

Operational review

Ruashi Mining sprl – Copper and Cobalt

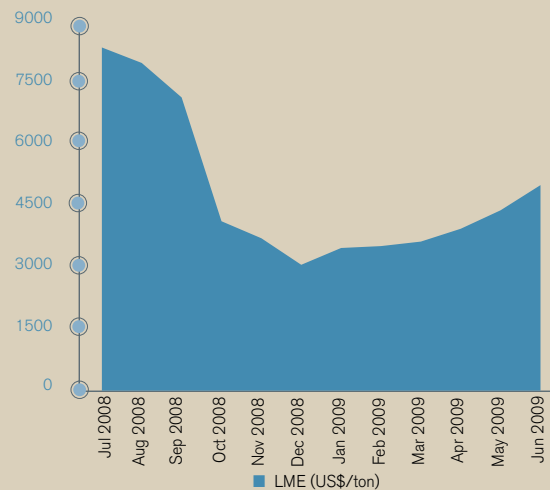


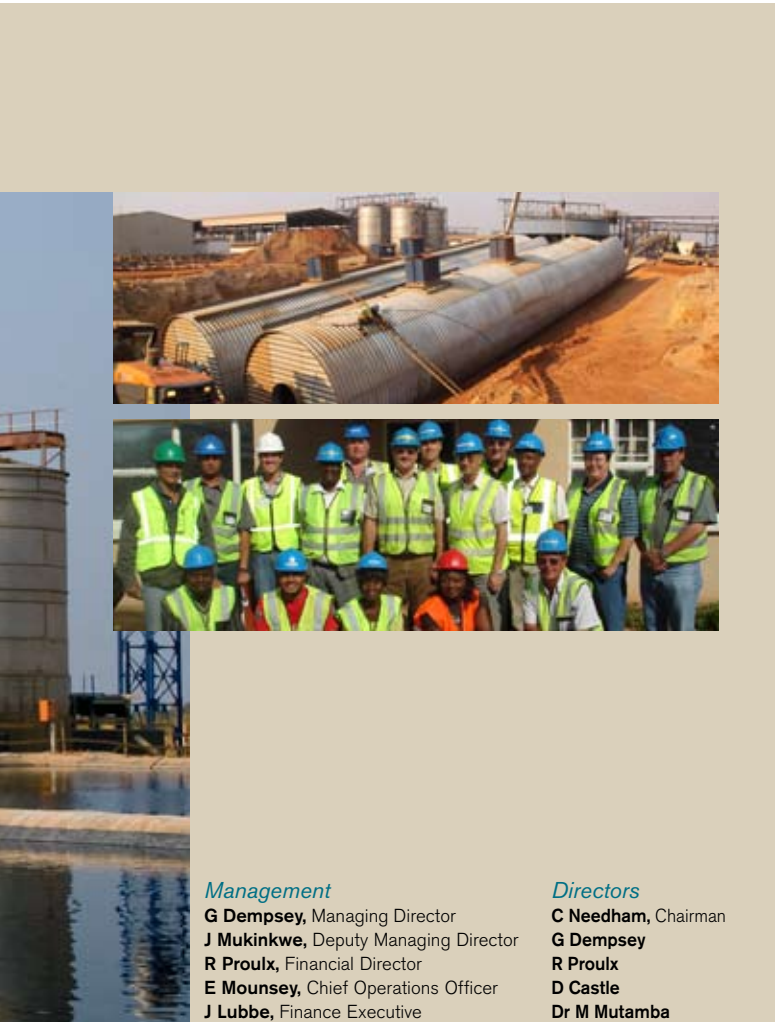
CCD tanks (Ruashi view over PLS pond)

Ruashi is a developing copper and cobalt operation located a few kilometres from Lubumbashi in the south eastern province of Katanga in the Democratic Republic of the Congo (“DRC”). Ruashi Holdings (Pty) Limited owns 75 per cent (F2008: 80 per cent) of the operating company (Ruashi Mining sprl), while the remaining 25 per cent (F2008: 20 per cent) is held by the state-owned Gécamines. The decrease in the interest held by Ruashi Holdings (Pty) Limited is as a result of the finalisation of the contract revisitation process and the subsequent amendment to the contract of creation of Ruashi Mining sprl.

During F2009, the process plant took major strides to enhance its engineering and development capacity. During plant commissioning many bottlenecks were identified and solved and a comprehensive mineral resource modelling programme was undertaken to achieve greater certainty and resolution of mineral resources and ore reserves. All costs were capitalised for the Ruashi phase II during the entire financial year.

Copper price: July 2008 – June 2009





Management

G Dempsey, Managing Director
J Mukinkwe, Deputy Managing Director
R Proulx, Financial Director
E Mounsey, Chief Operations Officer
J Lubbe, Finance Executive

Directors

C Needham, Chairman
G Dempsey
R Proulx
D Castle
Dr M Mutamba
C Umba
K Kasakoto

Ruashi		Year	
		June 2008	June 2009
Tons milled	(t)	n/a	485 360
Headgrade	- Copper	(%)	2,8
	- Cobalt	(%)	0,5
Recovery	- Copper	(%)	76
	- Cobalt	(%)	27
Copper produced	(t)	n/a	10 378
Copper sold	(t)	n/a	10 351
Cobalt produced	(t)	n/a	720
Cobalt sold	(t)	n/a	326
Total cash cost/ton of copper produced, net of cobalt credits*	(US\$/t)	n/a	4 518
Capital expenditure, excluding losses and borrowing costs	(R'000)	1 365 773	752 632

* Cobalt credit calculated basis cobalt production and a gross cobalt price of US\$15/pound (US\$9.60/pound payable) for illustrative purposes

SHEC report

Safety performance frequency rates

Frequency rates	F2008	F2009
Non-lost time frequency rate	42,7	6,9
Lost time injury frequency rate	-	0,5
Total recordable injury frequency rate	42,7	7,4
Reportable injury frequency rate	-	0,5
Serious injury frequency rate	-	0,5
Lost day severity rate	-	9,5
Fatality frequency rate	-	-

Safety and health

Data from the last two financial years are not fully comparable given that reporting methodology of the mine's safety statistics changed to match the new Metorex standard definitions. However, the non-lost time injury frequency rate showed a favourable downward trend. The number of non-lost time injuries increased marginally to the increase in the number of employees. The operation has not had a fatal accident since inception in May 2005 and has achieved 1,27 million fatality-free shifts.

