

29-31 Currey Street Private Bag X6093
Kimberley Kimberley
8301 8300

Tel: (053) 807 1700
Fax: (053) 832 5631
Directorate: Mineral Regulation: Northern Cape Region
Sub Directorate: Mine Environmental Management
Enquiries: S. Mathavhela
Ref: (NC) 30/5/1/1/3/2/1/ (264) EM

Case ID: 835

The Director
South African Heritage Resources Agency
PO Box 4637
CAPE TOWN
8000

Attention: Mary Leslie

CONSULTATION IN TERMS OF SECTION 40 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT 2002, (ACT 28 OF 2002) FOR THE APPROVAL OF AN ENVIRONMENTAL MANAGEMENT PROGRAMME FOR MINING RIGHT IN RESPECT OF DIAMONDS (ALLUVIAL) ON REMAINING EXTENT OF FARM HARRISDALE No. 226, SITUATED IN THE MAGISTERIAL DISTRICT OF BARKLY WEST, NORTHERN CAPE REGION.

APPLICANT: DIDIMAL DIAMONDS CC.

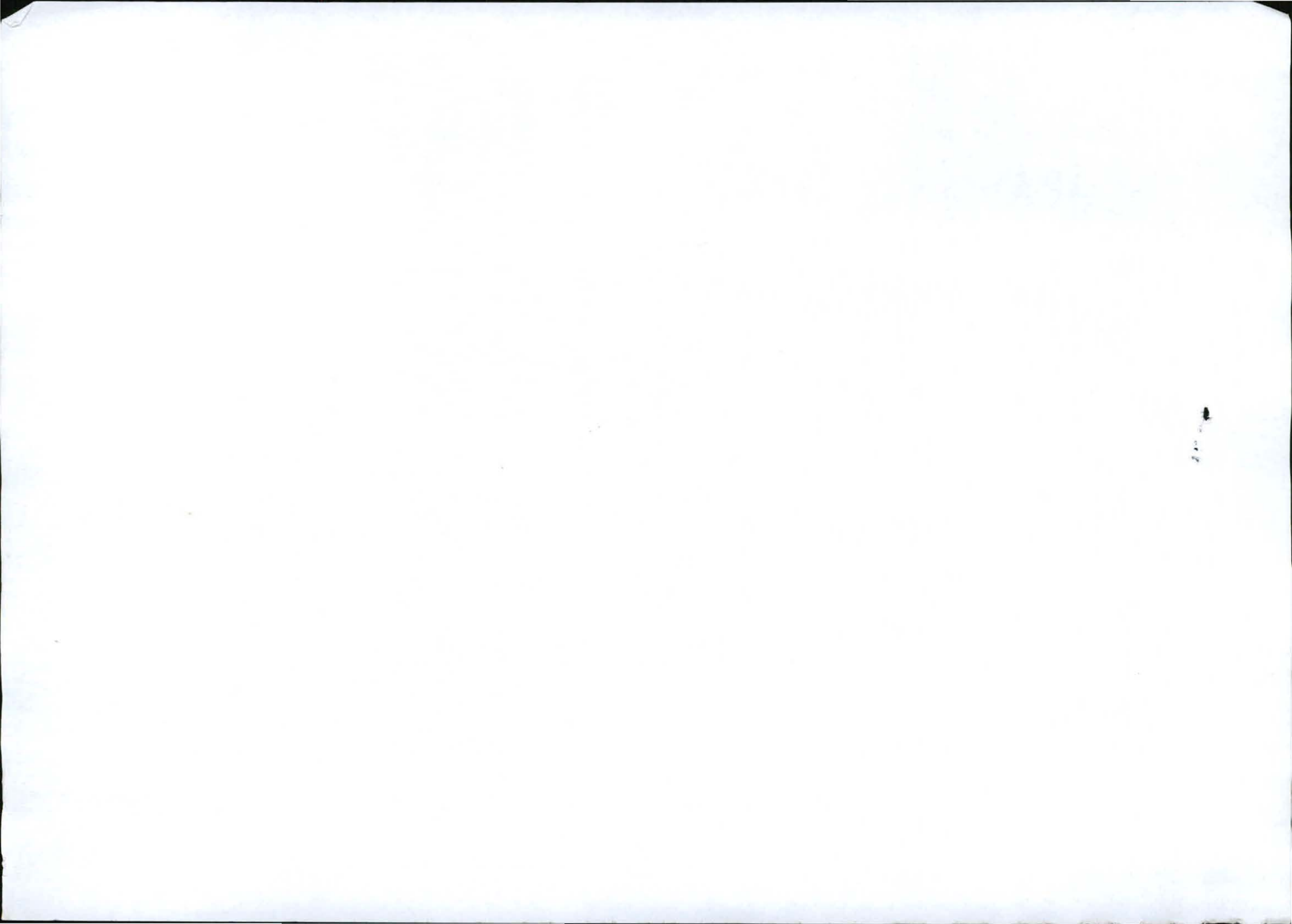
Attached herewith, please find a copy of an EMP received from the above-mentioned applicant, for your comments.

It would be appreciated if you could forward any comments or requirements your Department may have to this office and to the applicant before **17th August 2010** as required by the Act.

Consultation in this regard has also been initiated with other relevant State Departments. In an attempt to expedite the consultation process please contact **Mr. Samuel Mathavhela** of this office to make arrangements for a site inspection or for any other enquiries with regard to this application.


.....
**REGIONAL MANAGER: MINERAL REGULATION
NORTHERN CAPE REGION**

Spoke To Mr Kotzee
053 963 1081
on the 17th Aug 2010
He said a report was
done in Aug 2009 +
he will email it to me.
DONE
Waiting for a better copy





COBUS DREYER

Pr. Archaeologist/Heritage Resource Specialist

**P.O. Box 12910
BRANDHOF 9324
Bloemfontein
dreyerj@telkomsa.net**

**Tel: 051-444 1187
Fax: 051-444 4395
Cell: 083 357 7982**

19 June 2009

FIRST PHASE ARCHAEOLOGICAL AND CULTURAL HERITAGE ASSESSMENT OF THE PROPOSED DIAMOND PROSPECTING AT HARRISDALE 226, BARKLY WEST, NORTHERN CAPE

EXECUTIVE SUMMARY

New diamond prospecting and mining developments are planned at the farm Harrisdale 226 along the Vaal River near Barkly West, Northern Cape.

Remains of old diamond diggings consisting of heaps of rubble and river washed stones represent these activities. A single stone flake was found among the rubble.

Two graveyards containing about fifty graves and around thirty graves respectively were found. These tombs date from the 1970s in the one case and the other from between 1970 and the year 2000.

A glazier floor and drumlin is located near the river. The owners are well aware of the significance of these exceptional natural features. The drumlin and glazier floor will be preserved and protected and will not be part of the proposed mining activities. No diamond prospecting will be done on the drumlin or in the direct area.

No other cultural or historical remains were found.

I recommend that the proposed diamond prospecting and mining developments may proceed.





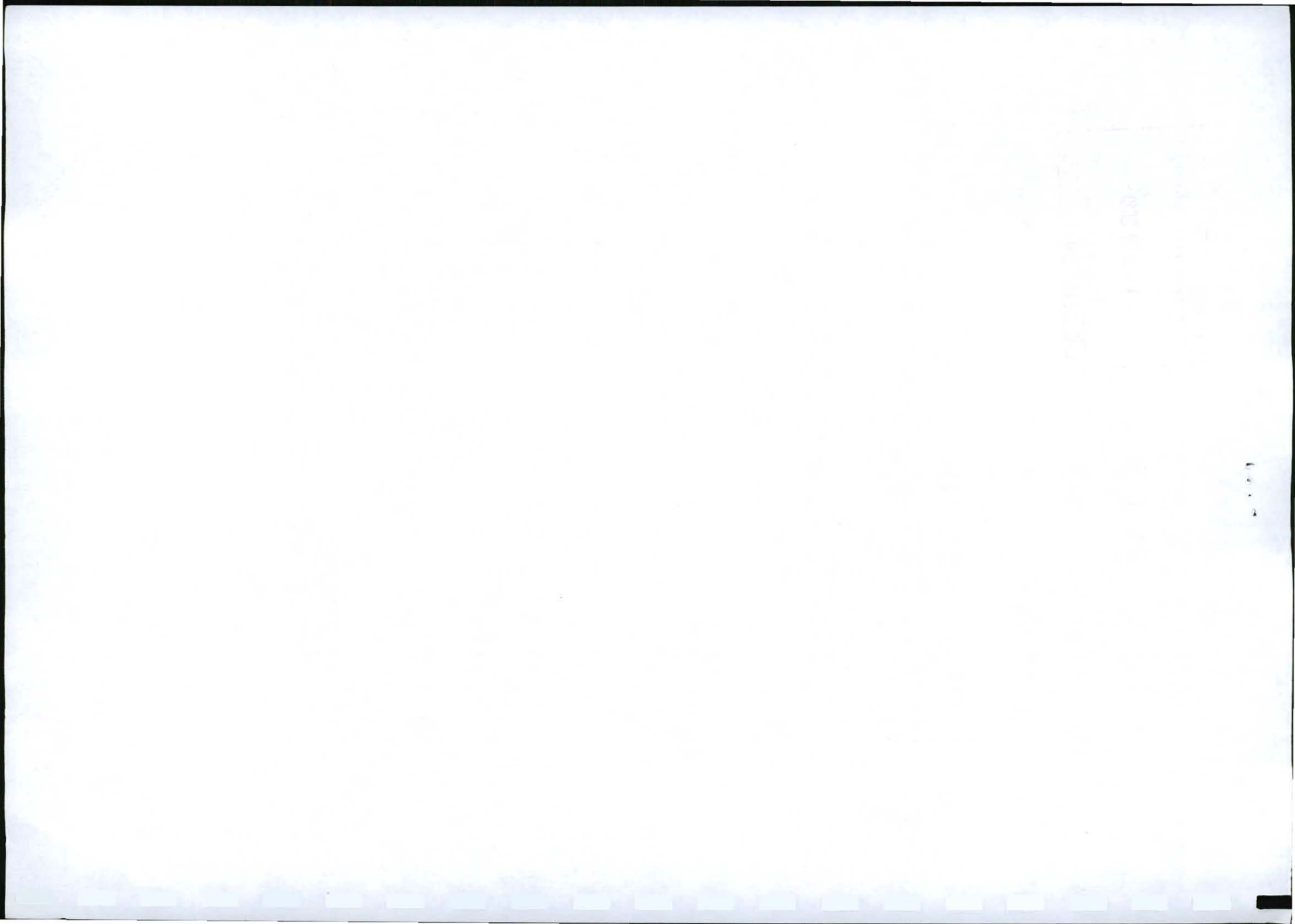
ENVIRONMENTAL MANAGEMENT PROGRAMME

Submitted in support of application for a converted mining right

Section 39 and Regulations 50 and 51 of the minerals and Petroleum resources Development
Act, 2002 (Act 28 of 2002)

DIDIMALA DIAMONDS CC

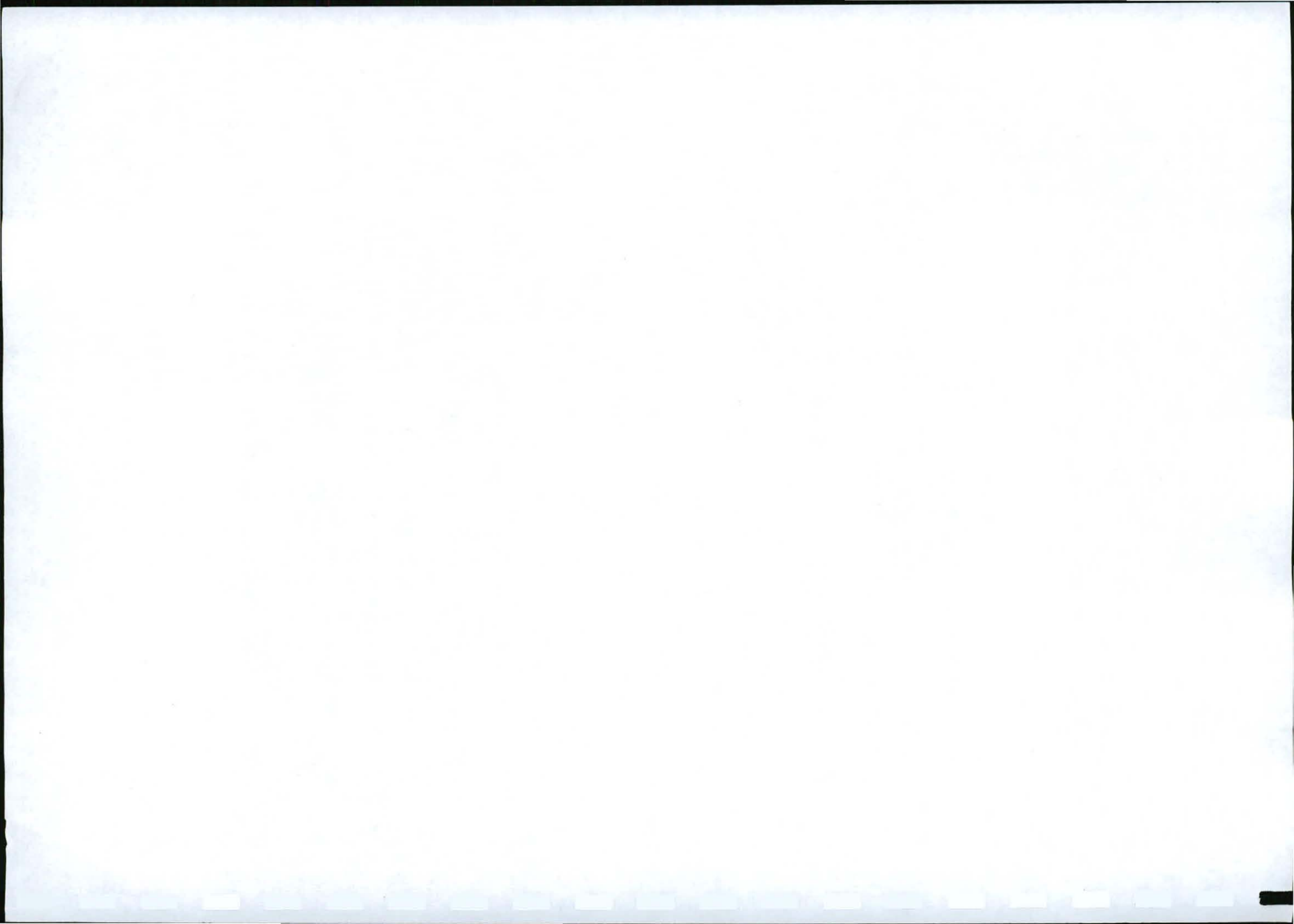
NC 30/5/1/2/2/264 MR



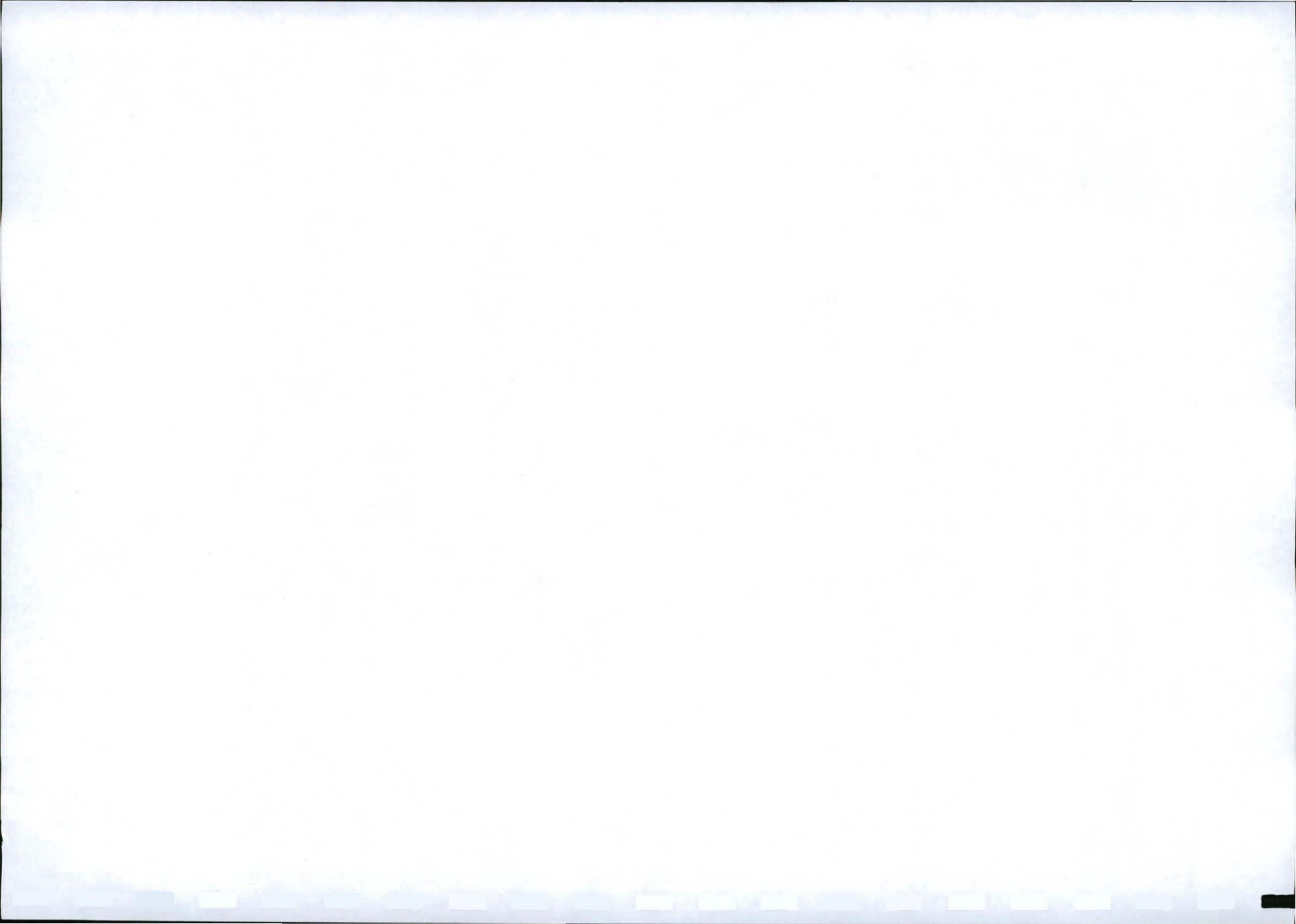
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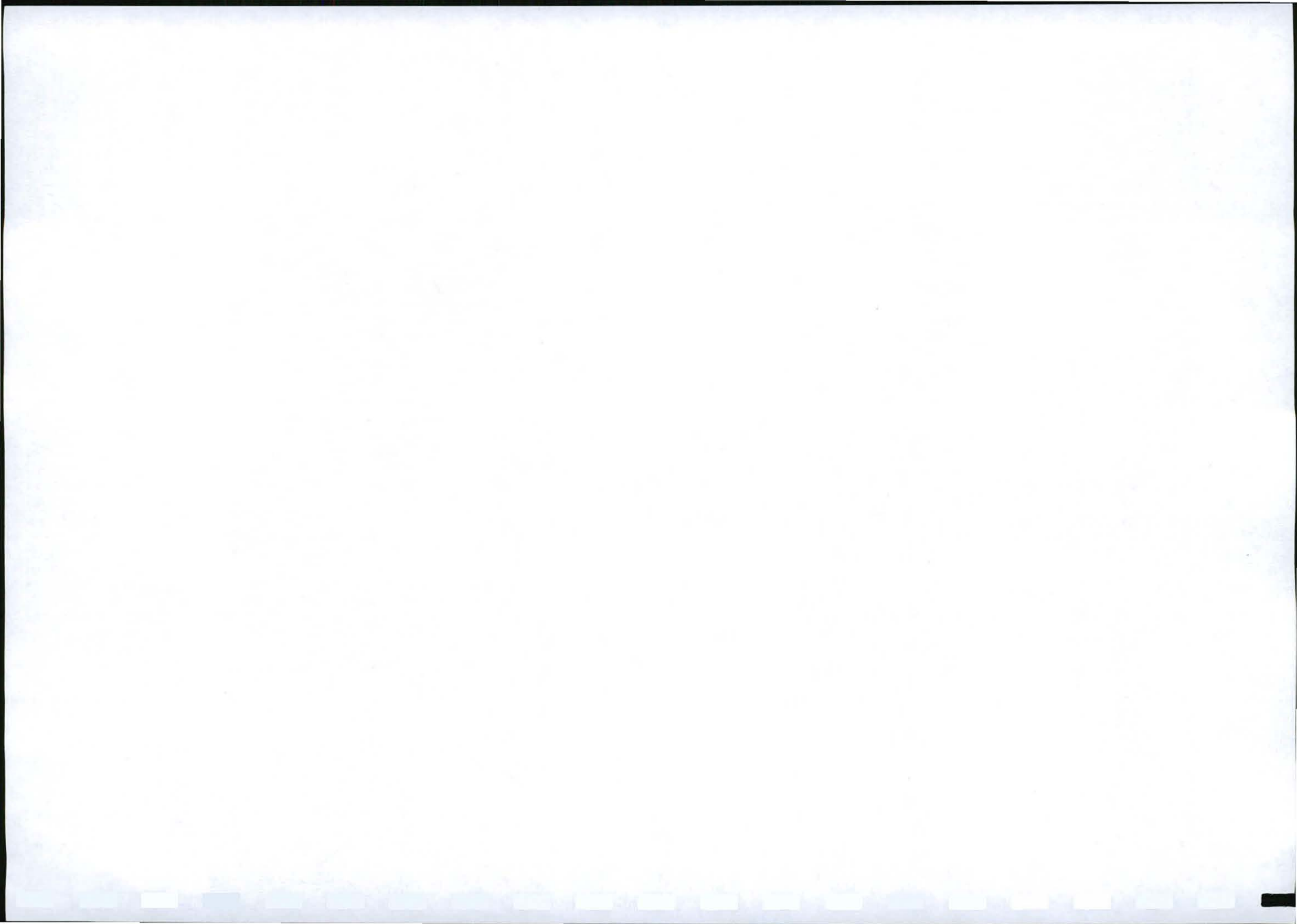
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ENVIRONMENTAL IMPACT ASSESSMENT REPORT

