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MARKET RELEASE

29th November 2013

ROCKLANDS COPPER PROJECT (CDU 100%)

ROCKLANDS RESOURCE UPDATE 2013

An updated Resource Estimate reported according to the Joint Ore Reserves Committee (JORC) Code 2012 and Guidelines, has been completed. The primary focus of the resource update is to upgrade the current 30Mt copper, cobalt, gold and magnetite resource that will sustain mining operations at Rocklands at a production rate of 3 million tonnes per annum.

Measured and Indicated Resource (open pitable)

30Mt @ **1.90%** CuEq

(1.3 billion pounds CuEq - using 0.80% CuCoAu cut-off)

The secondary focus was to define resources with sufficient confidence that support studies into a planned Stage-2 expanded operation, producing up to 10 million tonnes per annum.

Measured and Indicated Resource (open pitable)

181Mt @ 0.8% CuEq

(3.3 billion pounds CuEq)

In addition to the above copper, cobalt, gold and magnetite resources, a new and separate magnetite resource has been defined and will be included in future mine planning.

New and Separate Inferred Magnetite Resources (open pitable)

330Mt @ 14% Magnetite

(47 million tonnes of magnetite grading 62% Fe* - using 10% magnetite cut-off)

Including

100Mt @ 20% Magnetite

(20 million tonnes of magnetite grading 62% Fe* - using 15% magnetite cut-off)

* Fe grades based on average of results from 2013 DTR programme - see resource notes for full details.

See full details of resource attached to this document...

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RESOURCE ESTIMATES FOR ROCKLANDS GROUP COPPER PROJECT USING VARIOUS CUT-OFF GRADES

Using 0.2% CuCoAu cut-off;

Total Measured, Indicated and Inferred Resource (open pitable)

272Mt @ 0.7% CuEq

(4.2 billion pounds CuEq)

Using 0.40 CuCoAu cut-off;

Measured, Indicated and Inferred Resource (open pitable)

96Mt @ 1.1% CuEq

(2.2 billion pounds CuEq)

Including Measured and Indicated Resource (open pitable)

84Mt @ 1.1% CuEq

(2.1 billion pounds CuEq)

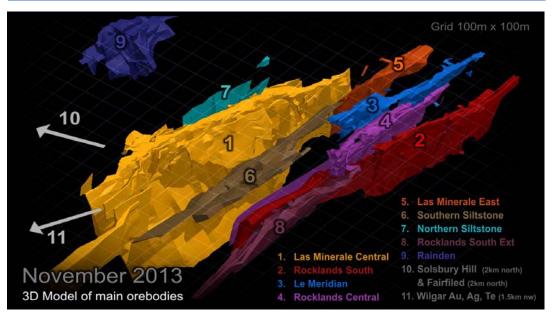


Figure 1: 3D-model of November 2013 Cu-Co-Au +mag resource - the main orebodies have been colour-coded and referenced.

See full details of resource attached to this document...





Figure 2: Rocklands is located just 15km west of the north-west Queensland Regional Township of Cloncurry, has access to all required infrastructure, and enjoys the benefits of a Cloncurry based local workforce.

Rocklands Resource Estimate

The Rocklands Resource Estimate and associated Block Model represents the collective input and geological interpretations and investigations of more than 50 individual geologists and other industry professionals, who have contributed to the creation of a resource model that has been compiled, validated and cross-checked by independent expert resource consultants. The 2011 Resource Estimate and Updated 2013 Resource Estimate, was prepared by Hong Kong and Brisbane based Mining Associates Pty Ltd.

Since the 2011 resource estimate was released, the drilling strategy focussed on delineating the Fairfield Prospect to sufficient detail to support resource estimation and possible inclusion in the mine planning, selective infill drilling at central Las Minerale, and several deep diamond drill holes also at Las Minerale.

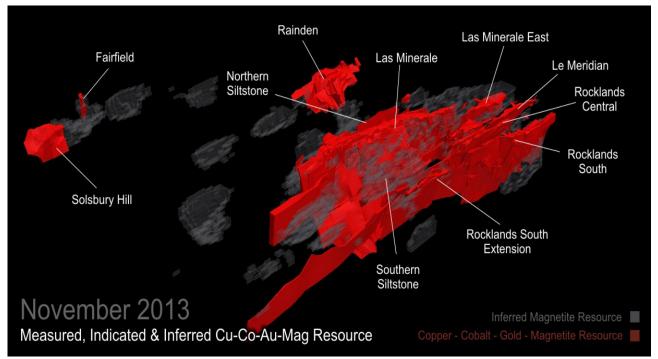


Figure 3: 3D-model of November 2013 Measured, Indicated & Inferred Resource (Cu-Co-Au +Mag) in red highlight and separate magnetite resource shown in faded grey.



More recently drilling concentrated on defining in detail an area of high-grade primary mineralisation discovered during pit dewatering drilling towards the end of 2012, that occurs immediately below the planned Rocklands South Pit.

The 2013 Updated Resource Estimate has been calculated based on more than 360,000m of bedrock, reverse circulation and diamond drilling, providing sufficient information to support a robust geological model throughout all mineralised areas of interest.

Forward Programme - Expanded Operations and Magnetite Resource

The Company is currently undertaking a pulp-magsus programme (magsus readings taken from the same pulverised samples that are sent for assay) designed to provide superior sampling accuracy of magnetite grades, sufficient to support both indicated and measured categories in the preparation of a planned new magnetite resource update. Indicated category is the minimum resource confidence level required to sufficiently determine upgrading implications to the project if future expansion plans are to include concurrent processing of some or all of the new magnetite resource.

In the interim, waste areas in the current Las Minerale and Rocklands South Pits will be re-classified into "waste" and "magnetite rich waste", and segregated accordingly to facilitate future access to above ground magnetite resources should processing opportunities arise.

Future expansions, or changes to planned mining regimes, will be subject to amended EA and appropriate approvals being granted.

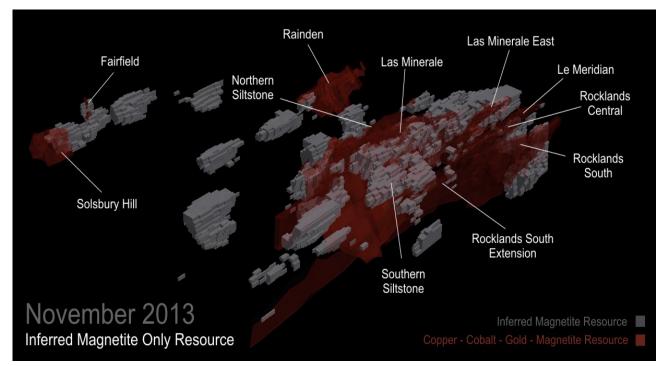


Figure 4: 3D-model of November 2013 Inferred Magnetite-only Resource in light-grey blocks, which is a completely separate resource to the existing Cu-Co-Au +mag resource (faded red).



Pit Optimisation

Based on the updated resource estimate, new pit optimisation studies will be generated to investigate benefits from possible changes to pit shapes and subsequent mining schedules.

The new study will include Life of Mine (LOM) schedules that include the entire Rocklands Resource, and will focus on splitting future development of the Rocklands Project into several stages:

Stage 1: Update current 10-year open-cut mine plan, incorporating any changes that may result from the new resource estimate and subsequent pit-optimisation and mining schedule update.