A new Safety, Health, Environment and Communities ("SHEC") policy was introduced in February 2009 in alignment with Metorex's Group policy. Safety training progressed well in the period under review, and safety awareness was heightened through a number of initiatives and an increase in training.

Environment

Ruashi introduced Metorex's reporting levels in April 2009 to capture its environmental incidents. Only four incidents were reported in the latter half of the year, one of which was an incident that occurred when return water from the tailings dam overflowed and discharged mine water into a nearby stream. Prompt corrective action was taken and measures were put in place to prevent further occurrences.

Improved systems have been installed to clean and prevent further hydrocarbon spills from large earthmoving equipment on the mine. Once a fully operational sulphuric acid plant has been established at Ruashi, it will further reduce the operational risk and costs associated with importing sulphuric acid from the Zambian copper belt.

In terms of occupational health Ruashi has sampling devices around the plant for dust collection. Subsequent chemical analysis is undertaken to ensure compliance with environmental standards for workplaces. Water quality is

Operational review continued

Ruashi Mining sprl – Copper and Cobalt continued

monitored in and around the mine and plant, as well as in the community and other general water courses. Equipment to enable a comprehensive range of workplace health monitoring programmes for workers is on order, but a formal system is not yet in place. This will be implemented in F2010. Ruashi undertakes limited malaria spraying and provides impregnated mosquito nets. This specifically structured preventative programme will be enhanced in F2010.

Serving the community

Ruashi provided both power and water to various sections of the Ruashi village during the year under review. A water storage tank and reticulation system at the main village was upgraded and transformers have been installed at three of the subsections of the village. The company also sponsors sports days and annually hosts the “Ruashi Water Fun Run” to celebrate the commissioning of the water system in F2008. A total of US\$1.0 million was spent on social initiatives during F2009. The proximity of the mine to Lubumbashi and more specifically the Ruashi village requires a high level of engagement with local communities. This is a key risk and management focus area.

In addition, a number of additional projects were supported and these are listed in the Corporate Social Investment section.

Operational review

Commencing in April 2009 the mine embarked on a 5,000 metre infill diamond drilling programme to improve its knowledge of the orebody in areas where there is a lower concentration of information, and also to confirm the different ore types within the overall orebody. The drilling and assay interpretation is complete and a revised South African Mineral Resource Committee (“SAMREC”) mineral resource and ore reserve has been defined for publication. A full technical team has been set-up at the mine to ensure compliance with best practice.

Mining commenced in Ruashi Pit 1 at the start of the financial year. Benches and access to the pit were established and dewatering efforts accelerated. Additional curtain dewatering boreholes were drilled on the south sides

of Pit 1 and Pit 2. At the close of the 2009 financial year, Pits 1 and 2 were fully established.

The mine delivered 738,236 tons of ore to plant, 252,876 tons of which were initially processed through the phase I concentrator and commencing December 2008, 485,360 tons at the new phase II base metal refinery. The grades recorded were 3,05 per cent copper and 0,47 per cent cobalt to the Phase I concentrator and 2,8 per cent copper and 0,5 per cent cobalt to the Phase II refinery. Waste tonnage stripped for the period amounted to 6,3 million tons.

During the latter half of the year considerable progress was made in developing the Phase II plant into a steady state of operation. Both the milling and the leach sections were stress tested to 200 tons/hour and 180 tons/hour of solids respectively. The pre-leach thickener operated to its design specifications, and transfer to the leaching section was satisfactory. The counter-current decantation circuit operated effectively, as did the solvent extraction (“SX”) and electro-winning (“EW”) sections.

Annual production comparisons are difficult for F2009 as the Phase I concentrator was placed on care and maintenance while the Phase II plant was being commissioned. In addition the mine blended ores from stockpiles to maintain plant stability until sufficient ore was available from the open pits for full grade and “gangue acid consumption” flexibility.

The Phase II processing facility commenced production of London Metal Exchange “A” grade copper in early January 2009, after commissioning the solvent extraction facility in the last quarter of the 2008 calendar year. This was followed by the commissioning of the cobalt plant in February 2009.

Total Phase II production totalled 10,378 tons of copper and 720 tons of cobalt since the start up of the new facility in January 2009.

Copper sales tonnages have largely been aligned with their anticipated production profile. Conversely cobalt sales lagged considerably behind production due to various logistical problems experienced in the last quarter of the financial year.

Considerable time and effort has been and will continue to be spent on improving logistics flows to and from the DRC.

The company was materially impacted by the decline in commodity prices but benefited from a copper hedge at US\$7.071 per ton to 30 June 2009. The company currently maintains a hedge book which is briefly summarised as:

- 24,750 tons to September 2010 at US\$3.900 per ton.
- 34,425 tons from October 2010 to 30 June 2012 at a put level of US\$3.900 per ton with full exposure to the upside.

The average cobalt price achieved reduced from US\$18 per pound to US\$14 per pound.

Unit costs for the Phase II processing facility were distorted due to commissioning and ramp-up activities in the year. Although commissioning did not satisfactorily meet the originally expected profile, ongoing elimination of technical bottlenecks, improved maintenance and availability of critical spares ensured encouraging month-on-month improvements. Staff training is augmenting the current ramp-up profile and ensuring its sustainability.

A large proportion of the capital expenditure, totalling US\$60.1 million, was spent on finalising the Phase II processing facility and bringing the plant into production. Investment was focused on mainly electrics and instrumentation, commissioning and the front-end crushing section. Overburden stripping in Pit 2 was capitalised and the first dewatering infrastructure was established.

Exploration projects included resource drilling of the Musonoi Project, at a cost of US\$1 million and US\$1.8 million was spent on infill drilling at Ruashi during the latter half of the financial year.

Looking forward

The mining and processing ramp-up of Phase II will continue in the year ahead. By the second half of F2010 Ruashi will be producing in excess of 2,000 tons of copper per month and 200 tons of cobalt per month. To achieve this Ruashi will complete a comprehensive mine design and scheduling programme and will complete several projects by the end of the December 2009 quarter as displayed below:

Area	Activity
Front-end crusher and coarse ore stockpile	Completion of civil, mechanical and electrical works.
Lime Plant upgrade	Scope defined and equipment orders placed. Construction has commenced
Cobalt Plant dryer	All civil, structural, mechanical and instrumentation equipment is on site. Construction is ongoing.
Flottweg Tricanter	An additional centrifuge has been ordered for the SX section.
Pit Dewatering Project	<ul style="list-style-type: none"> • Re-positioning of electrical and mechanical equipment for in-pit water pumping • Commissioning of the coffer dam water flow to plant • Constructing and equipping of a number of permanent sumps in both pits • Constructing and equipping seven additional pit dewatering boreholes

A number of additional capital and developmental projects are planned for the coming year, namely:

- A design review and scope clarification for the mine's acid plant will be completed at the end of October 2009. During this period all engineering work is expected to be completed and the site will be prepared for construction access;
- Exploration work has commenced on identifying sites with the best potential for further exploration to extend mineral resources and resultant ore reserves; and
- The mine design and an evaluation of the development and processing options for the Musonoi (Dilala East) feasibility study are under way for completion in December 2009.

