

AN INDEPENDENT TECHNICAL REPORT ON BINDURA NICKEL CORPORATION, FREDA REBECCA MINE AND SEMKHAT (ANMERCOSA EXPLORATION CONGO SPRL).

(ANMERCOSA EXPLORATION CONGO SPRL), THE MATERIAL ASSETS OF MWANA AFRICA PLC

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The Directors Mwana Africa Plc PO Box 2950 Parklands, 2121 Johannesburg

June 2007

RE: AN INDEPENDENT TECHNICAL REPORT ON THE MINING AND EXPLORATION ASSETS OF MWANA AFRICA PLC.

Dear Sirs,

Please find attached our Independent Technical Report ("ITR") on the material and certain other mining and exploration assets of Mwana Africa plc ("Mwana"), a company incorporated in England and Wales with Registration number: 02167843, and registered office at Devon House Dartmouth Street, London, SW1H9BL, comprising the Bindura Nickel Corporation and Freda Rebecca Mine located in Zimbabwe and exploration prospects located in Zimbabwe and the Democratic Republic of the Congo. We have prepared this ITR in accordance with our proposal No.377727/1 dated March 2007, and our understanding of the listing requirements of the Ontario Securities Commission ("OSC") of the Toronto Stock Exchange.

Should you have queries please do not hesitate to contact us on the following numbers:

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EXECUTIVE SUMMARY

1. Introduction

Oct 2005

Mwana Africa Plc ("Mwana"), an AIM listed company, is considering the acquisition of Southern Era Diamonds Inc. a TSX listed company. SRK Consulting (SA) Pty Ltd ("SRK") has been requested to prepare this independent Technical Report in connection with this transaction.

This ITR comprises an independent report of the technical and financial aspects of Mwana's mining and exploration assets, and has been prepared according to the guidelines set out in Chapter 5, Rules and Policies, National Instruments 43-101, Standards of Disclosure for Mineral Projects, of the Ontario Securities Commission ("OSC").

The effective date of this report is July 11, 2007 other than the Mineral Resource and Mineral Reserve Statement dated December 31, 2006.

2. History of Mwana Africa Plc

Mwana was formed through a reverse takeover of African Gold Plc an AIM listed gold mining company with assets in Zimbabwe and Ghana by the privately owned Mwana Africa Holdings (Proprietary) Ltd with mining and exploration assets in Zimbabwe and the DRC. A brief history of the company since formation is summarised as follows:

Formation of Mwana through a reverse takeover of AIM listed African Gold Plc

OCI 2003	Torniadon of wiwana through a reverse takeover of Any fisted African Gold Fie
Dec 2005	Mwana acquired Cluff Mining (Zimbabwe) Holdings Limited which has a 50% interest in the dormant Maligreen Gold Mine
Apr 2006	A capital raising of £42.1 million through public placement on AIM
May 2006	Acquired a 20% interest in the Société Minière de Bakwanga (MIBA), DRC through a purchase of Umicore's subsidiary Sibeka. MIBA is a State controlled diamond producer located in Mbuji Mayi
Jun 2006	Established a joint venture agreement with Energy Equity Resources Limited, a privately owned oil and gas group with international exploration and production currently focused in the African and Middle East region
Aug 2006	Acquired 15% shareholding in Gravity Diamonds Limited, an ASX and AIM listed diamond exploration company. The company intends to fund exploration at their Kasai Shield property in the DRC

Mar 2007

Mwana makes a bid to acquire all the outstanding shares of Southern Era Diamonds Inc. Southern Era, a TSX-listed diamond company holding exploration projects in Canada and the DRC as well as an 18% interest in the Camafuca mine, Angola and a 57% interest in the Klipspringer diamond mine, South Africa.

The principal assets of Mwana, as at the date of this ITR, comprise mining and exploration assets located in the Republic of Zimbabwe ("Zimbabwe") as well as certain exploration assets located in the Democratic Republic of the Congo (the "DRC") and Ghana. The principal commodities currently being mined, processed and recovered include nickel, copper, cobalt and gold. Production in the twelve months ending December 2006 comprised some 5,451t of nickel, 320t of copper in copper sulphide, 60t of cobalt and 4,000oz of gold. The mining and exploration assets that form part of this ITR and are owned and operated by Mwana (the "Mining Assets") are summarised as follows:

- A 52.9% equity interest in the Bindura Nickel Corporation Limited which in turns holds:
 - A 100% interest in Trojan Mine located at Bindura, some 100km north east of Harare,
 Zimbabwe.
 - o A 100% interest in Shangani Mine located some 100km north east of Bulawayo, Zimbabwe,
 - o A 100% interest in the Bindura Smelter and Refinery located at Bindura, Zimbabwe,
 - A 82.5% interest in the Hunters Road nickel exploration prospect located some 35km north of Gweru, Central Zimbabwe,
- A 100% equity interest in Ashanti Goldfields Zimbabwe Limited ("Ashanti Zimbabwe") which in turn holds a 100% interest in the Freda-Rebecca Gold Mine its sole operating asset. Mwana has an obligation to sell 15% of FRM to a local investor; and
- A 100% interest in the Semkhat (Anmercosa Exploration Congo SPRL) that has rights to exploration concessions comprising some 9,689km² located in the Katanga Province of the Democratic Republic of Congo ("DRC").
- 70% of the Obenemase project, which is part of the Konongo licence area in Ghana (Owera Mine), a joint venture with Talos Ghana Limited and the Ghanaian Government.

All the above assets except for the Obenemase project are considered material to the market capitalisation of Mwana.

The 52.9% majority interest in BNC was acquired by Mwana from Anglo American Corporation Ltd in 2003. The remaining interest comprises holdings by Zimbank (14%), the NSSA (6%) and the Public (27%).

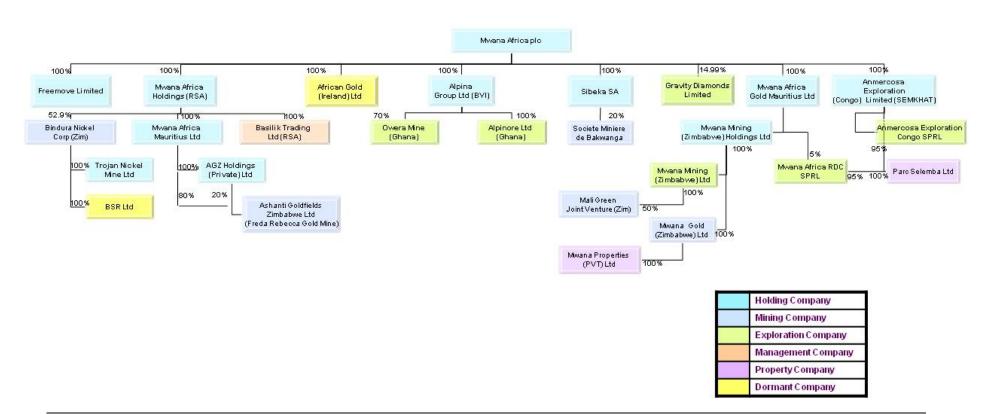
The 100% interest in Ashanti Zimbabwe and Fredda Rebecca Mine ("FRM") was acquired by Mwana in 2004 from AngloGold Ashanti Ltd.

A considerable amount of underground and surface infrastructure exists at BNC and FRM and whilst the infrastructure at BNC is fully operable and requires only reasonable stay-in-business ("SIB") capital to maintain production that of FRM requires capital investment in both the process facility and the underground mining fleet to return to full production

The group structure of Mwana as on 31 March 2007 is as follows:



Group Structure At 31 March 2007



3. Geological Setting

The nickel sulphide deposit at Trojan Mine occurs within a pile of ultramafic lavas subjected to a lower amphibolite grade of metamorphism and are characterised by lensoidal bodies of serpentinite. The lavas form part of the Upper Greenstones (Bulawayan Group) of the Mazowe greenstone belt. The serpentinite bodies are separated from each other by cherts, BIFs, graphitic shales and felsic volcanics. The footwall and hanging wall of the nickel bearing serpentinites are formed by komatiitic and tholeiitic basalts. The general strike of the ore bodies is east—west and dip steeply (75° to 85°) to the north. The two major ore bodies are the Main Orebody and the Hanging Wall Orebody. The massive and near massive ores occupy a narrow and discontinuous zone along the footwall of the Main Orebody and this is called the footwall massive orebody. The Main Orebody is the largest, and averages 250m long and 30m wide. There are other smaller ore bodies such as Trojan Hill, Cardiff East and Cardiff Far East. Drilling has outlined the Main Orebody to a depth of 1,180m below surface.

The Shangani Mine is located in the Shangani/Nsiza Greenstone Belt to the north east of the Bulawayan Greenstone Belt, and is aligned roughly north-south. The Shangani ore bodies lie within the mushroom shaped 'Shangani ultramafic complex', with mineralisation occurring in the Esmyangane Formation of the Sebakwean Group. The Esmyangane Formation comprises a thick succession of mafic and intermediate tuffs and agglomerates, the upper part of which is intruded by a layered ultramafic body. The mushroom shape is now believed to be one continuous mineralised zone disrupted into three distinct ore zones by near vertical faults. The 'stem' of the mushroom is probably an older feeder dyke system. The ore zones are confined to flat lying parts of the lobes adjacent to the stem of the 'mushroom'. Amphibolites and cherts form the footwall to the orebodies.

The Shangani nickel sulphide deposit is 1.5km long and trends east-west and plunges generally at 48° south-easterly. The main host rock is highly altered, talcose serpentinites with abundant coarse-grained carbonates (magnesite and dolomite). The Main Orebody and Far West Orebody outcrop on surface while the West Orebody does not outcrop. The West Orebody and Far West Orebody are tabular in shape but the Main Orebody is thicker in section. Drilling has outlined the Main Orebody to a depth of approximately 1,065m below surface, and about 1,010m below surface for the other orebodies. Primary control of sulphides distribution was probably gravity settling of the heavier sulphides through the ultramafic magma, resulting in a rich footwall zone – particularly well developed in the footwall of the eastern lobe. It is the eastern lobe that forms Shangani's Main Orebody. The western lobe forms the Far West Orebody and the central part forms the West Orebody. Massive sulphides occur at the base, followed by near-massive sulphides, whose concentration progressively decreasing upwards into disseminated sulphides. Sulphide enrichment also occurs in

tectonic veins and faults. Disseminated sulphides comprise the bulk of the ore mined at Shangani Mine.

The Hunters Road deposit lies in the upper Bulawayan Group within the Gweru-Midlands South Greenstone belt in central Zimbabwe. The Hunters Road nickel deposit is hosted by a serpentinized cumulate komatiite, originally mainly consisting of coarse interlocking magnesium rich olivine grains. In some cases accessory pyroxene, sulphides and chromites are present as intergranular / interstitial / intercumulus material. This cumulate komatiite is thus essentially dunitic in composition. The orebody is bi-lobate near to surface but appears to merge at depth to form a single entity as in a scissors fault. Although there are different interpretations on the formation of this structure, the most probable on is that the structure is a result of sinistral shear thrusting and repeating the contact and the mineralisation.

The exploration, development and production history for gold in the Bindura area dates from 1912. The Freda oxide and Freda and Rebecca sulphide gold deposits were discovered in 1987 and the first gold pour took place in 1988. Underground operations commenced at the Rebecca section in 1996. Ashanti Goldfields Zimbabwe acquired the mine in 1996. In 1998, the Freda pit was closed and the Freda Rebecca Mine ("FRM") became an underground operation. AngloGold acquired Ashanti Goldfields in 2004. In that year Mwana acquired FRM from AngloGold for USD2.25million. From 1988 until 2006, FRM operated on a continuous basis. Today, FRM comprises a single underground operation and various surfaces sources processing ore through a single facility utilising a combination of crushing, conventional milling and combined gravity, CIL process. The plant and mine were closed in March 2007 due to refurbishment of the process plant and adverse economic conditions. FRM lies on the central axis of the synclinal Mazowe-Bindura Greenstone belt. The geology of the area around FRM is characterised by the Shamvaian sediments, diorite and granodiorite. The FRM orebodies are largely hosted by the Prince of Wales diorite and the Bindura granodiorite. The mineralisation is hosted within two major shear envelopes. Individual shears are variable in width and these two systems merge to the south west at depth flattening at around 850m elevation and extending into the metasediments. The shear system is characterized by a set of anastomosing shears separated by relatively undeformed rock units.

The Kibolwe Project area, which is part of the Semkhat area, overlies sediments of the Katangan Supergroup which form part of a regional-scale fold and thrust belt formed during the Pan African Lufilian orogeny. Within the project area strata have been thrusted and brecciated along the east-west trending Disoloshi Anticline.

Kibolwe is a sediment-hosted stratiform copper deposit which occurs within steeply dipping Roan, Mines Sub-group rocks. Cu-Co mineralization occurs within weathered argillaceous dolomites and shale units which have been correlated with R-2.3.1 CMN-Kambove dolomites. The mineralized units have been

traced over an 800m strike length. The dominant copper oxide is malachite with minor amounts of cuprite and tenorite which occur in the argillaceous carbonates with minor concentrations in the shale units. (Sulphide minerals including chalcopyrite and pyrite were encountered in historical diamond drill holes drilled below the oxide zone).

4. Mineral Resource Estimation

SRK has not recalculated Mineral Resource and Mineral Reserve estimates for each asset. SRK has, however, undertaken sufficient check calculations and, where appropriate, made necessary adjustments to the estimates to derive the estimates presented herein. The Mineral Resources of BNC are 52.9% attributable to Mwana.

Table 0-1: Mineral Resources at Trojan Mine (Dec 31, 2006)

Measured			Indicated			Inferred		
Tonnes (kt)	Grade Ni%	Contained metal Ni (t)	Tonnes (kt)	Grade Ni%	Contained metal Ni (t)	Tonnes (kt)	Grade Ni%	Contained metal Ni (t)
1,965	0.90	17,686	4,436	1.89	83,846	7,942	0.72	57,185

NB: Nickel grades are reported as total nickel.

Table 0-2: Mineral Resources at Shangani Mine (Dec 31, 2006)

Measured			Indicated			Inferred			
Tonnes (kt)	Grade Ni %	Contained metal t Ni	Tonnes (kt)	Grade Ni %	Contained metal t Ni	Tonnes (kt)	Grade Ni %	Contained metal t Ni	
663	0.43	2,850	800	0.50	4,000	5,243	0.52	27,264	

NB: Nickel grades are reported as total nickel.

Table 0-3: Total Mineral Resources for BNC (Dec 31, 2006)

Measured			Indicated			Inferred		
Tonnes (kt)	Grade Ni %	Contained metal t Ni	Tonnes (kt)	Grade Ni %	Contained metal t Ni	Tonnes (kt)	Grade Ni %	Contained metal t Ni
2,628	0.78	20,536	5,236	1.68	87,846	13,185	0.64	84,449

NB: Nickel grades are reported as total nickel.

Table 0-4: Mineral Resources for FRM (Dec 31, 2006)

Measured			Iı	ndicated		Inferred			
Tonnes (kt)	Grade (g/t)	Gold (Koz)	Tonnes (kt)	Grade (g/t)	Gold (Koz)	Tonnes (kt)	Grade (g/t)	Gold (Koz)	
nil	nil	nil	20,552,838	2.60	1,720	1,855,591	2.57	153	

Note. Estimated at a 1.5g/tAu cut-off

A Mineral Reserve has not been estimated for FRM as the mine is closed due to the prevailing economic situation in Zimbabwe.

Table 0-5: Exploration Mineral Resources; Obenemase (70% attributable to Mwana).

	Measured			Indicated			Inferred			
Exploration Project	Tonnes (kt)	Grade Au (g/t)	Gold (Koz)	Tonnes (kt)	Grade Au (g/t)	Gold (Koz)	Tonnes (kt)	Grade Au (g/t)	Gold (Koz)	
Obenemase	nil	nil	nil	1,297	3.43	143	1,081	2.88	100	

5. Status of Development and Operations

5.1. Bindura Nickel Corporation - Zimbabwe

Trojan Mine: The Bindura Nickel Corporation has been producing cathode nickel for the past 4 decades. Mining is by mechanised sub-level caving. At the Trojan Mine the orebody is open in depth and exploration drilling has indicated but not confirmed continuity. A re-deepening project is well advanced on the first phase to extend the access infrastructure by 480m. Ramp development and level development is behind schedule and will need to accelerate to prevent a reduction in production. The LoM is expected to continue to 2017. The age and poor recovery performance of the Trojan Mine concentrator has necessitated the rebuilding of the flotation section using larger tank cells. Construction has started and commissioning is expected in the first quarter of 2008.

Shangani Mine: Shangani mine was scheduled for closure in 2008. Exploration drilling identified an extension in depth of the far west orebody and the LoM plan has been extended to 2012. A conveyor decline has advanced 480m of the planned length of 1,100m to provide rock handling capacity and ventilation to the deeper workings. The ore is predicted to be harder and some reduction in throughput can be anticipated if the comminution circuit is not modified.

5.2. Hunters Road - Zimbabwe

This mineral deposit has been known for 30 years. The mineralogy is complex and various campaigns of drilling and metallurgical testwork have been undertaken over the past 10 years. The increase in nickel price has justified the commissioning of a new scoping and pre-feasibility study. The proposal to advance the level of study to full feasibility is expected to be approved by the Board in mid 2007 and construction and pre stripping is expected to start by year end, with the project commissioned at the end of 2008.

5.3. Freda Rebecca Mine - Zimbabwe

The mine was acquired at a stage when gold prices were low and the mine had suffered from lack of reinvestment. The plant was in a poor state of repair with one of the mills cannibalised for spare parts.

The reinvestment programme is well advanced and although the mine is currently on care and maintenance it is expected to restart in late September 2007 with an annualised output of about 48,000ozs per year treating 50,000tpm. Additional investment in phase 2 of the project should see the commissioning of the second mill with new girth gear, pinion and shaft. This should allow production to be further increased to about 80,000oz per year.

Both the Bindura Nickel Operations and the Freda Rebecca Mine are impacted by the hyperinflation economic conditions pertaining in Zimbabwe. The Governor of the Reserve Bank of Zimbabwe has attempted to curb inflation by implementing a range of fiscal and monetary controls. Manipulation of the local gold price has seen the severe contraction of the gold mining industry in Zimbabwe over the past few years. The knock on effects have been the imposition of rigid import and export control bureaucracy which has the effect of delaying delivery of imported spares and consumables. The deteriorating quality of life has motivated an exodus of professionals and skilled labour from Zimbabwe to South Africa, Botswana and elsewhere to earn foreign currency.

5.4. Semkhat - DRC

Semkhat S.P.R.L. ("Semkhat"), a wholly owned subsidiary of Mwana Plc, is exploring for copper/cobalt and lead/zinc mineralisation on its licences in the South Katanga Province of the DRC. Mr. Tony Martin of SRK visited these properties in mid 2004 but did not carry out a detailed examination of the database.

Semkhat has acquired an extensive database comprising, geological maps, geophysical and geochemical data sets produced by Anglo American, Gecamines, Sudkat Union Minére, Société International des Mines du Zaire and SODIMICO while exploring within the concession area. These data have been analysed, interpreted and used to identify several priority targets which occur within a highly prospective zone 80km long and 20km wide in the northern portion of the licence area. Other high priority targets with significant geochemical anomalies and prospective geological settings occur elsewhere in the concession. Follow up exploration is currently underway to verify the potential of the prospects.

At the Kibolwe prospect a regional soil sampling programme identified an open ended geochemical copper soil anomaly 1.5km in length and 800m wide. A 3,100m Reverse Circulation drilling programme undertaken over the anomaly outlined a lenticular, sub horizontal mineralized zone over an 800m strike length with an inferred resource of 2.8Mt grading 2.76% Cu. A 5,000m infill RC drilling programme is underway. A total of 2,500m of the 5,000m programme have been completed. The remaining meters are expected to be drilled by the end of June. Samples are being assayed by ALS Chemex Analytical Laboratories in Johannesburg in accordance with international industry

standards. The relevant quality assurance and quality controls have been put in place. A pre-feasibility study will be undertaken once the current RC drilling programme is completed.

Resource drilling is progressing at the Kibolwe prospect with recent results having been made public on the 5th June 2007. Pending confirmation of the results the project is likely to advance through scoping to pre-feasibility in 2007.

The gold exploration which Mwana is conducting in the Ituri district of Eastern DRC is not considered material and is therefore not described in this technical report. Similarly the recent acquisition of Gravity an Australian junior exploration company has not yet been integrated into Mwana to be included in this report. Mwana holds 20% of the MIBA Diamond Mine in DRC and this holding is also excluded as not material.

5.5. Obenemase - Ghana

The Obenemase gold project in Ghana, although not material, has been described in more detail in the text. Mwana has yet to decide on a strategy for the deposit, and whether to extend the drilling campaign.

The Obenemase gold project was reviewed by RSG Global¹ and SRK have referred to their report throughout this document.

6. Valuation of Mwana

The macro economic climate of Zimbabwe is currently hyper inflationary and in conjunction with disparities between official and unofficial exchange rates the reporting of cost and economic factors is problematic. As a result of the forgoing USD has been retained as the currency for financial valuation.

The Net Present Value ("NPV") derived for BNC at varying discount rates is reflected below.

Table 0-6: Discounted NPV for BNC

		Net Present
Rate		Value
10%	USDm	117.20
12.5%	USDm	113.10
15%	USDm	109.20

The Hunters Road Project has been valued assuming a production rate of 720ktpa of ore treated returns an NPV of USD61 million at a discount rate of 12.5%.

1 RSG Obenemase Review Report

The Semkhat and Obenemase exploration prospects have been valued using historical costs as a basis. The values derived are as follows:

• Obenamase: USD7.2 million for 70% share

• Semkhat: USD 5.2 million for 100% share

No value was placed on FRM as there is no Mineral Reserve declared.

7. Conclusion And Recommendations

Bindura Nickel Corporation

The Trojan Mine is an established operation and the QP concludes that this is a viable operation until 2017.

The Shangani Mine is an established operation and the QP concludes that this it has a viable life until 2012.

The QP concludes that the project warrants advancement to the full feasibility stage.

Freda Rebecca Mine

The QP concludes that the re-commissioning of Freda Rebecca Mine will be dependent on the gold price received as determined by the governor of the Reserve Bank of Zimbabwe.

Semkhat

The QP concludes that the Kibolwe prospect is worthy of further exploration and study.

Obenemase

As part of the greater Konongo area, it may make a contribution but is unlikely to be established as a stand alone project.

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A TECHINCAL REPORT ON THE MINING AND EXPLORATION ASSETS OF MWANA AFRICA HOLDINGS PLC

1 INTRODUCTION AND TERMS OF REFERENCE

1.1 QUALIFICATIONS OF SRK

The SRK Consulting (SA) Pty Ltd ("SRK") Group comprises 500 staff, offering expertise in a wide range of resource engineering disciplines. The SRK Group's independence is ensured by the fact that it holds no equity in any project. This permits the SRK Group to provide its clients with conflict-free and objective recommendations on crucial judgment issues. The SRK Group has a demonstrated track record in undertaking independent assessments of resources and reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. The SRK Group has also worked with a large number of major international mining companies and their projects, providing mining industry consultancy service inputs.

Neither SRK nor any of its employees and associates have any material interest in Mwana Africa Plc ("Mwana") or in the Mining Assets of Mwana and SRK are to be paid a fee for this work in accordance with normal professional consulting practice. The individuals responsible for this report, listed below, have extensive relevant experience in the mining industry and are members in good standing of appropriate professional institutions:

- Roger Dixon, Pr. Eng, FSAIMM, BSc
- Vic Hills, Pr.Eng., MSAIMM, B.Eng.
- Andrew Nesbitt, BSc (Eng) Mining, MBA
- Chris Smythe, HND(Mech Eng), Cert. Eng., MSAIMM
- Rob Ingram, Pr.Sci.Nat., C.Eng., FGSSA, MIMMM, BSc.
- James Lake, Pr.Sci.Nat., MSc (Environmental Geochemistry)
- Tony Martin, Pr.Sci.Nat., BSc (Eng) Mining Geology, DPhil, MAus IMM

The qualified person with overall responsibility for this Independent Technical Report is Roger Dixon who did not participate in the site visit, however, he was represented by the above mentioned qualified persons in each discipline.

1.2 PURPOSE OF INDEPENDENT TECHNICAL REPORT

Mwana Africa Plc, an AIM listed company is considering the acquisition of the outstanding shares of Southern Era Diamonds inc, a junior mining and exploration company listed on the Toronto Stock

Exchange. The preparation of the Independent Technical Report is a requirement of the rules and policies of the Ontario Securities Commission and has been prepared according to the guidelines set out in Chapter 5, National Instrument 43-101 Standards of Disclosure for Mineral Projects. The Independent Technical Report describes the technical and financial aspects of Mwana's material mining and exploration assets.

In preparing this Independent Technical Report ("ITR"), SRK have undertaken the following:

- A site visit to the Trojan Mine, Bindura Smelter and Refinery ("BSR") complex, FRM located at Bindura, Hunters Road some 100km from Bindura and to Shangani Mine, Zimbabwe conducted over five days during 7-11 May 2007;
- A review of the technical information provided by Mwana including various reports, results and forecasts of future production and cost;
- Discussions with the relevant Mwana, BNC and FRM personnel;
- Reviewed BNC's and FRM's estimates and classification of Mineral Resources and Mineral Reserves and commented upon these;
- Reviewed the technical inputs into the life of mine ("LoM") plan and technical-economic model prepared by BNC to reflect forecasts of production and cost; and
- Reviewed the respective exploration assets.

SRK has not undertaken any accounting, financial or legal due diligence of the Assets or the associated company structures and the comments and opinions contained in this ITR are restricted to technical and economic aspects associated with the mining and processing activities. As SRK was responsible in the past for providing the necessary support and technical advice regarding the tailings management at both Bindura Nickel Corporation Limited ("BNC") and FRM, SRK does not therefore offer an independent opinion on these aspects or the adequacy of the design. A description of the current facilities is however presented as part of the Minerals Processing and Metallurgy Section of this ITR.

1.3 SOURCES OF INFORMATION

Table 1-1 below shows a list of information sources used by SRK for compiling the ITR. A detailed list of all files and/or documents used can be produced by SRK should it be required.

Table 1-1: List of Information Sources

Reference	Description	Date	Author
1	African Gold acquisition - Mwana AIM listing document -Competent Persons Report	Sep-05	SRK Consulting
2	Mwana Annual Report 2006	Sep-06	Mwana Africa Plc Board of Directors
3	Bindura Nickel Corporation Annual Report 2006	Jul-06	Bindura Nickel Corporation Board of Directors
4	Bindura Nickel Corporation Reconciliation of Resources and Reserves	Feb-07	Claudius Makuni - Qualified person -Senior Geologist
5	Review of Mineral Resources for Freda Rebecca Mine	Oct-06	Gayle Hanssen - Qualified Person - Consultant for Geology and Mineral Resource Management
6	LOM Budget FRM 2007 Draft 2	May-06	Tinashe Tagwire - Mining Manager Feda Rebecca Mine
7	Minerals Marketing Corporation of Zimbabwe Marketing Agreement	Apr-06	
8	Annual and Monthly Operations Reports		Mine Management
9	Capital estimates as approved by the Board and adjusted by SRK	Feb-07	Mine Management
10	Report on 2004 Exploration of Kibolwe, Lufira and Mwombe Anomalies – Katanga DRC	Jan-04	SRK Consulting: Tony Martin
11	Database Review, Geological Modelling and Grade Estimation	Aug-06	RSG Global: Neil Inwood, Senior Consultant – Resources

2 DISCLAIMER

2.1 LIMITATIONS AND RELIANCE ON INFORMATION

The opinions expressed by SRK in this ITR are based on observations made during the site visit supplemented by discussions held with various operational and management personnel and documentation either provided to SRK by Mwana, or requested during and following the site visits. SRK has not undertaken any independent testing, analyses or calculations beyond checks intended to give SRK comfort in the material accuracy of the data provided.

The macro economic climate of Zimbabwe is currently hyper inflationary and in conjunction with disparities between official and unofficial exchange rates the reporting of cost and economic factors is problematic. As a result of the forgoing USD has been retained as the currency for financial evaluation.

2.2 LEGAL RELIANCE

SRK has placed reliance on Mr. J.H. Cook (Atherstone & Cook) for the legal due diligence of the Zimbabwe operations, a copy of which is included as Annexure A. The opinion of Mr. J.H. Cook was that there were no legal matters that will materially effect the ongoing operations of Mwana. A copy of the share certificate showing Mwana's ownership of BNC shares is attached as Annexure B.

2.3 TECHNICAL RELIANCE

SRK placed technical reliance on RSG Global with respect to the geological report and Mineral Resource Statement for Obenemase exploration prospect. The qualified persons responsible for the report dated 25 August 2006 are Mr. N Inwood, Mr. J de Visser and Mr. B Nicholls. Mr Nicholls visited the site and all have given written consent for the use their report in this document.

3 PROPERTY DESCRIPTION AND LOCATION OF MINING AND EXPLORATION ASSETS

3.1 PROPERTY DESCRIPTION AND LOCATION

The Trojan Mine and Concentrator and BSR facility is located at Bindura in the Mashonaland Central Province of Zimbabwe, some 100km northeast of the capital Harare. The site is accessed by tarred road and a rail link from Harare. It is supplied from the national network in terms of power and telecommunications. Water is obtained from the Mazowe River. A plan of the surface area, which is approximately 85ha, is included as Figure 3-1 below. Details of the claims for Trojan Mine are included in the legal opinion attached as Annexure A.

Section 3 – Property Description

Mwana 43-101 ITR: Main Report

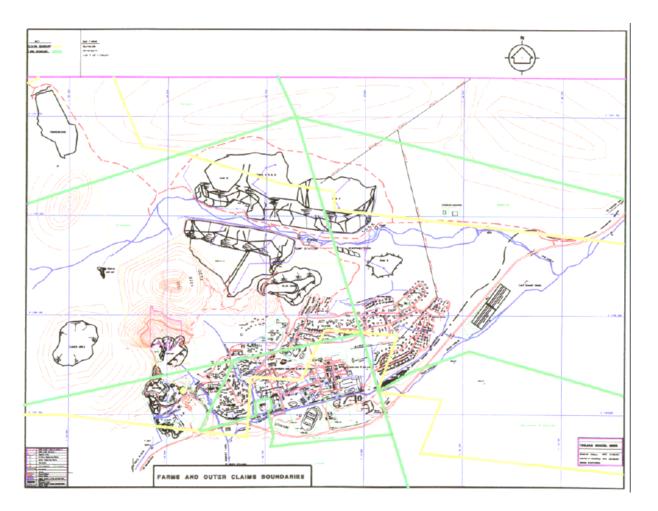


Figure 3-1: Trojan Surface Area

The Shangani Mine and Concentrator are located in the Midlands Province of Zimbabwe some 100km northeast of the regional city of Bulawayo. The mine is also served by good tarred road and rail facilities as well as access to the national network of electrical power and telecommunications. Water is obtained from underground dewatering and from the Tiyabenzi dam. A plan of the surface area is included as Figure 3-2 below. Details of the claims for Trojan Mine are included in the legal opinion attached as Annexure A.

Section 3 – Property Description

Mwana 43-101 ITR: Main Report

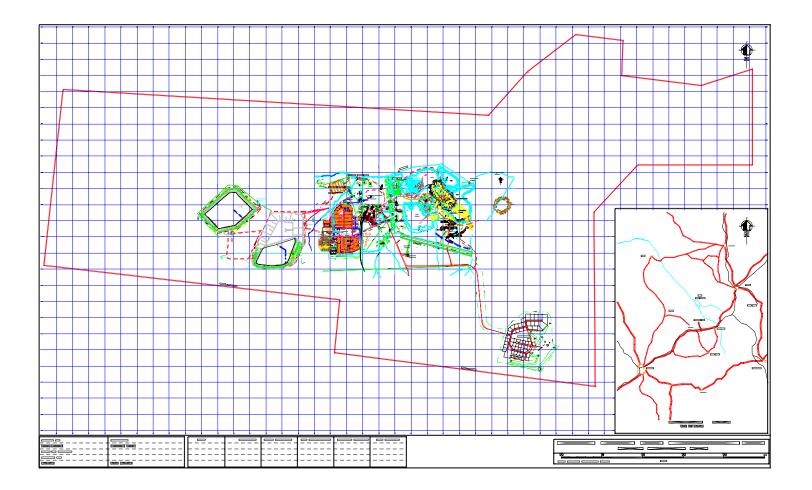


Figure 3-2: Shangani Surface Area

Hunters Road exploration prospect is located some 35km north of Gweru in the Midlands Province of Zimbabwe. A plan of the surface area is included as Figure 3-3 below. Details of the claims for Trojan Mine are included in the legal opinion attached as Annexure A.

