Rockface Copper Discovery at Jervois

Keith Mayes, KGL Resources
Rockface Copper Discovery at Jervois

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Location

- 380 km by road east north east of Alice Springs
- Jervois Pastoral Lease
- Access via Stuart and Plenty Highway
- Bonya Community 17 km south west of project
Geological Setting

- Hosted by Bonya Metamorphics in Eastern Arunta
- High T - Low P metamorphism
- Dominated by Qtz Muscovite Schist
- Stratabound mineralisation
- Hybrid SEDEX-VMS IOCG?
Deformation

D0
- Basin Formation

D1
- large westward closing recumbent folds

D2
- Dominant fabric.
- East-west possibly transpressional regime
- Isoclinal folding repetitions

D3
- Refolding of D2 forming the “J”shape
Jervois Exploration

- Jervois discovered in 1929
- Numerous small scale prospecting and mining ventures
- **New Consolidated Goldfields** (Australasia) Pty Ltd 1961-1965;
- **JV Petrocarb and Union Corporation** (Australia) Pty Ltd (1973-1974)
- **Plenty River Mining** (1980-1983)
- **JV Plenty River Mining** and **Anaconda** (1983-1984)
- **JV Plenty River Mining** and **Normandy Poseidon** (1991-1996);
- **Britannia Gold NL** (1997-1999)
- **JV Britannia Gold NL** and **MIM Exploration** Pty Ltd (1999-2001)
- **KGL Resources** (2011 – Present)
Total contained lead-zinc 190,000 tonnes
30.5 Mt @ 1.07% Cu for 327,000 t Cu

30.5 Mt @ 23 g/t Ag for 22.6 M oz Ag
Jervois

- Coxs Find - 3km
- Rockface - 5km
- Bellbird - 5km
- Green Parrot - 1km
- Marshall - 500m
- Reward
Rockface
Rockface Exploration

**Rockface**

- Petrocarb > Nicron > Normandy Poseidon Group
  - 5 RC holes (PF1-5) – early 1970s

**MIM Exploration**

- 2 RC holes (J8, J9) - 2000

**Reward Minerals**

- 5 RC holes (RJ series) – mid 2000s

**KGL Resources**

- 4 diamond (KJD series)
- 10 hand held diamond (KJD series) * Post 2014 resource estimate
- 5 RC holes (KJC & JOC series)
- 12 RC holes with Diamond tail (KJCD series) * Post 2014 resource estimate

**Rockhole**

**KGL Resources**

- 3 diamond (KJD series)
- 5 RC holes (KJC series)
IP Chargeability

Map of 1968 IP anomalies
Overlays of 2001 IP Chargeability 0m depth slice

KEY
- Color
- Drill Trace
- 2001 P survey lines
- Copper Assays

Mineralisation
IP Chargeability 40mV/V
IP Chargeability 20mV/V

Mineralisation
IP Chargeability 30mV/V
IP Chargeability 20mV/V

REWARD
GREEN PARROT
MARSHALL
MORELY
BELLEBIRD
BELLEBIRD NORTH
ROCKFACE
Inferred Resource 0.7Mt @ 0.82% Cu, 3.1g/t Ag
Induced Polarisation

- Conventional dipole-dipole array

QUANTEC GEOSCIENCE

ORION 3D

Data Density
Orion 3DIP 100mRL: Coincident resistivity and conductivity anomaly
Ground Magnetics

KEY
- 2016 Collar
- 2016 Hole Trace
- Historical Collar
- Historical Hole Trace
- 2014 Mineral Wireframe
- Copper Outcrop

JERVOIS PROJECT
ROCKFACE PROSPECT
SAM TMI RTP

GDA94 - MGA Zone 53

260 m
KJCD171
13m @ 2.14% Cu, 12.5g/t Ag, 0.10g/t Au from 255m
2m @ 2.83% Cu, 10.8g/t Ag, 0.05g/t Au from 278 m
Hole KJCD182 successfully intersected EM Conductor 2

Hole KJCD183 lifted and did not intersect EM Conductor 3
Drilling Priorities

Eastern zone (C6,7,8)
Shallower areas of C3 are target for infill drilling

Infill drilling on remainder of C3 & C5 in advance of resource update

IP Chargeability suggesting potential to the west

Rockhole extension drilling
Alteration

Alteration Assemblage

Distal | Intermediate | Proximal

Magnetite-sericite

andalusite alteration to sericite and/or chlorite

localised to high-strain zones garnet-biotite pervasively disseminated

chlorite-magnetite-biotite

massive magnetite±biotite

post mineralisation carbonate fracture veins

Alteration Symmetry

KJCD 195

Distal | Intermediate | Proximal | Intermediate | Distal

SOH-203.6m ~155m ~25m ~58m ~42m ~70m ~45m ~55m ~55m ~55m

KJCD 183

Distal | Intermediate | Proximal | Intermediate | Distal

SOH-271.2m ~16m ~55m ~10m ~36m ~36m ~36m ~36m ~36m ~36m ~36m

Easting: 1210000, 1210500, 1211000, 1211500, 1212000

Mineralisation: SOH-203.6m ~155m ~25m ~58m ~42m ~70m ~45m ~55m ~55m ~55m

EOH-438.7m

Jervois Copper Project
Rockface-Rockhole Prospect
Multiple parallel lenses

Dipping north at -80deg

C5 appears to be flattening to -75deg in KJCD201

Strike for C6,7,8 swinging to the north
Magnetite Alteration Halo can be observed in Iron assay, magnetic susceptibility and SG

