

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

**PICTORIAL UPDATE 15**

Major construction activity at the process plant is primarily focussed on foundation work at present, including the powerhouse, tailings thickener, gravity separator, gravity jig and native copper cleaning drum.

High Pressure Grinding Rolls (HPGR) and Ball Mill foundations are complete and various housings and steel components are being installed in preparation for lifting of large-scale components into place, including the Ball Mill drum which is currently being assembled.

Commissioning test-work at the crushing circuit includes batch-runs of differing ore-type and head-grade combinations as part of the optimisation process. Particular focus has been on achieving optimal fraction size settings to efficiently scalp coarse native copper metal to produce direct shipping ore (DSO).

**Test-work on Las Minerale supergene ore is also underway using conveyor based ore-sorters, with the view to producing a separate multi copper species DSO concurrently with scalped coarse native copper ore (dominated by chalcocite, cuprite and small-fraction native copper).**

The Company is extremely pleased with initial results from ore-sorter test-work and looks forward to producing DSO product well before the remainder of the process plant is operational.



*Figure 1: Formwork for gravity thickener in foreground, and completed concrete work at Ball Mill housing in background.*

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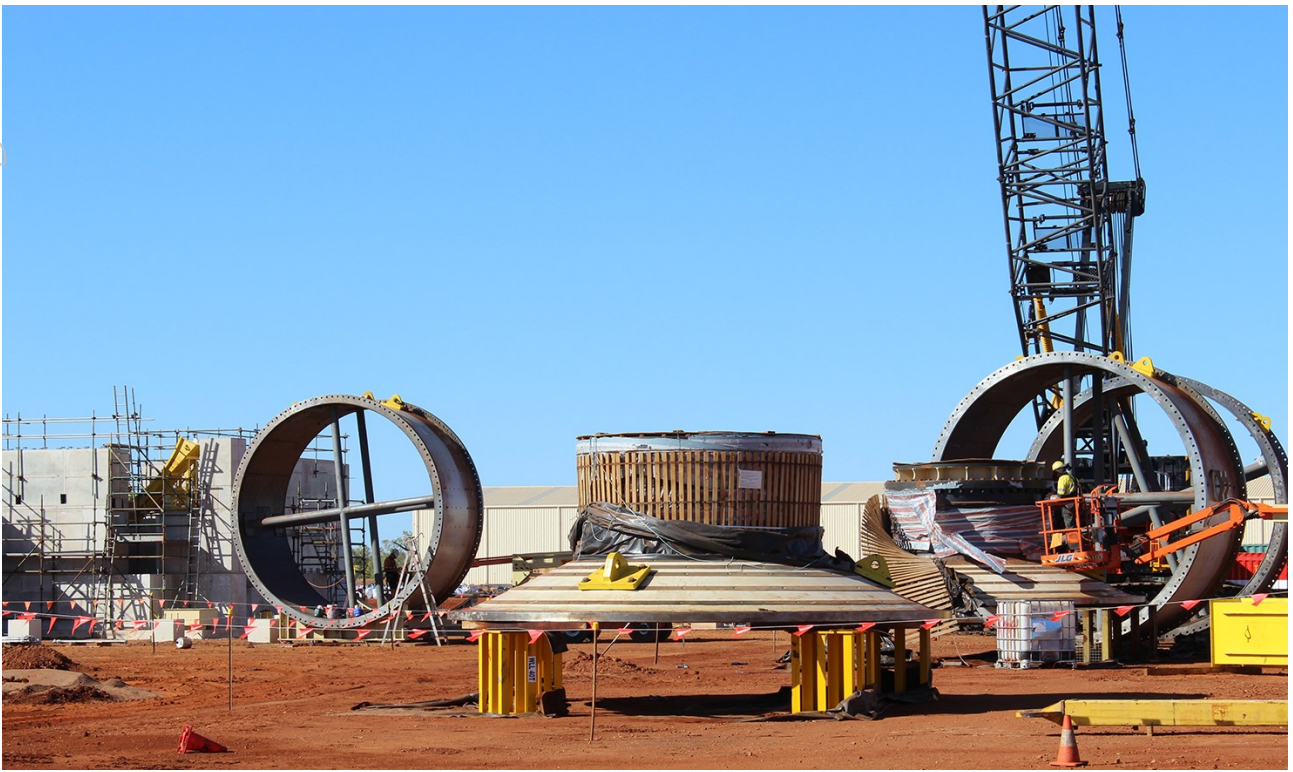
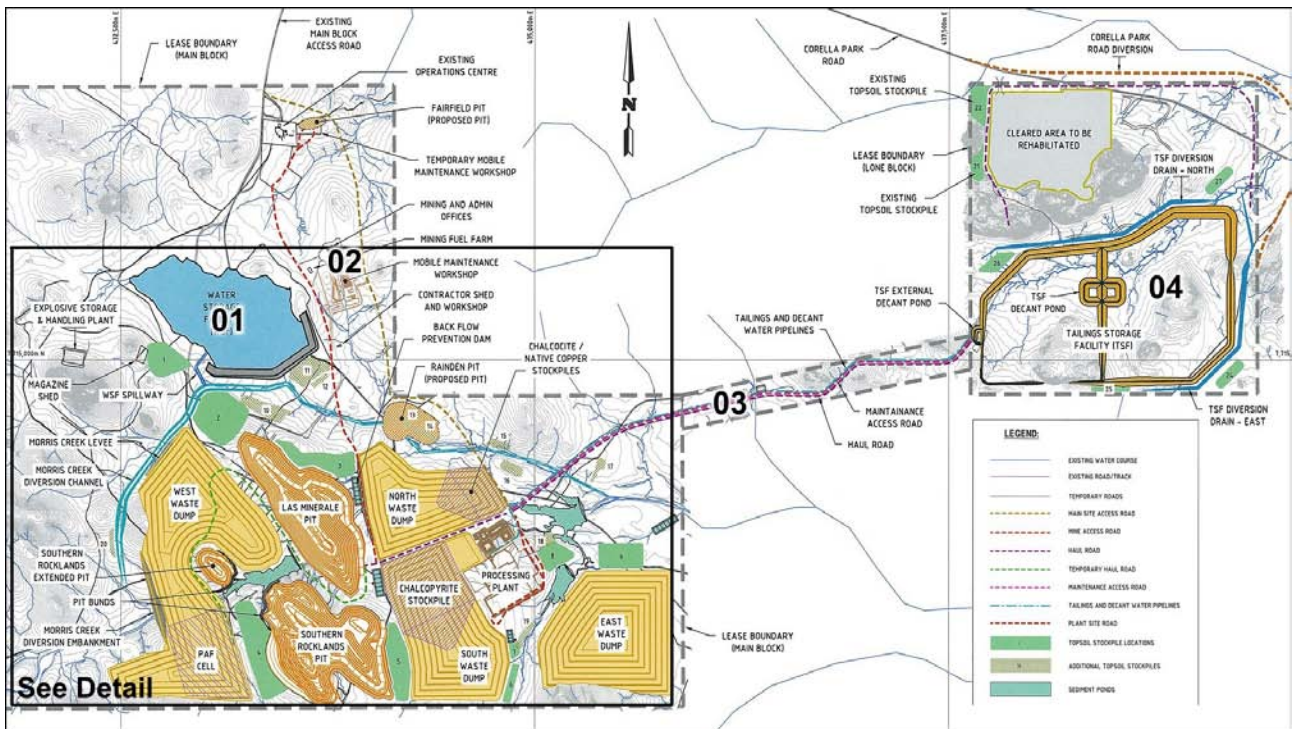


Figure 2: Ball Mill components ready for assembly and large 250 tonne Waltz crawler crane has been moved into position for lifting.



Figure 3: Foundations for the tailings thickener.





