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# MARKET RELEASE

# 29<sup>th</sup> June 2015

### **ROCKLANDS COPPER PROJECT (CDU 100%)**

## MARKET UPDATE ON PROGRESS AT ROCKLANDS

Electrical Cable, Transformer and E-house installation is well under way...it's completion will clear the path for preliminary commissioning activities. Electrical cable installation and associated works is the final stage of major construction and installation activity at the 3mtpa mineral process plant at Rocklands.

The 28 Megawatt Cummins Power Plant is complete, commissioned and awaiting formal hand-over.

The Company intends to process high grade ore already stockpiled to maximise copper concentrate production over the first 4 years.

Ore-types to be concurrently processed at the Rocklands Process Plant include;

Native copper ore (coarse, medium and fine) Primary sulphide copper ore (chalcopyrite) Secondary sulphide copper ore (chalcocite) Oxide copper ore blended with other ore types (malachite, azurite, cuprite, tenorite) Primary sulphide cobalt ore (pyrite) Gold (as a by-product) Magnetite (via magnetic separation)



Figure 1: Electrical cable connected to one of the projects 20 E-houses.

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# **PROCESS PLANT CONSTRUCTION**

Electrical cable and computer cable installation is well underway at Rocklands and represents one of the largest, most important and most complex contracts undertaken on the Project. The 28Mw Power Plant was designed and installed by Cummins Power, the E houses by Seimens of Germany and the Computer Management program by Honeywell Corporation.

The EPC contract for the mineral processing plant was let to CuDeco's principal contractor, Sinosteel Equipment and Engineering who have appointed Walz Electrical for the installation.

Installation of electrical cable tray support steelwork, cable trays and cable ladders have been completed and cabling is currently being pulled into the cable trays to specified termination and/or end-points.

There is approximately 350,000m of power cable (high-voltage 6.6kV and low-voltage 415V) that needs to be installed plus an additional 100,000m of Instrument and Control cabling.



Figure 2: Cable trays run the length of the conveyor (inset shows examples of different cable types).





Figure 3: Cable being installed.





Figure 4: Cable support trays being installed (top image); and large diameter cables connected to one of the 20 E-houses.





Figure 5: A sea of cables (top); one of many control stations (middle); Gravity Jig control station (bottom left); and more cable support trays being installed (bottom right).





Figure 6: Various views of the Process Plant; (with ROM in background (top) and crushed ore stockpiles in background (bottom)





Figure 7: Over 120 electrical contractors are involved in cable and associated infrastructure installation.





Figure 8: Rocklands Process Plant includes 15,000 tonnes of steel and more than 20,000m<sup>3</sup> of re-enforced concrete. Components for the project were delivered in 33 shiploads from around the globe including China, Japan and Germany.





Figure 9: Various views of the Process Plant.





Figure 10: Electric Furnace installation is nearing completion.







Figure 11: Various views of the Process Plant (top images); and home time after a long day.





Figure 12: Various views of the Process Plant.



### MINING

Mining continues in the LM2 Pit, with occasional mining at the RS Pit during periods of congestion.

Primary ore continues to dominate at the south end of the pit whilst supergene ore dominates in the north.

The LM2 Pit is the second of three staged pits targeting the Las Minerale orebody, and has a final design depth of ~140m. LM2 circles the previously completed LM1 Pit that finished in high-grade ore at RL152.5 (~70m deep).

Pit staging facilitates access to high-grade ore earlier in the mine life, resulting in benefits to project economics.



Figure 13: Pit scheduling schematic (top image) and mining in supergene ore at the north of the LM2 Pit (bottom)





Figure 14: Mining in LM2 Pit (top image) whilst blast-hole drilling prepares for the next blast (bottom)





Figure 15: The pit wall shows some impressive lithological formations (top); primary ore dumped at the high-grade stockpile (middle and bottom)





Figure 16: Close-up of the ore on the high-grade primary ore stockpile.





Figure 17: Close-up of the ore on the high-grade primary ore stockpile.



# **CRUSHING CIRCUIT & PRODUCTION**

With the Process Plant under construction, the Crushing Circuit continues to be utilised to produce early cash-flows from coarse native copper ore types.

The Crushing Circuit has been running without incident for several months at rates up to 900 tonnes per hour, almost twice design capacity, but optimally operates at 600 tonnes per hour.

To date over 300,000 tonnes of high-grade native copper ore has been crushed, in the process producing clean native copper metal product via scalping screens (~95% Cu), and various crushed fraction sizes for further processing.

Crushed ore will not require re-crushing and will be fed directly into the HPGR feed, resulting in future cost savings.

A cone crusher has been ordered and will replace the second stage rolls crusher enabling copper concentrate to be produced from the main crushing circuit without requiring further processing.



Figure 18: Crushing circuit with ROM in background (top image); and crushed ore stockpiles are now well over 300,00 tonnes (bottom)



### **Competent Person Statement**

Information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Andrew Day. Mr Day is employed by Geoday Pty Ltd, an entity engaged by Cudeco to provide independent consulting services. Mr Day has a BAppSc (Hons) in geology and is a Member of the Australian Institute of Mining and Metallurgy (Member #303598). Mr Day has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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" (JORC Code). Mr Day consents to inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report insofar as it relates to Metallurgical Test Results and Recoveries, is based on information compiled by Mr Peter Hutchison, MRACI Ch Chem, MAusIMM, a full-time executive director of CuDeco Ltd. Mr Hutchison has sufficient experience in hydrometallurgical and metallurgical techniques which is relevant to the results under consideration and to the activity which he is undertaking to qualify as a competent person for the purposes of this report. Mr Hutchison consents to the inclusion in this report of the information, in the form and context in which it appears.

#### Rocklands style mineralisation

Dominated by dilational brecciated shear zones, throughout varying rock types, hosting coarse splashy to massive primary mineralisation, high-grade supergene chalcocite enrichment and bonanza-grade coarse native copper. Structures hosting mineralisation are sub-parallel, east-south-east striking, and dip steeply within metamorphosed volcano-sedimentary rocks of the eastern fold belt of the Mt Isa Inlier. The observed mineralisation, and alteration, exhibit affinities with Iron Oxide-Copper-Gold (IOCG) classification. Polymetallic copper-cobalt-gold mineralisation, and significant magnetite, persists from the surface, through the oxidation profile, and remains open at depth.

### **Disclaimer and Forward-looking Statements**

This report contains forward-looking statements that are subject to risk factors associated with resources businesses. It is believed that the expectations reflected in these statements are reasonable, but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including, but not limited to: price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delays or advancements, approvals and cost estimates.