Stage 2: Extend current open-cut mine plan (+/- 30 years) and incorporate options for expanding the mineral process plant capacity from the current 3mtpa throughput. Studies will consider the financial feasibility of upgrades to the process plant ranging from 6-15mtpa throughput, depending on the most profitable scale/cost configuration that results from the optimisation study. The new magnetite resource will form an important aspect of expansion considerations.

Stage 3: Prepare an underground component to long-term mine planning, to be implemented at a time in the future when open-pit economics give way to more attractive underground options.

Detailed resource statement follows...

On behalf of the board.

- ends



Resource Statement reported according to JORC guidelines

The resources for the Rocklands area at November 2013 have been estimated and are tabulated below at various cut-off grades. The tables need to be read in conjunction with the following "Table 1" (from page 8)

	Measured Resource Nov 2013 at various cut-off grades									
cut-off	Tonnes		Estimate				Equivalents Contained Metal Equivalent			
CuCoAu*		Cu	Со	Au	Mag	CuCoAu*	CuEq*	Cu	CuCoAu*	CuEq*
%	Mt	%	ppm	ppm	%	%	%	Mlb	Mlb	Mlb
0.2	83	0.36	273	0.09	6.4	0.74	1.0	669	1,369	1,787
0.4	44	0.63	355	0.13	5.6	1.13	1.3	614	1,108	1,300
0.8	19	1.23	504	0.22	5.8	1.96	2.2	506	809	894
			Indicated	Resource N	ov 2013 at	various cut-	off grades		-	
cut-off	Tonnes		Estimate	d Grade		Copper E	quivalents	Contain	ed Metal Ec	quivalent
CuCoAu*		Cu	Со	Au	Mag	CuCoAu*	CuEq*	Cu	CuCoAu*	CuEq*
%	Mt	%	ppm	ppm	%	%	%	Mlb	Mlb	Mlb
0.2	98	0.16	226	0.07	6.5	0.47	0.7	339	1,021	1,518
0.4	40	0.32	287	0.13	4.1	0.74	0.9	282	652	779
0.8	11	0.68	405	0.19	3.0	1.28	1.4	170	319	346
		Total Me	asured and	Indicated I	Resource No	ov 2013 at v	arious cut-o	ff grades		
cut-off	Tonnes		Estimate	d Grade		Copper E	quivalents	Contain	ed Metal Ec	quivalent
CuCoAu*		Cu	Со	Au	Mag	CuCoAu*	CuEq*	Cu	CuCoAu*	CuEq*
%	Mt	%	ppm	ppm	%	%	%	Mlb	Mlb	Mlb
0.2	181	0.25	248	0.08	6.5	0.60	0.8	1,008	2,390	3,306
0.4	84	0.48	323	0.13	4.9	0.95	1.1	896	1,759	2,079
0.8	30	1.02	467	0.21	4.8	1.71	1.9	676	1,128	1,240
			Inferred 1	Resource No	ov 2013 at v	various cut-o	off grades			
cut-off	Tonnes		Estimate	d Grade		Copper E	per Equivalents Contained Metal Equivaler			quivalent
CuCoAu*		Cu	Co	Au	Mag	CuCoAu*	CuEq*	Cu	CuCoAu*	CuEq*
%	Mt	%	ppm	ppm	%	%	%	Mlb	Mlb	Mlb
0.2	91	0.06	146	0.09	4.6	0.3	0.4	117	573	902
0.4	12	0.24	200	0.10	2.6	0.5	0.6	63	142	166
0.8	0.5	0.54	413	0.12	3.2	1.1	1.2	6	12	13
	Το	tal Measur	ed, Indicate	d and Infer	red Resour	ce Nov 2013	at various	cut-off grad	les	
cut-off	Tonnes		Estimate	d Grade		Copper E	quivalents	Contain	ed Metal Ec	quivalent
CuCoAu*		Cu	Co	Au	Mag	CuCoAu*	CuEq*	Cu	CuCoAu*	CuEq*
%	Mt	%	ppm	ppm	%	%	%	Mlb	Mlb	Mlb
0.2	272	0.19	214	0.08	5.9	0.5	0.7	1,125	2,962	4,208
0.4	96	0.45	308	0.13	4.6	0.9	1.1	959	1,902	2,244
0.8	30	1.01	466	0.21	4.8	1.7	1.9	681	1,140	1,253
	Additional	Magnetite	Only Inferr	ed Resourc	e Nov 2013					
cut-off	Tonnes		Estimate	ed Grade		Product				
Mag%		Cu	Со	Au	Mag	Magnetite				
%	Mt	%	ppm	ppm	%	Mt				
10	328	0.02	70	0.01	14.3	47				
15	102	0.02	78	0.01	19.5	20				
20	26	0.01	77	0.00	26.6	7				



Competent Person Statements:

The information in this report that relates to Mineral Resources is based on information compiled by Mr Andrew J. Vigar, who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Vigar is employed by Mining Associates Pty Ltd of Brisbane, Australia. Mr Vigar 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 Vigar consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The Mineral Resource Update (2013) has been prepared with inputs from the following personnel:

Mr Andrew Day has been responsible for Exploration Results including the exploration data, comments on exploration target sizes, QA/QC and geological interpretation and information, which is incorporated in the database that was provided to Mining Associates for undertaking the a resource estimate. 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 mineralization 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 consent 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 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.

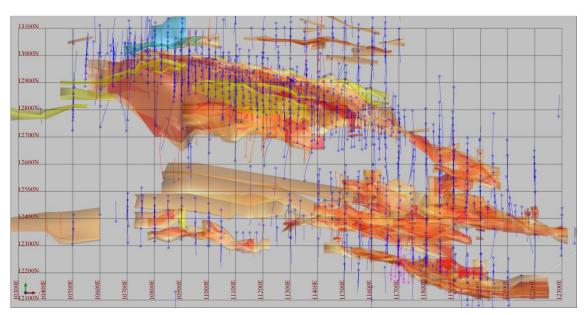




Mineral Resource Estimate Update

Rocklands Project, Australia

November 2013



Prepared by Mining Associates Pty Ltd

for

CuDeco

Authors: Andrew J Vigar, BSc, FAusIMM James H Lally, MSc, PhD, MAusIMM, MAIG

Effective Date: 29 November 2013 Reference: MA1362-V4

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EXECUTIVE SUMMARY

This report describes the November 2013 mineral resource update of the Rocklands IOCG Project, a multi-lode high grade copper + cobalt +/- gold with magnetite ("IOCG") deposit group located about 23 km northwest of Cloncurry, Queensland, Australia.

The Rocklands Group Copper Project is located in northwest Queensland, on the eastern fold belt of the Mt Isa Inlier, near Cloncurry. The Project is 100% owned by CuDECO Limited ("CuDECO", ASX:CDU), an ASX listed company headquartered in Southport, Queensland.

At the request of Mr David Wilson of CuDeco, Mining Associates Pty Ltd ("MA") was commissioned in October 2013 to prepare an Independent Technical Report and resource update on the Rocklands Project to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves standards ("JORC 2012 Code standards").

Five weeks were spent on data collection and analysis, site visits, technical work and preparation of this report.

Geology and Mineralisation

The Rocklands Project contains an Iron Oxide Copper Gold (IOCG) style deposit with copper-cobaltgold mineralisation hosted in a series of subparallel, east south east trending, steeply dipping zones within a metamorphosed volcano-sedimentary sequence with significant magnetite content. It is and is one of several examples of significant IOCG deposits in the Cloncurry district, including the Ernest Henry, Osborne and Eloise deposits.

