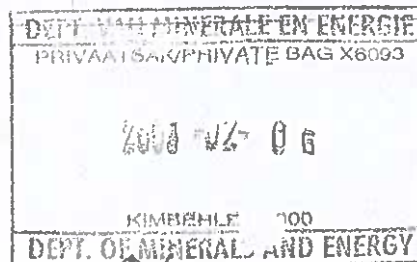




Our Ref: IV.04.05.044.JHB
Your Ref: (NC) 30/5/1/2/2/070 MR

63 Wessel Road Woodmead
PO Box 2597 Rivonia 2128
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Tel +27(0)11 807 8925
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general@ivuzi.co.za

43 Chapel Street
Kimberley
8300



7 February 2006

Attention: Mr. Rudzanni Mudau

BKM MINE

**ENVIRONMENTAL IMPACT ASSESSMENT AND MANAGEMENT REPORT ACCORDING TO THE
MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT (NO. 28 OF 2002)**

Dear Sir or Madam

With reference to the Mining Right Application for the BKM Mine: Ref: (NC) 30/5/1/2/2/070 MR:

Herewith, please find seven (7) copies of the Environmental Impact Assessment and Management Report (EIA/EMP) for the BKM Mine, situated in the Northern Cape Province for your review (review period of 120 days commencing 8 February 2006).

It is understood from our initial consultation that the Department of Minerals and Energy, Northern Cape will distribute this report to the following authorities:

- ✓ Department of Water Affairs (Attention Mr. Hennie Harding)
- ✓ Department of Tourism Environment and Conservation (Attention Ms. Dineo Moleko)
- ✓ National Department of Agriculture (attention Mr. Harm Voster)

**THE REGIONAL MANAGER
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REG NO.: 2002/028494/07

- ✓ National Monuments Council (SAHRA) (attention Andrew Timothy)

Ivuzi has distributed the draft Scoping Report to Stakeholders for review. The reports are available from the following venues:

- ✓ Olifantshoek Library;
- ✓ Postmasburg Library; and
- ✓ Kathu Library.

The report consists of 5 documents:

- ✓ Report 1 of 2
- ✓ Report 2 of 2
- ✓ Appendix 1 of 3
- ✓ Appendix 2 of 3
- ✓ Appendix 3 of 3

All comments received will be included within the final EIA / EMP.

An authorities meeting will be held on 9 March 11h00 at the Ammosal Club at Beeshoek Mine.

Should you have any queries or concerns, please contact the undersigned.

Kind regards

Tanja Thorius

Environmental Co-ordinator and Project Manager

(011) 803 5726 (tell)

(011) 803 5745 (fax)

**THE REGIONAL MANAGER
NORTHERN CAPE REGION**



ASSMANG

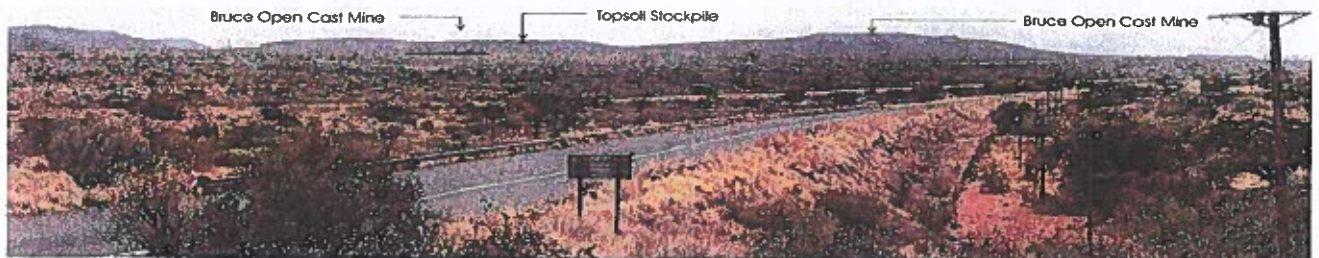
IRON ORE

BKM MINE
ENVIRONMENTAL IMPACT ASSESSMENT
AND
MANAGEMENT REPORT

**According to the Mineral and Petroleum Resources
Development Act (No. 28 of 2002)**



View 7 from N14 looking north-east towards Bruce mining area: BEFORE DEVELOPMENT



View 7 from N14 looking north-east towards Bruce mining area 3.2 km away AFTER DEVELOPMENT



Prepared by IVUZI (Pty) Ltd

Project No: IV.04.05.044.JHB

February 2006

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EXECUTIVE SUMMARY

INTRODUCTION

Assmang Limited, a mining company, mines manganese and iron ores in the Northern Cape and chrome ore in the Mpumalanga Province. The company also produces manganese alloys at its works in Cato Ridge in KwaZulu-Natal Province and chrome alloys at its works in Machadodorp in the Mpumalanga Province. The company is controlled jointly by African Rainbow Minerals (ARM), which owns 50.35 percent and Assore Limited, which holds 45.67 percent. Both holding companies are listed on the Johannesburg Security Exchange (JSE).

Assmang Limited has mining operations in the Northern Cape Province, which includes Beeshoek Iron Ore Mine ("Beeshoek Mine"). Mining at the Beeshoek Mine was established in 1964 with a basic hand sorting operation. In 1975 a full washing and screening plant was installed. Because of increased production, Beeshoek South, a southern extension of the Beeshoek Mine, was commissioned during 1999 on the farms of Beeshoek and Olyfontein.

Assmang is the holder of old order rights in respect of high-grade hematite iron ore deposits north of Beeshoek Mine on the farms Bruce, King and Mokaning, adjacent to the current Sishen Mine. The proposed area is situated 15 km south of Kathu. Neighbouring towns and villages include Olifantshoek, Beeshoek, Postmasburg, and Dingleton.

PROJECT DESCRIPTION

Assmang plans to replace and increase its iron ore sales by undertaking a new mining development (hereafter referred to as the BKM Mine, named after the farms Bruce, King and Mokaning) in order to utilize the available iron ore deposits. Beeshoek Mine will be decreasing its iron ore production significantly during the next 6 years as it reaches the end of its production capacity. The proposed BKM Mine is therefore intended to phase in iron ore production, replacing Beeshoek Mine production whilst Beeshoek Mine scales down. Increased production will take advantage of additional capacity allocation to be made available by Spoornet on the Sishen / Saldanha iron ore export channel over the period 2010 to 2015.

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It is envisaged that the BKM Mine construction will commence no later than June 2006 preceded by detailed engineering. The BKM Mine will be undertaken in two phases. During phase 1 (commencing end 2007 / beginning 2008), 8 million tons of product per annum will be produced. During Phase 2, which is intended to start from 2013 onwards, production will ramp up to produce 16 million tons product per annum from 2015, on the basis of logistical capacity being allocated by Transnet (Spoornet).