Section 3 – Property Description

Mwana 43-101 ITR: Main Report

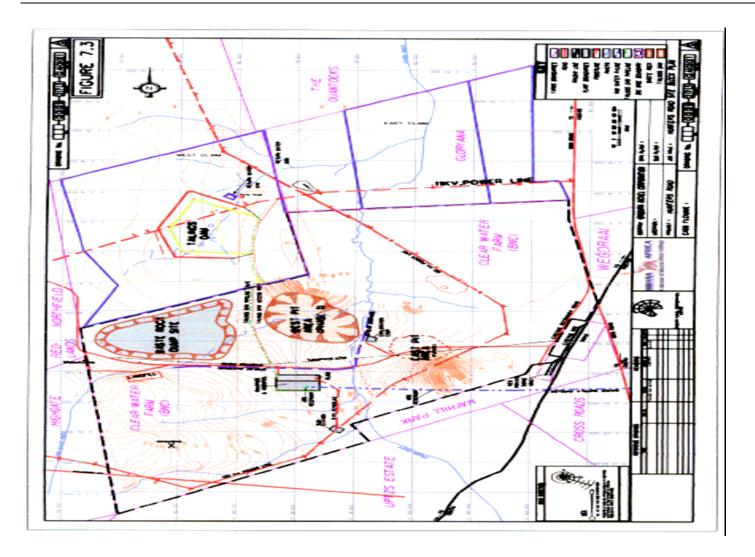
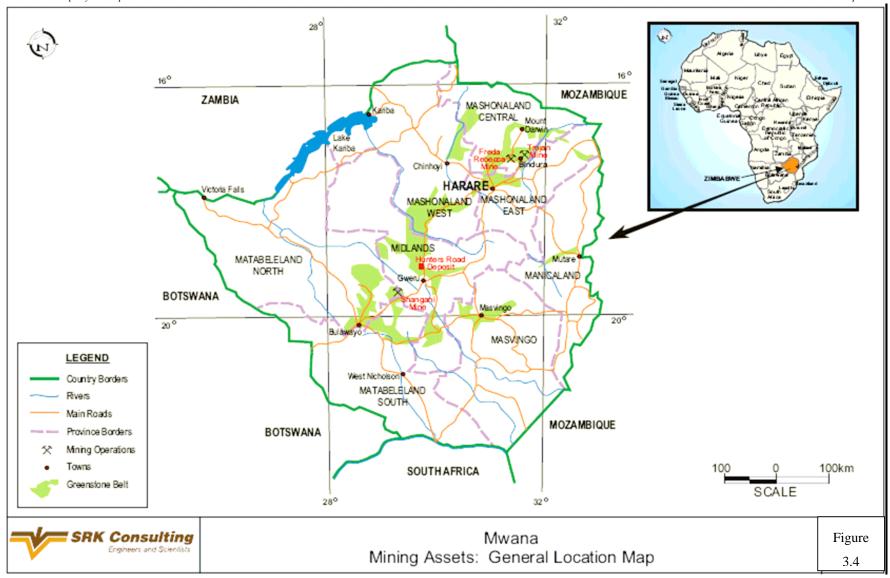


Figure 3-3: Hunters Road Surface Area

The principal toll contracts in operation comprise nickel matte that is received from Bamangwato Concessions Ltd ("BCL") located near Francistown, Botswana and Western Platinum Ltd in South Africa. This is delivered by rail to the BSR facility and the product from BNC is exported by road to warehouses of the selling agents located in Johannesburg, South Africa.

The location plan of BNC's assets is depicted in Figure 3-4.

Section 3 – Property Description Mwana 43-101 ITR: Main Report



The nickel operations in Zimbabwe are obliged to pay a royalty of 2% on gross proceeds with respect to nickel mining.

The environmental liabilities of each operation are described in Section 0: Semkhat

The work is being conducted according to the conditions stipulated in the environmental permission for exploration issued by the environmental agency in the DRC. No significant issues with respect to the environment or the community were anticipated.

Environmental Liabilities.

FRM is located adjacent to Mwana's BNC operation at Bindura some 87km north east of the capital Harare in the Mashonaland Central Province of Zimbabwe. The site location, access and services are substantively the same as that described for BNC's Trojan Mine and BSR facility in Section 3.1 above. The location is also reflected by Figure 3-4.

Semkhat has rights to 9,689km² located in the Katanga Province of the DRC (refer Figure 9-1).

The table below depicts a list of all the exploration rights numbers for Mwana with regards to the Semkhat prospect.

Table 3-1: Semkhat Exploration Rights (16-Oct-2003 to 15-Oct 2008)

Permis De Recherches N°		
738	752	763
739	753	767
740	754	768
741	755	769
745	756	774
746	757	775
747	758	776
748	759	777
749	760	778
750	761	779
751	762	975

An annual renewal fee of USD341,000 is payable and Mwana have to relinquish 50% of the exploration area before the next renewal payment in March 2008.

No royalties are at present levied on the Semkhat prospect as it is an early exploration project.

The Obenemase Prospect which forms part of the Konongo Propecting Licence is located about 175km NW of Accra and 25km SE of Kumasi in the Republic of Ghana. The climate is tropical with well defined rain seasons. The altitude is about 300m.

4 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

4.1 INFRASTRUCTURE AND ACCESS

4.1.1 ZIMBABWE

Trojan Mine and the BSR

The Trojan Mine and the BSR are situated on the main road network, which is in reasonable condition. Rail access is available at both the smelter and the refinery. It was reported; however, that road transport of concentrate, product and material is more reliable than rail transport. Communications to and from site is good with the latest technology being used. The access and communications aspects are considered, by SRK, to be adequate to support the requirements of the LoM plan.

The Trojan Mine and the BSR has been operational since the early 1960s and the plant although maintained, is showing signs of wear. In certain cases mechanical failure may result in the necessity to replace equipment, as repairs may not be possible or economically viable. The provision of SIB capital is therefore of importance. SRK understand that BNC has budgeted SIB capital at a level equivalent to some 5% of cash operating costs. This is believed by SRK to be low considering the 7-10% historically expended and the age of the infrastructure.

Shangani Mine

The Shangani mine is situated some 100km north east of Bulawayo. It is accessed from the main road which is tarred all the way. The road access to the mine site is in good condition and if properly maintained is considered, by SRK, to be adequate to support the requirements of the LoM plan.

Freda Rebecca Mine

FRM is situated on the main road network, which is in reasonable condition. Rail access is available at Bindura Town Station and BNC's Smelter and Refinery. Communications to and from site are good with the latest technology being used. The access and communications aspects are considered, by SRK, to be adequate to support the requirements of the LoM plan.

4.1.2 DRC

In Lubumbashi, local infrastructure and resources are relatively well established. High voltage lines capable of providing sufficient power for mine development are already in place. However, the main prospect area of Kibolwe is some 160km from Lubumbashi. There is little infrastructure in the area and exploration is conducted via bush tracks.

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4.2 CLIMATE

4.2.1 ZIMBABWE

No information is currently available to SRK on the site specific climatic conditions, therefore those of Harare have been included for illustrative purposes as all assets, with the exception of Shangani mine are within 100km radius of the city. The daily maximum and minimum temperatures for Harare are presented in the table below.

Table 4-1: Monthly Maximum and Minimum Temperatures for Harare

Temperatures (°C)	J	F	M	A	M	J	J	A	S	О	N	D
Maximum	25	25	26	25	22	20	20	22	26	26	27	26
Minimum	17	16	16	15	12	9	9	10	13	15	16	17

On average 700mm of rain is recorded annually. Although there are recurring droughts, floods and severe storms are rare.

Generally the summer temperatures (November to May) are generally high and winters (April to October) are warm with only occasional frost. The rainy season is generally from November to March and seasonal mean rainfall is around 800mm although some seasons have recorded as high as 1,600mm.

4.2.2 DRC

The climate of the region is tropical. The wet season is typically from April to October and the dry season is from December to February. In the southern parts of the DRC, the annual average rainfall is 1,000 to 1,500mm. Between December and April, most fieldwork is restricted to areas served by bush tracks, effectively limiting exploration.

4.3 ELECTRICAL POWER SUPPLY

BNC has an agreement with the national power utility (ZESA) whereby ZESA considers BNC to be a preferred customer and in consideration of this, BNC pays 50% of the tariff in foreign currency. At the time of the site visit, announcements were made in the press about severe load shedding and it remains to be seen how this will impact the operation. Diesel generator capacity at the operations is limited and will not prevent losses, should load shedding occur.

Trojan Mine and the BSR

The infrastructure is well established and problems have generally been resolved over the past years of operation. The electrical infrastructure in Zimbabwe is well developed and plans to increase the

supply to the national grid are in progress. The power requirement for the plant including the smelter and refinery is reported to be approximately 60MW. There are two incoming power lines, which supply power at 132kV and 88kV. The original installation was 88kV and a new incomer at 132kV is stepped down to 88kV. Together they supply the site with 75MVA. There is provision for the installation of a further transformer expansion of the switchyard if required.

The tariff for 88kV is higher than that at 132kv and it is reported that there is an opportunity to reduce the tariff cost of electricity if the mine can accept power at 132kV. This possibility is being reviewed in depth for practicality and cost effectiveness.

Planned future plant upgrades are not expected to add to the power requirements. The power installation appears in relatively good condition and is considered, by SRK, to be adequate to support the requirements of the LoM plan.

Shangani Mine

The power requirement for the plant is reported to be approximately 20MW. There is one incoming power line supplying power at 132kV from the main transmission line running between Harare and Bulawayo. The switchyard has one transformer of 25MVA capacity, which is over the capacity required of the mine and is reported to be reliable.

Planned future plant upgrades are not expected to add to the power requirements. The power installation appears in relatively good condition and is considered, by SRK, to be adequate to support the requirements of the LoM plan.

Freda Rebecca Mine

The power requirement for the FRM gold plant is reported to be approximately 15MW. The power is distributed throughout site by an overhead transmission line at 33kV and stepped down at each substation on site. There are no future plant upgrades, which are expected to add to the power requirements. The power installation appears to be in relatively good condition and is considered, by SRK, to be adequate to support the requirements of the LoM plan.

4.4 WATER SUPPLY

Trojan Mine and the BSR

Water is supplied to the process plant from the Mazowe River. The plant requires 260Ml water per month under normal operation conditions. The mine is a relatively dry mine and a small amount of water is supplied from mine dewatering. All the water requirements for Trojan Mine and the BSR are supplied from the pump station on the Mazowe River, which has a pump capacity of 397Ml per month. The pipeline has been in operation for some time and it is reported that some sections have

been replaced. This is likely to be an ongoing requirement as age takes its toll on the installation. This supply is reported to be reliable and no problems with the availability of water from the Mazowe River have been reported in the past. The water supply infrastructure is considered, by SRK, to be adequate to support the requirements of the LoM plan.

Shangani Mine

Water is supplied to the process plant from dewatering operations of the mine. Make-up water is supplied from the Tiyabenzi dam on the Shangani River. The plant requires 260Ml of water per month and under normal operating conditions 80Ml is supplied from the mine dewatering operation and 180Ml from the pump station at the Tiyabenzi dam, which has a pumping capacity of 397Ml per month. A water treatment plant on site supplies potable water to the mine site and surrounding staff accommodation. The water supply infrastructure is considered, by SRK, to be adequate to support the requirements of the LoM plan.

Freda Rebecca Mine

Water is supplied to the process plant from dewatering operations of the mine. Make-up water is supplied from the Mazowe River. The plant requires 125Ml water per month under normal operation conditions. 50ML is supplied from the mine dewatering operation and 75Ml from the Mazowe River. This supply is reported to be reliable and no problems with water from the Mazowe River have been reported in the past. At the time of the site visit, the process plant and the mine were not operating and the pump station was severely overgrown. It was not possible to inspect the pumps installed in the river and it is therefore assumed that the maintenance of this installation has been stopped. Potable water is supplied by the Bindura Town Council. The water supply infrastructure is considered, by SRK, to be adequate to support the requirements of the LoM plan.

4.5 ENVIRONMENT AND WATER MANAGEMENT

The following section includes discussion and comment on the environmental management aspects of the Mining Assets of BNC and FRM, specifically: environmental legislation and compliance; environmental policies and management; environmental liabilities and risks over the life of the operation; and decommissioning and closure liabilities and risks, and is based on information gathered from the mine in 2005. The FRM environmental setting, relevant Zimbabwean legislation and certain aspects of the environmental management are the same as that for BNC and are not repeated.

4.6 ENVIRONMENTAL SETTING

Trojan Mine, the BSR and Freda Rebecca Mine

Trojan, BSR and the Freda Rebecca Mine are located around the town of Bindura, approximately 80km to the north east of Harare, while Shangani is located approximately 90km north of Bulawayo.

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Bindura straddles two catchments, namely the Pote River and the Mazowe River, with the Pote River ultimately flowing into the Mazowe. Besides those mentioned, there are a number of smaller perennial and non-perennial rivers that discharge to both water courses. Trojan Mine straddles both the Pote and the Mazowe Rivers, while BSR falls into the Pote River catchment and Freda Rebecca falls into the Mazowe River catchment.

Raw water is abstracted from the Mapunga pump station on the Mazowe River for use in process and underground. The abstraction point is downstream of Freda Rebecca Mine and Trojan Mine. Although, the water quality is reportedly good at the pump station, pre-treatment in the form of filtration is required to achieve a potable standard. Trojan and BSR jointly operates a small treatment facility to produce potable water for the local community, as well as areas of the process where higher quality water is required.

Other than mining activities, the outskirts of Bindura are utilised for farming activities with a number of large commercial farming estates surrounding the town.

Shangani Mine

The mine is located between a non-perennial tributary to the Shangani River and the Shangani River itself. It is understood that water for the mine is abstracted from the Shangani River. It is further understood, that the environmental setting of the mine is similar to that of Trojan mine in that there are a number of farming areas that surround the mine.

4.7 ENVIRONMENTAL ASPECTS - HUNTERS ROAD

At Hunter Road the environmental impact assessment ("EIA") was submitted in May 2007.

4.8 ENVIRONMENTAL ASPECTS – SEMKHAT

The work is being conducted according to the conditions stipulated in the environmental permission for exploration issued by the environmental agency in the DRC.

4.9 PHYSIOGRAPHY

4.9.1 ZIMBABWE

Zimbabwe comprises of an undulating landscape, with altitude ranging from 2,592m (Mount Inyanga on the Mozambique border) to 600m in the Zambezi valley. The country is divided into three zones based on elevation, natural vegetation, temperature, soils, water supply and animal life. These zones are the Low Veld (below 900m), the Middle Veld (900m - 1,200m) and the High Veld (above 1,200m). These zones represent about 35.5%, 40.5% and 24.2% of the total land area respectively. The mines around Bindura fall into the Middle Veld Zone, while Shangani and Hunters Road fall into

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the Highveld region. It must be noted however, that there are mountains around Bindura and the mines, with these mountains being up to 1,250m in elevation.

4.9.2 DRC

The Semkhat concessions are in the Katanga province in the copper belt region of the DRC. The Kibolwe prospect area, which is in the northern portion of Mwana's Semkhat licence area is situated 160km northwest of Lubumbashi.

The area around the project forms part of the drainage basin of the Congo River, a large, low-lying plateau with an average elevation of approximately 300m. The lands which are the subject of the Company's licence are located on gently undulating topography with a mean elevation of 1,250m.

5 HISTORY

5.1 HISTORY OF MINING IN THE PROJECT AREAS

5.1.1 BINDURA NICKEL CORPORATION

The Trojan deposit was discovered in 1956 and acquired by Anglo American Corporation ("AAC") in 1965 whilst the Shangani Mine was opened in 1975 by Johannesburg Consolidated Investments Ltd ("JCI"). A brief summary of the history of the assets is given as follows:

- 1956 Trojan deposit discovered
- 1964 First production from the Trojan Mine
- 1965 Trojan Mine acquired by AAC
- 1968 First production of finished nickel from BSR facility
- 1971 BNC Listed on the Zimbabwe (formerly Rhodesian) stock exchange
- 1975 Shangani Mine opened by JCI
- 1975 BSR upgraded to treat the Shangani concentrate
- 1981 Shangani Mine acquired by BNC
- 2003 Mwana Africa Holdings (Pty) Ltd acquired Anglo American Corporation Ltd's 52.9% interest for a consideration of USD8 million.

As can be seen the assets have a long history of operation and the principal results for the last five years of operation are tabulated as follows:

Table 5-1: BNC Principal Operating Summary

Description	Units	2002	2003	2004	2005	2006
Trojan Mine - Milled tonnage	(kt)	1,031	1,016	980	864	772
Shangani Mine - Milled tonnage	(kt)	929	873	842	785	748
BNC Milled Tonnage	(kt)	1,960	1,889	1,822	1,649	1,520
Head Grade	Ni(%)	0.56	0.54	0.59	0.57	0.55
Nickel Produced	(t)	6,765	6,411	7,043	5,994	5,451
Copper Produced	(t)	579	551	465	371	320
Cobalt Produced	(t)	92	77	82	66	60
C1 Cash Cost	(USD/lb)	2.09	3.94	4.06	3.29	6.47
C2 Cash Cost	(USD/lb)	2.39	4.29	4.35	3.72	7.60
C3 Cash Cost	(USD/lb)	2.41	4.78	5.20	4,45	10.68
Capital Cost	(USD/lb)	0.13	0.18	0.27	0.75	1.02

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5.1.2 FREDA REBECCA MINE

Exploration, development and production history in the area dates from 1912 and from 1988 FRM has operated on a continuous basis until it was placed on care and maintenance in March 2007. FRM comprises a single underground operation and various surfaces sources processing ore through a single facility utilising a combination of crushing, conventional milling and combined gravity, CIL process. A brief summary of the history of the asset is given as follows:

- 1987 Discovery of the Freda oxide and Freda and Rebecca sulphides.
- 1988 Construction of Freda Rebecca Mine and first gold pour.
- 1995 Underground operations commence at Rebecca section.
- 1996 Acquisition by Ashanti Goldfields Zimbabwe Ltd.
- 1998 Freda pit closes and all mining activity concentrates on underground operations.
- 2000 Technical study of Phoenix Prince and feasibility study of RAN JV commences.
- 2004 AngloGold acquires Ashanti Goldfields Company Ltd.
- 2005 Mwana acquires FRM for a cash consideration of USD2.5million with an obligation to sell 15% to a local investor. FRM has been on care and maintenance since 24 March 2007.

As can be seen the asset has a long history of operation and the principal results up to 24 March 2007 are tabulated as follows:

Table 5-2: FRM Principal Operating Summary

Description	Units	2002	2003	2004	2005	2006
Milled	(kt)	1,155	1,197	603	405	130
Head Grade	(g/t Au)	2.92	1.75	2.23	2.57	2.51
Recovery	(%)	82	76	77	76	71
Gold Produced	(koz)	98	51	34	26	4
Cash Cost	(USD/oz)	214	264	472	541	390

FRM provides direct employment to some 750 people and local costs comprise some 70%.

5.1.3 SEMKHAT

Exploration of over the concession was conducted by Union Miniere between 1920 and 1960, but there was little follow up. In 1970 Sodimiza explored the area south of the main copper arc to the Zambian border. The initial phase identified a number of anomalies, most of them over know mineral occurrences. With the discovery of economic mineralisation in the far south of the concession, the priority targets were abandoned.

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Anmercosa explored the area between 1998 and 2001 with "track and trail" soil sampling and geological mapping and soil/rock chip sampling of previously identified mineral occurrences. Later infill grids confirmed the main anomalies.

Anmercosa summarised data on 21 mineral occurrences in November 2002 and 17 of these have geochemical plots in the 2001 Annual Report. Twelve were recommended for follow up and six identified for further work in 2003. Of these five were considered to be drill targets.

An incomplete airborne Em, Magnetic and Radiometric survey was interpreted by the Perth office of SRK Consulting in 1999 and identified potential targets in the areas covered.

Anglo PLC commissioned a study to identify regional structure and stratigraphic controls on the mineralisation in 1993 but the results are not available to Anmercosa.

In November 2003 SRK reviewed the data of 10 of the mineral occurrences on the Anmercosa 1992 list, ranked the targets and recommended follow-up on the top seven of these.

5.1.4 OBENEMASE

The following is taken from RSG Global (2004 and 2005):

The Owere area was probably mined for gold prior to the arrival of Europeans. Colonial underground mine development commenced at Obenemase in 1903 and at Konogo in 1918. A number of other deposits were mined with varying success; however the bulk of production came from the Konogo mine, which was developed to a vertical depth of 844m. Gold was extracted from high grade quartz veins by conventional gravity and cyanide leach methods. Total production from the Owere Project area until mine closure in 1986 was approximately 2.5mt at a recovered grade of 15.7g/t Au for approximately 1.4Moz of gold.

In 1986, the State Gold Mining Corporation of Ghana (SGMC) was granted a 125km² ML over the Owere Project area for a term of 30 years. In 1988, a joint venture between SGMC and North Queensland Company Limited (NQC) was established, and a joint venture company known as Southern Cross Mining Limited (SCM) was formed, with a view to exploiting the oxide resources on the project.

In 1994, the SCM ML's were acquired by Obenemase Gold Mines Limited (OGM).

In 1998, Resolute Mining Limited (RML) acquired a majority interest of 19.9% in Ghana Gold Mines (GGM). GGM had, in turn, acquired a 90% interest in OGM. RML, through GGM, aided the funding of a pre-feasibility study on the Obenemase A and B lodes, and undertook an extensive data compilation and validation program on all available exploration and development data relating to the OML ML's and the surrounding PL's. In 2000, RML increased its equity interest in the Owere

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concession to 81% through the purchase of 90% of Ghana Meeting Investments Pty Limited (GMI), a wholly owned subsidiary of GGM. The remaining 19% interest in the Owere Project was held by the Government of Ghana (10%) and the Apollo Group (9%).

OGM (RML) failed to obtain a joint venture partner of purchaser for the Owere Project, and the ML's were relinquished in December 2002 and placed on care and maintenance.

In December 2002, the Owere ML's were acquired formt he Government of Ghana by Talos Ghana Ltd (Talos). Talos did not undertake any exploration or development work on the project.

In January 2004 Talos entered into a joint venture agreement with the Alpina Group Limited (a wholly owned subsidiary of AGP) to form Owere Mines Ltd (OML). AGP purchased a 70% interest in the Konongo ML No. LVB749/03. The 70% equity level was reached in November 2004. As of July 2005, AGP had the option to purchase a further 10% by payment of US\$5 per ounce in the event of a bankable feasibility study being completed. AGP have the right of first refusal to a further 10% by negotiation. The remaining 10% is retained by the Government of Ghana.

In June 2006 African Gold PLC became Mwana Africa PLC.

The Konongo ML was granted on 11 December 2002, valid for a term of eight years.

Currently, the Owere project comprises the Konongo ML, the Kurofa PL, a large number of houses on site, the OGM 350Ktpa CIP plant, previous exploration and production data, offices, drill core and a number of ancillary buildings and equipment. The on-site laboratory is no longer functional.

5.2 HISTORICAL RESOURCE STATEMENTS

The following tables indicate the historical resources for each of the operations. All figures stated are at December of each year and grades reported as total nickel unless otherwise stated.

Table 5-3: Mineral Resources at Trojan Mine

	Measured				Indicate	ed	Inferred			
	Tonnes (kt)	Grade Ni%	Contained metal Ni (t)	Tonnes (kt)	Grade Ni%	Contained metal Ni (t)	Tonnes (kt)	Grade Ni%	Contained metal Ni (t)	
2002	1,178	0.72	8,482	8,088	1.52	122,938	7,522	1.02	76,724	
2003	1,035	0.65	6,728	5,068	2.20	111,496	9,582	0.76	72,823	
2004	1,089	0.68	7,405	4,679	2.34	109,489	9,406	0.76	71,486	
2005	1,110	0.67	7,437	850	4.49	38,165	9,390	0.76	71,364	

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Table 5-4: Mineral Resources at Shangani Mine

	Measured				Indicate	ed	Inferred			
	Tonnes (kt)	Grade Ni%	Contained metal Ni (t)	Tonnes (kt)	Grade Ni%	Contained metal Ni (t)	Tonnes (kt)	Grade Ni%	Contained metal Ni (t)	
2002	41	0.69	283	4,377	0.54	23,636	13,265	0.54	71,631	
2003	735	0.53	3,896	4,716	0.53	24,995	11,392	0.54	61,517	
2004	585	0.53	3,101	5,348	0.55	29,414	7,177	0.53	38,038	
2005	90	0.47	423	4,770	0.56	26,712	5,240	0.52	27,248	

Table 5-5: Total Mineral Resources for BNC

		Measure	ed		Indicate	ed	Inferred			
_	Tonnes (kt)	Grade Ni%	Contained metal Ni (t)	Tonnes (kt)	Grade Ni%	Contained metal Ni (t)	Tonnes (kt)	Grade Ni%	Contained metal Ni (t)	
2002	1,219	0.72	8,765	12,465	1.18	146,573	20,787	0.71	148,355	
2003	1,770	0.60	10,623	9,784	1.40	136,491	20,974	0.64	134,340	
2004	1,674	0.63	10,506	10,027	1.39	138,903	16,583	0.66	109,524	
2005	1,200	0.66	7,860	5,620	1.15	64,877	14,630	0.67	98,612	

Table 5-6: Mineral Resources for FRM

		Measure	d		Indicated	t	Inferred			
	Tonnes (kt)	Grade (g/t)	Gold (Koz)	Tonnes (kt)	Grade (g/t)	Gold (Koz)	Tonnes (kt)	Grade (g/t)	Gold (Koz)	
2002	12,375	2.51	1,000	3,784	2.42	294	1	I		
2003	11,102	2.50	893	2,106	2.52	170	2,900	2.75	256	
2004	11,597	2.43	905	2,106	2.52	170	5,230	2.72	457	
2005	11,290	2.43	883	2,106	2.52	170	5,230	2.72	457	

Note: the Resources have been estimated at a cut-off grade of 1.5g/t Au.

6 GEOLOGICAL SETTING

6.1 REGIONAL GEOLOGY

6.1.1 ZIMBABWIAN ASSETS

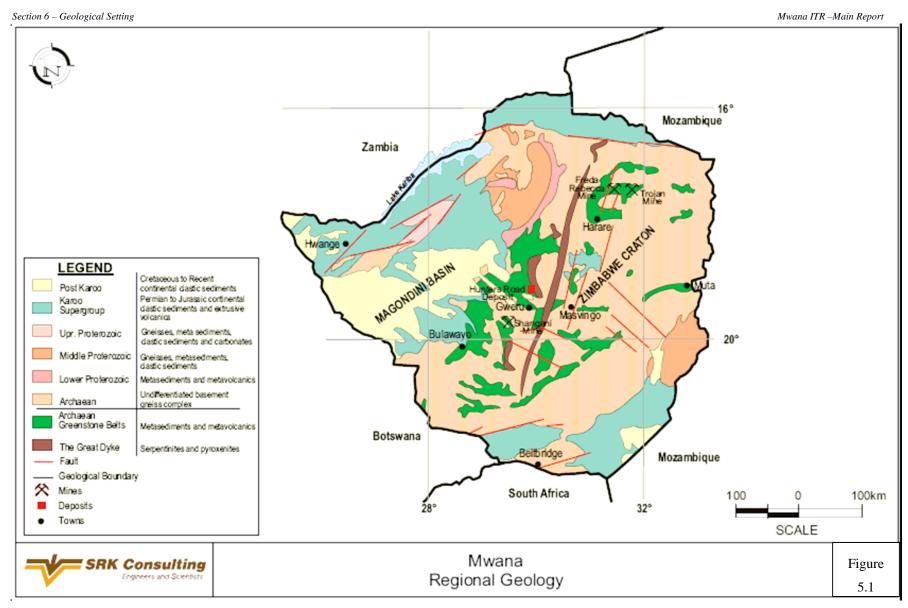
The Zimbabwe Craton is the basement complex that outcrops over 60% of Zimbabwe's surface. The craton consists of substantial deformed granite and granite gneiss domes with relatively thin greenstone belt envelopes. The greenstone belts comprise mafic, ultramafic and felsic volcanics, volcaniclastics, epiclastics, banded iron formations ("BIF") and igneous intrusions. The metamorphic grade and intensity of deformation of the greenstone belts varies across the craton but is mainly in the lower to medium greenschist facies. Major unconformities can be locally observed within the greenstone belts and there have been attempts at correlation between these unconformities and the greenstone belts in general. Trojan Mine is located within the Mazowe/Bindura Greenstone belt near the town of Bindura.

The stratigraphic succession of the belt consists of the basal Bulawayan Group and the overlying Shamvaian Group. The Bulawayan Group is a thick metavolcanic sequence of felsic flows and intrusive, massive and pillowed tholeiitic basalts, komatiitic basalts and serpentinites. The main units have intercalations of BIFs, quartzites, marbles and clastic metasediments. Rocks of the Shamvaian Group are distinctly split into a lower felsic metavolcanic unit in the southern part of the belt, and an upper unconformable metasedimentary unit in the northern area. The upper unit has a basal polymict conglomerate in which granite boulders and pebbles, arkoses and greywackes, are the dominant lithologies.

The contact between the Bulawayan and Shamvaian Groups is an unconformity defined by intraformational conglomerates and tectonic interdigitation. The schist belt has been intruded in several places by younger granite plutons of which the Bindura Granite Stock is the most prominent. Ages for the granite intrusions are some 2.7Ga. The stocks vary in composition from tonalite to granodiorite with the latter being dominant. Heat generated by the Chinamora and Madziwa batholiths could have been the driving force for the regional metamorphism. Metamorphic grades vary from greenschist to lower amphibolite Mashonaland dyke swarms which intrude the whole belt with more or less east-west and north-south trends. Archaean rocks trend east west with steep dips (>60°) towards the north. There is strong east-west deformation channelled along the felsic units, chert layers and most contacts. Strong aeromagnetic and land satellite imagery lineaments follow the lithological trends. The fact that the deformation follows the lithological contacts makes it difficult to recognise the major shears.

The regional geology including the location of the Mining Assets is shown by Figure 6-1.

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6.1.2 SEMKHAT

The Kibolwe Project area overlies sediments of the Katangan Supergroup which form part of a regional-scale fold and thrust belt formed during the Pan African Lufilian orogeny. Within the project area strata have been thrusted and brecciated along the east-west trending Disoloshi Anticline.

Kibolwe is a sediment-hosted stratiform copper deposit which occurs within steeply dipping Roan, Mines Sub-group rocks. Cu-Co mineralization occurs within weathered argillaceous dolomites and shale units which have been correlated with R-2.3.1 CMN-Kambove dolomites. The mineralized units have been traced over an 800m strike length. The dominant copper oxide is malachite with minor amounts of cuprite and tenorite which occur in the argillaceous carbonates with minor concentrations in the shale units. (Sulphide minerals including chalcopyrite and pyrite were encountered in historical diamond drill holes drilled below the oxide zone).

6.1.3 OBENEMASE

Primary gold mineralisation in Ghana is predominantly associated with northeast trending Proterozoic greenstone belts separated by sedimentary basins, which together form part of the West African Craton. The Craton is believed to have remained geologically stable for the last I .7Ga. An Archaean basement is not known in Ghana but exposures do occur to the west in Liberia, Sierra Leone and Guinea. The greenstone belts represent Proterozoic island arc volcanism which has been mildly metamorphosed to lower greenschist facies.

The Proterozoic rocks in Ghana have been divided into a Birimian series, of age 2.17Ga to 2.18Ga, and a (marginally) younger Tarkwaian series, of age 2.10Ga to 2.13Ga. The formation of the two rock series therefore covers a maximum period of approximately 80 million years. The greenstone belts differ in some minor respects from the more familiar type Archaean examples, most notably in the paucity of banded iron formations, chert, pillow lavas and komatiites (ultramafic lavas), and the presence of manganese rich formations. This latter difference probably reflects a more oxygen rich environment, given equal or similar concentrations of available iron and manganese. Volcanism in the belts is regarded as being both sub-aqueous and sub-aerial and of mainly tholeitic (low alkali) composition.

The greenstone belts and the intervening sedimentary basins are both intruded by massive granites, which can be conveniently (but not entirely accurately) divided into 'belt' and 'basin' type. The belt type granitoids seem to be co-magmatic with the belt volcanics, as suggested by limited radiometric age dating. There is also radiometric dating evidence that indicates that most of the hornblende bearing. unfoliated belt type granitoids, are also older (by 60 to 90 million years) than the biotite

bearing foliated basin granites in the Sunyani and Kumasi basins. Belt type granitoids, which are usually smaller bodies but more widespread, are generally more compositionally variable, show some signs of forceful intrusion and are believed to be mantle sourced ('I-type"). In contrast, basin type graniloids generally show narrower compositional ranges that suggest a partial melt from the base of the sedimentary pile ('S-type").