Copper-cobalt-gold-magnetite mineralisation at Las Minerals was first discovered by CuDECO in 2006 after first acquiring the project rights in 2005. Mineralisation is located mostly within a corridor 3 km long and 1700 m wide, comprising a number of northwest striking and steeply dipping breccia-fault zones.

Copper is the dominant mineralisation at Rocklands with lesser amounts of cobalt, gold and magnetite. The copper mineralisation extends from surface and is still open at depth with overlapping oxide, secondary and primary styles of copper mineralisation.

The mineralisation is hosted both within steeply dipping higher grade breccia zones, often also hosted in pre-existing dolerite dykes, and within broader lower grade shallow dipping zones within favourable host sedimentary units.

Work Completed

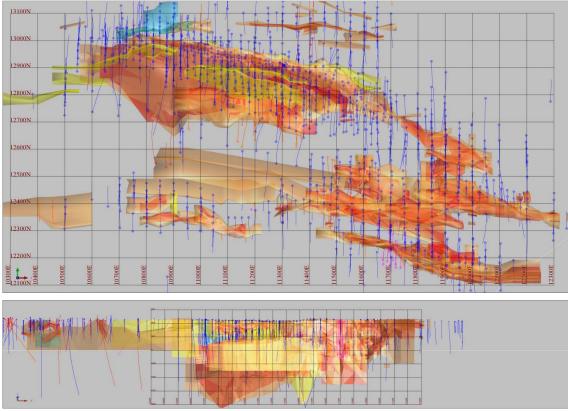
The previous Mineral Resource Estimate was completed in May 2011 by Mining Associates. This update reviewed the same and conducted a complete re-estimation with special attention to new drilling at Fairfield and Rocklands South; updates to Co assays; revision of the magnetite estimates based on test work; and further examination of bias issues previously identified with the diamond and RC drilling in native copper oxide zones. MA has reviewed all aspects of the recent 185 hole drill programme. The review included site visits, observing logging and sampling procedures, and examining QA/QC and assay results.

Mineralisation at Rocklands has been defined by diamond core and reverse circulation drilling on a pattern of 25 m spaced drill sections reduced to 12.5 m spacing in some areas. Sampling protocols, assay methods and sample QA/QC procedures are in accordance with industry best practice and samples are considered by MA to be adequate for the purposes of resource estimation. Mineralisation remains open along strike and at depth, and there is potential for discovery of additional mineralised zones.



Resource Estimates

The resources have been estimated within defined mineralisation wireframes domains based on geology and copper and cobalt grade envelopes. The material between these has also been estimated on a wider node spacing to define host lithologies for exploration targeting and for mining and waste characterisation purposes.



Plan and Long Section showing copper domains and drilling

The input data and estimation methods are discussed in the JORC Table 1 below.

Recent drilling by Cudeco at Fairfield and Rocklands South, has led to a notable upgrade of this significant deposit. The Rocklands Deposit is estimated by MA to contain the following Total Measured, Indicated and Inferred Mineral Resources listed according to cut-off grades set using a copper-cobalt-gold equivalent (CoCuAu), (see detailed tables later for break-down by resource category).

Tab	Table 1 Total Rocklands Resource November 2013 at various cut-off grades – open cut and underground									
cut-off	Tonnes	Estimated Grade			Copper Equ	ivalents	Conta	ined Metal Equ	ivalent	
CuCoAu*		Cu	Co	Au	Mag	CuCoAu*	CuEq*	Cu	CuCoAu*	CuEq*
%	Mt	%	ppm	ppm	%	%	%	Mlb	Mlb	Mlb
0.20	272	0.19	214	0.08	5.9	0.5	0.7	1,125	2,962	4,208
0.40	96	0.45	308	0.13	4.6	0.9	1.1	959	1,902	2,244
0.80	30	1.01	466	0.21	4.8	1.7	1.9	681	1,140	1,253

Note - Figures have been rounded to reflecting level of accuracy of the estimates

*Copper equivalent CuCoAu% = Cu % + Co ppm*0.001232 + Au ppm*0.518238

*Copper equivalent CuEq% = Cu % + Co ppm *0.001232 + Au ppm *0.518238 + magnetite %*0.035342



MA completed a resource estimate from first principles and notes that the lower cut-off grade of 0.2% CuCoAu is appropriate for this scale of deposit to be developed by open pit mining with the main deposits occurring in an area 2km long by 1km wide and within the vertical range of -250m RL to surface (about 475m).

Andrew J Vigar

Brisbane, Australia

29th November 2013



	Measured Rocklands Resource November 2013 at various cut-off grades									
cut-off	Tonnes		Estimate	ed Grade		Copper Equ	ivalents	Contained Metal & Equivalent		
CuCoAu*		Cu	Co	Au	Mag	CuCoAu*	CuEq*	Cu	CuCoAu*	CuEq*
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0.80	19	1.23	504	0.22	5.8	1.96	2.2	506	809	894
	l	ndicated	l Rocklar	nds Reso	urce Nov	ember 2013 at	various cut·	off grades		
cut-off	Tonnes		Estimate	ed Grade		Copper Equ	ivalents	Contai	ned Metal & Eq	uivalent
CuCoAu*		Cu	Со	Au	Mag	CuCoAu*	CuEq*	Cu	CuCoAu*	CuEq*
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0.80	11	0.68	405	0.19	3.0	1.28	1.4	170	319	346
	Total Measured and Indicated Rocklands Resource Nove					ource Novemb	er 2013 at v	arious cut	-off grades	
cut-off	Tonnes		Estimate	ed Grade		Copper Equivalents		Contained Metal & Equivalent		
CuCoAu*		Cu	Со	Au	Mag	CuCoAu*	CuEq*	Cu	CuCoAu*	CuEq*
%	Mt	%	ppm	ppm	%	%	%	Mlb	Mlb	Mlb
0.20	181	0.25	248	0.08	6.5	0.60	0.8	1,008	2,390	3,306
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0.80	30	1.02	467	0.21	4.8	1.71	1.9	676	1,128	1,240
		Inferred	Rocklan	ds Resou	rce Nove	ember 2013 at v	various cut-	off grades		
cut-off	Tonnes		Estimate	ed Grade		Copper Equ	ivalents	Contained Metal & Equivalent		
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0.80	0.5	0.54	413	0.12	3.2	1.1	1.2	6	12	13
	Tot	al Resou	rce Rock	lands Re	source N	lovember 2013	at various o	ut-off grad	des	
cut-off	Tonnes		Estimate	ed Grade		Copper Equ	ivalents	Contai	ned Metal & Eq	uivalent
CuCoAu*		Cu	Со	Au	Mag	CuCoAu*	CuEq*	Cu	CuCoAu*	CuEq*
%	Mt	%	ppm	ppm	%	%	%	Mlb	Mlb	Mlb
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0.40	96	0.45	308	0.13	4.6	0.9	1.1	959	1,902	2,244
0.80	30	1.01	466	0.21	4.8	1.7	1.9	681	1,140	1,253

Additional Ma	Additional Magnetite only Inferred Resource Rocklands Resource November 2013 at various cut-off grades						
cut-off	Tonnes	Estimated Grade				Contained Metal Equivalent	
Magnetite		Cu	Со	Au	Mag	CuEq*	
%	Mt	%	ppm	ppm	%	Mlb	
10	328	0.02	70	0.01	14.3	47	
15	102	0.02	78	0.01	19.5	20	
20	26	0.01	77	0.00	26.6	7	



JORC Code, 2012 Edition – Table 1

Notes on data relating to Rocklands Project Resource Estimates. Data provided by CuDeco and verified by MA.