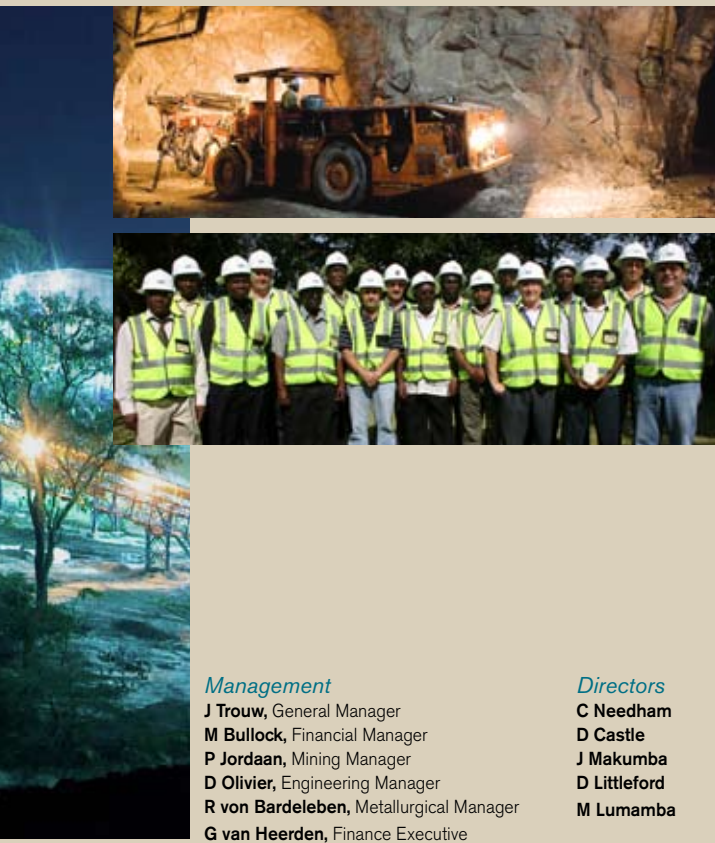
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Chibuluma Mines plc – Copper



Crushing plant

Chibuluma is situated in the heart of Northern Zambia's copper belt, west of Kitwe, near the town of Kalulushi. Metorex acquired 85 per cent of the company in 1997, while the remaining 15 per cent is held by the Zambian Government and Zambia Consolidated Copper Mines Limited. It is an efficient operation with a high grade orebody and an estimated mine life of seven years. The mine produces approximately 16,000 tons of copper per annum.



Management

J Trouw, General Manager
M Bullock, Financial Manager
P Jordaan, Mining Manager
D Olivier, Engineering Manager
R von Bardeleben, Metallurgical Manager
G van Heerden, Finance Executive

Directors

C Needham
D Castle
J Makumba
D Littleford
M Lumamba

Chibuluma Mines plc

Year

	June 2008	June 2009
Tons milled (t)	555 575	568 187
Headgrade (%)	2,9	3,1
Overall recovery (%)	89,6	90,0
Copper produced (t)	14 583	15 940
Copper sold (t)	14 491	15 905
Total cash cost/ton sold (US\$/t)	2 663	2 793
Mining profit before depreciation (R'000)	539 380	155 786
Depreciation (R'000)	49 070	72 781

SHEC report

Safety performance frequency rates

Frequency rates	F2008	F2009
Non-lost time frequency rate	5,5	21,3
Lost time injury frequency rate	6,0	4,0
Total recordable injury frequency rate	11,5	25,3
Reportable injury frequency rate	6,6	0,9
Serious injury frequency rate	3,3	0,9
Lost day severity rate	618*	18,7
Fatality frequency rate	0,6	-

*Includes 1000 shifts for the fatality in 2008

Safety and health

A substantial improvement in safety performance was achieved in the fatality, reportable and serious injury frequency rates in F2009. Improved safety awareness resulted in employees being more aware of and willing to report minor injuries.

During the year, the safety team at Chibuluma was restructured to incorporate a training department and the mine's induction programme was entirely revised. Additionally, an integrated computer database auditing system was commissioned to monitor and report safety and training information.

A number of additional developments took place at Chibuluma in F2009 which included:

- A geotechnical audit to model the mining sequence and method was conducted. The mine plan was modified to minimise ground failure risk;
- A "Mining Skills Improvement Programme" was delivered to employees, many of whom participated on a voluntary basis. (Altogether 134 of the 230 mining employees have enrolled, and 32 modules were completed in F2009);
- Three female truck operators successfully commenced work underground; and
- All mining, concentrator and engineering staff attended a one day safety teamwork presentation.

Environment

No environmental incidents occurred during the year. The mine's environmental reporting system is under development and several steps were also taken to improve the mine's environmental impact during the year. These included:

- Weekly sampling of effluent discharges to ensure containment within regulated limits;
- Successful sealing of number seven shaft at Chibuluma West;

Operational review continued

Chibuluma Mines plc – Copper continued

- Trail dust suppression sprays were installed on the secondary crusher and the system will be extended to other areas in future; and
- The rehabilitation of the Chibuluma South tailings dam, including lawn planting, is well under way.

Serving the community

Despite community expenditure being adversely affected by liquidity constraints, approximately US\$50,000 was spent on supporting ongoing community initiatives, including continued sponsorship of both the local soccer and rugby clubs. The mine continued to drive the 'malaria roll-back campaign' through financing a large portion of a malaria spraying initiative in Kalulushi.

Local police were assisted with fuel, while repairs were carried out on district roads and local schools received building materials.

Chibuluma has played a significant role at the Kalulushi Mine Hospital. In F2009 the hospital continued to provide basic diagnosis and treatment for the wider community. The hospital was also instrumental in assisting with an anti-malaria campaign.

