

## Supplementary information

### SALIENT TERMS OF THE METOREX SHARE INCENTIVE SCHEME, AS AMENDED ("THE SCHEME")

The object and purpose of the scheme is to attract and retain employees and to provide offerees with a performance-based incentive.

The aggregate number of shares which may be utilised for the scheme is limited to 55 782 255 (fifty-five million, seven hundred and eighty-two thousand, two hundred and fifty-five) ordinary shares of Metorex Limited ("the Company"), equivalent to 7,5 per cent of the current issued shares of the Company. Shares which are the subject of an expired or terminated instrument are not taken into account in determining the aggregate number of shares.

The aggregate number of shares which any one offeree may acquire in terms of the scheme shall not exceed in the aggregate 7 437 634 (seven million, four hundred and thirty-seven thousand, six hundred and thirty-four) ordinary shares of the Company, equivalent to one per cent of the current issued shares of the Company.

Options or share appreciation rights ("SARs") may be offered to employees of the Company (which includes anyone employed on a full-time basis by the Company or any of its subsidiaries). The criteria for awards shall be aligned with the strategic requirements of the Company and shall incorporate the objective of incentivising offerees for good performance and promoting the continued growth of the Company.

The option price of an option and the grant price of a SAR is the volume weighted average price of a share of the Company on the JSE on the last trading day preceding the grant date of the option or SAR. The exercise price of a SAR is the volume weighted average price of a share of the Company on the JSE on the last trading day preceding the exercise date of the SAR.

The options are pure vanilla options. Upon the exercise of SARs, an offeree shall be entitled to subscribe for a number of shares of the Company calculated as follows:

$$\text{SAR exercise price} - \text{SAR grant price} \times \text{number of SARs exercised} = \text{TV}$$

$$\text{TV/SAR exercise price} = \text{N}$$

Where:

TV is the total value attributable to the exercise by the offeree of SARs and;

N is the number of shares to be issued by the Company to the offeree, rounded down to the nearest share.

Options and SARs granted are irrevocable and their exercise requires the written approval of the Board of directors ("the Board") in its absolute discretion. Options and SARs shall lapse if not exercised within seven years of their grant, provided that such date may be extended to take account of closed periods.

Options and SARs may be exercised as follows:

- up to 50% (fifty per cent) of the instruments after the third anniversary of the grant date;
- up to 100% (one hundred per cent) of the instruments after the fourth anniversary of the grant date.

If any employee ceases to be employed by reason of death, retrenchment, illness, serious incapacity, serious disability, or by reason of him/her ceasing to be an employee as a result of his employer ceasing to be a member of the Metorex Group, such employee shall be entitled to exercise in full any option or SAR (whether vested or unvested), provided that such exercise must take place within 365 days after the termination of employment.

If any employee ceases to be employed by reason of his retirement, including early retirement, such employee shall be entitled to exercise in full any option or SAR which has vested as at the date of his retirement provided that such exercise must take place within 365 days after the termination of employment.

If any employee ceases to be employed by reason of resignation or dismissal or any other reason not specified above then, and in such event, any unexercised option or SAR (whether vested or unvested) at the date of termination of employment, shall lapse with effect from the date of such termination.

The scheme may be amended from time to time by resolution of the Board, provided that no such amendment shall operate adversely to alter the terms and conditions under which any scheme shares are held prior thereto and provided further that no amendment to the scheme may be made without prior approval of the JSE if so required in terms of the listings requirements of the JSE.

No amendment in respect of the following matters shall operate unless such amendment has been approved by 75 per cent of the Company's shareholders, present in person or represented by proxy in general meeting:

- the determination of the offerees;
- the aggregate number of shares which may be utilised for the scheme;
- the aggregate number of shares which any one offeree may acquire in terms of the scheme;
- the determination of the option price or SAR grant price;
- the determination of the period in which payment of the option price, or SAR grant price has to be made by the offeree;
- the voting, dividend, transfer and other rights (including those arising on liquidation of the Company) attaching the scheme shares;
- the basis upon which an award of options or SARs has to be made;
- the treatment of options or SARs in the instance of mergers, takeovers or corporate actions; and
- the rights of offerees who leave the employment of the Company.

## Supplementary information continued

### INTERESTS IN SUBSIDIARIES, JOINT VENTURES, ASSOCIATES AND INVESTMENTS

Metorex Limited ("the Company") acts as a holding company for the Group. All mining operations are conducted by companies which are members of the Group. The Company holds beneficial interests in its subsidiaries at 30 June 2009 are as follows:

Subsidiaries	Place of incorporation	Percentage of ownership and voting power held	Principal commodity
Ruashi Holdings (Pty) Limited <sup>(1)</sup>	South Africa	100%	Copper, cobalt
Chibuluma Mines plc	Zambia	85%	Copper
Copper Resources Corporation <sup>(2)</sup>	British Virgin Islands	87%	Copper
Sable Zinc Kabwe Limited	Zambia	100%	Copper, cobalt
Vergenoeg Mining Company (Pty) Limited <sup>(4)</sup>	South Africa	70%	Fluorspar
Consolidated Murchison Division	South Africa	100%	Gold, antimony
Pan African Resources plc <sup>(3)</sup>	UK	53%	Gold
O'Okiep Copper Company (Pty) Limited	South Africa	100%	Dormant
Maranda Mines (Pty) Limited	South Africa	100%	Dormant

1. Ruashi Holdings has a 75 per cent (2008: 80 per cent) interest in Ruashi Mining sprl which is incorporated in the DRC.

2. Copper Resources Corporation (CRC) owns a 77 per cent interest in Minière de Musoshi et Kinsenda sarl (MMK) which holds the Kinsenda and Lubembe copper deposits in the Democratic Republic of the Congo (DRC).

3. With effect 1 July 2009, Metorex disposed of its entire shareholding in Pan African Resources plc. Consequently, this asset no longer form part of the Metorex Group.

4. Vergenoeg became empowered on 27 July 2009 through the sale of 15 per cent to Medu Capital. Consequently, the Company's interest in this asset reduced to 55 per cent.

### LEGAL ENTITLEMENT TO MINERALS

The Company conducts its mining operations and exploration activities in terms of approved permits and licences that have been issued and registered according to the regulatory requirements of the various countries in which these are conducted. The details of the permits and licences are set out below:

Mine or prospect	Farm name	Type of title	Hectares
<i>Ruashi Mining sprl</i>			
	Ruashi PE 578	Permis de Exploitation	900
	Musonoi Est PE 4958	Permis de Exploitation	2 000
	Sokoroshe I PE 523	Permis de Exploitation	
	Sokoroshe II PE 528	Permis de Exploitation	
<i>Chibuluma Mines plc</i>			
	LML23	Large-scale mining licence	4 440
	LML24	Large-scale mining licence	960
<i>Minière de Musoshi et Kinsenda sarl<sup>(1)</sup></i>			
	Kinsenda PE 101	Permis de Exploitation	5 012
	Lubembe PE 330	Permis de Exploitation	2 378
Prospecting	Kinsenda PR 4724	Permis de Reserche	13 168
<i>Sable Zinc Kabwe Limited</i>			
	SML1	Large-scale mining licence	80
<i>Consolidated Murchison Division</i>			
	Farrell 781LT	Old order mining rights <sup>(2)</sup>	663
	Josephine 777LT	Old order mining rights <sup>(2)</sup>	792
	Claimland 780LT	Old order mining rights <sup>(2)</sup>	502
	Begin 765LT	Old order mining rights <sup>(2)</sup>	840
Prospecting		Converted prospecting rights 29/06/2007 – 2010	9 454
<i>Vergenoeg Mining Company (Pty) Limited</i>			
	Kromdraai 209JR	Old order mining rights <sup>(2)</sup>	393
<i>O'Okiep Copper Company (Pty) Limited</i>			
	Melkboschkuil 132	Old order mining rights	
	Nigramoep 136	Old order mining rights	
	Nababeep 134	Old order mining rights	
	Brakkefontein 133	Old order mining rights	
	Plaatjiesfontein 135	Old order mining rights	
	Steinkopf Rural Area	Old order mining rights	

1. Following the review of mining titles by the DRC Ministry of Mines in 2008, it was agreed that all mining and prospecting licences associated with the Musoshi deposit would be returned to Sodimico (the state mining company holding 23 per cent of the MMK assets).