1.1 JORC TABLE 1 - 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 (eg 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information. 	 The resource estimate is based on drill samples only, no surface samples were used. Representative 1 meter samples were taken from ¼ (NQ, HQ) or ½ (NQ, BQ) diamond core and in the case of reverse circulation (RC) and rotary air blast (RAB) drilling, samples were split using the splitter attached to each rig for that particular programme. Only assay result results from recognised, independent assay laboratories were used in Resource calculation after QAQC was verified.
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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). 	 Diamond (DDH) of NQ, PQ, HQ and BQ diameters with standard and triple tube sample recovery and reverse circulation (RC) with "through the bit" sample recovery data were used for geological interpretation and resource estimation. Current practice is to use DDH only in mineralised zones.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 DDH core recovery averaged 98% overall, and exceeded 80% in 96% of the meters drilled in the mineralised zone. RC recovery was recorded as bag size estimate and bag weight for all samples RC - In most cases when chip recovery was poor and sample became wet the hole was stopped and a diamond tail was added. DDH - Analysis of recovery results vs grade indicates no significant trend occurs indicating bias of grades due to diminished recovery and / or wetness of samples. RC - Possible loss of native copper in the weathered potion of the mineralised zone has been identified and could result in an underestimation of the copper grade when based on RC drill data, in certain circumstances. This could not be reliably quantified and no



Criteria	JORC Code explanation	Commentary
		correction to the data or estimates has been made.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of 	 Drill samples are logged for lithology, mineralisation and alteration using a standardised logging system, including the recording of visually estimated volume percentages of major minerals. Early (2006 to mid 2008) rock chip and core samples were logged on paper and data entry completed by a 3rd Party Contractor and Database administrator in 2008. Since 2008, rock chip and core samples were logged on site directly into Microsoft Excel field data capture templates with self-validating drop down field lists. Drill core was photographed after being logged by the geologist.
Sub-	 the relevant intersections logged. If core, whether cut or sawn and 	 Drill core not used for bulk metallurgical testing and RC drill chips are stored at the Rocklands site.
sampling techniques and sample preparation	 whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 All, DDH core is orientated along the bottom of hole, where possible. A cut line is drawn 1cm to the right of the core orientation line. Core is cut with a diamond saw, ½ core is used for NQ and BQ analysis, ¼ core is used for HQ and PQ analysis to standardise the sample size per meter. RC samples are split using an automated splitter (type) on the drill rig. Sample intervals are 1m down-hole in length unless the last portion of hole is part of a metre SGS Minerals Townsville Sample Preparation All samples are dried. Drill core is placed through Jaw crusher and crushed to approx. 8mm. RC chips and core are then split if necessary to a sample of less than approximately 3.5kg. Native copper samples were prepared by 2 methods. Grain size of native copper determined which method was used. Samples where the Native Copper grain size is less than 2mm were disc ground to approximately 180µm. 500g is then cut from the sample and lightly pulverised for 30 seconds to approximately 100µm. Samples where Native Copper grain size is greater than 2mm were put through a rolls crusher to approximately 3mm. Samples were sieved at 2mm with copper greater than 2mm hand picked out of sample. Material less than 2mm and residue above 2mm was disc ground to approximately 180µm. 500g is then cut from the sample and lightly pulverised for 30 seconds to approximately and lightly pulverised for 30 seconds to approximately 100µm. All other sampled material not containing Native Copper is pulverised to a nominal 90% passing 75µm. AMDEL Bureau Veritas Mt Isa Sample Preparation After receiving, checking and sorting samples were dried at 103oC for 6 hours. Core samples were then put through a Jaw Crusher and crushed to approximately -10mm. Sample was then split if sample weight over 3kg.
		 Rock chip samples weighing over 3kg were crushed with the use of a Boyde crusher and split with 3kg of material retained. Samples were then pulverised for 5 minutes in an LMS until 90% of the sample passed through -106µm. Sample was then cut with the remaining pulp put in storage.
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. For geophysical tools, spectrometers, handheld XRF 	 Prior to the May 2011 Resource, Cu and Co grades were determined predominately by 3 acid digest with either a ICP-AES (Inductively- Coupled Plasma Atomic Emission Spectrometer) or AAS (Atomic absorption Spectrometer). determination (SGS methods, ICP22D, ICP40Q, AAS22D AAS23Q, AAS40G). Post May 2011 Resource, Cu and Co grades were determined predominantly by 2 acid digest by



Criteria	JORC Code explanation	Commentary
	instruments, etc, the parameters used in determining the analysis including instrument make and	ICP-OES (Inductively Coupled Plasma Optical Emission Spectrometer) determination at AMDEL Mt Isa laboratory.
	 model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control 	 Prior to the May 2011 Resource, Au grades were determined by 50g Fire Assay (at SGS Townsville method FAA505). Post the May 2011 Resource, Au grades were determined by 40g Fire Assay (at AMDEL Adelaide and Mt Isa method FA1).
	procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of	 Prior to the May 2011 resource Calcium and Sulphur grades were determined by ICP – AES, post May 2011 Resource Sulphur grades were determined by aqua regia digest by ICP-OES.
	accuracy (ie lack of bias) and precision have been established.	• Magnetite grades were determined by measurements of Magnetic Susceptibility taken on the samples which were compared to Davis Tube test results to determine a linear regression. It is recognised that a low susceptibility portion of the magnetite does exist, and hence magnetite grades may be underestimated in certain locations, but no correction has been found reliable at this time. Additional clarification should be available after results of the current bulk-sample programme have been analysed.
		 All analyses were carried out at internationally recognised, independent assay laboratories SGS, ALS, Genalysis, and Amdel Bureau Veritas.
		 Quality assurance was provided by introduction of known certified standards, blanks and duplicate samples on a routine basis.
		Assay results outside the optimal range for methods were re-analysed by appropriate methods. Copper assay results differ little between acid digest methods but cobalt assay results show a significant underestimation when analysed using the AAS, Only Co samples assayed by the ICP methods were used in resource estimation.
		Ore Research Pty Ltd certified copper and gold standards have been implemented as a part of QAQC procedures, as well as coarse and pulp blanks, and certified matrix matched copper-cobalt-gold standards. Performance for standards has been adequate, apart from a period of systematic laboratory error, where standards are suspected to have been only partially digested. In-house cobalt only standards are more variable in results than those of Ore Research copper and gold, which is attributed to the in-house origin. These were later replaced by the copper-cobalt-gold standards certified by Ore Research Pty Ltd.
		 Re-assay programmes of sample intervals analysed prior to QAQC implementation, and those of the systematic laboratory error period have shown correlations between re-assay and original results to be chiefly within the realm of analytical error, and as such, acceptable.
		Field duplicates collected in three retrospective programmes were affected by weathering and cementing of samples, making assay comparison difficult. Recent duplicate samples, split and despatched with the originating drill hole, show good correlation within paired copper and cobalt results, although gold results are variable, which is attributed to coarse (>75?m) gold mineralisation. Duplication of core samples has been attempted, and is considered to be of little use as a measure of assay repeatability, due to local variation in mineralisation.
		 QAQC monitoring is an active and ongoing process on batch by batch basis by which unacceptable results are re-assayed as soon as practicable.
		• An issue was found with the early AAS sample grades for Cobalt and approximately 21,400 samples have been re-assayed for Co via ICP methods. There is an approximate 20% lift in Co concentration between 100 and 500ppm, and 10% above this level. The proportion of new assays to total assays in the mineralised zones is approximately 27%. Only ICP results have been used in the estimation.
		 A limited check assay program carried out in 2007 on 497 samples