Progress was made in setting up an HIV/Aids centre at the Kalulushi Mine Hospital with the help of the Zambia National Aids Network. The HIV/Aids initiative leverages the hospital infrastructure, but further investigations are under way to rightsize the hospital appropriately for the number of in-patients that it services. Audiometric testing for employees, to be conducted on an annual basis is planned to be introduced at the hospital in the coming year.

In addition a number of additional projects were supported and these are listed in the Corporate Social Investment section.

Operational review

Chibuluma milled 568,187 tons in the period under review, representing an increase of 2,3 per cent on last year, while the tonnage mined improved by one per cent.

Mining the higher grade lower sections of the orebody delivered a significantly improved average copper grade of 3,1 per cent compared with the prior year's 2,9 per cent. This positively affected sales performance, with a 9,8 per cent increase in copper tons sold of 15,905 tons.

The total capital metres developed of 2,225 metres was 410 metres lower than F2008 and was a deliberate reduction in response to the copper price decline in the second quarter of the year. This decision was subsequently revisited and the main ramp has been restarted.

A contract to sell all copper concentrate to Konkola Copper Mines terminated in December 2008, and F2009 production was allocated to three customers: Republic House Limited (4,697 tons) for exportation; Konkola (6,250 tons), and the Chambishi Copper Smelter (4,960 tons). A new agreement has been finalised to supply all concentrates to the Chambishi Copper Smelter from June 2009 to December 2009. During the year the mine was granted an export tax exemption as a consequence of the Zambian smelters' inability to provide capacity during commissioning of the industry's two new smelters (Konkola and Chambishi). Smelter recoveries increased following a new offtake agreement with the Chambishi Copper Smelter.

The deterioration of the copper price achieved from an average of US\$7,811 per ton in F2008 to US\$3,887 per ton in F2009 resulted in management implementing a cash flow improvement programme to mitigate its adverse effects on the operation's liquidity. These measures contained the cash cost of copper at US\$2,793 per ton for the financial year.

Although the overall tonnage of copper sold increased by 1,416 tons, the deterioration of the copper price substantially impacted the net on-mine revenue which fell from US\$106 million to US\$52 million for the year.

Smelting, transport and refining costs were marginally higher at US\$917 per ton compared to the US\$903 per ton achieved in F2008. This was due to the higher realisation costs incurred with the Chambishi smelter.

On-mine costs increased by 17 per cent from US\$30 million to US\$35 million. This equated to US\$2.164 per ton, representing a seven per cent increase year on year from US\$2.030 per ton. Production throughput was higher with 568,187 tons milled.

Consumable costs were affected primarily by the fluctuation in the oil price from around US\$50 per barrel to over US\$140 per barrel. This also substantially impacted on the domestic cost of many of the mine's oil price related costs, in particular diesel, oils and explosives which all increased by over 50 per cent. The steel used for machine maintenance also escalated by more than 20 per cent. Payroll costs increased due to an annual pay award of 16 per cent, which was largely offset by the depreciation of the Zambian Kwacha.

Lower copper prices influenced Chibuluma's expenditure on capital of US\$16 million for F2009. This represented a seven per cent reduction and was 17 per cent below the approved budget. During the year under review, capital expenditure was focused on production items with the acquisition of two new underground hauling vehicles for US\$3 million. Several machine rebuilds took place to extend the life of the existing fleet, at a cost of US\$2 million in F2009. Expenditure at the metallurgical plant totalled US\$0.2 million in F2009, a reduction from the US\$2 million spent in F2008 when several large investments in crushing equipment were made.

Looking forward

Chibuluma has overcome significant challenges during the financial year, precipitated by the sharp fall in copper prices at the beginning of the second quarter.

Safety performance continued to improve, and this should continue into the next year as a result of current SHEC initiatives.

Copper production has shown an increase year on year since production commenced at Chibuluma South in F2006. The mine achieved record copper production of 1,600 tons of copper in June 2009 and based on current volumes and forecast grades in the deeper parts of the mine, this improvement trend should continue.

Sites with the potential for further exploration are being identified in the vicinity of the mine with the aim of extending Chibuluma's life of mine.

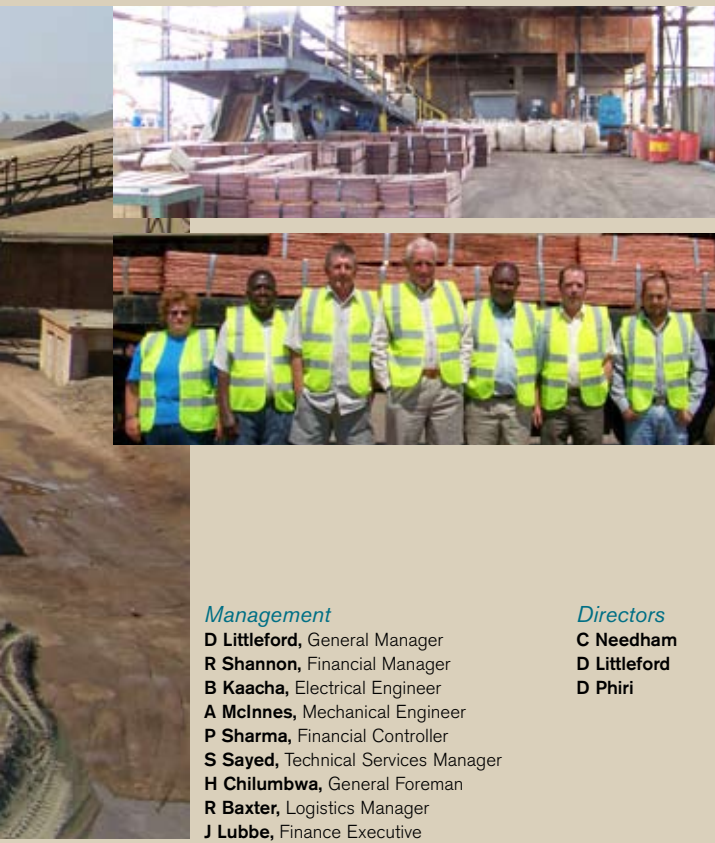
Operational review continued

Sable Zinc Kabwe Limited – Copper and Cobalt



Raw material receiving and pulverising pad

Sable is located near the town of Kabwe in the central province of Zambia, approximately 150 kilometres north of Lusaka – the country's capital. The operation comprises a copper and cobalt processing facility that treats concentrate purchased from various suppliers in Zambia and the Democratic Republic of the Congo ("DRC"). The plant is accessed by either the main railway line or the tarred road between the copperbelt and Lusaka.



