

This report is issued as the annual update of resources and reserves to inform shareholders and potential investors of the mineral assets controlled by the group.

OVERVIEW – ASSMANG

MANGANESE Mineral resources	(MEASURED+INDICATED)			(PROVED+PROBABLE)		
	Mt	Mn %	Fe %	Mineral reserves Mt	Mn %	Fe %
BLACK ROCK						
No 1 Seam	137,7	44,7	8,83	115,3	44,7	8,83
No 2 Seam	185,2	42,5	15,4	–	–	–
GLORIA						
No 1 Seam	52,5	38,3	5,54	40,4	38,3	5,54
No 2 Seam	29,4	29,9	10,1	–	–	–

IRON ORE Mineral resources	(MEASURED+INDICATED)		(PROVED+PROBABLE)		CHROMITE Mineral resources	(MEASURED+INDICATED)		(PROVED+PROBABLE)	
	Mt	Fe %	Mineral reserves Mt	Fe %		Mt	Cr ₂ O ₃ %	Mineral reserves Mt	Cr ₂ O ₃ %
BEESHOEK	120,4	63,55	22,9	64,28	DWARSRIVIER	44,0	39,16	35,1	39,16
KHUMANI									
Bruce	265,0	64,69	215,3	64,5					
King	379,7	64,49	295,6	64,52					

SUBSIDIARY COMPANIES

Resource/reserves

Mine	Commodity	In Situ resource (millions)			Total resource	Reserve (millions)			In Situ rand/ton	Value* (million)
		Measured tons	Indicated tons	Inferred tons		Proved tons	Probable tons	Total reserve		
Rustenburg Minerals	Chrome	2,0	2,9	5,4	10,3	1,3	1,8	3,1	29,42	142,27
Wonderstone Ltd	Wonderstone	4,8	0,0	104,8	109,6	4,6		4,6	10,55	51,15
Zeerust Chrome	Chrome	0,9	0,0	10,6	11,5	0,8		0,8	7,44	6,53

* Measured and indicated multiplied by Rand/Ton

SALIENT HIGHLIGHTS 2007/2008

Khumani – 15% increase in iron ore reserves due to higher iron ore prices. Export production starts mid-2008.

Beeshoek – Supplied both local and export markets. Resources/reserves now under severe strain.

Nchwaning – Measured resources increased by 172% due to the more appropriate classification methods used.

Dwarsrivier – Chrome production exceeded target by 14%. Board approval for the North decline.

MINERAL RESERVES AND RESOURCES REPORT – Assmang operations

GENERAL STATEMENT

Assmang's method of reporting mineral resources and mineral reserves conforms to the South African Code for Reporting Mineral Resources and Mineral Reserves (SAMREC Code) and the Australian Institute of Mining and Metallurgy Joint Ore Reserves Committee Code (JORC Code).

The convention adopted in this report is that mineral resources are reported inclusive of that portion of the total mineral resource converted to a mineral reserve. Resources and reserves are quoted as at 30 June 2008.

Underground resources are in-situ tonnages at the postulated mining width, after deductions for geological losses. Underground mineral reserves reflect milled tonnages while surface mineral reserves (dumps) are in situ tonnages without dilution. Both are quoted at the grade fed to the plant. Open-cast mineral resources are quoted as in situ tonnages and mineral reserves are tonnages falling within an economic pit-shell.

The evaluation method is generally ordinary kriging with mining block sizes ranging from 10 x 10 metres to 50 x 50 metres in the plan view. The blocks vary in thickness from 5 to 10 metres. The evaluation process is fully computerised, generally utilising the Datamine software package.

The mineral resources and mineral reserves are reported on a total basis regardless of the attributable beneficial interest that Assmang has on the individual projects or mines.

Maps, plans and reports supporting resources and reserves are available for inspection at Assmang's registered office and at the relevant mines.

In order to satisfy the requirements of the Minerals and Petroleum Resources Development Act, Assmang's operations will have to obtain new mining rights for all properties required to support the planned operations over the next 30 years. The act is effective from 1 May 2004 and the new rights must be obtained within five years from then. The operations are at various stages of application.

Rounding of figures may result in computational discrepancies.

DEFINITIONS

The definitions of resources and reserves, quoted from the SAMREC CODE, are as follows:

A **'mineral resource'** is a concentration (or occurrence) of material of economic interest in or on the earth's crust in such form, quality or quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a mineral resource are known, estimated from specific geological evidence and knowledge, or interpreted from a well constrained and portrayed geological model. Mineral resources are subdivided, in order of increasing confidence in respect of geoscientific evidence, into inferred, indicated and measured categories.

An **'inferred mineral resource'** is 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.

An **'indicated mineral resource'** is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.

A **'measured mineral resource'** is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

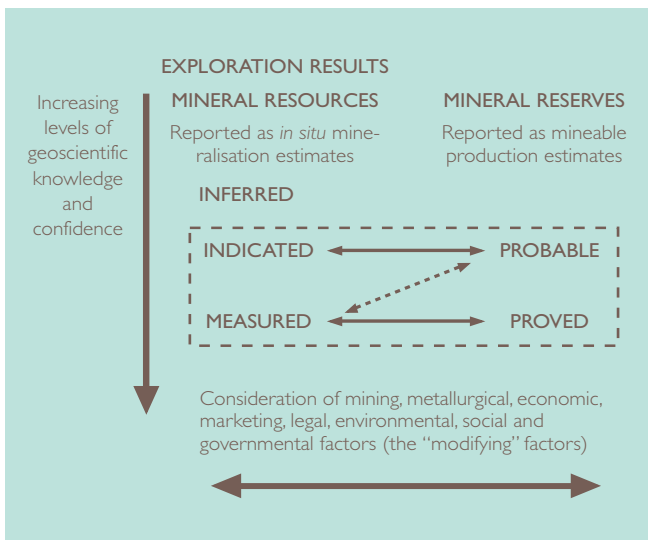
A **'mineral reserve'** is the economically mineable material derived from a measured and/or indicated mineral resource. It is inclusive of diluting materials and allows for losses that may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, including consideration of, and modification by, realistically assumed mining, metallurgical,

ORE RESERVES AND MINERAL RESOURCES (continued)

economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction is reasonably justified. Mineral reserves are subdivided in order of increasing confidence into probable mineral reserves and proved mineral reserves.