Criteria	JORC Code explanation	Commentary
		suggests that Cu may be understated by approximately 5%.
		 No assays for Cobalt or Copper have been factored.
		There is a need to complete the check assay program for Co and also to undertake a check assay program for Cu. No certified matrix- matched standards have been used for Cu and the in-house Co standards used have very high Co concentrations that are not representative of the bulk of the mineralised samples.
		 DTR (Davis tube recovery), which indicates magnetite content, was derived from magnetic susceptibility readings taken on core chip and pulps samples. Three different instruments were used and their calibration requires further investigation.
Verification of sampling	The verification of significant intersections by either independent or alternative	 An umpire assay programme of 528 mineralised samples from 173 drill holes was completed by ALS Laboratories in 2007
and assaying	 company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical 	 Results between twinned RC and diamond holes are in approximate agreement, when taken into consideration with the natural variation associated with breccia-hosted ore bodies, identified coarse mineralisation, and subsequent weathering overprinting.
	and electronic) protocols.	 All assay data QAQC is checked prior to loading into the CuDeco Explorer 3 data base.
	• Discuss any adjustment to assay data.	 The CuDeco Explorer 3 data base was originally developed and managed by consulting geologists, Terra Search Pty Ltd, and was subsequently handed over to CuDeco Ltd in mid-2009. The data base and geological interpretation is collectively managed by the CuDeco Resource Committee, and relayed to the Resource Consultants by the nominated member of this committee, Exploration Adviser Mr David Wilson.
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. Specification of the grid system used. Quality and adequacy of topographic control. 	 All drill holes at Rocklands have been surveyed with a differential global positioning system (DGPS) to within 10cm accuracy and recorded in the CuDeco Explorer 3 data base. All drill holes, apart from vertical, have had down hole magnetic surveys at intervals not greater than 50m and where magnetite will not affect the survey. Surveys where magnetite is suspected to have influenced results have been removed from the Database. Where surveys are dubious the hole was resurveyed, where possible, via open hole in non magnetic material
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological 	 Drilling has been completed on nominal local grid north-south sections, commencing at 100m spacing and then closing to 50m and 25m for resource estimation. Local drilling in complex near-surface areas is further closed in 12.5m
	 and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has 	 Vertical spacing of intercepts on the mineralised zones similarly commences at 100m spacing and then closing to 50m and 25m for resource estimation, again some closer spacing is used in complex areas.
	• When er sample compositing has been applied.	 Drilling has predominantly occurred with angled holes approximately 55° to 60° inclination below the horizontal and either drilling to the local grid north or south, depending on the dip of the target mineralised zone.
		 Holes have been drilled to 600m vertical depth Drilling is currently focused on the known mineralised zones of Las Minerale and Las Minerale East; Rocklands South and South Extension; Rocklands Central and Le Meridian; Rainden and Solsbury Hill.
		 The data spacing and distribution is sufficient to establish geological and grade continuity appropriate for the Mineral Resource estimation procedure and has been taken into account in 3D space when determining the classifications to be applied.



Criteria	JORC Code explanation	Commentary
		 Samples were composited to 2m down-hole for resource estimation in the known wireframe constrained mineralised zones and 10m down- hole in the general lithology zone (Inferred only).
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. 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. 	 Drilling has been completed on local north-south section lines along the strike of the known mineralised zones and from either the north or the south depending on the dip Vertical to South dipping ore bodies, Las Minerale, Rocklands South Extended, Rainden and Solsbury Hill, were predominantly drilled to the north whilst Vertical to Northing Dipping ore bodies, Las Minerale East, Rocklands South, Rocklands Central and Le Meridian were predominantly drilled to the south. Scissor Drilling, (drilling from both north and south), as well as vertical drilling, has been used in key mineralised zones at Las Minerale and Rocklands South, to achieve unbiased sampling of possible structures, mineralised zones and weathering horizons. Horizontal layers of supergene enrichment occur at shallow depths in Las Minerale and Rocklands South and a vertical drill program has
Sample	The measures taken to ensure	been drilled at right angles to address this layering and to provide bulk samples for metallurgical test work.
Sample security	sample security.	 Samples are either dispatched from site through a commercial courier or company employees to the Laboratories. Samples are signed for at the Laboratory with confirmation of receipt emailed through. Samples are then stored at the lab and returned to a locked storage set back at site.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	 CuDeco conducts internal audits of sampling techniques and data management on a regular basis, to ensure industry best practice is employed at all times.
		External review and audit have been conducted by the following groups;
		2007 – In July 2007, Snowden were engaged to conduct a review of drilling and sampling procedures at Rocklands, provide guidance on potential areas of improvement in data / sample management and geological logging procedures, and to ensure the Rocklands sampling and data record was appropriate for use in resource estimation. All recommendations were implemented.
		• 2010 – In early 2010 Hellman Schofield conducted a desktop review of the Rocklands database, as part of their due diligence for the resource estimate they completed in May 2010. Apart from limited logic and spot checks, the database was received on a "good faith" basis with responsibility for its accuracy taken by Cudeco. A number of issues were identified by H&S but these were largely addressed by Cudeco and H&S regarded unresolved issues at the time of resource estimation as unlikely to have a material impact on future estimates.
		• 2010 - Mr Andrew Vigar of Mining Associates Limited visited the site in 12 to 15 October, 3 to 5 November and 8 to 10 December 2010 during the compilation of detailed review the drilling, sampling techniques, QAQC and previous resource estimates and 17 to 19 march 2011 to confirm the same for new drilling incorporated into this resource estimate. Methods were found to conform to international best practise, including that required by the JORC standard.