A. GENERAL

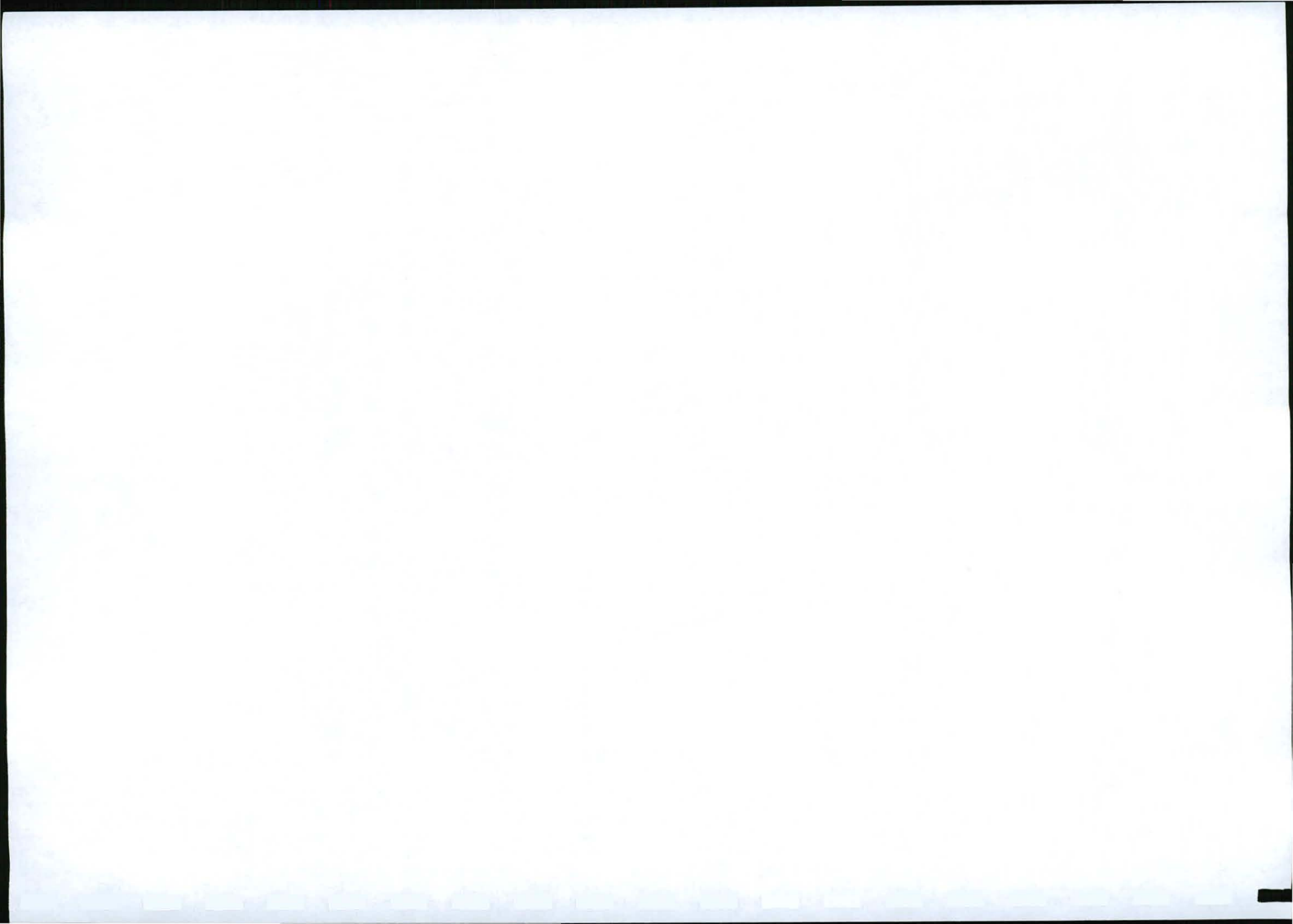
This document is submitted by DIDIMALA DIAMONDS CC for the application of a mining right.

This document aims to ensure compliance with Regulation 51 of the MPRDA.

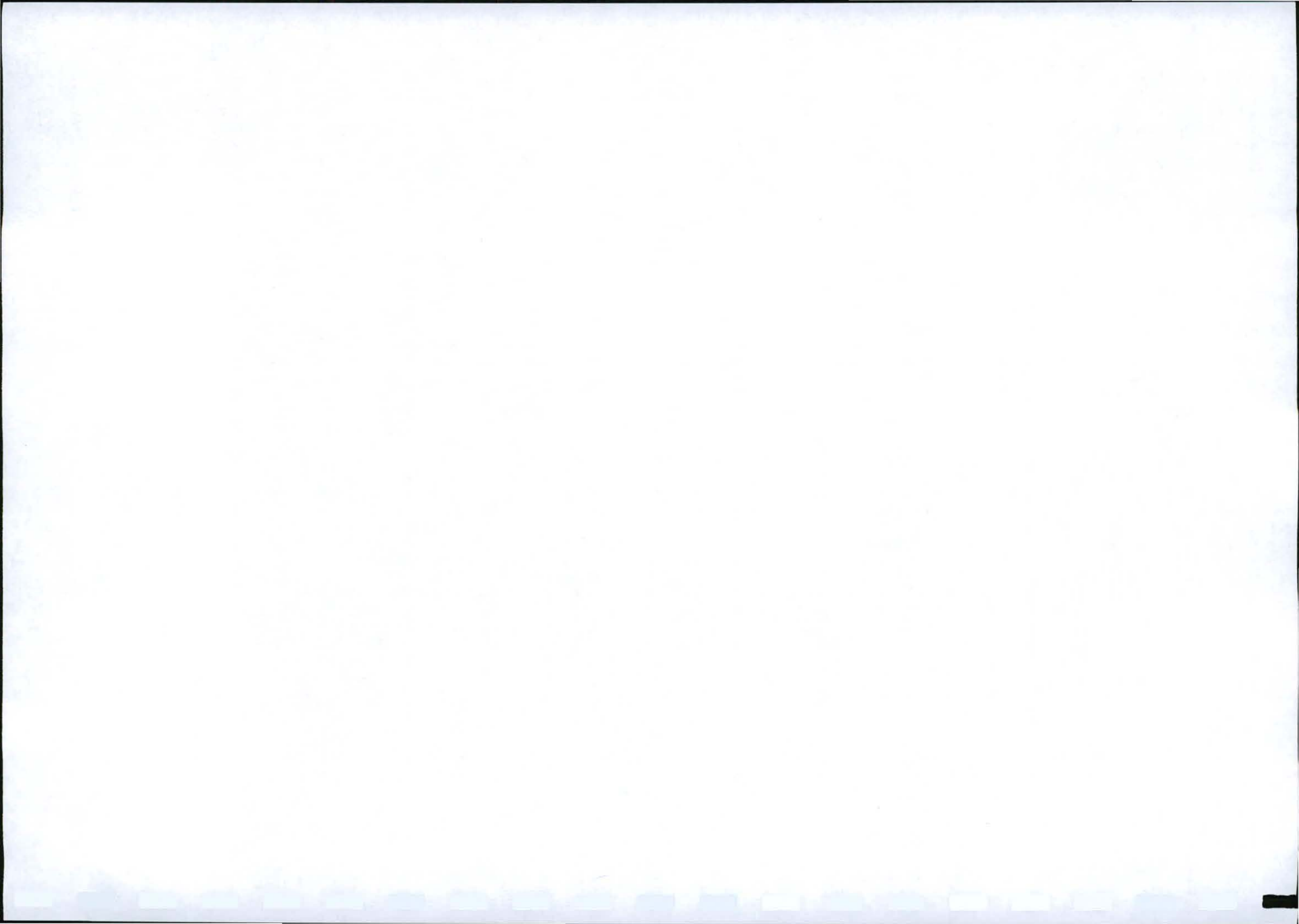
This Environmental Impact Assessment determines the effect of the mining activities undertaken by DIDIMALA DIAMONDS CC in their operations in the direct and indirect environment they are operating in.

B. INTRODUCTION

The applicant proposes to develop an alluvial diamond processing plant at the farms Harrisdale No 226, District Barcly West. An economic feasibility of the project has been established and this report forms the environmental impact assessment. Alluvial gravels will be reclaimed from the ground and will be processed through a pan plant. The local economy will benefit from the project, as job opportunities and community development are likely to be significant. The assessment includes the following elements:



- Assessment of the environment that will be affected by the proposed mining.
- Assessment of the environment likely to be affected by the identified alternative land use or developments.
- Assessment of the nature, extent, duration, probability and significance of the identified environmental, social and cultural impacts of the proposed mining operation, including the cumulative environmental impacts.
- A comparative assessment of the identified land use and development alternatives and their potential environmental social and cultural impacts.
- A determination of the appropriate mediatory measures for each significant impact of the proposed mining operation.
- Details of the engagement process of interested and affected parties and persons followed during the course of the assessment and an indication on how the issues raised by interested and affected parties have been addressed.
- Identification of knowledge gaps and reports on the adequacy of predictive methods underlying assumptions and uncertainties encountered in compiling the required information.

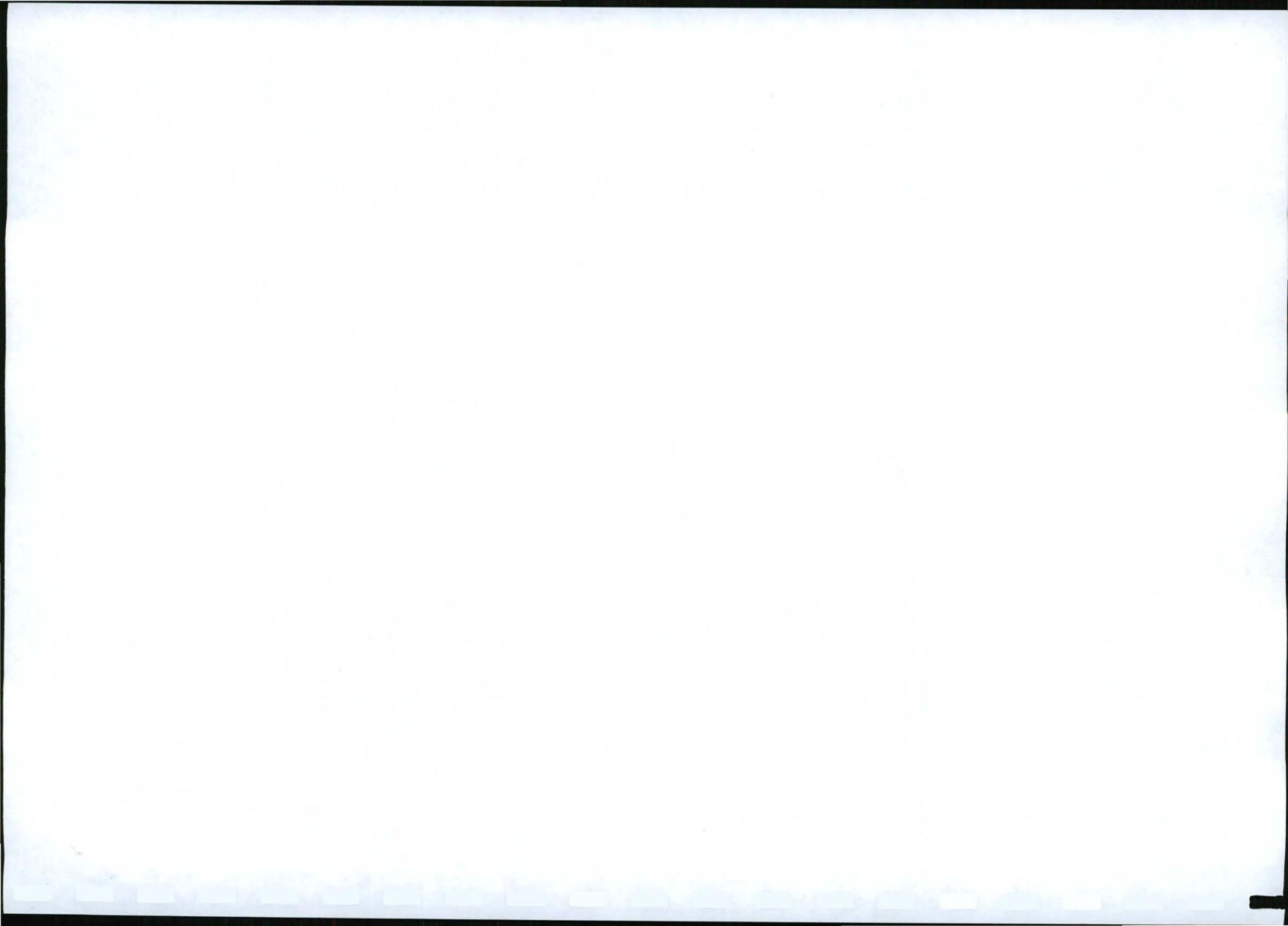


- Description of the arrangements for monitoring and management of environmental impacts.

C. DESCRIPTION OF THE PROJECT

The applicant intends to mine alluvial diamond bearing gravels on the property. The opencast and strip-mining method will be used to mine the diamonds. Although the alluvial diamond deposits and the presence of channels can be inferred, it is necessary that the mining work must be accompanied by prospecting and exploration work to determine the precise location and direction of the channels to follow it during mining. Excavators will thus excavate pits as part of further exploration work and for mining purposes.

Excavators will excavate Trenches. The topsoil will be removed and stored separately. The gravel will be removed and transported by dumpers to the mining plant. Here it will be stored and transported by a front-end loader into the washing machines. Using the so-called "dry method" will wash the gravel. No waste will be washed back into the trenches but will all the waste be moved to the tailings dam. The other so-called "wet method" can also be used if the Department of water affairs does not approve the tailings dam. Then the tailings will be washed back into the existing excavations.

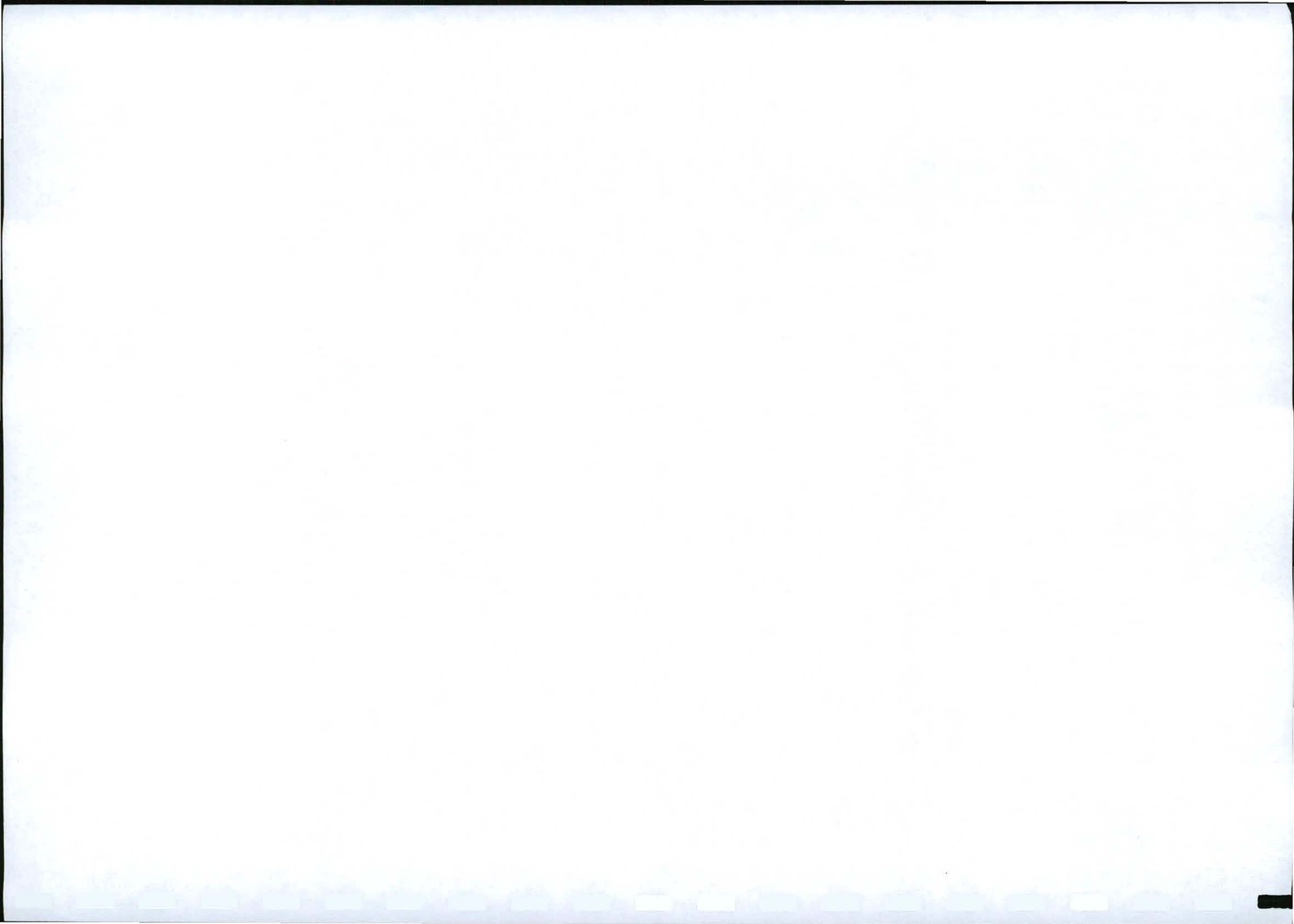


The possible diamond bearing gravel will be mortised into bins, where after the concentrated gravel will be sorted by a sortex to possibly find the diamonds.