Over 80% of Ghana's current (and historic) gold production is derived from Birimian metasediments, usually broadly described as phyllites and tuffs. The major historic mines such as Obuasi, Prestea, Bogosu and Konongo, occur on or immediately adjacent to the Ashanti greenstone belt's lithological contact with the Kumast Basin metasediments.

Structurally, the deposits occur on deep-seated, high-angle, near contact boundary faults that have both transcurrent shear and oblique components, and which frequently display several splay and parallel structures. Gold deposits occur within structural dilational zones as both sulphidic and carbonaceous quartz reefs, usually in association with disseminated arsenic and/or iron sulphides.

The remaining 20% of Ghana's gold is hosted by belt type granitoids (Ayanfuri, Bibiani), as small deposits in Birimian lavas, or detrital deposits in the Tarkwaian 'Banket' conglomerate (Tarkwa, Iduapriem and Teberebie). Hydrothermal stockwork mineralisation also occurs within Tarkwaian quartzite and dolerites at Damang.

The Owere Project is situated in the western margin of the northeast trending Ashanti Belt, which hosts the world class Obuasi deposit, currently operated by AngloGold Ashanti Limited, and where past production has exceeded 22Moz of gold. The Ashanti Belt also hosts the Prestea/Bogosu deposits, which are currently being mined by Golden Star Resources (GSR). These deposits have historically produced approximately llMoz of gold. Both the Obuasi and Prestea/Bogosu deposits are very similar in terms of geological setting and mineratisation styles to the Owere deposits.

Geology within the project area comprises Upper Birimian and Tarkwaian series rocks. These rocks are folded around a northeast trending axis, which swings to the north as dips flatten in the Obenemase and Kwakawkaw areas. Folding is isoclinal, with the fold axis overturned to the southeast and limbs separated by Tarkwaian sediment in the core of the syncline.

Gold mineralisation within the Owere Project area can be divided into four distinct styles:

1) Quartz reef style, with gold/sulphide mineralisation hosted within narrow, intensely sheared, quartz veined and altered transition zone sediments (Konongo area).

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2) Disseminated sulphide/gold lodes; hosted within Upper Birimian volcano-sedimentary rocks (Obenemase-Kwakawkaw area).

- 3) Associated with highly sheared, altered and quartz veined granitoid intrusives (Santreso area).
- 4) Broad hydrothermal auriferous stockwork zones in Tarkwaian rocks (Abebe area).

The Obenemase database includes drilling data generated in three main periods, SCM drilling (pre 1993) 53%, 0GM (RML) drilling (1993 to 1999) 32% and CML (now MAP) drilling from 2004 onwards 15%. The drill data contained in the database is a combination of diamond and reverse circulation ("RC") drilling.

Wherever practically possible, drilling was undertaken normal to the plane of the principal mineralised orientation. The mineralisation in Obenemase is sub vertical and the drill database is comprised of scissor style holes to the East and West.

Reports on SCM and CGM do not give details of drill quality but the general quality of RC drilling is considered to have progressively improved over time, particularly since more experienced and well equipped contractors have become available. The quality of diamond drilling is considered to be of industry accepted standard after review of the stored core during the site visit.

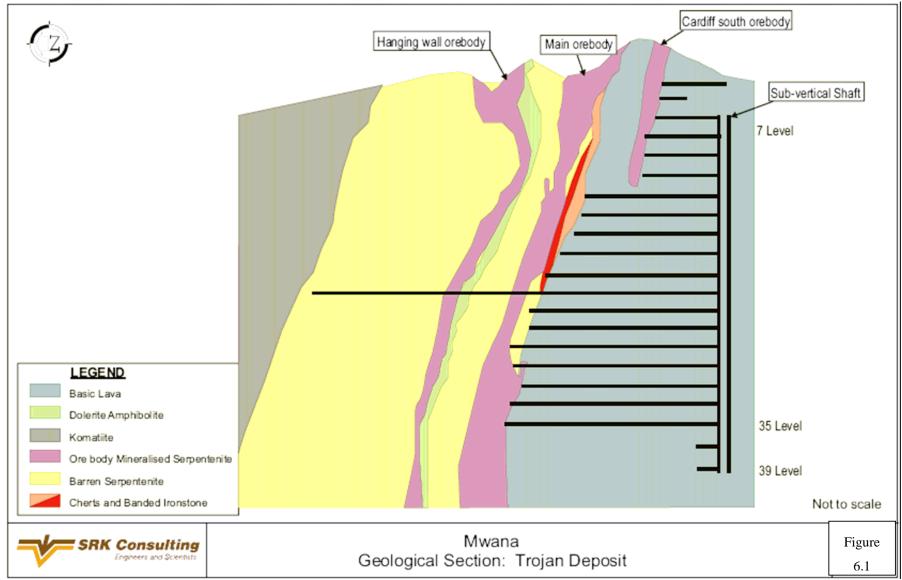
Recoveries for diamond core noted during the site visit were very good. RC drilling was utilised in the weathered zone end diamond tails were completed on deeper holes in fresh competent rock resulting in good recoveries.

7 DEPOSIT TYPES

7.1 TROJAN DEPOSIT

The nickel sulphide deposit at Trojan Mine occurs within a pile of ultramafic lavas subjected to a lower amphibolite grade of metamorphism and are characterised by lensoidal bodies of serpentinite. The lavas form part of the Upper Greenstones (Bulawayan Group) of the Mazowe greenstone belt. The serpentinite bodies are separated from each other by cherts, BIFs, graphitic shales and felsic volcanics. The footwall and hanging wall of the nickel-bearing serpentinites are formed by komatiitic and tholeitic basalts. A doleritic dyke cuts through the serpentinites and displays nickel sulphide along its sheared contact. The regional setting and deformation of the Harare-Bindura schist belt with thrusting and doming of the Chinamora batholith has given rise to the deformation imprint observed in host rocks at the mine. The general strike of the ore bodies is east—west and dip steeply (75° to 85°) to the north and this is controlled by the regional foliation trend. The two major ore bodies are the Main Orebody and the Hanging Wall Orebody. The massive and near massive ores occupy a narrow and discontinuous zone along the footwall of the Main Orebody and this is called the Footwall Massive Orebody. The Main Orebody is the largest, and averages 250m long and 30m wide. There are other smaller ore bodies such as Trojan Hill, Cardiff East and Cardiff Far East, with dimensions of 100m x 15m and 200m x 15m respectively. Drilling has outlined the Main Orebody to a depth of 1180m below surface. Approximately 300m of longhole drilling is still planned to increase the confidence in the geometry of the Main Orebody at depth, and reduce the variation on estimation of grade, for the current shaft deepening programme.

The geology of the deposits at Trojan Mine is illustrated by Figure 7-1.



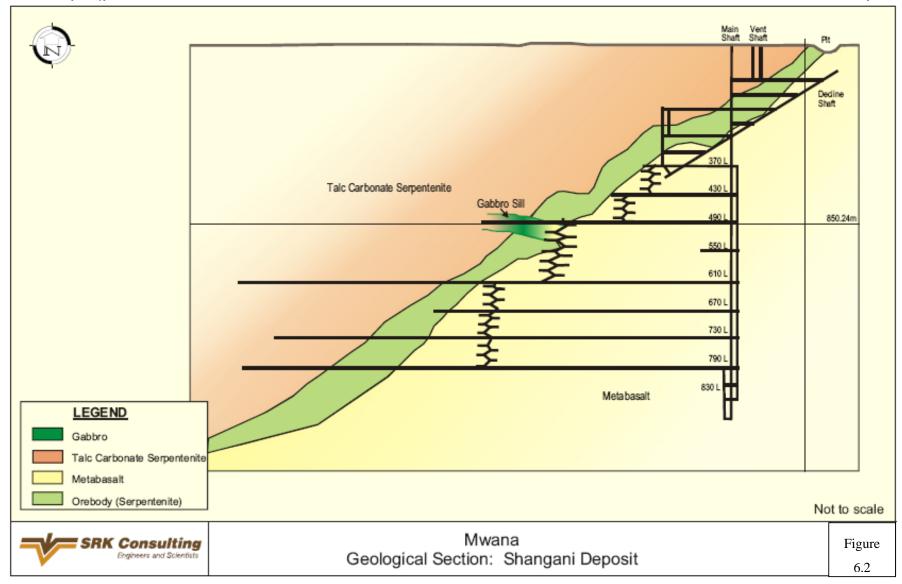
7.2 SHANGANI DEPOSIT

Shangani Mine is located in the Shangani-Nsiza Greenstone belt, which is a smaller belt, to the north east of the Bulawayan Greenstone Belt, and is aligned roughly north-south. The Shangani ore bodies lie within the mushroom-shaped 'Shangani ultramafic complex', with mineralisation occurring in the Esmyangane Formation of the Sebakwean Group. The Esmyangane Formation comprises a thick succession of mafic and intermediate tuffs and agglomerates, the upper part of which is intruded by a layered ultramafic body. The mushroom shape is now believed to be one continuous mineralised zone disrupted into three distinct ore zones by near vertical faults. The 'stem' of the mushroom is probably an older feeder dyke system. The ore zones are confined to flat lying parts of the lobes adjacent to the stem of the 'mushroom'. Amphibolites and cherts form the footwall to the orebodies.

The Shangani deposit is 1.5km long and trends east-west and plunges generally at 48° south-easterly. The main host rock is highly altered, talcose serpentinites with abundant coarse-grained carbonates (magnesite and dolomite). Shallow dipping (10° to the north) gabbro sills, 30-50m thick, have intruded the Shangani deposit and caused minor horizontal displacement. The Main Orebody and Far West Orebody outcrop on surface while the West Orebody does not outcrop. The West Orebody and Far West Orebody are tabular in shape but the Main Orebody is thicker in section. Drilling has outlined the Main Orebody to a depth of approximately 1,065m below surface, and about 1,010m below surface for the other orebodies. At Shangani, the orebody is covered by sufficient drilling to classify the resources up to the current limits of infrastructure of the shaft as Indicated Resources.

Primary control of sulphides distribution was probably gravity settling of the heavier sulphides through the ultramafic magma, resulting in a rich footwall zone – particularly well developed in the footwall of the eastern lobe. It is the eastern lobe that forms Shangani's Main Orebody. The western lobe forms the Far West Orebody and the central part forms the West Orebody. Massive sulphides occur at the base, followed by near-massive sulphides, whose concentration progressively decreasing upwards into disseminated sulphides. Sulphide enrichment also occurs in tectonic veins and faults. Disseminated sulphides comprise the bulk of the ore mined at Shangani Mine.

The geology of the deposits at Shangani Mine is illustrated by Figure 7-2.



7.3 HUNTERS ROAD

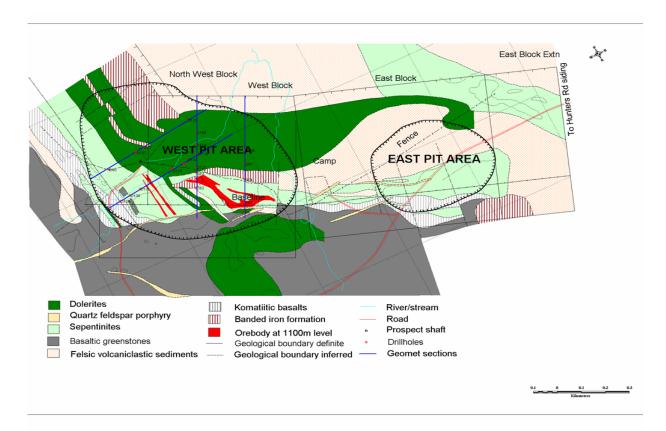


Figure 7-3: Hunters Road Geological Setting

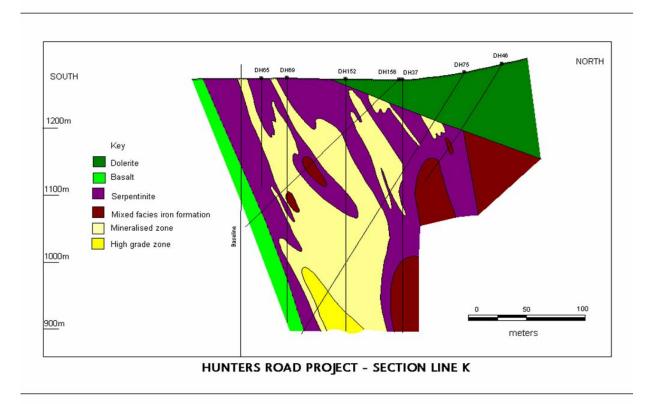


Figure 7-4: Hunters Road Geological Section

The Hunters Road deposit lies in the upper Bulawayan Group within the Gweru-Midlands South Greenstone belt in central Zimbabwe. The Hunters Road nickel deposit is hosted by a serpentinized cumulate komatiite, originally mainly consisting of coarse interlocking magnesium rich olivine grains. In some cases accessory pyroxene, sulphides and chromites are present as intergranular / interstitial / intercumulus material. This cumulate komatiite is thus essentially dunitic in composition. The orebody is bi-lobate near to surface but appears to merge at depth to form a single entity as in a scissors fault. Although there are different interpretations on the formation of this structure, the most probable on is that the structure is a result of sinistral shear thrusting and repeating the contact and the mineralisation.

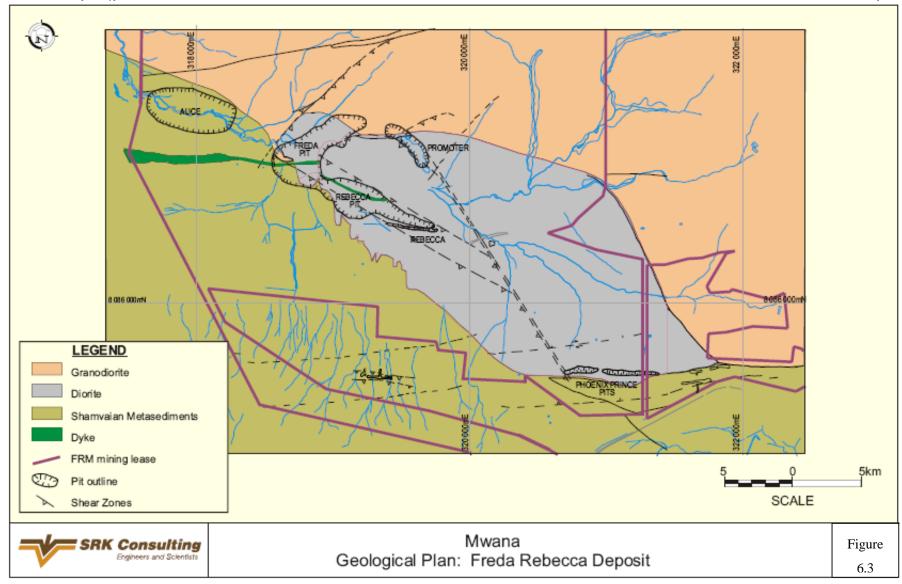
7.4 FREDA REBECCA MINE

FRM is lies on the central axis of the synclinal Mazowe-Bindura Greenstone belt. The geology of the area around FRM is characterised by the Shamvaian sediments, diorite and granodiorite. Dolerite

dykes cut through the three rock types. The FRM orebodies are largely hosted by the Prince of Wales diorite and the Bindura granodiorite, with limited transgressions into the metasediments. The mineralisation is hosted within two major shear envelopes: the footwall/curvilinear Freda-Promoter which strikes from north east through to east west and dips at 0° to 25° to the south; and the Rebecca which strikes north west and dips at 35°. Individual shears are variable in width and these two systems merge to the south west at depth flattening at around 850m elevation and extending into the metasediments. The shear system is characterized by a set of anastomosing shears separated by relatively undeformed rock units.

Two kilometres to the south east of FRM is the Phoenix Prince open pit which lies on an east-west striking shear zone dipping ay 75° to the north. Originally the mine exploited thin, high-grade, near vertical bodies. Exploration has outlined broad, 5m to 10m, low-grade oxide lenses over a zone 50m wide for a kilometre of strike. The deposit was divided into three zones, two of which were depleted between 2002 and 2003. Exploitation of the third zone was not pursued at the time as the mine needed permission from Bindura Municipality to stake a mining claim. Special Grant No. 4372 by the Mining Commissioner was granted in September 2004. This deposit has not been included in the FRM Mineral Resources. FRM believes there is further potential for oxide ore between the mined and unmined zones, but follow-up drilling is required to demonstrate this.

The geology of the deposits at FRM is illustrated by Figure 7-5 and Figure 7-6.



Section 7 – Deposit Type Mwana ITR -Main Report Freda Pit Rebecca Pit L 1000 L 900 L 800 N 87000 N 86800 LEGEND Shamvaian Metasediments L 700 Section looking north Freda Promoter Shear 100m Rebecca Shear SCALE Mwana RK Consulting
Engineers and Scientists Figure Geological Section: Freda Rebecca Deposit 6.4

Section 8 – Mineralisation Mwana ITR – Main Report

8 MINERALISATION

8.1 TROJAN DEPOSIT

Three types of nickel sulphide ore are found at Trojan Mine, namely: massive ore, near massive ore and disseminated ore, whose main sulphide minerals are pyrrhotite, pentlandite and chalcopyrite, with pyrrhotite being the most abundant. Minor amount of millerite and pyrite are also present. The massive and near massive ores are situated towards the base of the ultramafic units and are overlain by the disseminated ore. The main and hanging wall orebodies contain all three types of mineralisation.

8.2 SHANGANI DEPOSIT

The Shangani orebodies are hosted in talc schist, talcose serpentinite, and serpentinite and chlorite schist. The country rock consists of amphibolites and felsic tuff. The ore minerals are pentlandite and pyrrhotite, with other sulphides being chalcopyrite, millerite and pyrite. Pentlandite is the prominent nickel carrier. 'Ore' at Shangani occurs as talc carbonate talcose serpentinite or serpentinite. The ore can also occur as massive sulphide lenses.

8.3 HUNTERS ROAD

The Hunters Road Nickel deposit is hosted by a serpentinized cumulate komatiite, originally mainly consisting of coarse interlocking Mg-rich olivine grains. Komatiitic basalts to the south and felsic volcanics to the north, which are in turn interbedded with banded iron formation, argillites and agglomerates, bind the host rock. A late dolerite sill covers the north - western part of deposit dipping at 15° towards NNE.

Late porphyritic – acidic intrusions +/-1m scale truncate the ore body at various angles.

The primary magmatic sulphides, which occur interstitially and intergranular to the olivines, are the main source of extractable nickel. The sulphides consisted of pentlandite ($\pm 75\%$), pyrrhotite ($\pm 20\%$) and possibly minor pyrite (< 5%) and traces of chalcopyrite. The deposit has been subject to greenschist metamorphism, supergene alteration, and possibly to other, less readily identifiable alteration. The metallurgical extraction of the nickel is, as a result of the multiple stages of alteration, considered critical to the evaluation of the economic exploitation of the orebody. A full description of petrology and mineralogy of the deposit in relation to the metallurgy is given in Section 15.4.2 below.

8.4 FREDA REBECCA MINE

At FRM there are two styles of sulphide mineralisation: older disseminated, pervasive sulphides occurring throughout the sediments, diorite and granodiorite, which vary in intensity and grade; and

Section 8 – Mineralisation Mwana ITR – Main Report

younger mineralisation restricted to shear zones and associated with higher gold grades. In both types of mineralisation, higher grades are associated with fine-grained sulphides. Sulphides include arsenopyrite, pyrite, pyrrhotite and chalcopyrite. Mineralisation is characterised by patchy micaceous chloritic alteration with some silicification and to a lesser degree, carbonatization. Quartz veins generally do not carry gold values but may contain minor amounts of sulphide. Payable gold mineralisation is not visually distinct so assaying is required to outline the ore zones.

At Phoenix Prince orebody, the pyrite mineralisation is hosted within the diorite with minor chalcopyrite. Strong shearing marks the footwall of the zone.

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9 EXPLORATION

9.1 BINDURA NICKEL CORPORATION

9.1.1 TROJAN MINE AND SHANGANI MINE

Ongoing underground exploration drilling is carried out at both mines to sustain the Mineral Reserve. The drilling is carried out by mine personnel.

9.1.2 HUNTERS ROAD

The Hunters road deposit was discovered by means of a soil geochemical anomaly and was initially explored through trenches. Substantial drilling has subsequently been completed on the deposit to outline the orebody. This comprised 125 percussion holes, amounting to 4,620m, and 183 diamond drill holes amounting to 41,041m drilled. Current work on the project involved modelling of the metallurgical domains identified. Metallurgical testing was initially done by Anglo American Research Labs (AARL) but has since been taken over by MINTEK, South Africa. Currently, Grinaker-LTA Metallurgical Operations ("G-LTA") is carrying out a detailed metallurgical investigation of this deposit for Mwana.

The pre-feasibility study is in progress and production is expected to commence in first quarter 2009.

Mineral Res	serve Categor	y		Mineral Reso	Mineral Resource Category						
	Tonnes	Grade	Nickel		Tonnes	Grade	Nickel				
	(kt)	Total Ni	(t)		(kt)	Total Ni	(t)				
		(%)				(%)					
Proved				Measured							
	nil	nil	nil		nil	nil	nil				
Probable				Indicated							
				Orebody 1 (west zone)	29,350	0.56	164,363				
	nil	nil	nil	Orebody 2 (east zone)	7,087	0.50	35,433				
Total	nil	nil	nil	Sub-total	36,437	0.55	200,404				
	·	·		Inferred	nil	nil	nil				

9.2 FREDA REBECCA MINE

FRM holds claims in Zimbabwe for various gold, precious metals, base metals and precious stones in terms of mining leases and exclusive prospecting orders ("EPO"s). The claims total some 9,800ha of which the FRM mining lease is 1,585ha.

FRM also holds exclusive EPOs. The current Bindura EPO 1578 (JV with Kinross) and Arcturus EPO total 41,234ha and the new applications 19/03 and 20/03 amount to 56,857ha. Apart from the Arcturus EPOs the EPOs are in the Bindura area.

Exploration around FRM has yielded positive results in the past and the company is currently proposing exploration of a south east extension of the old Rebecca pit and a northwest extension of the underground workings.

9.3 THE SEMKHAT EXPLORATION CONCESSIONS, DRC

Semkhat S.P.R.L. ("Semkhat"), a wholly owned subsidiary of Mwana Plc, is exploring for copper/cobalt and lead/zinc mineralisation on its licences in the South Katanga Province of the DRC. Mr. Tony Martin of SRK visited these properties in mid 2004 but did not carry out a detailed examination of the database.

Semkhat has acquired an extensive database comprising, geological maps, geophysical and geochemical data sets produced by Anglo American, Gecamines, Sudkat Union Minére, Société International des Mines du Zaire and SODIMICO while exploring within the concession area. These data have been analysed, interpreted and used to identify several priority targets which occur within a highly prospective zone 80km long and 20km wide in the northern portion of the licence area. Other high priority targets with significant geochemical anomalies and prospective geological settings occur elsewhere in the concession. Follow up exploration is currently underway to verify the potential of the prospects.

At the Kibolwe prospect a regional soil sampling programme identified an open ended geochemical copper soil anomaly 1.5km in length and 800m wide. A 3,100m Reverse Circulation drilling programme undertaken over the anomaly outlined a lenticular, sub horizontal mineralized zone over an 800m strike length with an inferred resource of 2.8Mt grading 2.76% Cu. A 5,000m infill RC drilling programme is underway. A total of 2,500m of the 5,000m programme have been completed. The remaining meters are expected to be drilled by the end of June. Samples are being assayed by ALS Chemex Analytical Laboratories in Johannesburg in accordance with international industry standards. The relevant quality assurance and quality controls have been put in place. A pre-feasibility study will be undertaken once the current RC drilling programme is completed.

The Kiamoto, Nyundeulu, Kawesitu, Mwombe, Ecaille prospect areas are high priority stratabound Cu-Co targets occurring along strike of the Kibolwe prospect area. Copper-cobalt mineralisation has been identified within prospective Roan strata outcropping in these areas. Mapping, soil sampling and trenching programmes are underway to determine the extent and grade of this mineralisation. Follow-

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up RC drill programmes will be undertaken during the current field season to test mineralisation at depth.

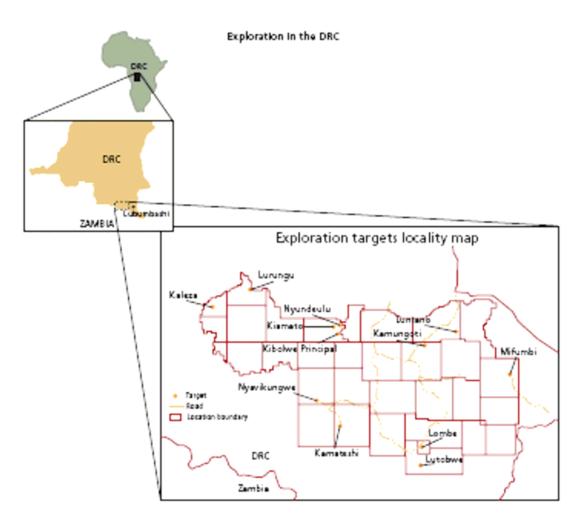
The Lufungu prospect is located in the northwestern portion of the license area. Geological mapping and trench sampling programmes have identified cobalt and nickel mineralisation within Roan (R4.1) units. Although the cobalt and nickel mineralisation is of a low tenor (0.1 - 0.2%) the bulk mining of these units may be economically viable. The same stratigraphic units extend into the adjoining Kaleza and Menda-Dilungu licenses.

At Lombe geochemical soil sampling programmes have located copper and zinc soil anomalies within Kundelungu lithologies. Drilling intersected a mineralized zone 12m in width with semi-massive sphalerite which was open to depth. Further exploration work is required to evaluate this prospect.

The Kitemena, Kintungulu, Lufira and Lutobwe prospects are located in high priority lead-zinc target areas. Geochemical soil programmes have identified copper, zinc and lead anomalies some of which are over 2km long and 400m wide. These anomalies are currently being evaluated by trench sampling and mapping programmes. Mineralized zones will be followed up by Reverse Circulation drilling programmes later in the year.

Regional soil sampling and reconnaissance mapping programmes are being undertaken over the Lukila, Mutebi, Kisalala, Kifita and Kakosa licenses with a view to sterilizing and dropping ground. A number of these licenses are located within geological environments considered to have little economic potential.

Figure 9-1: Schematic of Semkhat Exploration Concession



9.4 OBENEMASE PROJECT

The Konongo gold mining region is located about 25km SE of Kumasi in the Republic of Ghana. The mines at Konongo have been in operation almost continuously since 1907. The Obenemase workings are at the northern end of a mineralised belt of early to late Proterozoic metavolcanic sediments. Underground mining took place here from 1907 to 1956 and open pit mining from 1985 to 1992.

The project has been studied in some detail by RSG Global who issued a report 'Obenemase Project: Database Review, Geological Modelling and Grade Estimation' by N Inwood and J De Visser, dated 25th August 2006. The information and comments that follow are based on the RSG Global report. SRK has not visited the project nor carried out an in-depth independent review of the data.

The deposit has been modelled using SURPAC modelling software. A resource block model has been created based on 2m diluted sample composites. Only high confidence holes have been used in the grade estimation. The grade estimate was generated using Block Ordinary Kriging based on grade continuity defined by an anisotropic variogram model with a 25m range. The estimate was calculated using three passes of expanding neighbourhoods.

The Obenemase Mineral Resource has been classified as Indicated and Inferred on the basis of assessment criteria set out under JORC (December 2004).

The resource above 0g/t lower cut-off is 1,297,000 tonnes at 3.43g/t Au for 143,000 contained ounces of gold for Indicated Resource and 1,081Mt at 2.88g/t Au for 100,000 contained ounces for Inferred Resource.

Table 9-2: Obenemase Resource Statement

Obenemase Grade Tonnage Report – Combined estimate

5 mE~x~10 mN~x10 m~RL~Block Ordinary Kriged Estimates for 2 m~cut~gold~composites reported above 0 g/t~Au

Indicated Resources Domain Tonnes Contained Oz Aug/t Oxide 128,000 3.76 15,000 Fresh 3.39 1,169,000 128,000 Total 1,297,000 3.43 143,000 Inferred Resources Oxide 46,000 1.86 3,000 Fresh 1.035,000 2.93 97,000 **Total** 1,081,000 2.88 100,000

Several issues have been highlighted in the resource database, which include non-sampling of intervals, inconsistent collection of QA/QC data and the rounding of historic grades. This has had the cumulative effect of lowering the confidence category of some areas of the resource. Underground (stopes and drives) development has been depleted from the resource block model using the drive and stope solids generated during the 1996 RSG resource estimate. The exact spatial position and extent of the underground workings and stopes requires survey confirmation.

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10 DRILLING

10.1 BINDURA NICKEL CORPORATION

The Resource estimation on both Trojan and Shagani mines are based on underground drilling and on a limited amount of underground chip sampling (5% of the assays). The sample sections are demarcated by a geologist and are typically 2m long but this depends on the rock type and may be as small as 0.5m long for the massive sulphides. There are two types of exploration drilling undertaken at BNC: capital drilling and evaluation drilling. Capital drilling (BQ size) is undertaken from the lower levels of the mine to confirm the existence and the continuity of the orebody at greater depth and to assist in the overall evaluation of the Resource. Evaluation drilling (AQ size) is undertaken from the footwall access drives, adjacent to the current mining levels, and is used to demarcate the hanging wall limit of the orebody based on a 0.4% total nickel cut-off grade. The core recoveries for drilling are typically in excess of 90%. The core observed by SRK was competent, and relatively unfractured, with no evidence of grinding, supporting the good core recoveries reported. The collars of all drilling are surveyed and certain of the capital drilling holes are surveyed.

Exploration drilling has been carried out over many years to sustain the ore reserve base.

10.2 HUNTERS ROAD

The table below shows Diamond Drilling Campaigns Completed at the Hunter's Road Nickel Prospect

Table 10-1: Hunters Road Drilling Completed Campaigns

Company	No. of	Type of Drilling	Hole	Total	Year	Purpose Drilled
	BHs		Numbers	Metres	Drilled	
Union	63	Core	001-063	14,682	1971-77	Exploration
Corporation (UC)	6	Core	064-069	1,103		Metallurgical
	121	Percussion		3,441	1991/2	Exploration
	15	Perc. > Core		911		
	14	Core	121-134	1,777	1993	Geotechnical
BNC	5	Core	135-139		1993	Environmental
	3	Core	136A,141	250	1993	Hydrological
			+ 2			

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	27	Core	145-171	10,458	1994/5	Exploration
	3	Core	143, 144 & 172	602	1993 &5	Shaft Pilot & Bulk Sampling
TOTAL CORE	136			29,633		
TOTAL PERCUSSION	121			3,591		Estimate

A further campaign at Hunter's Road core-drilling (HQ, 63.5mm) was completed in late December, 2003 after having drilled a total of 2,830m out of a planned 3,000m.

10.3 FREDA REBECCA MINE

Considerable exploration drilling has taken place at the Freda Rebecca Mine. Drilling comprised; 252 reverse circulation holes totalling 63,358m, 697 surface diamond drill holes totalling (predominantly BQ size), 140,612m and 584 underground diamond drillholes totalling 46,749m. Altogether, 1,533 drill holes totalling 250,720m were completed. 172,153 assays were carried out on the core and chips.

10.4 SEMKHAT

In the 2004 drilling reverse circular programme, five lines of holes were drilled (refer Figure 10-1). Three of these were 160m apart with one line to the west angled at 45° to the others to take into account the changes in strike in the this area. The last line to the east was a closure line with only two holes. A total of 64 holes and 3,147m were drilled to an average depth of 49m. All holes were drilled to the south at 45°.

The drilling programme was curtailed when the XRF analyser ceased to function. Reasons for the malfunction have not been documented.

In 2005 Guy Voglet selected 52 samples from the 2004 RC drill programme sample archives and submitted them to ACME in Canada for analysis by ICP emission spectrometry using an Aqua regia. This was undertaken to check the reliability of the XRF assay results.

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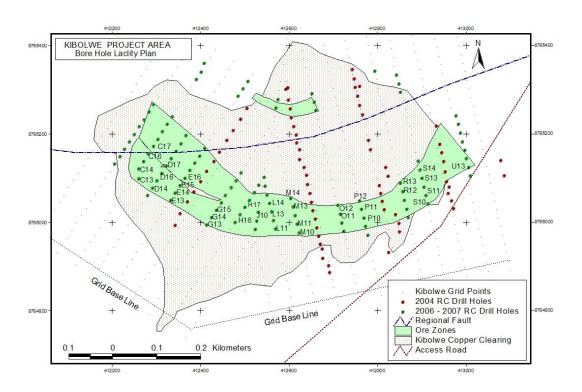


Figure 10-1: Kibolwe Project. 2004 and 2006-2007 Reverse Circulation drillhole locality plan.

