064         6591226.852         402.443 <t< td=""><td>BORC299</td><td>26</td><td>29</td><td>3</td><td>1.87</td><td>63.54</td><td>-59.19</td><td>120</td><td>370015.497</td><td>6591281.314</td><td>399.322</td><td>CJ</td></t<>	BORC299	26	29	3	1.87	63.54	-59.19	120	370015.497	6591281.314	399.322	CJ
BORC386 67 74 7 1.31 60.04 -59.98 149 370078.592 6591271.437 403.156 CJ BORC386 81 89 8 1.22 60.04 -59.98 149 370078.592 6591271.437 403.156 CJ BORC386 95 99 4 1.69 60.04 -59.98 149 370078.592 6591271.437 403.156 CJ BORC387 10 18 8 1.68 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ incl 17 18 1 6.11 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 23 50 30 1.5 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ incl 24 25 1 5.92 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 65 67 2 0.82 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 78 80 2 1.23 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 97 119 22 1.3 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 110 111 112 1 6.12 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 130 142 12 0.97 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC388 130 142 12 0.97 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC388 23 28 5 0.84 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 32 33 1 1.21 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 37 40 3 1.03 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 37 40 3 1.03 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 43 49 6 0.87 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ	BORC299	76	78	2	1.15	63.54	-59.19	120	370015.497	6591281.314	399.322	CJ
BORC386 81 89 8 1.22 60.04 -59.98 149 370078.592 6591271.437 403.156 CJ BORC386 95 99 4 1.69 60.04 -59.98 149 370078.592 6591271.437 403.156 CJ BORC387 10 18 8 1.68 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ incl 17 18 1 6.11 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 23 50 30 1.5 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ incl 24 25 1 5.92 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 65 67 2 0.82 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 78 80 2 1.23 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 97 119 22 1.3 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ incl 111 112 1 6.12 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 130 142 12 0.97 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC388 11 17 6 0.94 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 37 40 3 1.03 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 43 49 6 0.87 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ	BORC299	112	114	2	0.85	63.54	-59.19	120	370015.497	6591281.314	399.322	CJ
BORC386 95 99 4 1.69 60.04 -59.98 149 370078.592 6591271.437 403.156 CJ BORC387 10 18 8 1.68 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ incl 17 18 1 6.11 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 23 50 30 1.5 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ incl 24 25 1 5.92 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 65 67 2 0.82 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 78 80 2 1.23 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 97 119 22 1.3 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ incl 111 112 1 6.12 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 130 142 12 0.97 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC388 11 17 6 0.94 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 32 33 1 1.21 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 37 40 3 1.03 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 43 49 6 0.87 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ	BORC386	67	74	7	1.31	60.04	-59.98	149	370078.592	6591271.437	403.156	CJ
BORC387 10 18 8 1.68 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ incl 17 18 1 6.11 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 23 50 30 1.5 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ incl 24 25 1 5.92 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 65 67 2 0.82 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 78 80 2 1.23 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 97 119 22 1.3 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ incl 111 112 1 6.12 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC387 130 142 12 0.97 63.12 -59.48 149 370082.064 6591226.852 402.443 CJ BORC388 11 17 6 0.94 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 32 33 1 1.21 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 37 40 3 1.03 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 43 49 6 0.87 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ BORC388 43 49 6 0.87 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ	BORC386	81	89	8	1.22	60.04	-59.98	149	370078.592	6591271.437	403.156	CJ
incl         17         18         1         6.11         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         23         50         30         1.5         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           incl         24         25         1         5.92         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         65         67         2         0.82         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         78         80         2         1.23         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         97         119         22         1.3         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           incl         111         112         1         6.12         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ<	BORC386	95	99	4	1.69	60.04	-59.98	149	370078.592	6591271.437	403.156	CJ
BORC387         23         50         30         1.5         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           incl         24         25         1         5.92         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         65         67         2         0.82         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         78         80         2         1.23         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         97         119         22         1.3         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           incl         111         112         1         6.12         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         130         142         12         0.97         63.12         -59.48         149         370082.064         6591226.852         402.443         <	BORC387	10	18	8	1.68	63.12	-59.48	149	370082.064	6591226.852	402.443	CJ
incl         24         25         1         5.92         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         65         67         2         0.82         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         78         80         2         1.23         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         97         119         22         1.3         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           incl         111         112         1         6.12         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         130         142         12         0.97         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC388         11         17         6         0.94         62.88         -59.42         120         370064.300         6591217.431         401.269         <	incl	17	18	1	6.11	63.12	-59.48	149	370082.064	6591226.852	402.443	CJ