Management

- D Littleford**, General Manager
- R Shannon**, Financial Manager
- B Kaacha**, Electrical Engineer
- A McInnes**, Mechanical Engineer
- P Sharma**, Financial Controller
- S Sayed**, Technical Services Manager
- H Chilumbwa**, General Foreman
- R Baxter**, Logistics Manager
- J Lubbe**, Finance Executive

Directors

- C Needham**
- D Littleford**
- D Phiri**

Ruashi I/Sable

		Year	
		June 2008	June 2009
Copper produced	(t)	10 767	4 889
Copper sold	(t)	8 800	5 588
Cobalt produced	(t)	565	151
Cobalt sold	(t)	386	252
Mining profit before depreciation	(R'000)	176 915	11 470
Depreciation	(R'000)	35 244	35 826

SHEC report

Safety performance frequency rates

Frequency rates	F2008	F2009
Non-lost time frequency rate	14,9	108,0
Lost time injury frequency rate	11,0	22,0
Total recordable injury frequency rate	25,9	130,0
Reportable injury frequency rate	14,9	30,0
Serious injury frequency rate	–	15,0
Lost day severity rate	14,9	97,0
Fatality frequency rate	–	–

Safety and health

Revised methods of collecting, defining and collating safety performance frequency rates in order to comply with the new Metorex safety standards came into effect at the operation in F2009. As a small surface operation with a limited workforce Sable has historically had a good safety track record. The inflated safety figures for F2009 are a reflection of the new reporting definitions. The most serious injury for the year was a hand injury which resulted in the injured being away for 21 days and this increased the severity rate statistics.

Environment

A new system for measuring and recording environmental incidents was implemented at Sable in April 2009. Environmental incidents at Sable were limited to minor occurrences of higher than normal emissions at the acid plant as a result of stopping and starting the operation. These were of short duration and were reported accordingly.

Serving the community

The labour force for Sable resides in the Kabwe Municipal Council housing area and Sable therefore supports the local community and assists the Kabwe Municipal Council in various projects. Over the past year this support ranged from waste removal to the installation of a clock tower at the Kabwe Municipal offices. Sable assists local community churches and recently refurbished the St Margaret's Anglican Church built in 1926.

A number of additional projects were supported and these are listed in the Corporate Social Investment section.

Operational review continued

Sable Zinc Kabwe Limited – Copper and Cobalt continued

Operational review

The F2009 copper cathode production of 4,889 tons was based on Ruashi's oxide concentrate feed, coupled with some locally sourced ore. Oxide concentrate deliveries from Ruashi Phase I ceased in December 2008.

In the second quarter, Sable secured 4,500 tons of third party heavy medium separation ("HMS") concentrate at a grade of 26 per cent acid soluble copper. This supply was suspended in December 2008 when the London Metal Exchange copper price collapsed and the supplier operations in the Congo were placed on care and maintenance. In the latter half of the year, Sable received only 2,389 tons of locally sourced ore and copper production was low at an average of 183 tons per month.

In March 2009, Sable secured an off-take agreement to supply the operation with 21,000 tons of oxide ore at an average grade of 22 per cent scheduled for the period to December 2009. Deliveries commenced in May 2009 and Sable had received 3,582 dry metric tons of oxide ore by year-end.

The copper cathode tonnage improved to 678 tons in June 2009, while sales for the year totalled 5,588 tons of copper.

In the year under review, profits were materially affected by the collapse of both the cobalt and copper prices in the latter months of calendar 2008. In addition, revenue was materially impacted by a lack of ore supply following the collapse in global demand. The total operating costs of the company reduced in line with the lower production levels.

Capital expenditure for F2009 was limited to US\$0.4 million. Capital works were carried out on Zinc electro mining plant, additions to plant and machinery, a compressor and a crushing plant for pulverising oxide ore. An acid storage tank with greater capacity was erected and a new forklift was purchased.

Looking forward

Sable is confident of being able to source suitable ore tonnages and grades from both the DRC and the local market well into F2010. The terms under which these ores are sourced are such that Sable should operate profitably for the year provided copper prices remain robust. Capital spending will be limited in F2010.



Consolidated Murchison: Flotation plant



Long hole open stope driller at Chibuluma Mine



Ruashi LME Grade A copper ready for export



Mining on bench 1245m in western portion of Ruashi Pit 1

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Vergenoeg Mining Co (Pty) Limited – Fluorspar



Primary stockpile and crushing facilities

Situated 150 kilometres north of Johannesburg, Vergenoeg Mining Company (“Vergenoeg”) is one of the world’s largest known fluorspar resources. Vergenoeg is an open-pit operation with a modern concentrator and magnetic separator which enables it to meet market demand.

Metorex owns 55 per cent of Vergenoeg after the disposal of 15 per cent of the share capital of Vergenoeg to Medu Capital in July 2009, a consortium of black economic empowerment (“BEE”) entities. Minerale Y Productos Derivados S.A. (“Minersa”) provides Vergenoeg with advice on both metallurgical processes and international marketing. Minersa is a 30 per cent shareholder.



Management

D Cook, General Manager
F Opperman, Financial Manager
H Pretorius, Engineering Manager
H Terblanche, Mining Manager
G Brooker, Metallurgical Manager
G Thomson, Financial Executive

Directors

T Goodlace, Chairman
J Alonso
A Barrenechea
D Castle
G Thomson
E January
S Nhlumayo

		Year	
Vergenoeg		June 2008	June 2009
Tons milled	(t)	570 826	537 589
CaF ₂ grade	(%)	39,9	38,9
CaF ₂ recovery	(%)	74,2	69,8
Fluorspar produced (all grades)	(dmt)	180 854	152 934
Fluorspar sold (all grades)	(dmt)	184 299	135 962
Price (all grades)	(R/dmt)	1 387	2 241
Total cash cost/ton sold	(R/t)	841	1 123
Mining profit before depreciation	(R'000)	93 846	151 934
Depreciation	(R'000)	11 218	13 437

SHEC report

Safety performance frequency rates

Frequency rates	F2008	F2009
Non-lost time frequency rate	18,3	47,0
Lost time injury frequency rate	2,0	2,1
Total recordable injury frequency rate	20,4	49,1
Reportable injury frequency rate	2,0	2,1
Serious injury frequency rate	2,0	2,1
Lost day severity rate	10,0	17,0
Fatality frequency rate	–	–

Safety and health

The non-lost time frequency rate for F2009 has increased from F2008 with the largest category of dressing case injuries being a result of employee carelessness and mainly associated with minor hand injuries. There does not appear to be an obvious reason for this increase in dressing cases but high levels of communication were initiated in an attempt to reduce these injuries. There was one lost time injury in the year which resulted in 17 lost days. This lost time injury led to an increase in the lost day severity rate.