The technology to be used will include geographical methods, mining equipment that will include a flow sort, excavators, front-end loaders, washing machines, dumpers and water winning equipment. It is forecasted that the annual production rates will be 1000 tons of gravel a day.

The mining operation will be conducted in house. The costs will be made up by rehabilitation costs, working costs, diesel, wages, and maintenance.

The applicant intends to start his operation in the South of the farm, towards the North. The applicant will expand his activities to the North down the middle of the farm. The applicant will rehabilitate the property as an integral part of conducting his operations.



1. PARTICULARS OF THE APPLICANT

1) *Full name (and surname) of person/ co cc applying for mining right*

DIDIMALA DIAMONDS CC

2) *ID number of person or company/CC registration number*

CK 2004/068369/23

3) *Postal address*

P.O. Box 1086

Schweizer-Reneke

2780

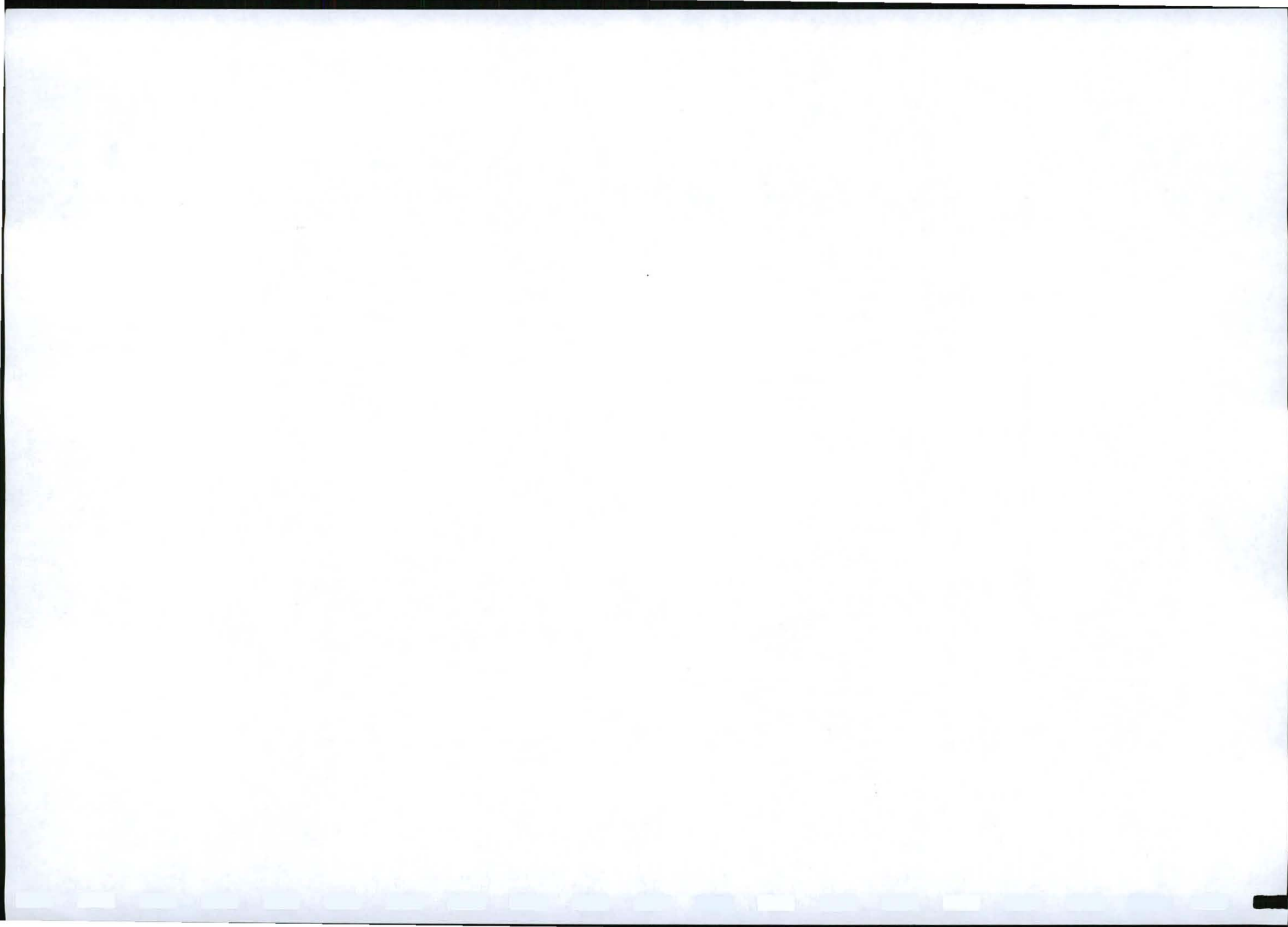
4) *Physical/residential address*

4 Botha Street

Schweizer-Reneke

2780

5) *Applicant's cellular phone number / phone number*



084 657 3006

053 963 1081

6) Applicant's fax number

053 963 2009 or 053 963 1081

7) Alternative contact's name

HG Kotzee

8) Alternative contact's telephone/cell phone numbers

053 963 2008

084 657 3006

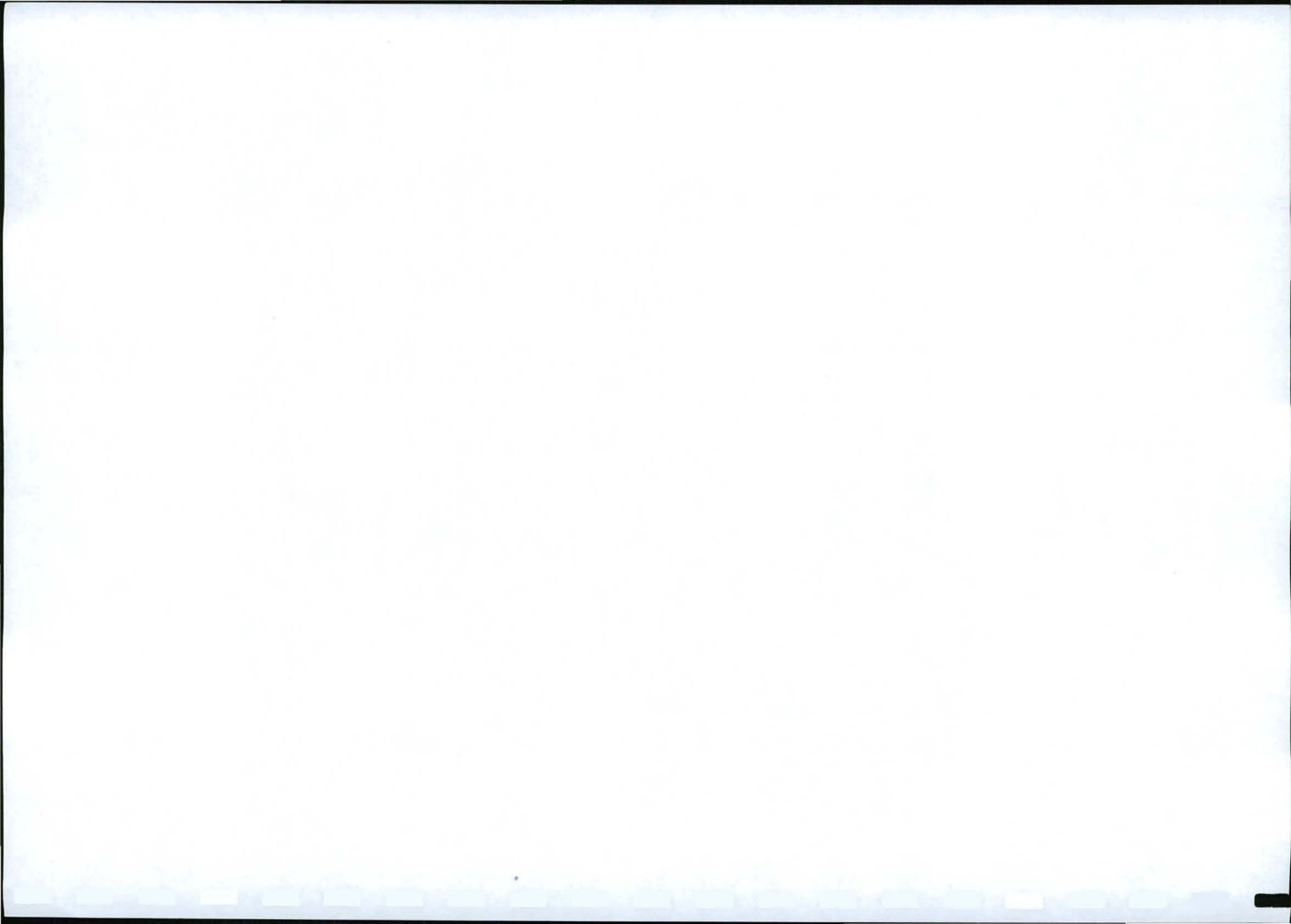
9) Full name of the property on which mining operations will be conducted

A copy of the title deed is annexed hereto.

Remaining extent of the farm Harrisdale 226

District Barcly West

Northern Cape



10) Name of registered owner of the property

Springfit Estates

11) Contact's telephone/cell phone numbers

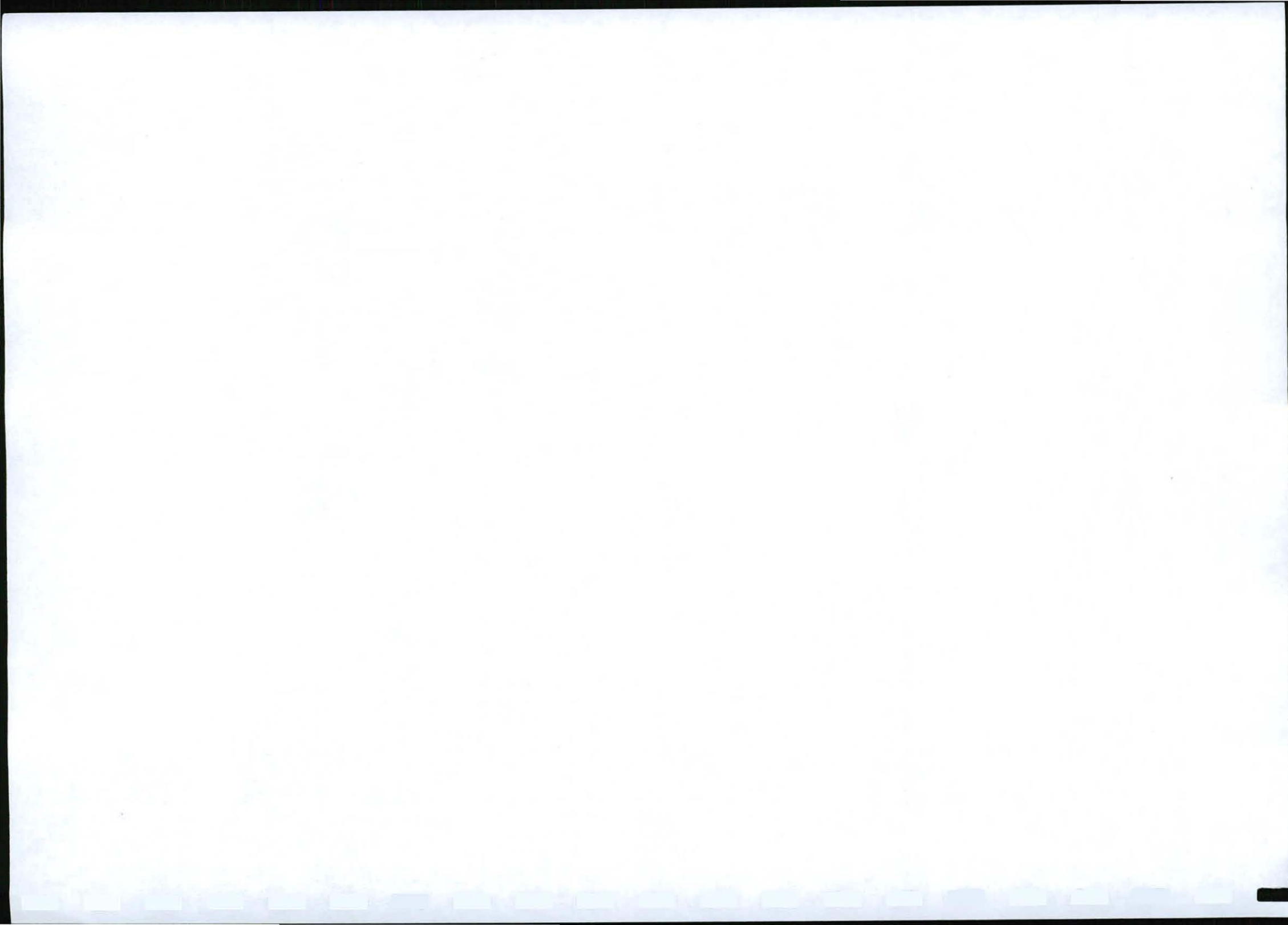
084 657 3006

12) Postal address

P.O. Box 1086

Schweizer-Reneke

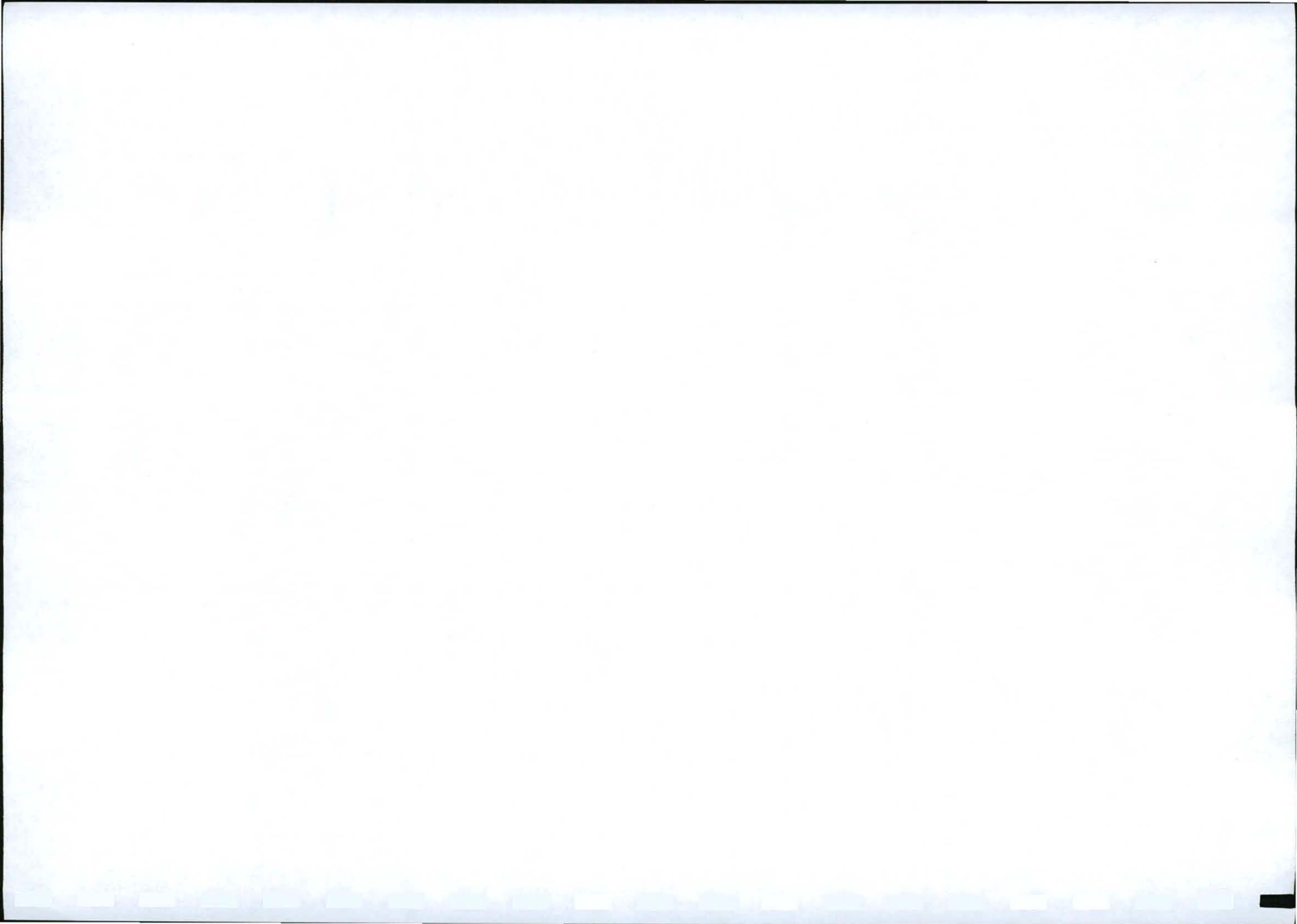
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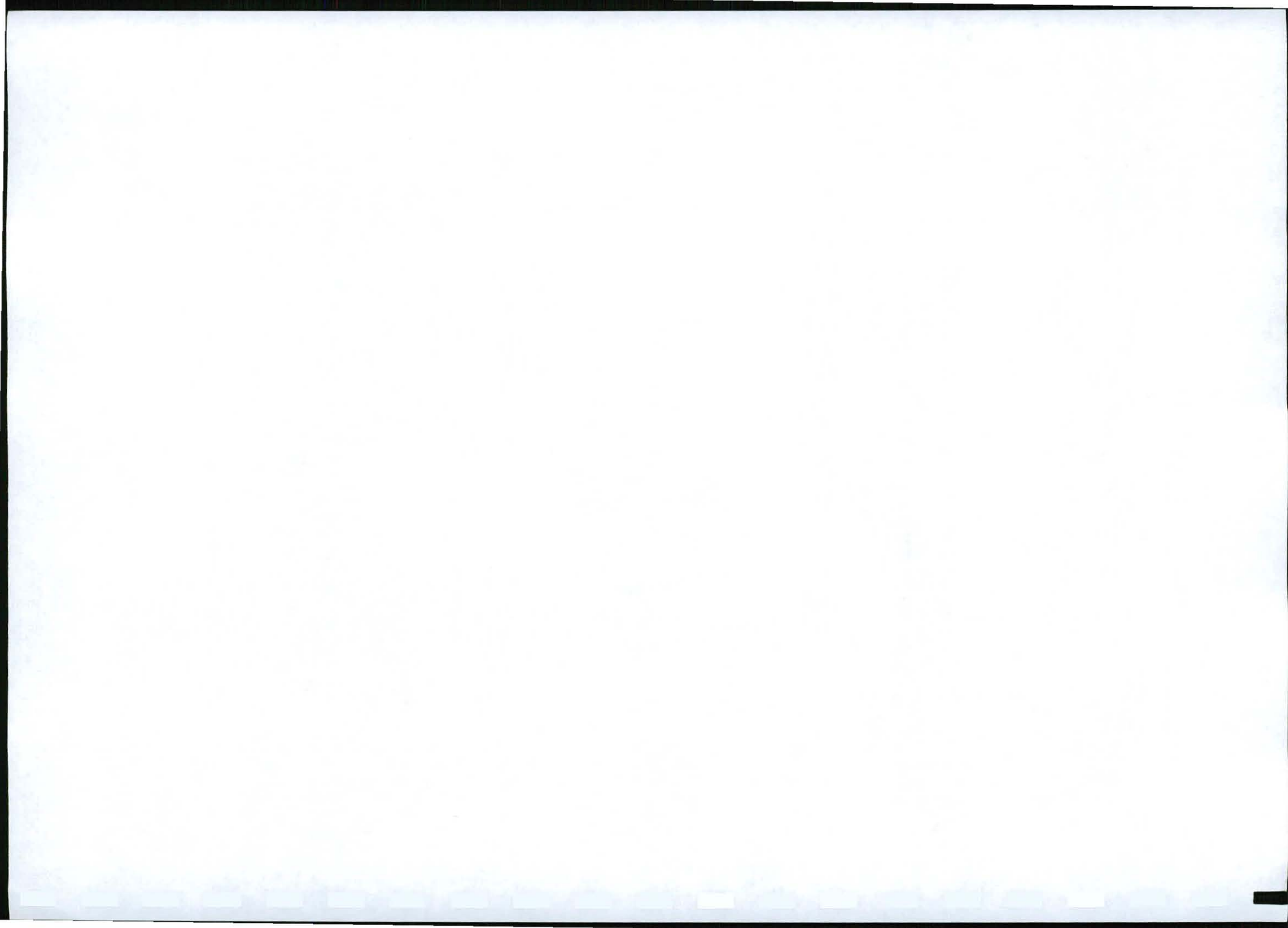
2. DEFINITIONS

In this document, unless otherwise indicated, the following words will have the meanings as indicated here:

Act (The Act)	Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)
Borehole	A hole drilled for the purposes of prospecting i.e. extracting a sample of soil or rock chips by pneumatic, reverse air circulation percussion drilling, or any other type of probe entering the surface of the soil.
CARA	the Conservation of Agricultural Resources Act
EIA	An Environmental Impact assessment as contemplated in Section 38(1) (b) of the Act
EMP	An Environmental Management plan as contemplated in Section 39 of the Act
Fauna	All living biological creatures, usually capable of motion, including insects and predominantly of protein-based consistency.