BORC387         65         67         2         0.82         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         78         80         2         1.23         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         97         119         22         1.3         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           incl         111         112         1         6.12         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         130         142         12         0.97         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC388         11         17         6         0.94         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         32         33         1         1.21         62.88         -59.42         120         370064.300         6591217.431         401.269	BORC387	23	50	30	1.5	63.12	-59.48	149	370082.064	6591226.852	402.443	CJ
BORC387         78         80         2         1.23         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         97         119         22         1.3         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           incl         111         112         1         6.12         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         130         142         12         0.97         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC388         11         17         6         0.94         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         23         28         5         0.84         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         37         40         3         1.03         62.88         -59.42         120         370064.300         6591217.431         401.269	incl	24	25	1	5.92	63.12	-59.48	149	370082.064	6591226.852	402.443	CJ
BORC387         97         119         22         1.3         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           incl         111         112         1         6.12         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         130         142         12         0.97         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC388         11         17         6         0.94         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         32         28         5         0.84         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         37         40         3         1.03         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         43         49         6         0.87         62.88         -59.42         120         370064.300         6591217.431         401.269	BORC387	65	67	2	0.82	63.12	-59.48	149	370082.064	6591226.852	402.443	CJ
incl         111         112         1         6.12         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC387         130         142         12         0.97         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC388         11         17         6         0.94         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         23         28         5         0.84         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         32         33         1         1.21         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         37         40         3         1.03         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         43         49         6         0.87         62.88         -59.42         120         370064.300         6591217.431         401.269	BORC387	78	80	2	1.23	63.12	-59.48	149	370082.064	6591226.852	402.443	CJ
BORC387         130         142         12         0.97         63.12         -59.48         149         370082.064         6591226.852         402.443         CJ           BORC388         11         17         6         0.94         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         23         28         5         0.84         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         32         33         1         1.21         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         37         40         3         1.03         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         43         49         6         0.87         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ	BORC387	97	119	22	1.3	63.12	-59.48	149	370082.064	6591226.852	402.443	CJ
BORC388         11         17         6         0.94         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         23         28         5         0.84         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         32         33         1         1.21         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         37         40         3         1.03         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         43         49         6         0.87         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ	incl	111	112	1	6.12	63.12	-59.48	149	370082.064	6591226.852	402.443	CJ
BORC388         23         28         5         0.84         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         32         33         1         1.21         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         37         40         3         1.03         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         43         49         6         0.87         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ	BORC387	130	142	12	0.97	63.12	-59.48	149	370082.064	6591226.852	402.443	CJ
BORC388         32         33         1         1.21         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         37         40         3         1.03         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         43         49         6         0.87         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ	BORC388	11	17	6	0.94	62.88	-59.42	120	370064.300	6591217.431	401.269	CJ
BORC388         37         40         3         1.03         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ           BORC388         43         49         6         0.87         62.88         -59.42         120         370064.300         6591217.431         401.269         CJ	BORC388	23	28	5	0.84	62.88	-59.42	120	370064.300	6591217.431	401.269	CJ
BORC388 43 49 6 0.87 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ	BORC388	32	33	1	1.21	62.88	-59.42	120	370064.300	6591217.431	401.269	CJ
	BORC388	37	40	3	1.03	62.88	-59.42	120	370064.300	6591217.431	401.269	CJ
BORC388 60 63 3 1.2 62.88 -59.42 120 370064.300 6591217.431 401.269 CJ	BORC388	43	49	6	0.87	62.88	-59.42	120	370064.300	6591217.431	401.269	CJ
	BORC388	60	63	3	1.2	62.88	-59.42	120	370064.300	6591217.431	401.269	CJ