A **'probable mineral reserve'** is the economically mineable material derived from a measured and/or indicated mineral resource. It is estimated with a lower level of confidence than a proved 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.

A **'proved mineral reserve'** is the economically mineable material derived from a measured mineral resource. It is estimated with a high level of confidence. 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.



COMPETENCE

The competent person with overall responsibility for the compilation of the Mineral Reserves and Resources report is Paul van der Merwe, PrSciNat, an ARM employee. He consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Paul van der Merwe graduated with a BSc (Hons) in Geology from the Free State University. He spent four years as an exploration geologist at FOSKOR. He then joined the Uranium Resource Evaluation Group of the then Atomic Energy Corporation of South Africa for 12 years. While employed there he studied geostatistics and spent some time at the University of Montreal, Canada. In 1991 he joined Anglovaal Mining (now ARM) in the Geostatistics Department and evaluated numerous mineral deposit types for this group in Africa. In 2001 he was appointed as Mineral Resource Manager for the group. He is registered with the South African Council for Natural Scientific Professions as a Professional Natural Scientist in the field of practice of geological science, Registration Number 400498/83, and as such is considered to be a competent person.

All competent persons at the operations have sufficient relevant experience in the type of deposit and in the activity for which they have taken responsibility. Details of the competent persons are available from the company secretary on written request.

The following competent persons were involved in the calculation of mineral resources and reserves.

RESOURCES AND RESERVES

M Burger/S v Niekerk, PrSciNat	Iron
B Rusive	Manganese
M Burger, PrSciNat	Chrome

P J van der Merwe
August 2008

Manganese

Locality – The manganese mines are situated in the Northern Cape province of South Africa, approximately 80 kilometres north-west of the town of Kuruman. Located at latitude 27°07'50"S and longitude 22°50'50"E, the site is accessed via the national N14 route between Johannesburg and Kuruman, and the provincial R31 road.

History – In 1940, Assmang acquired a manganese ore outcrop on a small hillock known as Black Rock. Several large properties underlain by ore were subsequently found and acquired. Today the Black Rock area is considered to be the largest and richest manganese deposit in the world. Manganese ore operations were extended and today include the Gloria and Nchwaning underground mines. Manganese ore is supplied locally to Assmang-owned smelters, but is mainly exported through Port Elizabeth to Japanese and German customers.

Mining authorisation – The Nchwaning mining lease (ML10/76) comprises an area of 1 877,0587 hectares and is located on the farms Nchwaning (267), Santoy (230) and Belgravia (264). An application for the conversion to a new order mining right was submitted during the 2008 financial year.

The Gloria mining lease (ML11/83) comprises an area of 1 713,1276 hectares and is located on portion 1 of the farm Gloria (266). An application for the conversion to a new order mining right was submitted during the 2008 financial year.

Geology – The manganese ores of the Kalahari Manganese field are contained within sediments of the Hotazel Formation of the Griqualand West Sequence, a subdivision of the Proterozoic Transvaal Supergroup. At Black Rock, Belgravia and Nchwaning, the Hotazel, Mapedi and Lucknow Formations have been duplicated by thrusting. The average thickness of the Hotazel Formation is approximately 40 metres.

The manganese ore bodies exhibit a complex mineralogy and more than 200 mineral species have been identified to date. The hydrothermal upgrading has resulted in a zoning of the ore body with regard to fault positions. Distal areas exhibit more original and low-grade kutnohorite + braunite assemblages, while areas immediately adjacent to faults exhibit a very high-grade hausmannite ore. The intermediate areas exhibit a very complex mineralogy, which includes bixbyite, braunite and jacobsite amongst a host of other manganese-bearing minerals. A similar type of zoning also exists in the vertical sense. At the top and bottom contacts it is common to have high iron (Fe) and low manganese (Mn) contents while the reverse is true towards the centre of the seam. This vertical zoning has given rise to a mining practice where only the centre 3,5-metre-

high portion of the seam is being mined. At the Gloria mine the intensity of faulting is much less, which also explains the lower grade.

Two manganese seams are present. The No. 1 seam is up to 6 metres in thickness, of which 3,5 metres are mined, using a manganese marker zone for control. There is, therefore, minimum dilution. Studies are being undertaken to evaluate the effect of increasing the mining height to 5 metres.

Mineral resources and Ore reserves – Measured resources at Nchwaning are based on the two-thirds of the semivariogram sill range. Areas where the borehole spacing is greater than this distance and up to the sill range are classified as indicated. There are no inferred resources at Nchwaning. Measured/indicated resources were converted to proved/probable reserves by a LOM scheduling exercise done by Snowden Mining Consultancy. Geological losses are built into the grade models. Measured resources at Gloria are classified as material available up to 50 metres in front of the mining faces. Material situated further than 50 metres from the face and up to a boundary string around the dense drilled area on Gloria is classified as indicated resources. The rest of the property with limited drill information is classified as inferred. In the coming year an increase in the measured resources by in-fill drilling is anticipated. At Gloria a 23% pillar loss is accounted for in moving measured/indicated resources into proved/probable reserve.

The Nchwaning Mine was diamond drilled from surface at 330-metre centres and the data captured in Excel spreadsheets. The core was logged and 0,5-metre-long, half-core, diamond-saw cut samples were submitted to Assmang's laboratory at Black Rock for X-ray fluorescence (XRF) analyses. Mn and Fe values were checked by wet chemical analyses. Several standards were used to calibrate XRF equipment, and results are compared with other laboratories on a regular basis.

At Nchwaning a total of 341 boreholes for the No. 1 ore body and 372 holes for the No. 2 ore body, as well as a total of 20 000+ face samples were considered in the grade estimation. The available data for an area was optimised over a thickness of 3,5 metres and exported into data files for computerised statistical and geostatistical manipulation to determine the average grades of Mn, Fe, silica (SiO₂), calcium (CaO) and magnesium (MgO).

Ordinary kriging interpolation within Datamine was used to estimate the grade of each 50 x 50 x 3,5-metre block generated within the geological model. Sub-cell splitting of the 50 x 50-metre blocks was allowed to follow the geological boundaries accurately.

ORE RESERVES AND MINERAL RESOURCES (continued)

The relative density of Nchwaning manganese ore was taken as 4,3t/m³.