11 SAMPLING METHOD AND APPROACH

11.1 BINDURA NICKEL CORPORATION

At the core yard, the core is split by diamond saw. A part of the core is sent for assay and a half core is kept for reference purposes. A quarter of the capital drilling drill core is kept to form a bulk sample for metallurgical testing. The percentage sulphide is visually estimated by the geologist. A barren sample of footwall basalt is included for every 20m section as a sample blank. Duplicate cores are not routinely sent for assay but if any anomalous sample values are returned a standard is submitted

Assays are performed at laboratories located at Trojan Mine and Shangani Mine and both are ISO 9001 Certified. Samples entering the assay laboratory are identified as either high grade or low grade (typically concentrator and smelter samples for the former and geological samples for the latter). The massive sulphides are treated in the high grade stream. Approximately 20% of the samples analysed are control samples. The laboratories participate in a monthly external round robin analysis as well as a weekly round robin analysis between the two laboratories.

Samples are crushed through primary and secondary jaw crushers to a maximum size of 4mm, and are then fed into a pulveriser which reduces the size to 75 microns. 100g aliquots are bagged, and sent for analysis. Analysis for total Ni, Cu and Co is performed using an atomic absorption spectrometer ("AAS") and analysis for PGMs is mainly done on the copper cement before it is sold, as the concentrations before smelting are usually too low.

Trojan Laboratory operates under strict quality controls, and SRK are of the opinion that these are sufficient to ensure sufficient accuracy and precision in assays performed. More regular use of standards, and blind repeat assays by the geology department would provide an increased confidence through additional independent checks on the laboratory.

A relative density of 2.8g/m³ was historically been used on Trojan and Shangani Mine for the disseminated sulphides, and 4.0g/m³ for the massive sulphides. In 1998 a study was done at BNC's laboratories using approximately 150 samples to check the relative density figures. The results confirmed the previously used figures, and they have continued to be used as standards.

11.2 HUNTERS ROAD

During the last campaign at Hunter's Road core-drilling (HQ, 63.5mm) was completed in late December, 2003 after having drilled a total of 2830m out of a planned 3000m.

Geological logging ran concurrently with drilling, where completed drill holes were instantly logged, with particular attention paid to visibly identifiable alteration zones that might affect metallurgical performance of the ore, such as talc carbonate zones. Visible chrysotile vein-lets were visually

quantified, as there is no proper analytical method to quantify chrysotile fibre without interfering with other fibrous minerals in the ore.

During logging, sulphidic horizons were also identified for splitting, and were marked in relation to geozones identified during previous drilling. Ultra fine-grained sulphides horizons were also identified, in zones next to the hanging wall intercepts of earlier modelled ore zones. These ultrafine grained sulphides confirmed the presence of hydrothermal sulphides.

The sulphide rich zones marked on the core during logging were split into halves, and one half further split into quarters

11.3 FREDA REBECCA MINE

The underground resource estimation process at FRM is based on surface and underground diamond drilling. Sampling was done at 1m intervals within 15m of the mineralised zone and the core was split for sampling and reference purposes. Sidewalls of development were channel sampled with diamond saw cuts, or if the saw is out of action, hand-cut channels are used. Previously the core was assayed at Rio Tinto, Geomet and the mine laboratory. From 1998 samples were submitted to SGS laboratory for assaying. After the closure of SGS in August 2002, samples were sent to Antech laboratory in Kwekwe. Core recovery is generally greater than 95%. Drill core and RC chips are stored in the core yard on-site. SRK viewed the core during the site visit. The remaining half core was found to be stored in wooden core boxes under shelter. The half core and core boxes were found to be in generally good condition and clearly marked with borehole number, box number and depth.

Reverse circulation ("RC") drilling on the Phoenix Prince orebody was carried out with a 75mm face-sampling hammer. Holes were logged and split at the FRM core shed. The samples were assayed at SGS and the procedure included check samples.

11.4 SEMKHAT

RC drilling used a high pressure, high volume compressor to overcome anticipated problems in water-logged ground. The equipment was larger than originally planned and less mobile in difficult terrain.

Samples were collected in a cyclone and split on site for dispatch to field laboratory with a portion washed and lithologically logged. A second portion was archived for check assays.

12 SAMPLE PREPARATION, ANALYSES AND SECURITY

12.1 BINDURA NICKEL CORPORATION

At the mines the grade of the sample is determined by acid digestion and finished off with Atomic Absorption Spectra by BNC laboratories. The sample is prepared from an initial 2 kilogram drill core, chip or grab sample by crushing, riffling and milling it to 75 percent passing 74 microns. Half a gram of the sample is either digested in dilute hydrochloric acid for Atomic Absorption or imprecated for X-ray. During assaying the instrumentation is constantly calibrated against standards for deviation and compared with Certified Reference Material from external laboratories. The BNC laboratories at Trojan and Shangani participate in round robin inter laboratory check programs.

12.1.1 HUNTERS ROAD

At Hunter's Road, one metre samples for geochemical analysis were collected from one of the quarter core splits, with every four consecutive metres being indicated on the sample collection sheet to represent a 4m – composite for geochemical analysis. The basis for a 4m – composite to represent a geochemical sample is outlined in a note by *John Barr (EAD/ZIM/JMB/53 Procedure for compositing of drill core samples for the Hunters Road geochemical work Appendix 1*). Quartz blanks, Base metal Certified Reference Materials ("CRMs") namely GBM300 – 4, GBM999 – 1 and GBM998 – 8C, repeats and blinds were placed alternately after every fifty, (four-metre composite samples). The 1metre ore zone samples plus the inserted blinds and blanks were then taken to Inner Core Exploration Services at The Institute for Mining and Research at the University of Zimbabwe for crushing, riffle splitting, pulverizing and packaging into smaller (100g) packets of four – metre composites for dispatch to ACME laboratories in Canada for geochemical analysis i.e (Whole Rock, Group 4A & 4B and Group 1EX). Quartz washing was also done during milling to control contamination.

The three CRMs used covered the low, medium and high Ni % grades expected from the Hunters Rd deposit. GBM 998 – 8C represented the low grade ore with average Ni grade of 4 103ppm, whereas GBM 300 – 4 represented the medium grade, average Ni grade of 8118ppm and GBM 999 – 1 representing the high grade, with an average Ni grade of 11 728ppm. Each of these was inserted randomly at approximately after every 50 samples interval. These CRMs had other elements besides Ni; namely Zn, Cu, Co, As, Pb and Ag and these were also analysed.

On receipt of results CRMs, quartz blanks and duplicate samples results were extracted from the database and graphs plotted to check the accuracy and precision of the analyses. The agreed tolerance

levels for acceptance on the quality of the analyses were 3 Standard Deviations from the mean value of the standard. The analyses were found to be satisfactory to the agreed standards.

Sample preparation, analytical procedures and security were considered acceptable by SRK.

12.2 FREDDA REBECCA MINE

A specific gravity of 2.78t/m³ is used for the sulphides and 2.23t/m³ for the oxides at FRM. A specific gravity of 2.60t/m³ is used for the oxides at Phoenix Prince and this is based on results of density measurements carried out at the mine laboratory. Samples are pulverised to 90% passing 75µm and then a 50g aliquot is fire assayed with AA finish. Every tenth sample is repeated and bought-in standards are inserted every 20 samples. Production grab samples and channels samples are also sent to the mine laboratory. The laboratory routinely inserts blanks and standards and the quality is checked using correlation graphs.

The FRM laboratory is operated by mine personnel and is not certified, however SRK have reviewed the procedures and are of the opinion that the laboratory procedures conform to industry practice. This laboratory has been in operation for several years. Sample preparation, analytical procedures and security were considered acceptable by SRK.

12.3 SEMKHAT

In order to facilitate a quick turn-around of analytical results a field laboratory was assembled around a Bruker XRF analyser. Sample preparation included drying and milling facilities with a press for producing the discs to be inserted into the XRF instrument. Ancillary equipment included a generator with voltage stabiliser and UPS back-up. The laboratory had the capacity to process up to 180 samples per day. The major drawback of the analytical method was the small sample analysed of only 10 gm, split down from a nominal 25 kg drilled metre. There are no records of replicates, standards or blanks having been used.

12.4 OBENEMASE

All SCM assays (pre 1999) were completed at the on-site laboratory. This laboratory was used to complete all mine and resource drilling assays. No CC data apart from laboratory pulp repeats is available for this laboratory and the precision and accuracy cannot be quantified. All data was validated against hard copy reports and is now represented correctly in the digital database. Assays were reportedly rounded to one decimal place. This practice is not accurate and will lead to artificial grade populations at the lower end of the skewed distributions. The confidence of the assay data from the SCM laboratory can be considered low. This laboratory work represents 53% of the database. A

large amount of this drilling is concentrated on past open pit mining and is effectively discounted by the depletion exercise.

OGM 1993 — 1999 comprises approximately 32% of the dataset for Obenemase. The majority of samples were taken by RML although little QC data is available for this period. It is likely that RML applied the same QC measures as applied to their other projects in West Africa. OML are unable to locate this data. Most of the samples were analysed at SOS Bibiani. The confidence of this assay data is considered to be moderate.

OML 2004 to June 2005 comprises approximately 15% of the dataset for Obenemase. QC data for the Obenemase deposit is limited. This was due to late delivery of certified standards at the commencement of drilling. OML have not reviewed the QC results on an ongoing basis and a number of issues have only been identified with the recent site visit by RSG Global. All samples were analysed at SGS Tarkwa and SGS Bibiani. Gravimetric finish for samples over 10ppm Au was not requested by OML.

The assay method applied by SOS Tarkwa and SOS Bibiani is as follows:-

- Code S032 The sample (received weight <3.5kg) is dried and the entire sample crushed to a nominal 3mm. It is then representatively split down to a 1.5kg sub-sample using a 'Jones riffle splitter' and the remainder of the crushed sample is returned to the original bag and stored. The entire crushed split is milled/pulverized in a LM2 mill to a nominal 90% passing 75 μ m. An analytical pulp of approximately 200g is sub-sampled from the bulk. All preparation equipment is flushed with barren material prior to the commencement of the sample batch.
- Code F650 A 50g sample of the assay pulp is fluxed with litharge and fused. The resulting lead button contains the precious metal. The lead is separated from the silver and precious metals to form a prill or bead. The bead is dissolved in aqua regia and read by Atomic Absorption Spectrum (AAS) to yield a gold result. The detection limit for gold (Au) is 0.0lppm.

13 DATA VERIFICATION

13.1 BINDURA NICKEL CORPORATION

13.1.1 DATABASES

At both Trojan and Shangani mines, data are captured in Excel spreadsheets first and then imported into DATAMINE using appropriate macros. Each of the databases consists of the following files: geology, assays, collar coordinates, survey and geomechanics. These are all cleaned and validated prior to estimation.

13.1.2 VARIOGRAPHY

Samples are regularized to 2m composites at Trojan and to 4m at Shangani. The semi variograms were modelled with the best continuity along strike and dip at both Trojan and Shangani.

13.1.3 ESTIMATION

The interpolation method used for both mines was Ordinary Kriging. Blocks of 15 x 2 x 15m (in X, Y and Z respectively) were used for Cardiff Hill and 15 x 10 x 15m blocks were employed for Shangani.

The kriging neighbourhood was optimized using a krig test based on the slope of regression.

Panels of 60 x 15 x 120m were used for Cardiff Hill resources below 33Level and the kriging parameters were optimized for the slope of regression and kriging variance.

Sub-celling was also done for the three estimations to ensure the best fit of the blocks in the solid wire frame models during tonnage calculations.

13.1.4 VALIDATIONS

The three mineral resource models are validated by:

- Plotting out sections of the block models with boreholes and checking any discrepancies between the two.
- Plotting out sections of the ore body wire frame 'slices' with boreholes and comparing the mean and variance of the blocks in each 'slice' with that of the boreholes in the same 'slice'.

13.2 FREDDA REBECCA MINE

An independent review of the gold resource at the Freda Rebecca Mine was carried out by a Qualified Person at the request of Mwana. The review was carried out by M G Hanssen Bsc (Honours), Pr. Sci. Nat, of Digital Mining Services (DMS) of Harare. SRK has not independently reviewed the data upon

which the model is based. The resources at Phoenix Prince were not included in this review. The resources at FRM are reported in a document dated December 2006 that has been reviewed by SRK. The assay data used is 'as provided' by Freda Rebecca Mine. No quality control criteria have been applied to this data. From their long experience with the project and the sampling and laboratory procedures, DMS is confident that the drill and assay data 'does come from reliable and sound technical sources'. Mwana have not carried out any verification of the existing assay data by carrying out check assays of pulps, chip samples, or half core. No verification drilling ('twinning' of existing holes), has been carried out. DMS notes that downhole survey data exists for 21% of the surface diamond drill holes, but is of the opinion that this may be insufficient for resource estimation purposes. An upper cut of the assays was applied at the 99.5% point on the cumulative frequency curve. The effect of this was to cut the Rebecca shear assays at 20 g/t Au and the Freda shear assays at 15 g/t Au. The cut affected 0.46% of the samples on the Rebecca shear and 0.36% of the Freda shear samples. The purpose of the cut was to produce a more stable variogram.

The resource was classified according to the following criteria:

Measured: No blocks have been classified as measured because two datasets are not available.

- 1) Insufficient downhole surveys have been undertaken to establish the location of the intersections.
- 2) There is no quality control assay data and Mwana has not run any checks to verify the dataset. However at FRM mining staff measured blocks as being within 30m of the estimating samples. If this criterion was applied, 62% of the blocks would fall within the measured category.

Indicated: Blocks were estimated using kriging with over 30 samples used in the kriging. The estimate should include at least two holes to estimate each block to prevent a 'bulls eye' effect.

Inferred: Blocks that have been estimated by kriging and are not within the parameters defined above. Thereafter the remaining blocks were estimated by the ID² method.

13.3 SEMKHAT

The ACME results together with the Anmercosa XRF assay results are depicted in Figure 13-1 below. When undertaking check assays the same assay techniques should be used. XRF methods give a total element determination while the ICP method is only partial. Comparing Anmercosa XRF assay results with those obtained by ACME ICP is questionable. The Check Assay Plot shows a lack of correlation at higher concentrations of Cu. There is a positive bias in the case of the ACME results with

increasing concentration. A number of samples show major variations. The XRF method appears to have underestimated Cu grades which may be a function of small sample size.

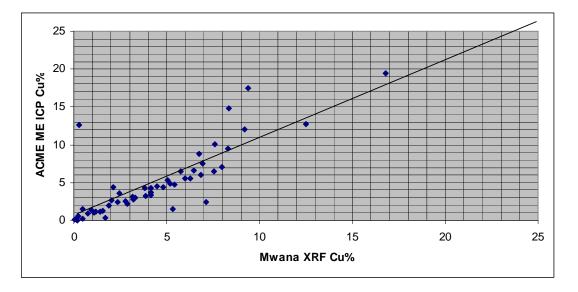


Figure 13-1: Kibolwe Project, 20045 RC Check Samples, Check Assay Plot

The re-assaying option and current planned drilling is as follows: 31 holes were drilled into the mineralized zone. They were drilled at approximately 25m intervals along fence lines. Drill samples were crushed, milled and stored in sealed plastic bags in Lubumbashi. 10 of the 31 holes have been selected and are being re-sampled and assayed. The total cost will be USD8,000. The 10 holes will provide a 50m pierce point interval along the 2004 RC programme fence lines. This corresponds with the spacing interval of the 2006-2007 RC drilling programme. Sampling will be completed in one week with assay results returned by the end of July.

13.4 OBENEMASE

SRK did not verify the data on the asset but rely on the comments of RSG Global.

14 ADJACENT PROPERTIES

14.1 BINDURA NICKEL CORPORATION

Trojan Mine, Shangani mine and Hunters Road as described in this report are stand alone and are not situated adjacent to any mine(s).

14.2 FREDA REBECCA MINE

No known relevant information on mineralisation on properties adjacent to Freda Rebecca Mine.

14.3 SEMKHAT

No known relevant information on mineralisation on properties adjacent to the Semkhat prospect area.

14.4 OBENEMASE

As far as it is known there are no adjacent properties with known mineralisation zones.

15 MINERAL PROCESSING AND METALLURGICAL TESTING

15.1 TROJAN CONCENTRATOR

15.1.1 PROCESSING FACILITY

A flow diagram of the Trojan Mine Concentrator ("TMC") is shown in Figure 15-3. Underground ore is received into a 2.5kt live capacity silo ahead of a primary jaw crusher and a secondary and tertiary cone crushing circuit. Crushed ore at approximately 80% passing 12mm is conveyed to a conical stockpile. The crushed ore is delivered to three primary ball mills and the combined mill discharge is pumped to two classifying cyclones, with cyclone underflow being returned to two of the primary ball mills operating in closed circuit. Cyclone overflow is dewatered in a cluster of cyclones before being fed to the primary flotation plant.

The TMC incorporates two stages of flotation each comprising roughing and scavenging in low volume conventional cells with concentrate cleaning and re-cleaning also in low volume conventional cells. In primary flotation, coarsely liberated and faster floating minerals are recovered at a relatively coarse grind of 50% passing 75 micron. Primary flotation tails are reground to approximately 65% passing 75 micron ahead of secondary flotation, where finer and slower floating minerals are recovered. Flotation concentrates are thickened and filtered using rotary vacuum filters ahead of road transport to the BSR. Flotation tails are separately thickened before being pumped to the current tailings dam facility.

The ore is relatively hard with a Bond Ball Milling Work Index of approximately 24kWh/t. This has necessitated the installation of in excess of 3.0MW of milling power to meet the design capacity of 1,080ktpa. On the basis of management indicated unit capacities in conjunction with recently achieved plant utilisation data, the milling and flotation circuits limit plant throughput to approximately 970ktpa and 1,050ktpa respectively.

The TMC was commissioned in 1964. The plant is generally showing its age but SRK consider that with the planned flotation modernisation and ongoing maintenance, the plant should meet LoM requirements.

15.1.2 FLOTATION MODERNISATION

A new flotation circuit incorporating current technology is presently under construction and once commissioned will replace the existing circuit.

Objective

Replace existing old, high maintenance cost, conventional flotation cells with tank cells;

Provide flotation system able to cope with high grade ores (up to 1.5%Ni) anticipated from Trojan Mine from 2007 onwards;

Improve nickel recovery by 3% points on existing recovery curve;

Reduce MgO value in concentrate to below 12%.

Project Scope

Purchase, install and commission new Outokumpu Tank Cells;

Upgrade milling circuit by installing higher efficiency cyclones;

Decommission existing dewatering circuit;

Purchase, install and commission additional filtration capacity.

Capital

Total Authorised capital is USD10.8 million with USD8.16 million spent up to March 2007.

Status

Under construction; Civil and excavation work was in progress at the time of the site visit and procurement of equipment was taking place.

Commissioning planned first quarter 2008. In the opinion of SRK, on-time completion is possible, provided intensive project management is performed. It is likely, however, due to the loss of skills, that the completion of this project may be delayed by up to three months.

15.1.3 HISTORICAL AND PROJECTED PROCESS OPERATING STATISTICS

Key historical processing and projected statistics for the TMC are summarised below:

Table 15-1: TMC Metallurgical Performance

Description	Units	2002	2003	2004	2005	2006	2007	LoM	LoM
						Annualised	Plan	Ave	Max
Milled Tonnage	(kt)	1,031	1,016	980	864	767	928	685	928
Head Grade - Ni	(%)	0.620	0.646	0.689	0.686	0.671	0.626	0.891	1.057
Head Grade - Cu	(%)	0.045	0.047	0.046	0.043	0.042	0.042	0.059	0.070
Head Grade - Co	(%)	0.027	0.026	0.026	0.024	0.025	0.021	0.030	0.035
- Ni Recovery	(%)	69.4	70.8	72.3	72.0	71.0	76.2	83.0	85.0
- Cu Recovery	(%)	61.4	53.2	46.6	45.2	46.4	68.8	68.8	68.8
- Co Recovery	(%)	55.2	45.7	48.9	52.7	47.1	54.0	54.0	54.0

It is seen that throughput has steadily decreased. This is largely due to an increasing proportion of hard ore and reduced availability of mined ore. Comminution optimisation studies have identified a number of areas to improve milling throughput and efficiency that will return plant capability to its design capacity of 1,080ktpa.

Projected LoM nickel recovery is seen to be sharply higher than that achieved in recent years. This is principally due to the projected increase in head grades plus an allowance for recovery improvement once the flotation upgrade is commissioned. TMC have generated a regression curve to predict recovery as a function of head grade. SRK conducted an independent analysis of recent operating performance and is of the view that the TMC regression curve at typical 9% concentrate grade could be optimistic by 1-2% as shown in Figure 15-1.

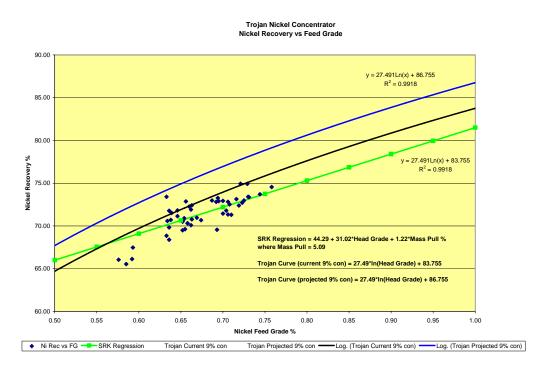


Figure 15-1: Nickel Recovery vs Feed Grade

TMC have further predicted an improvement of 3% once the flotation upgrade is commissioned. SRK has reviewed supporting pilot plant test results and considers this to be a reasonable assumption. Recoveries projected in the current LoM Plan are compared to the uprated regression curve in Figure 15-2.

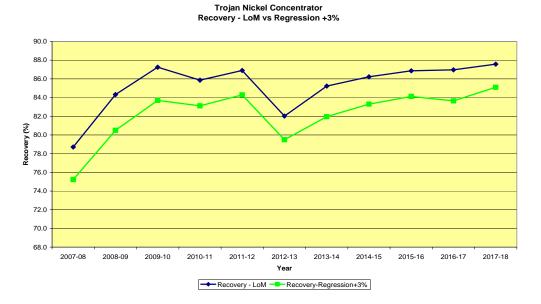
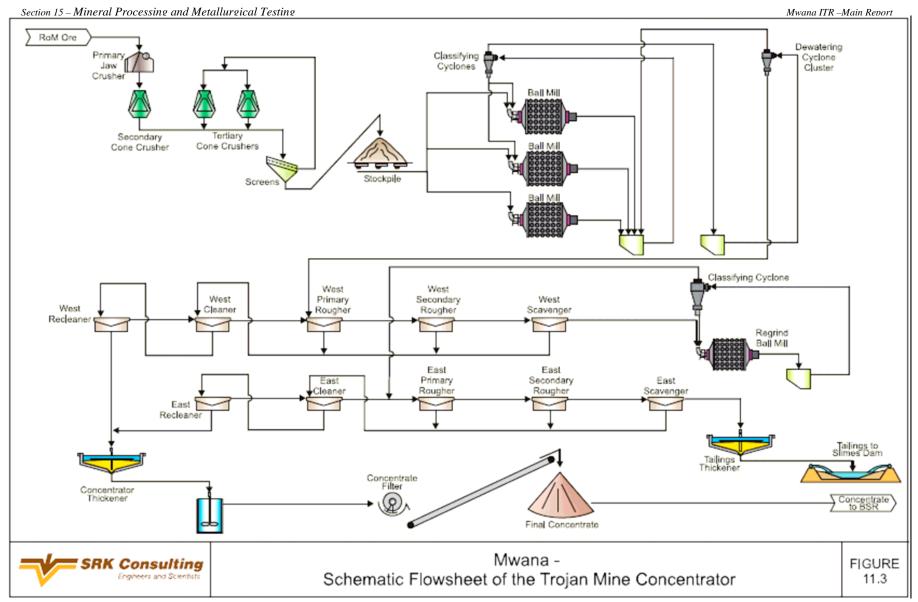


Figure 15-2: Comparison of LoM Recovery vs Uprated Regression Curve

It is seen that the projected LoM recoveries are approximately 3% higher than the current regression curve at 9% concentrate grade. As already indicated, SRK considers the latter to possibly be optimistic by 1-2%. SRK would accordingly recommend a downwards adjustment of LoM recoveries by approximately 2%, until further improvement has been demonstrated in practice.



15.2 SHANGANI MINE CONCENTRATOR

15.2.1 PROCESSING FACILITY

A flow diagram of the Shangani Mine Concentrator ("SMC") is shown in Figure 15-6. Underground ore is received into a 1.5kt live capacity silo ahead of a primary jaw crusher and a secondary and tertiary cone crushing circuit. Crushed ore at approximately 80% passing 10mm is conveyed to a live capacity silos. The crushed ore is delivered to two identical milling circuits comprising a ball mill in closed circuit with two classifying cyclones. Cyclone underflow is returned to the ball mill, whilst cyclone overflow is dewatered in a cluster of cyclones before being fed to the primary flotation plant.

The SMC incorporates single stage flotation comprising roughing and scavenging in low volume conventional cells with concentrate cleaning and re-cleaning also in low volume conventional cells. Optimum grind size has been identified as 70% passing 75 micron. An optimising software package is installed for mill control and optimisation. Flotation concentrates are thickened and filtered using rotary vacuum filters ahead of road transport to the BSR. Flotation tails are separately thickened before being pumped to the current tailings dam facility.

The three main orebodies at Shangani have a relatively low Bond Ball Milling Work Index of 13kWh/t to 14kWh/t with no significant variation at depth. This led to the installation of only 2.0MW of power to meet the design capacity of 1,080kt per annum. The Far West Pit ore however, is significantly harder at between 25kWh/t and 30kWh/t. In order to manage this situation, this ore has been introduced at a maximum proportion of 10% of total feed. In future however, as the proportion of Far West ore increases, plant capacity will decrease proportionally.

The SMC was commissioned in 1975. The plant is generally in good condition and with the planned equipment replacement and ongoing maintenance SRK consider that the plant should meet LoM requirements.

15.2.2 HISTORICAL AND PROJECTED PROCESS OPERATING STATISTICS

Key historical and projected processing statistics for the SNC are summarised in Table 15-2:

Table 15-2: SMC Metallurgical Performance

Description	Units	2002	2003	2004	2005	2006	2007	LoM	LoM
						Annualised	Plan	Ave	Max
Milled Tonnage	(kt)	929	873	842	785	750	802	837	864
Head Grade - Ni	(%)	0.484	0.427	0.434	0.426	0.439	0.668	0.942	1.128
Head Grade - Cu	(%)	-	-	0.037	0.036	0.035	0.034	0.038	0.040
Head Grade - Co	(%)	-	-	0.015	0.015	0.017	0.022	0.031	0.038
- Ni Recovery	(%)	73.7	71.7	72.7	72.4	71.2	71.8	72.2	72.6
- Cu Recovery	(%)	-	-	85.8	85.1	82.6	85.0	85.0	85.0
- Co Recovery	(%)	-	-	63.0	65.4	59.9	66.0	66.0	66.0
Bond BWI	(kWh/t)	-	-	16.2	18.1	19.6	20.5	21.5	21.8

Milled tonnage is seen to have decreased steadily in recent years. This is due to a steady increase in ore hardness as reflected by the Bond Ball Work Index ("Bond BWI"). This trend will continue over the remaining LoM as the proportion of harder Far West ore increases. Projected LoM milled tonnage does not seem to fully recognise this and may be optimistic.

SMC have generated a regression curve to predict recovery as a function of head grade. SRK conducted an independent analysis of recent operating performance and is of the view that the SMC regression curve may be conservative by approximately 1% as shown in Figure 15-4.

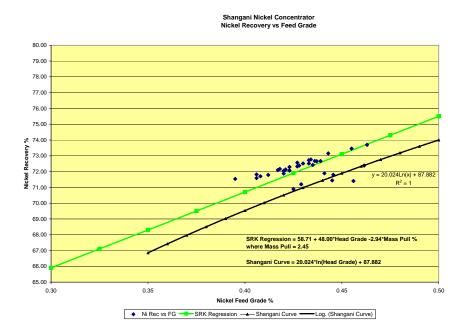


Figure 15-4: Nickel Recovery vs Feed Grade

LoM nickel recoveries appear to recognise the conservatism of the regression curve as seen in Figure 15-5. SRK would accordingly not recommend any adjustment to the projected Shangani LoM nickel recoveries.

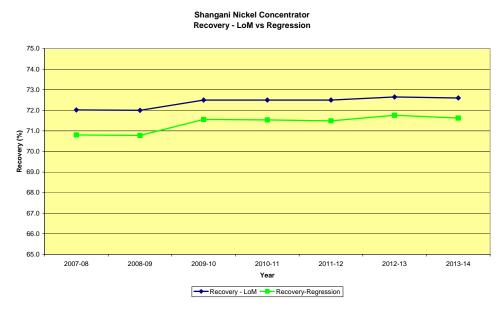
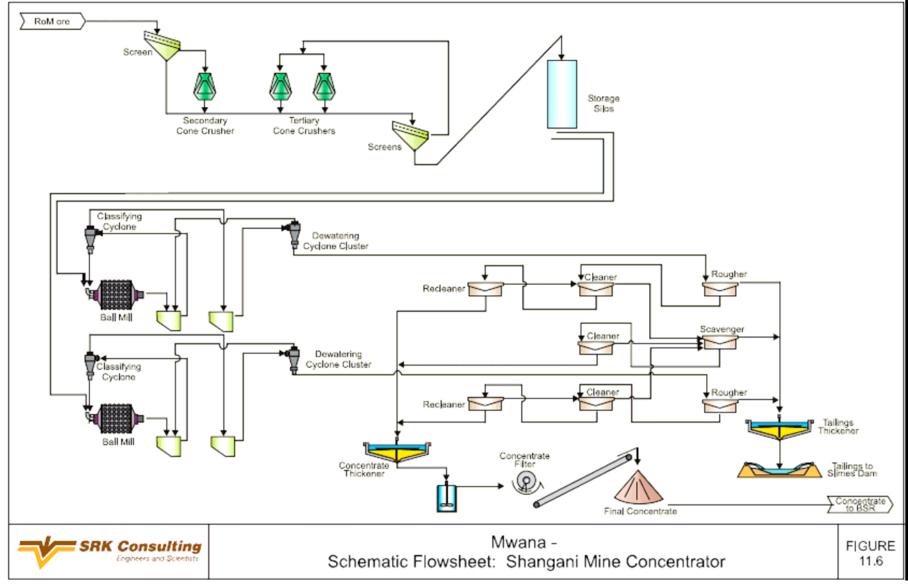


Figure 15-5: Comparison of Shangani LoM Recovery vs Uprated Regression Curve



15.3 BINDURA SMELTER AND REFINERY

15.3.1 PROCESSING FACILITY

A flow diagram of the BSR is shown in Figure 15-7 and Figure 15-8. Moist concentrates received from TMC, SMC and third party tolling customers are blended and dried before being charged into the 15MW electric furnace for smelting. Furnace slag is tapped, granulated and removed to dumps. Furnace matte is periodically tapped into ladles for molten transfer to Peirce Smith converters. Converter slag is recycled to the smelting furnace and low sulphur matte is granulated ahead of transport to the Refinery. Copper sulphide is recycled from the Refinery to the Smelter as required to ensure the required Ni/Cu ratio in leach alloy matte.

BNC matte is blended with third party matte ahead of closed circuit ball milling. The ground leach alloy matte is leached at 80°C in acidic sulphate solution in a two stage counter current atmospheric leach circuit comprising cementation and copper leach. This is followed by a third stage non-oxidising pressure leach at approximately 140°C and 400kPa. Copper precipitates as copper sulphide under the pressure leach operating conditions and is recovered as a cake after filtration of the autoclave discharge. A separate autoclave operating under oxidising conditions is used to remove iron and arsenic as an iron arsenate precipitate. This is drummed and disposed of in a secure bunker.

Impure nickel solution in the cementation thickener overflow contains cobalt in solution which is precipitated with the addition of caustic soda and recovered as a cobalt hydroxide filter cake. Nickel catholyte after cobalt precipitation reports to the Nickel tankhouse where nickel is recovered by electrowinning. The LME quality nickel cathodes are washed and cut into squares per customer requirement before being drummed and containerised for despatch.