HOLE-ID	Depth From (m)	Depth To (m)	INTERVAL (m)	Au (g/t)	Azimuth (°)	Dip (°)	EOH (m)	Easting (GDA)	Northing (GDA)	mRL	Area
BORC388	77	81	4	2.9	62.88	-59.42	120	370064.300	6591217.431	401.269	CJ
incl	78	79	1	5.99	62.88	-59.42	120	370064.300	6591217.431	401.269	CJ
BORC388	88	89	1	1.26	62.88	-59.42	120	370064.300	6591217.431	401.269	CJ
BORC388	95	96	1	1.31	62.88	-59.42	120	370064.300	6591217.431	401.269	CJ
BORC388	108	109	1	1.83	62.88	-59.42	120	370064.300	6591217.431	401.269	CJ
BORC388	119	120	1	1.02	62.88	-59.42	120	370064.300	6591217.431	401.269	CJ
BORC389	25	27	2	1.11	61.24	-59.79	120	370100.417	6591191.071	402.769	CJ
BORC389	71	96	25	1.6	61.24	-59.79	120	370100.417	6591191.071	402.769	CJ
incl	79	89	10	3.48	61.24	-59.79	120	370100.417	6591191.071	402.769	CJ
BORC389	101	106	5	0.74	61.24	-59.79	120	370100.417	6591191.071	402.769	CJ
BORC390	15	31	16	1.4	60.04	-59.43	233	370084.439	6591181.619	401.412	CJ
incl	20	21	1	7.18	60.04	-59.43	233	370084.439	6591181.619	401.412	CJ
incl	21	22	1	6.47	60.04	-59.43	233	370084.439	6591181.619	401.412	CJ
BORC390	34	36	2	1.47	60.04	-59.43	233	370084.439	6591181.619	401.412	CI
BORC390	39	42	3	0.86	60.04	-59.43	233	370084.439	6591181.619	401.412	CI
BORC390	44	46	2	0.86	60.04	-59.43	233	370084.439	6591181.619	401.412	CJ
BORC390	91	93	2	2.23	60.04	-59.43	233	370084.439	6591181.619	401.412	CJ
BORC390	161	165	4	0.78	60.04	-59.43	233	370084.439	6591181.619	401.412	CJ
BORC390	219	229	10	1.63	60.04	-59.43	233	370084.439	6591181.619	401.412	CJ
incl	219	220	1	12.3	60.04	-59.43	233	370084.439	6591181.619	401.412	CJ
BORC391				NSR	60.87	-59.86	150	370123.899	6591157.598	402.616	CJ
BORC392	25	28	3	0.8	61.47	-59.52	210	370105.629	6591147.445	401.369	CI
BORC392	74	79	5	1.47	61.47	-59.52	210	370105.629	6591147.445	401.369	CJ
BORC392	89	91	2	0.76	61.47	-59.52	210	370105.629	6591147.445	401.369	CI
BORC392	109	110	1	1.89	61.47	-59.52	210	370105.629	6591147.445	401.369	CI
BORC392	117	119	2	2.38	61.47	-59.52	210	370105.629	6591147.445	401.369	CI
BORC392	142	174	32	1.3	61.47	-59.52	210	370105.629	6591147.445	401.369	CJ
incl	159	160	1	5.95	61.47	-59.52	210	370105.629	6591147.445	401.369	CI
incl	168	169	1	9.51	61.47	-59.52	210	370105.629	6591147.445	401.369	CJ
incl	169	170	1	5.34	61.47	-59.52	210	370105.629	6591147.445	401.369	CI
incl	170	171	1	5.38	61.47	-59.52	210	370105.629	6591147.445	401.369	CI
BORC392	192	202	10	1.07	61.47	-59.52	210	370105.629	6591147.445	401.369	CI
BORC393	29	32	3	0.72	62.86	-60.07	126	370108.512	6591104.613	399.736	CI
BORC393	120	123	3	0.94	62.86	-60.07	126	370108.512	6591104.613	399.736	CJ
BORC394	9	10	1	1.72	60.60	-59.32	126	370091.605	6591095.587	399.560	CJ
BORC394	48	60	12	1.29	60.60	-59.32	126	370091.605	6591095.587	399.560	CJ
incl	54	55	1	7.33	60.60	-59.32	126	370091.605	6591095.587	399.560	CJ
BORC394	66	68	2	0.78	60.60	-59.32	126	370091.605	6591095.587	399.560	CJ
BORC394	79	80	1	1.07	60.60	-59.32	126	370091.605	6591095.587	399.560	CJ