Trackless mechanised equipment is used in the bord and pillar mining method. Mining in the eastern extremity of Nchwaning occurs at a depth of 200 metres while the deepest (current) excavations can be found at a depth of 519 metres below the surface. Gloria Mine is extracting manganese at depths that vary between 180 and 250 metres below the surface.

Ore from Nchwaning No. 2 mine is crushed underground before being hoisted to a surface stockpile via a vertical shaft. Similarly, ore from the Nchwaning No. 3 mine is crushed underground before being conveyed to a surface stockpile via a declined conveyor system. Ore is withdrawn from the surface stockpile and forwarded to two stages of crushing, dry screening and wet screening to yield lumpy and fine products.

At the Gloria Mine, ore is crushed underground before being conveyed to a surface stockpile via a decline shaft. At both plants the finer fractions are stockpiled while the coarser fractions are extracted from the respective product boxes into road haulers, sampled, weighed and stored on stacks ahead of despatch. Samples from each stack are analysed for chemical content and size distribution. This ensures good quality control and enables the ore control department to blend various stacks according to customer demand.

Year-on-year change – The 2008 mineral reserves for the Nchwaning No. 1 ore body changed from 114,6 million tonnes in 2007 to 115,3 million tonnes. A LOM scheduling exercise by Snowden showed that the 20% loss when changing from resource to reserve previously used, proved to be very conservative, hence the increase in reserves. The mineral resources at Nchwaning No. 1 ore body decreased by 5,7 million tonnes to 137,7 million tonnes (143,4 million tonnes). The mineral resources at Nchwaning No. 2 ore body increased slightly to 185,2 million tonnes from 181,9 million tonnes. This is the same as it was in 2006 (184,7 million tonnes), indicating a modelling problem in 2007.

NCHWANING MINE: 2 BODY MANGANESE RESOURCES

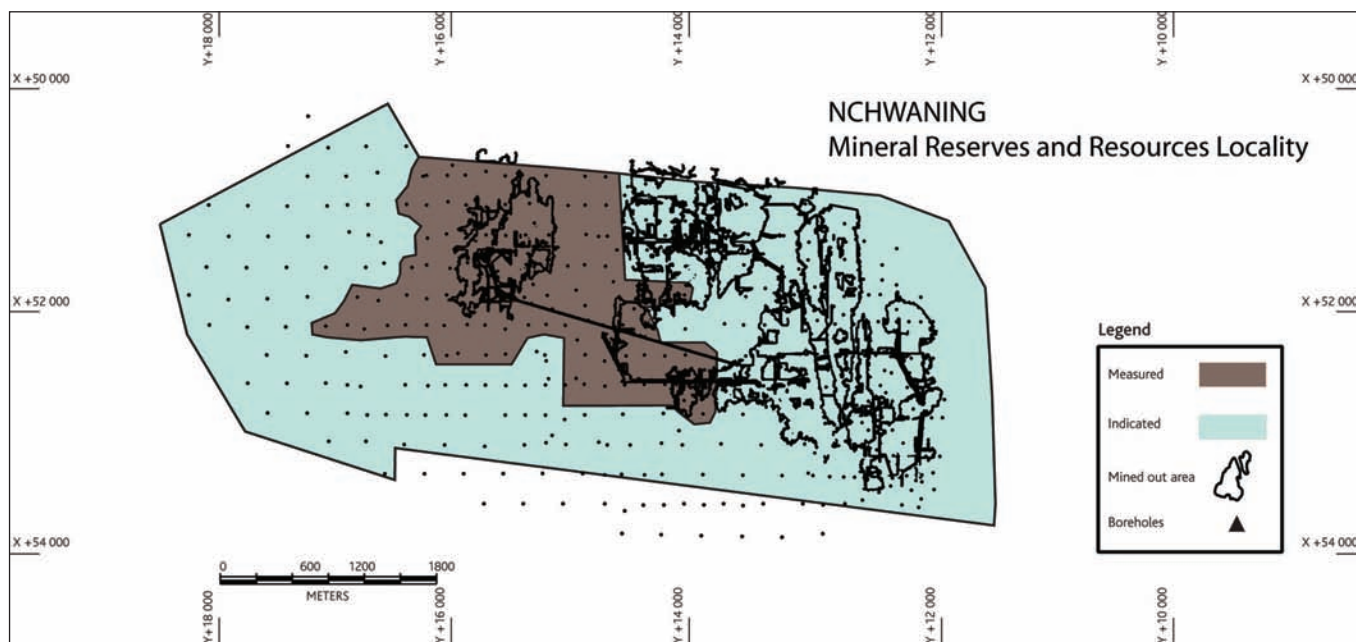
Nchwaning 2 body resources	Tonnes Mt	Mn %	Fe %
Measured	53,9	42,1	16,1
Indicated	131,3	42,6	15,1
Total resources 2 body 2008	185,2	42,5	15,4
Total resources 2 body 2007	181,9	42,4	15,5
Inferred	none		

Measured resources are based on two-thirds of the semivariogram sill range rule. Areas outside this distance are classified as indicated. Proved reserves = Measured resources used in LOM scheduling by Snowden. Probable reserves = Indicated resources used in LOM scheduled by Snowden.

NCHWANING MINE: 1 BODY MANGANESE RESOURCES/RESERVES

Nchwaning 1 body resources	Tonnes Mt	Nchwaning 1 body reserves	Tonnes Mt	Mn %	Fe %
Measured	43,8	Proved	37,6	46,9	8,96
Indicated	93,9	Probable	77,7	43,7	8,76
Total resources 1 body 2008	137,7	Total reserves 1 body	115,3	44,7	8,83
Total resources 1 body 2007	143,4	Total reserves 1 body	114,70	44,8	8,87
Inferred		none			

Nchwaning borehole locality map showing the mineral resource classification



Procedures for drilling and assaying at Gloria Mine are the same as at Nchwaning. A total of 103 boreholes were considered in the evaluation of the Gloria 1 body mine. The wide-spaced borehole interval puts some limitation on the evaluation in areas away from current mining faces. A total of 5 100+ underground sampling values were used in evaluating areas close to current mining. The boreholes were optimised over a stoping width of 3,5 metres and the relative density was taken as 3,8t/m³. The seams were evaluated by means of statistical and geostatistical methods to determine the average grades of Mn, Fe, SiO₂, CaO and MgO. Ordinary kriging interpolation within Datamine was used to estimate the grade of each 50 x 50 x 3,5-metre block generated within the geological model. Sub-cell splitting of the 50 x 50-metre blocks was allowed to follow the geological boundaries.