Associated with the BKM Mine is the following infrastructure:

- Development of various opencast pits for the mining of iron ore on the farms Bruce, King and Mokaning;
- Establishment of a washing and screening and beneficiation plant on Parson Farm;
- Establishment of ore-blending and product stockpiles on the Parson Farm;
- Primary and Secondary Crushing on the farms Bruce and King;
- Transportation of the crushed material from the pit to the plant via conveyor routes;
- Rapid rail loading facility, and associated infrastructure (i.e. small office and amenities);
- Development of a paste disposal facility on the farm King;
- Establishment of two overburden and low-grade ROM stockpiles;
- Establishment of 2 overburden dumps on the farms King / Mokaning and Bruce;
- Establishment of a discard stockpile on the farm Parson;
- Establishment of various topsoil stockpiles;
- Establishment of services, roads, railway line, power lines, water pipeline, telephone line, and sewage treatment facility.

ENVIRONMENTAL PROCESS

The BKM Mine's EIA / EMP was undertaken in accordance with the Mineral and Petroleum Resources Development Act No. 28 of 2002 and other relevant legislation including the Environment Conservation Act of 1989.

An Environmental Impact Assessment according to the Environment Conservation Act No. 73 of 1989 is undertaken in parallel to the EIA / EMP process.

As a prerequisite to the EIA / EMP, in accordance to the Mineral and Petroleum Resources Development Act, a Scoping Report, was submitted to the Department of Minerals and Energy,

Northern Cape and all stakeholders on 8 December 2005. The Scoping Report provided an overview of the project and details the issues identified to date, and also lists the recommended specialist investigations that need to be undertaken. Parallel to the submission of the Scoping Report an Environmental Impact Assessment according to the Environment Conservation Act of 1989 was submitted to the Department of Tourism, Environment and Conservation and all stakeholders for review.

This document serves as the final phase of the environmental investigations, in which the detailed specialist investigations are portrayed. It provides a detailed description of the environmental setting and envisaged impacts and recommended management measures to be implemented. The EIA /EMP will be further refined through a consultation process with the identified stakeholders and authorities.

ENVIRONMENTAL SETTING

Geology

The iron deposits of the BKM Mining area are contained within a sequence of Proterozoic sediments of the Transvaal Supergroup and Olifantshoek Group deposited between 2500 and 1800 million years ago. Although the iron deposits are geographically divided into the southern Beeshoek area and northern Bruce-King-Mokaning-McCarthy area, the geological settings are identical. They are situated on the Maremane dome and along the unconformity between the Gamagara Formation and the underlying Manganore Iron Formation. In general two ore types are present, namely laminated hematite ore, which forms part of the Manganore Iron Formation and conglomerate ore belonging to the Doornfontein conglomerate member at the base of the Gamagara Formation.

Climate

The BKM Mine is located in an area that is characterised by a low rainfall. Most of the rainfall in this semi-arid region occurs in summer and autumn between the months of December and April.

High summer temperatures are the cause of atmospheric instability and turbulence, which leads to the development of thunderstorms.

The predominant wind direction is from the north-northwest to west with frequent winds also occurring from the north and south. Mean daily wind speeds are generally in the range of 2 m/s to 5 m/s, with maximum daily speeds typically ranging from 3 m/s to 10 m/s. The months of August to October are characterised by increased wind velocities with low wind speeds occurring during the months of April to July.

Topography

The area surrounding the proposed BKM mining area consists of a mix of unutilised gradually sloping mountainsides and relatively flat river valleys in the south to flat uncultivated land in the north. The general topography is characterized by fairly flat terrain with no steep inclines except for the two mountain ranges to the west (Langberg range) and a smaller range to the east (Kuruman Heuwels). Various landform elevations occur on the three farms, with the highest elevations on the southern portion of Mokaning farm (1365 mamsl) and on the border between Mokaning and King farms (1347.3 mamsl).

Soils

Hard rock outcrops characterise the topographic highs of the area. The outcrops generally comprise quartzites and the iron ore bearing ironstones. These outcrops form prominent hills or ridges with moderate to steep slopes. In these areas, soils are very shallow to non-existent, occurring as erratic pockets of orange sands within the outcrops. The pockets can be as deep as 1m. These soils are classified as Mispah Form soils, with minor occurrences of Hutton Form soils.

The very gently sloping areas between the hills and ridges are generally underlain by calcrete or dolomite. The calcrete is overlain by orange fine sands, which can be classified as Plooyburg Form soils. The calcrete surface is undulating, with isolated boulder outcrops occurring within the soils. The soil depth is highly variable, being between about 0,3 m and greater than 2m.

On the lower slopes between the Plooyburg Form soils and the Mispah Form soils are Hutton Form soils. However, these areas are characterised by abundant to numerous surface boulders derived from the outcrops upslope thereof, which have moved by gravity down slope to be deposited on the ground surface.

Land Capability

Agricultural activities in the Kalahari region are limited due to shallow soils and the lack of water; hence the natural veldt is mainly suitable for extensive livestock grazing (Golder Associates, 2004).

The Mispah Form soils can be classified as wilderness land or non-arable land. Although the remainder of the area is underlain by Plooyburg and Hutton Form soils, due to the variability of soil depth and the presence of isolated rock outcrops within these soils, as well as abundant to numerous scattered boulders on the surface, these soils are classified as low yield grazing land.

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Land Use

Sishen Iron Ore Mine, a large opencast mining operation, is situated directly west and northwest of the proposed BKM Mine. Besides the mining operations, other activities in the region include farming, and small residential communities and business trade. Land use is currently grazing, on an extensive basis - that is, a relatively small number of stock per hectare. There is no permanent surface water on the site, and all stock watering is provided by reservoirs using groundwater sources. The main land uses in the study area are: Livestock grazing; Game farming; and Mining.

Natural Vegetation

Vegetation of the BKM area of interest consists mainly of the Kalahari Mountain Bushveld with elements of Kalahari Plateau Bushveld and Kalahari Plains Thorn Bushveld well represented.

Though Rebelo and Low indicate the area as Kalahari Plateau Bushveld (Rebelo, A.G. & A.B. Low, 1996), the ore body constitutes a geomorphology of its own and leads to Kalahari Mountain Bushveld species prevailing. The botanical communities do therefore not represent climax compositions, but rather an ecotone between the 3 types of Kalahari Bushveld. Of importance are changes from the typical Kalahari vegetation and botanical communities. These changes are found in pans and the riparian zones of streams and rivers. Further the geology of the dolomitic areas allows a clayey consolidation that also allows changes in typical species composition.

Animal Life

Fauna is limited to smaller mammals and specifically Duiker and Steenbuck are common. Kudu do occur but are scarce. Smaller carnivores are present and the Striped Pole Cat (Red Data Species) was observed on site. Avifauna is well represented with unusual species for the area such as Black-winged Stilt and Common Sandpiper observed at pans holding water. A species list of 261 species is reported in the area (Roberts Multi-Media Version 3).

Surface Water

The BKM Mine falls within the Lower Vaal Water Management Area (No. 10). The area is situated in the D41 catchment of the Gamagara River, the quaternary catchment being D41J.