HOLE-ID	Depth From (m)	Depth To (m)	INTERVAL (m)	Au (g/t)	Azimuth (°)	Dip (°)	EOH (m)	Easting (GDA)	Northing (GDA)	mRL	Area
BORC395	138	143	5	0.98	62.28	-59.30	186	370133.268	6591118.350	400.906	CI

<sup>\*</sup>NSR: Denotes a drill hole with no significant result



# **JORC Code, 2012 Edition – Table 1 Report**

## **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	The Boorara Deposit 13 RC holes (BORC 297-299, 386-395 1,983m), azimuth 060° dipping -60°.  The RC samples are collected from the drill rig cyclone in a green plastic bag in 1m intervals and are laid out in rows of either 20 or 40 samples. A 2-4kg representative sample is split via the rig mounted cone splitter and placed on top of the green plastic for that metre interval.  Diamond drilling completed using one metre sampling lengths, core half cut adjacent to bottom of hole orientation line.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	All sampling is undertaken using MacPhersons Resources sampling procedures and QAQC in line with industry best practise which includes certified standards on average every 30 samples.
		The RC drill rig provides a sample at the end of each metre of drilling. A 2-4 kg sample is collected from the drill rig via a cone splitter which is representative of that metre.
		HQ diamond core was half cut to produce a 2-4 kg sample for analysis.
	Aspects of the determination of mineralisation that are Material to the Public Report.	Historic hole collars have been recovered where possible and surveyed by a licenced surveyor using a DGPS (0.01). Historic holes were down hole surveyed where possible for deviation by north seeking gyroscope method by local contactor ABIMS.
	In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	The RC one metre sample intervals were collected with a 2-4 kg representative sample despatched to the laboratory for gold analysis.  The diamond half core sample intervals were typically a 2-4 kg representative sample despatched to the laboratory for gold analysis.  All analysis was by 50g fire assay with AAS finish with the exception of cases where visible gold has been observed or a fire assay grade has exceeded 100 g/t or coarse gold is suspected then a screen fire assay (Au-SCR22AA) has been undertaken on those samples and
		those results reported instead of the fire assay result.



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	The RC drilling was undertaken using a face sampling percussion hammer using 137mm drill bits.  The diamond drilling was undertaken using HQ3 (triple tube) and HQ3 (standard tube) techniques.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Each metre of RC sample is checked and an estimate of sample recovery is made. For this program, greater than 80% of samples had a recovery of 70% or higher. Sample weights reported by laboratory can also give an indication of recoveries  Drill core was measured and compared to drilled intervals, and recorded as a percentage recovery. Recovery in oxidised rock can be reasonable whereas recovery in fresh rock is excellent.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Drillers experience is important. Steady drilling, using modern well maintained drilling equipment, regular cleaning of cyclone and splitter, pausing the drilling at each metre to allow sample to pass through drill string and reducing sample loss. Using a RC rig equipped with auxiliary and booster compressors is critical to maintaining good RC sample recovery.  Using professional and competent core drilling contractor minimises issues with sample recoveries through the use of appropriate drilling equipment techniques and drilling fluids suited to the particular ground conditions.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	RC sample recoveries from the mineralised zones are generally high although some of the weathered material is lost in drilling (dust) and some natural voids do exist. No sample was lost from 2-4 kg split from cyclone that was submitted for analysis, some loss of sample occurred from large green bags and some bias may have occurred to that sample as water was flowing from sample bag – this sample has not been analysed and therefore will not affect results reported in this release.  The core sample recovery in the transitional and fresh rock zones is very high and no significant bias is expected. Recoveries in oxidised rock were lower.  Although no exhaustive studies have been undertaken, no significant bias is expected, and any potential bias is not considered material at this stage of resource development.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a	Each RC metre drilled underwent detailed logging through the entire hole with record kept of colour,