Year-on-year-change – The 2008 proved reserves at Gloria No 1 body decreased to 6,8 million tonnes (7,7 million tonnes) due to re-evaluation and production draw-down. The probable reserves also decreased from 67,4 million tonnes to 33,6 million tonnes as a result of a new delineation approach followed for the indicated resources. A substantial increase of the Inferred resources is seen

due to the more appropriate delineation boundary for Indicated resources. The mineral resources at Gloria No 2 body were also reclassified using the new boundaries and substantial shifts in resources between categories occur. No markets exist for Gloria 2 body ore at this point in time.

GLORIA MINE: 2 BODY MANGANESE RESOURCES

Gloria 2 body resources	Tonnes		
	Mt	Mn %	Fe %
Measured	–	–	–
Indicated	29,4	29,9	10,1
Resources 2 body 2008	29,4	29,9	10,1
Resources 2 body 2007	67,9	31,9	10,9
Inferred 2008	132,3	–	–
Inferred 2007	70,3		

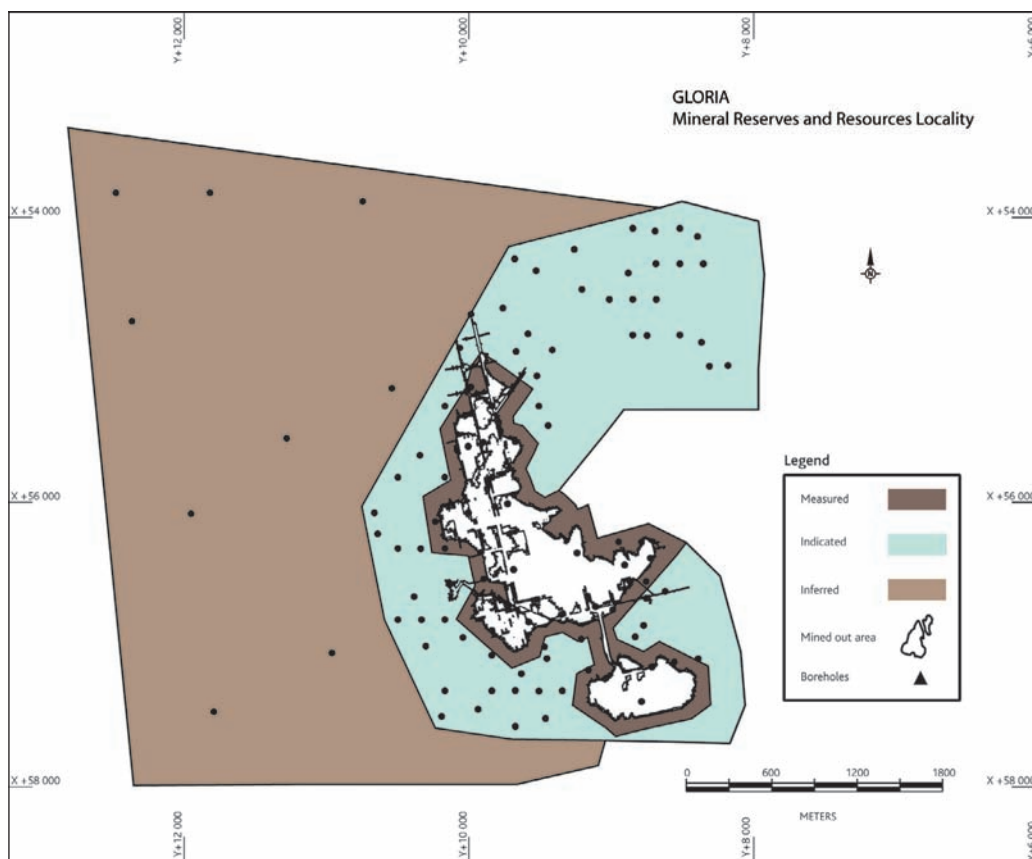
Measured resources = immediately available tonnes up to 50 metre in front of mining faces. Indicated resources are as per dense drilling area (see map). Proved reserves = measured resources less 23% pillar loss. Probable reserves = indicated resources less 23% pillar loss.

GLORIA MINE: I BODY MANGANESE RESOURCES/RESERVES

Gloria I body resources	Tonnes		Gloria I body reserves	Tonnes	
	Mt			TMt	Mn %
Measured	8,82	Proved	6,8	38,4	4,9
Indicated	43,7	Probable	33,6	38,3	5,67
Total resources I body 2008	52,5	Total reserves I body	40,4	38,3	5,54
Total resources I body 2007	97,6	Total reserves I body	75,1	38,3	5,67
Inferred 2008	132,3		–	–	–
Inferred 2007	70,3				

HISTORICAL MANGANESE PRODUCTION AT NCHWANING AND GLORIA MINES

Year	Nchwaning Mt	Gloria Gloria Mt
2003/2004	1,17	0,33
2004/2005	1,97	0,15
2005/2006	2,83	0,13
2006/2007	2,49	0,43
2007/2008	2,71	0,41



Iron Ore

Locality – The Iron Ore Division is made up of the Beeshoek Mine located on the farms Beeshoek 448 and Olynfontein 475. The iron ore resources on the farms Bruce 544, King 561, and Mokaning 560, which were formerly known as the BKM Project, are now being developed into what is known as the Khumani Iron Ore Mine. All properties are in the Northern Cape approximately 200 kilometres west of Kimberley. The Beeshoek open-pit operations are situated 7 kilometres west of Postmasburg and the new Khumani open pits will be adjacent to, and south-east of, the Sishen Mine, which is operated by Kumba Resources. Located at latitude 28°30'00"S/longitude 23°01'00"E, and latitude 27°45'00"S/longitude 23°00'00"E respectively, these mines supply iron ore to both the local and export markets. Exports are railed to the iron ore terminal at Saldanha Bay.