2. In terms of the Minerals and Petroleum Resources Development Act (MPRDA), Consolidated Murchison and Vergenoeg are required to submit applications to convert these old order mining rights to new order mining rights. Vergenoeg submitted a conversion application on 24 April 2009. Consolidated Murchison has yet to attain an acceptable level of empowerment.

## MINING OPERATIONS, MINERAL RESOURCES AND ORE RESERVES

### RUASHI HOLDINGS (PTY) LIMITED

The Ruashi mine is an opencast oxide copper and cobalt mine situated in the Democratic Republic of the Congo (DRC) on the outskirts of Lubumbashi which is the capital of Katanga Province.

The Ruashi mine consists of three open pitable deposits. These deposits occur along strike of each other over a combined strike length of 2,000m, and are separated by cross-cutting faults and breccias zones.

#### Historical and Recent Exploration Activities

The Ruashi deposits were discovered by Union Minière in 1919 and have been intensively evaluated by drilling over the years. Drilling has been conducted on sections spaced at 50m intervals along strike and drill hole intervals along section of between 25m and 50m. Historical drilling activities at Ruashi prior to Metorex's involvement amounted to 1,047 holes over a total of 76,548m of which a total of 914 holes were captured into the Ruashi geological database from Gécamines geological logs at the time of the 2003 Phase I feasibility study.

Metorex completed a drilling campaign at Ruashi shortly after being granted a Permis d'Exploitation (PE578) in 2003. The Company carried out a verification drilling programme during F2006 consisting of 6 665m of drilling across the three orebodies, of which 5,088m (69 holes) were by reverse circulation (RC) and 1,577m (15 holes) diamond drilling. This programme was carried out to verify and infill the existing Gécamines' drilling where possible and to provide core for assays, lithological identification, Quality Assurance and Quality Control (QAQC) and density determinations for the Phase II feasibility study.

During the course of F2009, Ruashi Mining completed two drilling campaigns between January and June 2009. 1,651m (48 holes) of RC drilling was completed in the Ruashi 1 open pit with a further 5,229m (52 holes) of diamond drilling completed across all three orebodies. Since discovery in 1919, 1,269 drill holes have been completed on the Ruashi property for a total of 94,589m.

In addition to activities at Ruashi, the Company has been involved in exploration activities on the Sokoroshi I (PE523) and Sokoroshe II (PE538) deposits as well as the Dilala East Project, located on the Musonoi Est Permis d'Exploitation (a portion of PE 4958) close to Kolwezi. These permits form part of the licences granted to Ruashi Mining sprl in 2003.

Exploration commenced on the Dilala East Project in 2006, and to date, 44 diamond drillholes have been drilled for a total drilled length of 9,221m. Steeply dipping mineralisation has been identified over a strike length of 600m and to a maximum depth of 400m below surface. Drilling activities were stopped in December 2008 but will recommence in F2010 to extend the orebody at depth.

#### Geological setting and geological model

The copper and cobalt deposits of Ruashi occur in the Proterozoic Katangan Supergroup rocks of the Congolese Copperbelt and are hosted in a succession of siltstones, sandy dolomites and shales associated with dislocated thrust sheets and 'rafts' within the northwest trending Lufilian Thrust Belt.

The Ruashi deposits form part of a recumbent synclinal fold trending northwest with flanks comprising Kundulungu Group (Upper Katangan) sediments and a core of Mines Group sediments, which is the Lower Roan Formation equivalent in Zambia. Three orebodies have been recognised, namely Ruashi 1, 2 and 3 with respective strike lengths of 800m, 200m and 450m.

The primary copper and cobalt sulphide mineralisation is stratiform. The orientation of these horizons has been affected by folding and their orientation in the orebody varies from horizontal through vertical to overturned. Supergene enrichment of copper and cobalt resulted in an irregular blanket of oxide ore to a depth of 50m to 70m overlying the steeply dipping sulphide ore and extending laterally beyond the sulphide bodies from 20m to 100m. The main oxide minerals are malachite, chrysocolla and heterogenite.

The supergene cap, which was previously mined by Union Minière and Gécamines consists of malachite and heterogenite in massive saprolite or in fracture controlled mineralisation along joint planes, fracture cleavages and shear fractures. Mixed oxide-sulphide mineralisation occurs at the transition zone extending into the sulphides at depth over a thickness of 10m to 20m. The sulphide mineralisation comprises chalcopyrite, bornite, carrollite and pyrite.

The Dilala East orebody in Kolwezi occurs along strike from, and is similar to, the Kamoto underground orebody. The orebody occurs on the eastern end of the Dilala Syncline and is a blind deposit with mineralisation starting at between 50 and 100m below surface. It consists of a lower and an upper copper rich zone separated by a copper poor, cobalt rich zone. The full mineralised package is approximately 60m in width and is open ended at depth. A feasibility study is in progress to complete the geological resource model, mining and metallurgical treatment options and capital forecasts for the Dilala East Project.

## Supplementary information continued

### Type of mining, mining activities

The Ruashi mine comprised an old open pit originally mined by Union Minière starting in the early 1920s and later by Gécamines up to the early 1980s. Approximately 5,5 Mt was mined at a grade of 7,9 per cent Cu.

Metorex has been involved since 2003 with a first phase of copper and cobalt production being derived from old stockpiles previously not treated by Gécamines. The old stockpiles and tailings were reclaimed in Phase I using a load and haul contractor, and treatment through an oxide flotation circuit to recover a low grade copper/cobalt concentrate.

The Phase II solvent extraction, electro winning (SX-EW) plant is now substantially complete. The Ruashi 1 and 2 orebodies have been opened up and oxide copper and cobalt ore production is being ramped up to feed the new SX-EW plant at a rate of 120 ktpm. Pre-stripping on the Ruashi 3 orebody is targeted to commence in F2010. Mining is by a conventional drill, blast, load and haul operation.

### Production figures

Production figures for Ruashi for 2009 in comparison to 2008 are as follows:

Description	Units	2008	2009
<i>Phase 1 (Concentrator)</i>			
Tons milled	(t)	601 505	<b>238 447</b>
Head grade			
Copper	(%)	3,2	<b>3,05</b>
Cobalt	(%)	0,4	<b>0,47</b>
Metal recovery			
Copper	(%)	57	<b>43</b>
Cobalt	(%)	23	<b>24</b>
Concentrate produced	(t)	65 481	<b>24 640</b>
Concentrate grade			
Copper	(%)	17,10	<b>13,59</b>
Cobalt	(%)	1,95	<b>1,27</b>
<i>Phase 2 (SX/EW Plant)</i>			
Tons milled	(t)	–	<b>485 360</b>
Head grade			
Copper	(%)	–	<b>2,8</b>
Cobalt	(%)	–	<b>0,54</b>
Metal recovery			
Copper	(%)	–	<b>76</b>
Cobalt	(%)	–	<b>27</b>
Cu Cathode produced – Standard grade	(t)	–	<b>1 448</b>
Cu Cathode produced – LME grade	(t)	–	<b>8 931</b>
Co Metal produced in Carbonate	(t)	–	<b>720</b>

### Methods and key assumptions in estimation and classification of Mineral Resources and Ore Reserves

Reconciliation of open pit mining actuals to the 2007 resource model during F2009 highlighted limitations in the model. Recent re-interpretation based on the 2009 drilling campaign results and in-pit mapping has resulted in a dramatically improved structural and lithological interpretation with the orebody being further sub-divided into oxide and sulphide zones based on the observed degree of weathering in the drillholes. A hard boundary approach has been applied to oxide and sulphide zones of the same lithological unit to more accurately reflect the statistical difference in grades between the weathered and unweathered units.

The 2009 model geostatistical estimation was carried out by IGS (Pty) Limited using ordinary kriging and has interpolated grades into discrete geological (lithological and structural) domains based on geostatistical estimation parameters matched to each domain.

The 2009 Ruashi orebody model has been classified into SAMREC compliant resource categories on a subjective basis by the Competent Person, with the majority of the drill hole data spaced close enough to categorise the resource as either indicated or measured. A high geological confidence exists in the location and continuity of the lower orebody strataform units. These units have been categorised as measured in the Ruashi 1 and 2 pits where current mining activity has confirmed the continuity and grade of the units. Further drillings will be required to upgrade these units to measured in the Ruashi 3 orebody.