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	lithology, degree of oxidation, and type and intensity of alteration veining and sulphide content.  Diamond core metres underwent detailed logging through the entire hole with record kept of colour, lithology, degree of oxidation, and type and intensity of alteration, veining and sulphide content. Structural, density and geotechnical data is also collected on drill core.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	All logging is qualitative in nature and included records of lithology, oxidation state and colour with estimates of intensity of mineralisation, alteration and veining.  Wet and dry photographs were completed on the core.
	The total length and percentage of the relevant intersections logged.	All drill holes were geologically logged in full (100%).
Sub- sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Core was half cut with a diamond saw with the same half always sampled and the other half retained in core trays.  In some instances oxidised and non-competent clay zones are carefully split in half using sampling wedge and sampled as half core.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	All RC sub-samples are collected via a cone splitter system mounted on the drill rig. An estimated 30% of samples were moist to wet in nature that passed through the cyclone – splitter system.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	All samples were analysed via a 50 gram fire assay. Following that analysis in cases where visible gold has be observed or a fire assay grade has exceeded 100 g/t or coarse gold is suspected then a screen fire assay (Au-SCR22AA) has been undertaken on those samples and those results reported instead of the fire assay result.
		Sample preparation and analysis were completed by ALS in Kalgoorlie. When received, samples are processed by code PREP-31 - logged in tracking system and bar code attached, wet samples dried through ovens, fine crushing to better than 70% passing 2mm, split sample using riffle splitter, split of up to 1000g pulverised to >85% sample passing 75um.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	All sampling equipment and sample bags are kept clean at all times.  The RC drill rig mounted cone splitter is adjusted to ensure that the 1m split sample weighs on average between 2-4kg. The cone splitter is cleaned using an air nozzle after every drill rod – 6m.



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		MacPhersons Resources sampling procedures and QAQC is used to maximise representivity of samples.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	For drill core, the entire core is sampled at one metre intervals to ensure that samples are representative of the entire in-situ rock being tested. The laboratory ensures that the entire sample submitted is crushed and split appropriately to provide a representative subsample.
		No duplicate samples are taken from the core
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes (0.5 kg to 4 kg) are considered appropriate for the style of mineralisation at Boorara.
		Half cut HQ diamond core samples over 1m length (normally at the end of hole) were up to 4kg.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The nature, quality and appropriateness of the assaying and laboratory procedures are industry standard for Archaean mesothermal lode gold deposits. The fire assay technique will result in a total assay result. In cases where visible gold has be observed or a fire assay grade has exceeded 100 g/t or coarse gold is suspected then a screen fire assay (Au-SCR22AA) has been undertaken on those samples and reported instead of the fire assay result.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	None of these tools are used
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Certified Reference Materials (standards) are purchased from an independent supplier of such materials. Blanks are made up from samples previously collected from other drill programs at Boorara –Nimbus that have analysed as less than detection Au values.
		A standard sample followed by a blank sample are inserted every 30 <sup>th</sup> sample. A duplicate sample is taken every 25 samples.
		Evaluation of the Macphersons submitted standards and blanks analysis results indicates that assaying is accurate and without significant drift.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	At least two different company personnel visually verified intersections in the collected drill chips. At least two different company personnel visually verified intersections in the diamond core. A representative sample of each metre is collected and stored for further verification if needed. Drill core or core photos are used to verify drill intersections in diamond core samples.