The mine commissioned an external Safety, Health, Environment and Community ("SHEC") audit in the year under review, the results of which form the basis of a system improvement plan to strengthen conformance levels in the coming year. Standard occupational hygiene measurements were performed and no noise-induced hearing loss or silicosis (an occupational lung disease) issues were evident among the mine's employees.

Environment

A new system for measuring and recording environmental incidents was implemented at Vergenoeg in April 2009. Minor incidents were caused by hydrocarbon spillage from heavy vehicle breakdowns. The mine is in the process of installing systems to minimise environmental exposure, particularly in the area of waste handling.

Serving the community

Several local economic development projects were progressed in F2009 in accordance with the mine's social and labour plan. Although the appropriate involvement of local municipalities delayed implementation in some areas in the year, heightened activity is expected in the coming year.

Operational review continued

Vergenoeg Mining Co (Pty) Limited – Fluorspar continued

Vergenoeg spent in excess of R1.5 million on several of its existing social commitments. Notably during the year Vergenoeg sponsored a training programme for eight local youths in NQF Level 1 Field Guiding and Basic Hospitality. The course is registered by the Field Guide Association of South Africa, and is accredited by the Tourism, Hospitality, Sport, Education and Training Authority.

A number of additional projects were supported and these are listed in the Corporate Social Investment section.

Operational review

The tons mined and milled for the year are lower than F2008 due to decisions made to reduce the output of the mine to match lower market demand.

Production of fluorspar for the year was 27,917 tons lower in line with the reduced mill throughput, but also due to a lower acidspar recovery. The recovery reduced by four per cent to 70 per cent as a result of the commissioning of new magnetic separators which improve the quality of the final product at the expense of the recovery. There was an increased focus on producing and delivering higher quality acidspar to match customer requirements in F2009.

During the 2008 resource boom there was a perception of a shortage of fluorspar and this created significant demand. This resulted in an increase in fluorspar prices from around US\$220 per ton to in excess of US\$400 per ton. During this period Vergenoeg was constrained at previously negotiated prices of around US\$215 per ton. At calendar year-end, contracts for 2009 were negotiated at prices well over US\$300 per ton but some customers were already being affected by the global slowdown and thus did not conclude contracts. In 2009 some consumers who had negotiated contracts for the year called for re-negotiation of the terms and timing of shipments. Prices have regressed by about

US\$100 per ton. A number of fluorspar mines around the world have been mothballed as they are not viable at current prices.

The reduction in demand for fluorspar provided Vergenoeg the opportunity to stop the mine for a month to perform critical maintenance. A significant amount of fluorspar has been warehoused in an off-site stockpile for sale when the market improves. The fluorspar (all grades) sales were significantly affected by the poor state of the market and reduced from 184,299 tons in F2008 to 135,962 tons in F2009, a 26 per cent reduction.

Fluorspar (all grades) pricing improved from R1.387 per ton to R2.241 per ton year on year. Rand pricing was improved through the depreciation of the Rand which weakened from R7.30 per US\$ to R9.03 per US\$ year on year. Revenue was negatively affected by the lower sales but positively affected by the higher selling price and the weaker Rand. The net result was that revenue improved from R256 million in F2008 to R305 million in F2009.

On-mine operating costs were negatively affected by the resource boom which resulted in increased input costs and the significant increase in the price of electricity in South Africa. This resulted in costs increasing from R91 million in F2008 to R112 million in F2009.

Vergenoeg's mining profit before depreciation increased by 62 per cent to R152 million for F2009.

During F2009 Vergenoeg increased its capital spending to R41 million, up from R19 million in F2008. A large part of this was the cost of the magnetic separators which improve product quality. The remainder of the capital was spent primarily on increasing plant capacity and on mining operations.

Looking forward

Fluorspar prices are expected to bottom in the first half of F2010 with volumes becoming more robust in the latter half of the year. Several capital projects are also planned for the coming year, most notable being the construction of a new tailings facility.

Shareholders of Metorex were advised on 23 September 2009 that Metorex and Minerales Y Productos Derivados S.A. ("Minersa") entered into a conditional sale of shares agreement whereby Metorex will dispose of its entire shareholding of 55 per cent in Vergenoeg for US\$60 million.

Operational review continued

Consolidated Murchison – Antimony



Ore being transported from Monarch decline

Consolidated Murchison, a division of Metorex, is currently one of the largest known antimony orebodies in the world. The operation is situated at Gravelotte, in the Limpopo Province and produces both antimony and gold. Antimony is used mostly for flame retardants but has a variety of commercial applications in plastic, fabric and electronic printed circuit boards.



Management

- Z Barnard**, General Manager
- W Bodenstein**, Financial Manager
- C Wilson**, Technical Service Manager
- K Venter**, Metallurgical Manager
- L Swart**, HR Manager
- G van Heerden**, Finance Executive

**Consolidated Murchison
(Asset held-for-sale)**

	Year	
	June 2008	June 2009
Tons milled (t)	355 076	345 349
Produced – antimony (mtu)	361 455	257 983
– gold (kg)	533	423
Sold – antimony (mtu)	337 403	271 286
– gold (kg)	521	423
Total cash cost/mtu sold~ (R/mtu)	343	592
Mining profit/(loss) before depreciation (R/t)	24 925	(79 223)
Depreciation (R'000)	10 196	13 590

~ Net of gold revenue

SHEC report

Safety performance frequency rates

Frequency rates	F2008	F2009
Non-lost time injury frequency rate	2,8	2,1
Lost time injury frequency rate	7,8	8,9
Total recordable injury frequency rate	10,5	11,0
Reportable injury frequency rate	1,4	2,1
Serious injury frequency rate	1,4	2,1
Lost day severity rate	12,2	11,3
Fatality frequency rate	–	–

Safety and health

Consolidated Murchison's safety performance during the year under review included the achievement of 1,295 million fatality-free production shifts. Conversely, an increase in injuries continued to hamper the operation's overall safety performance.