With the exception of the Calcaire a Minerais Noirs zone (CMN), all other lithological units have been classified as Indicated. The CMN zone occurs in the stratigraphic hangingwall of the orebody and is dominated by wad mineralisation (weathered and altered dolomite). It has proved to be more lenticular in nature with a vertical structural and surface weathering control. In the opinion of the Competent Person, this zone has a low geological confidence based on the current drilling grid and has consequently been downgraded to an Inferred category. Additional drilling will be required to upgrade the CMN zone into the indicated or measured during the next year.

A revised Ruashi LOM reserve pit shell for the 2009 model has been completed by VBKOM Consulting Engineers (Pty) Limited using the Whittle 4X pit optimisation software. A mining cost of US\$4.1/t mined and a processing cost of US\$72.7/t processed has been used based on F2010 steady state budget prices and the completion of the acid plant. A final pit design and schedule is being generated using an optimal NPV Whittle shell based on a long-term copper and cobalt price of US\$5,000/t copper and US\$15/lb co-respectively.

#### Inclusion of Inferred Resources

Inferred Resources are not included in the life of mine (LOM) plan and production schedule for Ruashi. Consequently, there has been a 22 per cent reduction in LOM reserves from that reported in June 2008.

#### Material risk factors that could impact on the Mineral Resource and Ore Reserve Statement

The possibility of an amendment to the Ruashi resource model was flagged in the 2008 annual report as a risk based on new information from mining activities, ore reconciliations and further enhancements to the geological interpretation.

Remodelling of the orebody in F2009 based on hard lithological, structural and ore type boundaries has significantly de-risked the resource estimate and has highlighted areas that need additional drilling. Open pit Whittle optimisation using revised F2010 budget costs derived from steady state on-mine and off-mine costs will further de-risk the LOM plan and reserve.

Changes in the copper price could impact on the cut-off grade used to define the Mineral Resources and Mineral Reserves which in turn would affect the LOM.

#### Legal proceedings or other material conditions that may impact on mining or exploration activities

The DRC mining licence review process with regard to Ruashi Mining sprl is now complete. Metorex has been informed by Gécamines that the review process with regards to Ruashi has been concluded and no further amendments are likely.

Ruashi Holdings (previously an 80 per cent shareholder in Ruashi Mining sprl) conceded a five per cent interest in Ruashi Mining sprl to Gécamines resulting in a revised shareholding of 75 per cent held by Ruashi Holdings (Pty) Limited and 25 per cent held by Gécamines.

In addition to the change in shareholding, a Pas de Porte of US\$4 million is payable to Gécamines on deferred terms and the royalty calculation payable to Gécamines was increased from 0,5 per cent to 2,5 per cent on gross revenue from sales of product.

#### Ruashi – Mineral Resources

Oxides	Tons (Mt)		Cu Grade (%)		Copper ('000t)		Co Grade (%)		Cobalt ('000t)	
Classification	F2008	F2009	F2008	F2009	F2008	F2009	F2008	F2009	F2008	F2009
Oxides										
Measured	–	1,0	–	6,7	–	70	–	0,29	–	3
Indicated	44,8	19,6	2,8	2,8	1 254	553	0,24	0,35	107	68
Inferred	–	8,6	–	2,2	–	186	–	0,13	–	11
Total oxides	44,8	29,2	2,8	2,8	1 254	809	0,24	0,28	107	83
Surface oxide stockpiles										
Measured	–	–	–	–	–	–	–	–	–	–
Indicated	–	0,3	–	2,5	–	7	–	–	–	–
Inferred	–	–	–	–	–	–	–	–	–	–
Total surface stockpiles	–	0,3	–	2,5	–	7	–	–	–	–
<b>Oxide total</b>	<b>44,8</b>	<b>29,5</b>	<b>2,8</b>	<b>2,8</b>	<b>1 254</b>	<b>817</b>	<b>0,24</b>	<b>0,28</b>	<b>107</b>	<b>83</b>

Supplementary information continued

<b>Sulphides</b>	Tons (Mt)		Cu Grade (%)		Copper ('000t)		Co Grade (%)		Cobalt ('000t)	
<b>Classification</b>	F2008	<b>F2009</b>	F2008	<b>F2009</b>	F2008	<b>F2009</b>	F2008	<b>F2009</b>	F2008	<b>F2009</b>
Sulphides										
Inferred	-	<b>7,9</b>	-	<b>3,1</b>	-	<b>248</b>	-	<b>0,26</b>	-	<b>21</b>
Total sulphides	-	<b>7,9</b>	-	<b>3,1</b>	-	<b>248</b>	-	<b>0,26</b>	-	<b>21</b>
Surface sulphide stockpiles										
Measured	-	-	-	-	-	-	-	-	-	-
Indicated	-	-	-	-	-	-	-	-	-	-
Inferred	-	-	-	-	-	-	-	-	-	-
Total surface stockpiles	-	-	-	-	-	-	-	-	-	-
<b>Sulphide total</b>	-	<b>7,9</b>	-	<b>3,1</b>	-	<b>248</b>	-	<b>0,26</b>	-	<b>21</b>

<b>Oxides + Sulphides</b>	Tons (Mt)		Cu Grade (%)		Copper ('000t)		Co Grade (%)		Cobalt ('000t)	
<b>Classification</b>	F2008	<b>F2009</b>	F2008	<b>F2009</b>	F2008	<b>F2009</b>	F2008	<b>F2009</b>	F2008	<b>F2009</b>
Oxides + sulphides										
Measured	-	<b>1,0</b>	-	<b>6,7</b>	-	<b>70</b>	-	<b>0,29</b>	-	<b>3</b>
Indicated	44,8	<b>19,6</b>	2,8	<b>2,8</b>	1 254	<b>553</b>	0,24	<b>0,35</b>	107	<b>68</b>
Inferred	-	<b>16,6</b>	-	<b>2,6</b>	-	<b>434</b>	-	<b>0,19</b>	-	<b>32</b>
Total oxides + sulphides	44,8	<b>37,2</b>	2,8	<b>2,8</b>	1 254	<b>1 057</b>	0,24	<b>0,28</b>	107	<b>103</b>
Surface stockpiles										
Measured	-	-	-	-	-	-	-	-	-	-
Indicated	-	<b>0,3</b>	-	<b>2,5</b>	-	<b>7</b>	-	-	-	-
Inferred	-	-	-	-	-	-	-	-	-	-
Total surface stockpiles	-	-	-	-	-	-	-	-	-	-
<b>Grand total</b>	44,8	<b>37,5</b>	2,8	<b>2,8</b>	1 254	<b>1 065</b>	0,24	<b>0,28</b>	107	<b>103</b>

**Ruashi – Ore Reserves**

<b>Oxides</b>	Tons (Mt)		Cu Grade (%)		Copper ('000t)		Co Grade (%)		Cobalt ('000t)	
<b>Classification</b>	F2008	<b>F2009</b>	F2008	<b>F2009</b>	F2008	<b>F2009</b>	F2008	<b>F2009</b>	F2008	<b>F2009</b>
Oxides										
Proved										
Probable	18,5	<b>15,1</b>	3,7	<b>3,2</b>	686	<b>483</b>	0,36	<b>0,39</b>	67	<b>59</b>
Total oxides	18,5	<b>15,1</b>	3,7	<b>3,2</b>	686	<b>483</b>	0,36	<b>0,39</b>	67	<b>59</b>
Surface stockpiles										
Proved										
Probable	-	<b>0,3</b>	-	<b>2,5</b>	-	<b>7</b>	-	-	-	-
Total surface stockpiles	-	<b>0,3</b>	-	<b>2,5</b>	-	<b>7</b>	-	-	-	-
<b>Oxide total</b>	18,5	<b>15,4</b>	3,7	<b>3,2</b>	686	<b>491</b>	0,36	<b>0,39</b>	67	<b>59</b>

## CHIBULUMA MINES PLC

### Location

The Chibuluma South mine is part of the Chibuluma mines complex situated near the Zambian town of Kalulushi, approximately 12km west of Kitwe. Kitwe is the second largest town on the Zambian Copperbelt and is approximately 300km north of the capital city, Lusaka.

### Historical and Recent Exploration Activities

The Chibuluma South orebody was discovered in 1969 by Roan Selection Trust (RST). A total of 113 diamond drill holes were drilled in the area, of which 77 drill holes intersected the Chibuluma South orebody. Orebody intersections were spaced between 75 and 150m apart. Metorex drilled three twin holes in 1999 and verified the thickness and grade of the orebody as defined by the historical drilling.