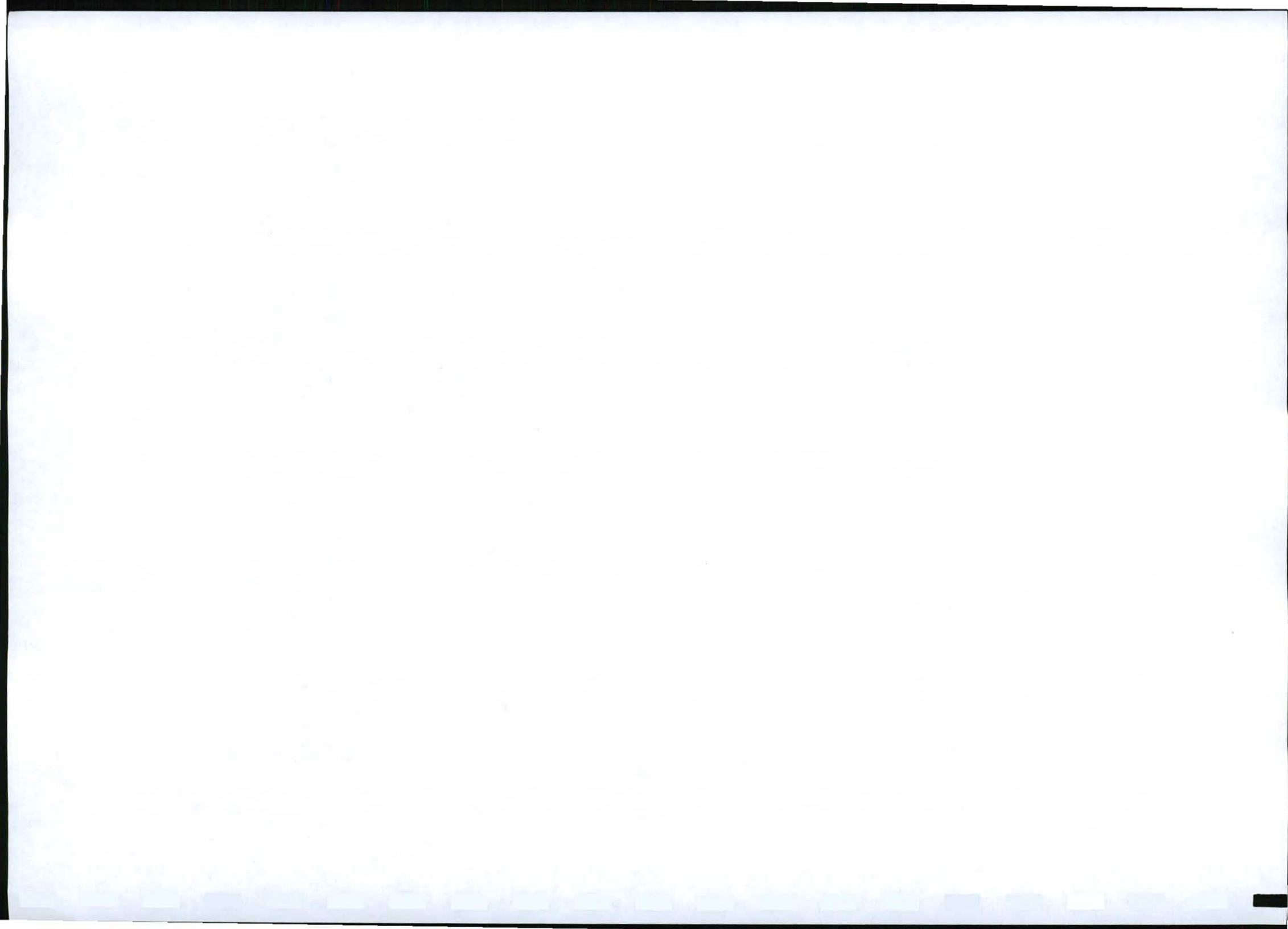


Flora	All living plants, grasses, shrubs, trees etc. It is usually incapable of easy natural motion and capable of photosynthesis.
Fence	A physical barrier in the form of posts and barbed wired and/or "Silex" or any other concrete construction, ("palisade" - type fencing included), constructed with the purpose of keeping humans and animals within or out of defined boundaries.
House	any residential dwelling of any type, style or description that is used as a residence by any human being.
NDA	National Department of Agriculture
NWA	National Water Act, Act 36 of 1998
Pit	An open excavation
"Porrel"	The term used for the sludge created at alluvial diamond diggings where the alluvial gravel are washed and the diamonds separated in a water-and-sand medium
Topsoil	The layer of soil covering the earth which-



- (A) Provides a suitable environment for the germination of seed;
- (B) Allows the penetration of water;
- (C) Is a source of micro-organisms, plant nutrients and in some cases seed; and
- (D) Is not of a depth of more than 0.5 meters or such depth as the Minister may prescribe for a mining area.

Trench	A type of excavation usually made by digging in a line towards a mechanical excavator and not pivoting a boom.
Vegetation	Any and all forms of plants see also Fauna
DWAF	The Department of Water Affairs and Forestry - both national office and their various regional offices, which are divided across the country on the basis of water catchments areas.
MPRDA	the Mineral and Petroleum resources Development Act, 2002 (Act 28 of 2002)
EM Programme	An Environmental Management Programme as contemplated in Regulation 51 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)



3. ASSESSMENT OF THE ENVIRONMENT THAT WILL BE AFFECTED BY THE PROPOSED MINING, INCLUDING THE CUMULATIVE EFFECTS (reg. 50a)

3.1 DESCRIPTION OF THE ENVIRONMENT

3.1.1 The nature of the landscape surrounding the proposed operation

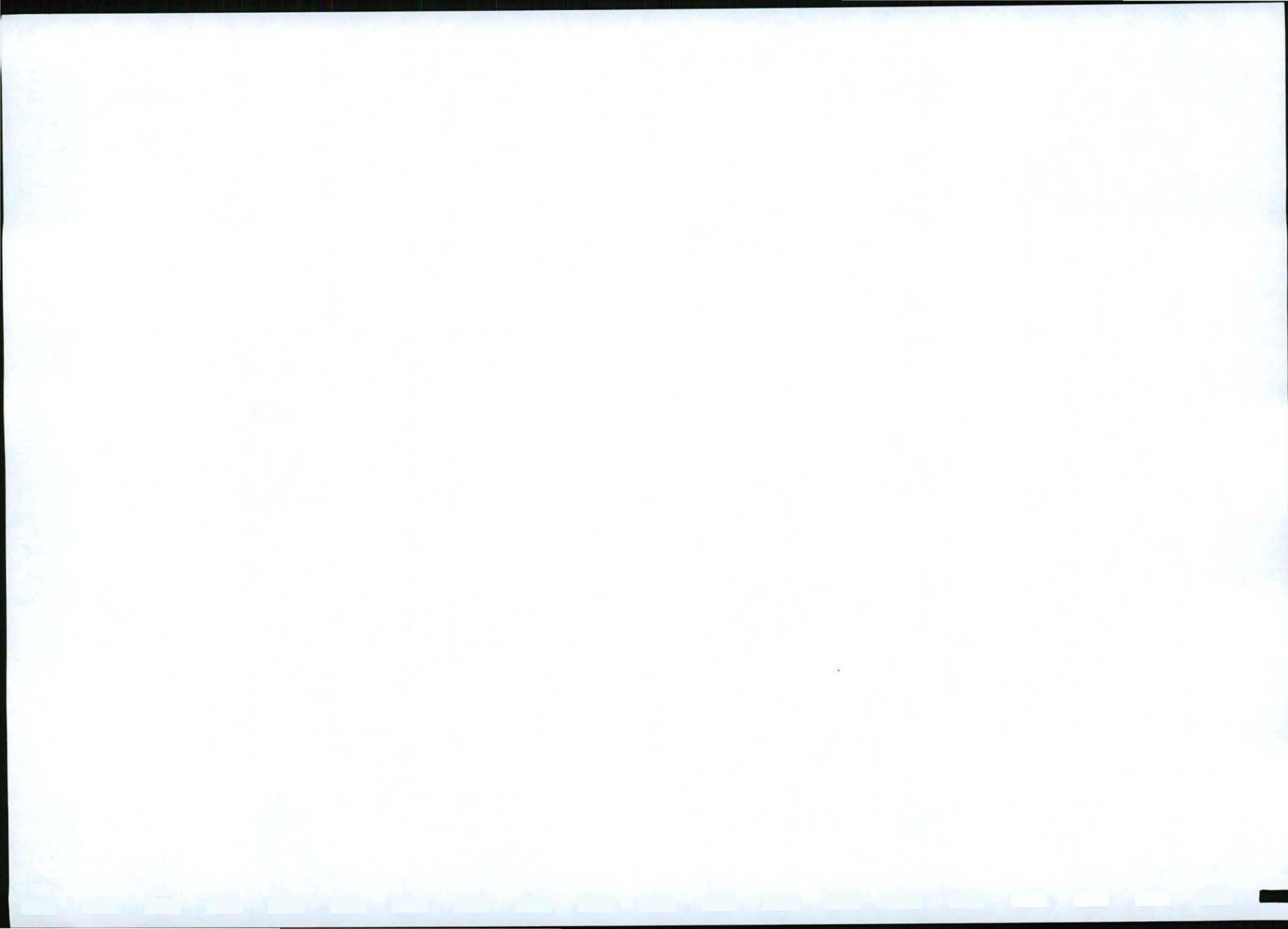
The landscape is an open veldt that is generally flat with low hills. The area is situated between 1140 and 1170 meters above sea level. It is evident that the area was disturbed years ago by pick and shovel diggings as well as portions of un-rehabilitated areas from previous mining activities. The landscape is covered with trees, bushes and grass with grazing potential.

3.1.2 The type of soil found on the surface

The topsoil diversified on the different parts of the farm, in some areas it is a thin layer of lime and Red Hutton or a soft carbonate (Kimberley form) with lithocutanic (Glenrosa form or with neocarbonate layers (Addo form).

In other areas the topsoil covers a soft calcrete overlaying hard calcrete and blue slate.

The Witbank form is represented in areas where the soil has been disturbed. The Valsriver soil form is present in certain patches..



3.1.3 How deep is the topsoil?

The depth of the topsoil varies from 0,3 to 2 meters.

3.1.4 A description of the plants, trees and grasses that grow naturally in the area around the site

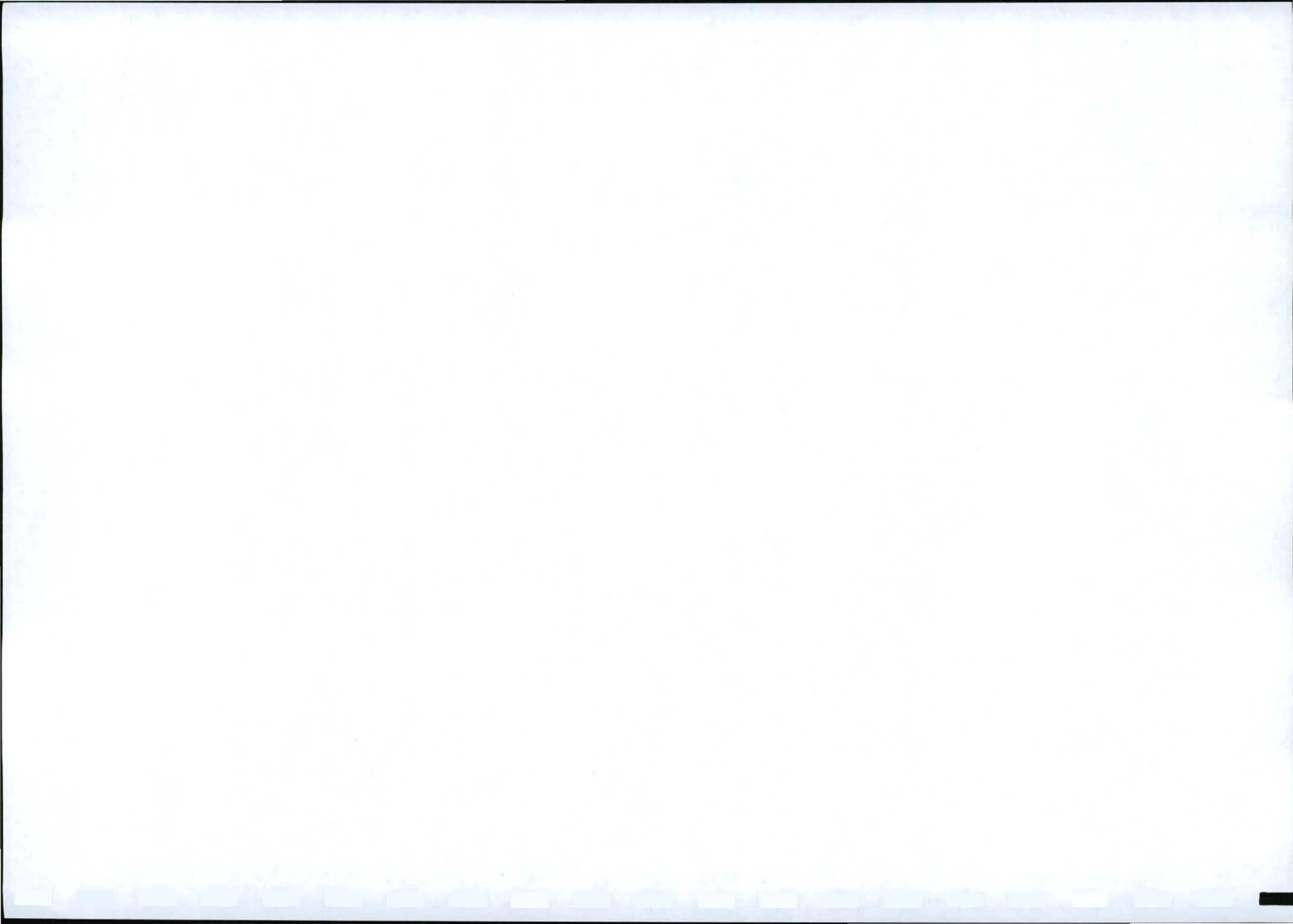
The "Swarthaak", Sweet thorn, Karree, "Wag 'n Bietjie" trees and "Vaalbos" are spread over the farm. "Soet", "Borseltjie" grass are mostly grown on the farm Harrisdale.

3.1.5 A description of the animals that occur naturally on the site.

The Highveld Hare, Mongoose, Steenbuck and Jackal are some the animals that occur naturally on site.

3.1.6 A description of any protected areas (game parks, nature reserves, monuments etc) that occur in the area

There are no protected areas found on the farm portions of the application. On the farm two graveyards were found containing about fifty graves in one and about thirty graves in another. The dates on the tombstones is from 1970 until 2000. The applicant and farm owner are well aware of the graveyards and will not allow any disturbances within the area.



These graveyards are outside the planned mining area.

A Glazier floor is found near the river, this area is also outside the planned mining area, and will be protected in all cases.

4. ASSESSMENT OF THE ENVIRONMENT LIKELY TO BE AFFECTED BY THE IDENTIFIED ALTERNATIVE LAND USE OR DEVELOPMENTS, INCLUDING CUMULATIVE ENVIRONMENTAL IMPACTS (reg. 50b)

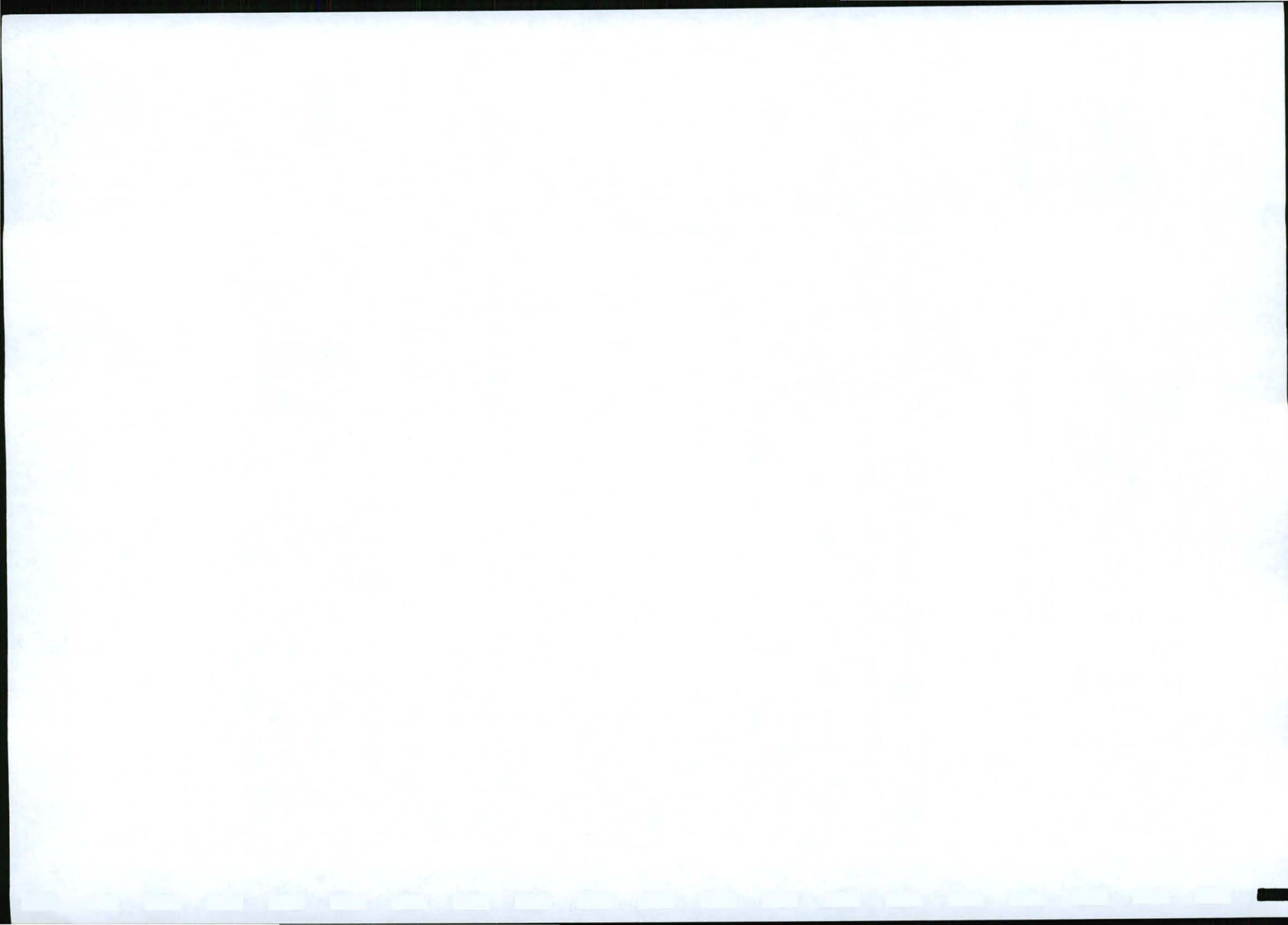
Geological

The inland plateau at an altitude of 1100m – 1150m above sea level, consists of a series of platform sediments.

