RESULTS OF FEASIBILITY STUDY
JABAL SAYID PROJECT IN SAUDI ARABIA

Highlights:

- Annual concentrator throughput of 3MT of ore per annum
- Copper in concentrate production of 60,000 T per annum
- Life of mine at average head grade of 2.26%Cu
- Capital cost of copper project US$ 249.5M (US$4,200/T of annual copper production)
- Cash operating cost of US$0.94/lb copper produced, with cost in the first two years as low as US$0.75/lb after credits
- Heap leach of Lode 1 oxide gold cap to produce 50,000 to 60,000oz gold over first two years of project, followed by additional production from other nearby gold projects
- First gold production in 10 months, first copper production in March 2011

Summary
Citadel Resource Group Limited (ASX: CGG – “Citadel” or “the Company”) is pleased to announce the positive results of the Feasibility Study (FS) for the Jabal Sayid project in Saudi Arabia. The Jabal Sayid project is held by Bariq Mining Ltd, a Saudi Arabian joint venture company of which Citadel holds 50%.

The FS confirms the economic viability of the Jabal Sayid project, based on production of ore from an underground mine, and treatment in a conventional crush/grind/float concentrator circuit. Early production and revenue will be derived from the open cut mining of the Lode 1 oxide gold cap (strip ratio less than 1:1), and the treatment of this in a conventional heap leach plant.

The project has been designed to mine 3 MT pa of ore from Lode 2 and 4 by conventional large scale open stopes, using cemented aggregate backfill in primary stopes. The ore will be trucked to surface, and treated to produce a high quality copper concentrate, containing 60,000 tonnes per annum of copper with precious metal credits. This will be trucked to the Red Sea coast (Yanbu or Jeddah) for export to European, Indian or East Asian smelters.

The capital cost of the project has been estimated at US$249.5M, with an additional US$13M required to advance the Lode 1 oxide gold cap heap leach plant into early production. Cash costs for copper production will be US$0.94/lb (after credits), and gold cash costs will be approximately US$330/oz gold produced.

The project is economically feasible at current copper prices, and the project will now continue through the Definitive Feasibility Study and into permitting, financing, construction and development. The initial gold heap leach component of the project will be “fast-tracked”, and will also be designed to accept supplementary ores from Citadel’s other 100% owned gold projects in the region.

The Jabal Sayid mine will be a world class, large scale, low cost copper producer, producing a clean concentrate which will be sought after by international smelters. First gold production is scheduled for Q1 2010, and first copper production in Q1 2011.
Jabal Sayid Feasibility Study (FS)

The Jabal Sayid FS has been completed by an integrated team comprising Citadel and SNC-Lavalin (SNC) personnel. SNC was awarded the contract to undertake the Definitive Feasibility Study (DFS) in November 2008, and the completion of this FS is the first milestone towards this objective.

The FS includes contributions from:

- SNC Lavalin – DFS Consultant, re-configured PFS scope and compiled capital estimate
- AMC – Resource Modelling and Mine Geotechnical
- GMS Mining – Mine Planning and supervision of mine engineering consultancy
- SRK – Hydrology
- Oreway – Milling testwork and mill sizing
- Metcon – Metallurgical test work
- Ammtec – Metallurgical test work
- Coffey – Tailings Storage Facility and Surface geotechnical
- Arensco – Environmental and Social
- Metifex – gold heap leach program management and process design

Geology

The Jabal Sayid Resource is mostly pyrite-chalcopyrite stockwork mineralisation hosted in rhyodactic volcanics. Since Citadel commenced work in 2006 (through its subsidiary company Vertex) it has completed 27,483m of both diamond core and reverse circulation drilling (as of end September 2008). The existing decline has been dewatered and refurbished. Early in 2009 a program of underground drilling commenced to provide additional infill geological data.