A feasibility study for Chibuluma was completed by Metorex in May 2000. The oxide zone down to 60m below surface was mined in an open pit and treated through a differential flotation and oxide leach plant. The open pit was stopped in 2001 due to poor leach recoveries and operations focused on opening up the underground reserve.

### Geological setting and geological model

Mineralisation in the copper mines of the Zambian Copperbelt is predominantly stratabound and confined to the Lower Roan Group of the Katanga stratigraphic succession. The Katangan Supergroup consists of Proterozoic age siliclastic, greywacke and carbonate sediments deposited in an extensional rift basin environment that has subsequently been subjected to Pan African age tectonism and deformation.

Mineralisation in the Chibuluma orebody is limited to copper only and is hosted in detrital conglomerates, sandstones and argillaceous siltstones of the Lower Roan Group. The orebody occurs over a strike length of 300m, dipping at about 38° towards the north-west and varies in thickness from a few metres to over 20m in places.

### Type of mining, mining activities

Post pillar cut and fill (PPCF) mining with trackless mining equipment is used to extract the bulk of the orebody and longhole stoping is often used where the orebody is narrow. The longhole stopes are post filled along with the adjacent cut. The sulphide ore is hauled to surface via a decline ramp at a rate of 45 to 50ktpm.

Mining takes place from the bottom up, while development is from the top down. The orebody is mined in 40m vertical sections as they become available. This necessitates the leaving of sill pillars between these sections, which locks up ore. The sill pillars are partially recoverable at the end of the life of mine.

Underground development waste and classified tailings are used as backfill in the mining process to support exhausted stopes and minimise dilution from the hangingwall through adequate support of the weak hangingwall sediments.

The underground sulphide ore is treated by conventional flotation, which produces a concentrate grade of between 45 and 50 per cent copper and recoveries of 95 per cent. The concentrates are currently transported approximately 40km by road to the Chambishi Copper Smelter (CCS).

### Production figures

Total production for Chibuluma for 2009 in comparison to 2008 is as follows:

Description	Units	2008	2009
Tons milled	(t)	555 575	568 187
Head grade	(% Cu)	2,9	3,1
Overall recovery	(%)	89,6	90
Copper produced	(t)	14 583	15 940

### Methods and key assumptions in estimation and classification of Mineral Resources and Mineral Reserves

Geological block modelling of the Chibuluma orebody is carried out using Surpac. Grade envelopes are delineated on a one per cent copper assay grade and wireframed to produce a 3-dimensional solid model. Lithological contacts are modelled as surfaces. Grade is interpolated into the blocks using ordinary kriging. A Surpac model was completed by IGS (Pty) Limited (IGS) in 2007 utilising updated surface and underground drill hole data. This model was further updated in F2009 using all new data and depleted on a cut by cut basis using a 3-dimensional mining excavation volume model.

The resource is classified as a measured or indicated Resource based on drillhole spacing. A block is considered measured if there are three or more drill holes within a 50m radius of the block and indicated if there are more than three drill holes between 50 and 150m. In general, infill drilling is carried out from the ramp decline and currently all levels above the 411mℓ are considered measured.

## Supplementary information continued

The modifying factors applied to convert the Mineral Resources to Ore Reserves in the upper levels takes into account a waste parting, which is identified in the boreholes and modelled accordingly. Current mining has largely mined the waste parting zone, and little or no internal waste is anticipated in the lower levels. The modifying factors for the conversion of the Resources to Reserves have consequently been modified to reflect the lower dilution expected in the lower levels of the mine.

### Inclusion of Inferred Resources

Inferred Resources are not included in the LOM plan and production schedule.

### Material risk factors that could impact on the Mineral Resource and Reserve Statement

The method of stope support was considered adequate at shallow mining depths, and was substantially revamped in December 2008 following a number of hangingwall failures on the 298 and 309m levels. On advice from African Mining Consultants in Kitwe, the mining echelon and timing of backfill support has been scheduled such that the risk of stope failure due to geotechnical reasons will be contained and kept to a minimum.

Changes in the copper price could impact on the cut-off grade used to define the Mineral Resources and Mineral Reserves which in turn would affect the LOM.

### Legal proceedings or other material conditions that may impact on mining or exploration activities

The Company is not aware of any material conditions that may affect the mining activities at Chibuluma.

### Chibuluma South – Mineral Resources

Classification	Tons (Mt)		Cu Grade (%)		Copper (000t)	
	F2008	F2009	F2008	F2009	F2008	F2009
Chibuluma South – Underground						
Measured	0,9	2,4	3,5	3,3	32	80
Indicated	4,3	2,1	4,0	4,8	172	99
Total underground	5,2	4,5	3,9	4,0	204	180
Resources in buttress pillars						
Indicated	0,7	0,7	4,0	4,0	30	30
Total pillars	0,7	0,7	4,0	4,0	30	30
Chifupu prospect						
Inferred	1,9	1,9	3,1	3,1	59	59
Total prospects	1,9	1,9	3,1	3,1	59	59
<b>Total underground and prospects</b>	<b>7,9</b>	<b>7,2</b>	<b>3,7</b>	<b>3,7</b>	<b>293</b>	<b>268</b>

### Chibuluma South – Ore Reserves

Classification	Tons (Mt)		Cu Grade (%)		Copper (000t)	
	F2008	F2009	F2008	F2009	F2008	F2009
Chibuluma South – Underground						
Proved	0,8	2,1	3,0	2,9	24	61
Probable	3,7	1,8	3,4	4,1	127	73
Total underground	4,5	3,9	3,4	3,4	150	135
Reserves in buttress pillars						
Probable	0,3	0,3	2,7	3,0	7	8
Total pillars	0,3	0,3	2,7	3,0	7	8
<b>Total underground</b>	<b>4,7</b>	<b>4,2</b>	<b>3,3</b>	<b>3,4</b>	<b>158</b>	<b>143</b>

## COPPER RESOURCES CORPORATION PLC

### Miniere de Musoshi et Kinsenda sarl (MMK)

The Kinsenda mine together with the Lubembe prospect is owned by Copper Resources Corporation through Minière de Musoshi et Kinsenda sarl (MMK). Both are located within a 50km radius of Kasumbalesa, a main border town into the DRC from Zambia. The border is located approximately 75km northwest of Kitwe in Zambia, and 130km southeast of Lubumbashi in the DRC.

The Kinsenda mine is located approximately 24km east of Kasumbalesa and is the focus of a re-equipping programme to bring the mine into production during 2010. Lubembe is located a further 25km south-east of Kinsenda. The Musoshi mine was returned to Sodimico during F2009 as part of the mining title revisitation process, and no longer forms part of the MMK assets.

### Historical and Recent Exploration Activities

Two hundred and three surface diamond drill holes totalling 51,000m were drilled by Sodimico and Nippon Mining on the Kinsenda orebody from the mid 1960s to early 1970s. Very little core remains from these drilling programmes. Metorex plans to complete a limited surface drilling programme to verify reserves below the 285m level and improve the confidence in the geological interpretation of the lower levels of the mine.

The Lubembe deposit is an advanced exploration prospect, with 22 holes previously drilled by Sodimico in the early 1970s. An infill drilling programme on the Lubembe deposit was funded by Metorex and commenced in June 2008 to verify old data and improve the resource confidence. In total, 7,506m of shallow reverse circulation drilling and 5,272m of diamond core drilling were completed during F2009. A SAMREC compliant resource model will be completed in F2010 before progressing to a full feasibility study.

### Geological setting and geological model

The Kinsenda and Lubembe orebodies are Zambian Copperbelt style orebodies and are geologically similar to the Chibuluma South and Mufulira mines in Zambia. Mineralisation occurs in the footwall of the Ore Shale Member.

Mineralisation in the Kinsenda orebody is limited to copper only and is hosted in detrital conglomerates, sandstones and argillaceous siltstones of the lower Roan Group and varies from 2 to 20m with an average width of 6m. The orebody occurs in three zones, namely the lower, middle and upper orezones over a strike of approximately 2,000m dipping moderately at 25 – 30°. These zones pinch and swell and in places merge to form a single zone. Kinsenda is a sulphide orebody consisting of predominantly chalcocite, bornite and chalcopyrite mineralisation. The orebody has not been subjected to significant folding and is reasonably uniform along strike and down dip. A normal fault with a throw of 50 to 100m truncates the orebody on the southern, down dip extent of the resource. The downthrown block (starting at 600m below surface) has not been extensively delineated, and presents upside potential for the Kinsenda resource.