The Vaal river forms the south-eastern corner boundaries of the farm, and flowing in a generally southern direction. The local topography of the site is represented by a small crest towards south. The rest of the landscape slopes generally to the west gradients are mostly shallow.

Drainage lines run in a western direction towards the river.

Topographical disturbance as a result of historic mining and prospecting is visible.



These historical excavations has re-vegetate naturally.

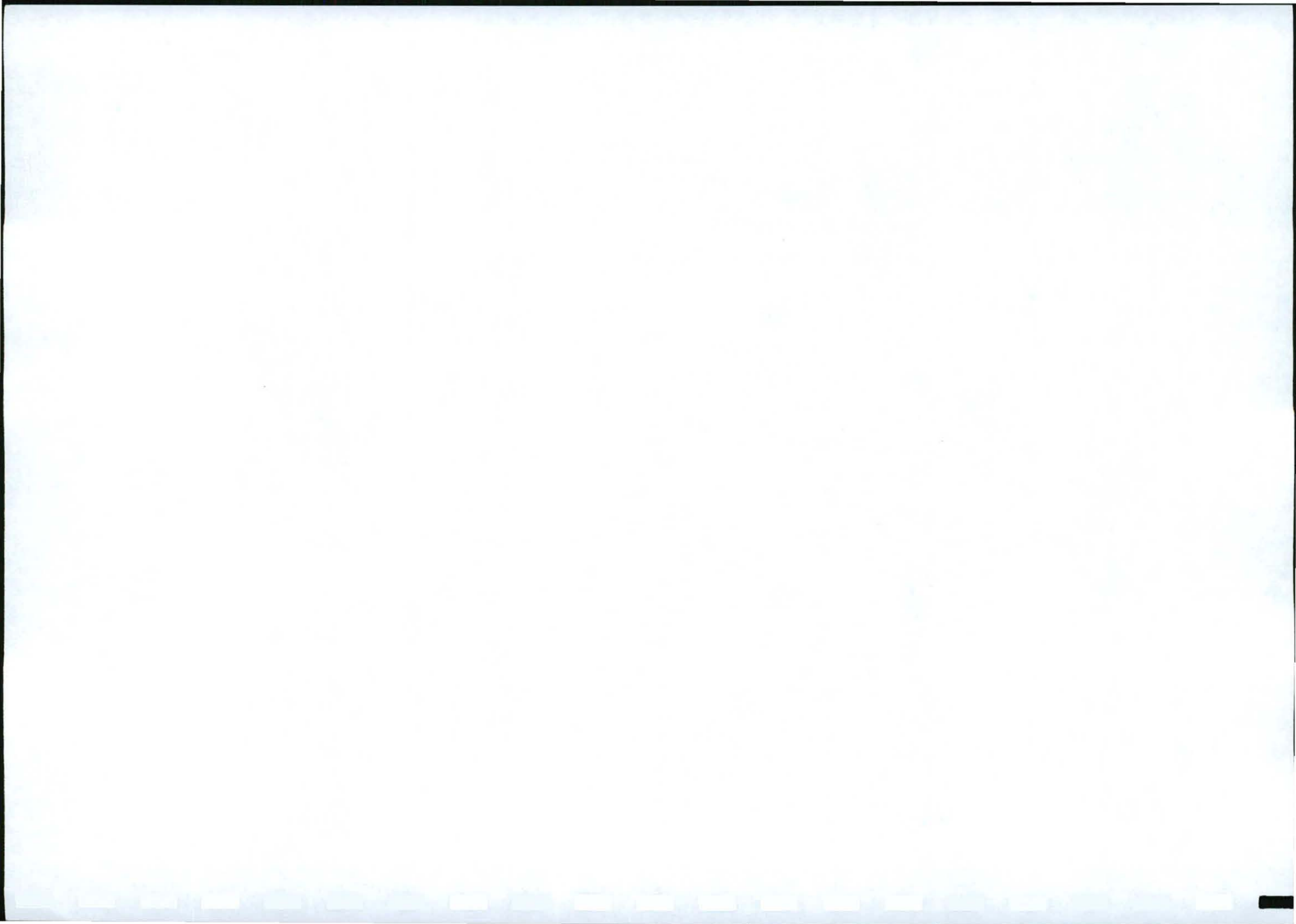
Mining done during the resent years resulted topographical disturbances, but was rehabilitated according requirements set by the Department of Minerals and Energy.

Much of the local geomorphology is influenced and shaped by early carboniferous glaciations and since the cretaceous emerge, the Pre-Karoo landscape has been largely exhumed by erosion and removal of the great thickness of overlying Permian (Karoo) sediments.

The gravel deposits consist of:

i) Oldest Gravels

These deposits represent the earliest phase of alluvial deposition and are believed to be Later Cretaceous to early tertiary in age. The gravel is usually a clast-supported grit-cobble grade conglomerate. The morphology indicates that these represented channel migrations of palacostreams across a wide valley floor probably in a meandering stream environment. As the landscape was lowered by deflation, the original alluvial gravel weathered and spread out on the surroundings surface to form thin, laterally extensive derived or colluvial deposits. These are



best developed on deeply weathered Ventersdorp lavas where the palacosurface has produced psuedokarst features by laterization processes.

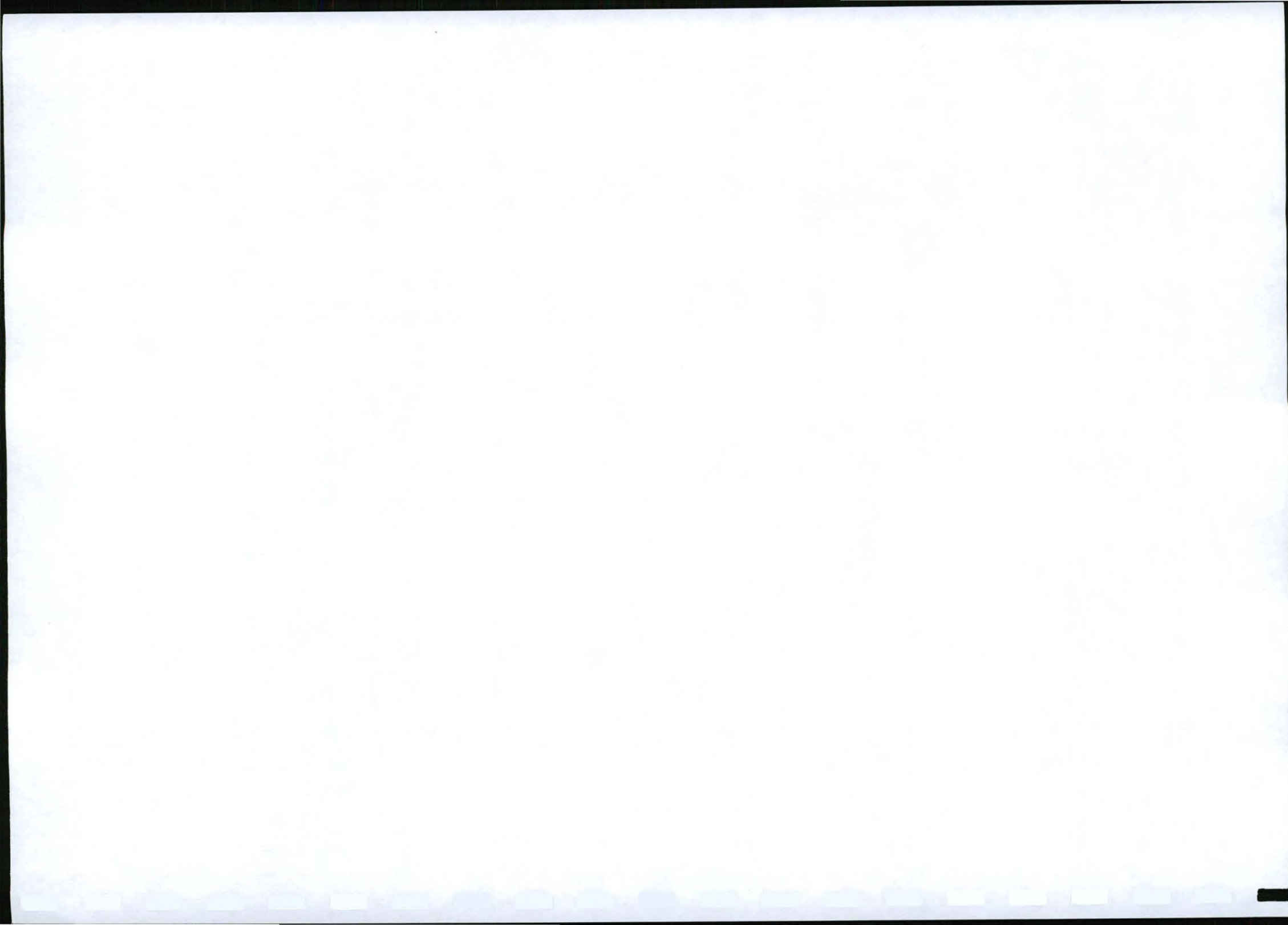
ii) Primary Gravels

These gravels are developed on a broad plain that is some 3000 m wide in places. The economically diamondiferous gravels generally occur as channels of up to 30m in width and 0.5m – 2m in thickness. The better gravels are sandy, clast-supported, granule-to-cobble conglomerates and are invariably associated with alluvial gravel. These alluvial gravels are developed in solutions of hollows in the hardpan cal Crete, which may mask underlying gravels.

iii) Terrace Gravels

The terrace gravels are found along the length of the numerous dry sprouts in the area. Generally the terrace deposits of a basal diamondiferous gravel of up to 2m overlain and by up to 2m of an upward filling alluvial sequence and capped by 1-3m of black cotton soil. The entire sequence is cemented by immature cal Crete. The gravel deposits are found at depths of 2 – 5m.

The gravel of the current application conforms mostly to the description of the oldest gravels.



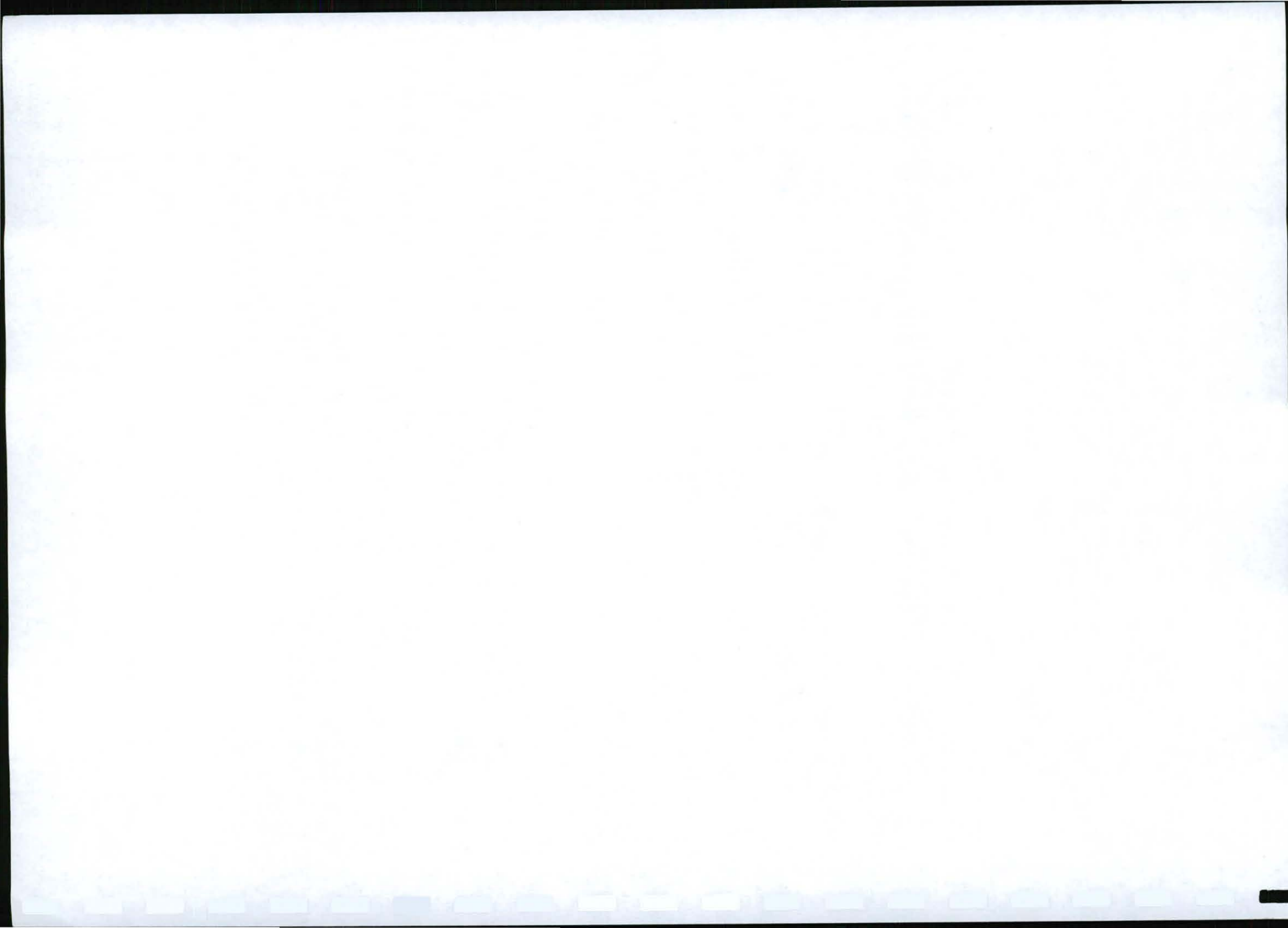
Climate

The Barcly West and surrounds is characterized by summer rainfall with thunderstorms. Winters are dry with frost common. Summer temperatures differ between 28 degrees and 40 degrees. In winter the temperatures can drop to -5 degrees. Rainfall differs between 350mm to 450mm a year. The predominant wind directions during the year are northwest with average wind velocities between 4 and 5 meter per second. These high temperatures with low rainfall make the region susceptible to very dry conditions.

Topography

The farms lie within the Highveld and inland plateau at an altitude of 1100 – 1150 meter above sea level. The Vaal river forms the south eastern boundary of the farm, and flowing in a southern direction.

The topography is general flat and is represented by a small crest in the south, which gives way to moderate gentle slopes towards the direction of the Vaal river. The landscape slopes generally to the direction of the river. Drainage lines run towards the river.



Topographical disturbance caused by historic mining and prospecting is visible. The age of these historical excavations has already re-vegetated. These historical mining activities have resulted in topographical disturbances. The more recent excavations were rehabilitated and re-vegetated.

Soil

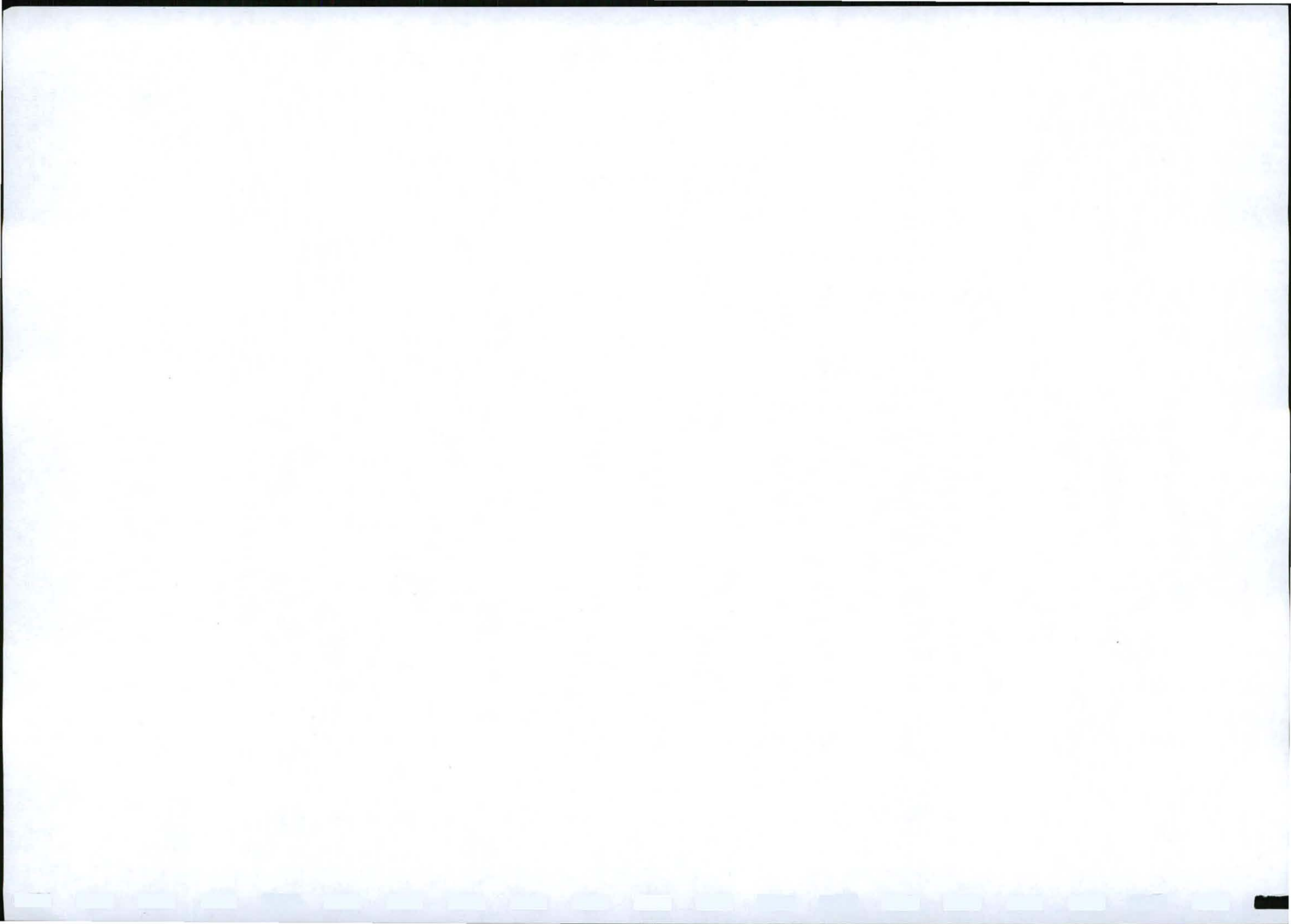
The topsoil differs in depth of 0,3m to 6m. If the topsoil is Red Hutton lime is then found till the gravel is reached at depths that may vary up to 7m. The soil is a red Hutton and lime.

Land Capability

The land capability is classified in accordance with the Chamber of Mines rehabilitation guidelines for pre-mining capability. The mining area will be a class 2, grazing land, and the rest of the farms will mostly be affected by future mining activities.

Ground Water

There is currently a borehole on the relevant farm which is in use for farming purposes. Groundwater levels are fluctuating depending on the topography.



Water will be extracted from the channel for the mining operations. A copy of the registration document is annexed.