At mid-year management implemented several measures to curb an increase in the lost time injury frequency rate. Although the situation improved, three reportable injuries were recorded in the last two months of F2009, which led to a noticeable increase in the reportable injury rate. Accidents and injuries were attributed to engineering activities and operations at the Monarch shaft.

Unfortunately the year under review was not without issues, with the mine having to comply with an instruction by the Department of Mineral Resources ("DMR") to halt production for 10 days in light of safety concerns. It was found that the practice of mid-shift secondary blasting was resulting in limited exposure of some employees to gasses. As a result, this secondary blasting was stopped. During the stoppage the mine re-examined its ventilation regime, analysed the chemical composition of its explosives and embarked on a re-training exercise.

Occupational hygiene is given a high priority at the operation. A full-time medical practitioner conducts all of the medical examinations and compiles information in relation to all illnesses and sicknesses, including noise-induced hearing loss and dust-related diseases.

Operational review continued

Consolidated Murchison – Antimony continued

Environment

In F2009 several audits were undertaken at Consolidated Murchison by the Department of Mine's Environmental Auditors and the Department of Environmental Affairs. No outstanding issues remained following the audits, and a new method of reporting on incidents will be a focus in the coming year.

In an effort to continue sound environmental management practices, an internal review of the mine's environmental rehabilitation liability was undertaken, with an independent consultant appointed to conduct a detailed assessment.

Serving the community

The community service contributions by the operation's Occupational Medical Practitioner, in conjunction with the Limpopo Department of Health, continues to function well. The surrounding community was impacted by the completion of a retrenchment process ending in March 2009. Of the 304 employees retrenched, 35 were due to medical incapacity while the remaining 269 employees were retrenched as a result of new operational requirements. Management has engaged with the Ba-Phalaborwa Municipality regarding post-retrenchment support, which could potentially extend to the clinic, water and other services.

Social investments undertaken during the year include an Occupational Health Management Programme (R2.9 million), adult education and computer training (R240.000), spending on schools (R120.000), transport for employees (R1.6 million) and hostel feeding (R2.2 million). The mine also supplies the local Gravelotte community with potable water.

Operational review

The overall tonnage mined at Consolidated Murchison declined by five per cent compared with the prior year. Production was adversely affected by lightning damage to the Beta shaft and a planned reduction in mining in response to the global economic crisis, reduced prices and the bankruptcy of the company's sole antimony client. The previously mentioned closure of the mine for 10 days on the instruction of the DMR further impinged on production.

During the latter part of F2009 the mine ramped up its efforts to target high grade areas, which resulted in improved recovery grades. However, the tons milled declined by three per cent due to the lower mined tonnage.

The mine's overall antimony production declined by 29 per cent, while gold production was 21 per cent lower than the previous year. The primary causes were lower headgrades and lower plant recoveries. Both antimony and gold headgrades recovered during the latter part of F2009 by focusing on high grade areas. It is anticipated that plant repairs and upgrades under consideration will improve plant recoveries to their previous levels in the coming year.

Antimony and gold sales fell 20 per cent and 19 per cent respectively compared with F2008. The mine's only antimony customer, US-based GLCC Laurel, experienced severe financial difficulties and was consequently unable to purchase antimony from the mine after October 2008. Alternative clients were sourced, albeit at substantially lower prices.

The price of antimony reached a high of US\$54.68 per metric ton unit ("MTU") at the end of September 2008 but declined to US\$16.81 per MTU in January 2009. The subsequent increase in price of antimony was insufficient to close the gap and unit prices were 33 per cent lower on average than the previous year. More positively, the price of gold showed a healthy improvement of 23 per cent in Rand terms.

Overall operating costs increased by 29 per cent year on year, while labour costs increased by 37 per cent (including R5 million retrenchment costs). This was incurred primarily after plans were implemented at the end of F2008 to boost production, which required a larger staff complement. The cost of staff retrenchments, coupled with increased capacity building in the first half of the year, also contributed to increased costs. The continuing international rise of key raw materials (such as steel and reagents) substantially impacted on the domestic cost of many of these indispensable materials.

Reduced production and lower unit prices resulted in an overall revenue decline of 15 per cent against the prior year. Combined with increased costs, Consolidated Murchison recorded a mining loss before depreciation of R79 million. The closing out of a negative gold hedging position realised a loss of R41 million.

All capital projects ceased in October 2008 in response to cash flow constraints, with total capital expenditure for the year amounting to R30 million, well below the R68 million spent in F2008. In the first few months of F2009, capital was spent on new declines, trackless machinery purchasing and the purchase of wet screens for the plant.

Looking forward

The antimony price began to show some strength towards the end of F2009 and this should continue into F2010, relieving some of the financial pressure on the operation. However, Rand strength continues to offset some of the benefits of the higher Dollar antimony and gold prices. Capital has also been spent on critical maintenance at the plant which should return recoveries to normal levels. The mining plans demonstrate sufficient available tonnages for F2010, but constraints are apparent thereafter. The mine continues to make losses and all alternatives are being investigated to save jobs and return the operation to profitability.

Operational review continued

Pan African Resources plc



Concentrate flotation froth

Barberton Mines (Pty) Ltd – Gold (Au)

Barberton Mines is situated 25 kilometres southeast of the town of Nelspruit, the main business hub of the Mpumalanga Province in South Africa and 10 kilometres outside the town of Barberton.

Gold is produced from the Fairview, Sheba and Consort sections. Concentrate is produced at each mine section and trucked for final processing to the Fairview section (BIOX®, Carbon-in-Leach (CIL) and elution). Barberton was sold with effect from 1 July 2009.



Management

- J Nelson**, Chief Executive Officer
- K Spencer**, Chairman
- K Loots**, Finance Director
- M Gericke**, Mining Executive
- N Reynolds**, Financial Manager
- P Wiese**, New Business Executive
- R Holding**, Platinum Mining Executive
- M Bevelander**, Consulting Geologist

Barberton
(Asset held-for-sale)

		Year	
		June 2008	June 2009
Tons milled	(t)	315 305	313 952
Headgrade	(g/t)	8,91	10,32
Overall recovery	(%)	91	91
Produced:			
Gold including Calcine dump	(kg)	2 984	3 075
Sold:			
Gold including Calcine dump	(kg)	3 082	3 028
Total cash cost/kg sold	(R/kg)	111 272	136 251
Mining profit before depreciation	(R'000)	226 990	347 604
Depreciation	(R'000)	33 688	33 837
Capital expenditure	(R'000)	54 173	58 302

SHEC report

Safety performance frequency rates

Frequency rates	F2008	F2009
Total injury frequency rate	50,8	37,8
Lost time injury frequency rate	4,8	6,4
Reportable injury frequency rate	3,1	1,7
Serious injury frequency rate	3,1	1,7
Lost day severity rate	11,0	6,2
Fatality frequency rate	0,4	0,0

Safety

The number of lost time injuries increased compared to the previous year (2008) mainly due to a higher incidence of minor accidents. The number of serious injuries decreased significantly together with a reduction in the lost day severity rate for the year, which is an indication of the lower severity of injuries experienced.