The Lubembe deposit is analogous to Kinsenda with a strike length of 1km and an average width of 40m dipping 25 – 30°. A second zone of mineralisation has been identified approximately 1km north of the Lubembe deposit by recent drilling. This zone requires additional exploration drilling to delineate before a resource can be established. Lubembe is distinguished from Kinsenda by lower grades (1,8 to 2,2 per cent copper) and a mixed oxide/sulphide ore type consisting of predominantly chalcocite and chalcopyrite with minor malachite.

### Type of mining, mining activities

The Kinsenda mine is an old underground operation commissioned in 1977 as a joint venture between Sodimico and Nippon Mining. Ore was mined from Kinsenda and hauled 40km by truck to Musoshi where it was treated through the Musoshi concentrator. In total, 4,5 million tons was mined at Kinsenda from 1977 to 2002 with a maximum tonnage of 410,000 tons in 1984.

The operation was taken over by a Canadian company in the early 1980s, but was curtailed by 1987 due to low copper prices and limited developed reserves. Operations stopped completely with the flooding of the mine in 2002.

The infrastructure at Kinsenda comprises three inclined shafts and one vertical shaft to a depth of 285m below surface. Mine dewatering has lowered the water level to 285m below surface. Metorex has been involved in re-establishing the operation since the beginning of 2008.

The Kinsenda mine programme was curtailed in F2009 to conserve cash outflows with the project being placed on care and maintenance in January 2009. A revised feasibility study is in progress with sulphide ore production planned at a rate of between 60 and 80ktpm using the cut and fill mining method.

Lubembe is a greenfields site, and has not been previously mined.

## Supplementary information continued

### Production figures

There are no production figures for 2009 and 2008.

### Methods and key assumptions in estimation and classification of Mineral Resources and Ore Reserves

Resources reported for the Kinsenda mine are based on a model compiled by FinOre in 2006 using Datamine software as part of the feasibility study completed by Mineral Engineering Technical Services (METS) of Perth, Australia on behalf of Copper Resources Corporation. The digital database used by FinOre was generated by EGMF in 2005. The FinOre model used a two per cent Cu assay grade to delineate the orebody with assay data being composited to one metre intervals within individual orezones. No top cuts were applied.

The resource estimation used ordinary kriging to estimate both Total and Acid Soluble Copper with separate geostatistical parameters for each zone and variable. FinOre classified the resources into Measured, Indicated and Inferred using the JORC system of resource reporting.

Reserves were derived by MMK using a spreadsheet scheduling methodology. Individual mining cuts were scheduled using a top down mining philosophy and were modified using generic cut and fill mining extraction and dilution factors. The risk associated with generic nature of the reserve calculation is reflected in the mineral reserve classification.

### Inclusion of Inferred Resources

No inferred resources were included in the production plan.

### Material risk factors that could impact on the Mineral Resource and Ore Reserve Statement

The classification of resources into Measured, Indicated or Inferred by FinOre was subjective and was not elaborated on in any detail in the FinOre report. In the conversion of resources to reserves, Metorex has downgraded Measured resources to Probable rather than Proved reserves to reflect uncertainty and risk in the mining plan.

### Legal proceedings or other material conditions that may impact on mining or exploration activities

Following the 2006 general elections for the National Assembly in the DRC, the application of the regulations of the DRC relating to foreign investment and mining licensing was under review. The DRC Government initiated a review process by the Licence Review Commission in relation to all joint venture agreements entered into by private investors with state-owned companies including the contract between CRC and Sodimico, a DRC state-owned company.

The final outcome of the review process resulted in Sodimico increasing its shareholding in MMK from 20 per cent to 23 per cent. A Pas de Porte payment of US\$3 million has been agreed to on deferred terms with a royalty payment calculated at 2,5 per cent on gross proceeds from sales of product. The Musoshi mine (currently flooded to a depth of 200m below surface) and related Prospecting permits have been returned to Sodimico as part of the settlement. The CRC shareholding in MMK has now been amended to an effective 77 per cent.

It has been confirmed that the review process relating to MMK has been finalised, and no further payments or relinquishing of licences will be required.

### Miniere de Musoshi et Kinsenda sarl (MMK) – Mineral Resources

Classification	Tons (Mt)		Cu Grade (%)		Copper (000t)	
	F2008	F2009	F2008	F2009	F2008	F2009
Kinsenda Mine – Underground						
Measured	13,1	<b>13,1</b>	4,8	<b>4,8</b>	628	<b>628</b>
Indicated	4,1	<b>4,1</b>	5,8	<b>5,8</b>	235	<b>235</b>
Total underground	17,1	<b>17,1</b>	5,0	<b>5,0</b>	863	<b>863</b>
Lubembe prospect						
Inferred	47,5	<b>47,5</b>	2,2	<b>2,2</b>	1 045	<b>1 045</b>
Total prospects	47,5	<b>47,5</b>	2,2	<b>2,2</b>	1 045	<b>1 045</b>
<b>Total underground and prospects</b>	<b>64,6</b>	<b>64,6</b>	<b>3,0</b>	<b>3,0</b>	<b>1 908</b>	<b>1 908</b>

**Miniere de Musoshi et Kinsenda Sarl (MMK) – Mineral Resources**

Classification	Tons (Mt)		Cu Grade (%)		Copper (000t)	
	F2008	F2009	F2008	F2009	F2008	F2009
Kinsenda Mine – Underground						
Proved	0,6	<b>0,6</b>	5,7	<b>5,7</b>	32	<b>32</b>
Probable	10,7	<b>10,7</b>	4,9	<b>4,9</b>	522	<b>522</b>
<b>Total underground</b>	<b>11,3</b>	<b>11,3</b>	<b>4,9</b>	<b>4,9</b>	<b>554</b>	<b>554</b>

**SABLE ZINC KABWE LIMITED**

The Sable Zinc facility is located approximately 2km south of the centre of Kabwe in central Zambia, some 150km north of the capital Lusaka.

Sable Zinc is a copper and cobalt toll processing facility produced a combination of standard and A-grade copper cathode and was commissioned during May 2006.

**Exploration activities**

There is an old dump of oxidised zinc material which contains some 400kt at an average grade of 9,78 per cent zinc. In addition, there is a dump which contains 4,9Mt grading 4,47 per cent zinc. Testwork is underway to evaluate the dumps, but no results were available at the time of preparing this report.

**Geological setting and geological model**

Not applicable.

**Type of mining, mining activities**

No mining activities were carried out at Sable Zinc during F2009.

The leach, solvent extraction and electro-winning circuits previously enabled Sable to process the copper and cobalt concentrates from Ruashi Phase I.

Sable Zinc plant no longer receives oxide concentrate from Ruashi and is reliant on sourcing high-grade oxide copper feed in the open market and via traders.

**Production figures**

Production figures for Sable Zinc for 2009 in comparison to 2008 are as follows:

Description	Units	2008	2009
Tons concentrate treated	(t)	65 481	<b>32 638</b>
Concentrate grade			
Copper	(% Cu)	17,10	<b>16,81</b>
Cobalt	(% Co)	1,95	<b>0,50</b>
Metal Recovery			
Copper	(%)	96	<b>40</b>
Cobalt	(%)	44	<b>75</b>
Metal Production			
Copper	(t)	10 767	<b>4 889</b>
Cobalt	(t)	565	<b>151</b>

*Includes concentrate from Ruashi phase I and oxide concentrates purchased from third parties.*

**Methods and key assumptions in estimation and classification of Mineral Resources and Ore Reserves**

Metorex has classified the two dumps as Inferred Mineral resources due to the inherent problems associated with representative sampling and tonnage determination of dumps and the restricted sampling data.

## Supplementary information continued

### Inclusion of inferred resources

Inferred resources are not included in the current LOM plan and production schedule for Sable Zinc.

### Material risk factors that could impact on the Mineral Resource and Ore Reserve Statement

The classification of the dumps into the Inferred Resource category adequately reflects the unknowns and risks associated with the dumps.

### Legal proceedings or other material conditions that may impact on mining or exploration activities

The Company is not aware of any material conditions that may affect the mining activities at Sable Zinc.