The capacity of the Smelter is 160kt per annum concentrate producing 22kt per annum low sulphur matte. Refinery capacity is 14,500t Ni per annum. Both the Smelter and Refinery are structurally and mechanically in reasonable condition and with ongoing maintenance SRK consider that they should achieve the targeted LoM availabilities of 96% and 98% respectively.

The Smelter process currently incorporates no facility for sulphur abatement or fixation. Whilst the BSR has appropriate authorisation in terms of Zimbabwean legislation, pressure on reducing sulphur emissions is likely to increase.

15.3.2 OXYGEN INJECTION UPGRADE

A new oxygen injection leach circuit has recently been completed to replace the atmospheric copper leach tanks.

Objective

To reduce BSR operating costs by replacement of air agitated tanks with mechanical agitation and use of oxygen;

To realise improved reaction efficiencies leading to a reduction in the heating requirements thereby making a boiler redundant;

To replace the now safety hazardous copper leach tanks.

Project Scope

Installation of mechanically agitated cementation tanks;

Installation of a Pressure Swing Adsorption (PSA) plant;

De-commission of a blower;

De-commission of a boiler.

Final Estimated Cost

USD4.41 million.

Status

Commissioning commenced but discontinued due to problems with oxygen shear reactors.

15.3.3 COPPER CATHODE PRODUCTION PROJECT

Consideration is being given to producing LME A Grade copper cathode but this project is conceptual only at this stage.

Objectives

Add value to copper product by producing LME A Grade cathode as opposed to impure copper sulphide;

Increase nickel recovery by recovering 90% of nickel currently lost in copper sulphide cake (100tNi/annum at full capacity);

Produce a higher value PGM concentrate.

Project Scope

Installation of additional copper leach autoclave;

Installation of iron and nickel precipitation facilities;

Refurbishment of copper electro-winning circuit;

Refurbishment of PGM recovery facility;

Installation of sulphur removal and sodium sulphate circuit.

Final Estimated Cost

USD18 million.

Status

Conceptual.

15.3.4 HISTORICAL AND PROJECTED PROCESS OPERATING STATISTICS

Key historical and projected processing statistics for the BSR are summarised in Table 15-3:

Table 15-3: BSR Metallurgical Performance

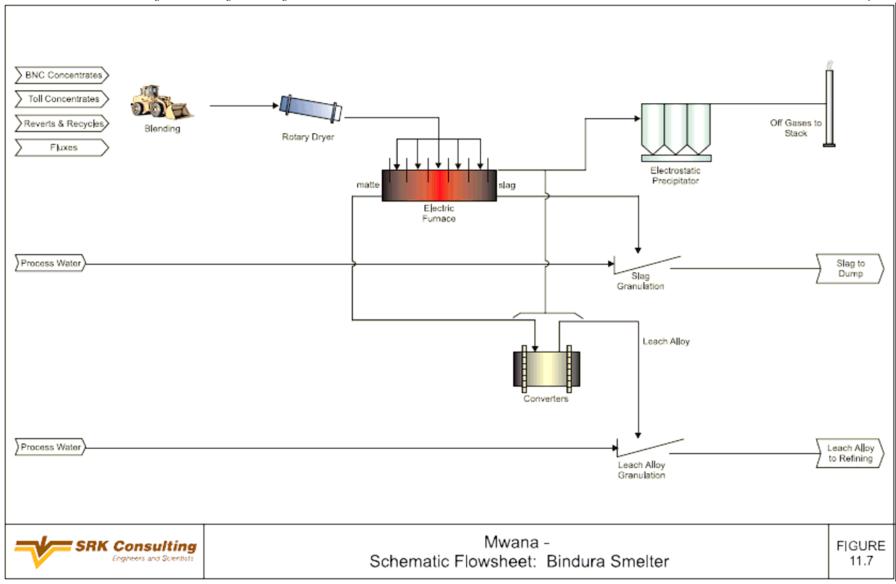
Description	Units	2002	2003	2004	2005	2006	2007	LoM	LoM
						Annualised	Plan	Ave	Max
- BNC Nickel Receipts	(t)	7,851	7,622	7,675	6,788	6,444	7,029	8,339	14,810
- Toll Nickel Receipts	(t)	7,249	4,998	3,327	3,076	3,532	2,820	1,560	2,820
BSR Nickel Production	(t)	11,165	10,105	10,586	9,115	8,694	9,264	9,026	14,641
- Ni Recovery (1)	(%)	91.8	91.6	91.7	91.6	91.8	94.1	94.0	94.4
- Cu Recovery (1)	(%)	95.3	95.4	97.9	96,2	97.1	97.9	97.2	97.9
- Co Recovery (1)	(%)	36.5	36.4	39.0	37.6	38.8	42.0	40.3	42.0

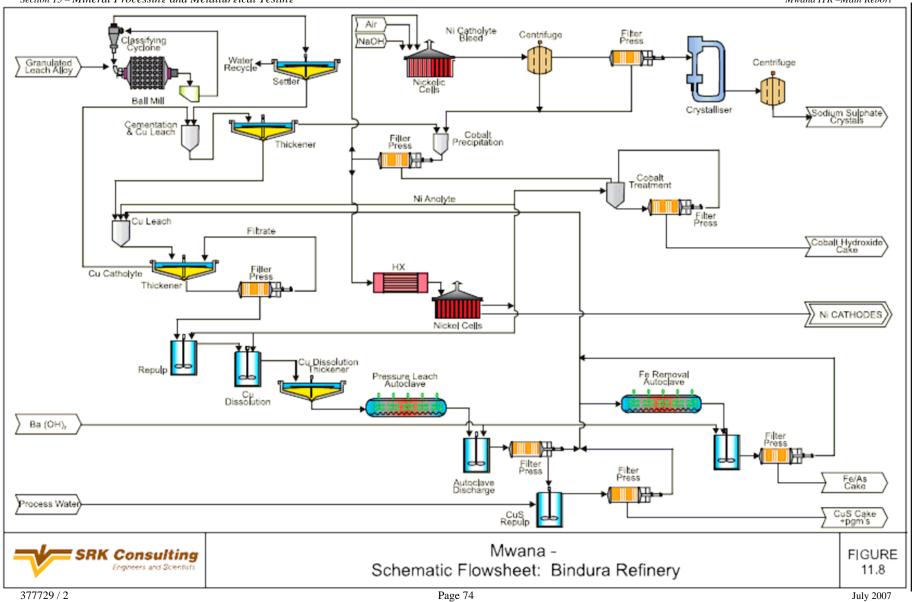
⁽¹⁾ Combined Smelter and Refinery Recoveries.

Historical smelter recoveries for nickel are considered to be low at less than 93%. This is thought to be due to the current concentrate drying and handling technology and represents an area of opportunity were such sources of loss to be addressed.

Total nickel production has been significantly below the refinery capacity of 14,500t per annum in recent years, notwithstanding the fact that BNC concentrates have been supplemented with external toll material. Maximum LoM nickel production exceeds the design capacity in certain years as a result

of the higher nickel head grades at Trojan Mine. In the interest of maintaining long term tolling contracts, it will probably be necessary to restrict or stockpile BNC concentrate generation in these years.





15.4 HUNTERS ROAD CONCENTRATOR

This section describes metallurgical test work and design conducted as part of the pre-feasibility study on the Hunters Road exploration property.

15.4.1 INTRODUCTION

The Hunters Road deposit was discovered by JCI in 1969. Since the early nineteen eighties, the metallurgy of Hunters Road has been the subject of detailed investigations by various participants. In 1993-94, Anglo American Research Laboratory ("AARL") undertook a testwork campaign which formed the basis of the process design for a 180ktpm concentrator treating open pit ore. Following a subsequent testwork campaign in 1996-97, process design was modified to a 150ktpm concentrator treating underground ore. In 2002, the process costing was updated on the basis of the 1996-97 process design. The base capacity was increased to 170ktpm, with a later increase to 240ktpm to match the capacity of the BSR after closure of Shangani and Trojan concentrators. In 2005-06, a further programme of diamond core drilling and bench scale metallurgical testwork was undertaken. This formed the basis of the process design for a 160ktpm concentrator treating open pit ore, with a later increase to 240ktpm.

Currently a pre-feasibility study is being undertaken for Mwana Africa by Grinaker-LTA Metallurgical Operations ("G-LTA"), a division of Engineering & Projects Company ("E+PC"). This study envisages a concentrator of 40-60ktpm initial capacity with the potential to add further modules to a final capacity of 240ktpm. The initial treatment rate will be confirmed once the availability of second hand equipment has been confirmed.

This section includes discussion and comment on the metallurgy of the Hunters Road Project and the impact thereof on likely mineral processing options. Specific comment on current mineral processing proposals and costing has not been included as such aspects have yet to be confirmed in the current scoping study.

15.4.2 MINERALOGY

1996-97 Study

The principal nickel sulphide observed in the Hunters Road mineralised serpentinite was pentlandite, with pyrrhotite being another significant sulphide. Minor sulphides included pyrite, violarite, millerite, haezelwoodite and polydymite. The sulphides were observed mainly as disseminations rimming silicate grains or in veins associated with magnetite. Massive sulphides are rare and are thought to have formed as a result of shearing and remobilisation. Near the surface, pentlandite

 $(Ni,Fe)_9S_8$ has been replaced by violarite $(Ni,Fe)_3S_4$, which is less amenable to flotation and impacts negatively on flotation.

Early test programmes identified three problematic metallurgical characteristics, namely low and highly variable nickel recovery, very hard ore and highly viscous milled pulp. Attempts were made to relate these metallurgical properties to geological alteration facies, which had been defined as follows:

- Black ("B") lizardite.
- Yellow-Green ("YG") lizardite.
- Greyish-Green ("GG") lizardite.
- Talc carbonate-carbonate ("TC").

A key limitation of this phase of investigation was that whilst high grade mineralisation occurred mainly in GG lizardite, reliable metallurgical sampling was biased towards B lizardite and YG lizardite. Further limitations including inconsistent geological sub-facies definition and poor sample coverage hampered this mapping exercise. A number of qualitative findings were however made, including the following:

- Ni recoveries were shown to increase from the outer margins to the centre of the deposit.
- Ni recoveries are higher near the hangingwall sections than the footwall sections.
- Extrapolation of BWI data shows a crude zonation of higher values at the centre of the deposit with lower values at the margins. Vertical down dip zonation was not observed.
- No relationship was observed between samples with viscosity problems and alteration sub-facies.

2005 Study

Petrographic investigations confirmed that pentlandite and pyrrhotite are the main primary sulphide minerals of the deposit, with pentlandite being the dominant Ni-bearing sulphide.

It was reported that mild supergene alteration of sulphides has occurred, leading to partial replacement of pentlandite by violarite and original magmatic pyrrhotite by pyrite. Previously defined oxidation zones were re-affirmed on the basis of the degree of violaritization of pentlandite, with the amount of violarite found to decrease with depth:

- Supergene alteration zone, 90 95% violarite, down to a depth of ± 60 m.
- Transition zone, 30 80% violarite, down to a depth of ± 130 m.
- Fresh Sulphide zone, 5 10% violarite, down the rest of the evaluated zone down to 350m.

The fresh sulphide zone may be expected to give the best recoveries of all the zones because of the increased abundance of pentlandite at the expense of violarite.

In developing a geo-mineralogical model, four new broad geological alteration zones were identified:

- Magmatic.
- Hydrothermal.
- Chrysotile.
- Talc carbonate-carbonate.

Dolomite is the abundant carbonate mineral associated with the talc carbonate zones. Brucite occurs in substantial amounts, with other phyllosilicate minerals like chrysotile, antigorite and lizardite occurring in variable amounts. These, together with brucite, are all known to cause pulp viscosity problems. Traces of mountkeithite also occur in the ore rocks and may also have an impact on pulp viscosity.

Magnesite is not ubiquitous but is associated with the footwall shear, which also hosts significant amounts of talc carbonate.

15.4.3 METALLURGY

1980 – 1996 Testwork Campaigns

In 1980-81, six metallurgical holes were drilled and tested, with nickel recoveries reportedly varying from 55%-80%. A pilot shaft for metallurgical sampling was developed on the West orebody in 1991. Rougher flotation nickel recoveries of 65% were reported. Between 1993 and 1996, nine metallurgical test campaigns were undertaken by AARL, including bench and pilot scale milling and flotation investigations. A consistent feature across the various Hunters Road test campaigns has been the complex and variable mineralogy, with corresponding variability in metallurgical response. Such variability has led to difficulty in interpreting test results but the following are considered to be key findings of the test campaigns undertaken in the 1990s:

The ore was generally hard with BWI determinations averaging between 20kWh/t and 28kWh/t, with individual drill core samples observed as high as 34kWh/t.

High pulp viscosity was observed on certain samples tested but not on all samples. This was not correlated to any specific gangue constituent but in some instances necessitated the reduction of flotation feed density to 10% solids for flotation to be possible at all.

Extremely variable Ni recoveries ranging from 40% to 80% were achieved. Flotation response was characterised by high depressant requirement and long residence time. Concentrate grade also exhibited high variability between 4%Ni and 20%Ni, which poses smelting challenges.

Cyclone desliming of the primary milled product with separate flotation of cyclone overflow and reground cyclone underflow seemed to benefit the overall process.

It was evident that the results of the 1996 campaign were significantly superior to the 1993-94 campaign, with the following best fit recovery relationships being developed:

1993 Campaign

 $Recovery = (81 + Head\ Grade)*(Head\ Grade - 0.13)/Head\ Grade$

1996 Campaign

Recovery = (87 + Head Grade)*(Head Grade - 0.10)/Head Grade

The nickel head grade versus recovery curve for the 1996 campaign is shown in Figure 15-9.

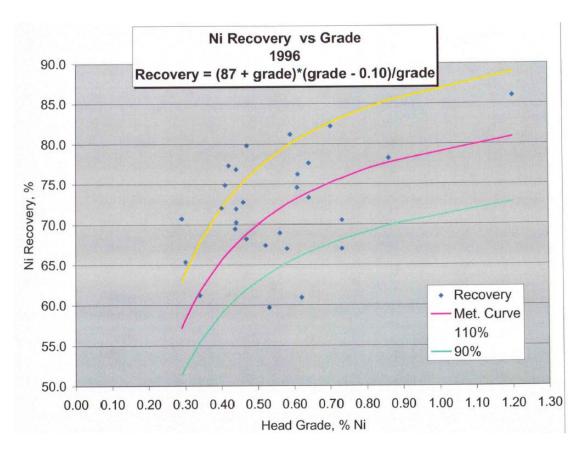


Figure 15-9: Nickel Recovery vs Head Grade – 1996 Campaign

2005 Testwork Campaign

Following indications that inconsistencies in metallurgical characteristics were linked to the existence of geological zones, it was decided in July 2003 to generate discrete samples of each zone for individual testing of metallurgical performance. Drilling commenced in late September 2003.

The previous geo-mineralogical model was developed based on Ni/Cu ratios and alteration. This defined four main geological zones namely, magmatic, hydrothermal, chrysotile and talc carbonatecarbonate zones. The new drilling campaign enhanced this geo-mineralogical model, after which metallurgical sampling and test work were carried out across the different geological zones. The test work included recovery, Bond Work Index and viscosity tests.

Metallurgical test results from the 2005 drilling campaign were incorporated into the geomineralogical model to produce a geo-metallurgical model. The following key results were obtained

Recovery: The nickel recoveries from testwork were adjusted to match a nickel concentrate grade with an MgO grade of 12%. They were translated onto the resource model according to the following adjusted recovery curves obtained for each geological zone:

Magmatic Fresh Recovery = $15.53 \times \ln (\text{grade}) + 86.553$ **Magmatic Transition** Recovery = $16.308 \times \ln (\text{grade}) + 80.72$ Talc Carbonate Recovery = 122.44 x grade + 4.6575

Recovery = $18.824 \times \ln (\text{grade}) + 90.037$

Where ln = natural logarithm and grade = %TNi head grade.

Normalised recoveries at a fixed head grade of 0.67% Ni are shown in Table 15-4.

Table 15-4: Hunters Road Normalised Ni Recoveries

Chrysotile

Ore Type	Normalised Recovery (%)	Recovery Range
Magmatic Fresh	80.3	73 - 87
Magmatic Transition	74.2	49 - 87
Talc Carbonate Fresh	86.7	49 - 77
Talc Carbonate Transition	73.0	73
Chrysotile	82.5	61 - 79

There is some variability in achieved recovery, with an overall range of 73 – 87%. In general, the recoveries follow the nickel grade trends in which the values increase from surface to a depth of around 200m below surface before decreasing slightly, this probably being due to limited information at 300m below surface. Talc carbonate exhibits the most recoverable grades, followed by chrysotile, magmatic fresh and magmatic transition respectively.

Bond Work Index: The Bond Work Index ranged from 15.4kWh/t in the magmatic transition to 20.1 kWh/t in the talc carbonate transition and chrysotile. Magmatic fresh had a hardness of 17.7kWh/t. These are somewhat softer than indicated in the 1993-96 test campaigns and therefore need further clarification.

Viscosity: Viscosity refers to the degree to which a fluid resists flow under an applied force and its unit is the Pascal x second. It ranges from 16.0Pa.s in magmatic fresh to an anomalously high figure of 61.1 found in talc carbonate transition, where only a single sample was available and underwent test work. Either way these generally represent high viscosity pulps.

Concentrate Quality: Average concentrate analysis for each zone is shown in Table 15-5.

Table 15-5: Hunters Road Concentrate Analysis

Component	Unit	Magmatic	Magmatic	Talc	Talc	Chrysotile	Overall
		Fresh	Transition	Carbonate	Carbonate		
				Fresh	Transition		
Ni	%	19.2	11.9	15.4	9.0	15.54	15.7
Cu	%	0.16	0.15	0.12	0.18	0.07	0.14
Со	%	0.56	0.3	0.50	0.39	0.59	0.47
Fe	%	27.75	29.82	19.45	26.92	27.45	27.06
S	%	21.44	21.88	15.68	20.19	23.43	20.9
Au	g/t	0.1	0.16	0.19	0.18	0.26	0.16
Pt	g/t	0.96	0.50	1.24	0.1	4.63	1.28
Pd	g/t	2.54	1.47	2.9	1.64	1.89	2.16
MgO	%	12	12	12	12	12	12
Al_2O_3	%	0.38	0.53	0.76	0.12	0.28	0.46
SiO ₂	%	10.76	11.86	12.27	10.06	18.78	12.27
CaO	%	0.33	0.36	0.64	3.95	0.29	0.49
Accountability	%	92.7	88.8	81.2	82.8	98.4	93.1

A comparison with Trojan and Shangani concentrate analyses is shown in Table 15-6.

Table 15-6: Hunters Road Concentrate Analysis

Component	Unit	Hunters	Trojan	Shangani
		Road		
Ni	%	15.7	9.6	13.2
Cu	%	0.14	0.38	1.32
Со	%	0.47	0.26	0.42
Fe	%	27.06	19.7	26.6
S	%	20.9	14.2	25.6
Au	g/t	0.16	0.16	0.27
Pt	g/t	1.28	0.61	0.87
Pd	g/t	2.16	1.33	3.8
MgO	%	12	19.5	11.1
Al_2O_3	%	0.46	1.60	0.85
SiO ₂	%	12.27	28.94	15.0
CaO	%	0.49	0.71	0.83
Accountability	%	93.1	96.99	98.9

It is seen that the Ni/Cu ratio is significantly higher at Hunters Road compared to either Trojan or Shangani.

Mineral Processing: The process flowsheet has yet to be defined but will incorporate the following key unit processes:

- Crushing.
- Milling.
- Flotation.
- Flotation concentrate handling.
- · Tailings disposal.

Equipment selection, sizing and operation will have to give due consideration to the variable ore characteristics observed.

15.4.4 ORE HARDNESS

Due to the variable but generally high ore hardness and variable but generally high pulp viscosity, it has been recognised that single stage fully autogenous or semi autogenous milling is unlikely to be successful. The following comminution alternatives are likely candidates for consideration:

- multi stage crushing ahead of primary ball/ secondary ball milling.
- multi stage crushing ahead of primary rod/ secondary ball milling.
- Single stage crushing ahead of primary RoM milling/ secondary ball milling.

15.4.5 VISCOSITY

High viscosity pulps can impact negatively on milling, flotation and solid liquid separation. In the case of Hunters Road, the most serious impact is likely to be on the efficiency of flotation and hence nickel recovery. The most likely remedy will be to reduce the flotation feed density from a typical 30% solids down to 10% for the worst ore types encountered in testwork. With flotation cells being sized on the basis of volumetric throughput, design to handle 100% of such ore would require a threefold increase in flotation capacity which in turn would impact on the capital cost of this unit process. In reality some compromise is likely, with either throughput or metallurgical performance being conceded when such ore is encountered.

In severe cases, viscosity modifiers have to be considered in milling but care needs to be given to their potential negative impact on flotation.

15.4.6 CONCENTRATE QUALITY

Testwork showed the Ni/Cu ratio in Hunters Road concentrate to be significantly higher than either Trojan or Shangani.

15.4.7 PRODUCTION SCHEDULE

Mwana's current intention is to complete the pre-feasibility study and then proceed with the construction of a trial mine on a scale determined largely by the capacity of equipment available from the dormant Epoch and Madziwa Mines. Future expansion will depend on the viability of this initial phase. The projected LoM production schedule is summarised in Table 15-7.

Table 15-7: Hunters Road LoM Production Schedule

Description	Units	2007/08	2008/09	2009/10	20010/11	20011/12	20012/13	20013/14	20014/15
Milled Tonnage	(kt)	0.00	130.00	720.00	720.00	720.00	720.00	720.00	720.00
Head Grade	(%Ni)	0.00	0.48	0.48	0.49	0.49	0.50	0.50	0.50
Ni Recovery	(%)	0.0%	69.8%	70.0%	70.5%	70.5%	71.0%	71.3%	71.3%

Description	Units	2015/16	2016/17	2017/18	20018/19	20019/20	20020/21	20021/22	20022/23
Milled Tonnage	(kt)	720.00	720.00	720.00	720.00	720.00	720.00	720.00	720.00
Head Grade	(%Ni)	0.47	0.47	0.47	0.48	0.48	0.48	0.49	0.51
Ni Recovery	(%)	69.2%	69.0%	69.2%	69.8%	69.8%	69.8%	70.4%	72.0%

Description	Units	2023/24	2024/25	2025/26	20026/27	20027/28	20028/29	20029/30	20030/31
Milled Tonnage	(kt)	720.00	720.00	720.00	720.00	720.00	720.00	720.00	720.00
Head Grade	(%Ni)	0.51	0.51	0.51	0.51	0.51	0.51	0.53	0.60
Ni Recovery	(%)	72.0%	72.0%	72.0%	72.0%	72.0%	72.0%	73.7%	77.9%

Description	Units	2031/32	2032/33	2033/34	20034/35	20035/36	20036/37	20037/38	20038/39
Milled Tonnage	(kt)	720.00	720.00	720.00	720.00	720.00	720.00	720.00	720.00
Head Grade	(%Ni)	0.60	0.60	0.61	0.64	0.64	0.64	0.64	0.63
Ni Recovery	(%)	77.9%	77.9%	78.5%	80.2%	80.2%	80.2%	80.1%	79.7%

The projected throughput is seen to be limited to a maximum of 60ktpm. It is not clear from the annual schedule how long the ramp to full throughput will be. In SRK's view a throughput ramp up of 6-9 months would be realistic.

Nickel recovery has been projected on the basis of the following relationship:

Recovery =
$$36.273 \text{ x ln (grade)} + 96.417$$

15.4.8 OPERATING COSTS

Operating costs have been projected on the basis of a fixed component of USD825,775 per annum and a variable component of USD5.84/t.

15.4.9 CAPITAL COSTS

Pending completion of the scoping study, process related expenditure has been assumed to total USD60 million over three years. Based on equivalent base metal concentrators, SRK would consider this to be a conservative estimate.

15.4.10 RISKS AND OPPORTUNITIES

The key process risks relate principally to orebody variability:

- Projected throughput may not be achieved due to under estimation of ore hardness.
- Projected throughput may not be achieved due to under estimation of viscosity effects.
- Projected recovery may not be achieved due to uncertain relationships between ore types and recovery.
- Higher MgO levels in concentrate than predicted.

15.5 FREDA REBECCA

15.5.1 PROCESSING FACILITY

A flow diagram of the Freda Processing Facility ("FPF") is shown in Figure 15-10. The FPF processes RoM ore from its underground mining operations, although operations have currently been suspended whilst plant refurbishment is completed. RoM is delivered to the plant by dump trucks and is crushed via one of two jaw crushers. Rock that is too large to be crushed is removed and stockpiled for secondary blasting. After crushing the ore is stockpiled ahead of single stage semi autogenous grinding (SAG) mills in two similar parallel milling circuits. The SAG mills are closed by hydro cyclones and a portion of the cyclone underflow is directed to Knelson centrifugal gravity concentrators. Gravity concentrates are processed by intensive cyanidation in an InLine Reactor ahead of gold recovery by electro-winning. Approximately 20% of the gold recovered is attributed to gravity concentration. Cyclone overflow is pumped to a cluster of dewatering cyclones to increase the percentage solids to that required in the pre-leach and carbon in leach ("CIL") adsorption circuit. Lime is added earlier in the process at the mill feed. Appropriate lixiviant levels are maintained by the controlled addition of calcium cyanide and oxygen. Loaded carbon is removed from the adsorption circuit for elution and electro-winning in an AARL elution circuit. Loaded cathodes are digested in hydrochloric acid ahead of washing, drying and smelting to doré. Eluted carbon is thermally regenerated before being returned to the adsorption circuit. Adsorption tails are pumped to tailings.

The FPF was commissioned in 1989. In the past few years maintenance has been significantly curtailed due to cash constraints. The plant is currently not operational and a refurbishment

programme is being undertaken to return the plant to full operational capacity of 1,280ktpa. Plant housekeeping offers room for improvement. The level of spillage in the plant as a whole was generally high, particularly in the area of milling, leaching and carbon elution/regeneration.

15.5.2 PLANT REFURBISHMENT

A two phase refurbishment is currently being undertaken to return the plant to full operational capacity.

Objectives

Return plant to former capacity and condition.

Project Scope

Two phase refurbishment of existing equipment.

Final Estimated Cost

USD9.8 million including mining equipment with expensed to date USD4.42million

Status

In progress with commissioning of Phase 1 at half capacity scheduled in September 2007, followed by commissioning of Phase 2 at full capacity in December 2007.

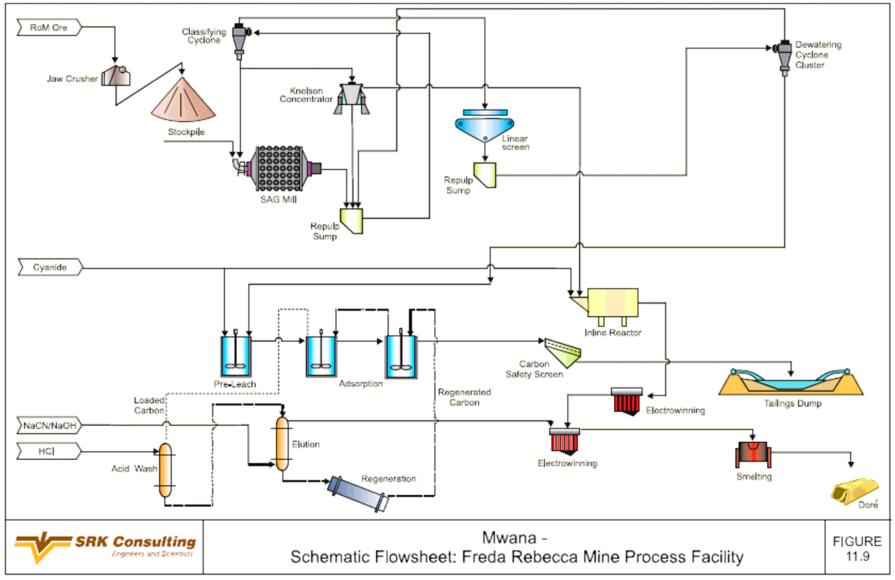
15.5.3 HISTORICAL AND SHORT TERM PROCESS OPERATING STATISTICS

Key historical processing statistics for the FPF are summarised in Table 15-8.

Table 15-8: Freda Rebecca Metallurgical Performance

Description	Units	2002	2003	2004	2005	2006	2007	LoM	LoM
						Annualised	Plan	Ave	Max
Mill Feed	(kt)	1,155	1,200	543	335	160	424	1,000	1,390
Head Grade	(g/t)	3.23	1.74	2.23	2.70	2.12	2.50	2.55	2.74
Recovery	(%)	81.8	76.1	77.2	75.6	69.1	79.1	80.9	80.9

Projected LoM throughput is significantly higher than that achieved in recent years. In order to achieve this successful implementation of the proposed plant refurbishment programme will be necessary. It is further noted that the projected LoM recovery is also higher than that achieved in recent years, although similar recoveries have been seen in the past. The increased future recoveries have been put down to less refractory material being treated in the years to come.



16 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

16.1 DATA QUALITY AND QUANTITY

16.1.1 BINDURA NICKEL CORPORATION

The estimation methodology applied at Shangani and Trojan mines is similar with a few minor differences. Data from the estimation and capital drilling is captured in spreadsheets, and checks are performed to identify any input errors. The data are then imported into DATAMINE, where further validation checks are preformed by a series of macros, which check for duplication and errors in the drill hole inputs. Basic statistics are calculated for batches of drill holes that are imported to check for anomalous values. Drill holes are composited to 2m intervals at Trojan mine, and to 4m intervals at Shangani Mine. No capping or cutting of high grade values is applied at Trojan or Shangani mines.

Ore boundaries are defined on each sub-level, based on the geological contact on the footwall side, and on a grade cut off of 0.4% total nickel on the hanging wall side. The Hanging Wall Orebody is defined solely on grade criterion. Outlines of the orebody are drawn on the geology plans, as well as digitally, and are then compared for control purposes. From the outlines on each sub-level, a wireframe model is created. The wireframe is created to two levels above the highest working level, and extends down to the lowest level where there is evaluation drilling. Beyond this, a second wireframe is created from the capital drilling information. Most of the ore within the second wireframe will be classified as Inferred Resource, except where there is a higher density of capital drilling, sufficient to upgrade the confidence to an Indicted Resource category.

Within the wireframe, a block model is created for each orebody. At Trojan Mine, the block dimensions are 15m, 2m and 15m (in X, Y and Z respectively), while at Shangani the block dimensions are 15m, 10m and 15m (in X, Y and Z respectively). Sub-celling is used to adjust the edges of the block model to best fit the wireframe. Semivariogram modelling reveals the best continuity along strike and down dip as would be expected from this type of deposit. The search neighbourhood is optimised using a krige test based on the slope of regression. Values are interpolated into the block models using ordinary kriging.

The classification of Resources into Measured, Indicated and Inferred Mineral Resource Categories is based on the density of drilling. Measured Mineral Resources require a drilled grid of 15 x 15m. Indicated Mineral Resources are based on an approximately 60 x 30m grid on dip and strike respectively. The Inferred Mineral Resources extend to the lowest positive drilling intersections, and the projected shape of the orebody, where the drill spacing is less than that required for an Indicated Mineral Resource.

16.1.2 FREDA REBECCA MINE

Orebody modelling entails the generation of closed strings from 1m composites of the diamond drilling data. Strings are generated at a cut-off grade of 0.8g/t for the sulphides. These strings, which are ordinarily generated at a section spacing of 25m along strike, are then used to generate the solid wireframe model through interpolation. The number and dimensions of strings on any given section varies and depends on the characteristics of mineralisation on the particular section. The individual grades within wireframes vary although most of them are above 0.8g/t. Those below cut-off grade are taken as internal waste whilst the average grade of the all the assays within the envelope is always above the cut-off grade.

A block model with regular blocks 10m in the X and Y directions and 5m in the Z direction is created and constrained by the wire frame. Ordinary Kriging and Inverse Distance Squared were used to interpolate grades into the block model. A minimum of 6 and a maximum of 40 samples are used.

A Nested Spherical Variogram was created. This indicated a first range of around 25m and a maximum range of around 75m in the down dip direction. While on strike the ranges were ill defined. It was concluded that the down dip drill spacing of 25m was satisfactory.

The software used to perform the estimation (SURPAC) is not owned by the mine, but by consultants Digital Mining Services of Harare. The methodologies used to create the Mineral Resource models are considered to be acceptable to support the Mineral Resource and Mineral Reserve Statements.

16.2 AUDITED MINERAL RESOURCE AND MINERAL RESERVE STATEMENTS

The following two tables indicate the Mineral Reserve Statements for BNC and FRM respectively.