History – Mining of iron ore (mainly specularite) was undertaken as early as 40 000 BC on the farm Doornfontein which is due north of Beeshoek. The potential of iron ore in this region was discovered in 1909, but, due to lack of demand and limited infrastructure, this commodity was given little attention. In 1929 the railway line was extended from Koopmansfontein (near Kimberley) to service a manganese mine at Beeshoek. In 1935 The Associated Manganese Mines of South Africa Limited (Assmang) was formed, and in 1964 the Beeshoek iron ore mine was established, with a basic hand sorting operation. In 1975 a full washing and screening plant was installed and production increased over the years to the current level of approximately 6 million tonnes a year.

Mining authorisation – The Beeshoek mining lease (ML3/93) comprises an area of 5 685,64 hectares and is located on the farms Beeshoek (448) and Olynfontein (475). An application for the conversion to a new order mining right was submitted during the 2008 financial year.

The Khumani mining lease comprises an area of 7 388,02 hectares and is located on the farms Bruce (544), King (561), Mokaning (560) and McCarthy (559). New order mining rights were granted during the 2007 financial year.

Geology – The iron ore deposits are contained within a sequence of early Proterozoic sediments of the Transvaal Supergroup deposited between 2 500 and 2 200 million years ago. In general two ore types are present, namely laminated hematite ore forming part of the Manganore Iron Formation and conglomerate ore belonging to the Doornfontein Conglomerate Member at the base of the Gamagara Formation.

The older laminated ore types occur in the upper portion of the Manganore Iron Formation as enriched high-grade hematite bodies. The boundaries of high-grade hematite ore bodies crosscut primary sedimentary bedding, indicating that secondary hematitisation of the iron formation took place. In all of these, some of the stratigraphic and sedimentological features of the original iron formation are preserved.

The conglomeratic ore is found in the Doornfontein Conglomerate Member of the Gamagara Formation and is lenticular and not persistently developed along strike. It consists of stacked, upward fining conglomerate-gritstone-shale sedimentary cycles. The lowest conglomerates and gritstones tend to be rich in sub-rounded to rounded hematite ore pebbles and granules and form the main ore bodies. The amount of iron ore pebbles decreases upwards in the sequence so that upper conglomerates normally consist of poorly sorted, angular to rounded chert and banded iron formation pebbles.

The erosion of the northern Khumani deposit is less than that in the southern Beeshoek area. The result is that Khumani is characterised by larger stratiform bodies and prominent hanging wall outcrops. The down-dip portions are well preserved and developed, but in outcrop the deposits are thin and isolated. Numerous deeper extensions occur into the basins due to karst development. A prominent north-south strike of the ore is visible. The southern Beeshoek ore bodies were exposed to more erosion and are more localised and smaller. Outcrops are limited to the higher topography on the eastern side of the properties. Down dip to the west, the ore is thin and deep. The strike of the ore bodies is also in a north-south direction, but less continuous.

Haematite is the predominant ore mineral, but limonite and specularite also occur.

MINERAL RESOURCES AND ORE RESERVES

In the iron ore operations, the following table shows how the search ellipse (ie the ellipsoid used by the kriging process to determine if a sample is used in the estimation of a block) is used to classify the mineral resource:

	Minimum number of samples	Maximum number of samples	Search ellipse settings XYZ (m)
Measured	6	30	100 × 100 × 10
Indicated	5	30	200 × 200 × 20
Inferred	4	30	400 × 400 × 40

ORE RESERVES AND MINERAL RESOURCES (continued)

Only measured and indicated resources are converted to proved and probable reserves respectively. Modifying factors were applied to these resources and financially optimised. The financial outline is used to define the optimal pit by means of the Lersch-Grossman algorithm. The resources within this mining constraint are defined as reserves. These are categorised into different product types, destined for the different plant processes and scheduled for planning.

The methodology followed to identify targets is initiated with geological mapping, followed by geophysics (ground magnetics and gravity). Percussion drilling is used to pilot holes through overlying waste rock down to the iron ore bodies. Diamond drilling is the next phase, which is usually on a 200 × 200-metre grid. Further infill drilling is carried out at spacing ranging from 100 × 100 metres to 25 × 25 metres, depending on the complexity of the geological structures. Numerous exploration programmes were completed in the last 40 years. A total of 2 832 holes (1 315 holes on Khumani and 1 517 holes on Beeshoek) were drilled. Core samples were logged and split by means of a diamond saw and the half-core is sampled every 0,5 metres. Before submission for assaying, the half-cores were crushed, split and pulverised. Samples with values larger than 60% are included in the definition of the ore bodies. Any lower-grade samples inside the ore body are defined as internal waste and modelled separately. Each zone is modelled per section, and then wire framed to get a three-dimensional (3D) model.

Ordinary kriging interpolation within Datamine was used to estimate the grade of each 10 × 10 × 10-metre block generated within the geological model. Density in the resource model is calculated using a fourth degree polynomial fit applied to the estimated Fe grade. Densities range from 4,38 t/m³ (60% Fe) to 5,01 t/m³ (68% Fe). A default density of 3,2 is used for waste.

At Beeshoek all blast holes are sampled per metre, but composited per hole. All holes are analysed for density and blast holes in ore are sampled and analysed for Fe, potassium oxide (K₂O), sodium oxide

(Na₂O), silica (SiO₂), aluminium oxide (Al₂O₃), phosphorus (P), sulphur (S), CaO, MgO, Mn and barium oxide (BaO). Every fifth blast hole is geologically logged per metre, which is used to update the geological model. The chemical results of these holes are used to update the ore block model. Approximately 45 000 blast holes are drilled a year and 9 000 blast holes are used every year to update the models. The major analytical technique for elemental analyses is XRF spectroscopy. Volumetric titration is used as verification method for the determination of total iron in the ore. International standards (eg SARM11) and inhouse iron standards are used for calibration of the XRF spectrometer. The Beeshoek laboratory participates in a round robin group that includes seven laboratories for verification of assay results.