Air Quality

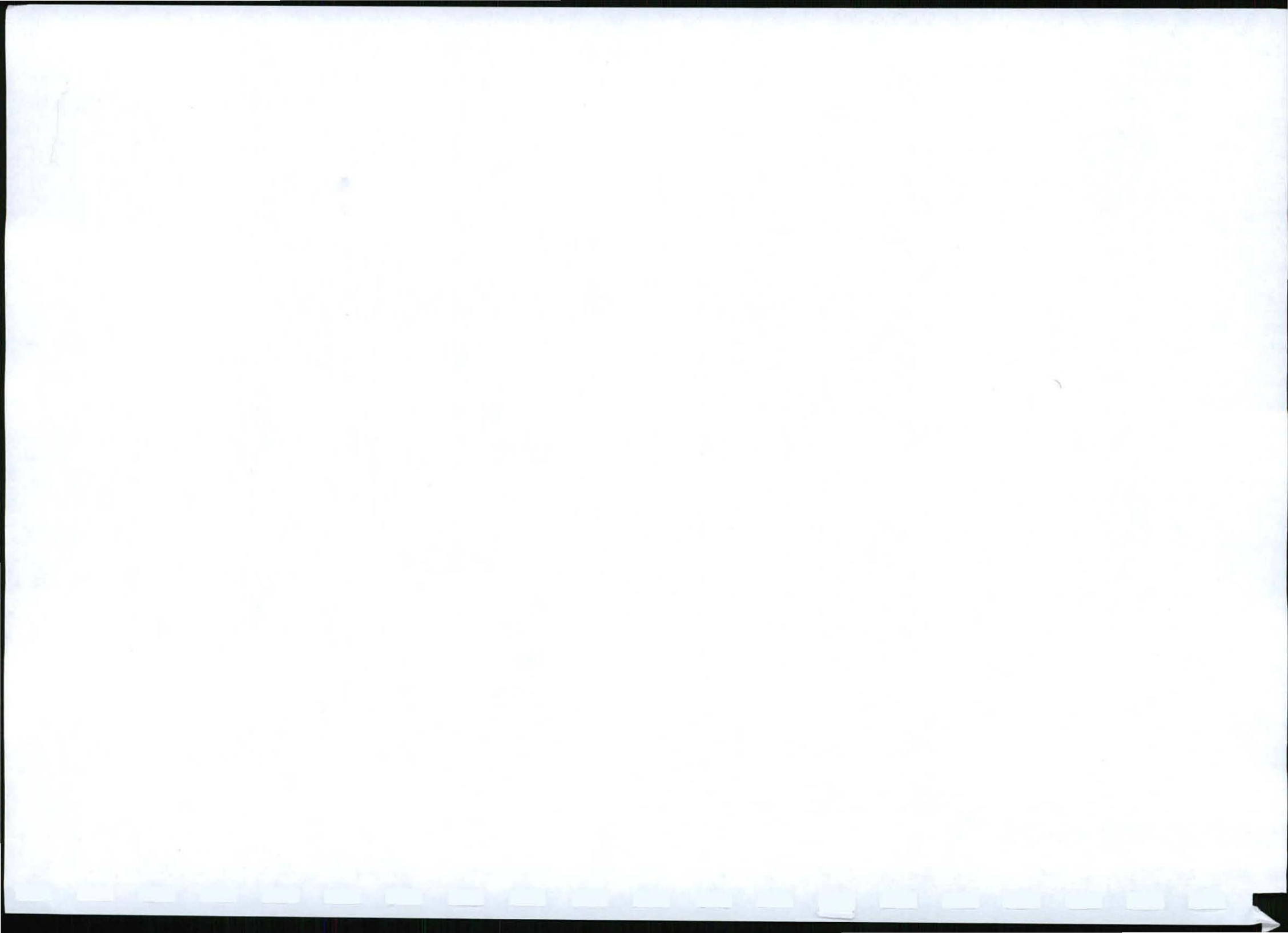
The area surrounding the farm is characterised mostly farming activity. Limited mining occurs in the direct vicinity of the farm. Ploughing and harvesting of croplands are a reasonable source of dust. Roads in the area are predominantly gravelled and generate considerable dust through daily use.

The air may however be regarded as relatively free from industrial pollution.

Noise

No noise, other than animals and infrequent vehicle sounds is noticeable on site.

No mining operations are active in the direct vicinity of the farm. Existing noise levels in the area are mainly generated from surrounding agricultural and mining activities.



Archaeological and Cultural Interest

No Archaeological or cultural interest was identified during the assessment of the property. Two graveyards is identified which dated since 1970 until 2000 according the dates on the tombstones..

- Dr Kobus Dreyer -
- Bloemfontein -
- 19/06/2009 -

Sensitive Landscapes

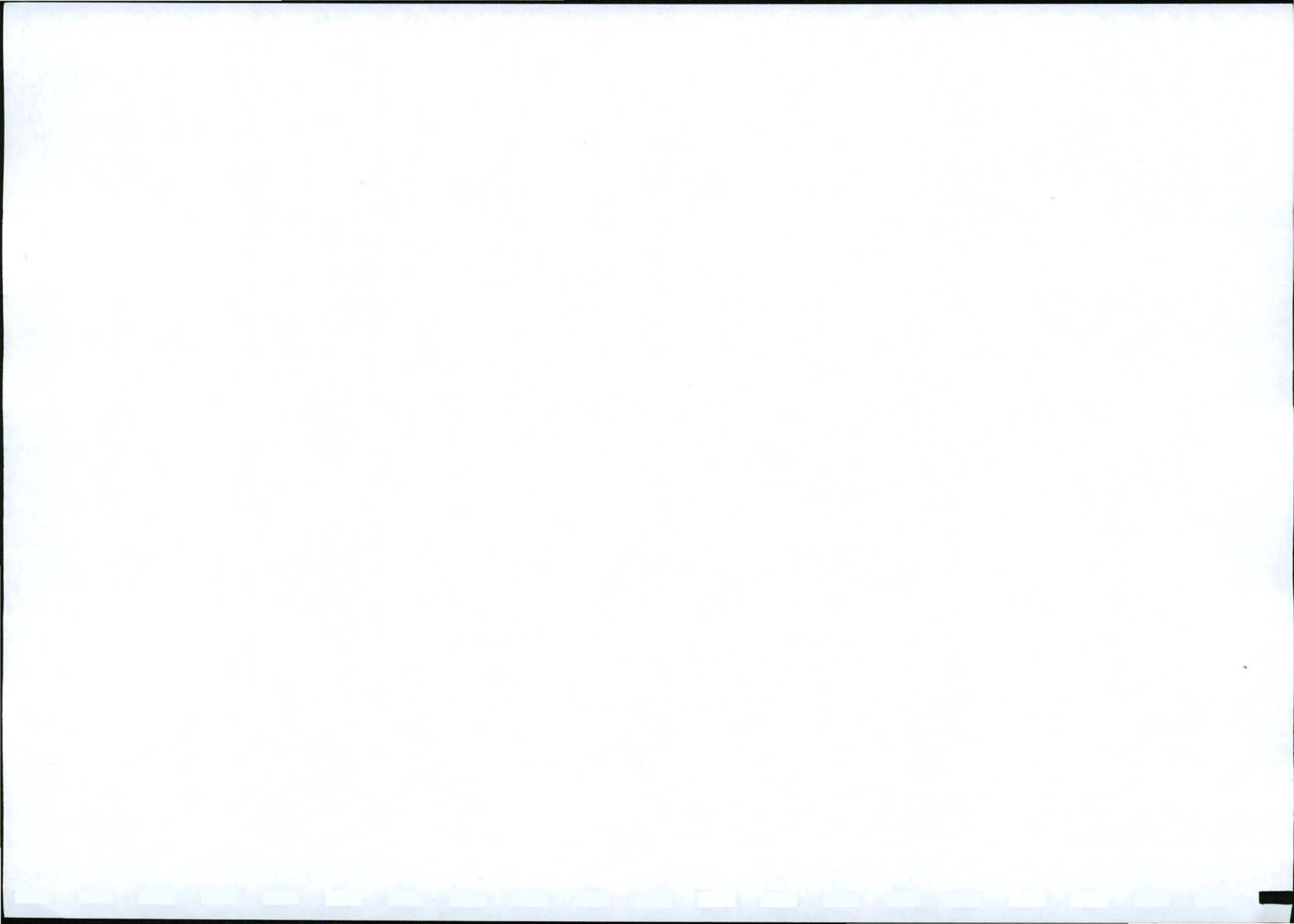
No sensitive landscape was identified during the assessment.

A Glazier floor is found near the river, this area is also outside the planned mining area, and will be protected in all cases.

Visual Aspects

The site can be seen from the Barkly West Riverton tar road which forms the south western boundary of the farm, the site will be about a kilometre to the east of it. On certain places mining activities and infrastructures will be visible..

Although partly adjacent to the Vaal river, the area is not known for its scenic beauty or tourism value. Activities are mostly farming related with limited mining.

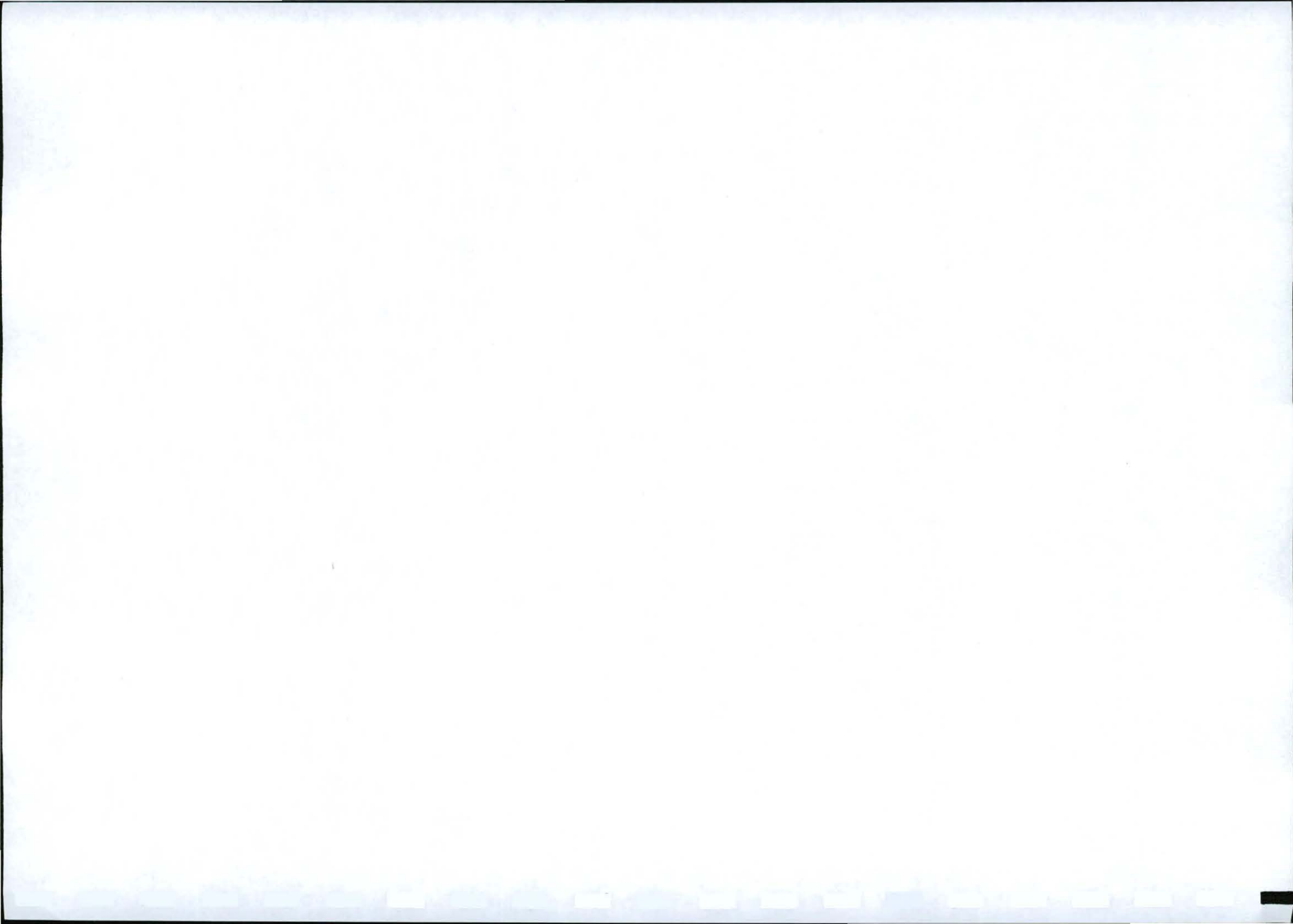


Socio-Economic Structure

The Northern Cape lies to the south of its most important asset, the mighty Orange River, which provides the basis for a healthy agricultural industry. The landscape is characterised by vast arid plains with outcroppings of haphazard rock piles. The cold Atlantic Ocean forms the western boundary.

This region covers the largest area of all the provinces and has the smallest population. Its major airports are situated at Kimberley, the capital, and Upington. The Northern Cape is serviced by an excellent road network, which makes its interior easily accessible from South Africa's major cities, harbours and airports.

Important towns are Upington, centre of the karakul sheep and dried-fruit industries, and the most northerly wine-making region of South Africa; Springbok, in the heart of the Namaqualand spring-flower country; Kuruman, founded by the missionary Moffat; De Aar, hub of the South African railway network; Sutherland, the coldest town in the country; and the sheep-farming towns of Carnarvon, Colesberg, Kenhardt and Prieska.



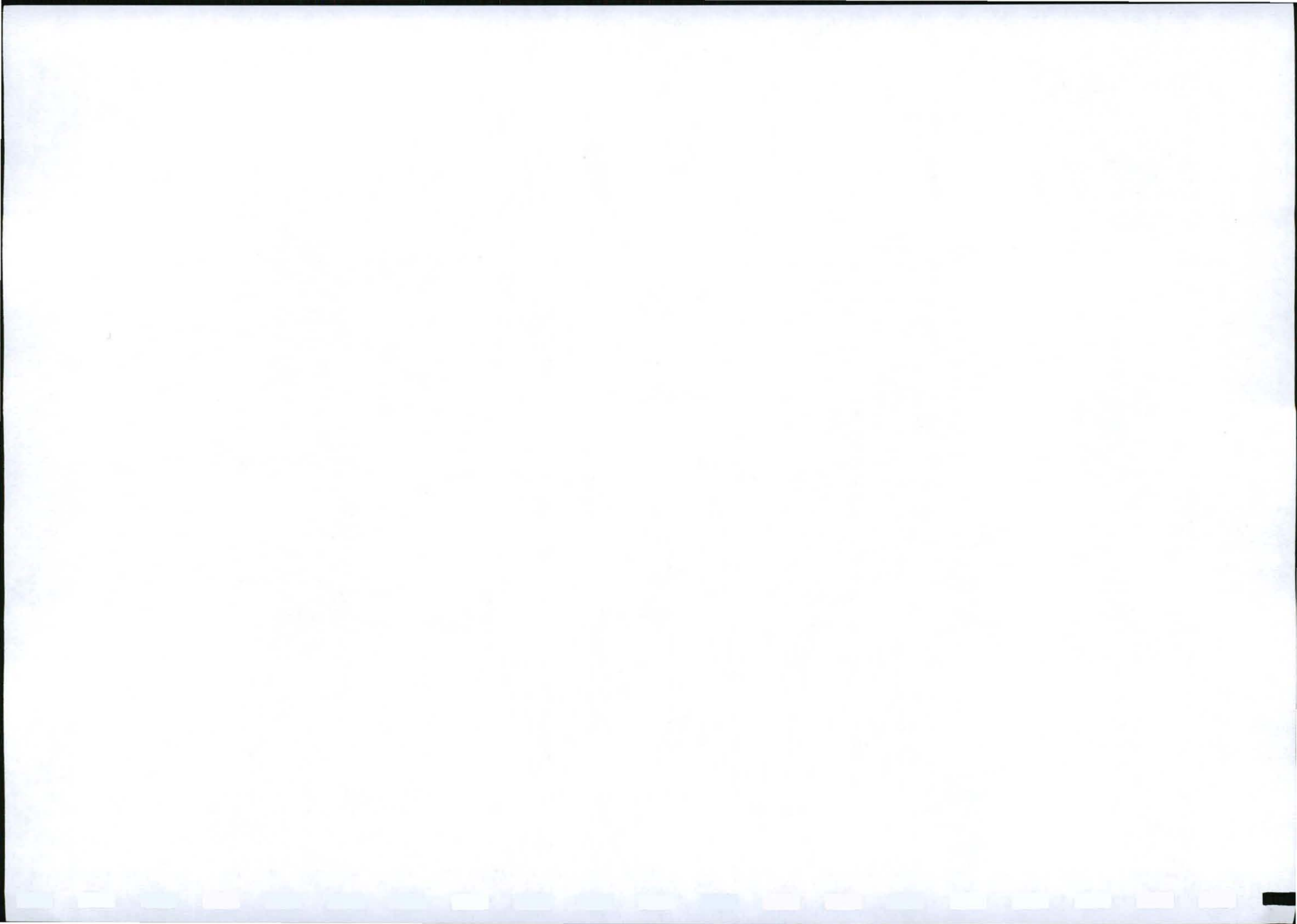
Apart from a narrow strip of winter-rainfall area along the coast, the Northern Cape is a semi-arid region with little rainfall in summer. The weather conditions are extreme cold and frosty in winter, with extremely high temperatures in summer.

The largest part of the province falls within the Nama-Karoo biome, with a vegetation of low shrub land and grass, and trees limited to watercourses. The area is known worldwide for its spectacular display of spring flowers that, for a short period every year, attracts thousands of tourists.

This biome is home to many wonderful plant species, such as the elephant's trunk (halfmens), tree aloe (kokerboom) and a variety of succulents.

The province has several national parks and conservation areas. The Kalahari Gemsbok National Park, together with the Gemsbok National Park in Botswana, is Africa's first transfrontier game park, known as the Kgalagadi Transfrontier Park. It is one of the largest nature-conservation areas in southern Africa and one of the largest remaining protected natural ecosystems in the world. The Park provides unfenced access to a variety of game between South Africa and Botswana and has a surface area of more than two million ha.

The Ai-Ais-Richtersveld Transfrontier Conservation Park spans some of the most spectacular scenery of the arid and desert environments in southern Africa. Bisected by the Orange River, which forms the border between South Africa and



Namibia, it comprises the Ai-Ais Hot Springs Game Park in Namibia and the Richtersveld National Park in South Africa. Some of the distinctive features in the area include the Fish River Canyon (often likened to the Grand Canyon in the United States of America) and the Ai-Ais Hot springs. This arid zone is further characterised by a unique and impressive variety of succulent plant species.

Nowhere is the Orange River more impressive than at the Augrabies Falls, which ranks among the world's greatest cataracts on a major river. The Augrabies Falls National Park was established to preserve this natural wonder.