The BKM Mine is located in an area with rivers flowing in a north-westerly direction. The major river traversing the BKM Mine area is the Gamagara River. There are six other watercourses,

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which are all tributaries of the Gamagara River. The six minor tributaries of the Gamagara River are based on contour data and are regarded as storm water drainage paths.

Groundwater

The geohydrological regime in the BKM Mine area is predominantly made up of two aquifer systems. The first, the upper, semi-confined aquifer would occur where thick calcrete cover is present and forms in the calcrete or on the contact between the calcrete and the underlying Kalahari. The second, deeper aquifer is associated with fractures, fissures and joints and other discontinuities within the consolidated Griqualand West Sequence and associated intrusives.

Borehole yields vary between 0.5 and 70 l/s in the BKM area with static water levels usually occurring from 8 mbs in the unaffected plains to more than 100 meters below surface where it is affected by the dewatering cone from Sishen mine dewatering. Geological strata at BKM dip to the west while the regional groundwater flow gradient is approximately 0.5 % towards the north-north-west.

Due to the presence of dolerite dykes that serve as groundwater flow barriers, the cone of depression caused by existing Sishen mine and future BKM mine dewatering is to a very large extent contained within a groundwater compartment formed by these dykes. The BKM Mine opencast pits are situated in this compartment where significant dewatering has already occurred by the mining activities at the neighbouring Sishen Mine. Current water level depths from surface at the BKM pits are approximately 120 mbs (1080 m amsl) at the Bruce pits and 75 mbs (1145 m amsl) below the King/Mokaning pits.

Air Quality

There are not many sources of air pollution in the region besides the existing Sishen mine. Sources that may contribute to air pollution include vehicle tailpipe emissions (the R325 (N14) runs between the farms Bruce and King), household fuel combustion, biomass burning (from veldt fires and agriculture) and various miscellaneous fugitive dust sources (agriculture activities, wind erosion of open areas and vehicle entrainment of dust along unpaved and paved roads). Sensitive receptor areas in the vicinity of the mine are the towns of Dingleton, Olifantshoek and Kathu. In addition, there are various farms and homesteads surrounding the BKM Mine area.

Particulates represent the main pollutant of concern in the assessment of opencast mining operations. Particulate matter is classified as *criteria pollutant*, with ambient air quality guidelines and standards having been established by various countries to regulate ambient concentrations

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of this pollutant. Particulates in the atmosphere may contribute to visibility reduction, pose a threat to human health, or simply be a nuisance due to their soiling potential.

Noise

The area in which the BKM Mine is to be established is characterised by two different environments namely a rural farming community where the farmsteads are located at large distances from another; and the existing large opencast operation at Sishen.

Areas in the proximity of existing mining activities will already be subjected to the noise emissions from diesel-powered equipment and other mining processes. However, unless farmsteads are very close to these sources of noise, the pre-development ambient noise levels are still expected to be very low.

Archaeology

The archaeology of the Northern Cape is rich and varied, covering long spans of human history. Concerning Stone Age sites here, C.G. Sampson has observed: "It is a great and spectacular history when compared to any other place in the world" (Sampson 1985). Some areas are richer than others, and not all sites are equally significant.

Four cemeteries, previously identified, were inspected and briefly characterised.

A very sparse scatter of Stone Age artefacts, principally on jaspilite, was observed at several points inspected on the flat and gently undulating plains on the four properties. No major sites could be distinguished and it was determined that on the whole this topographic feature has generally low archaeological visibility.

The lower banks of the GaMogara bore traces of Stone Age sites, over generally low density. However, an area with much higher density was noted on the south bank of the GaMogara on the property Parson. Artefacts on jaspilite included flakes with prepared platforms, ascribable to the Middle Stone Age or Fauresmith. As on the plains, a low density of artefacts was found on some parts of hills..

The prominent outcrop of rocks, one of the landmarks of the area, clearly had been a focus of human activity in the past. Pot fragments reflecting Tswana settlement in the region were found, in addition to rich surface spreads of Middle Stone Age or Fauresmith stone artefacts.

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Visual Aspects

The semi-arid open nature of the landscape renders it particularly sensitive to visual intrusion, especially from mining activities of the nature and scale proposed for the BKM Mine. However, the landscape character and sense of place is also determined, to a large extent, by the existing mining activities in the region. The expectation of visitors to the area and those persons travelling along the N14 will therefore be of a mining area and not a pristine landscape devoid of human intervention.

Regional and Socio-Economic Structure

The Northern Cape Province comprises six regions of which the Kalahari region covers an area of 50 015 km², which is 13 percent of the area of the Northern Cape. The population of the Kalahari region is estimated at 84 234, resulting in a population density of 1.68 people / km². The majority of the population is urbanised, with 77 percent based in the small towns.

Kathu is the town closest to the proposed BKM Mine, approximately 15 km north of the centre of the proposed project and falls within Ward 4 of the Gamagara Local Municipality. The town was initially developed by Iscor and provides a diverse range of activities, services and infrastructure that the populations of Dingleton, Sesheng and Kathu can utilize. These include police stations, shops and cafes, lodges, guesthouses, a golf course and pleasure resort and schools.

Interested and Affected Parties (I&APs) / Stakeholders

Introductory meetings were held on two separate dates (25 and 26 May 2004) to accommodate all Authorities wanting to attend. Representatives from various departments were contacted throughout the Scoping Phase and were again invited to attend the Scoping Meeting on 29 June 2004 at the Beeshoek Ammosal Club Conference Room at Beeshoek Mine.

Three phases of stakeholder consultation were undertaken.

Firstly, advertisements regarding the project background, the assessment process being followed and the details and purpose of the Public Meeting were placed in the The Volksblad; The Kuruman Bulletin; and The Gemsbok newspapers during June 2004. Notices were placed at 13 different venues over the area of Postmasburg, Olifantshoek, Kathu and surrounding communities. In addition, notices in Afrikaans, English and Setswana were distributed by the Human Resources Department of Beeshoek Mine to all the Beeshoek workers and mine unions. All stakeholders on the database were invited to attend a Stakeholders meeting on 3 July 2004 on site at the farm King. Background Information Documents (BIDs) were made available to the registered I&AP's / Stakeholders.

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The property owners from the area surrounding BKM Mine requested a focus meeting in which issues regarding the proposed BKM Mine could be discussed. A meeting was held on 25 October at the Sishen Shooting Club.

Secondly, as an Environmental Impact Assessment according to the Environment Conservation Act of 1989 for the BKM Mine is undertaken parallel to the BKM Mine EIA / EMP, stakeholders were informed of these proceedings. Advertisements, notifying the public of the EIA process were placed in the Gemsbok; Volksblad; and Kuruman Bulletin newspapers and notices were placed in various venues in the Olifantshoek, Postmasburg, Kuruman, Danielskuil and Kathu areas. An on-site notice was also placed at the farm King. BiDs were made available to the registered I&AP's / Stakeholders.