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	The use of twinned holes.	The spatial location and assaying accuracy of historical drilling was confirmed with RC and DD twinned holes.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data collected in the form of spread sheets, for drill hole collars, surveys, lithology and sampling.  All geological and field data is entered into Microsoft Excel spreadsheets with lookup tables and fixed formatting (and protected from modification) thus only allowing data to be entered using the MacPhersons geological code system and sample protocol.  Data is verified and validated by MRP geologists and stored in a Microsoft Access Database
		Data is emailed to a database administrator for validation and importation into a GEMS database and periodically into a SQL database using Datashed.
	Discuss any adjustment to assay data.	No adjustments are made to the primary assay data imported into the database.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Initial hole collars surveyed by licenced surveyor DGPS (0.01m). Diamond drill line by surveyed back sight and foresight pegs. Dip was checked with clinometer on drill mast at set up on hole. RC holes are surveyed by down hole surveys at 30m intervals using single shot "Reflex Camera +/- 0.1° by drill contractor.  Diamond holes are surveyed by down hole surveys at 30m intervals using single shot "Reflex Camera +/- 0.1° by drill contractor.  All holes are surveyed for deviation at end of hole by
		gyroscope method by local contractor ABIMS Ltd. This is normally inside rods but may be open hole for RC drilling.  Final hole collar locations surveyed by licenced
		surveyor (Minecomp Pty Ltd) DGPS (0.01m).
	Specification of the grid system used.	The grid system used is Geocentric Datum of Australia 1994 (GDA94).
	Quality and adequacy of topographic control.	Historical – Aerial photography used to produce digital surface topographic maps at 1:2500 1m contours.
		2011 - Fugro Spatial Solutions Pty Ltd detailed aerial photographic survey. Orth rectification and mosaicking performed using Inpho Digital Photogrammetric Systems. Expected accuracy of detail within 0.8mm at the ortho-image map scale.
		Topographic control is from an aerial photographic



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		survey completed during 2012 with accuracy within 0.01m.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drilling at Boorara is at:  10m line x 5m hole 20m line x 10m hole 20m line x 20m hole 40m line x 10m hole 40m line x 20m hole The holes reported in this release were on 40m spaced
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	lines that are 10m apart along the lines.  The data spacing and distribution is sufficient to demonstrate spatial and grade continuity of the mineralized domains to support the current MRE classifications as Measured, Indicated and Inferred according to JORC (2012 Edition) reporting criteria.
	Whether sample compositing has been applied.	No sample compositing has been applied in the field within the mineralised zones.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Diamond drill holes and RC holes were orientated 115°/-60° which is considered to be perpendicular to the dominant quartz vein arrays or at 060°/-60° perpendicular to geology contacts but also is preferred orientation for estimating grade of quartz veins and arrays. Various other orientations have been tried historically to try and capture the best orientation to drill various different structures and vein orientations. Historically diamond core holes were orientated 060°/-60°. BORC 297-299, 386-395 were orientated 060°/-60°. The 115°/-58° orientated holes are close to perpendicular to the dominant quartz vein geometry.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	It is not believed that drilling orientation has introduced a sampling bias as the dominant mineralised quartz vein arrays at SSW area at Boorara are orientated 020°/48°NW, 040°/55° NW, 060°/40°NW & 100°/43°N.
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by MRP. Field samples are stored overnight in a shed onsite (if not delivered to laboratory) which is equipped with security cameras and caretaker in residence who is an employee of MacPhersons.
		Field samples are delivered to the assay laboratory in Kalgoorlie by MRP personnel once the hole is completed. Whilst in storage at the laboratory, they are kept in a locked yard. Tracking sheets have been set up online to track the progress of batches of samples through the laboratory.
		Sample pulps and coarse rejects are stored at ALS for



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		a period of time and then returned to MRP.
Audits or reviews	The results of any audits or reviews of sampling techniques and data	CSA completed a review in early 2015 of the MRP sampling protocols as part of their Resource estimation work and were satisfied that the adequacy of sample preparation, sample security and analytical procedures support the Mineral Resource classification discussed and are of industry standard.  MRP have maintained those sampling protocols from that time.



# **JORC Code, 2012 Edition – Section 2 Report**

## **Section 2 Reporting of Exploration Results**

(Criteria in this section apply to all succeeding sections.)