1.2 JORC TABLE 1 - SECTION 2 - REPORTING OF EXPLORATION RESULTS

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary	
			MA1362-V4



Criteria	JORC Code explanation	Commenta	ıry							
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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	including a as joint ve interests, environme The secur	agreemer ntures, p historica ntal settin ity of the nown im	nts or ma partnershi I sites, ngs. e tenure l	me/number, location and ownership or material issues with third parties such nerships, overriding royalties, native title ites, wilderness or national park and nure held at the time of reporting along liments to obtaining a licence to operate					
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Previous 1 between 1 a number length of 6 	987 and of sub p	1994 des	scribe a	wide sh	ear zon	e containi	ing	
Geology	 Deposit type, geological setting and style of mineralisation. 	 Dominated varying rod mineralisa and bonar mineralisa steeply wi the easte mineralisa Copper-Go gold miner surface, th depth. 	ck types, tion, hig nza-grade tion are s thin met rn fold tion, and old (IOCC alisation,	hosting h-grade coarse sub-parall amorpho belt of alteratio G) classif and sigr	coarse s superge native lel, east- sed vol- the Mt n, exhib ication. nificant r	splashy ene cha copper. -south-e cano-se Isa Inl it affiniti Polyme magnetit	to mass alcocite Structu ast strik dimenta ier. The ies with tallic co te, persi	sive prima enrichme ires hosti ing, and o ary rocks e observ Iron Oxio pper-coba sts from t	ary ent ing dip of ved de- alt- the	
Drill hole	A summary of all information material to the understanding of the exploration results	Drilling Type		2010	2011	2012	2013	Total	1	
Information	 including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole 	RAB	# holes metres	1514 7820	499 2819	1668 18741.5	145 2211	3826 31591.5		
		elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	DD	# holes metres	239 47286.04	111 17386.68	235 24749.41	28 7507.9	613 96930.03	
			RC	# holes metres	1491 221263.1	84 9850.8	2 195.7		1577 231309.6	
	 down hole length and interception depth hole length. If the exclusion of this information is justified 	Geotech DD	# holes metres			8 182.6		8 182.6		
	on the basis that the information is not		# holes			102.0	6	7		
	Material and this exclusion does not detract from the understanding of the report, the	Open Hole	metres			285	1394	1679		
	Competent Person should clearly explain	Total	# holes	3109	684	1914	179	5886		
	why this is the case.	Total	metres	276369.14	30056.48	44154.21	11112.9	361692.73		
Data aggregatio n methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 A nomina potentially a Co and r Most of the including r an assess intercept Informing s honouring necessary excluded (Metal equi The formu 	significa nagnetite na reporte naxima a ment of Samples the ge to ensur- best fit). valents a	nt interce e domains ed interce nd subin the balan have bee eological e that no are not us	epts for s are us epts are tervals, nce of t en comp domai residua sed in d	reporting ed in res shown to allow high and posited to ns and I sample	g purpo source r in suffi the rea l low gr o two m d adjus e lengths	ses, thou nodelling icient det der to ma rades in t etre lengt sted whe s have be	ugh ail, ake the ths ere een	
		CuCoAu%= C	u% +Co p	pm*0.001	163 + Au	ppm*0.5	181			
		CuEqu%= Cu	· % +Co ppi	m*0.00123	32 + Au p	pm*0.51	81 + Mao	a%*0.0353	342	



Criteria	JORC Code explanation	Commentary
Relationshi p between mineralisati on widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 Mineralised structures are variable in orientation, and therefore drill orientations have been adjusted from place to place in order to allow intersection angles as close as possible to true widths. Exploration results have been reported as an interval with 'from' and 'to' stated in tables of significant economic intercepts. Tables clearly indicate that true widths will generally be narrower than those reported. Resource estimation, as reported later, was done in 3D space.
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. 	 See figures in main report.
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. 	 Resources have been reported at a range of cut-off grades, above a minimum suitable for open pit mining.
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. 	 Extensive work in these area has been done, and is reported separately.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	The mineralisation is open at depth. Current estimates are restricted to those expected to be reasonable for open pit mining. Limited drilling below this depth (-250m rl) shows widths and grades potentially suitable for underground extraction. CuDeco are currently considering target sizes and exploration programs to test this potential to 1,000m from surface.

1.3 JORC TABLE 1 - SECTION 3 - ESTIMATION AND REPORTING OF MINERAL RESOURCES

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
 Database integrity Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	data has not been corrupted by, for example, transcription or keying errors, between its initial	 The Rocklands database is an Microsoft Access based Explorer 3 data base system. Data is logged directly into an Excel spreadsheet logging system with drap down field liste.
	 drop down field lists. Validation checks are written into the importing program in the Explorer 3 data base, an error is triggered if data is not in correct format and ensures all data is of high quality. 	
		 Digital assay data is obtained from the Laboratory, QAQC checked and imported into Explorer 3.
		 Data tables were exported from Explorer 3 as a sub-set, also in MS Access format, and connected directly to the Gemcom Surpac mine



Criteria	JORC Code explanation	Commentary								
		software used by MA for interpretation and resource estimation.								
		 Data was validated prior to resource estimation by the reportin basic statistics for each of the grade fields, including examination maximum values, and visual checks of drill traces and grade sections and plans. Errors were reported back to CuDeco for correct in the Explorer3 Database. 								
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	to 15 Octol 17 to 19 M drilling, sar Mr. Vigar a the same Methods w	ber, 3 to 5 N larch 2011 d mpling techn also visited th for new dri vere found to	ining Associat lovember and luring the con niques, QAQC ne site from 2 illing incorpor conform to ir RC standard.	8 to 10 Dece ppilation of a and previous 4 to 25 Septe rated into this	ember 2010, detailed rev s resource e mber 2013 s resource	and from iew of the estimates. to confirm estimate.			
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	of subpara mineralised sequence lenses, cal is the dom and gold. T overlapping mineralisat controlled structures t high angle. The orienta influenced features, w dolerite dyl The contro North-Wess The coppe depth with mineralisat thick seco	allel, east so d lodes of of siltstone, careous bed inant minera The copper n g oxide, s ion. Minera by steeply that cut the ation and gr. by a combi- which may b kes, and sha olling set of t orientation. er mineralisa overlapping ion. Primary pondary mine-	ation extends oxide, secor sulphide min eralisation se	ading, steeply a metamorp uartzite, quai licates of Pro ocklands, less extends from and primary ears to be a vest northwe og metasedim own mineralis eply dipping s sociated with favourable lift sub-vertical a from surface idary and prin veralisation oc equence of	r dipping zc phosed se rtz magnetii terozoic ag ser amounts surface to o styles or associated est trending entary sequ sed zones a structurally n largely su thological un and strike in e and is stil mary styles ccurs at the	ones. The dimentary te/jaspilite e. Copper a of cobalt depth with f copper with and g, linear, lence at a are clearly controlled lb vertical hits. n a North II open at of copper base of a			
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	 chalcocite with a minor complete oxidation zone. The main area of defined mineralisation occurs as a number of sul parallel structures over a corridor strike length of 3km, 1.7km wide ar up to 0.64km down dip, which excludes the Solsbury Hill and nearly domains situated immediately to north of the main zone. There are total of 36 currently defined domains, including Solsbury Hill. 								
			Defined	Mineralised D	omains Extent	Report	_			
			m	north	east	RL	RL limit			
		All	min	12,100	9,325	-400	-250			
		Resource	max	14,796	12,375	245	245			
		Mala	extent	2,696	3,050	645	495			
		Main	min	12,100	9,375	-400	-250			
		Areas	max extent	13,784 1,684	12,375 3,000	245 645	245 495			
			GALGIIL	1,004	5,000	040	+30			
Estimation	• The nature and appropriateness	 The resour 	rce estimate	has been re	vised from "f	irst principle	es" based			