### Sable Zinc – Mineral Resources

Classification	Tons (Mt)		ZN Grade (%)		Zinc (000t)	
	F2008	F2009	F2008	F2009	F2008	F2009
Washing plant stockpile						
Inferred	0,4	<b>0,4</b>	9,8	<b>9,8</b>	39	<b>39</b>
Total washing plant stockpile	0,4	<b>0,4</b>	9,8	<b>9,8</b>	39	<b>39</b>
Residue tailings						
Inferred	4,9	<b>4,9</b>	4,5	<b>4,5</b>	219	<b>219</b>
Total tailings	4,9	<b>4,9</b>	4,5	<b>4,5</b>	219	<b>219</b>
<b>Total stockpiles and tailings</b>	<b>5,3</b>	<b>5,3</b>	<b>4,9</b>	<b>4,9</b>	<b>258</b>	<b>258</b>

### VERGENOEG MINING COMPANY (PTY) LIMITED

The Vergenoeg mine is situated on the farm Kromdraai, approximately 70km north-east of Pretoria and 32km east of the village and rail siding of Pienaars River. The oxidised (upper) zone of the Vergenoeg deposit is exploited for fluorite (fluorspar) and the fluorspar concentrate (acid grade) is exported through Durban to clients mainly in Europe and the America's.

The Vergenoeg deposit is one of the largest fluorite resources in the world. Estimates are that it contains approximately 10 per cent of the world's resources. The mine life is estimated to be in excess of 100 years and the fluorite (CaF<sub>2</sub>) grade of the mine is in the upper quartile of world deposits.

### Exploration Activities

The orebody was evaluated in 2000 using 254 percussion drill holes spaced approximately 50m x 50m, and 58 diamond drill holes with a spacing of approximately 100m x 100m. A total of 1 160 blast holes were also used.

Drilling of 23 diamond drill holes during 2003 resulted in the delineation of a good quality orebody termed the A-orebody on the eastern contact of the volcanic pipe with the surrounding wall rock. Two holes in this programme also intersected high-grade fluorspar (metspar). Further drilling allowed for the delineation of a discrete small high-grade fluorspar plug within the main volcanic pipe. This was subsequently mined for metallurgical grade fluorspar (gravel) until the end of 2008 when the overburden: ore ratio became excessive.

From the results of 34 boreholes drilled in F2007, an extension of the A-orebody was traced southwards into the valley and eastwards under the hill and the deposit footprint was more accurately defined.

RC exploration drilling was conducted in F2008 as well as F2009. 181 boreholes totalling 9,836m targeting the upper portion of the Vergenoeg deposit. Samples were taken at 1m intervals and submitted for multiple element analyses. This new data, combined with some of the previous data is currently being used for Surpac modelling and resource estimations of the deposit.

### Geological Setting and Geological Model

Fluorite (fluorspar) mineralisation is contained within the 1,950Ma Vergenoeg volcanic pipe. Felsic rocks of the Rooiberg Group constituting the roof of the Bushveld Igneous Complex (BIC), host the discordant volcanic pipe and associated surrounding pyroclastic and sedimentary rocks of the Vergenoeg suite. The volcanic pipe and surrounding pyroclastic rocks are related to the Lebowa Granite Suite of the Bushveld Complex, which is regarded as the source of the mineralisation. The volcanic pipe is situated at the intersection of regional lineaments and is centrally located between the four lobes of the BIC.

The Vergenoeg volcanic pipe is about 900m in diameter at surface tapering down at depth where it is still open ended at a depth of approximately 600m. Fluorite is found in massive and disseminated forms throughout the pipe, but its concentration decreases with depth. To the east of the pipe is a spill area (referred to as the A-orebody) where mining currently takes place. The mineralogy of the upper portion of the pipe is dominated by iron oxides and fluorite, with increasing siderite and fayalite occurring with depth.

Recent exploration (2007 – 2009) has resulted in a significant improvement in the understanding of the internal geology of the Vergenoeg orebody. The mineable resource at Vergenoeg is highly dependent on the type and quality of material that is required by the end users.

The ore being mined can now be classified into a number of different ore types. Blending of ores from the pit and crushed ore stockpiles occur commonly. Ores that cannot be processed under current conditions are stockpiled. It is expected that metallurgical extraction methods will improve and ore types that are presently not economical to treat will be processed in the future. The installation of a high-powered magnetic separator at the end of 2008 has resulted in more than 50 per cent of the high aluminium stockpile being successfully submitted to the processing plant. This has also resulted in an increase in the reserves of the best-quality ores.

#### Type of Mining, Mining Activities

Mine planning and production scheduling is spreadsheet based with the three dimensional modelling restricted to the original block modelling and grade estimation. Vergenoeg considers it adequate to plan in a spreadsheet format, as the critical parameters are the fluorspar grade and the contaminants. Currently production planning is determined by marketing factors and no long-term pit planning is viable.

#### Production Figures

Production figures for Vergenoeg for 2009 in comparison to 2008 are as follows:

Description	Units	2008	2009
Ore milled	(t)	570 826	<b>537 589</b>
CaF <sub>2</sub> feed grade	(%)	39,9	<b>39,2</b>
Fluorspar concentrate produced (all grades)	(dmt)	180 854	<b>152 934</b>
CaF <sub>2</sub> Recovery	(%)	74,2	<b>69,8</b>

#### Methods and key assumptions in estimation and classification of Mineral Resources and Ore Reserves

A SURPAC block model was constructed in 2000 using diamond drill, percussion drill, blast hole and other available geological and survey data. Grade values were estimated into this model using the inverse distance squared method. Since then the resources have not been re-estimated, but adjusted by depleting this resource model for mining. The Reserves were, however, re-assessed in 2008 following exploration work. Reserve criteria, particularly the cut-off levels of the contaminants, were significantly changed in view of improved plant efficiency as well as the changed market contaminant specifications. Re-assessment of the resources by consultants (IGS) is underway and will be completed before the end of September 2009. Reserves will be categorised into four ore types corresponding to the salient specification requirements of the clients.

The Resources, as determined in 2000, are estimated to a depth of 360m, although mineralisation has been shown to exist to a depth of 600m. Survey data representing the surface topography of the pit, exploration drill hole collar positions and blast hole collar positions are routinely measured.

A specific gravity of 3,28 is applied to the B-orebody and a value of 3,7 has been applied to orebody A. Indicated and Inferred Resources have been estimated using a cut-off of 10 per cent CaF<sub>2</sub>. Measured Resources consists of ore on stockpiles outside the pit at a cut-off of 20 per cent CaF<sub>2</sub>. Inferred Resources consists of low grade material located at significant depths within the geological block model.

The Reserves are based on the following criteria and assumptions:

- Fluorspar concentrate (acid spar) specifications acceptable to existing customers.
- Acid spar concentrate specifications acceptable to customers not currently serviced by VMC.

This assessment also considers the installation of a recently installed SLON magnetic separator that would allow for higher flotation primary-feed aluminium levels and would reduce the iron and arsenic levels of the final concentrates.

## Supplementary information continued

In order to achieve acceptable acidspars concentrate grades, the insitu reserves need to meet the following criteria:

Parameter	Criteria
1 CaF <sub>2</sub>	>12%
2 P <sub>2</sub> O <sub>5</sub>	<2,5%
3 As	<11000ppm
4 Al <sub>2</sub> O <sub>3</sub>	≤1,5%
5 S	Less than 0,3%
6 Hydrated iron oxides	Low levels
7 Regolith or soils	Low levels
8 K and Mg	Low levels
9 Overburden	Less than 33m
10 Thickness of mineralisation	Not specified

Proven Reserve is distinguished from Probable Reserve based primarily on the following criteria:

- Degree of certainty of geometry/distribution/occurrence/grade (main criteria).
- Level of metallurgical knowledge regarding the treatment of the particular ore (has material been submitted to the processing plant/pilot plant/lab bench test).
- Overburden thickness (accessibility).
- Geological complexity (faulting, intrusions, weathering, secondary mineralogy).

### Inclusion of inferred resources

Inferred resources are not included in mine planning and production scheduling.

### Material risk factors that could impact on the Mineral Resource and Ore Reserve statement

Certain contaminants and minerals have been identified in the ore that negatively affect the final concentrate and recovery. Metallurgical test work is in progress to find processes and methods for eliminating or managing the negative effects.

### Legal proceedings or other material conditions that may impact on mining or exploration activities

The application for conversion of old order mining rights to New Order Mining Rights in terms of the MPRDA was submitted before 30 April 2009. Feedback regarding this submission was received from the DME and minor modifications to the SLP and MWP as requested by the DME were attended to.