Table 16-1: SRK-BNC Mineral Resource and Mineral Reserve Statement (31st Dec. 2006)

Mineral Res	erve Categor	y (1), (3)		Mineral Reso	ource Catego	ory (2)	
	Tonnes	Grade	Nickel		Tonnes	Grade	Nickel
	(kt)	Total Ni	(t)		(kt)	Total Ni	(t)
		(%)				(%)	
Proved	2,333	0.54	12,690	Measured	1,965	0.9	17,686
- Trojan	1,030	0.71	7,280	- Trojan	1,965	0.9	17,686
- Shangani	1,303	0.42	5,410	- Shangani	nil	nil	nil
Probable	6,320	0.74	46,600	Indicated	4,436	1.89	83,486
- Trojan	3,030	1.00	30,200	- Trojan	4,436	1.89	83,486
- Shangani	3,290	0.47	16,400	- Shangani	nil	nil	nil
Total	8,653	0.69	59,290	Sub-total	6,401	1.58	101,172
				Inferred	13,185	0.64	84,449
				- Trojan	7,942	0.72	57,185
				- Shangani	5,243	0.52	27,264

⁽¹⁾ Mineral Reserves reported as delivered to the concentrator and exclude all metallurgical recoveries.

Table 16-2: Hunters Road: Mineral Resource and Mineral Reserve Statement

Mineral Re	serve Categor	·y		Mineral Resor	Mineral Resource Category					
	Tonnes	Grade	Nickel		Tonnes	Grade	Nickel			
	(kt)	Total Ni	(t)		(kt)	Total Ni	(t)			
		(%)				(%)				
Proved				Measured						
	nil	nil	nil		nil	nil	nil			
Probable				Indicated						
				Orebody 1 (west zone)	29,350	0.56	164,363			
	nil	nil	nil	Orebody 2 (east zone)	7,087	0.50	35,433			
Total	nil	nil	nil	Sub-total	36,437	0.55	200,404			
				Inferred	nil	nil	nil			

⁽²⁾ Mineral Resources are stated exclusive of Mineral Reserves.

Table 16-3: SRK-FRM Mineral Resource and Mineral Reserve Statement (31st Dec. 2006)

Mineral Re	serve Category	,		Mineral Resource Category (1) (2)					
	Tonnes (kt)	Grade (g/t)	Gold (koz)		Tonnes (kt)	Grade (g/t)	Gold (koz)		
Proved	nil		nil	Measured	nil	, , , ,	nil		
- UG	nil		nil	- UG	nil		nil		
Probable	nil		nil	Indicated	20,553	2.60	1,720		
- UG	nil		nil	- UG	20,553	2.60	1,720		
Total	nil		nil	Sub-total	20,553	2.60	1,720		
				Inferred	1,856	2.57	153		
				- UG	1,856	2.57	153		
				Total	22,408	2.60	1,823		

⁽¹⁾ Mineral Resources are stated at a cut-off grade of 1.5g/t for underground resources.

17 ADDITIONAL REQUIREMENTS FOR INDEPENDENT TECHNICAL REPORT ON DEVELOPMENT PROPERTIES AND PRODUCTION PROPERTIES

17.1 MINING

17.1.1 TROJAN MINE

Trojan Mine employs a sub-level caving mining method to extract ore from the Main Orebody; and the Hanging Wall Ore body that are steeply dipping (some 75-85°) and separated by a barren zone some 50m in thickness. The ore bodies are accessed from drives installed in the foot wall on levels developed from a sub-vertical shaft system, from 7L to 35L (the lowest working level and some 1,130m below surface), that is used to hoist rock and transport men and material to the workplaces. All rock is hoisted to 7L, trammed by locomotive to the main shaft and hoisted to surface. The capacity of the sub-vertical shaft system is some 150ktpm of rock (ore and waste) and the main shaft has recently been upgraded from 106ktpm to 130ktpm. The mine hoists some 20ktpm of waste. The overall ore hoisting capacity of 130ktpm is compatible with the requirements of the LoM plan.

Main levels are installed at 60m intervals and comprise a tracked haulage. Sub-levels are installed at 15m intervals from a footwall ramp that is developed between main levels. Currently mining is being conducted between 29L and 31L and the average historical drop down rate is equivalent to some 35m vertical per year. This rate is forecast to increase as the future footprint of the ore body decreases. The stoping operation is fully trackless using long-hole drill rigs and LHDs for all cleaning. Development is partially mechanised with some hand held drilling but all cleaning is by LHD.

The nickel sulphides at the contact ("massives") of the main ore body is mined separately to the remaining ore due to the high nickel content, and transported to surface in material cars for direct feed to the smelter.

Ground conditions are deteriorating as the mining depth increases and this is causing the mine to increase support requirements as well as reduce the lead time between development and production. In terms of the mine's own geotechnical classification system rock conditions are expected to change from good/fair to fair/poor. Underground temperatures are also increasing with depth and the geothermal gradient at site is some 13°C per 1km. Ventilation needs to be managed and temperatures on the production level are typically some 25°C and slightly higher in development ends.

A drop-down project is being undertaken to extend the sub-vertical shaft, rock pass and ventilation infrastructure to 47L which will enable mining to be conducted to 43L (the next lowest working level) an extension of 240m. Blind sinking of a waste pass commenced in January 2004 and is being

undertaken by the mine. The programme will enable the other excavations to be raised in sections of 60m from access derived from the blind sunk future waste pass. Current infrastructure supports production until 2012. Further delay in this project will cause production shortfalls post 2012.

This deepening project was originally scheduled for completion at the end of 2007. The project has crept and is now scheduled to complete in April 2009. The mine anticipates that this delay will cause a 10% dip in production for six months before the commissioning of the project. SRK is of the opinion that, considering the amount of work still to be done, it is likely that the commissioning date will be put out for at least a further six months.

17.1.2 SHANGANI MINE

The mining operation at Shangani Mine is substantively similar to that of Trojan Mine using sub-level caving to exploit three ore bodies (Main Ore body, West Ore body and the Far West Ore body). Currently 46% of ore is sourced from the Main ore body, 47% from Far West ore body, 7% is from West ore body and 6% from development. Hoisted tonnage has decreased from just below 1Mtpa in 2001 to 750ktpa in 2006. The main reason for this decrease is the reduction in the footprint of the ore body as mining depth has increased and depletion of Reserves, Main Ore Body (2010) and the West Ore Body in 2009. Total production from 2011 will be delivered from the Far West Ore body only.

The mine is accessed via a main shaft system (795mL) to surface and an additional sub-incline shaft system for the Main Ore body that was commissioned in 2004 for access to the 900mL. The mining that is conducted below the shaft infrastructure is more arduous than at Trojan Mine. The lowest working level is 795mL for the West and Far west ore bodies and 900mL for the Main Ore body. Currently mining is being conducted between 700m and 900m below surface. The hoisting capacity of the shaft system is some 120ktpm of which 17ktpm is required for waste. The development of a decline shaft and associated pumping and ventilation infrastructure to access deeper ore has commenced and is expected to be completed by November 2008. This infrastructure is required in the LoM (2010 – 2013/14). Any further delay will cause a production shortfall.

The following layout is used for ore winning. One access ramp is developed on one side of the ore body for transportation of equipment, men, materials, and machinery and acts as fresh air intake. Gathering drives run parallel to the ore body (10m outside the ore body). 15m spaced production crosscuts branch off from the gathering drive into the ore body. At the end of each production crosscut is a slot drive and raise is driven to intersect parallel production drives and the level above respectively. Production rings are then systematically blasted from the slot back to the gathering drives. On each level there is a ventilation return raise, a waste and an ore tip. Levels are spaced 15m vertically apart.

As with the case of Trojan ground conditions are and are expected to deteriorate with depth.

SRK consider that the mining methods and techniques are appropriate to the ore body and production rates envisaged in the current LoM plan for both Trojan Mine and Shangani Mine.

17.1.3 HUNTERS ROAD

Hunter Road is reported as preliminary assessment. The work done thus far indicates the following:

 A Whittle optimisation containing 33.9Mt of ore at a grade of 0.51% Ni and some 140Mt of waste. Planned production rates commence at 0.130Mtpa increasing to 0.720Mtpa in year 3.

The following techno-economic parameters ("TEP") were used in the financial analysis of Hunters Road:

- Mining USD1.92/tonne mined
- Processing USD14.31/tonne treated
- Transport to smelter USD0.60/tonne treated
- Smelter USD1.86/tonne treated
- Refinery USD1.40/tonne treated
- Other costs USD0.20/lb Ni Refinery
- Slope angles vary between 45° and 50°
- Royalties 2.0% of gross revenue
- Minerals Marketing Commission of Zimbabwe 0.875% of gross revenue
- Marketing Agent Commission 3.7% of gross revenue
- By-product revenue 5.33% of gross revenue
- A mining recovery of 95% and external dilution of 10% were applied

17.1.4 FREDA REBECCA MINE

Operations at FRM have been conducted substantively by underground mining since 1998 using a fully mechanised trackless fleet. The underground mine is accessed by ramps driven from portals in the old open pits and the current depth of mining is some 200m below these portals. A sub-level stoping mining method is predominantly employed and the ore is trucked to surface using a variety of articulated dump trucks. One-way haul distances are of the order of 3-3.7km and the cycle time for

trucking is typically 45 min. Adaptations of this mining method as well as room and pillar mining are undertaken depending on the characteristics of the orebody and stope design.

The recent history has been characterised by a degradation of the mining fleet exacerbated by the national economic difficulties and access to spares and consumables. During SRK's visit FRM was not operational and has been put on a care and maintenance. The main reason for this is the current conditions under which FRM is able to sell bullion, which effectively makes FRM unprofitable. SRK understands that the government's bullion sales regulations need have been reviewed and new sales conditions will be promulgated which will allow FRM to be profitable. FRM consistently achieved production of over 1Mtpa before these difficulties but current production is at a level of some 0.5Mtpa. Historical grades were of the order of 3.5g/t but in accordance with the declining resource base the grade available for mining has reduced to below 2.6g/t.

17.2 DILUTION, MINING LOSSES AND RECONCILIATION

17.2.1 TROJAN MINE

The grade of the drawpoints is monitored by grab samples that are taken each shift and by visual control of the sulphide mineralisation made by a geologist. The number of loads taken from each drawpoint on a shift basis is recorded and reconciled with the weekly plan which is derived from the monthly plan. The amount of ore taken from each drawpoint is monitored to ensure that a sequence of drawpoints is optimally mined and that excessive dilution is prevented. Reconciliation is performed on a monthly basis of the tonnes, grade and metal content predicted by the Mineral Reserve to that Milled and the results for Trojan Mine for the last five years are presented below as Table 17-1:

Table 17-1: Trojan Mine Reconciliation Factors

Description	Units	2002	2003	2004	2005	2006	Average
Tonnage Factor (TF)	(%)	1.11	1.33	1.38	1.09	1.23	1.22
Grade Factor (GF)	(%)	0.96	0.93	0.90	0.93	0.97	0.94
Metal Factor (TF x GF)	(%)	1.07	1.24	1.24	1.02	1.19	1.14

Ore loss and dilution factors of 13% and 23% respectively are applied to derive the Mineral Reserves together with a dilution grade of 0.40% nickel. This results in an average equivalent tonnage and grade factors of 1.22 and 0.94 respectively resulting in an overall metal factor of 1.14.

17.2.2 SHANGANI MINE

Reconciliation is performed on a monthly basis of the tonnes, grade and metal content predicted by the Mineral Reserve to that Milled and the results for Shangani Mine for the last five years are presented below as Table 17-2:

Table 17-2: Shangani Mine Reconciliation Factors

Description	Units	2002	2003	2004	2005	2006	Average
Tonnage Factor (TF)	(%)	1.07	0.99	1.01	0.99	0.98	1.01
Grade Factor (GF)	(%)	0.99	0.99	0.94	0.99	1.03	0.99
Metal Factor (TF x GF)	(%)	1.06	0.93	0.95	0.99	0.98	0.98

The modifying factors used in the derivation of Mineral Reserves for ore loss and dilution are as for Trojan Mine is 13% and 23% respectively although the dilution grade is slightly lower at 0.30% nickel. A comparison of the predicted LoM head grade (0.44% nickel) at Shangani Mine with historical results for the last three years (0.46% nickel) compares favourably.

17.2.3 FREDA REBECCA MINE

The mined grade is monitored by production grab samples that are taken during the shift and after each blast. Reconciliation is performed on a monthly basis in terms of the tonnes, grade and metal content predicted by the Mineral Reserve to that Milled. The results for FRM are presented below:

Table 17-3: FRM Reconciliation Factors

Description	Units	2002	2003	2004	2005	2006	Average
Tonnage Factor (TF)	(%)	0.93	0.99	0.97	0.95	0.95	0.96
Grade Factor (GF)	(%)	1.02	0.82	0.98	1.01	0.86	0.94
Metal Factor (TF x GF) ⁽¹⁾	(%)	0.95	0.81	0.95	1.00	0.89	0.92

⁽¹⁾ Equivalent to a mine call factor ("MCF").

The low grade factor in 2003 was the result of oxide ore treatment and is not considered representative of current production. A MCF of 93% appears appropriate in the modification of any Mineral Resource to Mineral Reserve for planning purposes.

17.3 MINE PLANNING AND SCHEDULING

17.3.1 BINDURA NICKEL CORPORATION

The geological model and plans of the development infrastructure are used as a basis for undertaking a computerised mine design of the sub-level stopes and slot cutting sequence. The scheduling is driven by the maximum drop down rate historically some 35m vertical per year. The production per level and sub-level and the exact number of draw points required is then determined.

17.3.2 TROJAN MINE

Current Mineral Reserves reflects a mine life until the end of 2012 at an average production rate of 870ktpa resulting in the overall production of 9.5Mt of ore. Some 4.1Mt is currently defined as Mineral Reserve. The remaining production is derived from Measured, Indicated and Inferred Resources. The average nickel grade is set to increase due to a combination of an increasing

contribution of massive ore and an increasing resource grade profile with depth at the Main ore body. The head grade is expected to increase from some 0.75% in 2007 to an average of 1.00% over the period of the LoM plan. Some 70% of production in terms of tonnage is derived from the Main Orebody. Development is planned at a rate of some 870m per month which is some 20% higher than that historically achieved. The valuation of Trojan is based on the 4.1Mt of Mineral Reserve only.

17.3.3 SHANGANI MINE

Current Mineral Reserves are expected to sustain the mine until 2012 at an average production rate of 840ktpa resulting in the production of some 5.8Mt of ore. Some 4.2Mt is mined from the Mineral Reserve. The annual nickel grade is consistent and averages some 0.43% over the period of the LoM plan. The majority of the production in the early years is split between the Main Orebody and the Far West Orebody changing to all production sources from the Far West Orebody. Development is planned at a rate of some 720m per month which is also some 20% higher than that historically achieved. The valuation of Shangani is based on the 4.2Mt of Mineral Reserve only.

SRK considers that the LoM plans have been derived using appropriate techniques and assumptions. The positive tonnage factor at Trojan Mine should continue to compensate for development underperformance, although is not known whether this is applicable to Shangani Mine. SRK considers there to be good potential to extend the LoM plan through deposit depth extensions and the conversion of Inferred Mineral Resource associated with the depth extensions.

17.3.4 FREDA REBECCA MINE

The mine design and planning process is fully computerised and based on geological and block models that are integrated with the geological resource and sampling functions of the mine. The planning process includes generation and application of stope designs which are used to derive tonnage and grade estimates from interrogation of the resource model. The system and the stope outlines are used to develop ring plans for drilling and charging operations. The results of the mine design are used to develop the mine schedule that is made on a LoM basis and on a monthly basis for the early periods.

FRM has developed a LoM plan schedule based on completing the plant refurbishment in September 2007 and depleting the remaining mineable resources from underground and including limited open pit material from the Promoter and Phoenix Prince resources. This model envisages a build-up from 2007 (424ktpa) to design capacity of some 1,400ktpa from 2009 and a life until 2012. The return to full production is dependent on the refurbishment of the process plant and the underground mine equipment as well as the completion of back-log development. SRK consider there to be potential to increase the LoM plan following successful exploration as has been the case in the past.

17.4 ZIMBABWEAN LEGISLATION

The Mines and Minerals Act 1996 administered by the Mining Commissioner does not include any specific references to environmental management. However, draft environmental management guidelines for mining and exploration have been prepared by the Chamber of Mines in 1995. Although these guidelines are not legally binding, they provide a code of conduct which mining operations should follow. It is likely that these guidelines will be incorporated into the new legislation/guidelines currently being prepared by the Ministry of Mines and Energy.

The Environmental Management Act 2003 has been gazetted and is in force. It is administered by the National Environmental Council and will replace many of the older acts. The Act makes reference to the polluter pays principle; the need for environmental impact assessments and requires that pollutants can only be released under the control of a permit issued by the relevant authorities.

Relevant sections of the Water Act 1998 administered by the Zimbabwe National Water Authority may also apply with respect to water use and protection of water resources. At mine closure, the mine owner is required to apply for a Quittance Certificate from the Chief Government Mining Engineer, who has powers of discretion in terms of determining the works to be completed prior to approval.

17.5 ENVIRONMENTAL MANAGEMENT

BNC has developed an in-house environmental policy and has implemented and achieved accreditation for an environmental management system ("EMS") in line with ISO 14001 at Trojan and Shangani mines and at the BSR. Although, the EMS is audited by a Zimbabwean accreditation body, the fact that the system is ISO 14001 compliant implies that the system meets certain international standards. Although there are no legislative requirements BNC has incorporated an EMP component into the respective EMS. It is considered by SRK that elements of these EMS and EMP systems would comply with the requirements of the Draft Environmental Management Guidelines for Mining and Exploration in Zimbabwe as well as the Environmental Management Act 2003.

All activities on the mines and at BSR that may potentially impact on the environment are required by Zimbabwean law to be permitted. Examples of these include permits to: abstract water from the Mazowe River; operate oil traps; operate various mine residue deposits (tailings dams and rock dump); release effluents; operate scheduled processes such as the operation of boilers and the release of sulphur dioxide; handle hazardous waste; operate a hazardous waste residue deposit; and operate sewage treatment facilities; etc. The permits specify what monitoring and reporting must take place and refer to the compliance limits stipulated in the Fourth Schedule of the Water Regulations 2000. It is SRK's understanding that BNC is in possession of all the required permits and that these permits are renewed as and when necessary.

The responsibility for overall environmental management is with BNC's Safety, Health and Environmental ("SHE") Manager with individual operations each having its own site environmental officer with assistants and technicians where necessary.

17.5.1 ENVIRONMENTAL ISSUES AND COMPLIANCE

Trojan Mine

It is understood, that there are times when the mine exceeds the compliance limits stipulated in its various permits, particularly with regard to sulphate, however, this has been partially rectified by the construction of the toe drain at the rock dump and the implementation of the "cleaner production policy". The following environmental issues have been identified:

Hazardous material handling: According to the mine, the only potentially hazardous material generated by the mine is used oil, which is managed via a number of physical controls and procedures.

Land degradation: There are ten tailings disposal facilities present on the mine of which two are active. Seven of the remaining eight have been re-vegetated. The standard of rehabilitation is good, with the vegetation forming a good basal cover to minimise wind and water erosion. The two areas of significant surface subsidence caused by cave mining have created an unstable unsafe area on surface. It is not expected that these areas will encroach on the mine residue disposal areas. As no remedial measures can be implemented the long term strategy is to permanently barricade the areas to ensure that access is limited.

Surface and ground water quality: The mine has developed a monitoring schedule to include both surface and groundwater and indicates general compliance with its various permit conditions. The mine intends to become fully compliant. It is SRK's opinion that the groundwater monitoring network needs revision in that there are insufficient boreholes around the mine to fully monitor the impact.

Dust control: The mine has implemented a dust monitoring program to measure irrespirable dust in operational areas as well as ambient dust releases to the environment. Where possible dust control is achieved through vegetation or watering. However, the nature and geometry of the waste rock dump is such that no dust control measures are practicable. SRK consider that the dust generated from this facility is unlikely to impact significantly on the local community as it is downwind of the settlement. At the site visit, the processing plant was found to be very dusty. SRK understands that the mine is addressing this problem with the installation of atomising sprays.

Pollution potential of mine residues: The mine has undertaken Acid Base Accounting ("ABA") testing on it residue facilities and the initial results indicate that although there are elevated sulphur

concentrations in some of the residue material (>0.25%), there is sufficient buffering capacity in the residue to neutralise acidity produced. To complete the assessment of pollution potential SRK consider that the mine needs to determine potential metals concentrations in the leachate.

Complaints and Community Involvement: There is only one complaint recorded in the complaints register which is considered by BNC to be resolved. The mine consults the local community as and when required and operates a number of projects in which the community act as the contractors. These projects would not provide income to the community once the mine has closed and are therefore not considered sustainable development.

Shangani Mine

Shangani Mine is very similar to Trojan Mine in terms of environmental management and has developed an accredited ISO 14001 EMS, which contains an EMP component. The EMS undergoes a compliance audit every second year, and biannual surveillance audits. Shangani also participates in the company round robin. SRK would expect similar conditions and environmental issues to that of Trojan Mine but the following specific points are relevant to Shangani:

Land degradation: This has occurred as a result of tails deposition and the disposal of waste rock.

Pollution potential of mine residues: The ABA assessment indicates that there is an excess of buffering potential in the geology with the result that it is unlikely that acidity will be generated from the various mine waste residue deposits. Although, the potential to generate acidity is low, it is understood that no leach tests have been undertaken on the residues to determine potentially leachable metals.

Hunters Road

At Hunter Road the environmental impact assessment ("EIA") was submitted in May 2007. No significant issues with respect to the environment or the community were anticipated.

Bindura Smelter and Refinery

It is understood, that there are times when the mine exceeds the compliance limits stipulated in the various permits, particularly with regard to soluble heavy metal concentrations. It is expected, by BSR, that with the commissioning of the new pollution control dam, BSR will achieve its goal of zero discharge during normal operations. However, as the design capacity is to retain the 1:20 year flood event it is expected that heavy rainfall events will necessitate discharge. BNC consider that in this event that there should be sufficient assimilative capacity in the natural water courses to dilute the contaminants to acceptable levels. The following environmental issues have been identified:

Hazardous material handling: Iron arsenate that is produced during the refining process is temporarily stored on a concrete base surrounded by a brick wall bund which is not completely sealed. The iron arsenate is loaded into PVC drums and transported to the hazardous waste facility that has been constructed according to national requirements. At closure, the drums will be covered with a thin soil layer which will then be covered with reinforced concrete.

White asbestos is used as an insulation material in some of the warehouses at BSR. It was reported that an asbestos survey has been conducted and it was determined that there were no detectable fibres in the air in the buildings. International regulation requires that asbestos is classified as a hazardous material and disposed of appropriately.

It is reported that two of the transformers currently operated use transformer fluid containing PCB's. BSR report that it is planed to upgrade these transformers to those that do not operate using PCB containing fluids. The only sources of radiation on the site are reported to be in the form of instrumentation. A radiation protection officer has been appointed and given the responsibility of handling the material safely.

Land degradation: The smelter operates a slag dump that could be re-processed for its cobalt content. If this occurs the soil in the footprint may require remediation.

Air Emissions: During the visit it was observed that significant amounts of dust and sulfur dioxide were being emitted from the smelter. Although the complaints register in the EMS does not reflect any formal complaints, it is reported that residents of the local community are unhappy with the emissions.

Surface and ground water quality: BSR has developed a monitoring schedule to include both surface and groundwater. Historically there have been periods when the water released from the process area has been out of compliance, particularly with regards to sulphate and some heavy metals. However, it is expected that the construction of the new pollution control dam will minimise water releases.

Pollution potential of mine residues: ABA has been conducted on the slag and the results indicate that acid production is unlikely. To complete the assessment of pollution potential SRK consider that the mine needs to determine potential metals concentrations in the leachate.

Complaints and Community Involvement: It is reported that historically, there were complaints from the neighbouring farmers that the refinery was contaminating groundwater. BSR rectified this by installing concrete floors in all process areas in the refinery to minimise seep to groundwater. Monitoring data has indicated that there has been a gradual improvement in water quality leaving the

property. The mine consults the local community as and when required and participates in local forums but there are no community projects in operation or planed.

Freda Rebecca Mine

It is understood, from the monitoring of groundwater from the two existing boreholes, that there are times when the mine exceeds the compliance limits stipulated in the various permits, particularly with regard to soluble heavy metal (arsenic and mercury) concentrations and sulphates. It is suspected that the mercury is derived from historical gold processing activities, the arsenic from natural weathering of the Prince geology and the sulphates from the oxidation of pyrite in waste rock and tailings material. The following environmental issues have been identified:

Hazardous material handling: The use of cyanide in the gold extraction process has led to spills of the solid on the soils in the plant as well as generating cyanide dust which enters the atmosphere. Cyanide solution from the mixing tanks has spilled and entered the stormwater system whilst there is evidence that cyanide salts are leaching onto the soil surface. SRK observed the presence of cyanide around the new tailings dams that perhaps indicates excessive residual cyanide in the tailings. Although ongoing monitoring of decant and seepage in the toe drains indicates that the cyanide concentrations are currently below the ZINWA guideline of 0.007mg/l SRK consider this to be a significant environmental risk.

Asbestos is present in the construction of various buildings throughout the mine although the boards observed during the audit all appeared to be in good condition. This will need to be disposed of in terms of international regulations at closure.

Land degradation: The opencast workings of the mine have generated significant waste rock dumps that have been rehabilitated with a good cover that should minimise dust generation as well as water ingress. Historically the mine extracted gold from ore using heap leach technology and there is a defunct heap leach dam present on the property. It is expected that this dam has properties similar to the tailings material and is unlikely to generate acidity. Although, cyanide was used as the leachant during extraction, current monitoring activities indicate that the groundwater and decant in the defunct solution canals are below the ZIMWA guideline for cyanide.

Surface and ground water quality: The monitoring results indicate to SRK that the mine impacts on both surface and groundwater quality due to the presence of salts and instances of elevated heavy metal concentrations. FRM considers that the cyanide that is released to the environment is either oxidised by ferrous sulphate or it undergoes biodegradation with the result that no measurable cyanide is detected in the groundwater or in the surface water downstream of the mine. It is suspected by FRM that the quality of the water to the environment is kept below the compliance limits due to significant

clean water entering the system and acting as a diluent. Introduction of clean and dirty water separation infrastructure with the philosophy of capturing all dirty water for use back in the plant would prevent this problem.

Dust control: The old tailings dam and waste rock dumps have been adequately covered to minimise dust generation. However, dust can be generated from the old opencast pits, new tailings dam, active waste rock dumps, crusher and roads. Dust is suppressed on the active roads by watering and at the crusher complex using sprays.

Pollution potential of mine residues: No ABA or leach testing work has been undertaken on the residues in waste rock dumps or tailings material. Sulphates are generated at the residue deposits but there is no indication of any acidity being generated, apparently due to the basic nature of the geology. SRK consider that the relevant test work needs to be undertaken to confirm this.

Complaints and Community Involvement: The mine has received various complaints about dust. The mine consults the local community as and when required and participates in local forums. FRM operates a number of projects in which the community act as the contractors, however these projects would not provide income to the community once the mine has closed.

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The work is being conducted according to the conditions stipulated in the environmental permission for exploration issued by the environmental agency in the DRC. No significant issues with respect to the environment or the community were anticipated.

17.6 ENVIRONMENTAL LIABILITIES

Trojan Mine

Historically the mine has made a budgetary provision of approximately USD0.2million per annum for environmental purposes. SRK considers this to be insufficient for the annual operation of the mine, with the expected costs being in the order of USD0.3 million. In July 2001, the mine prepared a detailed assessment of its liabilities at closure, which were estimated at USD1.3million. Although this plan took the demolition of the shaft areas into account, no provision was made for the demolition of the plant as it was expected that the scrap value of the plant would in all likelihood cover the demolition costs. Current standard environmental liability accounting practices require that the cost of demolition be accounted for. Furthermore the closure assessment does not contain a provision for the rehabilitation of tailings dams 8 and 10. SRK expects, from experience of other operations and considering international standards that the total closure liability would be of the order USD6.5million

although the USD1.3million estimated by BNC is considered appropriate to satisfy what SRK understands to be the current legal requirements in Zimbabwe.

Shangani Mine

It is understood that the mine's operational budget is sufficient to cover ongoing environmental management. As Shangani Mine is of a similar size to Trojan Mine SRK expect that the closure cost for the operation will be similar at approximately USD6.5 million and that the USD1.3 million estimated by BNC is considered appropriate to satisfy what SRK understands to be the current legal requirements in Zimbabwe.

Bindura Smelter and Refinery

Historically the mine has made a budgetary provision of approximately USD0.2 million per annum for environmental purposes. SRK considers this to be insufficient for the annual operation of the mine, with the expected costs being in the order of USD0.35 million. An assessment of liabilities was prepared for the BSR in 2001 and estimated at USD2.4million. It appears that no provision was made for the demolition of the plant in both the smelter and refinery as it was expected that the scrap value of the plant would cover the demolition costs. However, current standard environmental liability accounting practices requires that the cost of demolition be accounted for. SRK expects, from experience of other operations and considering international standards that closure liability would be of the order USD10.5 million although the USD2.4 million estimated by BNC is considered appropriate to satisfy what SRK understands to be the current legal requirements in Zimbabwe.

Freda Rebecca Mine

FRM has a budgetary provision of approximately USD0.2 million per annum for environmental purposes but due to pressures for expenditures in other areas this provision is not utilised entirely for the necessary environmental aspects. An assessment of the closure requirements for the mine, undertaken in 2005, indicates that the liability is USD0.8 million. SRK has estimated environmental provision for closure cost at some USD9 million based on similar sized operations and consideration of international standards although considers that some USD2 million is appropriate to satisfy what SRK understands to be the current legal requirements in Zimbabwe.

17.7 MARKET AND CONCTRACT INFORMATION

A memorandum of agreement No. 001/2006 has been entered into during 2004 between the Minerals Marketing Corporation of Zimbabwe, Bindura Nickel Corporation LTD and Glencore International AG, on which the terms are negotiated from time to time. This agreement has been extended to Dec 2009. This agreement is within industry norms

Tolling agreements has been entered into with mining companies in South Africa and Botswana for the smelting and refining of nickel concentrates and nickel matte respectively. A long term contract is in place with Bamangwato Concessions Ltd and other contracts are negotiated on an annual basis.

All gold production in Zimbabwe is sold directly to government through Fidelity Printer, a subsidiary of the Reserve Bank of Zimbabwean. 60% is paid in foreign exchange and 40% is paid at the official rate of Zimbabwean Dollar ("ZD") 250 to the USD multiplied by a factor of 60. Under these conditions, Freda Rebecca Mine will remain under care and maintenance.

17.8 OPERATING AND CAPITAL COSTS

17.8.1 OPERATING COSTS

Bindura Nickel Corporation

The macro economic climate of Zimbabwe is currently hyper inflationary and in conjunction with disparities between official and unofficial exchange rates the reporting of cost and economic factors is problematic. An examination of the mine costs as reported by BNC in terms of USD is tabulated as follows:

Table 17-4: Trojan and Shangani Mines – Historical Cost Performance (1)

Description	Units	2002	2003	2004	2005	2006
Mining Cost	(USD/t)	7.6	12.5	19.5	13.6	23.7
Concentrator Cost	(USD/t)	3.4	5.7	8.8	4.7	11.3
Trojan Total Cost	(USD/t)	11.0	18.2	28.3	18.3	35.0
Mining Cost	(USDt)	10.4	15.1	20.8	10.2	25.7
Concentrator Cost	(USDt)	3.3	4.9	6.7	5.6	14.3
Shangani Total Cost	(USDt)	13.7	20.0	27.5	15.8	40.1

⁽¹⁾ SRK apportioned costs for mining costs and concentrator cost elements.

The overall costs for Trojan Mine and Shangani Mine are similar and this is to be expected considering the comparable size, mining methods and processing facilities. The increase in costs between 2003 and 2004 is considered by SRK to be related to the diversion in macro economic factors associated with the level of official exchange rate from the start of 2004. The overall costs recorded in 2006 are as a result of the hyper inflationary environment existing in Zimbabwe which has caused discrepancy between official and unofficial exchange rates.