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Boorara Project is located approximately 17km east-southeast of Kalgoorlie, 2km west of Nimbus and 6km north-northwest of Golden Ridge' The Boorara project is situated within mining leases M26/29, M26/277 and M26/318 accessed from the Kalgoorlie-Bulong Road via an unsealed haul road. The tenements are located within the Hampton Hill Pastoral Station.
		Normal Western Australian state royalties apply. A third party royalty of \$1/t is payable to a maximum of \$1 million on M26/277. A third party royalty based on production milestones is payable on M26/29, M26/318 & M26/161 as below;
		<ul> <li>25,000 ounces gold production – 375 ounce royalty payable</li> <li>50,000 ounces gold production – 375 ounce royalty payable</li> <li>75,000 ounces gold production – 375 ounce royalty payable</li> <li>100,000 ounces gold production – 375 ounce royalty payable</li> </ul>
		Situated within the Boorara Project area are the reserves associated with the Boorara townsite. Proposed open pit operations will not impact on the reserves.
		The location of waste dumps will be sited so as to avoid mineral resources, exploration targets and to work with other mining infrastructure associated with the Nimbus operations located within 2km of the proposed Boorara open pits.
		MRP purchased the Nimbus property on 8 <sup>th</sup> September 2011 from Kalgoorlie Ore Treatment Company Pty Ltd (KOTC). The tenements are held by KOTC, a wholly owned subsidiary of MacPhersons Resources Ltd.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing and no known impediments exist.



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historic gold production at Boorara produced 30,673 oz's from the treatment of 54,731 tonnes of ore. This production was from underground mining at the Cataract shaft, East Lode shaft and the Crown Jewel shaft. Historic mine plans and sections show two orientations of mine stopes, one at 040°/25° NW and another at 315°/65°W.
		Dampier Mining Pty Ltd and Texas Gulf Australia Ltd in 1980 drilled 20 RC holes for 1,038m and 10 diamond holes for 1,695m.
		Western Reefs NL in 1985 undertook soil sampling on a 40m x 20m grid. They also completed 180 RAB holes for 9892m, 268 RC holes for 20,831m and 26 diamond holes for 2,609m. Geological mapping was undertaken by Western Reefs including costean mapping and sampling. The Cataract shaft was refurbished and geologically mapped and surveyed. The Crown Jewel shaft was mapped and surveyed also.
		Windsor Resources in 1988 drilled 174 RC holes for 11,274m.
		Newmont in 1990 drilled 338 RAB holes for 15,446m, 39 RC holes for 4,319m and 4 diamond holes for 718m. Geological mapping and soil sampling was also undertaken.
		Mt Monger Gold Project in 1993 drilled 116 RC holes for 6,222m.
		Fimiston Mining NL in 1995 drilled 110 RC holes for 7,257m and 1 diamond hole for 195m. The data relating to the Boorara gold deposits comprising the Southern Stockwork Zone, Northern Stockwork Zone, Cataract Area, East Lode and Digger Dam was reviewed. The database was updated to incorporate the drilling completed by Fimiston and cross sections and interpretations made. A global polygonal based resource estimate was made which estimated resources of 2.25 million tonnes @ 1.40g/t Au at a cut-off grade of 0.5g/t or 1.42 million tonnes @ 1.72 g/t Au at a cut off of 1.0 g/t to be estimated. Block modelling of this polygonal data was then completed which returned a total oxide resource of 1,293,000 tonnes @ 1.49 g/t, and a total fresh resource of 1,095,000 tonnes @ 1.86g/t.
		New Hampton Goldfields Ltd in 2001 undertook a resource estimate at Boorara which resulted in a JORC compliant undiluted mineral resource of