### Vergenoeg – Mineral Resources

Classification	Tons (Mt)		CuF <sub>2</sub> Grade (%)		CuF <sub>2</sub> (000t)	
	F2008	F2009	F2008	F2009	F2008	F2009
Open pit						
Measured	12,4	11,4	37,0	40,4	4 570	4 606
Indicated	145,1	144,7	27,9	28,0	40 483	40 516
Inferred	69,6	69,6	12,7	12,7	8 839	8 839
Total open pit	227,1	225,7	23,7	23,9	53 892	53 961
Surface stockpiles						
Measured	–	0,4	–	40,4	–	162
Total stockpiles	–	0,4	–	40,4	–	162
Total open pit and surface stockpiles	227,1	226,1	23,7	23,9	53 892	54 122

### Vergenoeg – Ore Reserves

Classification	Tons (Mt)		CuF <sub>2</sub> Grade (%)		CuF <sub>2</sub> (000t)	
	F2008	F2009	F2008	F2009	F2008	F2009
Open pit						
Proved	12,0	11,4	37,0	40,4	4 440	4 606
Probable	5,7	5,7	40,0	40,0	2 280	2 280
Total open pit	17,7	17,1	38,0	40,3	6 720	6 886
Surface stockpiles						
Proved	–	–	–	–	–	–
Total surface stockpiles	–	–	–	–	–	–
<b>Total open pit and surface stockpiles</b>	<b>17,7</b>	<b>17,1</b>	<b>38,0</b>	<b>40,3</b>	<b>6 720</b>	<b>6 886</b>

#### CONSOLIDATED MURCHISON MINES (A DIVISION OF METOREX LIMITED)

The Consolidated Murchison Mine is situated in the Murchison Greenstone belt near Gravelotte in Limpopo. Gold was discovered in the Murchison range towards the end of the 19th century and was mined on a small-scale for many years. Prior to 1937, the high stibnite (antimony sulphide) of the gold ores rendered all but the oxidised ore too refractory to process. Metorex acquired the mine in July 1997. It is the only producer of antimony concentrate in South Africa, and contributes three to five per cent of world production.

#### Exploration activities

No current exploration programme is underway.

#### Geological setting and geological model

The Murchison Greenstone belt is an assemblage of lavas and sediments. The belt strikes WSW-ENE and dips steeply to the north. The rocks are extremely sheared and have been intruded by granites and iron rich gabbros on a number of separate occasions. The greenstone belt is approximately 6 000m thick near Gravelotte and thins to the east. Gold mineralisation occurs erratically throughout the greenstones. Areas of particular economic interest are the Copper-Zinc line, the Antimony line and the various emerald deposits.

The Antimony line is a discontinuous zone of mineralisation approximately 55km long. Stibnite is associated with quartz veining and occurs sporadically along the entire strike length, but has only been worked significantly between the Alpha-Gravelotte area and the Free State-Monarch area. It is generally accepted that the Antimony line represents a major shear zone along which stibnite and gold have been concentrated. The stibnite and gold occur in remobilised quartz veins hosted in quartz-carbonate rocks which have been formed by the hydrothermal alteration of the country rocks. Later tectonic deformation has concentrated the minerals and all major orebodies have strong structural controls. Approximately two-thirds of the known and exploited gold deposits are from quartz veins, while the remainder is associated with banded iron-formations.

#### Type of mining, mining activities

Ore is mined by sub-level open stoping and is hoisted from three working shafts Athens, Monarch and Beta.

During mining, the strike and dip of orezones and extensions to the orezones are followed.

Supplementary information continued**Production figures**

Production figures for Consolidated Murchison for 2009 in comparison to 2008 are as follows:

Description	Units	2008	2009
Tons milled	(t)	355 076	<b>345 349</b>
Head grade			
Antimony	(% Sb)	1,2	<b>1,0</b>
Gold	(g/t Au)	1,8	<b>1,7</b>
Metal recovery			
Antimony	(%)	84,8	<b>72,5</b>
Gold	(%)	82,0	<b>70,4</b>
Metal production			
Antimony	(mtu)	361 061	<b>257 983</b>
Gold	(kg)	533	<b>423</b>

**Methods and key assumptions in estimation and classification of Mineral Resources and Ore Reserves**

Mining blocks are categorised as inferred resources and probable and proved reserves, as follows:

- *Inferred resources are defined as an ore block which has been defined wholly by boreholes.*

A haulage is developed in the footwall of the orezone. A diamond drill cubby is developed every 30m. Three holes are drilled from each cubby – a horizontal hole at 45° to the orebody, a hole trending upwards perpendicular to the orebody aimed to intersect the orebody approximately 20m above the haulage elevation and a hole aimed downwards to intersect the orebody 20m below the haulage elevation. This results in a grid of approximately 20m x 30m. Boreholes are carefully logged and surveyed. The quartz carbonate orezone and any other mineralised zones are completely sampled. This information is plotted on plans and cross sections to ensure the mineralised zones are continuous. If there is any doubt as to the continuity, additional holes are drilled.

All values are plotted on longitudinal sections and areas of 30m x 60m are blocked off and a tonnage and grade is assigned to each block. A minimum stoping width of 1,5m is assumed and an area of 30m x 45m in a block is used to allow for the foot and crown pillars. The tonnage of possible ore from the block is estimated using the mean orebody width or measuring the cross-sectional area using a planimeter and applying the frustrum formula. A SG of 2,94 is used. Drill cores are sampled every 50cm and a weighted arithmetic mean is used to estimate both the grade of the borehole intersections and the block value.

This initial evaluation determines which blocks of ground require secondary development and more detailed evaluation.

- *Probable Reserves are defined as ore blocks that are partly defined by diamond saw sampling and partly by boreholes, but are not fully developed.*

After a block of ground has been identified, secondary development is planned in order to fully evaluate the orezone and to enable stoping to take place. A cross cut is developed from the haulage to the orezone and two raises are developed at the most suitable position. At each interlevel elevation drives are developed along the orezone for 30m and additional twin raises are developed and sampled. At a 15m interval along the reef drive the orezone is evaluated by boreholes or by developing cross cuts.

- *Proved Reserves are defined as blocks that are fully developed, evaluated and ready for stoping.*

Cross sections are interpreted and drawn every 10m. The orebody outline is interpreted from sample results. Often the orezone consists of more than a single band and there are areas where the orezone has been severely folded. For each 10m cross section, an area and grade is estimated and hence, an undiluted tonnage and grade is assigned to a proven 30m block.

This information is plotted on interlevel plans and sections. Block values are converted to Reserve estimates by adding a 15 per cent dilution at grades of 0,2 per cent antimony and 0,5g/t gold. Paylimit calculations are performed on each block in order to convert it to a mineral reserve. Paylimit values are plotted on a graph with the antimony grade on the Y axis and the gold grade on the X axis. A line is drawn connecting the two paylimit values. The present paylimit values from which the paylimit line is constructed on X and Y axes are presently 4,53g/t gold and 1,98 per cent antimony. Individual block grades are plotted on the graph and those plotting to the left of the line are considered as uneconomic and remain in the mineral resource category and those to the right of the line are classed as a mineral reserve. Resources five levels or 300m below the present working are classified as Inferred Resources. An 85 per cent mine call factor is applied to the Resource values estimated for both gold and stibnite.

Consolidated Murchison adjusts the grade and tonnage values by regression curves that have been constructed from historical data. The different areas have unique regression curves.

#### Inclusion of inferred resources

To be able to achieve the LOM production plan for Consolidated Murchison, some 60 per cent of the scheduled production will have to come from Inferred Resources. The confidence in Inferred Resources is low. The Inferred Resources enable the LOM to be extended by eight to ten years.

#### Material risk factors that could impact on the Mineral Resource and Reserve Statement

The SAMREC Code states that a Mineral Reserve is inclusive of diluting materials and allows for losses that may occur when the mineral is mined. Some economic criteria have been taken into consideration when estimating the Proved Reserves in the form of grade cutoff values. However, the fact that Consolidated Murchison has found it necessary to apply regression curves to its Reserve estimates indicates that not all the factors reflecting losses that may occur during mining have been taken into consideration in its Reserve estimates.

#### Legal proceedings or other material conditions that may impact on mining or exploration activities

The application for conversion of old order mining rights to New Order Mining Rights in terms of the MPRDA was submitted before 30 April 2009. The Company is in negotiations to identify suitable BEE partners, once these negotiations are finalised, the Company will progress the conversion application.