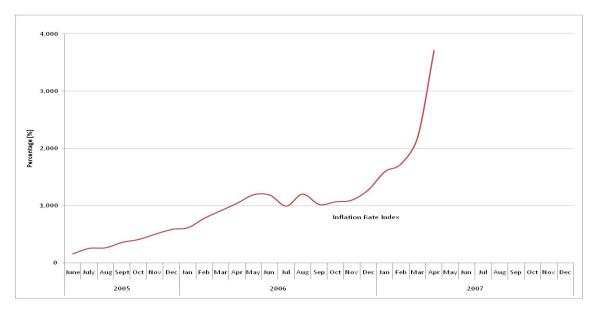
A summary of the total mine and operating costs as reported by BNC is tabulated as follows:

Table 17-5: BNC-Historical Cost Performance

Description	Units	2002	2003	2004	2005	2006
•						
Trojan Mine	(USD/lb)	1.39	2.68	3.06	1.90	3.46
Shangani	(USD/lb)	1.93	3.44	4.39	2.54	6.91
BNC Mining and Conc Costs	(USD/lb)	1.67	2.98	3.56	2.14	4.71
Smelter Costs	(USD/lb)	0.15	0.39	0.60	0.37	0.67
Refinery Costs	(USD/lb)	0.23	0.61	0.82	0.36	0.83
BSR Cost	(USD/lb)	0.38	1.00	1.44	0.73	1.50
Realisation and Marketing	(USD/lb)	0.41	0.23	0.32	0.41	0.87
Overhead Costs	(USD/lb)	0.31	0.48	0.84	0.50	1.43
Toll, By-products and other Credits	(USD/lb)	-0.68	-0.75	-2.08	0.49	-2.04
C1 - Cash Cost	(USD/lb)	2.09	3.94	4.06	3.29	6.47
C2 - Cash Cost ⁽¹⁾	(USD/lb)	2.39	4.29	4.35	3.72	7.60
C3- Cash Cost ⁽²⁾	(USD/lb)	2.41	4.78	5.20	4.45	10.68

⁽¹⁾ Includes depreciation and amortisation.

The diversion in macro economic factors is illustrated by the comparison made by BNC, and reproduced by SRK below, between the inflation rate and the exchange rate for the last three and two years respectively:



⁽²⁾ Includes royalties, taxation and interest.

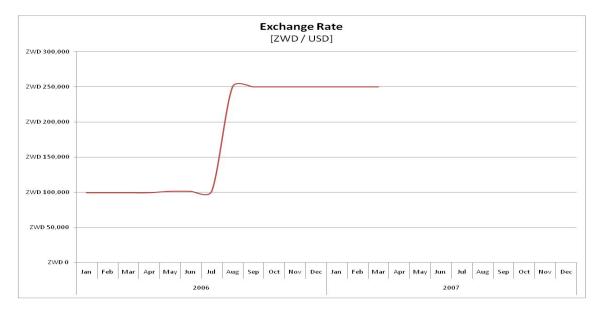


Figure 17-1: Macro Economics: Zimbabwean Inflation Rate

Figure 17-2: Macro Economics: Zimbabwean Exchange Rate

Note: (1) There are two exchange rates. Official Exchange Rate; fixed by the Governor of the Reserve Bank and a Parallel Exchange Rate; reflecting the inflationary economy.

(2) The inflation rate reflected above is derived the analysis done by Robertson Economic Information Services (Pvt) Ltd. Full details can be viewed as Annexure D and Annexure E

Freda Rebecca Mine

The total cash costs up to March 2007 reported by FRM in USD/oz are reflected in Table 17-6 below:

Table 17-6: FRM USD/oz Cash Costs

Description	Units	2002	2003	2004	2005	2006
- Mining Cost	(USD/oz)	93	110	179	222	117
- Processing Cost	(USD/oz)	75	96	128	129	103
- G&A Cost	(USD/oz)	47	58	165	191	170
Cash Cost	(USD/oz)	214	264	472	541	390

The current operating costs are impacted by the macro economic environment as well as the low production volumes currently being mined. A breakdown of the cost elements above in terms of unit costs per tonne milled is tabulated as follows:

Table 17-7: FRM USD/t Cash Costs (1)

Description	Units	2002	2003	2004	2005	2006
- Mining Cost	(USD/t)	7.2	4.6	10.6	13	20
- Processing Cost	(USD/t)	5.8	4.0	7.0	9	17
- G&A Cost	(USD/t)	3.6	2.4	7.4	13	28
Cash Cost	(USD/t)	16.7	11.0	25.1	35	65

⁽¹⁾ Calculated by SRK from gold produced and total milled tonnage that includes open pit and underground ore.

SRK have estimated that FRM operating costs will be in the order of USD33/t when operations resume and full production is achieved. The breakdown of these costs is as follows: Mining USD16/t, processing USD10/t, admin USD5/t and exploration USD2/t.

17.8.2 CAPITAL COSTS

Bindura Nickel Corporation

Capital expenditure is summarised in terms of projects and SIB capital. The historical capital expenditure is tabulated as follows:

Table 17-8: BNC Historical Capital Costs

Description	Units	2002	2003	2004	2005	2006
Project Capital	(USDk)	1,814	1,713	3,505	6,279	2,306
Stay in Business Capital	(USDk)	2,192	3,263	6,366	3,543	7,752
Total Capital	(USDk)	4,006	4,976	9,871	9,822	10,258
Project Capital	(USD/lb)	0.12	0.12	0.23	0.27	0.19*
Stay in Business Capital	(USD/lb)	0.15	0.23	0.41	0.48	0.66*
Total Capital	(USD/lb)	0.27	0.35	0.64	0.75	0.85*

^{*} based on Ni production of 5,451 tonnes excluding toll treatment

Table 17-9: Future BNC Capital Budget

CAPEX input, USDm	Total	2007/8	2008/9	2009/10	2010/1	2011/2
Stay in Business						
Trojan	11.66	5.20	4.08	1.40	0.78	0.20
Shangani	10.80	3.24	4.11	1.53	1.72	0.20
BSR	11.33	4.65	2.56	1.24	1.47	1.40
Other	10.08	4.29	2.34	0.73	0.00	2.72
Total	43.86	17.37	13.09	4.91	3.97	4.52
Major Projects/Expansions						
Trojan	16.60	8.38	5.35	2.87	0.00	0.00
Shangani	6.75	6.75	0.00	0.00	0.00	0.00
BSR	19.25	0.00	0.00	6.42	6.42	6.42
Other	6.00	1.00	0.00	0.00	0.00	5.00
Total Project	48.60	16.13	5.35	9.29	6.42	11.42
Total Capex	92.46	33.50	18.44	14.20	10.39	15.94

The table above is based on the 2006 LoM Capital Expenditure Budget, as supplied by the mine.

The SIB capital is equivalent to some 16% of the cash operating costs in 2007 and reduces to 4% towards the end of the life-of-mine. Taking into consideration the condition of the operations and the age of equipment, this is considered appropriate by SRK for the operation. Current project capital is principally associated with the Trojan Mine shaft deepening to 46 Level, the Trojan concentrator floatation upgrade and the Shangani conveyor decline. The Trojan deepening to 46 Level is expected to continue into 2009 and the Shangani conveyor decline construction is expected to continue into 2008. Provision has not been made for capital expenditure in those years, but due to slower than expected progress, some capital expenditure allocated for 2006 is unspent and will be carried over to complete the projects.

BNC is budgeting some USD43.6 million and USD43.9 million in terms of project and SIB associated capital expenditure over the period of the 2006 LoM plan respectively. Should the LoM be reduced, this capital provision would be reduced accordingly.

SRK has estimated environmental provision for closure cost at some USD18 million based on similar sized operations and consideration of international standards although the USD5 million estimated by BNC is considered appropriate to satisfy what SRK understands to be the current legal requirements in Zimbabwe.

Freda Rebecca Mine

FRM anticipate LoM capital costs of some USD9.9 million as appropriate to refurbish the mining fleet and the process plant.

Table 17-10: Current and Future FRM Capital Budget

Description		Units	Expected Capital Expenditure	Spent and committed to May 2007
Mining	Phase 1	USDm	1.66	1.58
Equipment	Phase 2	USDm	1.90	0
Total Mining Equipment		USDm	3.56	1.58
DI4	Phase 1	USDm	1.85	1.50
Plant Refurbishment	Phase 2	USDm	2.33	0.57
Returbishment	Additional	USDm	1.20	0
Total Plant Refurbishment		USDm	5.38	2.06
Contingency		USDm	1.00	
Total capital		USDm	9.94	3.64

FRM anticipate LoM capital costs of some USD9.9 million as appropriate to refurbish the mining fleet and the process plant. In terms of capital expenditure, the principle elements include the purchase and rebuilding of LHDs, trucks and drill rigs and the refurbishment of a mill and leach tanks. This expenditure consists of USD3.6 million for mining equipment and the remainder for the process plant refurbishment. No provision has been made for back-log development.

SRK has estimated environmental provision for closure cost at some USD7 million based on similar sized operations and consideration of international standards although considers that some USD2 million is appropriate to satisfy what SRK understands to be the current legal requirements in Zimbabwe.

17.9 FINANCIAL ANALYSIS

The macro economic climate of Zimbabwe is currently hyper inflationary and in conjunction with disparities between official and unofficial exchange rates the reporting of cost and economic factors is problematic.

This section will deal with the Techno-Economical Parameters ("TEP") used during the financial evaluation of Mwana. As stated previously, SRK has retained USD as the currency for financial evaluation as a result of the financial instability of Zimbabwe. Hence, all cost, prices, revenues and statements will be made in USD terms. A financial model for each operation will conclude this section on the financial analysis.

17.9.1 COMMODITY PRICES

Table 17-11 shows the metal prices used in the financial models.

Table 17-11: Commodity Prices

Metal Prices		Average	2007/8	2008/9	2009/10	2010/11	2011/12
Nickel	USD/lb	9.23	12.86	10.77	7.50	7.50	7.50
Copper	USD/lb	1.55	2.41	2.15	1.07	1.05	1.05
Cobalt 99.3%	USD/lb	11.60	14.00	14.00	10.00	10.00	10.00
Gold	USD/oz	600.00	600.00	600.00	600.00	600.00	600.00
Silver	USD/oz	7.60	10.00	10.00	6.00	6.00	6.00
Platinum	USD/oz	962.60	1,100.00	1,100.00	871.00	871.00	871.00
Palladium	USD/oz	246.00	315.00	315.00	200.00	200.00	200.00

17.9.2 PRODUCTION PROFILES

Bindura Nickel Corporation

Table 17-12 and Table 17-13 show the production schedules for Trojan and Shangani Mines respectively for the 5 year period from 2007/8 to 2011/12.

Table 17-12: Production Schedule: Trojan Mine 2007/8 to 2011/12

Production Schedule	_	Total /	2007/8	2008/9	2009/10	2010/11	2011/12
	Unit	Average					
MINING							
Main Orebody	kt	1,890.0	384.3	320.6	385.4	458.3	341.4
Grade (T Ni)	%	1.231	0.933	1.162	1.438	1.306	1.299
Massives Ore	kt	43.4	4.4	12.9	11.8	6.9	7.4
Grade (T Ni)	%	4.552	3.669	4.401	5.098	4.521	4.500
Hanging Wall Orebody	kt	378.1	165.7	136.9	54.2	21.3	0.0
Grade (T Ni)	%	0.769	0.673	0.871	0.817	0.731	0.676
Trojan Hill	kt	115.8	0.0	32.3	32.3	2.8	48.4
Grade (T Ni)	%	0.405	0.405	0.405	0.405	0.405	0.405
Development Ore	kt	336.5	41.3	66.9	67.0	61.0	100.3
Grade (T Ni)	%	0.500	0.500	0.500	0.500	0.500	0.500
Depletion of							
Reserve/Resource	kt	2,763.8	595.7	569.6	550.7	550.3	497.5
Average Grade	%	1.097	0.851	1.045	1.281	1.230	1.098
Dilution	kt	698.9	145.4	121.0	116.6	131.5	184.4
Grade (T Ni)	%	0.400	0.400	0.400	0.400	0.400	0.400
Total Ore Mined Trojan	kt	3,462.7	741.1	690.6	667.3	681.8	681.9
Grade	%	0.96	0.76	0.93	1.13	1.07	0.91
Total Ore Mined Trojan							
(excl.massives)	kt	3,419.3	736.7	677.7	655.5	674.9	674.5
Grade	%	0.91	0.75	0.87	1.06	1.03	0.87

Table 17-13: Production Schedule: Shangani Mine 2007/8 to 2011/12

Production Schedule		Total /	2007/8	2008/9	2009/10	2010/11	2011/12
	Unit	Average					
MINING							
Main Orebody	kt	1,004.2	347.0	383.2	274.0	0.0	0.0
Grade	%	0.422	0.426	0.420	0.420	0.000	0.000
West Orebody	kt	128.3	56.4	69.3	2.6	0.0	0.0
Grade	%	0.184	0.417	0.000	0.000	0.000	0.000
Far West Orebody	kt	2,961.8	355.5	362.9	563.4	840.0	840.0
Grade	%	0.438	0.425	0.428	0.445	0.442	0.441
F.W.O.B. Upper	kt	0.0	0.0	0.0	0.0	0.0	0.0
Grade	%	0.000	0.000	0.000	0.000	0.000	0.000
Development Ore	kt	97.6	48.8	48.8	0.0	0.0	0.0
Grade	%	0.450	0.450	0.450	0.420	0.458	0.515
Depletion of Reserve/Resource	kt	4,191.9	807.7	864.2	840.0	840.0	840.0
Average Grade	%	0.427	0.43	0.39	0.44	0.44	0.44
Stockpile	kt	0.0	0.0	0.0	0.0	0.0	0.0
Grade (T Ni)	%	0.000	0.000	0.000	0.000	0.000	0.000
Total Ore Mined Shangani	kt	4,191.9	807.7	864.2	840.0	840.0	840.0
Grade	%	0.43	0.43	0.39	0.44	0.44	0.44

Table 17-14 and Table 17-14 shows a summary of the BNC production schedule for the period 2007/8 to 2011/12.

Table 17-14: Production Schedule: BNC 2007/8 to 2011/12

Production Schedule		Total /	2007/8	2008/9	2009/10	2010/11	2011/12
	Unit	Average					
Mining							
Depletion of							
Reserve/Resource		6,955.7	1,403.4	1,433.8	1,390.7	1,390.3	1,337.5
Troj	an kt	2,763.8	595.7	569.6	550.7	550.3	497.5
Shanga	ni kt	4,191.9	807.7	864.2	840.0	840.0	840.0
Average Grade		0.693	0.607	0.651	0.770	0.754	0.686
Troj	an %	1.097	0.851	1.045	1.281	1.230	1.098
Shanga	ni %	0.427	0.426	0.391	0.435	0.442	0.441
Dilution (Trojan)	kt	698.9	145.4	121.0	116.6	131.5	184.4

Grade (T Ni)	%	0.400	0.400	0.400	0.400	0.400	0.400
Stockpile (Shangani) Grade (T Ni)	kt %	0.0	0.0	0.0	0.0	0.0 0.000	0.0
Total Ore Mined BNC Grade	kt %	7,654.6 0.67	1,548.8 0.59	1,554.8 0.63	1,507.3 0.74	1,521.8 0.72	1,521.9 0.65

17.9.3 OPERATING COST (OPEX)

Bindura Nickel Corporation

The operating cost for each of the two mining assets of BNC is shown in Table 17-15.

Table 17-15: BNC: Operating Cost

Unit Cost		LoM	2007	2008	2009	2010	2011
Trojan	USD/t ore milled	37.76	36.68	37.98	38.43	37.90	37.92
Shangani	USD/t ore milled	39.69	40.12	39.35	39.67	39.67	39.67
BSR	USD/lb	1.03	1.04	1.01	0.99	0.99	1.16
BNC	USD/t ore milled	38.82	38.48	38.75	39.13	38.88	38.89

17.9.4 CAPITAL COST (CAPEX)

Bindura Nickel Corporation

The future capital expenditure for BNC is depicted in Table 17-16. These expenditures have been broken down per year and per BNC assets. The total over the planned 5 years is USD87.5 million.

Table 17-16: BNC Capital Programme

CAPEX input, USDm	2007/8	2008/9	2009/10	2010/1	2011/2	Total
Stay in Business (SIB)						
Trojar	5.20	4.08	1.40	0.78	0.20	11.66
Shangan	i 3.24	4.11	1.53	1.72	0.20	10.80
BSF	4.65	2.56	1.24	1.47	1.40	11.33
Othe	r 4.29	2.34	0.73	0.00	2.72	10.08
Tota	17.37	13.09	4.91	3.97	4.52	43.86
Major Projects/Expansions						
Trojai	8.38	5.35	2.87	0.00	0.00	16.60
Shangan	i 6.75	0.00	0.00	0.00	0.00	6.75
BSF	0.00	0.00	6.42	6.42	6.42	19.25
Othe	r 1.00	0.00	0.00	0.00	0.00	1.00
Total Projec	t 16.13	5.35	9.29	6.42	6.42	43.60
			<u> </u>		_	
Total CAPEX	33.50	18.44	14.20	10.39	10.94	87.46

17.9.5 FINANCIAL VALUATION

Bindura Nickel Corporation

The detailed financial model with all relevant tables referring the information is attached as Annexure F. A summary is given below as Table 17-17.

Table 17-17: NPV Summary: BNC (discounted at 10%, 12.5% and 15%)

Discount Rate		Net Present Value
10%	USDm	117.20
12.5%	USDm	113.10
15%	USDm	109.20

Hunters Road

The Hunters Road Project assuming a production rate of 720ktpa of ore treated returns an NPV of USD61 million at a discount rate of 12.5%. The full financial analysis is included as Annexure H.

It must be noted that only measured and indicated resources have been utilised to develop the mine plan on which the financial analysis was based.

The analysis assumes that the Nickel concentrate will be toll treated at a smelter and refinery other than the BSR.

It must be noted that the analysis of Hunters Road is included as a preliminary assessment and there is no certainty that the result reflected will be realised.

Exploration Properties

SRK have opted to value the Semkhat Concessions in Katanga Province of the Democratic Republic of Congo and the Obenemase Project in Ghana on the basis of historical costs.

The historical cost for Semkhat is USD5.2 million (100% ownership).

The Mwana budget for 2007 is USD3.4million.

The total historical cost for Obenemase including acquisition cost of USD4 million is USD8.5 million which translates to USD7.2 for 70% ownership.

17.10 FREDA REBECCA MINE ADDITIONAL INFORMATION

The FRM is currently on care and maintenance. SRK consider the mine marginal due to weakness of the local currency, hyper inflation, and exchange rate legislation and as a result SRK have not presented a Mineral Reserve statement or valuation. SRK have included in the interests of disclosure a preliminary financial assessment of FRM as a going concern that receives a USD gold price of USD600/oz long term price.

17.10.1PRODUCTION PROFILE

The production schedule is shown below in Table 17-18.

Table 17-18: Production Schedule: Freda Rebecca Mine 2007/8 to 2012/13

		Total	2007/8	2008/9	2009/10	2010/11	2011/12	2012/13
Ore Source								
FRM UG	(t)	5,608,000	377,944	689,936	1,282,534	1,098,457	1,070,221	1,088,908
Grade	(g/t)	2.62	2.50	2.55	2.52	2.64	2.66	2.78
Dev	(t)	46,320	46,320	0	0	0	0	0
Grade	(g/t)	2.45	2.45	0.00	0.00	0.00	0.00	0.00
PPE	(t)	343,451			108,000	144,000	60,000	31,451
Grade	(g/t)	1.40			1.40	1.40	1.40	1.40
PP Oxides Stockpile	(t)	0	0	0	0	0	0	0
Grade	(g/t)	0.00		0.00	0.00	0.00	0.00	0.00
CP and Live Stockpiles	(t)	0	0.00	0	0	0	0	0
Grade	(g/t)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste	(t)	666,812	116,219	128,278	98,056	107,444	108,884	107,931
Total ROM	(t)	5,997,771	424,264	689,936	1,390,534	1,242,457	1,130,221	1,120,359
Grade	(g/t)	2.55	2.49	2.55	2.44	2.50	2.59	2.74
Longhole	(m)	1,313,280	218,880	218,880	218,880	218,880	218,880	218,880
Dev	(ore/m)	5,130	772	575	1,069	915	892	907
Dev	(waste/m)	10,896	1,899	2,096	1,602	1,756	1,779	1,764
Total Dev		16,026	2,671	2,671	2,671	2,671	2,671	2,671
Backlash	(t)	-	24,232			-	-	-
UG Mat	(t)	6,664,583	564,715	818,214	1,488,590	1,349,901	1,239,105	1,228,290
Support Drilling		16,026	32,665	26,132	26,132	19,599	19,599	16,333
Milled	(t)	5,997,771	424,264	689,936	1,390,534	1,242,457	1,130,221	1,120,359
Grade	(g/t)	2.55	2.50	2.55	2.44	2.50	2.59	2.74
MCF	(%)	93	93	93	93	93	93	93
Recovery	(%)	80.90	80.90	80.90	80.90	80.90	80.90	80.90
Gold Sold	(kg)	11,524.178	796.691	1,325.795	2,552.718	2,336.968	2,202.392	2,309.613
Gold Sold	(oz)	370,523	25,615	42,627	82,074	75,138	70,811	74,258

17.10.2OPERATING COST (OPEX)

The FRM estimated operating costs are summarised in Table 17-19.

Table 17-19: FRM: Operating Cost

Financial Year	Units	Totals/	2007/8	2008/9	2009/10	2010/11	20111/12	2012/13
Project Year		Averages	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6
Operating Expenditures	(USD/t)	(33)	(33)	(33)	(33)	(33)	(33)	(33)
Mining Costs	(USD/t)	(16.0)	(16.0)	(16.0)	(16.0)	(16.0)	(16.0)	(16.0)
Processing Costs	(USD/t)	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
Resource Management Costs Admin, Marketing & Inv.	(USD/t)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)
Costs	(USD/t)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)
Environmental Cost	(USDm)	(0.18)	(0.01)	(0.02)	(0.04)	(0.04)	(0.03)	(0.03)
Interest Repayment	(USDm)	-	(0.4)	(0.2)	(0.2)	-	-	-

17.10.3CAPITAL COST (CAPEX)

The future capital expenditure for FRM is depicted in Table 17-20. These expenditures have been broken down per year. The total over the planned 6 years is USD12.1 million. This total includes the USD2 million which has been included as reclamation and mine closure as discussed in Section 17.8.2 and Table 17-10. Of the USD9.9 million total capital stated under Section 17.8.2, USD3.6 million has already been spent.

Table 17-20: FRM Capital Programme

Financial Year	Units	Totals/	2007/8	2008/9	2009/10	2010/11	2011/12	2012/13
Project Year		Averages	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6
Capital Reclamation and	USDm	(6.3)	(6.3)	-	-	-	-	-
mine closure costs	USDm	(2.0)	-	-	-	-	(2.0)	-
Exploration	USDm	(3.8)	-	(2.2)	(0.9)	(0.7)	-	-

17.10.4FINANCIAL VALUATION

The preliminary financial model with all relevant tables referring the information is attached as Annexure G. A summary of the NPV over the 6 year period is given below as Table 17-21.

Table 17-21: NPV Summary: FRM (Discounted at 10%, 12.5% and 15%)

Rate		Net Present Value
10%	USDm	5.47
12.5%	USDm	4.54
15%	USDm	3.75

18 INTERPRETATION AND CONCLUSIONS

SRK have visited and reviewed all the operating assets of Mwana in Zimbabwe. The Bindura Nickel Corporation assets namely Trojan Mine and concentrator, Shangani Mine and Concentrator and the BSR complex have been valued as a going concern under the assumption described in Sections 17.9 and 17.9.5.

The economic and political situation in Zimbabwe is highly uncertain and therefore SRK's assessment is based on the premise that management will be able to adapt to changing circumstances.

18.1.1 BINDURA NICKEL CORPORATION

Table 18-1: SRK-BNC Mineral Resource and Mineral Reserve Statement (31st Dec. 2006)

Mineral Reserve Category (1), (3)				Mineral Reso	urce Catego	ory (2)	
	Tonnes	Grade	Nickel		Tonnes	Grade	Nickel
	(kt)	Total Ni	(t)		(kt)	Total Ni	(t)
		(%)				(%)	
Proved	2,333	0.54	12,690	Measured	1,965	0.9	17,686
- Trojan	1,030	0.71	7,280	- Trojan	1,965	0.9	17,686
- Shangani	1,303	0.42	5,410	- Shangani	nil	nil	nil
Probable	6,320	0.74	46,600	Indicated	4,436	1.89	83,486
- Trojan	3,030	1.00	30,200	- Trojan	4,436	1.89	83,486
- Shangani	3,290	0.47	16,400	- Shangani	nil	nil	nil
Total	8,653	0.69	59,290	Sub-total	6,401	1.58	101,172
				Inferred	13,185	0.64	84,449
				- Trojan	7,942	0.72	57,185
				- Shangani	5,243	0.52	27,264
				Total	19,586	0.95	185,621

⁽¹⁾ Mineral Reserves reported as delivered to the concentrator and exclude all metallurgical recoveries.

SRK has undertaken certain checks and calculations of the Mineral Reserves and the appropriateness of the modifying factors as well as certain economic checks and confirms the statement contained in Table 18-1 above. SRK also considers that there is good potential to increase the Mineral Resource and Mineral Reserve base principally through depth extensions to the existing deposits, further definition of the high grade massive ore and the conversion of inferred Mineral Resource associated with the current drop down project.

⁽²⁾ Mineral Resources are stated exclusive of Mineral Reserves.

⁽³⁾ Mineral Reserves are defined above the lowest working level for Trojan Mine (35L), Shangani Mine Far West Orebody (795L) and Shangani Mine Main Orebody (930L).

18.1.2 FREDA REBECCA MINE

The FRM which is described in the previous sections is currently on care and maintenance due to the reconstruction of the process plant. SRK is of the opinion that the operation is not viable at the current local gold price received as decreed by the Governor of the Reserve Bank of Zimbabwe and therefore have not been able to present a Mineral Reserve statement or valuation.

The mine is continuing to recapitalise the mine with a total investment of USD9.9 million and is reducing the workforce to an appropriate size for the anticipated future production.

A preliminary financial assessment is presented in Section 0 based on the assumption that the economic situation in Zimbabwe reverts to normality and FRM receives the full foreign exchange purchasing parity for the gold produced. The financial assessment is based on the Indicated Mineral Resources reflected below.

SRK is able to confirm the Mineral Resource and Mineral Reserve Statement as follows:

Table 18-2: SRK-FRM Mineral Resource and Mineral Reserve Statement (31st Dec. 2006)

Mineral Reserve Category			Mineral Resource Category (1) (2)				
	Tonnes (kt)	Grade (g/t)	Gold (koz)		Tonnes (kt)	Grade (g/t)	Gold (koz)
Proved	nil		nil	Measured	nil		nil
- UG	nil		nil	- UG	nil		nil
Probable	nil		nil	Indicated	20,553	2.60	1,720
- UG	nil		nil	- UG	20,553	2.60	1,720
Total	nil		nil	Sub-total	20,553	2.60	1,720
				Inferred	1,856	2.57	153
				- UG	1,856	2.57	153
				Total	22,408	2.60	1,823

⁽¹⁾ Mineral Resources are stated inclusive of Mineral Reserves.

18.1.3 SEMKHAT

The interim results to date indicate that the Kibolwe prospect is worthy of further exploration and analyses.

18.1.4 OBENEMASE

As part of the greater Konongo area, it may make a contribution but is unlikely to be established as a stand alone project.

⁽²⁾ Mineral Resources are stated at a cut-off grade of 1.5g/t for underground resources.

19 RECOMMENDATIONS / CONCLUDING REMARKS

19.1 BINDURA NICKEL CORPORATION - ZIMBABWE

Trojan Mine: The Bindura Nickel Corporation has been producing cathode nickel for the past 4 decades. Mining is by mechanised sublevel caving. At the Trojan Mine the orebody is open in depth and exploration drilling has indicated but not confirmed continuity. A re deepening project is well advanced on the first phase to extend the access infrastructure by 480m. Ramp development and level development is behind schedule and will need to accelerate to prevent a reduction in production. The LoM is expected to continue to 2012. The age and poor recovery performance of the Trojan Mine concentrator has necessitated the rebuilding of the flotation section using larger tank cells. Construction has started and commissioning is expected in the first quarter of 2008.

Shangani Mine: Shangani mine was scheduled for closure in 2008. Exploration drilling identified an extension in depth of the far west orebody and the LoM plan has been extended to 2012. A conveyor decline has advanced 480m of the planned length of 1,100m to provide rock handling capacity and ventilation to the deeper workings. The ore is predicted to be harder and some reduction in throughput can be anticipated if the comminution circuit is not modified. At lower metal prices the Shangani Mine is marginal.

The Trojan Mine is an established operation and the QP concludes that this is a viable operation until 2012.

The Shangani Mine is an established operation and the QP concludes that this it has a viable life until 2012.

19.2 HUNTERS ROAD

Road is a highly complex deposit from a metallurgical perspective. Considerable testwork has been undertaken over many years but there still remain many uncertainties concerning metallurgical behaviour of the various ore types. Principal uncertainties relate to the impact of ore hardness on throughput, the effect of pulp viscosity on throughput and recovery, recovery variability across the deposit and final concentrate quality. Additional testwork is unlikely to reduce the risks associated with these metallurgical uncertainties to any material degree. This said, the projected metallurgical performance in the LoM plan is considered to be a reasonable assessment of the likely performance based on the findings of investigations to date.

This mineral deposit has been known for 30 years. The mineralogy is complex and various campaigns of drilling and metallurgical testwork have been undertaken over the past 10 years. The increase in nickel price has justified the commissioning of a new scoping and pre-feasibility study. The proposal

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to advance the level of study to full feasibility is expected to be approved by the Board in mid year and construction and pre stripping expected to start by year end, with the project commissioned in first quarter of 2009.

The QP concludes that the project warrants advancement to the full feasibility stage.

19.3 FREDA REBECCA MINE

The mine was acquired at a stage when gold prices were low and the mine had suffered from lack of reinvestment. The plant was in a poor state of repair with one of the mills cannibalised for spare parts. The reinvestment programme is well advanced and although the mine is currently on care and maintenance it is expected to restart in late September 2007 with an annualised output of about 48,000ozs per year treating 50,000tpm. Additional investment in phase 2 of the project should see the commissioning of the second mill with new girth gear, pinion and shaft. This should allow production to be further increased to about 80,000ozs per year.

Both the Bindura Nickel Operations and the Freda Rebecca Mine are impacted by the hyperinflation economic conditions pertaining in Zimbabwe. The Governor of the Reserve Bank of Zimbabwe has attempted to curb inflation by implementing a range of fiscal and monetary controls. Manipulation of the local gold price has seen the severe contraction of the gold mining industry in Zimbabwe over the past few years. The knock on effects have been the imposition of rigid import and export control bureaucracy which has the effect of delaying delivery of imported spares and consumables. The deteriorating quality of life has motivated an exodus of professionals and skilled labour from Zimbabwe to South Africa, Botswana and elsewhere to earn foreign currency.

The QP concludes that the re-commissioning of Freda Rebecca Mine will be dependent on the gold price received as determined by the governor of the Reserve Bank of Zimbabwe.

19.4 SEMKHAT

Mwana is conducting base metal exploration in the Semkhat (previously Anmercosa) Concession area of Katanga. Resource drilling is progressing at the Kibolwe prospect with recent results having been made public on the 5th June 2007. Pending confirmation of the results the project is likely to advance through scoping to pre-feasibility in 2007.

The gold exploration which Mwana is conducting in the Ituri district of Eastern DRC is not considered material and is therefore not described in this technical report. Similarly the recent acquisition of Gravity an Australian junior exploration company has not yet been integrated into Mwana and is not included in this report. Mwana holds 20% of the MIBA Diamond Mine in DRC and this holding is also excluded as not material.

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The QP concludes that the Kibolwe prospect is worthy of further exploration and study.

19.5 OBENEMASE

The Obenemase gold project in Ghana, although not a material asset, has been described in more detail in the text. Mwana has yet to decide on a strategy for the deposit, and whether to extend the drilling campaign.

As part of the greater Konongo area, it may make a contribution but is unlikely to be established as a stand-alone project.

Section 20 - References Mwana ITR - Main Report

20 REFERENCES

For a full and comprehensive list of all references cited in the ITR, refer to Annexure I.

21 DATE AND SIGNATURE

The effective date of this report is July 11, 2007 other than the Mineral Resource and Mineral Reserve Statement dated December 31, 2006.

This document is sign for and on the behalf of SRK:

Mr Roger Dixon

Corporate Consultant,

SRK Consulting.