C6,7,8 off-hole to east

C3 off-hole above
KJCD201 DHEM

- C5 coincided with a zone of massive magnetite/chalcopyrite
  - 10.05m @ 8.99% Cu, 45.5g/t Ag, 0.6g/t Au

- Strong EM response observed from the eastern zone
<table>
<thead>
<tr>
<th>HoleID</th>
<th>Interval</th>
<th>ETW (m)</th>
<th>RL (m)</th>
<th>SG (t/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KJD016</td>
<td>7.35m @ 1.22% Cu, 2.1g/t Ag, 0.06g/t Au from 0m</td>
<td>4.3</td>
<td>389.7</td>
<td>2.71</td>
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<tr>
<td>KJCD171</td>
<td>13m @ 2.14% Cu, 12.5g/t Ag, 0.10g/t Au from 255m 2m @ 2.83% Cu, 10.8g/t Ag, 0.05g/t Au from 278 m</td>
<td>10.0</td>
<td>140.6</td>
<td>4.33</td>
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<tr>
<td></td>
<td></td>
<td>1.5</td>
<td>121.5</td>
<td>2.95</td>
</tr>
<tr>
<td>KJCD182</td>
<td>9m @ 2.91% Cu, 17.6g/t Ag, 0.2g/t Au from 284m 6m @ 1.6% Cu, 9.3g/t Ag, 0.16g/t Au from 296 m</td>
<td>6.6</td>
<td>118.3</td>
<td>3.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.4</td>
<td>108.7</td>
<td>4.46</td>
</tr>
<tr>
<td>KJCD183</td>
<td>16m @ 3.34% Cu, 16.7g/t Ag, 0.17g/t Au from 362m</td>
<td>11.7</td>
<td>46.6</td>
<td>3.84</td>
</tr>
<tr>
<td>KJCD203</td>
<td>28m @ 5.08% Cu, 22.4g/t Ag, 0.22g/t Au from 435m Incl. 14m @ 8.89% Cu, 38.5g/t Ag, 0.38g/t Au from 436m</td>
<td>23.2</td>
<td>-13.5</td>
<td>4.02</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.6</td>
<td>-14.2</td>
<td>4.28</td>
</tr>
<tr>
<td>KJCD195</td>
<td>10.5m @ 8.76% Cu, 42.9g/t Ag, 0.51g/t Au from 478.4m 5.1m @ 2.66% Cu, 13.8g/t Ag, 0.27g/t Au from 513.6 m</td>
<td>7.5</td>
<td>-58.6</td>
<td>4.42</td>
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<tr>
<td></td>
<td></td>
<td>3.7</td>
<td>-87.0</td>
<td>3.38</td>
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<tr>
<td>KJCD198</td>
<td>5.95m @ 4.94% Cu, 25.9g/t Ag, 0.45g/t Au from 449.85m</td>
<td>4.0</td>
<td>-61.4</td>
<td>3.90</td>
</tr>
<tr>
<td>KJCD197</td>
<td>9.4m @ 11.53% Cu, 56.6g/t Ag, 0.87g/t Au from 535.4m 8.9m @ 1.00% Cu, 7.3g/t Ag, 0.09g/t Au from 544.8 m 15m @ 7.11% Cu, 29.4g/t Ag, 0.89g/t Au from 558 m</td>
<td>6.6</td>
<td>-133.2</td>
<td>4.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.2</td>
<td>-141.3</td>
<td>3.94</td>
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<td></td>
<td></td>
<td>10.5</td>
<td>-152.2</td>
<td>3.59</td>
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<tr>
<td>KJCD201</td>
<td>10.05m @ 8.99% Cu, 45.5g/t Ag, 0.6g/t Au from 645.65m</td>
<td>7.5</td>
<td>-243</td>
<td>3.90</td>
</tr>
</tbody>
</table>

**ETW – Estimated True Width**  
**RL – Height above MSL at the start of the interval**  
**SG – Specific Gravity (density)**
• KJCD198 - 5.95m @ 4.94% Cu, 25.9g/t Ag, 0.45g/t Au
• KJCD205 - 30m zone of mineralisation C6 & C7
Gravity Inversion