The most recent complete Resource Estimate (February 2009) for the Jabal Sayid deposit resulting from this work, based on a 0.2% copper cutoff for copper domains is as follows:

<table>
<thead>
<tr>
<th>Resource Category</th>
<th>Type∗</th>
<th>Tonnes (Mt)</th>
<th>Cu %</th>
<th>Contained Cu t (000’s)</th>
<th>Zn %</th>
<th>Contained Zn t (000’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicated</td>
<td>MS</td>
<td>6.4</td>
<td>1.21%</td>
<td>77</td>
<td>1.67%</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>Oxide</td>
<td>24.8</td>
<td>1.62%</td>
<td>403</td>
<td>0.17%</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>All</td>
<td>31.2</td>
<td>1.54%</td>
<td>480</td>
<td>0.47%</td>
<td>148</td>
</tr>
<tr>
<td>Inferred</td>
<td>MS</td>
<td>15</td>
<td>0.8%</td>
<td>114</td>
<td>1.9%</td>
<td>279</td>
</tr>
<tr>
<td></td>
<td>Oxide</td>
<td>52</td>
<td>1.2%</td>
<td>613</td>
<td>0.3%</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>All</td>
<td>67</td>
<td>1.1%</td>
<td>735</td>
<td>0.6%</td>
<td>425</td>
</tr>
<tr>
<td>TOTAL</td>
<td>MS</td>
<td>21</td>
<td>0.9%</td>
<td>192</td>
<td>1.8%</td>
<td>385</td>
</tr>
<tr>
<td></td>
<td>Oxide</td>
<td>77</td>
<td>1.3%</td>
<td>1,016</td>
<td>0.2%</td>
<td>186</td>
</tr>
<tr>
<td></td>
<td>All</td>
<td>99</td>
<td>1.2%</td>
<td>1,215</td>
<td>0.6%</td>
<td>572</td>
</tr>
</tbody>
</table>

Table 1: Jabal Sayid Resource at 0.2% Cu Cutoff
At a 1% copper cutoff, the resource is as shown below:

### Table 2: Jabal Sayid Resource at 1.0% Cu cutoff

<table>
<thead>
<tr>
<th>Lode</th>
<th>Resource Category</th>
<th>Tonnes (Mt)</th>
<th>Grade Cu%</th>
<th>Contained Cu Metal (Kt)</th>
<th>Grade Zn%</th>
<th>Contained Zn Metal (Kt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lode 1</td>
<td>Indicated</td>
<td>2.6</td>
<td>2.05</td>
<td>53</td>
<td>1.12</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Inferred</td>
<td>3</td>
<td>1.8</td>
<td>53</td>
<td>1.0</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>6</td>
<td>1.9</td>
<td>106</td>
<td>1.1</td>
<td>60</td>
</tr>
<tr>
<td>Lode 2</td>
<td>Indicated</td>
<td>4.0</td>
<td>2.53</td>
<td>100</td>
<td>0.17</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Inferred</td>
<td>2</td>
<td>2.0</td>
<td>43</td>
<td>0.2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>6</td>
<td>2.3</td>
<td>143</td>
<td>0.2</td>
<td>11</td>
</tr>
<tr>
<td>Lode 4</td>
<td>Indicated</td>
<td>17.7</td>
<td>2.32</td>
<td>410</td>
<td>0.28</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Inferred</td>
<td>17</td>
<td>2.4</td>
<td>420</td>
<td>0.2</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>28</td>
<td>2.4</td>
<td>677</td>
<td>0.2</td>
<td>54</td>
</tr>
</tbody>
</table>

The resource shapes are represented visually as shown below, including a representation of the existing decline.

![Figure 1: Jabal Sayid Resources](image-url)
Mining

Of the complete resource noted above, the mine plan developed involves the mining of 32.2MT. Technical and economic factors have been considered in developing the mine plans, including the application of a 1% copper grade as the cutoff for copper ore blocks. The mine design to be implemented is as follows:

- **Lode 1:**
  - Open cut mining of oxidised gold mineralisation outcropping at surface. Approximately 1.35MT of ore at a grade of 1.3 g/T gold will be mined, crushed and heap leached during years 1 and 2 of the project to produce approximately 50,000 to 60,000 oz of contained gold in a gold/silver doré;
  - Open cut mining of the oxide copper zone (approximately 0.5MT ore at 1.6% Cu) to provide commissioning feed to the concentrator, using a sulphidising float;