- 01 - Water Storage Facility (WSF)
- 02 - Maintenance Workshop & Mining Office
- 03 - Infrastructure Corridor (Haul Road and Pipelines)
- 04 - Tailings Storage Facility (TSF)
- 05 - Morris Creek Diversion Channel
- 06 - Morris Creek Diversion Dam
- 07 - Topsoil Stockpiles
- 08 - West Waste Dump (and PAF cell)
- 09 - Rocklands South Extension pit (PAF pond)
- 10 - Las Minerale Pit (and LM Starter Pit & Box-cut)
- 11 - Southern Rocklands Pit (and SR Starter Pit)
- 12 - North Waste Dump
- 13 - Mine Access Road
- 14 - Primary Ore Stockpile
- 15 - South Waste Dump
- 16 - Run of Mine (ROM) Pad
- 17 - Native Copper and Chalcocite Stockpile
- 18 - Process Plant including Crushing Circuit
- 19 - Haul Road
- 20 - East Waste Dump
- 21 - Rainden Pit

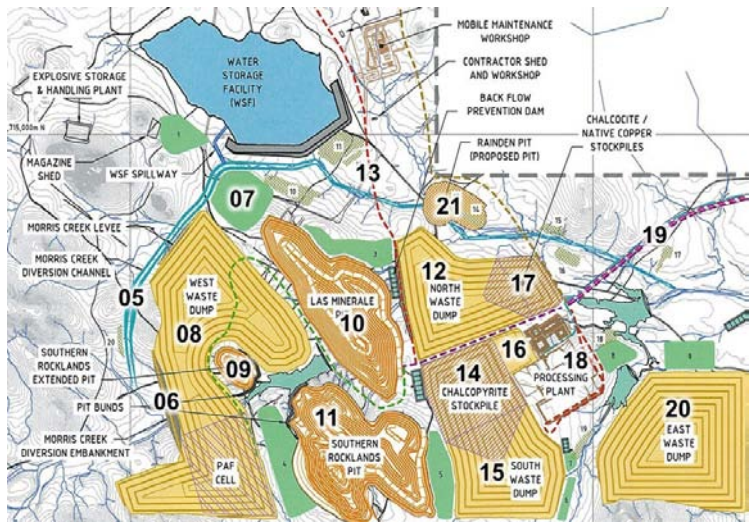


Figure 4: General Arrangement plans (and location references).

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## Key Project Milestones

Completed

### Major Copper Discovery - 2006

Discovery RC drill hole DORC078 skirts the top of Las Minerale intersecting 67m @ 1.08% Cu. The follow-up RC drill hole DORC079 intersected 71m @ 2.38% Cu, confirming a major discovery.

### Resource Drill-out - 2007 to 2011

Over 340,000m of drilling completed at Rocklands, some 305,000m of which used for resource estimation.

### Resource Estimate - May 2011

Independent resource estimate prepared by Mining Associates Pty Ltd.

### Mine Planning, Pit Optimisation and Mining Schedules

Numerous independent consultants engaged for preliminary studies on all aspects of mining.

### Purchase of majority of mining fleet during global financial crisis (GFC)

The GFC provides one-off opportunity to purchase the majority of our mining fleet at significant discount to market prices, including 20 dump trucks and 7 large-scale excavators purchased at distressed auctions.

### Mining Leases granted, including Infrastructure Corridor for 30 years

Mining Leases ML90177 & ML90188 granted in November 2011 with No Objections

### Environmental Impact Statement and Plan of Operations approved

CuDeco received Environmental Impact Statement Approval August 2011

### Compensation agreements with the landowner and the Cloncurry Shire Council

Agreement signed by Landowner, Cloncurry Shire and CuDeco Ltd November 2011

### Native Title and Heritage agreements in place

Completed and signed off by all relevant parties including State and Federal Authorities in mid 2009

### Rail-load Facility in Cloncurry - access to national markets secured

Joint memorandum of understanding with Xstrata Copper and Minmetals Group for the joint development of the Company's Multi-user Rail Load-out Facility, significantly reducing CuDeco's up-front development costs.

### Ship-loading Facility at Port of Townsville - access to international markets secured

Lease signed with Port of Townsville Limited for 1.506 ha of land at the Port of Townsville, allowing for the construction and operation of a bulk materials receipt, storage and export facility. Development Permit received from Queensland Department of Environment and Resource Management (DERM) for Ship-loader and Concentrate Storage Facility at the Port of Townsville - currently under development.