<table>
<thead>
<tr>
<th>Location</th>
<th>Rock Type</th>
<th>SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rockface</td>
<td>Massive Magnetite/Chalcopyrite</td>
<td>4.3</td>
</tr>
<tr>
<td>Bellbird</td>
<td>Disseminated Chalcopyrite</td>
<td>3.1</td>
</tr>
<tr>
<td>Reward</td>
<td>High-grade chalcopyrite/garnet magnetite</td>
<td>3.4</td>
</tr>
<tr>
<td>Jervois</td>
<td>Metasediments</td>
<td>2.8 - 2.9</td>
</tr>
</tbody>
</table>

- Garnet-Magnetite alteration halo
- Direct detection of magnetite + massive/semi-massive sulphides
- Composite sample from KJCD 171,182,183
- Composite head grade 2.05% Cu
- PFS flow sheet
- The grade and recovery for copper were better than expected
- >95% recovery at 25% Cu concentrate grade.
Copper Mineralisation in KJCD075

<table>
<thead>
<tr>
<th>Hole ID</th>
<th>Interval</th>
<th>Copper</th>
<th>Silver</th>
<th>Gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>J15</td>
<td>11m @ 4.73% Cu, 1.84g/t Au from 512</td>
<td>4.73%</td>
<td>1.84g/t</td>
<td>1.84g/t</td>
</tr>
<tr>
<td>RJ236</td>
<td>3.7m @ 4.68% Cu, 54g/t Ag, 1.96g/t Au from 433 m</td>
<td>4.68%</td>
<td>54g/t</td>
<td>1.96g/t</td>
</tr>
<tr>
<td>KJCD043</td>
<td>7m @ 1.36% Cu, 25g/t Ag, 0.5g/t Au from 413</td>
<td>1.36%</td>
<td>25g/t</td>
<td>0.5g/t</td>
</tr>
<tr>
<td>RJ061</td>
<td>22.4m @ 2.84% Cu from 408 m</td>
<td>2.84%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KJCD075</td>
<td>7m @ 5.07% Pb, 0.29% Zn, 106.6g/t Ag from 498m</td>
<td>5.07%</td>
<td>0.29%</td>
<td>106.6g/t</td>
</tr>
<tr>
<td>RJ169</td>
<td>72m @ 3.27% Cu, 51.3g/t Ag, 1.16g/t Au from 414m</td>
<td>3.27%</td>
<td>51.3g/t</td>
<td>1.16g/t</td>
</tr>
<tr>
<td>RJ237</td>
<td>23.6m @ 1.82% Cu, 23.9g/t Ag, 0.27g/t Au from 521.7</td>
<td>1.82%</td>
<td>23.9g/t</td>
<td>0.27g/t</td>
</tr>
<tr>
<td>RJ237W1</td>
<td>25m @ 1.74%Cu, 35.9g/t Ag, 0.82g/t Au from 518m</td>
<td>1.74%</td>
<td>35.9g/t</td>
<td>0.82g/t</td>
</tr>
<tr>
<td>RJ204</td>
<td>8m @ 4.8% Cu, 62.1g/t Ag, 0.35g/t Au from 502m</td>
<td>4.8%</td>
<td>62.1g/t</td>
<td>0.35g/t</td>
</tr>
<tr>
<td>RJ204W1</td>
<td>9.05m @ 4.9%Cu, 66.2g/t Ag, 1.22g/t Au from 509m</td>
<td>4.9%</td>
<td>66.2g/t</td>
<td>1.22g/t</td>
</tr>
</tbody>
</table>
The Greater Jervois Project

- Jervois Project Area increased from 37.9km² to 110.8km²
- Within the Bonya Metamorphics
- Already surveyed with SAM
- Soils geochemistry survey completed

Multiple walk-up drill targets
- Marshall-Reward-Morley trend
  - Becana
  - Yohoho
- North-east of Reward
  - Hamburger Hill
Competent Person Statement

The Jervois Exploration data in this report is based on information evaluated by Martin Bennett, who is a member of the Australian Institute of Geoscientists and a full time employee of KGL Resources Limited. Mr. Bennett has sufficient experience which is relevant to the style of the mineralisation and the type of deposit under consideration and to the activity to 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. Bennett has consented to the inclusion of this information in the form and context in which it appears in this report.

The data in this report that relates to Mineral Resource Estimates is based on information evaluated by Mr Simon Tear who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and who has sufficient experience 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 (the "JORC Code"). Mr Tear is a Director of H&S Consultants Pty Ltd and he consents to the inclusion in the report of the Mineral Resource in the form and context in which they appear.

The data in this report that relates to cut off grades and mining assumptions is based on information evaluated by Mr Simon Milroy who is a member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and who has sufficient experience 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 (the "JORC Code"). Mr Milroy is a full-time employee of KGL Resources Limited and he consents to the inclusion in the report of the cut off grades and mining assumptions in the form and context in which they appear.