- **Lode 2 and Lode 4:**
  - Retention and re-use of the existing decline for underground access, enlarging it to handle large underground “road train” type haul trucks, that can be configured as 30T for development, and up to 100T for production;
  - Use of conventional large scale open stopes for extraction of ore, with selective stope development to optimise grade over the life of the project;
  - Use of cemented aggregate fill in primary stopes, supplemented by de-slimed tailings (sand) or waste in secondary stopes. Tertiary stopes will be left unfilled, or sand filled;
  - Haulage of ore using large scale underground haul trucks in Years 1 to 3, with retrofit of a shaft hoisting system utilising rope guides into a ventilation shaft for ore haulage to surface in later years;

The ore to be mined from Lode 2 and 4 underground and delivered to the concentrator over the life of the project will be as follows:

- Ore tonnes: 30,401,000 T
- Life of mine average copper grade: 2.26%
- Life of mine average gold grade: 0.14 g/t
- Life of mine average silver grade: 8.11 g/t

The gold and silver grades noted above are considered conservative. As the in-fill drilling into several zones currently categorised as inferred resources is completed, it is expected that both gold and silver grades will increase.

Sub level caving was initially considered as a possible mining method. Further study of this option highlighted that the high levels of dilution and inability to selectively mine higher grade ore blocks would make a mine structured using this method less able to respond to volatile copper prices. Further, lower grade blocks outside the mine plan would become inaccessible, preventing potential recovery later in the mine life. It is advantageous to have a more flexible mine schedule enabling higher grade ore blocks to be accessed initially without impacting on long term mine integrity, whilst preserving the ability to salvage lower grade blocks.

The primary mineralisation associated with Lode 1 has not been considered at this stage for exploitation due to its more complex metallurgy. Previous testwork has confirmed that acceptable copper recoveries can be obtained, albeit at a much finer grind (35µm). The higher precious metals content of Lode 1, combined with reasonable base metals grades warrant further investigation of processing routes for this orebody. This work will be undertaken in due course, and it is probable that exploitation of Lode 1 will become a further “value add” to the Jabal Sayid project during its life. Lode 1 contains 6MT at 1.9%Cu, 1.1%Zn, 0.46g/t Au and 28.2g/t Ag. A large amount of this deposit is mineable by low cost open cut methods.
A general outline of the mine is shown in the figure below.

![Figure 2: Representation of Mine](image)

**Processing - Copper**

Conventional flotation is to be used to process the copper ore from Lodes 2 and 4. Metallurgical testwork has been carried out to confirm the viability of the proposed crushing/grinding/flotation flowsheet, a simplified version of which is shown below.

![Figure 3: Simplified Concentrator Flowsheet](image)
Up to 3.0Mt of ore per annum will be processed in the concentrator, which will consist of crushing, followed by an SABC circuit (SAG mill, Ball mill and scats crushing), rougher flotation, regrind of concentrate and three stage cleaning prior to thickening and filtering of the concentrate. The concentrator will produce approximately 60,000 tonnes per annum of copper in concentrate. In several years when run-of-mine grade is above average, the copper production is planned to exceed 70,000 tonnes per annum. Testwork at run of mine head grades of 2.26% copper has confirmed 94% to 96% copper recovery, producing a 25% to 27% copper concentrate.

Tailings will be produced as a dry filtercake, and transported to a lined tailings storage facility. Dry tailings storage was chosen to reduce water consumption. Approximately one third of the tailings produced will be de-slimed and returned underground as a component in the cemented aggregate fill for primary stopes.

**Gold Heap Leach**

A gold heap leach facility is to be implemented as part of this project. Ore from the Lode 1 oxide gold cap will be mined, crushed and stacked on an impervious synthetic liner. Following leaching, a gold/silver doré will be produced in a Merrill Crowe plant. Over a two year period, 1.3MT of Lode 1 ore will be processed to produce approximately 50,000 oz of gold. The heap leach facility will be sized (+60,000oz) to enable additional ore from other nearby Citadel 100% owned deposits (Lahuf and Shayban) to be also treated, to provide supplementary gold production in addition to that from Lode 1. The heap leach flowsheet is shown below.