The mine introduced a new Safety, Health, Environment and Community Development policy in February 2009 and with this initiative is striving to achieve:

- An improvement of health and safety performance through the setting and achievement of goals taking into account stakeholder expectations and industry leading practices;
- The implementation of systems to provide a working environment that is conducive to good health and safety; and
- The management of risks in the workplace and ensuring that employees have the relevant skills to perform work-related tasks in a safe manner.

Environment

All mining and exploration activities are run with the highest level of environmental awareness realistically possible. The environmental monitoring programme has been approved by the Department of Minerals Resources. The water and air monitoring programmes are compliant with the regulations and requirements of the Department of Water Affairs and Forestry as well as the Department of Environmental Affairs and Tourism.

During the year under review, a water retreatment programme was initialised. Although this type of programme is normally associated with mine closure, the company has decided to begin this process in advance in order to responsibly manage the use of water.

Operational review continued

Pan African Resources plc continued

A water use licence application has been submitted to the Department of Water Affairs. The annual environmental performance audit is in progress and was completed by the end of July 2009. The auditor is conducting a gap analysis from the environmental management programme ("EMP") and prepare an amendment to address undefined issues and changes from the current EMP. The mine experienced a serious incident during the year, which involved the spillage of hydrocarbons at the Fairview workshops. The spillage was cleaned and additional controls were implemented to prevent any future recurrence.

Progress made during the year on the environmental programme:

- 58 tons of AsO₃ has been removed to ZINCOR.
- The waste rock dump at Fairview has been removed and re-vegetation of the area has commenced.

Community development

Barberton Mines (Pty) Ltd is involved in a number of community development projects in the areas surrounding the mine. The Verulam lifeskills centre is situated in the Verulam township alongside the Fairview mine and focuses on the development of skills such as brickmaking, welding and boilermaking, bread making and other lifeskills in the community.

The Sinqobile vegetable project is also situated in the Verulam community and is run by the community. This project supplies fresh vegetable produce to the soup kitchen at Royal Sechaba and also sells directly to the community. The Verulam soup kitchen also benefits from the supply of vegetables and provides food to approximately 50 Aids orphans from the surrounding communities on a daily basis.

The Umjindi jewellery project is a jewellery training facility in Barberton, which runs learnership programmes with the support of the Mines Qualifications Authority (MQA). Jewellery-making apprentices from the Umjindi area benefit from the MQA programmes and the jewellery made here is sold commercially.

Operational review

Barberton Mines milled 313,952 tons at a run-of-mine ("ROM") grade of 10,32 g/t for the financial year. This resulted in gold sales of 3,028 kg for the year, which is marginally down on 3,082 kg achieved for the F2008 year. The focus during the year was on quality reef tons rather than volumes, which resulted in gold production increasing on the previous year at 3,075 kg (2008: 2,984 kg).

At Fairview, 139,301 tons at a ROM grade of 10,10 g/t were produced. These good grades were boosted by the earlier than expected exposure of the 62/11 high-grade block. At Sheba, 103,819 tons at a ROM grade of 11,72 g/t were produced. At Consort, 70,832 tons at a ROM grade of 8,72 g/t were produced.

Gold was sold at spot prices during the past year with no production hedged. The average spot price achieved during the year in review was R251.820 per kg which was 27,4 per cent above that achieved during the previous year. The average R/US\$ exchange rate achieved for the year was 16 per cent above the previous year at R9.23 to the Dollar. Mining profit before depreciation improved significantly and was R347.6 million for the year compared to R226.9 million for F2008.

Capital expenditure for the year amounted to R58.3 million, which was 7,5 per cent up on the R54.2 million spent in the previous financial year. The primary focus was on ore reserve replacement and the generation of new ore reserves and approximately 50 per cent of the capital expenditure was spent on this initiative. At Fairview, capital development to replace ore reserves progressed well and a total of 817 metres was completed on the 60/62 platform and 128 metres on the 58 level platform. Work to open up the three shaft bottom to enable the deepening of the shaft is progressing satisfactorily. Exploration drilling continues to confirm and determine the down dip extent of these ore bodies.

At Sheba, the available ore reserves at the MRC orebody are decreasing and there is a focus on capital development to replace these ore reserves in the Edwin Bray tunnel and the 35 ZK decline areas. At Edwin Bray 740 metres were developed towards the Thomas and Joe's Luck ore bodies. The 35 ZK decline was sunk for 69 metres. Exploration drilling at the Thomas and Joe's Luck ore bodies has been completed.

At Consort, ore reserve flexibility remains tight and capital development to replace ore reserves continues. At 50W 1,224 metres were sunk in the two declines which is on target to open up known pay shoots. On 45 level, 227 metres of exploration development was completed and exploration drilling confirmed the up dip extension of the Bullion orebody currently being mined on 50 level.

Capital expenditure on maintenance of the processing plants included the construction of a cyanide storage facility at the Consort plant and the replacement of three cone crushers at the Sheba and Fairview sections. The plant maintenance programme also included the replacement of a triple deck vibrating screen at Sheba and a conveyor vibrating feeder at Fairview.

The capital spend in the BIOX plant situated at Fairview included the procurement of a new set of regrind rollers for the concentrate regrind circuit and the purchase of a spare BIOX reactor gearbox for the secondary reactor tanks.

Capital expenditure on the maintenance of engineering equipment and infrastructure focused on the re-building and upgrading of the mining equipment fleet. The rehabilitation of shafts and headgears at the mine was also a critical area. This included the replacement of skips, cages and bridles together with the replacement of slack/tight rope safety devices. At Consort and Sheba sections some of the obsolete reciprocating compressors were replaced by modern and efficient screw compressors.

Capital expenditure for the general environmental and administration activities and equipment included the silencing of rock drills and work done to rehabilitate various areas on the mine together with the installation of environmental monitoring equipment at selected points on the mine. In addition the procurement and installation of an electronic clocking system was done to improve time management.