### Exhaustive metallurgical test-work completed with high metal recoveries achieved

Significant time, effort and expenditure allocated to metallurgy, resulting in high metal recoveries and premium concentrate grades

### Key Off-take agreements in place

Contract signed with one of China's largest state owned corporation Sinosteel to supply 3 million tonne per annum

### Project development plans approved and site activities commence

On schedule

**Progress of Development Activity**

Completed

**Water Storage Facility (WSF)**

Water Storage Facility capable of holding 980 mega litres and meeting all site water requirements.

**Morris Creek Diversion MCD**

Nearing completion

**Pit Dewatering & Water Diversion**

Bore Holes installed diverting water to two temporary water storage facilities and over flow going to WSF

**Las Mineral Starter Pit & Rocklands South Extension Pit**

Major strip-backs and preparations for the for both areas are underway

**Long-Term Ore Stockpiles**

Major drainage and site construction completed, stockpiles on-going

**Waste Dump Drainage Infrastructure**

Major drainage and site construction completed

**Infrastructure Corridor & Haul and Major Access Roads**

Major access roads internal and external to site have been completed



**Tailings Facility (TSF)**

Construction commenced, awaiting approval of upgrade - *ongoing*

**Mining Offices**

Completed to a level sufficient for current use, upgrade as required



**Service Workshops**

Completed and in use



**Explosive Magazine**

Magazine storage facility development



**Mobile Crushing Circuit**

Fully commissioned - waste rock being crushed for infrastructure, test-work on producing DSO ore



**Office & Accommodation Complex, Housing**

Cloncurry township - 38 cabin Office Complex and accommodation cabins, houses built and owned by CuDeco



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**Process Plant Construction**

Completed

**Crushing Circuit (3mtpa)**

Currently undergoing commissioning and test-ore crushing

**Ball Mill (5800 diameter x 8300mm long)**

Foundations complete ready for installation

**High Pressure Grinding Rolls (HPGR)**

Machinery in transit and foundations complete ready for installation

**Gravity Jig (alljig®)**

Machinery fabrication completed and in transit, footings being constructed at site

**Basic Process Plant Engineering**

Basic engineering for the processing plant



**Structural Steel**

Structural steel requirements in transit to site for the mineral processing plant. Structural steel supply agreement requires all steel to be prefabricated prior to export to Rocklands, which will reduce the expensive costs associated with the onsite fabrication, cutting and handling. To be delivered in four shipments embarking China from May 2013.

**Thickeners**

Finalising fabrication, footings under construction

**Native Copper Cleaning Drum**

Fabrication completed and mostly delivered to site, footings being constructed

**Flotation Cells**

Fabrication completed and delivered to site

**Tower Mills**

In transit to site and part delivered

**Process Control System**

On schedule

**Detailed Design Engineering**

On schedule

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**Current area of activity:**

**Development**

- Commissioning of Crushing Circuit
- Process Plant - Delivery of Components, Final Design, Site Preparation and Construction
- Morris Creek Diversion Channel
- Infrastructure Corridor haul roads and Tailings Storage Facility (TSF)
- Water Storage Facility (WSF) and Dam Walls
- Major Access Roads and Other Facilities

**Mining**

- Las Minerale Starter Pit (east and west of Morris Creek)
- Rocklands South Extension Pit & PAF cell

**Other**

- Environment



Figure 5: Activity during the concrete pour of foundations at the gravity thickener





Figure 6: Samples of coarse native copper ripped and flattened by the first-stage roller - "teeth imprints" clearly visible on the left native copper sample.

### Development

#### **Crushing Circuit...see Figure 4 for location**

Commissioning of the crusher continues, including full and partial load feed analysis. The balance of the work to complete the load and plant feed, stockpile and tunnel system is being completed by CuDeco personnel. The test-work for "scalping" of the large fraction size native copper and ore-sorter test-work is well underway.

The Company is placing particular focus on achieving optimal fraction size settings to facilitate efficient scalping of coarse native copper metal, with the view to producing a high-grade direct shipping ore (DSO), suitable for transport to interested parties.