HISTORICAL PRODUCTION AT BEESHOEK AND KHUMANI MINES

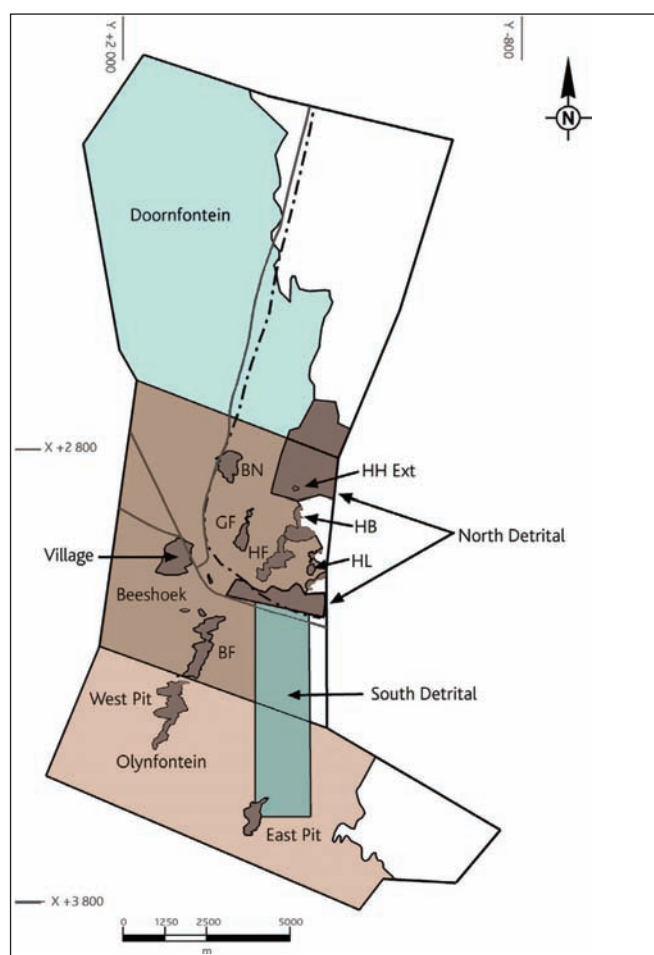
Year	Beeshoek Mt	Khumani
2003/2004	6,3	
2004/2005	6,0	
2005/2006	6,2	
2006/2007	6,7	
2007/2008	5,3	2,0

Year-on-year change – The 2008 mineral resources at Beeshoek Mine decreased from 134,5 to 128,36 million tonnes, due to the annual production drawdown. The mineral reserves at Beeshoek decreased from 28,6 million tonnes to 22,6 million tons. The village deposit is still not in reserve as a result of to the high stripping ratio, but due to the higher iron ore prices, this deposit will be revalued to see if its exploitation had become economic. Ore reserves at the BN and the BF pits were drawn down heavily to meet sales requirements. The Khumani Mine will take over the Beeshoek export production in mid-2008.

BEESHOEK IRON ORE: RESOURCES/RESERVES

Pit/Area	Measured		Indicated		Inferred		Total resource no inferred		Proved reserve		Probable reserve		Total reserve	
	Mt	Fe %	Mt	Fe %	Mt	Fe %	Mt	Fe %	Mt	Fe %	Mt	Fe %	Mt	Fe %
BN	21,4	63,51	0,01	62,67	–	–	21,41	63,51	14,58	64,03	–	–	14,58	64,03
HF/HB	1,66	64,3	0,30	63,85	–	–	16,90	64,30	2,55	65,24	0,03	66,45	2,58	65,25
BF	8,57	63,35	0,23	63,54	–	–	8,80	63,36	3,54	63,72	0,01	62,58	3,55	63,72
East Pit	9,14	64,61	0,03	64,19	–	–	9,17	64,61	1,89	65,66	–	–	1,89	65,66
Village	40,79	63,56	0,09	64,64	–	–	40,89	63,57	–	–	–	–	–	–
GF	3,13	63,81	0,09	61,80	–	–	3,22	63,76	–	–	–	–	–	–
HH Ext	0,28	62,63	–	–	–	–	0,28	62,63	–	–	–	–	–	–
HL	3,57	65,09	0,05	65,23	–	–	3,62	65,1	0,27	65,96	–	–	0,27	65,96
West Pit	10,19	63,04	–	–	0,05	61,87	10,19	63,04	–	–	–	–	–	–
N Detrital	–	–	5,9	60,00	–	–	5,9	60,00	–	–	–	–	–	–
S Detrital	–	–	–	–	3,7	60,0	–	–	–	–	–	–	–	–
Total 2008	113,67	63,74	6,65	60,44	3,75	61,87	120,38	63,55	22,8	64,28	–	–	22,9	64,28
Total 2007	120,74	63,67	6,70	60,07	0,05	61,87	127,49	63,31	28,0	64,16	0,62	64,03	28,62	64,16

Beeshoek resources



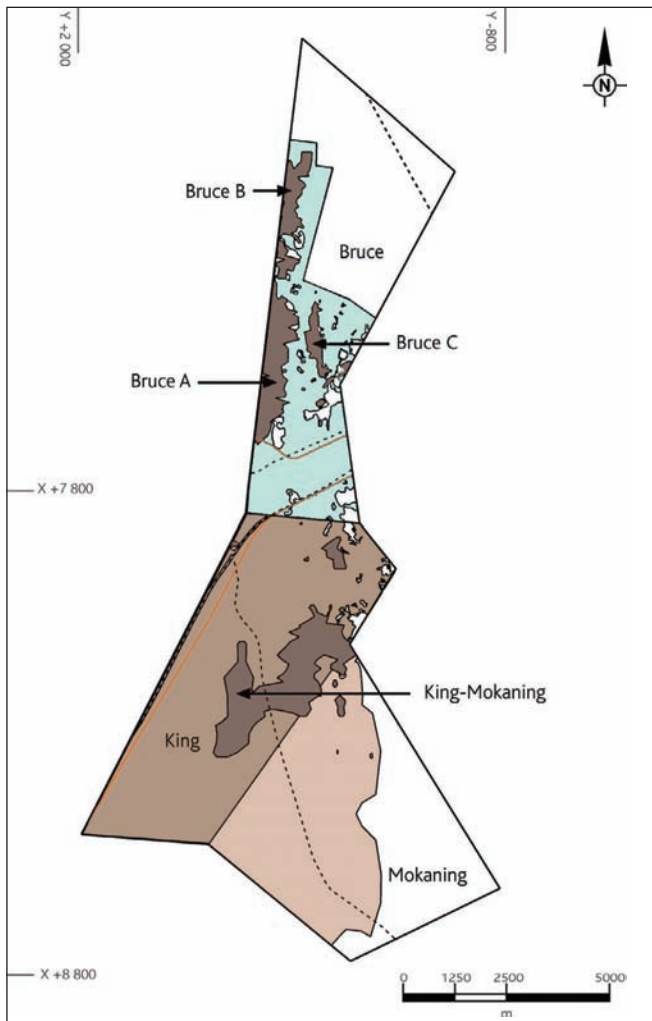
Year-on-year change – At Khumani Mine the 2008 mineral resources remain the same when compared to 2007. The ore reserves increased by 15% to 510,9 million tonnes (444,7 million tonnes) due to the higher iron ore prices taken into account in the open-pit designs. It is however expected that these reserve figures will further increase due to the iron ore price increase announced in April 2008. Infrastructure construction is in progress, and production is to start mid-2008, with an estimated life of mine of 30 years. During the 2007/2008 financial year overburden stripping took place and in the order of 2 Mt ore was stockpiled.