(Mining Engineer)

Pr.Eng, FSAIMM, BSc

Annexure A: Letter of Legal Reliance

Annexure B: Mwana Share Certificate

Annexure C: Certificates of qualifications and Letters of Consents



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CERTIFICATE AND CONSENT

British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Financial Services Commission, Securities Division
The Manitoba Securities Commission
Ontario Securities Commission
Autorité des Marchés Financiers due Québec
New Brunswick Securities Commission
Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland and Labrador
Toronto Stock Exchange

Re: Mwana Africa Plc Independent Technical Report on Bindura Nickel Corporation and Freda Rebecca Mine, located in the Republic of Zimbabwe as well as certain exploration assets located in the Democratic Republic of the Congo and Ghana

I refer to the independent technical report entitled "AN INDEPENDENT TECHNICAL REPORT OF THE MINING AND EXPLORATION ASSETS OF MWANA AFRICA PLC" dated 20 June 2007 (the "ITR").

I hereby consent to the public filing of this Independent Technical Report with any stock exchange or securities regulatory authority to which this consent is addressed and further to extracts there from, or a summary of, the Independent Technical Report being included in any publication and use of this Independent Technical Report by Mwana Africa Plc on its website or in connection with its business.

I certify that I have read the documentation for Mwana Africa Plc, and that such documentation fairly and accurately represents the information in the Independent Technical Report that supports the disclosure.

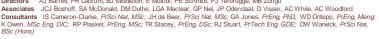
Dated the 11th Day of July 2007.

Roger Dixon Pr Eng, BSc (Mining) Hons, FSAIMM

Partner and Corporate Consultant



Partners MJ Braune, JM Brown, AC Burger, FM Cessford, JAC Cowan, CD Dalgliesh, M Harley, T Hart, NM Holdcroft, PR Labrum, RRVI McNeill, HAC Meinitjes, BJ Middleton, MJ Morris, GP Murray, VS Reddy, PN Rosewarne, PE Schmidt, PJ Shepherd, AS Smithen, OKH Steffen, PJ Terbrugge, KM Uderstadt, D van Bladeren, DJ Venter, HG Waldeck, A Wood Directors AJ Barrett, PR Labrum, BJ Middleton, E Molobi, PE Schmidt, PJ Terbrugge, MB Zungu





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CERTIFICATE AND CONSENT

To accompany the report dated July 2007 and entitled Independent Technical Report on the Mining and Exploration Assests of Mwana Africa Plc

I, John Roger Dixon hereby certify that:

- 1. I am a Partner and Corporate Consultant with the firm SRK Consulting (South Africa) (Pty) Limited ("SRK") with an office at SRK House, 265 Oxford Road, Illovo, Johannesburg 2196, South Africa;
- 2. I am a graduate of the Royal School of Mines, Imperial College London with a BSc (Mining) Hons in Mining Engineering in 1971. I have practised my profession continuously since 1971;
- 3. I have been registered as a Professional Engineer with the Engineering Council of South Africa since 2000. I am a Honorary Fellow of the South African Institute of Mining and Metallurgy;
- 4. I have not received, nor do I expect to receive, any interest, directly or indirectly, in Mwana Africa Plc or securities in Mwana Africa Plc:
- 5. As of the date of this certificate, to the best of my knowledge, information and belief, this Independent Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading;
- 6. I have read National Instrument 43-101 and Form 43-101F1 and by reason of my education and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for the purposes of National Instrument 43-101. This technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 7. I, as a Qualified Person, am independent of the issuer as defined in Section 1.4 of National Instrument 43-101;
- 8. I have co-authored and take overall responsibility for this report;
- 9. I personally did not visited the Zimbabwe assets of Mwana Africa Plc during June 2007, however was represented by 4 of my colleagues how are qualified persons in there field;
- 10. SRK was retained by Mwana Africa Plc to prepare an Independent Technical Report for Mwana Africa Plc in accordance with National Instrument 43-101. The preceding report is based on our review of project files and information provided by Mwana Africa Plc and discussions with personnel at the operations and Mwana Africa Plc;
- 11. I hereby consent to use of this report and our name for public filing with any Provincial regulatory authority.

Johannesburg, South Africa 11 July 2007 Roger Dixon Pr Eng.BSc (Mining) Hons, FSAIMM
Partner & Corporate Consultant
SRK Consulting

Annexure D: Zimbabwe Macro Economics – Exchange Rate

Month-end Figures, Actual since January 2006, Forecasts to December 2007. Assumption: Rapid Money Supply Growth Continues

1 01	Torceasts to December 2007. Assumption: Rapid Money Supply Stown Continues										
			INFLATION		<u>Z</u>	\$ Official Rates to	<u>):</u>	Parallel Market (approx)			
Month-	<u>End</u>	Inflation	Consumer	Annual							
		Per Month	Price Index	Inflation	US Dollar	Rand	Pound	US Dollar	Rand	Pound	
2006	Jan	18.6	57,175.6	613.2	99,202	16,586	177,224	115,500	16,739	200,970	
	Feb	27.5	72,927.0	782.0	99,202	16,586	177,224	155,340	22,513	268,738	
	Mar	19.8	87,337.5	913.6	99,202	16,586	177,224	200,000	32,787	368,000	
	Apr	21.1	105,734.3	1,042.8	99,202	16,263	182,531	230,000	37,705	423,200	
	May	28.0	135,329.6	1,193.5	101,195	15,812	186,199	300,000	46,154	564,000	
	Jun	17.3	158,708.8	1,184.7	101,195	15,568	186,199	430,000	66,154	795,500	
	Jul	25.1	198,544.7	993.6	101,195	15,568	186,199	303,585	43,369	561,632	
Z\$: ₁	Aug	29.2	256,519.8	1,204.6	250	38	460	1,500	200	2,775	
Three	Sep	14.8	294,484.7	1,023.3	250	35	460	1,400	182	2,590	
Zeros	Oct	27.5	375,478.8	1,070.2	250	33	475	1,800	238	3,422	
Removed	Nov	30.1	488,604.6	1,098.9	250	33	463	2,600	342	4,874	
▼	Dec	36.3	665,774.1	1,281.1	250	32	463	3,300	429	6,468	
2007	Jan	45.4	968,338.9	1,593.6	250	34	488	5,000	690	9,750	
	Feb	37.8	1,334,521.7	1,729.9	250	35	493	6,000	836	11,820	
	Mar	51.0	2,008,932.1	2,200.2	250	35	493	20,000	2,740	38,600	
F	Apr	100.7	4,032,629.9	3,713.9	15,000	2,158	29,850	38,000	5,468	75,620	
0	May	60.0	6,452,207.8	4,667.8	15,000	2,158	29,700	45,000	6,475	89,550	
R	Jun	55.0	10,000,922.0	6,201.4	30,000	4,317	59,700	55,000	7,914	109,450	
Е	Jul	50.0	15,001,383.0	7,455.7	50,000	7,194	99,500	70,000	10,072	139,300	
С	Aug	50.0	22,502,074.6	8,672.1	75,000	10,791	149,250	100,000	14,388	199,000	
Α	Sep	45.0	32,628,008.1	10,979.7	110,000	15,827	218,900	155,000	22,302	308,450	
S	Oct	45.0	47,310,611.8	12,500.1	150,000	21,583	298,500	225,000	32,374	447,750	
Т	Nov	40.0	66,234,856.5	13,455.9	210,000	30,216	417,900	320,000	46,043	636,800	
	Dec	37.0	90,741,753.4	13,529.5	280,000	40,288	557,200	335,000	48,201	666,650	

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Annexure E: Zimbabwe Macro Economics – Consumer Price Index (CPI)

Consumer Price Index (2001=100) April 2007

		Food and nonalcoholic beverages	Alcoholic beverages and tobacco	Clothing and footwear	Housing water electricity gas and other fuels	Rents plus furniture, household equipment & maintenance	Health	Transport	Communication	Recreation and culture	Education	Restaurants and hotels	Miscellaneous goods and services
	Weights >	31.9	4.9	5.7	16.2	15.1	1.3	9.8	1.0	5.7	2.9	1.5	3.9
2005	June	13,670.6	20,705.2	19,371.9	4,856.4	7,608.2	17,731.6	10,218.3	52,039.4	10,814.8	25,248.0	27,737.4	10,023.9
	July	18,754.7	23,930.5	23,536.2	10,574.9	9,609.0	20,364.1	16,479.7	130,586.5	10,992.1	29,271.3	45,206.4	12,573.5
	Aug	20,902.3	29,356.2	27,448.1	10,711.8	11,155.2	26,330.7	18,241.6	137,324.5	12,414.5	29,323.5	45,910.5	14,625.8
	Sept	25,773.5	41,090.6	37,255.1	14,996.2	14,931.5	33,660.7	32,988.3	157,803.1	18,510.0	29,777.7	58,772.6	18,947.6
	Oct	33,808.5	46,053.8	46,911.8	17,467.1	18,231.7	39,804.8	39,051.8	185,251.3	21,616.3	31,139.9	68,824.1	23,882.4
	Nov	47,173.1	58,265.4	56,644.5	17,741.0	21,223.5	48,540.4	46,262.9	239,926.9	27,009.2	31,178.6	99,752.6	29,258.9
	Dec	59,398.9	71,467.5	64,870.1	18,238.2	25,539.3	53,771.8	55,566.0	231,034.1	28,994.2	31,247.4	120,076.6	34,226.0
2006													
	Jan	69,625.4	77,592.5	72,859.2	28,458.6	27,321.1	66,986.3	64,814.4	344,205.1	33,422.5	42,579.7	134,602.9	39,067.0
	Feb	77,218.6	103,821.4	88,565.6	51,191.1	32,718.0	82,045.4	80,549.3	653,158.0	38,075.7	75,508.9	158,064.3	46,904.7
	Mar	90,077.4	131,656.8	100,288.7	73,376.1	37,241.7	90,148.8	102,495.1	653,062.3	52,052.8	84,384.6	178,844.3	57,994.4
	Apr	115,241.6	147,008.5	119,533.2	86,953.3	44,610.8	109,070.1	117,639.3	771,804.9	60,058.9	85,631.3	225,050.8	71,188.2
	May	137,850.1	166,784.0	134,085.0	88,961.4	50,563.8	1,224,478.4	135,586.8	796,173.8	63,905.7	93,086.0	264,608.4	82,024.6
	Jun	159,927.1	209,039.2	158,681.5	113,433.0	60,353.1	1,264,238.9	165,374.7	973,754.2	76,476.8	96,921.6	318,094.0	96,002.8
	Jul	203,779.7	261,422.1	195,701.3	150,996.3	71,275.2	1,354,957.5	238,346.4	1,054,133.7	86,254.2	126,841.2	423,841.1	124,862.6
	Aug	254,232.2	350,748.4	241,246.8	175,908.6	85,302.6	1,425,810.5	385,300.0	1,515,919.5	104,409.6	212,336.9	676,782.8	147,554.2
	Sep	312,936.5	424,597.7	270,942.1	183,085.2	105,504.6	1,461,328.3	410,475.5	1,544,704.4	121,852.1	224,452.7	816,808.6	183,000.6
	Oct	414,525.3	579,941.7	359,085.7	198,108.0	146,103.8	1,602,038.1	491,315.3	2,049,438.8	149,831.9	239,031.3	1,026,915.3	289,664.2
	Nov	545,610.1	822,295.4	483,687.6	218,637.6	195,459.1	1,773,151.0	715,477.8	2,073,752.6	200,636.0	294,928.9	1,462,096.4	366,818.2
	Dec	769,340.0	1,015,047.3	637,900.8	266,939.3	259,589.9	2,964,250.4	915,182.1	2,146,763.2	278,662.9	557,229.9	2,173,765.6	495,822.6

Consumer Price Index (2001=100) April 2007 (continue)

								-					
		Food and nonalcoholic beverages	Alcoholic beverages and tobacco	Clothing and footwear	Housing water electricity gas and other fuels	Rents plus furniture, household equipment & maintenance	Health	Transport	Communication	Recreation and culture	Education	Restaurants and hotels	Miscellaneous goods and services
	Weights >	31.9	4.9	5.7	16.2	15.1	1.3	9.8	1.0	5.7	2.9	1.5	3.9
2007	Jan	1,083,295.9	1,206,522.7	774,804.3	817,445.5	320,761.7	3,561,013.4	1,372,527.1	3,324,680.2	360,276.7	848,091.5	2,736,483.4	694,161.2
	Feb	1,486,688.0	1,869,584.8	1,001,702.5	1,102,241.4	461,685.6	3,884,597.0	2,092,191.7	4,800,732.1	519,406.9	895,660.0	3,353,322.3	1,056,914.1
	Mar	2,192,184.3	2,804,081.5	1,441,757.4	1,229,559.7	658,042.7	4,563,374.9	3,769,082.6	11,632,477.2	753,635.1	976,184.3	5,262,202.6	1,870,506.7
	Apr	4,620,246.9	5,105,049.6	3,533,538.3	2,349,327.5	1,650,874.8	7,317,514.3	7,042,711.3	16,050,327.7	1,897,502.7	1,080,753.6	13,194,025.7	3,513,981.6
%	h-on-Month Change 07 to April ' 07	110.8	82.1	145.1	91.1	150.9	60.4	86.9	38.0	151.8	10.7	150.7	87.9
% Ris	ar-on-Year se: 12 mths 06 to Apr '07	3,909.2	3,372.6	2,856.1	2,601.8	3,600.6	6,609.0	5,886.7	1,979.6	3,059.4	1,162.1	5,762.7	4,836.2

Consumer Price Index (2001=100) April 2007 (continue)

		All Items	Inflation Rate (%)				
	Weights >	100.0	Monthly	Annual			
2005	June	12,354.2	18.1	164.3			
	July	18,155.8	47.0	254.8			
	Aug	19,666.7	8.3	265.1			
	Sept	26,224.6	33.3	359.8			
	Oct	32,087.7	22.4	411.0			
	Nov	40,758.1	27.0	502.4			
	Dec	48,205.6	18.3	585.8			
2006	Jan	57,175.6	18.6	613.2			
	Feb	72,927.0	27.5	782.0			
	Mar	87,337.5	19.8	913.6			
	Apr	105,734.3	21.1	1,042.9			
	May	135,329.6	28.0	1,193.5			
	Jun	158,708.8	17.3	1,184.6			
	Jul	198,559.7	25.1	993.6			
	Aug	256,564.7	29.2	1,204.6			
	Sep	294,583.7	14.8	1,023.3			
	Oct	375,478.8	27.5	1,070.2			
	Nov	488,604.6	30.1	1,098.8			
	Dec	665,774.1	36.3	1,281.1			
2007	Jan	968,338.9	45.4	1,593.6			
	Feb	1,334,521.7	37.8	1,729.9			
	Mar	2,008,932.1	50.5	2,200.2			
	Apr	4,032,633.7	100.7	3,713.9			
Month-on-Month % Change Mar '07 to April '07		100.7	Month-on-Mo	onth % Change o April '07			
Year-on-Year % Rise: 12 mths Apr '06 to Apr '07		3,713.9	Year-on-Year% Rise: 12 mths Apr '06 to Apr '07				

Annexure F: SRK-BCN Technical Economic Model (Real Money Terms)

			TOTAL	2007/8	2008/9	2009/10	2010/1	2011/2
Summary			LOM					
1. Economic Assumptions								
Metal prices								
	Nickel	\$/lb	9.23	12.86	10.77	7.50	7.50	7.50
	Copper	\$/lb	1.55	2.41	2.15	1.07	1.05	1.05
	Cobalt 99.3%	\$/lb	11.6	14.0	14.0	10.0	10.0	10.0
	Gold	\$/oz	600	600	600	600	600	600
	Silver	\$/oz	7.6	10.0	10.0	6.0	6.0	6.0
	Platinum	\$/oz	963	1,100	1,100	871	871	871
	Palladium	\$/oz	246	315	315	200	200	200
2. Production Data								
Ore Tonnes Mined		ktpa	7,654.6	1,548.8	1,554.8	1,507.3	1,521.8	1,521.9
Waste Tonnes Mined		ktpa	1,189.9	233.2	239.8	210.4	191.5	314.9
Ore Grade	Nickel	% Ni in Ore	0.67	0.59	0.63	0.74	0.72	0.65
Ore Tonnes Processed		ktpa	7,654.6	1,548.8	1,554.8	1,507.3	1,521.8	1,521.9
Ore Grade	Nickel	% Ni in Ore	0.67	0.59	0.63	0.74	0.72	0.65
Recovery to Conc.	Nickel	%	79.86	74.93	80.61	81.74	81.22	80.83
Metal In concentrate		ktpa	44.6	7.5	8.6	10.0	9.8	8.8
Concentrate grade	% Ni in Concs	%	10.20	10.32	10.18	10.12	10.12	10.25
Nickel in Concentrate		ktpa	40.8	6.8	7.9	9.1	8.9	8.0
Recovery to Metal	Nickel	%	92.5	92.1	92.1	92.1	92.1	94.1
Payable Product	Nickel	t	37,854.5	6,301.7	7,314.7	8,439.3	8,260.7	7,538.2
	Copper (in CuS)	t	2,688.3	474.7	506.6	585.6	588.4	533.0
	Cobalt (in Co(OH)	t	370.0	65.7	70.8	79.6	78.7	75.2

				2007/8	2008/9	2009/10	2010/1	2011/2
Summary								
3. Cash Flow								
Revenue	Nickel	USDm	1,409.3	178.7	173.6	139.5	136.6	124.6
(payable metal)	Copper (in CuS)	USDm	23.5	4.3	4.4	3.4	3.4	3.1
	Cobalt (in Co(OH)	USDm	15.2	1.9	2.0	1.6	1.6	1.5
	Toll	USDm	58.9	10.6	8.7	6.1	6.2	1.1
	Total	USDm	1,507.0	195.4	188.7	150.7	147.8	130.4
Operating Cost								
Onsite Cost		USDm	(807.3)	(98.2)	(101.7)	(100.5)	(100.6)	(95.9)
Offsite Cost (realisation costs))	USDm	(99.0)	(12.2)	(12.5)	(11.6)	(11.4)	(10.4)
Royalty payments		USDm	(28.8)	(3.7)	(3.6)	(2.9)	(2.8)	(2.6)
Total Operating Cost		USDm	(935.1)	(114.1)	(117.8)	(115.0)	(114.8)	(108.9)
Capital Expenditure								
	SIB	USDm	(51.8)	(17.4)	(13.1)	(4.9)	(4.0)	(4.5)
	Project	USDm	(50.9)	(16.1)	(5.3)	(9.3)	(6.4)	(11.4)
Total		USDm	102.7)	(33.5)	(18.4)	(14.2)	(10.4)	(15.9)
Tax Paid		USDm	(84.3)	(5.6)	(7.7)	(8.4)	(3.6)	(3.7)
Working Capital		USDm	162.7)	(5.2)	(3.0)	(1.4)	(1.3)	0.1
Pre-Finance After Tax Cash Flo	OW	USDm	365.2	43.3	48.6	16.6	23.0	5.0
Cash Cost		USD/lb	7.44	7.83	6.89	5.92	6.03	6.34
By-product & Toll credits		USD/lb	0.71)	(1.20)	(0.93)	(0.60)	(0.61)	(0.35)
Net Cash Cost - C1		USD/lb	6.73	6.63	5.95	5.31	5.42	6.00

Annexure G: SRK-FRM Technical Economic Model (Real Money Terms)

Financial Year	Units	Totals/	2007/8	2008/9	2009/10 V=2	2010/11 V:-4	20111/12 V=5	2012/13
Project Year		Averages	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6
Production								
Mining	(1.1)	7 000	42.4	600	1 201	1 2 4 2	1 120	1 120
- Freda Rebecca Mine	(kt)	5,998	424	690	1,391	1,242	1,130	1,120
RoM	(kt)	5,998	424	690	1,391	1,242	1,130	1,120
Processing	(1.1)	5 000	42.4	600	1 201	1.040	1 120	1 120
- Milled Tonnage	(kt)	5,998	424	690	1,391	1,242	1,130	1,120
- Head Grade	(g/t)	2.55	2.50	2.55	2.44	2.50	2.59	2.74
- Mine Call Factor	(%)	93 81	93.0	93.0	93.0	93.0	93.0	93.0
- Au Recovery Factor	(%)		80.9	80.9	80.9	80.9	80.9	80.9
- Au Recovered	(kg)	11,524	797	1,326	2,553	2,337	2,202	2,310
- Total Au Recovered Metal	(koz)	371	26	43	82	75	71	74
Commodity Prices	(HGD/)	600	600	600	600	600	600	600
Au Price	(USD/oz)	600	600	600	600	600	600	600
Financial - Real								
Revenue	(USDm)	222	15	26	49	45	42	45
Au Revenue	(USDm)	222.3	15.4	25.6	49.2	45.1	42.5	44.6
Operating Expenditures	(USDm)	(200)	(14)	(24)	(46)	(41)	(37)	(37)
Mining Costs	(USDm)	(96.8)	(6.8)	(11.5)	(22.5)	(20.1)	(18.1)	(17.9)
Processing Costs	(USDm)	(60.0)	(4.2)	(6.9)	(13.9)	(12.4)	(11.3)	(11.2)
Resource Management Costs	(USDm)	(12.0)	(0.8)	(1.4)	(2.8)	(2.5)	(2.3)	(2.2)
Admin, Marketing & Inv. Costs	(USDm)	(30.0)	(2.1)	(3.4)	(7.0)	(6.2)	(5.7)	(5.6)
Environemental Cost	(USDm)	(0.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Interest Repayment	(USDm)	(0.8)	-	(0.4)	(0.2)	(0.2)	-	-
Operating Profit	(USDm)	23	1.4	2.0	2.9	3.6	5.2	7.6
Tax Liability	(USDm)	-						
Closure Costs	(USDm)	(2)	-	-	-	-	(2)	-
Capital Expenditure	(USDm)	(10)	(6)	(2)	(1)	(1)	-	-
Project	(USDm)	(6)	(6)	-	-	-	-	-
Sustaining	(USDm)	-	-	-	-	-	-	-
Exploration	(USDm)	(4)	-	(2)	(1)	(1)	-	-
Final Net Free Cash	(USDm)	11	(4.6)	(0.2)	2.0	2.9	3.2	7.6
Total Cash costs	(USD/t)	33.28	33.00	34.20	33.30	33.33	33.00	33.00
Total Working Costs	(USD/t)	33.30	33.03	34.22	33.33	33.36	33.03	33.03
Total Costs	(USD/t)	35.27	47.03	37.42	33.97	33.95	34.80	33.03
Cut-off grade (Cash Costs)	(g/t)	2.29	2.27	2.36	2.29	2.30	2.27	2.27
Cut-off grade (Working Costs)	(g/t)	2.29	2.28	2.36	2.30	2.30	2.28	2.28
Cut-off grade (Total Costs)	(g/t)	2.43	3.24	2.58	2.34	2.34	2.40	2.28
NPV								
Net Present Value (10%)	(USDm)	5.3						

Net Present Value (10%)	(USDm)	5.3
Net Present Value (12.5%)	(USDm)	4.4
Net Present Value (15%)	(USDm)	3.6

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Annexure H: SRK-Hunters Road Technical Economic Model (Real Money Terms)

			TOTAL	2007/8	2008/9	2009/10	2010/1	2011/2
Summary			LOM					
1. Economic Assumptions								
Metal prices								
	Nickel	\$/lb	7.68	12.86	10.77	7.50	7.50	7.50
	Copper	\$/lb	1.10	2.41	2.15	1.07	1.05	1.05
	Cobalt 99.3%	\$/lb	10.2	14.00	14.0	10.0	10.0	10.0
	Gold	\$/oz	686	570.00	570	696	691	691
	Silver	\$/oz	6.2	10.00	10.0	6.0	6.0	6.0
	Platinum	\$/oz	881	1,100.00	1,100	871	871	871
	Palladium	\$/oz	205	315.00	315	200	200	200
US Inflation rate		%		-	-	-	-	-
US \$ Inflator/deflator		%		1.00	1.00	1.00	1.00	1.00
2. Production Data								
Ore Tonnes Mined		ktpa	32,932	-	130	720	720	720
Ore Grade	Nickel	% Ni in Ore	0.558	-	0.480	0.482	0.490	0.490
Ore Tonnes Processed		ktpa	32,932	-	130	720	720	720
Ore Grade	Nickel	% Ni in Ore	0.558	-	0.480	0.482	0.490	0.490
Recovery to Conc.	Nickel	%	75.4	-	62.8	70.0	70.5	70.5
Metal In concentrate		ktpa	139	-	0	2	2	2
Concentrate grade	% Ni in Concs	%	13.0	13.0	13.0	13.0	13.0	13.0
Nickel in Concentrate		ktpa	1,254	-	4	22	23	23
Recovery to Metal	Nickel	%	90.2	-	92.1	92.1	92.1	92.1
Payable Product	Nickel	t	127,529	-	361	2,238	2,291	2,291
	Copper (in CuS)	t	7,922	-	27	150	152	152
	Cobalt (in Co(OH)	t	1,211	-	4	23	23	23

3. Cash Flow								
Revenue	Nickel	US\$m	2,111.2	-	8.6	37.0	37.9	37.9
(payable metal)	Copper (in CuS)	US\$m	20.5	-	0.1	0.4	0.4	0.4
	Cobalt (in Co(OH)	US\$m	26.7	-	0.1	0.5	0.5	0.5
	Toll	US\$m	-					
	Total	US\$m	2,158.5	-	8.8	37.9	38.8	38.8
Operating Cost								
Onsite Cost		US\$m	449.0	-	1.8	9.8	9.8	9.8
Offsite Cost (realisation costs)		US\$m	389.1	-	1.1	6.8	7.0	7.0
Royalty and Marketing Expenses		US\$m	209.4	-	0.8	3.7	3.8	3.8
Total Operating Cost		US\$m	1,047.5	-	3.6	20.3	20.6	20.6
Capital Expenditure								
	SIB	US\$m	44.4	-	0.5	1.0	1.0	1.0
	Project	US\$m	40.0	30.0	10.0	-	-	-
Total	,	US\$m	84.4	30.0	10.5	1.0	1.0	1.0
Tax Paid		US\$m	(132.2)	-	-	_	_	(1.1)
Pre-Finance After Tax Cash Flow		US\$m	749.3	(30.0)	(5.7)	14.0	14.6	13.5
Cash Cost		US\$/lb	3.70	-	4.58	4.12	4.07	4.07
By-product & Toll credits		US\$/lb	0.02	-	0.03	0.02	0.02	0.02
Net Cash Cost - C1		US\$/lb	3.69	-	4.55	4.10	4.05	4.05

Annexure I: References - GLOSSARY, ABBREVIATIONS AND UNITS

GLOSSARY

Aeromagnetic A geophysical technique of exploring an area by measuring the

magnetic intensity of the rock from an aircraft.

Archaean Of or belonging to the earlier of the two divisions of Precambrian

time, from approximately 3.8 to 2.5 billion years ago, marked by an atmosphere with little free oxygen, the formation of the first rocks

and oceans, and the development of unicellular life.

Arsenopyrite A silver-white to gray arsenic ore, essentially FeAsS.

Assay The chemical analysis of ore samples to determine their metal

content.

Chromite An iron-bearing chromium-oxide mineral

Cobaltite A rare silver-white to gray mineral, cobalt sulfarsenide, CoAsS, that

is a cobalt ore and is used in ceramics.

Dip inclination of geological features from the horizontal.

Dolerite Any dark, igneous rock composed chiefly of silicates of iron and

magnesium with some feldspar.

Dyke Thick, tabular vertical or near-vertical bodies of igneous rock formed

by magmatic injection into planar zones of weakness such as faults or

fractures.

Fire assay The assaying of metallic ores by methods requiring the use of furnace

heat.

Flame AA Flame atomic absorption. An instrumental technique for determining

the metal content in a sample by measuring the absorption of light at

specific wavelengths by atoms of particular metals.

Footwall The underlying side of a stope or mineralised body.

Fuchsite Fuchsite is a dark green variety of muscovite, the green colour is the

result of chromium impurities.

Geozone An area defined by geological characteristics.

Hangingwall The overlying side of a mineralised unit or stope.

Igneous Derived from molten rock that originated beneath the earth's surface

and solidified at or near the earth's surface.

Indicated mineral resource

That portion of a mineral resource for which quantity and quality are estimated with a lower degree of certainty than for a measured mineral resource. The sites used for inspection, sampling, and measurement are too widely or inappropriately spaced to enable the material or its continuity to be defined or its grade throughout to be established.

Inferred mineral resource

That part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that may be limited, or of uncertain quality and reliability.

Kriging

An interpolation method that minimises the estimation error in the determination of a mineral resource.

Lenticular

Convex on both sides.

Measured mineral resource

That portion of a mineral resource for which the tonnage or volume is calculated from dimensions revealed in outcrops, pits, trenches, drill-holes, or mine workings, supported where appropriate by other exploration techniques. The sites used for inspection, sampling and measurement are so spaced that the geological character, continuity, grades and nature of the material are so well defined that the physical character, size, shape, quality and mineral content are established with a high degree of certainty.

Metamorphism

The process by which rocks are altered in composition, texture, or internal structure by extreme heat, pressure, and the introduction of new chemical substances.

Mineral reserve

The economically mineable material derived from a measured and/or indicated mineral resource. It is inclusive of diluting materials and allows for losses that may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, including consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction is reasonably justified.

Mineral resource

A concentration (or occurrence) of material of economic interest in or on the Earth's crust in such a form, quality and quantity that there are reasonable and realistic prospects for eventual economic extraction.

The location, quantity, grade, continuity and other geological characteristics of a mineral resource are known, estimated from specific geological knowledge, or interpreted from a well constrained

and portrayed geological model.

Polymictic Contain an assortment of different kinds of clasts.

Proterozoic Of or relating to the later of the two divisions of Precambrian time,

from approximately 2.5 billion to 570 million years ago, marked by the buildup of oxygen and the appearance of the first multicellular

eukaryotic life forms

Pyrite A common iron-sulphide mineral

Pyrrhotite A common iron-sulphide mineral.

Resource A tonnage or volume of rock or mineralisation or other material of

intrinsic economic interest, the grades, limits and other appropriate characteristics of which are known with a specified degree of

knowledge.

RoM Run-of-mine.

Rudite A general name used for consolidated sedimentary rocks composed of

rounded or angular fragments coarser than sand (granules, pebbles, cobbles, boulders, or gravel or rubble); e.g. conglomerate, breccia,

and calcirudite.

SAMREC Code South African code for reporting mineral resources and mineral

reserves.

Sill An approximately horizontal sheet of igneous rock intruded between

older rock beds.

Stope Underground excavation created by mining.

Tailings Refuse or dross remaining after ore has been processed.

Unconformities A surface between successive strata representing a missing interval in

the geological record of time and produced either by an interruption in deposition or by the erosion of depositionally continuous strata

followed by renewed deposition.

Variogram A measure of the average variance between sample locations as a

function of sample separation.

ABBREVIATIONS

AAS Atomic Absorption Spectrometry

Ag Chemical symbol for silver

Au Chemical symbol for gold

DD Diamond drilling

DMS Dense media separation

DTM Digital terrain model.

ECSA Engineering Council of South Africa

EIA Environmental impact assessment

EMP Environmental management programme

EMPR Environmental management programme report

EMS Environmental management system

EPCM Engineering procurement and construction management

EW Electrowinning

FAG Fully autogenous grinding

Fe Fhemical symbol for iron

FM Financial model

FoG Fall of ground

HCl Hydrochloric acid

HFl Hydrofluoric acid

ITR Independent technical report

LoM Life of mine

MCF Mine call factor.

ML Mining licence

Opex Operating expenditure

PPT Precipitation

P&Gs Preliminary and generals

RAB Rotary air-blast drilling

RC Reverse-circulation drilling

RMR Rock mass rating

RoM Run of mine

RQD Rock-Quality-Designation

RWD Return-water dam

SACNASP South African Council for Natural Scientific Professions

SAMREC South African Code for Reporting of Mineral Resources and Mineral

Reserves

SANAS South African National Accreditation Scheme

SHE Safety Health and Environment

SRK Consulting (South Africa) (Pty) Limited

UNITS

cm a centimetre

cmg/t a centimetre-gram per metric ton – metal accumulation over channel

width

dwt/st a penny-weight per short ton, equivalent to 1.714285g/t

g grams

Ga a thousand million years.

g/t grams per metric tonne – metal concentration.

ha a hectare

kg a kilogram.

kg/m kilograms per metre of core length

kg/t kilograms per metric ton

klb a thousand pounds

km a kilometre

koz a thousand ounces

kt a thousand metric tons

Kt/m a thousand tonnes per month

lb a pound

lb/st a pound per short ton, equivalent to 0.5 kg/t

m a metre

Ml a million litres

Moz a million ounces

MPa a million pascals

Mt a million metric tonnes

MWh a million Watt-hours

oz a fine troy ounce, equalling 31.10348 grams

t a metric ton

tm-3 density measured as metric tonnes per cubic metre
c degrees
c degrees Centigrade
' minutes
" seconds
% percent

Annexure J: -

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