Figure 7: Strategy meeting during commissioning of the crushing circuit. Process Manager Wade Freedman (second from left), Executive Director Peter Hutchison (second from right) and Mine Manager Andy Kehoe (far right).





Figure 8: The crushing circuit undergoing commissioning (foreground), major earthworks commence at the site of the gravity circuit (middle distance), concrete foundations for the ball mill (background) and Process Plant Stores shed (far background). The site of the HPGR is obscured by the crushing circuit (middle distance to the left of the image).

**Process Plant - Delivery of Components, Final Design, Site Preparation and Construction...see Figure 4 for location**

EPC (Engineering, Procurement and Construction) contractors have been mobilised to site.

Foundations are being constructed at the alljig® native copper gravity jig, the two thickeners and the Cummins power station.

[Click here for diagrammatic video of alljig® process.](#)

Two Walz 250 tonne heavy-lift crawler cranes and two heavy-lift truck cranes are operating on site, making a total of nine cranes currently being used for various construction activities at site.

Deliveries of Plant Componentry continue to arrive at Rocklands, with the last of 4 large container ships recently docking at the Port of Townsville.

The ROM Pad is complete and awaiting final pour of the loading pad. An estimated 1.5million tonnes was required to construct the ROM Pad, primarily sourced from waste removed from early mining at the Las Minerale Starter Pit.

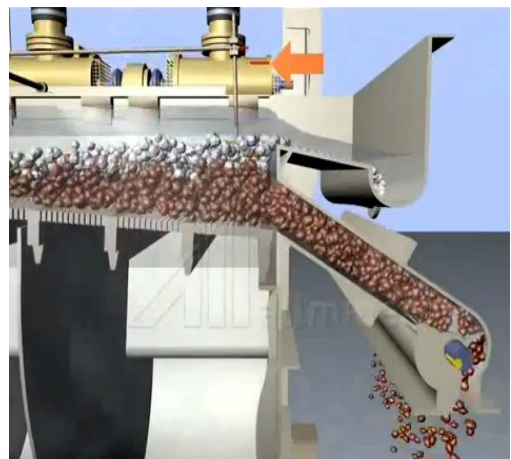


Figure 9: Diagram of alljig® continuous gravity jigging system currently in transit to Rocklands.

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Figure 10: Commissioning activities at crushing circuit included processing high-grade native copper ore. Above example of randomly sampled ore cleaned with water, dominated by copper minerals native copper, malachite, cuprite and minor chalcocite. This sample visually estimated at 22-26% Cu.

Additional waste from the Las Minerale Pit and from other development areas such as the Morris Creek Diversion Channel, suitable for crushing and use in concrete and/or road base, is sent to the Company's mobile crushing circuit on an ongoing basis.

**Morris Creek Diversion (MCD) Channel and Dam...see Figure 4 for location**

Completion of the MCD channel (see Figure 4, ref 05) was temporarily put on hold to divert assets to mining activities associated with the construction of the ROM. The MCD channel is more than 90% complete and is currently being completed.

The Diversion Channel is required to divert water flowing through Morris Creek during the wet season away from the pit and development areas. The diversion channel was previously completed to a sufficient stage to be able to withstand heavy wet-season rains (that never eventuated), and will shortly be completed to the original 1-in-10,000-year flood event capacity.

Construction of the MCD dam (see Figure 4, ref 06) was also temporarily postponed to assist mining activities associated with construction of the ROM and extraction of ore from the LM Pit. Construction has re-commenced on the MCD dam and is the final component of the Rocklands Project's major water diversion infrastructure.

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Figure 11: Left Image; Executive Chairman Peter Hutchison, Mine Manager (SSE) Andy Keogh & Process Manager Rob Brougham inspecting the Ball Mill Foundations. Right Image; Conveyor 7 of the crushing circuit during commissioning test crushing.