Mining operations are all open pit, based on the conventional drill-and-blast, truck-and-shovel operations. Run-of-mine ore is crushed and stored as high or normal grade on blending stockpiles. Ore from the stockpiles is either sent to the wash-and-screen plant or, if contaminated, to the beneficiation plant. The washing and screening plant consist primarily of tertiary crushing, washing, screening, conveying and stacking equipment. The beneficiation plant consists of tertiary crushers; scrubbers; coarse and fine jigs or Larcodems; fine crushing; elutriators and upward flow classifiers; lumpy, fines and scaw product stockpiles; and a rapid load-out facility. No chemical is being used in any of the treatment plants.

KHUMANI IRON MINE: RESOURCES/RESERVES

Area	Measured		Indicated		Inferred		Total measured and indicated		Proved reserve		Probable reserve		Total reserve	
	Mt	Fe %	Mt	Fe %	Mt	Fe %	Mt	Fe %	Mt	Fe %	Mt	Fe %	Mt	Fe %
Bruce A	23,5	64,91	99,0	64,54	0,8	63,37	122,5	64,60	13,9	64,47	84,2	64,43	98,1	64,44
Bruce B	21,1	65,71	77,0	64,06	8,7	64,64	98,1	64,43	20,4	65,55	64,7	63,88	85,1	64,28
Bruce C	37,2	65,45	6,9	65,95	1,6	64,80	44,1	65,45	30,4	65,27	1,66	65,55	32,1	65,28
King/Mokaning	255,8	64,53	123,9	64,48	17,7	63,98	379,7	64,49	209,6	64,47	85,99	64,64	295,6	64,52
Khumani Detrital	–	–	–	–	12,0	60,00	12,0	60,00	–	–	–	–	–	–
Total 2008	337,9	64,73	306,8	64,43	40,8	62,97	644,7	64,59	274,3	64,64	236,6	64,36	510,9	64,51
Total 2007	337,9	64,73	306,8	64,43	40,8	62,97	644,7	64,59	273,2	64,75	171,5	64,59	444,7	64,69

Khumani resources



Chromite

Locality – Chromite operations at Dwarsrivier Mine form part of the Chrome Division of Assmang Limited. The mine is situated on the farm Dwarsrivier 372KT, approximately 30 kilometres from Steelpoort and 60 kilometres from Lydenburg, in Mpumalanga province in South Africa. Located at longitude 30°05'00"E/latitude 24°59'00"S, Assmang purchased the farm from Gold Fields Limited, together with all surface and mineral rights in October 1998.

History – Neighbouring properties to the north and south of Dwarsrivier had existing chrome mining operations at the time of purchase. The feasibility study of the plant, tailings dam and designs for the open-cast and underground mines then commenced. After the completion of the consolidated assessment, approval to proceed with the final design and construction work was given in July 1999.

Chromite was obtained from the open-cast mining areas at a rate of approximately 0,9 million tonnes a year and these areas were mined out within five years. Underground mining commenced in 2005 at a rate of 1,2 million tonnes a year. Dwarsrivier Mine is specifically geared to deliver high quality metallurgical grade chromite to the Machadodorp smelter. In addition, the plant has been designed to produce chemical and foundry grade products.

Mining authorisation – An old order Mining Licence 21/99 was granted in October 1999. It was granted for the mining of chrome and platinum group metals. An application for the conversion to a new order mining right was submitted during October 2007.

Geology – Dwarsrivier Mine is situated in the eastern limb of the Bushveld Complex, which comprises persistent layers of mafic and ultramafic rocks, containing the world's largest known resources of platinum group metals, chromium and vanadium. The mafic rocks termed the Rustenburg Layered Suite, are approximately 8 kilometres thick in the eastern lobe, and are divided formally into five zones.

The rocks of the marginal zone at the base of the succession consist mainly of pyroxenites with some dunites and harzburgites. Above the marginal zone, the lower zone comprises mainly pyroxenites, harzburgites and dunite, and is present only in the northern part of the eastern lobe, and only as far south as Steelpoort. The appearance of chromitite layers marks the start of the critical zone, economically the most important zone. The layers are grouped into three sets termed the lower, middle and upper groups. The sixth chromitite seam in the Lower Group (LG6), is an important source of chromite ore and is the ore body being mined at Dwarsrivier Mine. In the

eastern lobe, in the vicinity of Dwarsrivier; the strike is nearly north-south, with a dip of approximately 10 degrees towards the west. Average thickness of the LG6 seam is about 1,86 metres in the Dwarsrivier area. Pipelike dunite intrusions are evident in the area, as well as dolerite dykes that on average strike northeast-southwest. No significant grade variation is evident, especially not vertically in the ore seam. Small, insignificant regional variations do, however, exist.

Mineral resources and ore reserves – Information was obtained from boreholes with a 300- to 150-metre grid spacing. Resources were determined with a decreasing level of confidence:

- Measured resource (150 metres drill grid spacing);
- Indicated resource (300 metres drill grid spacing); and
- Inferred resource (drill grid spacing greater than 300 metres)

All possible resources down to a mineable depth of 350 metres below ground level have been considered.

A strategy to ensure the availability of adequate information ahead of mining activities is in place. The strategy is to ensure all mining areas falling within the first five years of the life of mine plan contain proved reserves. Vertical diamond drilling holes are used, except where information is needed to clarify large-scale fault planes. The mineral resource at Dwarsrivier Mine is based on a total of 230 diamond drill holes that have been used for grade estimation and ore body modelling purposes. The drill core is NQ size and is geologically and geo-technically logged. The collar position of the drill holes is surveyed, but no down-hole surveys are done, and the holes are assumed to have minimal deflection.