#### Consolidated Murchison – Mineral Resources

Classification	Tons (Mt)		Sb Grade (%)		Antimony (000t)		Gold Grade (g/t)		Gold (000 oz)	
	F2008	F2009	F2008	F2009	F2008	F2009	F2008	F2009	F2008	F2009
Underground										
Measured	0,2	<b>0,3</b>	2,0	<b>2,0</b>	5	<b>5</b>	1,4	<b>1,2</b>	11	<b>10</b>
Indicated	3,5	<b>3,4</b>	2,0	<b>2,0</b>	70	<b>68</b>	3,3	<b>3,2</b>	371	<b>352</b>
Inferred	6,0	<b>6,0</b>	2,3	<b>2,3</b>	141	<b>141</b>	2,1	<b>2,1</b>	403	<b>400</b>
Total underground	9,8	<b>9,7</b>	2,2	<b>2,2</b>	216	<b>214</b>	2,5	<b>2,4</b>	785	<b>762</b>
Surface stockpiles										
Measured	–	<b>–</b>	–	<b>–</b>	–	<b>–</b>	–	<b>–</b>	–	<b>–</b>
Indicated	15,3	<b>15,3</b>	0,5	<b>0,5</b>	70	<b>70</b>	0,6	<b>0,6</b>	280	<b>280</b>
Total surface stockpiles	15,3	<b>15,3</b>	0,5	<b>0,5</b>	70	<b>70</b>	0,6	<b>0,6</b>	280	<b>280</b>
<b>Total underground and surface</b>	<b>25,1</b>	<b>25,0</b>	<b>0,5</b>	<b>1,1</b>	<b>286</b>	<b>284</b>	<b>1,3</b>	<b>1,3</b>	<b>1 065</b>	<b>1 042</b>

Supplementary information continued

## Consolidated Murchison – Ore Reserves

Classification	Tons (MT)		Cu Grade (%)		Copper (000t)		Co Grade (%)		Cobalt (000t)	
	F2008	F2009	F2008	F2009	F2008	F2009	F2008	F2009	F2008	F2009
Underground										
Proved	0,1	<b>0,1</b>	1,4	<b>1,5</b>	1	<b>1</b>	2,4	<b>2,1</b>	5	<b>4</b>
Probable	1,3	<b>1,2</b>	1,6	<b>1,5</b>	20	<b>19</b>	2,4	<b>2,5</b>	99	<b>98</b>
Total underground	1,3	<b>1,3</b>	1,6	<b>1,5</b>	21	<b>20</b>	2,4	<b>2,4</b>	104	<b>103</b>
Surface stockpiles										
Proved	–	–	–	–	–	–	–	–	–	–
Probable	–	–	–	–	–	–	–	–	–	–
Total surface stockpiles	–	–	–	–	–	–	–	–	–	–
<b>Total underground and surface</b>	<b>1,3</b>	<b>1,3</b>	<b>1,6</b>	<b>1,5</b>	<b>21</b>	<b>20</b>	<b>2,4</b>	<b>2,4</b>	<b>104</b>	<b>103</b>

## Review of exploration activities

No greenfields exploration activities were conducted by Metorex during F2009.

Drilling at the Dilala East Project (Ruashi Mining) and the Lubembe Project (MMK) are covered under the relevant sections above.

## FACTORS APPLIED TO ORE RESERVE ESTIMATES

2009	Ruashi	Chibuluma South	Kinsenda	Vergenoeg	Consolidated Murchison
Cut-off grade	1,04% Cu 0,41% Co	2,73% Cu	1% Cu	12% CaF <sub>2</sub>	2,32% Sb 3,74 g/t Au
Mining extraction factor (%)	95%	82%	70%	100%	100%
Block factor (%)	–	90%	90%	–	85%
Dilution factor (%)	5%	5%	7,5%	–	–
Mine call (%)	–	–	–	–	–
Metallurgical recovery factor (%)	83% Cu 59% Co	94%	90%	75%	85%

2008	Ruashi	Chibuluma South	Kinsenda	Vergenoeg	Consolidated Murchison
Cut-off grade	3,5% Cu Eqv	1% Cu	1% Cu	12% CaF <sub>2</sub>	2,02% Sb 4,27 g/t Au
Mining extraction factor (%)	95%	80%	70%	100%	–
Block factor (%)	–	90%	90%	–	85%
Dilution factor (%)	5%	5%	7,5%	–	–
Mine call (%)	–	–	–	–	–
Metallurgical recovery factor (%)	80% Cu 70% Co	94%	90%	75%	87%

## Notes

- All resources are stated inclusive of reserves.
- Reserves are a subset of resources and have been modified by mining extraction, dilution and block/mine call factors. All reserves are stated as run-of-mine feed delivered to mill.
- With the exception of Kinsenda and Ruashi, all mining factors are based on historical results.
- Mineral Resources for Ruashi have been restated, based on a revised geological block model completed in 2007. The new model has addressed geostatistical and geological issues for both copper and cobalt mineralisation. Whilst the copper metal content has not changed significantly, the contained cobalt has been adjusted downwards by 17 per cent. This downward adjustment is as a result of incomplete capture of cobalt assays from historical boreholes dating between 1920 and 1964.

## COMPETENT PERSONS DECLARATION

Mineral Resources and Ore Reserves for the various operations and projects have been compiled under the direction of the following people:

Mine	Mineral Resource estimation	Ore Reserve estimation
Ruashi	Mr S Savage PrSciNat BSc (Hons) (independent consultant)	Mr F van Dalen, PrEng, BSc (Eng) (independent consultant)
Chibuluma	Mr S Savage PrSciNat BSc (Hons) (independent consultant)	Mr C Sihole, BSc (Hons)
Copper Resources Corporation	Mr G Fahey, MAusIMM, MAIG (independent consultant)	Mr E Patris
Vergenoeg	Mr H Terblanche, BSc (Hons)	Mr H Terblanche, BSc (Hons)
Consolidated Murchison	Mr C Willson, MGSSA, BSc (Hons)	Mr C Willson, MGSSA, BSc (Hons)

The competent person who has checked and authorises publication of the Mineral Resources, is Mr T P Williams, PrSciNat (SA Council of Natural and Scientific Professionals Registration No 400387/04), Fellow of the Southern African Institute of Mining and Metallurgy, BSc (Hons). Mr Williams is Group Mineral Resource Manager and is a full-time employee of the Company. He is a mining geologist with 19 years' experience in exploration, resource development and estimation and mining geology in gold and base metals through west, central and east Africa. Mr Williams is based at the Company's Head Office at 2nd Floor, Cradock Heights, 21 Cradock Avenue, Rosebank 2146, Johannesburg.

Messrs Williams, Legg and Faber have confirmed in writing that the information disclosed in terms of 8,63(m) is compliant with the SAMREC Code and where applicable, the relevant Section 12 and Table 1 requirements, and that it may be published in the form and context in which it is intended.

## GROUP ENVIRONMENTAL MANAGEMENT AND FUNDING

The Company is exposed to environmental liabilities relating to its mining operations. Estimates of the cost of environmental and other remedial work such as rehabilitation costs, closure and pollution control are made on an annual basis. Based on the estimated remaining life of mine and any shortfall between total closure liability and accrued funds in a rehabilitation trust fund, additional payments are made to the fund once a year. Estimates of closure liability and the balance in the rehabilitation trust fund for each operation at 30 June 2009 are shown in the table below, together with the annual contribution required to ensure each operation has sufficient funds at the end of operations for rehabilitation:

Environmental costing (R million)					
Mining operation	Date of environmental approval	Closure liability	Accumulated fund	Annual contribution	
Chibuluma Mines plc	19/09/2006	15,4	2,0	1,0	
Consolidated Murchison	12/06/1995	25,0	9,9	2,7	
Pan African (Barberton)	27/10/2003	35,4	30,0	0,5	
Ruashi Mining sprl	02/03/2005	115,1	2,2	6,0	
Sable Zinc Kabwe Limited	04/06/2008	5,0	—	2,0	
Vergenoeg	01/2009	6,2	3,6	0,1	
O'Okiep	Dormant	4,7	5,1	—	
Rooiberg	Dormant	0,3	0,8	—	

Environmental factors that could have a material impact of economic extraction have been identified and appropriate measures implemented to mitigate the impact.

All necessary permits have been approved.