Criteria	JORC Code explanation	Commentary
and modelling techniques	 of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	 on a review and re-interpretation of the geological controls and using the results of the extensive recent drilling programs. The mineralised domains were digitised on cross sections defining boundaries for High-grade Cu as >0.5%Cu, Low-grade Cu as >0.1% Cu and Cobalt as >100ppm Co. The domains are nested. There are a total of 36 currently defined domains). The intervals for each drill hole for each domain were tagged into database tables and used for compositing and selection of informing samples. The defined mineralised domains were constrained with 3D wireframes and grades estimated by Ordinary Kriging. The results for Cu were compared with the raw drill data and also with block estimates made using Nearest Neighbour and Inverse Distance squared block estimates, the first to test the impact of averaging and clustering, the later the impact of clustering and the selected variogram. Resource categories have been defined using the sample density, number of informing samples and the krige variance. The grade estimation uses ordinary kriging into a parent block size of 50 m (E) by 8 m (N) by 20 m (RL). The estimation block size was varied by resource category as shown in the table 7. A sub-block size of 15 m (E) by 15 m (N) by 5 m (RL) was used against all wireframes for volumes. Geological and grade modelling work encompassed all previous drilling. Modelling work was extended vertically to the limits of the current drillhole assay database; section interpretations were extended a maximum of 75 m down dip and beyond the limit of drilling. Mineralisation is interpreted to be continuous between drill holes both along strike and down dip within the defined domains. The host lithologies between the defined wireframe domains. Where possible the wireframe domains were allocated a lithological type and grades estimated to these areas, but some areas where drilling and/or geological knowledge was insufficient informing samples for the tonange and grade estimates to be
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	 All tonnages are reported on a dry basis.
Cut-off parameters	 The basis of the adopted cut-off grade(s) or quality parameters applied. 	 Lower cutoff grade for resource reporting of 0.2% CuCo Au and only blocks above -250m RL were applied to blocks in reporting the resource estimates in a range of cut-off grades. Total costs from mining (C1) are approx \$18 per tonne of ore, which based a weighted average price for Cu Co and Au over the last 5 years and allowing for differential recoveries gives a cut-off of approx 0.23%
		CuCoAu.



Criteria	JORC Code explanation	Commentary								
		 Magnetite only resources are reported above a minimum cut-off of 								
<i>Mining</i> <i>factors or</i> <i>assumptions</i>	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	 Preliminary pit optimising was undertaken using Whittle software independent mining engineering consultancy. The aim of this wo to identify the approximate proportion of the modelled estimate fall inside an optimum pit shell using prevailing metal preliminary metallurgical recoveries and assumed inputs such slopes. This work was not intended to define reserves. The metallurgical recovery assumptions were 95% for Cu, 90% for C 75% for Au as advised by CuDeco., The pit reached a depth of a 180m RL The size of preliminary conceptual pits is strongly affected by particularly metal recoveries and metal prices which, if unrealised result in significant portions of resource estimates not report future open pits. The Xstrata December 2009 Resource Statement for the nearb geologically similar, Ernest Henry Open Cut is for a Total Resou 21Mt @0.9% Cu, 0.5 g/tAu and 18%magnetite using a cut-off gr 0.27%Cu. Final depth is 530m below surface. The resource is therefore considered as open pittable abor elevation of -250m RL, or about 475m from surface. 								
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 Numerous technologies and techniques have been applied to or samples extracted from across the Rockland's mineralised zones establish the general amenity of the Rockland's mineral species efficient recovery to produce quality saleable products, and determine any potential processing problems. No significant impediments to the efficient recovery of Rocklan copper, cobalt, magnetite and gold minerals have been encounter during the exhausting programme of laboratory and small and larg scale pilot processing testwork. No deleterious elements are present in concentrate products produce in the test programmes at concentrations in excess of, or near concentrations which would be likely to attract a penalty from a smell or other end users. Concentrate products are above the minimum specification required achieve full payment from smelters or other end users. The following procedures and processing techniques have be applied to the Rocklands mineralised zones: 								
		Zone Crush Crush								
		Oxidised √ √ √ √								
		Native Copper $$								
		Chalcocite $$ $$ $$ $$								
		Primary \checkmark \checkmark \checkmark \checkmark \checkmark								
		The following recovery values can be applied, based on weighted averages, across the mineralised zones to support resource estimation calculations: Element/mineral Copper Cobalt Gold Magnetite								
		Recovery 95% 90% 75% 80%								
Environmen- tal factors or	Assumptions made regarding possible waste and process	 The Assessment Report for the Environmental Impact Statement a Environmental Management Plan for the Rocklands Goup Copp 								



Criteria	JORC Code explanation	Commentary							
assumptions	residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	 International information information in action of the project was issued on 31st October, 2011. The Project currently operates under the Queensland EA, Pern Number EPML00887913. The environmental approvals referred to above allow the Project operate at an average processing rate of 3.0 Million tonnes per annu of ore and to dispose of the associated waste and tailings in approve design waste-rock dumps and tailings storage facilities. 							
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. 	 There were 3002 measurements, plus a number of validation tests undertaken for bulk density determinations with a special distribution across the Rocklands mineralized zones. Both internal and external laboratories were used in the bulk density programme. The results have been determined by way of averages for each of the main mineralized zones. The mineralised zones exhibited a definable trend of increasing bulk density with copper and magnetite grade and this has been factored for resource calculations. Based on the results obtained, the following table is applied to the mineralized zones for resource estimation purposes: 							
	 Discuss assumptions for bulk 	Zone	Baseline t/m3)	Cu% Factor	Magnetite % Factor				
	density estimates used in the evaluation process of the different	Oxide	2.38	0.657	0.0279				
	materials.	Semi Oxide	2.70	0.0620	0.0247				
		Native Copper	2.50	0.0645	0.0267				
		Chalcocite	2.75	0.062	0.0221				
		Primary Mineralised	2.9	0.0605	0.0227				
		Fresh	2.75	0.0625	0.242				
		 The grade formula applied to the zone for resource estimate purposes is as follows: Bulk Density = Baseline + %Cu*CuFactor 							
			*MagnetiteFactor	-	%Cu*CuFactor +				
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 Resource classification is based number of informing samples, kriging conditional bias slope ("Slope") and search distance to informing samples. Blocks within the defined wireframes domains are classified as measured, indicated or inferred based on the following criteria Measured - maximum number of informing samples, Slope >0.8 Indicated - maximum number of informing samples, Slope >0.8 Inferred - block estimated within domain wireframes, minimum of 3 informing samples within maximum search of 300m. The host lithologies between the defined wireframe domains are known as "undomained". Where grades above cut-off of 0.2% CuCoAu were identified and where these blocks had sufficient informing samples for the tonnage and grade estimates to be reliable, have been included in the inferred category only. Search range for this category was reduced to 200m and minimum number of informing samples increased to 10 as 							