The chromitite seam is bounded above and below by pyroxenites. As such, the ore horizon is clearly defined. The core is sampled from the top contact downwards at 0,5-metre intervals. The core is split and half is retained as reference material in the core sheds. The other half is crushed and split into representative samples, which are crushed and pulverised for chemical analysis. The samples are analysed fusion/ICP-OES for chrome oxide (Cr_2O_3), SiO_2 , FeO , Al_2O_3 , MgO and CaO . Three laboratories, all ISO 17025 accredited for this method, are used. Every tenth sample is analysed in duplicate. SARM 8 and SARM 9 standards, as well as inhouse reference material (CRI), are included every 20 to 30 samples in each batch. The density for each sample is measured using a gas pycnometer.

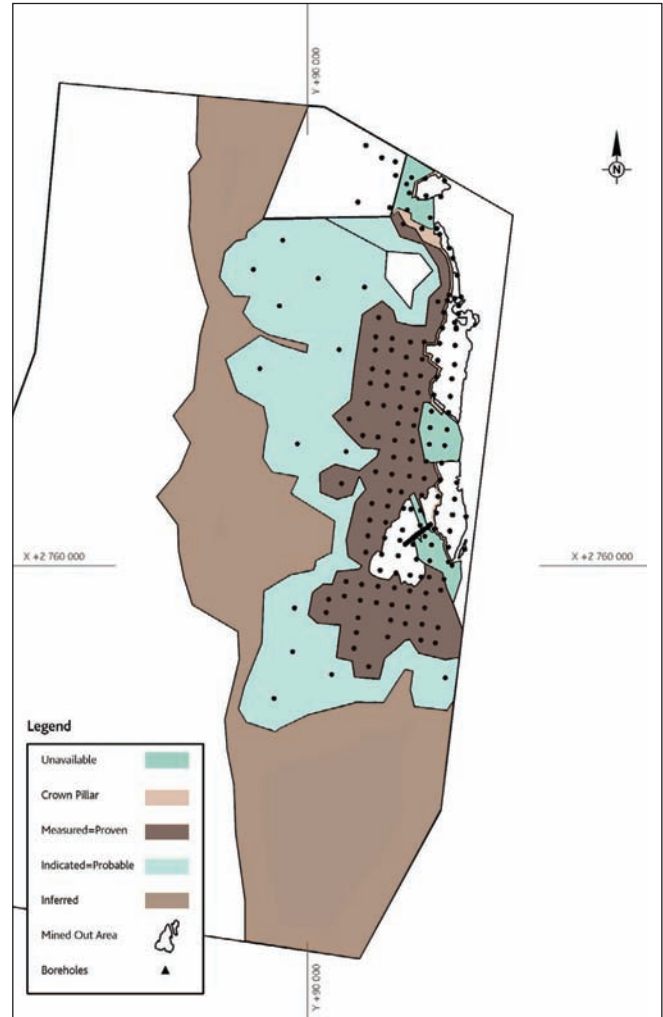
Datamine software is used to construct a 3-D geological model (wireframe) of the LG6 chromite seam, based on borehole and other geological data. A cut-off value of 35% Cr_2O_3 was used to

distinguish between ore and waste. Mineral resources have been calculated using ordinary kriging, where Cr_2O_3 -, FeO -, Al_2O_3 -, MnO and MgO -contents of the LG6 seam and densities were determined, using block sizes of $50 \times 50 \times 4$ metres.

During mining, a slightly diluted run of mine ore is fed to the beneficiation plant. This decreases the average grade from approximately 40% Cr_2O_3 to 37% Cr_2O_3 . An addition of approximately 9% of waste material results in this 3% Cr_2O_3 grade decrease. In the dense media separation part of the plant, the coarse fraction is upgraded to 40% Cr_2O_3 , with a yield of 80%. In the spiral section of the plant the finer fraction is upgraded to 44% Cr_2O_3 , and 46% Cr_2O_3 respectively, for metallurgical grade fines and chemical grade fines. Foundry sand is also produced with a similar grade to that of the chemical grade fines. A 67% yield is achieved in the spiral circuit.

Year-on-year change – When compared to 2007, the 2008 mineral reserves decreased by 1,3 million tonnes to 35,1 million tonnes (36,4 million tonnes) and the mineral resources show a decrease of 1,6 million tonnes to 44,02 million tonnes (45,64 million tonnes). The reason for the change is the draw-down by the annual production. The current life of mine of the Dwarsrivier Chrome Mine is more than 30 years. Excluded from this plan are the inferred mineral resources and material situated deeper than 350 metres below ground level.

Dwarsrivier Mine

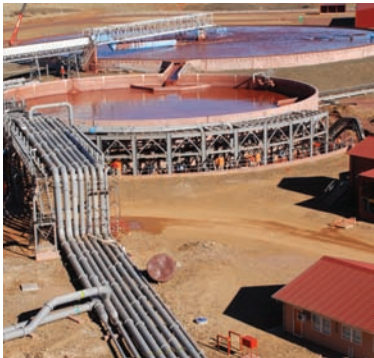


DWARSRIVIER MINE: CHROME RESOURCES/RESERVES PLAN

Resources	Tonnes			Reserves	Tonnes		
	Mt	Cr ₂ O ₃ %	FeO %		Mt	Cr ₂ O ₃ %	FeO %
Measured	15,30	39,32	23,21	Proved	12,2	39,32	23,21
Indicated	28,72	39,06	22,55	Probable	22,9	39,06	22,55
Total measured and indicated 2008	44,02	39,16	22,79	Total reserves	35,1	39,16	22,79
Total measured and indicated 2007	45,64	39,16	22,79	Total reserves	36,4	39,16	22,79
Inferred	53,11	39,00	22,71				

HISTORICAL PRODUCTION AT DWARSRIVIER CHROME MINE

Year	Mt
2003/2004	0,96
2004/2005	0,92
2005/2006	0,82
2006/2007	1,01
2007/2008	1,24





Of the R2,23 billion spent in the Iron Ore Division, R2,1 billion related to the construction of the Khumani Iron Ore Mine where production has already commenced.