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		1,506,000t @ 1.85 g/t Au. Open pit design of the Southern Stockwork, Cataract and the Northern Stockwork resulted in a Probable Reserve of 179,000t @ 3.0 g/t Au. The New Hampton Goldfields Ltd — Jubilee Gold Operations report, "Mineral Resource Estimate Report, Boorara M26/29 M26/318 and M26/161, June 2001 G Job" outlines the methodology and an explanation of the resource calculation.
		Polymetals (WA) Pty Ltd in 2006 estimated a NON JORC complaint total resource summary of 1,904,800t @1.38g/t Au using a cutoff grade of 0.5 g/t Au.
		Polymetals (WA) Pty Ltd in 2009 completed 18 RC holes for 1770m. From this program 126 samples with >1.0g/t Au were screen fire assayed, with another 34 duplicates taking the total samples assayed via screen fire assay to 160.
Geology	Deposit type, geological setting and style of mineralisation.	The Boorara Au deposit is an Archaean mesothermal Au deposit.
		The Boorara local geology consists of a sequence of ultramafic, mafic and felsic volcanic and volcaniclastic rocks, with interflow carbonaceous sediments found on the lithological boundaries. Dolerite intrusions are conformable within the sequence. The metamorphic grade of rocks at Boorara is lower greenschist facies. The alteration assemblage associated with better Au grades consists of quartz carbonate and sericite. Pyrite and arsenopyrite are associated with the better Au grades at Boorara.
		At Boorara gold mineralisation has been described by Verbeek (1987) to occur:
		<ul> <li>Near dolerite contacts associated with quartz stockwork or vein arrays. Pervasive carbonate-sericite alteration is present.</li> <li>Sulphides occur in the vein selvedge with proximal arsenopyrite and distal pyrite.</li> <li>Veins are usually less than 20 mm wide whilst the selvedge may be 1 to 4 times the width of the vein.</li> <li>Associated with quartz veins in shallow (20 to 45 degrees) north-dipping shear zones.</li> <li>Associated with steep (50 to 70 degrees) east-dipping shear zones on dolerite contacts.</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<ol> <li>Mineralisation envelopes at Boorara consist of three dominant orientations:</li> <li>NW trend of sub-vertical mineralisation which is typified by the East Lode workings, and interpreted as sub parallel to lithology contacts</li> <li>NW moderate NE dipping structure at Crown Jewel, sub parallel to lithology contacts</li> <li>NE striking, shallow to moderate NW dipping vein arrays as seen in the Boorara trial pit and at the Cataract workings.</li> </ol>
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  1. easting and northing of the drill hole collar  2. elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar  3. dip and azimuth of the hole  4. down hole length and interception depth  5. hole length.	Please refer to table 1 in the report for full details.
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Other relevant drill hole information can be found in Section 1-"Sampling techniques, "Drilling techniques" and "Drill sample recovery".
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	All one metre diamond drill results are reported in Appendix 1 Section 2 of JORC table 1. Holes include up to 2m of internal dilution - host dolerite was intersected in the 2m diluted section with significant alteration. A bottom cut off grade of 0.3 g/t was used and no top cut grade was applied.  The procedure applied to the aggregate intercepts quoted is length weighted average (sum product of interval x corresponding interval assay grade), divided by sum of interval lengths and rounded by one decimal place.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values have been reported.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	These drill holes are designed to drill perpendicular to the dominant quartz vein array geometry within the Boorara dolerite at Boorara which gives MRP geologists a good understanding of mineralisation widths encountered.  The dominant mineralisation geometries seen at the Boorara gold project are;
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	<ol> <li>Shear zone hosted mineralisation on the dolerite east contact which strikes 320° and is steeply dipping to the west.</li> <li>Quartz vein sheeted vein array hosted mineralisation that is orientated 020°/48°NW, 060°/40°NW &amp; 100°/43°N.</li> </ol>
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The estimated true width of the granophyric dolerite has been estimated at 20m and this based on BORC 157 intersection 23m @ 2.02 g/t. BODH 035 intersected 22m @ 2.1 g/t which has also been used to estimate true width.
		The true width of the ore at the Boorara gold resource is reasonably well known from the earlier deeper resource drilling, but at Boorara does not appear to be consistent in width due to the structural setting of the mineralisation. Greater than 90% of all drill holes would define both boundaries to mineralisation from which a true width can be reasonably determined.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Please refer to the body of the report.
	(NOTE: Any map, section, diagram, or other graphic or photo must be of high enough resolution to clearly be viewed, copied and read without distortion or loss of focus).	
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Please refer to table 1 in the body of the report.



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	The diamond holes were also utilised for bulk density measurements.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further RC & Diamond drilling is planned to further test mineralisation associated with this release.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Please refer to the body of the report.
	(NOTE: Any map, section, diagram, or other graphic or photo must be of high enough resolution to clearly be viewed, copied and read without distortion or loss of focus).	