Criteria	JORC Code explanation	Commentary					
		no domain wireframes were used.					
		 A magnetite only material was also allocated in the "undomained" section of the deposit using the same criteria as described above. A cut-off of 10% magnetite was applied. 					
Audits or reviews	 The results of any audits or reviews of Mineral Resource estimates. 	 CuDeco' internal review and audit of the Mineral Resource Estimate consisted of data analysis and geological interpretation of over 210 individual cross-sections, comparing drill-hole data with the resource estimate block model. 					
		 Good correlation of geological and grade boundaries were observed, however some loss of resolution is observed when high-grade results are present, due to the apparent smoothing of these results into surrounding blocks. 					
		COMPARISON WITH PREVIOUS ESTIMATES					
		 On 3 May 2006 Australian Mining Investments Ltd, the former name of CuDeco, reported to the ASX an Indicated and Inferred Mineral Resource of 5.2Mt @ 0.77% Cu for the Rocklands and Double Oxide deposits. 					
		 On 29 June 2006 Australian Mining Investments Ltd reported to the ASX an Inferred Mineral Resource of 59Mt @ 2.04% Cu equivalent for Las Minerale. 					
		 On 13 July 2006 CuDeco reported to the ASX an amended Inferred Mineral Resource of 25Mt @ 2% Cu equivalent for Las Minerale consisting of 1.6% Cu, 820 ppm Co and 0.2 g/t Au. The remainder of the initial 59 Mt resource was re-classified as Exploration Results consisting of an exploration target of 34 Mt. 					
		The methodology for the 25 Mt resource estimate, as reported to the ASX on 13 July 2006, appears to be a manual polygonal technique based on a geometry of 600m (strike) by 45m (true width) by 250m (depth) by 3.7 (density) resulting in 25 Mt. The grade estimate is described as based on assay results for 21 Reverse Circulation (RC) drill holes and visual estimates and interpretation of the mineralization for six unassayed RC holes.					
		 Weighted average grades were used to derive the quoted resource grade with metal prices of US\$3.15/lb (Cu); US\$500/oz (Au) and US\$15/lb (Co) used to calculate the copper equivalent (no metallurgical recoveries appear to have been used). 					
		 In August 2010 CuDeco reported a resource estimated by Hellman and Schofield using a block model approach, broad domains based on a CuCoAu equivalent cut-off and estimation with Multi Indicator Kriging. The new estimates by H&S were expected to reasonably model grades and tonnages realized in a mining operation. 					
		CuDeco had completed approximately 260,000 metres of drilling across the Rocklands tenement since the July, 2006 resource statement, with a major proportion of this being close-space drilling to support this resource update. The Resource has been well drilled on sections approximately 25-50 metres apart, in some cases down to 12.5 metres apart, over a strike length of approximately 4km for the major orebodies.					
		 The models for the Rocklands project used blocks with dimensions of 25 x 5x 20m for the steeper dipping zones and blocks of 25 x 10 x 10m for the moderately dipping zones. 					
		 Copper estimation by Multi Indicator Kriging (MIK) using 5 x 2.5 x 5m SMU, while Co, Au and DTR estimated by OK. No cutting of grades. Initial search radii 25 x 25m in plane of mineralisation and around 10m (8 – 12.5m) across strike, second pass radii doubled and third pass 4x in plane of mineralisation but around 20-25m across strike. DTR estimates are regarded as Inferred. 					
		 CuCoAu equivalent grades were based on metal prices and 					



Criteria	JORC Code explanation	Commentary									
		metallurgical recoveries provided by CuDeco and refer to recovered equivalents:Cu 95% recovery US\$2.00 per Pound									
		Co 85% recovery US\$26.00 per Pound									
		Au 75% recovery US\$900.00 per Ounce									
		 The recovered copper equivalent formula was 									
		EqCu = %Cu x 0.95 + ppmCo x 0.001163 + ppmAu x 0.5181									
		The quoted resource estimates for 2011 were as follows Rocklands Measured Resource									
		Cu Eq Cutoff M t Cu % Au g/t Co (ppm) Kt Cu Koz Au t Co									
		0.15	69	0.34	0.06	228	230	140	15,690		
		0.25	51	0.44	0.08	271	220	130	13,700		
		0.8	20	0.88	0.14	415	180	90	8,460		
		Rocklands Indica	ted Resc	ource							
		Cu Eq Cutoff (%)	M t	Cu %	Au g/t	Co (ppm)	Kt Cu	Koz Au	t Co		
		0.15	82	0.17	0.03	152	140	90	12,460		
		0.25	51	0.25	0.05	178	120	80	8,990		
		0.8	11	0.67	0.08	230	70	30	2,420		
		Rocklands Measu	red and	Indicated	Resourc	e					
		Cu Eq Cutoff (%)	M t	Cu %	Au g/t	Co (ppm)	Kt Cu	Koz Au	t Co		
		0.15	151	0.25	0.05	186	370	230	28,150		
		0.25	101	0.34	0.06	224	350	210	22,690		
		0.8	31	0.81	0.12	352	250	120	10,890		
		Rocklands Inferre	ed Resou	irce							
		Cu Eq Cutoff (%)	M t	Cu %	Au g/t	Co (ppm)	Kt Cu	Koz Au	t Co		
		0.15	94	0.14	0.03	163	130	100	15,300		
		0.25	56	0.21	0.05	195	120	80	10,960		
		0.8	10	0.63	0.09	275	60	30	2,690		
		Rocklands Measu	ıred, Indi	cated an	d Inferred	r					
		Cu Eq Cutoff (%)	M t	Cu %	Au g/t	Co (ppm)	Kt Cu	Koz Au	t Co		
		0.15	245	0.21	0.04	177	510	340	43,480		
		0.25	157	0.3	0.06	214	470	290	33,660		
		0.8	41	0.77	0.11	333	310	150	13,580		
		 The densities of range from 2. type. In May 2011 C by Mining Asso 	.38 to uDeco	approxir release	nately 3 d an upo	3.0 deper	nding or	n miner	alisation		



Criteria	JORC Code ex	planation		Comn	nenta	ſy							
Cut-off Tonnes									ay 2011 at various cut-off grades Copper Equivalents Contained Me			s etal Equivalent	
CuCoAu*				Cu Co Au Mag			CuCoAu*	CuEq*	Cu	CuCoAu*	CuEq*		
%			Mt	%	ppm	ppm	%	%	%	Mlb	Mlb	Mlb	
	0.20	272.9	0.18	233	0.09	2.98	0.51	0.62	1,064	3,070	3,704		
	0.40	118.5	0.36	321	0.11	2.70	0.81	0.90	935	2,112	2,361		
		0.80	31.4	0.94	465	0.19	2.29	1.61	1.69	646	1,109	1,165	
Discussion of relative accuracy/ confidence	 Where appropriate according appropriate or propriate by approach or propriate by approach or propriate by appropriate by application of stageostatistical proquantify the relative resource with approach is not appropriate, a confidence limit approach is not appropriate, a confidence limit approach is not appropriate, a confidence limit approach is not appropriate, a confidence in the statement is whether it relate estimates, and, relevant to the economic evalut. Documentation assumptions maprocedures use These statement accuracy and cestimate should affect the economic evalut. Documentation assumptions maprocedures use These statement accuracy and cestimate should affect the estimate should be relevant to the economic evalut. Documentation assumptions maprocedures use 	uracy and I in the Mine ate using ar ocedure dee the Compete ample, the tatistical or to cedures to to cedures to thin stated is, or, if such deemed ualitative e factors that relative acc of the estimative should speci- es to global of ti local, stat es, which should inclu- ade and the d. ths of relative onfidence of I be compare	eral n med ent cy of n an at uracy nate. ify or local e the nould l ide e the f the e d with	 both statii in th cate The is re Infer para cons Usin reso into Reso mod dens The reco 	confistical a me allo gories. "undor estricte red ro- meters siderab g the urce ta consid purces el with sity. Th depos nciliati	dence inalysis cation mained d by t esources. It ly. slope akes th eration estima varia e mod it is no on to	in ge s. The of th d' mate he cu e wa is ex of reg ne qua n. ates h ble bl el is su ot yet i the re	source class eological ca level of acc e measure erial, both c rrent level s constrai pected tha ression as lity and her ave been n ock sizes uitable for te n productio source esti re resource	ontinuity curacy ar d, indica opper ar of drilling ned by at furthe a guide nee accu made on which re echnical a n. A grace mates, is	(domai and risk is ited and and magn g. Repo use of use of to class racy of a local flect the and econ de contri s currer	n wirefram s therefore d inferred netite miner- orting of th of tight ex- will extension sification of the block ex- basis using e informing nomic evalu- ol system,	es) and reflected resource alisation, is as an stimation end this f mineral estimates g a block sample uation. including	

1.4 SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVES

No reserves are reported