Thirdly, as the commencement of the environmental reporting according to the Mineral and Petroleum Resources Development Act is subject to the submission and acceptance of the Mining Right Application, the Scoping Report could only be submitted in December 2005 and not 2004 as initially envisaged. Due to the delay in timeframes a third consultation phase was undertaken to ensure that the registered I&AP's and Stakeholders were kept informed of the status associated with the environmental reporting. Advertisements and notices were also placed as per the initial phase to ensure that the broader public and those who did not have the opportunity during the initial consultation phases had the opportunity to register as I&AP's or Stakeholders if they had not during the initial phases.

The main concerns of the stakeholders are documented in this report and can be summarised as:

- Impact of the BKM Mining activities on the surface- and groundwater in the area;
- Impact of light pollution on the surrounding area;
- Increase of dust dispersion in the area;
- Impact of noise on the environment area;
- Employment opportunities for the local people;
- Transition between the downscaling of the Beeshoek Mine and the upcoming BKM Mine and the subsequent employee transfer;
- Impact of the BKM Mine blasting schedules and mining activities on the surrounding mines, in specific mining interruptions, infrastructure damage and safety issues at the Sishen Mine area neighbouring the Bruce opencast mining area;
- Impact on railway line in the event of tailings dam failure;
- Contribution towards the development of the surrounding community;
- Impact of the BKM Mine on the current infrastructure in the area;
- Housing requirements for employees;

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-
- o Impact on the surrounding property values as well as potential damage to properties; and
 - o Presence of land claims in the area.

ENVIRONMENTAL IMPACTS AND MANAGEMENT MEASURES

Impacts identified as part of the specialist investigations and detailed investigations are presented in Section 5 of the EIA / EMP. The significance of the impacts can be reduced to a level of acceptable risk through the implementation of sound and feasible management measures as presented in Section 6 of this document.

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SECTION 1

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1.0 BRIEF PROJECT DESCRIPTION

1.1 Name and Address of Mine

Name of Mine: BKM Mine

Postal Address:

Postal Address	PO Box Mancorp Mine Postmasburg 8423
-----------------------	--

Contact Numbers:

Phone Number	053 311 6666
Fax Number	053 311 4642

ARM Iron Ore Project Manager:

Freddie Human

Assmang Technical Services Manager:

Alex Mostert

Assmang General Mine Manager:

Willem Grobbelaar

1.2 Name and Address of Mine Owner

Name of Mine Owner: Assmang Limited

Postal Address:

Postal Address	PO Box Mancorp Mine Postmasburg 8423
-----------------------	--

Physical/ residential address:

Physical Address	Beeshoek Iron Ore Mine Mancorp Mine Postmasburg 8423
-------------------------	---

**THE REGIONAL MANAGER
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Contact Numbers:

Phone Number	053 311 6666
Fax Number	053 311 4642

ARM Iron Ore Project Manager: Freddie Human
Assmang Technical Services Manager: Alex Mostert
Beeshoek General Mine Manager: Willem Grobbelaar

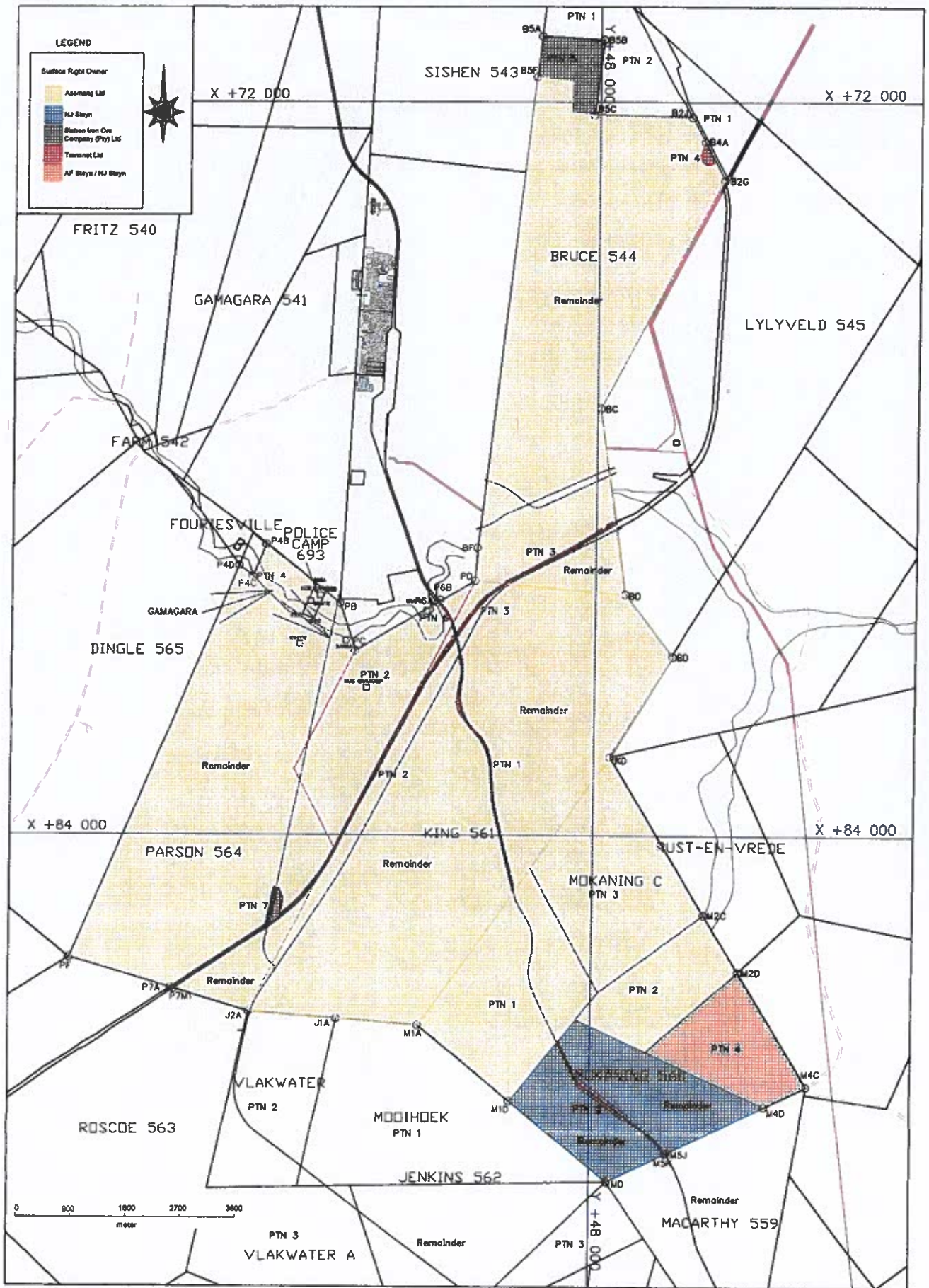
1.3 Name and Address of Mineral Rights Holder

Assmang Limited is the minerals rights holder of all iron bearing minerals within the Mining Rights Area (Refer to Section 1.2). Refer to Figure 1-1 (page 1-3) for the Surface Rights and Figure 1-2 (page 1-4) for the Mineral Rights.