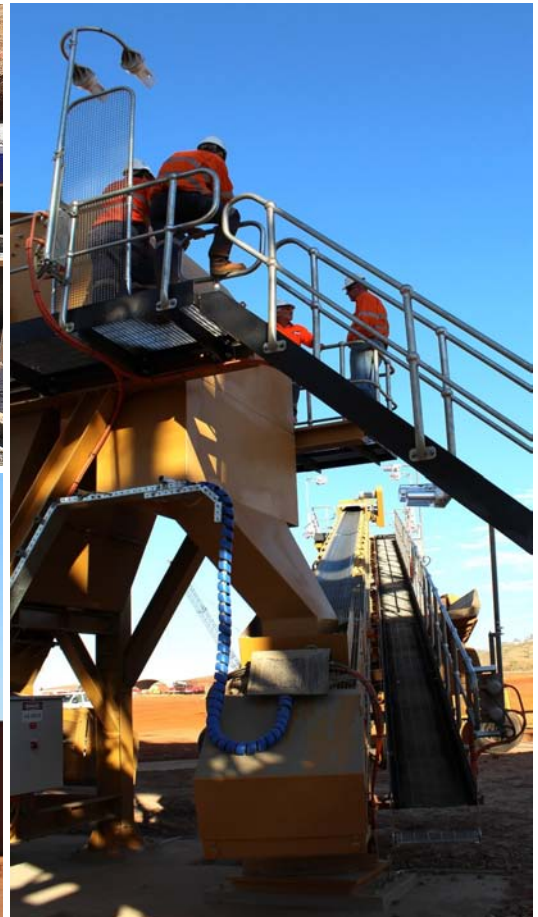


Figure 12: Clockwise from middle left; Concrete pour at the Tailings Thickener; commissioning meeting at the crushing circuit and; unloading component deliveries at Rocklands.

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Figure 13: Rocklands Mine Site fuel truck (left) re-fuels one of CuDeco's four fully owned heavy-lift cranes in the field.



Figure 14: Various plant and equipment components arrive at site.

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Figure 15: Final touches to the new Stores Warehouse, which also includes a data centre and offices



Figure 16: Delivery audit - lube system for Ball Mill main bearing and pinion

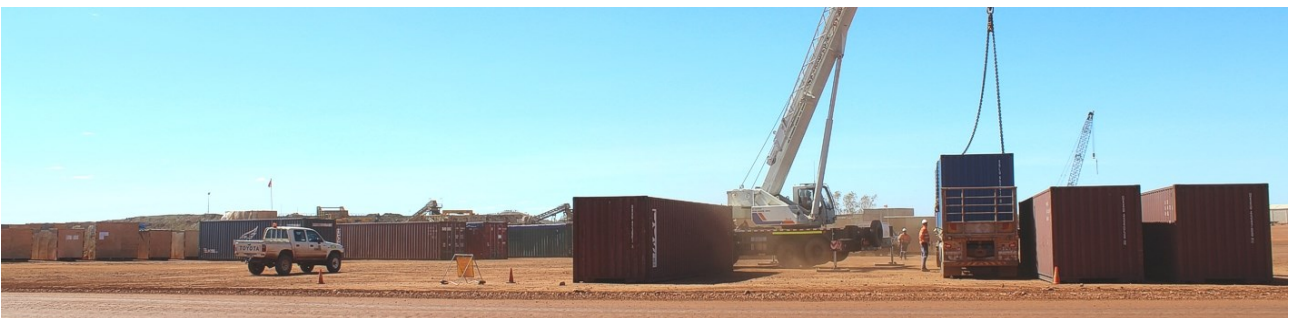


Figure 17: Containers delivered to site are placed in a temporary lay-down area for audit and recording for later retrieval.

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Figure 18: Deliveries continue to arrive at the Port of Townsville for shipment to Rocklands



**Infrastructure Corridor, Haul Roads and Tailings Storage Facility (TSF)...***see Figure 4 for location*

The Rocklands Project TSF is designed for a minimum storage capacity of 30 million tonnes of tailings waste to match the 30mt of ore (less removed product) scheduled to be processed through the Rocklands Process Plant during the current 10 year mine plan.

The TSF is located on ML90188 (*see Figure 4 ref 04*), where clearing and initial cut-back earthworks have been completed and approval for changes and improvements to the TSF design is subject to the current amended EA.