**Infrastructure and Services**

The project will require power, water, accommodation and access to the nearby road network. These aspects of the project have been studied and the costs of the provision of these services included in either the operating or capital cost estimates.

The concentrator requires water as a key input to the process. The project has taken significant measures to reduce water consumption, including:

- Filtering of tailings and recycling of all water streams;
- Use of crushed waste rock as aggregate in the cemented aggregate fill system used to fill primary stopes only, with secondary and tertiary stopes using non-water use fill;
- Recycling of all mine drainage water streams, and domestic water;

As a result of these water conservation techniques the project water demand is approximately 2,000m3 per day. Water supply to the project will be provided by using wastewater from the town of Madinah, and trucked to the site. In future, waste water from the closer town of Al Mahd will be used as it becomes available.

The operation will require approximately 30MW of power, to be provided by an Independent Power Producer (IPP) using heavy fuel oil or diesel as the combustion fuel in a reciprocating engine power station located at site. Initial proposals have
been received from several potential IPP’s and negotiations will occur to finalise a supply agreement prior to project commencement.

The overall site layout is shown in the figure below.

![Overall Site Layout](image)

**Figure 5: Overall Site Layout**

**Project Implementation**

On the basis of receipt of the Mining License and other approvals by mid 2009, gold production from the Lode 1 heap leach is planned for the first quarter of 2010, and concentrate production from Lodes 2 and 4 ore in first quarter 2011.

**Marketing, Shipping and logistics**

The project will produce approximately 250,000 tonnes per annum of copper concentrate, containing nominally 25%-27% copper by weight. Metallurgical testwork has confirmed that the concentrate will be of a high quality, containing no deleterious elements which will affect smelter returns. There will be sufficient precious metals (gold and silver) content in the concentrate to result in precious metals credits from the smelters. The smelters treatment and refining charge (TC/RC) used in this study is US$75/0.075, reflecting current benchmark rates.
Social and Environment

The Jabal Sayid project site is located within an existing mining reserve. The project and operations will comply with international and Saudi Arabian environmental standards, and also the World Bank Equator Principles. Initial studies have indicated that there are no significant environmental issues which will be potential obstacles to the project.

In full operation Bariq will have up to 226 direct employees, with a further 160 contract employees (village, mine and power station).

Capital Costs

Total project capital costs have been estimated at US$ 13.0M for the stand alone gold project, and a further US$249.5M for the copper project. The estimate is based on preliminary engineering, budget prices and quotes for major equipment items and bulk materials such as steel and concrete.

Operating Costs

Cash costs (C1) after precious metal credits over the life of mine are US$0.94/lb copper produced, with cost in the first two years as low as US$0.75/lb after credits.

Value Add Opportunities

A number of opportunities have been identified to add value to the project. These include:

- Mining and treatment of Lode 1 primary mineralisation. This lode contains 6MT at 1.9%Cu, 1.1%Zn, 0.46g/t Au and 28.2g/t Ag. A large amount of this deposit is mineable by low cost open cut methods;
- Improving precious metals grades in the final mine plan, by infill drilling and remodelling the resource;
- Improving operating costs, including optimisation of fuel supply (Heavy Fuel Oil vs. diesel) for the power station, and downstream logistics costs;
- Resource growth and mine life extension, through exploitation of the known additional Lode 4 mineralisation, further resource extension where the deposit is currently open, and exploitation of the remnant ore blocks;
- Optimisation of the mine plan to accelerate higher grade block extraction;
- Increasing gold production on the heap leach by using the already defined oxide gold at Lahuf and Jabal Shayban.

Note 1: The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Steve Rose, Chief Geologist, who is a Member of The Australasian Institute of Mining and Metallurgy, a Member of The Institution of Materials, Mining and Metallurgy, and a Chartered Engineer. Steve Rose is a full time employee of Citadel Resource Group. Steve Rose has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Steve Rose consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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