1.4 Name and Address of the Applicant or Holder of the Mining Right

Assmang Limited is the applicant of the Mining Right of the relevant areas (Refer to Section 1.2).

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urface Rights**

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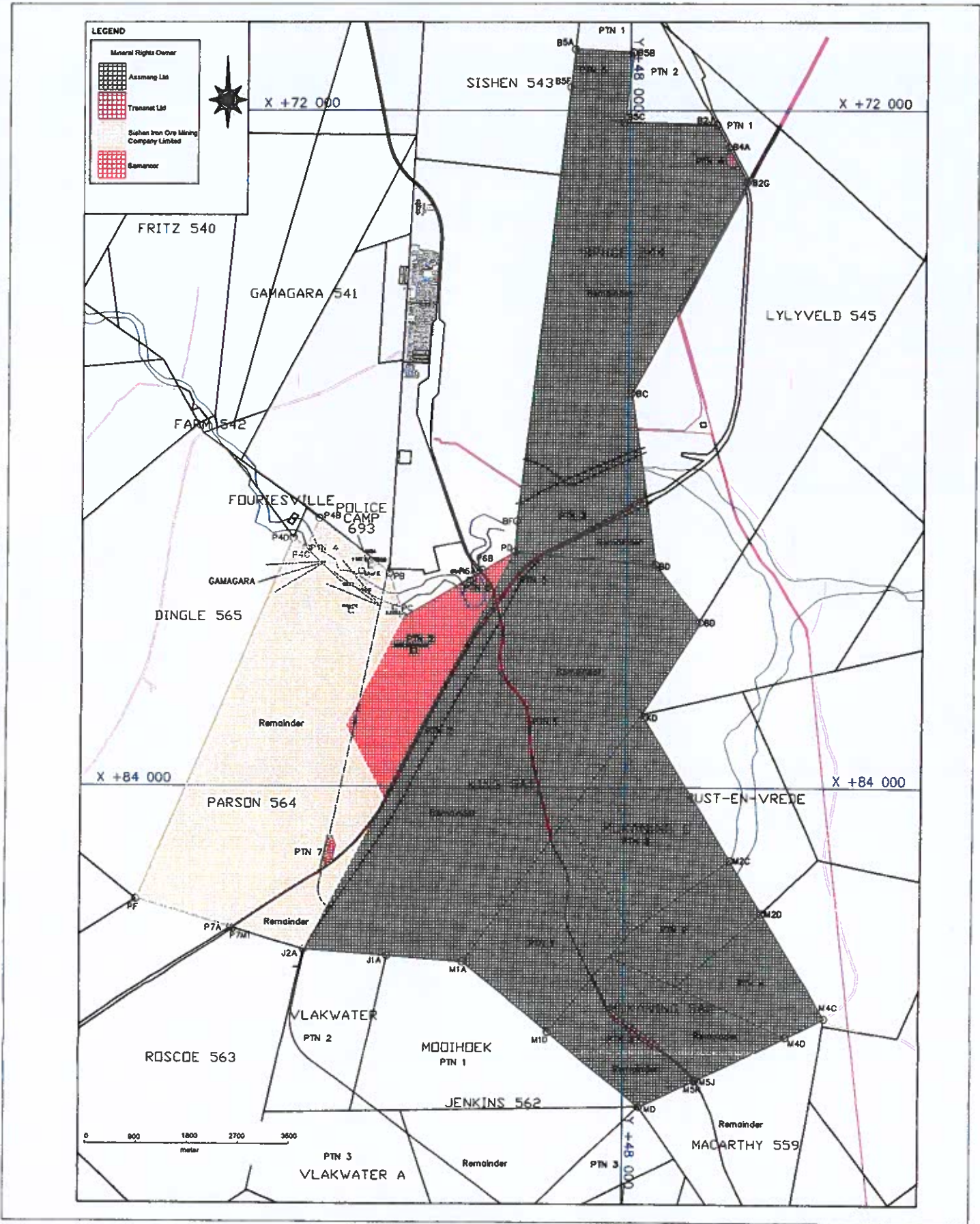
Ivuzi (Pty) Ltd

WATER, ENVIRONMENTAL & EARTH SCIENCE CONSULTANTS

P.O. Box 2597 Rivonia 2128 Tel: +27 11 803 5726 Fax: +27 11 803 5745

Project Number: IV04.05.044

Figure Number: 1-1



**BKM Mine
Mineral Rights**

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P.O. Box 2597 Rivonia 2128 Tel: +27 11 803 5726 Fax: +27 11 803 5745

Project Number: IV04.05.044

Figure Number: 1-2

1.5 Name and Address of the Owner of the Land and the Title Deed Description

According to the Mineral and Petroleum Resources Development Act 28 of 2002, Section 1, a Mining Area:

- In relation to the mining right, means the area for which that right is granted;
- In relation to any environmental, health, social and labour matters and any latent or other impact thereto, includes:
 - Any adjacent or non-adjacent surface of land on which the extraction of any mineral has not been authorized in terms of the act, but upon which related or incidental operations are being undertaken and including:
 - Any area connected to such an area by means of any road, railway line, power line, pipeline, cable way or conveyor belt; and
 - Any surface of land on which such road, railway line, power line, pipeline or cable way is located; and
 - All buildings, structures, machinery, mine dumps or objects situated on or in that area which are used for the purposes of mining on the land in question.

In order to clarify the identification of the mining right area, and the mining area (which will be associated with the proposed BKM Mine mining operation, and identified in the mining right application as stipulated by the Mineral and Petroleum Resources Development Act) this application for the mining right for the proposed BKM Mine mining operation has separated such areas into two schedules.

Firstly a Mining Right Area, which refers to:

- The area in respect of which the mineral rights belong to the applicant (and which are subject to the current conversion application to a new prospecting right in terms of Schedule II of the Act);
- The area for which a Mining Right Application has been submitted.

Secondly the mining area which refers to:

- All the properties to be included within the mining right area, as well as
- The area that falls outside the mining right area, but which includes those other areas referred to in the definition of the mining area referred to above, on, over or

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below which haul roads, railway lines for the rail load out facilities and conveyors may be established.

The area for which the environmental investigations (i.e. EIA / EMP) are undertaken include all the areas within the mining area in which the proposed mining development will be operating.

The overall mining area is approximately 9 000 ha. The footprint area to be disturbed by the proposed development is estimated to be 3 700 ha (which includes the northern and southern opencast 500 m blasting area, the Bruce and Mokaning Residue dumps, Paste disposal facility area, Plant area and excludes railway lines, load out facility, haul roads, conveyors and other infrastructure).