Construction will commence once approval has been granted, and will be timed to coincide with wet-commissioning of the Rocklands Process Plant.

**Water Storage Facility (WSF)...***see Figure 4 for location*

Construction of the WSF was also completed to a stage suitable to withstand the on-set of heavy rains, and apart from undergoing maintenance, is completed to original design specifications.

Numerous dewatering bores have been diverted to the WSF, adding to total water inventory and to help ensure continuity of water supply for the project.

The WSF is capable of storing 980 Mega litres.

**Major Access Roads and Other Facilities...***see Figure 4 for location*

Construction and maintenance of major access and heavy haulage roads is ongoing, with supply of road-base being met by the Company's Mobile Crushing Circuit. Rock types perfect for use in road-base, such as dolerite, are prolific at Rocklands and has resulted in significant cost savings over material that may otherwise have been sourced off-site.

**Mining**



*Figure 19: Blast-hole drilling has commenced in waste areas adjacent to the main ore zones at Las Minerale - ore areas are still free-dig at this stage.*



Figure 20: Mining at Southern Rocklands Extension (SRE) Starter Pit

**Las Minerale and Las Minerale Starter Pits...see Figure 4 (ref 10) for location**

Full-scale mining has commenced at Las Minerale Starter Pit.

Waste removal for use in ROM pad construction has been completed and LM Starter Pit waste is now being transported to the eastern waste dumps (see Figure 4, ref 20).

Rock suitable for crushing is sent to the Company's mobile crushing circuit, to be used in concrete, road-base and various earthworks.

Ore is being stockpiled for later access.

Large scale de-watering and pumping continues to reduce ground water levels in the LM pit ahead of planned mining activities, and is being diverted to the WSF.

**Rocklands South Extension Pit & PAF cell...see Figure 4 for location**

Construction of the Rocklands South Extension (RSE) pit to be used as a Potential Acid Forming (PAF) drainage retention pond continues.

Construction of the PAF draining retention pond is located in the RSE orebody, resulting in ore being mined that not only covers costs of its construction and development, but also results in additional income for the project...an example of yet another significant net saving on development costs.

The RSE pit takes advantage of both the scale and orientation of the RSE orebody, which results in a final optimised pit size suitable for use as a drainage pond.

**Environment:**





Figure 21: Mining at Las Minerale Starter Pit (original box-cut) can be seen in foreground.



Figure 22: Mining continues at Southern Rocklands Extension (SRE) Starter Pit

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With support from the Department of Environment and Heritage Protection (EHP), CuDeco will commence an air quality monitoring trial using 'real time' air quality samplers in conjunction with our current High-Volume samplers (where there is a time lag for results to be collected, sent to laboratory, analysed and results sent back to us).

This should allow CuDeco to become more pro-active when it comes to monitoring and managing dust emissions on site.

We have commenced reporting for National Pollution Inventory (NPI) and National Greenhouse Gas Emissions (NGERs) as project activities increase and reporting thresholds triggered after commencement of Mining activities in January.

A Revised Plan of Operations for the period June to December 2013 has been submitted and approved by EHP;

Rehabilitation Plans have been submitted to EHP and progressive site rehabilitation has commenced.

A revised Waste Management Plan and Procedure has been submitted to EHP.

A community update meeting is planned to be held in Cloncurry in the next quarter.

On behalf of the board.

- ends



Figure 23: Solar powered DRX dust track real-time dust monitor.



Figure 24: High-grade ore face at the base of the Las Minerale Pit - Coarse native copper in grey-green clays (left and middle) and high-grade chalcocite ore (right in background). Field of view approximately 8m from left to right.



## **Competent Person Statement**

*The information in this report that relates to Exploration Results is based on information compiled by Mr Andrew Day. Mr Day is employed by GeoDay Pty Ltd, an entity engaged, by CuDeco Ltd to provide independent consulting services. Mr Day has a BAppSc (Hons) in geology and he is a Member of the Australasian Institute of Mining and Metallurgy (Member #303598). Mr Day has sufficient experience which is relevant to the style of mineralisation and type of deposits 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 Ores Reserves". Mr Day consents to the inclusion in this report of the 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 are 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.*