1.5.1 Name and Address of the Owner of the Land

Refer to Table 1-1 (page 1-7).

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Table 1-1: Title Deed description of the BKM mining area

Farm Name	Portion	Registration Division	Size	Minerals Rights Owner and Title Deed	Address	Surface Owner and Title Deed	Address
Bruce No. 544	RE	Kuruman RD	1891.2995Ha	Assmang Ltd T 349 of 1954	PO Box 782075 Sandton 2145	Assmang Ltd T 349 of 1954	PO Box 782075 Sandton 2145
	3		Transnet Ltd T 790 of 1993	PO Box 2189 Joubert Park 2044	Transnet Ltd T 790 of 1993	PO Box 2189 Joubert Park 2044	
	4		Transnet Ltd T 790 of 1993	PO Box 2189 Joubert Park 2044	Transnet Ltd T 790 of 1993	PO Box 2189 Joubert Park 2044	
	5		Assmang Ltd T 349 of 1954	PO Box 782075 Sandton 2145	Sishen Iron Ore Company (Pty) Ltd T 3280 of 2001	PO Box X506 Kathu 8446	
King No. 561	RE	Kuruman RD	2282.4186 Ha	Assmang Ltd T 349 of 1954	PO Box 782075 Sandton 2145	Assmang Ltd T 349 of 1954	PO Box 782075 Sandton 2145
	1		Transnet Ltd T 1447 of 1993	PO Box 2189 Joubert Park 2044	Transnet Ltd T 1447 of 1993	PO Box 2189 Joubert Park 2044	
	2		Transnet Ltd T 1299 of 1996	PO Box 2189 Joubert Park 2044	Transnet Ltd T 1299 of 1996	PO Box 2189 Joubert Park 2044	
Mokaning No. 560	3	Kuruman RD	20.6287 Ha	Transnet Ltd T 1299 of 1996	PO Box 2189 Joubert Park 2044	Transnet Ltd T 1299 of 1996	PO Box 2189 Joubert Park 2044
	RE		Assmang Ltd K 7 RM of 1967	PO Box 782075 Sandton 2145	N J Steyn K 7 RM of 1967	PO box 799 Kathu 8446	
	1 (Pro Rata)		Assmang Ltd K 6 of 1967 K 4 of 1968	PO Box 782075 Sandton 2145	Assmang Ltd T 572 of 1968	PO Box 782075 Sandton 2145	

Farm Name	Portion	Registration Division	Size	Minerals Rights Owner and Title Deed	Address	Surface Owner and Title Deed	Address
Parson No. 564	2 (Mokaning B)	Kuruman RD	279.4246 Ha	Assmang Ltd K 6 of 1967 K 4 of 1968	PO Box 782075 Sandton 2145	Assmang Ltd T 572 of 1968	PO Box 782075 Sandton 2145
	3 (Mokaning C)		558.7530 Ha	Assmang Ltd K 6 of 1967 K 4 of 1968	PO Box 782075 Sandton 2145	Assmang Ltd T 572 of 1968	PO Box 782075 Sandton 2145
	4 (Portion of Mokaning B)		279.3786 Ha	Assmang Ltd K 7 RM of 1967	PO Box 782075 Sandton 2145	A F Steyn N J Steyn T 180 of 1981	PO box 799 Kathu 8446
	5		16.6819 Ha	Transnet Ltd T 414 of 1968	PO Box 2189 Joubert Park 2044	Transnet Ltd T 414 of 1968	PO Box 2189 Joubert Park 2044
	RE		1878.8259 Ha	Sishen Iron Ore Mining Company Limited	Private Bag X506 Kathu 8446	Monia Boerdery Ltd T 70 of 1988 <i>This portion has been purchased by Assmang, and is in the process of being transferred to Assmang. See appendix B for copy of the agreement.</i>	PO Box 1600 Kathu 8446
	2 (RE)		426.7714 Ha	Samancor K 61 of 1994	P O Box 8186 Johannesburg 2000	Assmang Ltd (Previously owned by Eerste Begin Boerdery Ltd) T 2995 of 1995	PO Box 782075 Sandton 2145
6	1.4076 Ha	Transnet Ltd T 45 Of 1993	PO Box 2189 Joubert Park 2044	Transnet Ltd T 45 Of 1993	PO Box 2189 Joubert Park 2044		

Farm Name	Portion	Registration Division	Size	Minerals Rights Owner and Title Deed	Address	Surface Owner and Title Deed	Address
Police Camp No. 693	0	Kuruman RD	10.6710 Ha	Sishen Iron Ore Mining Company Limited	Private Bag X506 Kathu 8446	Moria Boerdery Ltd T 70 of 1988 <i>This portion has been purchased by Assmang, and is in the process of being transferred to Assmang.</i>	PO Box 1600 Kathu 8446

Notes:

- The columns highlighted in green illustrate the Mining Rights Area. This area represents the area in which the applicant owns all mineral rights and in which opencast mining activities will be undertaken.
- The columns highlighted in blue illustrate the area in which the applicant does not own the mineral rights. This area is however included in the Mining Area (i.e. the area in which all mining and associated mining activities will take place), as infrastructure imperative to the opencast operation (i.e. the beneficiation plant, rapid load out facility, haul roads, conveyors etc.) will be established on these properties.
- Assmang has purchased the Remaining Extent of the farm Parson (which included Police Camp No. 693), and Portion 2 of the farm Parson from the existing surface right owners. Portion 2 has been registered in the name of Assmang, and transfer of the Remaining Extent (plus Police Camp) will be registered in the name of Assmang shortly.

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1.6 Regional Setting

Refer to Figure 1-3 (page 1-11) and Figure 1-4 (page 1-12) for the Regional and Local Setting of the BKM Mine respectively.

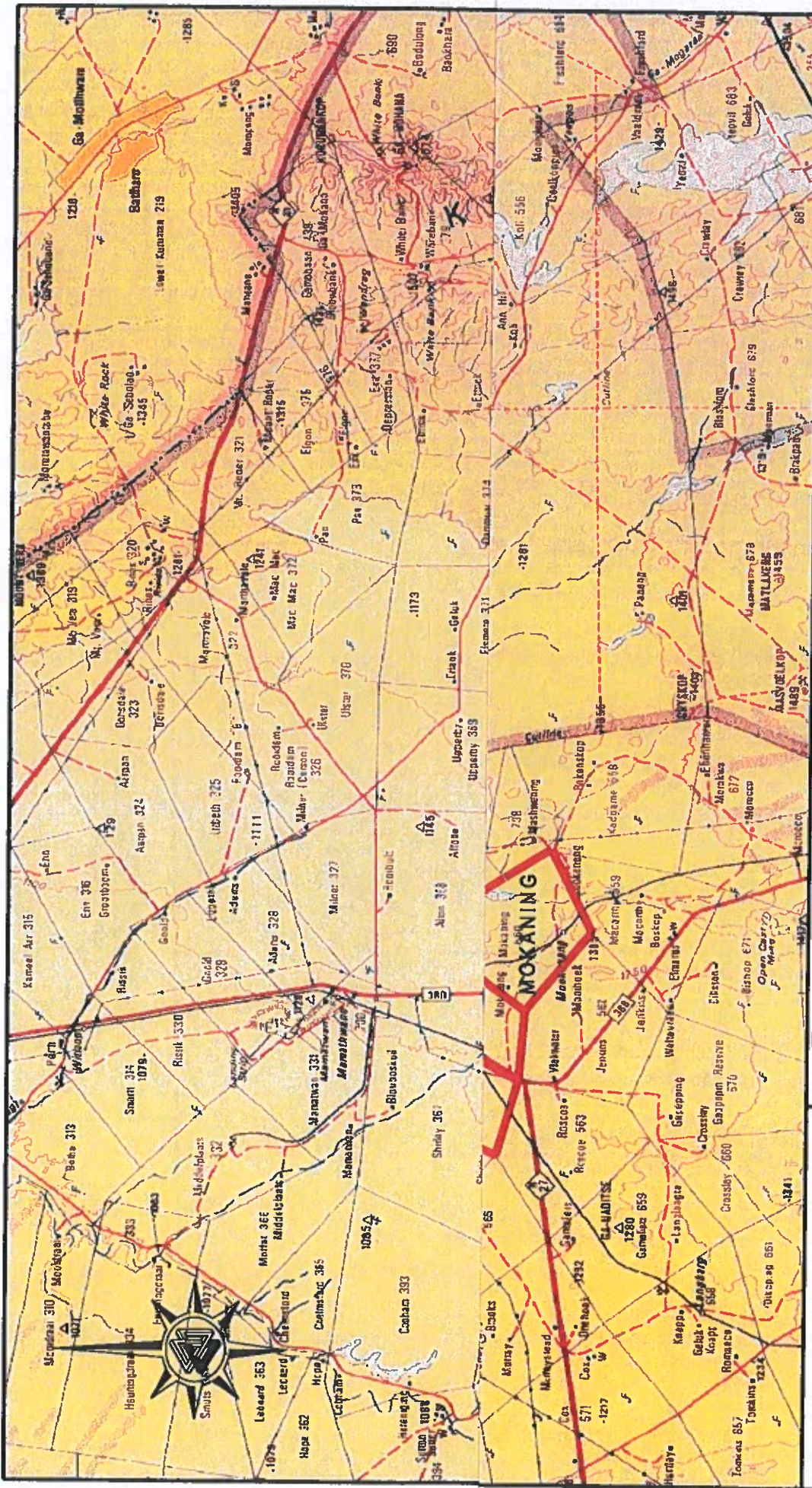
1.6.1 Magisterial District

The proposed BKM Mine is situated within the Magisterial District of Postmasburg. The BKM Mine falls within the jurisdiction of two Local and Districts Municipalities. Mokaneing Farm is situated within the Tsantsabane Local Municipality (NC085), which forms part of the Siyanda District Municipality. The farms Bruce, King and Parson are situated within the Gamagara Local Municipality (NC01B1), which forms part of the Kgalagadi District Municipality. Refer to Figure 1-5 (page 1-13).

1.6.2 Neighbouring Towns

Neighbouring towns to the BKM Mine include Kathu (approximately 10 km towards the north), Olifantshoek (35 km towards the south west) and Postmasburg (approximately 65 km south). Various settlements and villages are also common in the vicinity of the BKM mine area. These include Mashwening, Sebilong, Longaneng, Ga-Motswaedi, Newtown, Hakbosdraai, Postdene, Groenwater and Skeyfontein.

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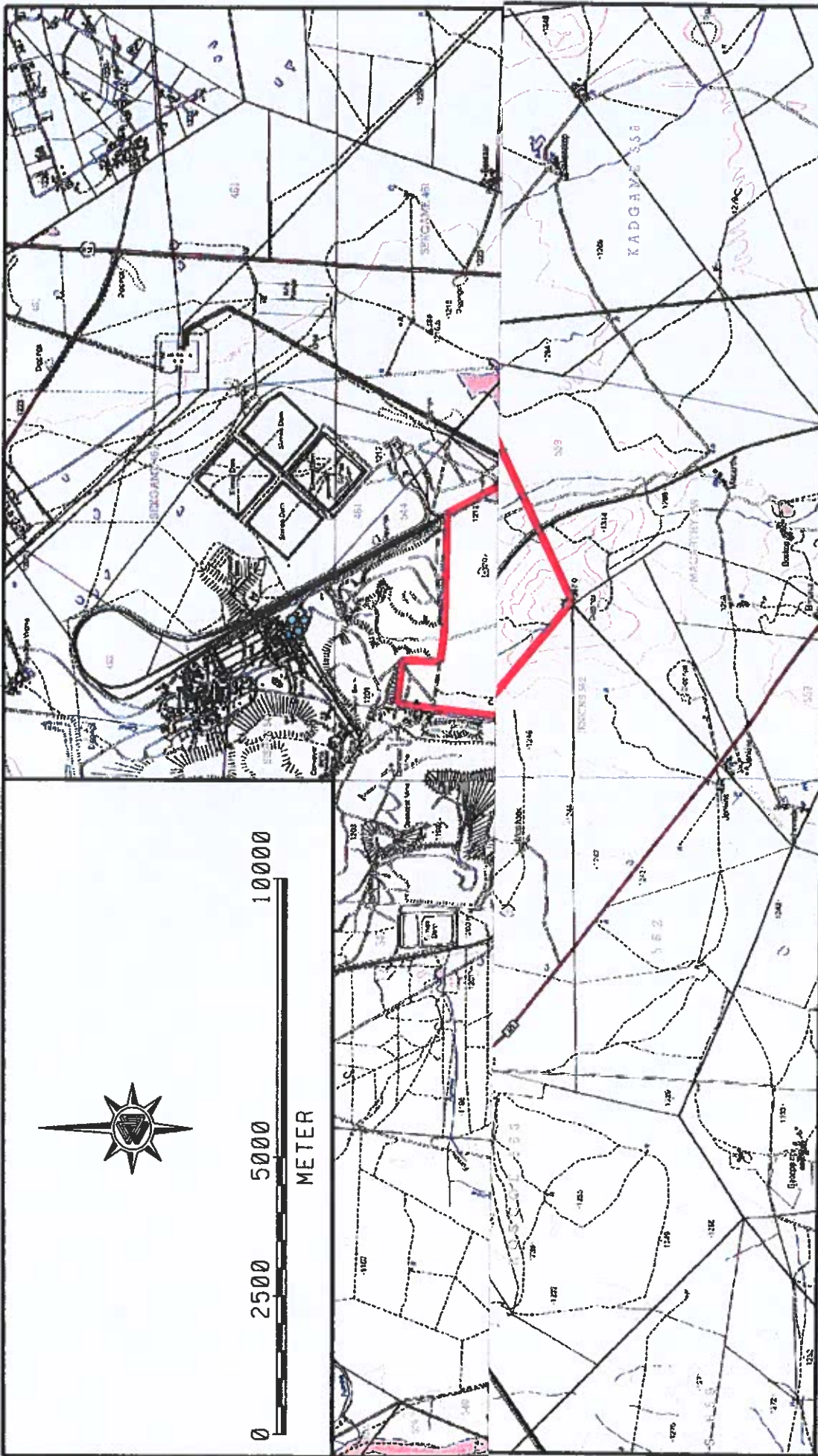
DESIGNED	BY	DATE
DRAWN	N.S.	OCT 2004
CHECKED		
SCALE		
DRAWING No.	Figure: 1-3	
REVISION		

CLIENT: Assmang Limited

DRAWING TITLE: BKM Mine Regional Setting

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**THE REGIONAL MANAGER
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DESIGNED	BY	DATE
DRAWN	N.S.	OCT 2004
CHECKED		
SCALE		
DRAWING No.	Figure: 1-4	
		REVISION

CLIENT: Assmang Limited

DRAWING TITLE:
BKM Mine Local Setting

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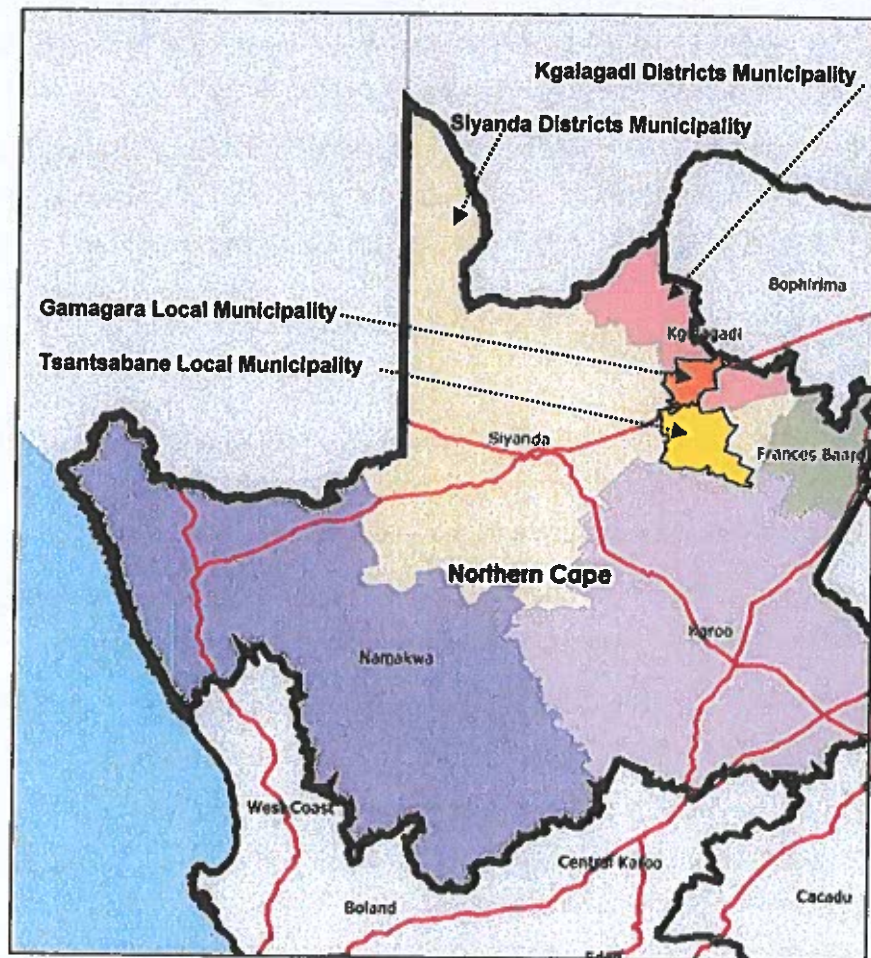


Figure 1-5: Districts and Local Districts associated with the BKM Mine

1.6.3 Existing Surface Infrastructure

The following surface infrastructure is located on the BKM Project property:

- The N14 national road, traverses the BKM Mine property between the farm Bruce and King in a North / South direction.
- A Secondary road (R325) to the town Dingleton runs through to the farm Parson in a north-south direction.
- The Oryx Railway line between Sishen Mine and the Saldanha Port (export market supply) runs parallel to the R325.
- The Port Elizabeth Railway line (local markets supply) traverses the farms Mokaning and King, where after it runs west of the farm Bruce.

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The resources are reported above a 60% Fe cut-off for blocks within mineralized envelope boundaries and are classified on the basis of Fe grade as Measured, Indicated and Inferred resources according to the JORC code (December 2004).

Construction activities at the BKM Mine are planned to commence in January 2006. The life of BKM Mine is expected to last beyond the year 2035. If envisaged production commences in 2008, the life of mine is expected to be in excess of 30 years.

1.7.4 Proposed Mining Method

The northern iron ore deposits on the farms Bruce, King and Mokaning are relatively shallow lending themselves to economical opencast mining. The ore and associated overburden will be removed by truck and shovel operations.

As an integral part of the mining operations, backfilling will be employed to minimise both the final voids left open at the end of mining and the size of the waste dumps

The opencast area is subdivided into four areas, namely Bruce A, B, C and King / Mokaning. These areas will be associated with 19 individual opencast pits.

Iron ore will be transported via conveyors to the washing, screening and beneficiation plant, where after it will be transported via conveyor to the rapid load out siding and loaded to be railed to Saldanha for export.

1.7.5 Planned Production Rate

The envisaged production rates in financial years (example: 2008 = July 2007 to June 2008) for the BKM Mine are:

- Financial Years 2006 to 2007: Construction
- FY 2008 to 2013: 8 million tons / annum,
- FY 2013 to FY 2014: Ramping up to 16 million tons / annum,
- FY 2015 and onwards Full production of 16 million tons / annum.

The BKM Mine plans to export 16 million tonnes per annum through Saldanha Bay.

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Table 1-5: BKM opencast pits

Main Opencast Pit	Individual Opencast Pit	Average Maximum Depth (m)	Size (ha)
Bruce A	BA_STH	90	110
	BA_CENT	180	
	BA_NTH	130	
	BA_ESTS	50	
	BA_ESTN	60	
	BA_ESTC	50	
Bruce B	BB_STH	120	90
	BB_CENT	110	
	BB_NTH	110	
Bruce C	BC_WST	30	94
	BC_STH	30	
	BC_CENT	140	
	BC_NTH	130	
King / Mokaining	KM_NTH	100	330
	KM_EST1	150	
	KM_EST2	240	
	KM_CENT	120	
	KM_WST1	180	
	KM_WST2	210	

1.7.6 Planned Life of Mine

The planned life of mine is envisaged to be in excess of 30 years.

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