Northern Cape

Capital: Kimberley

Principal language: Afrikaans

Official language: 68,0%

Second language: Setswana

Third language: 20,8%

Other languages: isiXhosa

6,2%

Population: 822 727

Area (km²): 361 830

% of total area: 29,7%

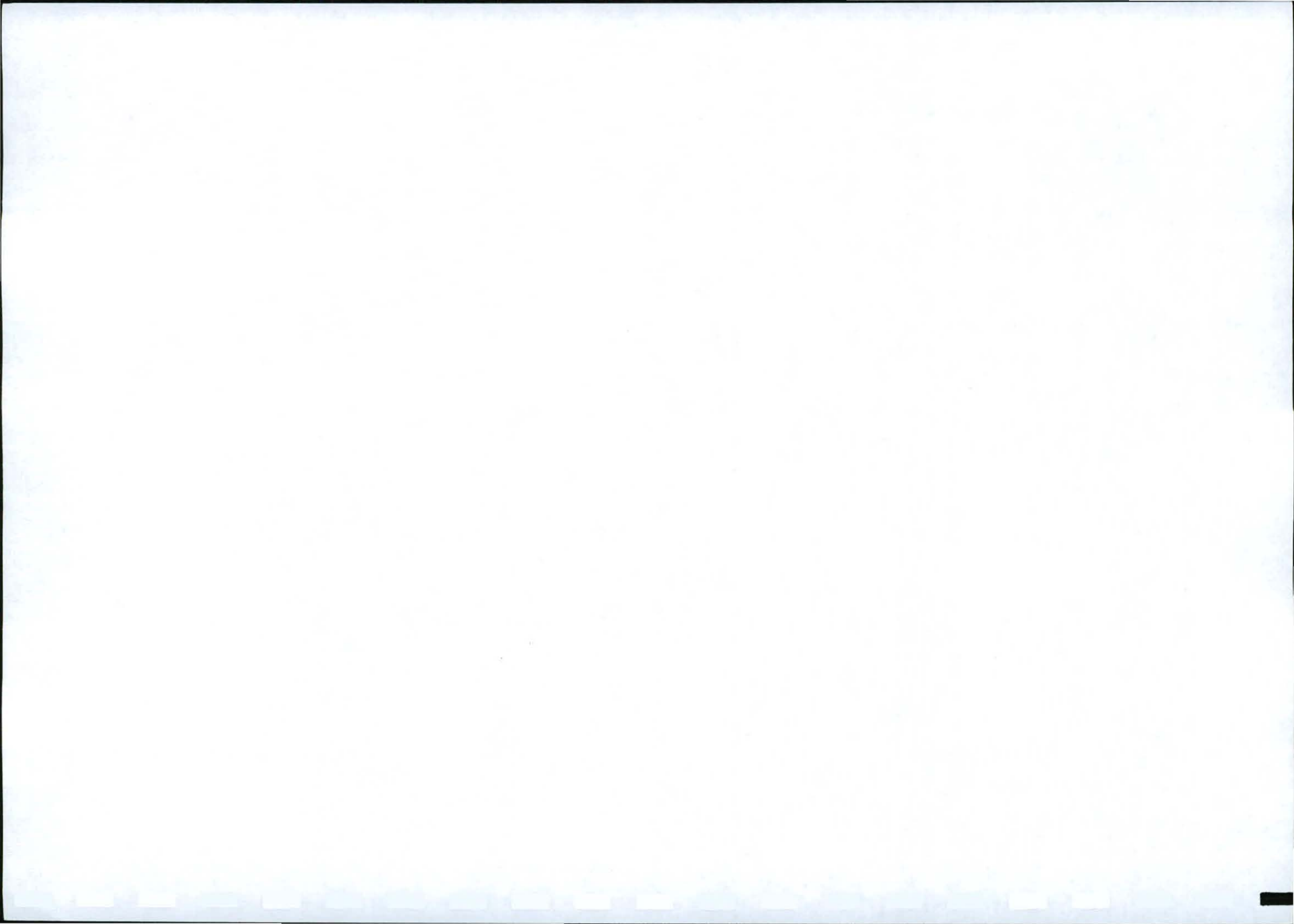
GGP* at current prices

(2001): R19 585 million

% of total GDP:** 2,0%

* GGP (Gross Geographical Product) = GDP of a region

** GDP (Gross Domestic Product)



The people

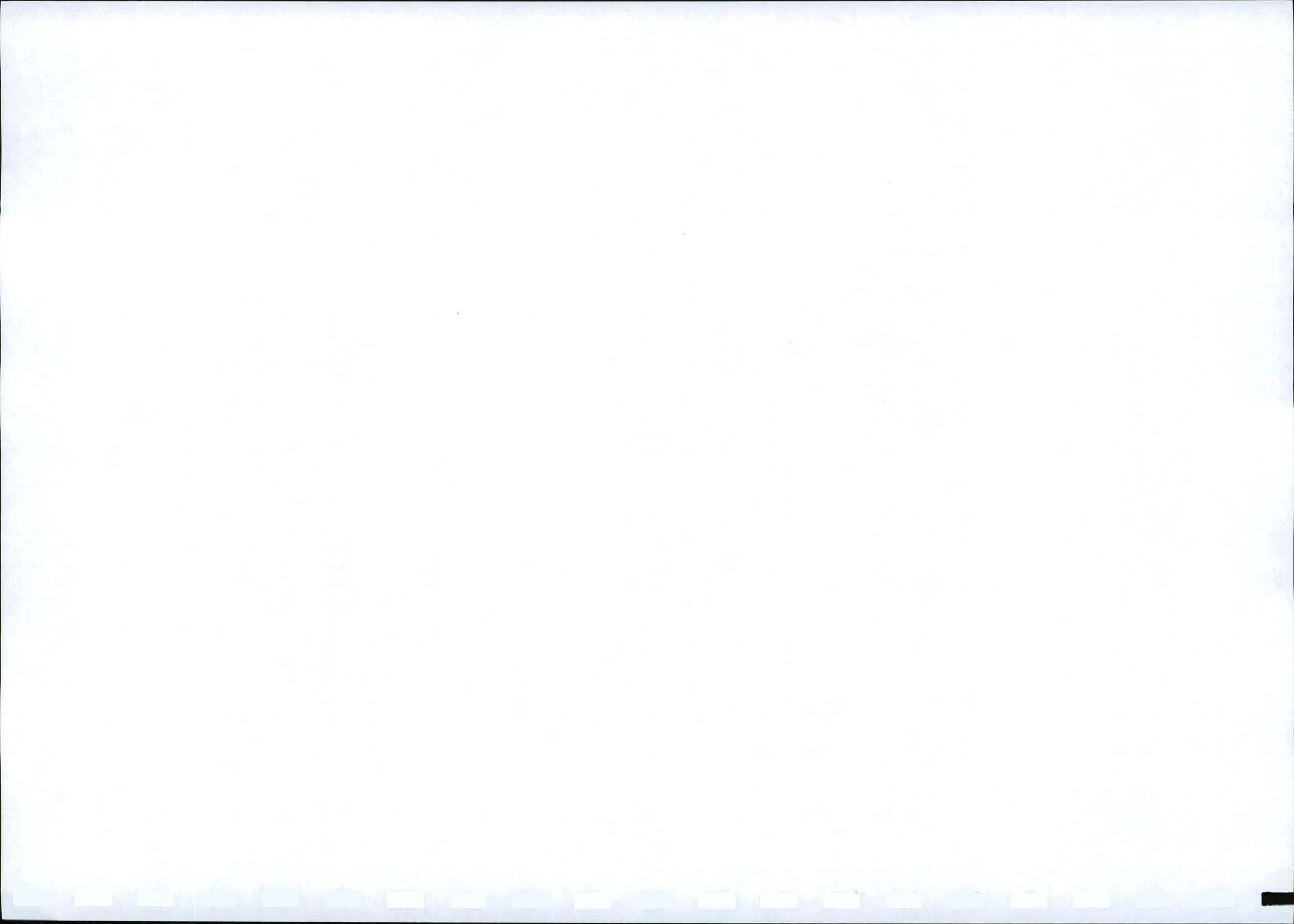
The Northern Cape is sparsely populated and houses some 822 727 people on 361 830 km² of land. About 68% of the people speak Afrikaans. Other languages spoken are Setswana, isiXhosa and English.

The official unemployment rate of the Northern Cape is 14,4% (Labour Force Survey).

The last remaining true San (Bushman) people live in the Kalahari area of the Northern Cape. The whole area, especially along the Orange and Vaal Rivers, is rich in San rock engravings. A good collection can be seen at the McGregor Museum in Kimberley. The province is also rich in fossils.

Agriculture and industry

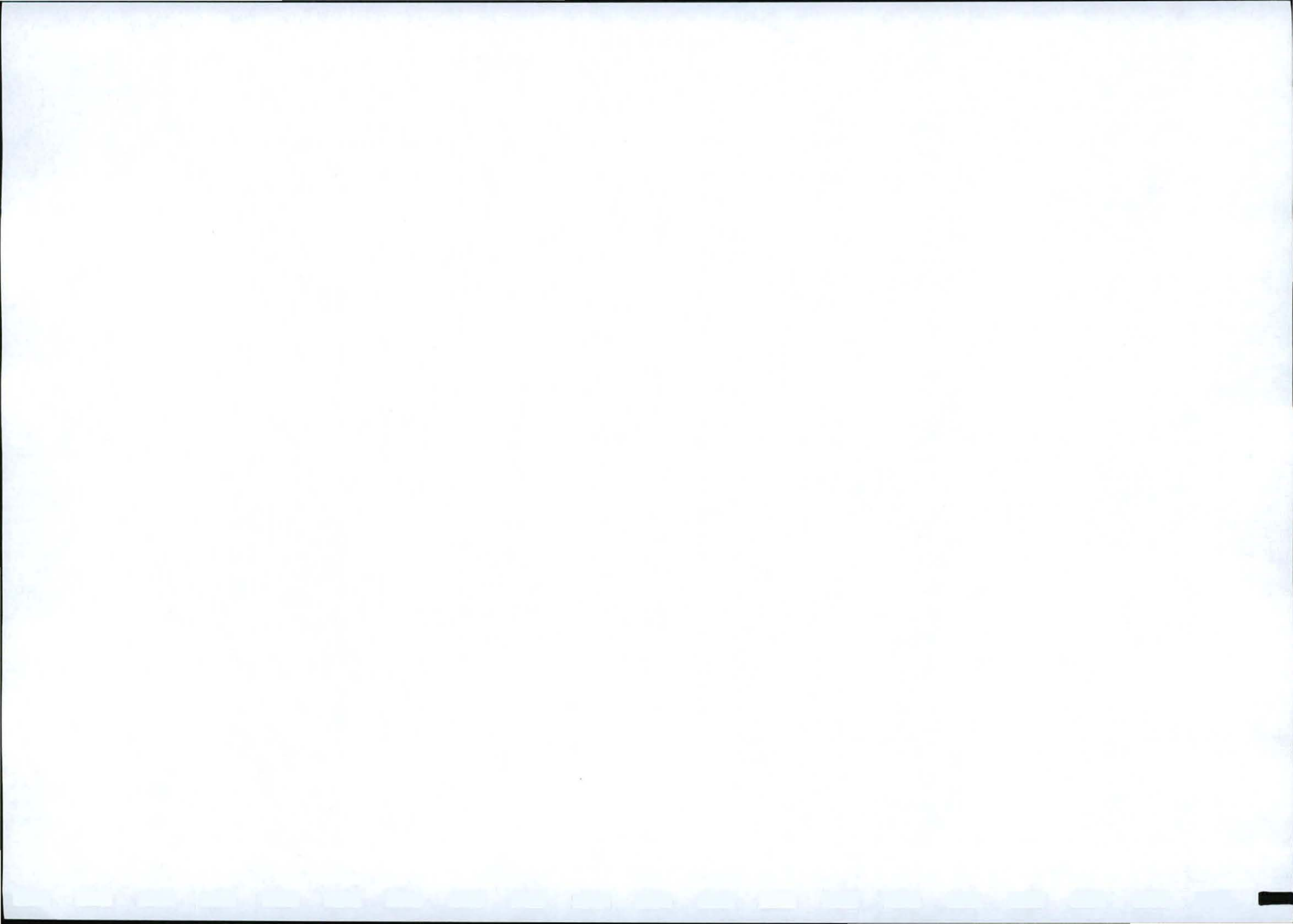
The Northern Cape is an important contributor to South Africa's primary production and has considerable potential for the beneficiation of these primary commodities. However, the province only contributed 2, 0% to the economy of South Africa in 2001, making it the smallest contributor among all the nine provinces (Census 2001).



The province is displaying a tremendous growth in value-added activities, including game farming. Food production and processing for the local and export market is growing significantly. Underpinning the growth and development plan of the province are the investment projects that link up with the existing plans of the Namaqua Development Corridor. The focus is on the beneficiation and export of sea products.

The economy of a large part of the Northern Cape, the interior Karoo, depends on sheep farming, while the karakul-pelt industry is one of the most important in the Gordonia district of Upington. The province has fertile agricultural land. In the Orange River Valley, especially at Upington, Kakamas and Keimoes, grapes and fruit are intensively cultivated.

Some 14 million crates of table grapes were produced in 2001/02, mainly for the export market. In line with grape production being higher than expected, raisins also showed a significant increase with the South African Dried Fruit Co-op paying out more than R200 million to some 200 producers. Wheat, fruit, peanuts, maize and cotton are produced at the Vaalharts Irrigation Scheme near Warrenton.

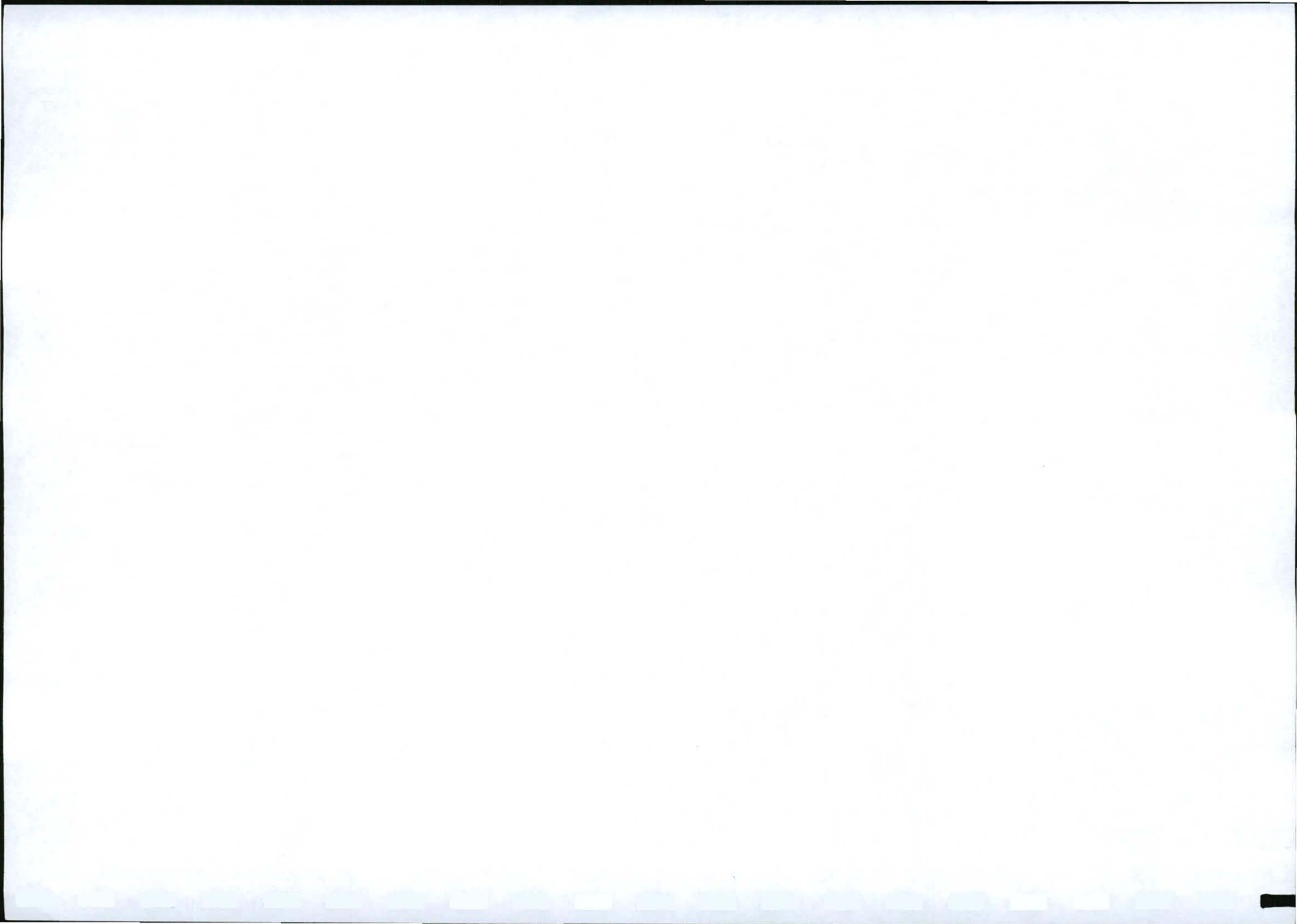


Mining

The Northern Cape is rich in minerals. The country's chief diamond pipes are found in the Kimberley district. In 1888, the diamond industry was formally established with the creation of De Beers Consolidated Mines. Alluvial diamonds are also extracted from the beaches and sea between Alexander Bay and Port Nolloth. The Sishen Mine near Kathu is the biggest source of iron ore in South Africa, and the copper mine at Okiep is one of the oldest mines in the country. Copper is also mined at Springbok and Aggenys. The province is also rich in asbestos, manganese, fluorspar, semi-precious stones and marble.

Until recently, the majority of small- to medium-scale alluvial operations were concentrated along or near the current Vaal River system. With the rapidly depleting deposits available for mining, there has been a gradual shift towards the Orange River system, with Trans-Hex holding 50% of concessions issued along the Orange River. Two recent larger scale investments also show continued prospects in this sector.

- ❖ Furthermore we include the following demographic information on the Socio-Economic structure



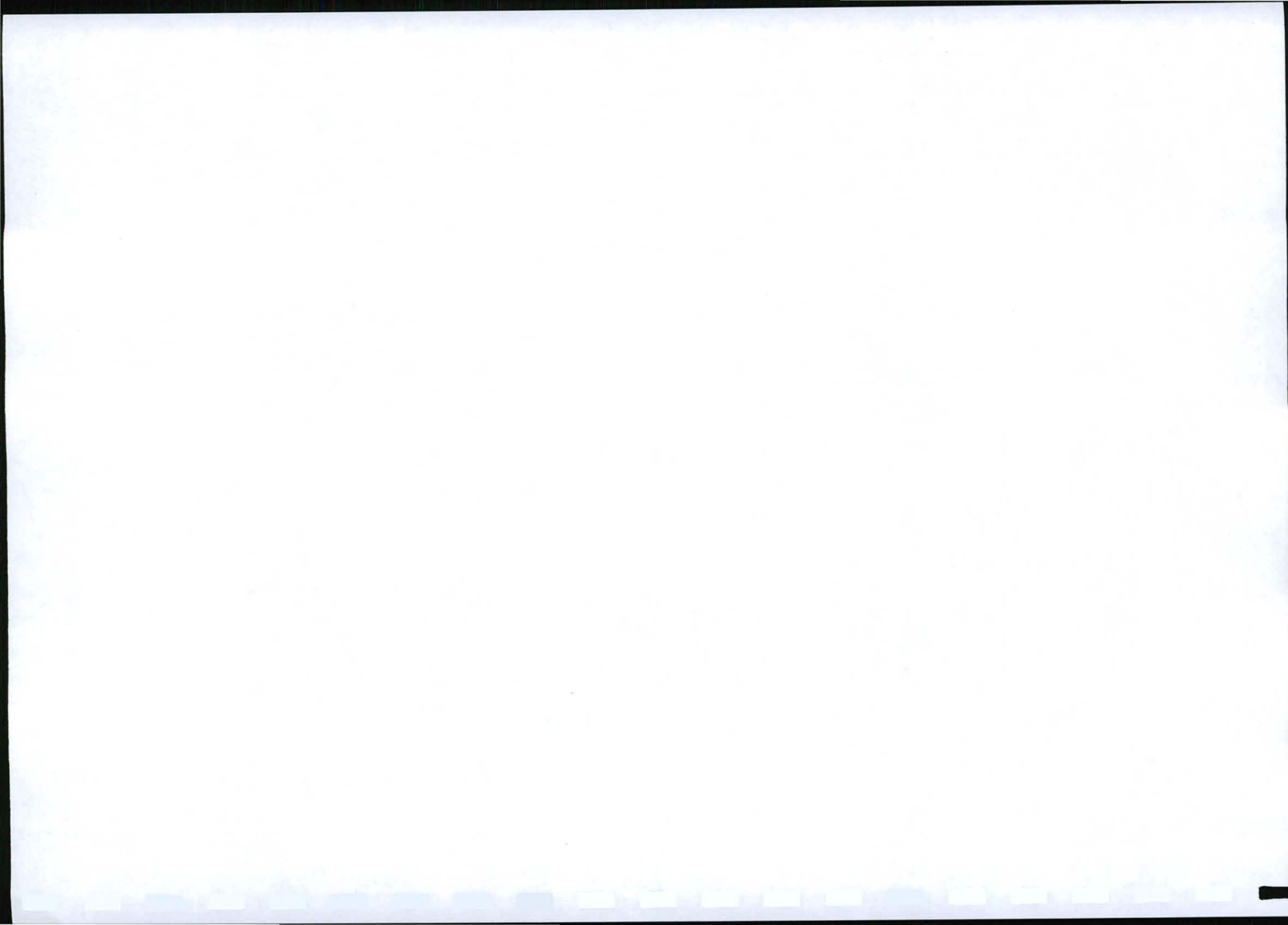
Demographic Information:

RACE

	AMOUNT	%	GRAPH
AFRICAN	53965	88.14	
COLOURED	<u>RACE988</u>	1.61	
INDIAN	94	0.5	
WHITE	5898	9.63	
OTHER	279	0.46	

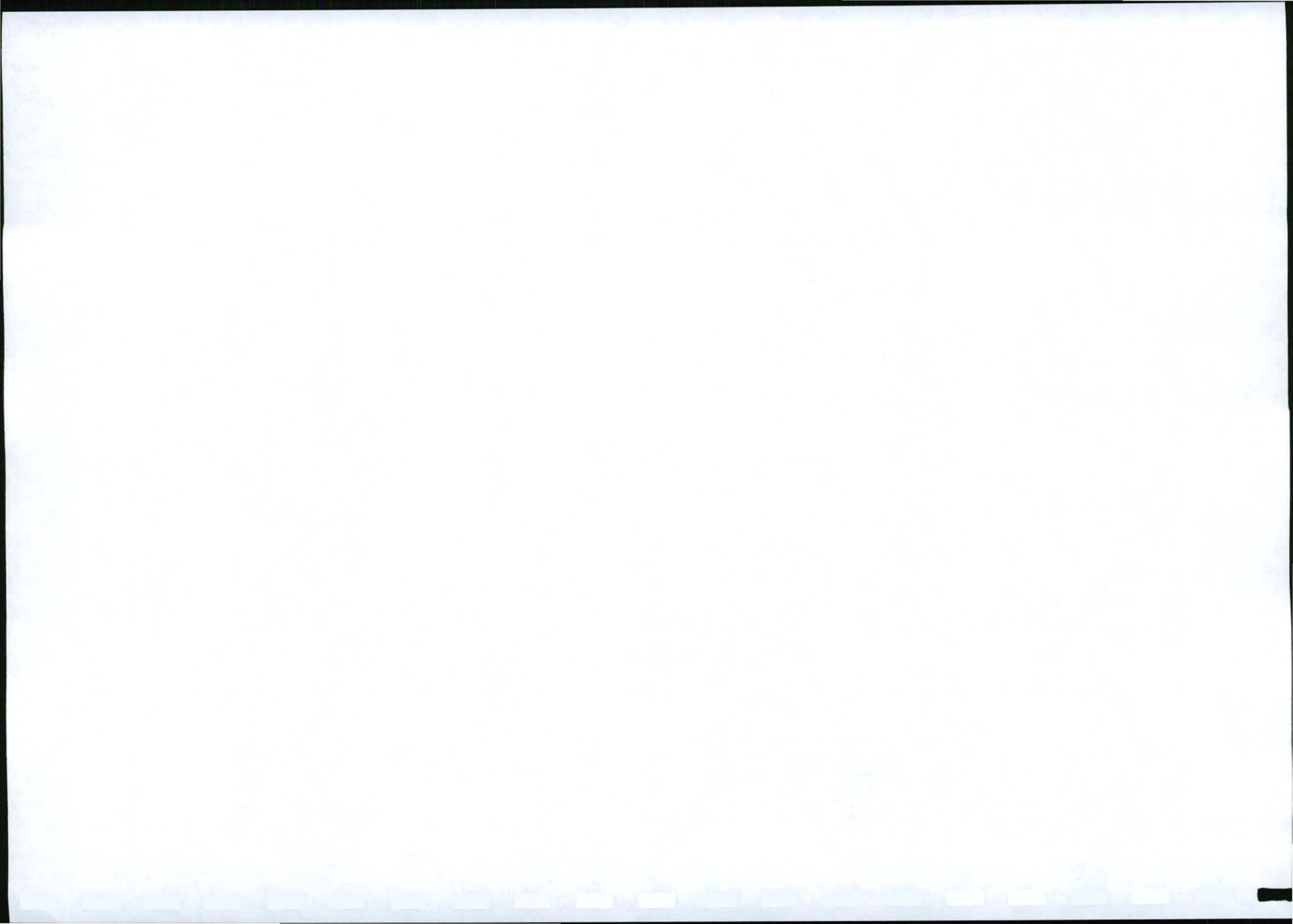
GENDER

	AMOUNT	%	GRAPH
MALE	29955	48.93	
FEMALE	31258	51.06	



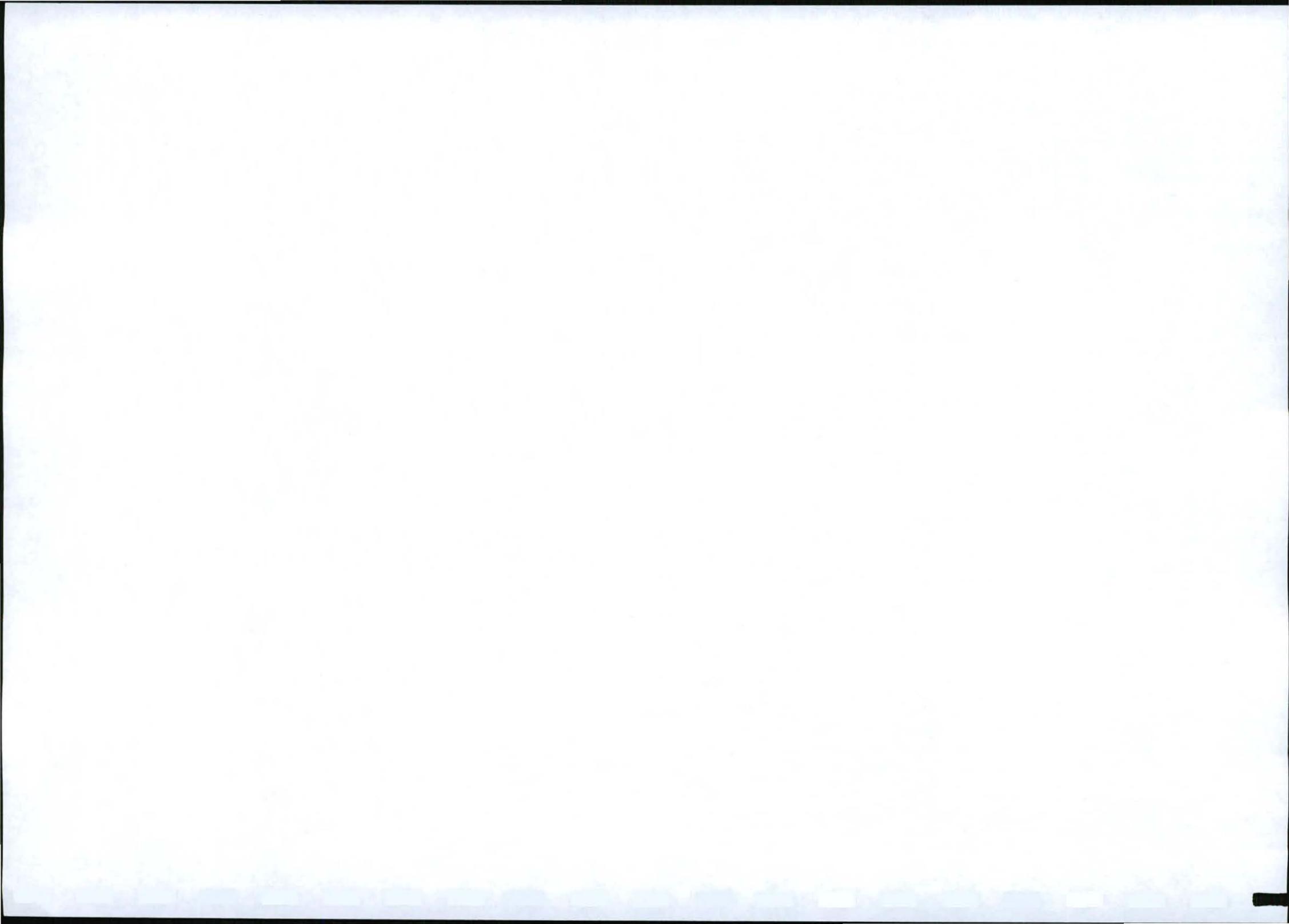
AGE

	AMOUNT	%	GRAPH
0 - 4	6151	10.5	
5 - 19	23059	37.66	
20 - 29	10947	17.88	
30 - 49	12865	21.01	
50 - 64	4744	7.75	
OVER 65	2775	4.54	
AGE UNKNOWN	664	1.08	



LABOUR BREAKDOWN

	AMOUNT	%	GRAPH
EMPLOYED	12912	21.09	<p style="text-align: center;">LABOUR BREAKDOWN</p> <p style="text-align: center;">LABOURBREAKDOWN</p>
UNEMPLOYED	5723	9.35	
NOT LOOKING	1487	2.43	
HOUSEWIFE	3243	5.30	
FULLTIME STUDENT	8294	13.55	
PENSIONER	3912	6.39	
DISABLED	507	.83	
NOT WISHING	1027	1.68	
NOT WORKING OTHER	1876	3.06	
UNEMP. UNSPECIFIED	98	.16	
UNEMP. UNDER 15	21709	35.46	
UNEMP. INSTITUTION	441	.72	



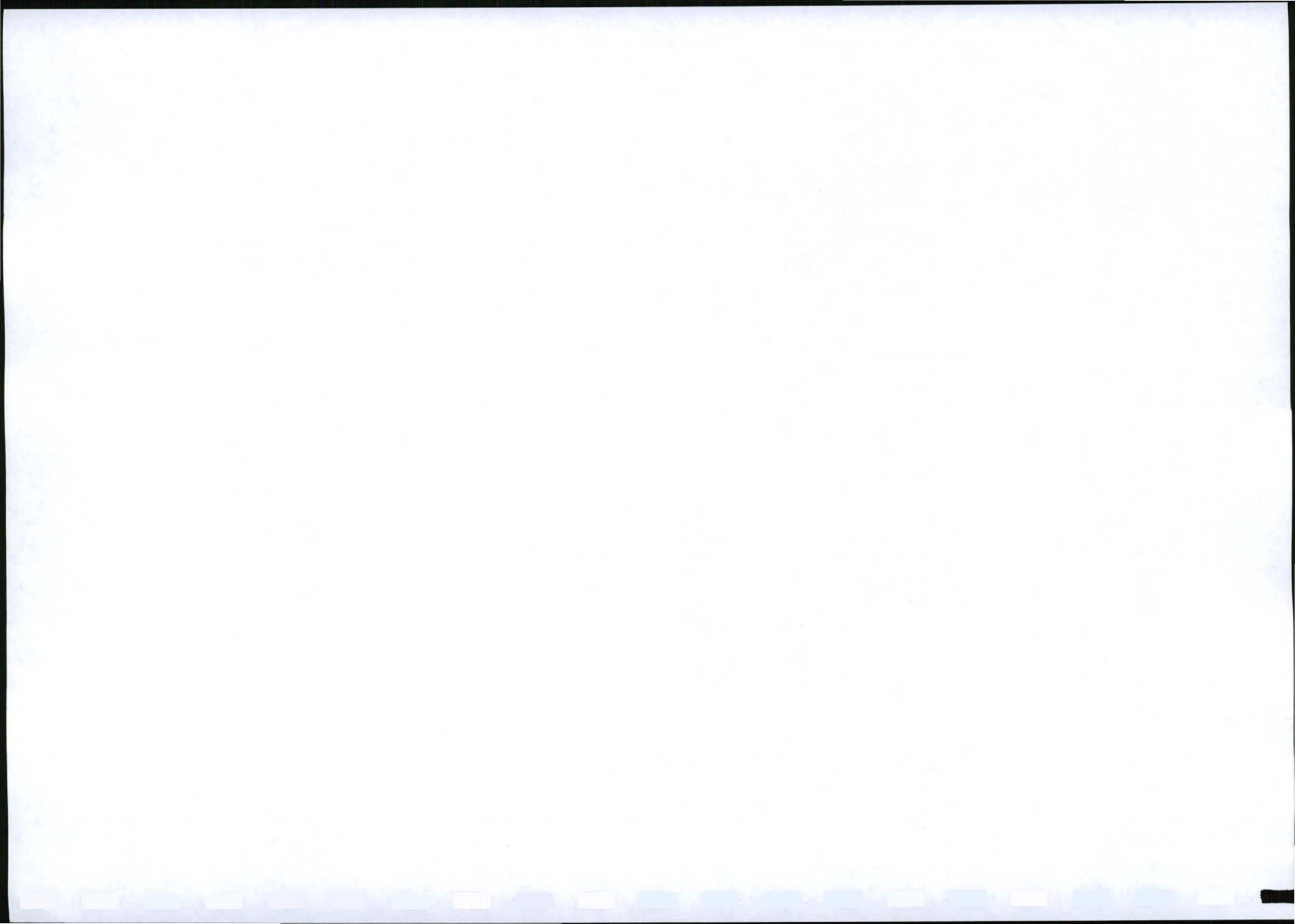
OCCUPATION

	AMOUNT	%	GRAPH																						
SENIOR MANAGEMENT	283	2.19	<p>A bar chart titled 'GRAPH' showing the amount for each occupation category. The y-axis represents the amount, ranging from 0 to 8000 in increments of 2000. The x-axis lists the occupation categories: SENIOR, PROFESSIONAL, TECHNICAL, CLERKS, SERVICE, SKILLED, CRAFT/TRADE, PLANT, ELEMENTARY, and NOT. The bars represent the amount for each category, with 'ELEMENTARY' having the highest amount, exceeding 8000. A legend indicates 'Series 1'.</p> <table border="1"> <thead> <tr> <th>OCCUPATION</th> <th>AMOUNT</th> </tr> </thead> <tbody> <tr> <td>SENIOR</td> <td>283</td> </tr> <tr> <td>PROFESSIONAL</td> <td>687</td> </tr> <tr> <td>TECHNICAL</td> <td>340</td> </tr> <tr> <td>CLERKS</td> <td>460</td> </tr> <tr> <td>SERVICE</td> <td>540</td> </tr> <tr> <td>SKILLED</td> <td>1233</td> </tr> <tr> <td>CRAFT/TRADE</td> <td>1190</td> </tr> <tr> <td>PLANT</td> <td>621</td> </tr> <tr> <td>ELEMENTARY</td> <td>7013</td> </tr> <tr> <td>NOT</td> <td>1001</td> </tr> </tbody> </table>	OCCUPATION	AMOUNT	SENIOR	283	PROFESSIONAL	687	TECHNICAL	340	CLERKS	460	SERVICE	540	SKILLED	1233	CRAFT/TRADE	1190	PLANT	621	ELEMENTARY	7013	NOT	1001
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CLERKS	460	3.56																							
SERVICE RELATED	540	4.18																							
SKILLED	1233	9.55																							
CRAFT / TRADE	1190	9.22																							
PLANT MACHINE	621	4.81																							
ELEMENTARY	7013	54.31																							
NOT CLASSIFIED	1001	7.75																							



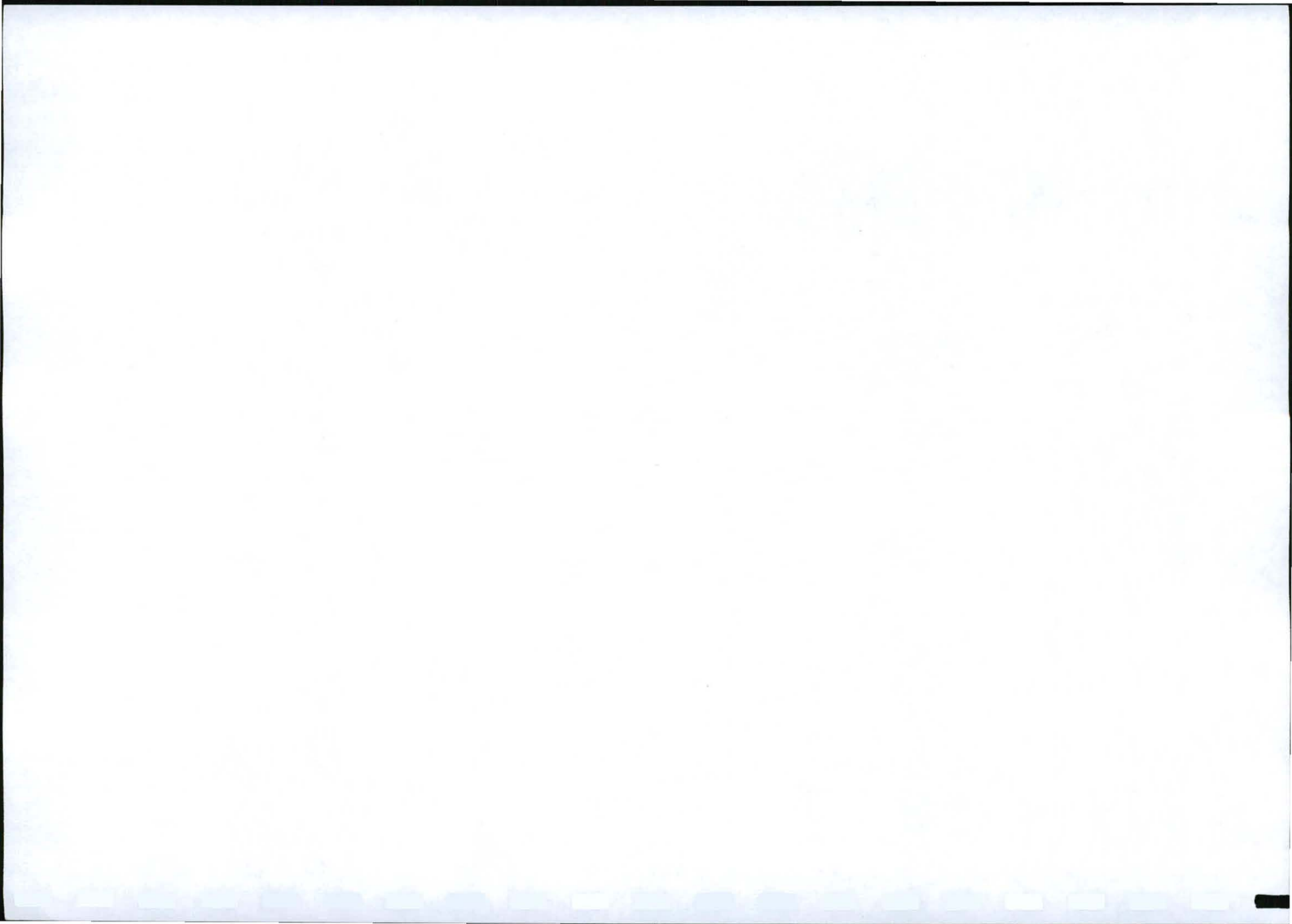
INDUSTRY

	AMOUNT	%	GRAPH
FARMING	5388	41.73	<p>Series 1</p>
MINING	555	4.30	
MANUFACTURING	392	3.04	
UTILITIES	95	0.74	
CONSTRUCTION	602	4.66	
TRADE	812	6.29	
TRANSPORT	299	2.32	
BUSSINESS SERVICES	266	2.06	
SOCIAL SERVICES	1255	9.72	
PRIVATE HOUSEHOLD	2391	18.52	
EXTERRITOTIAL	0	0.00	
DIPLOMATIC	9	0.07	



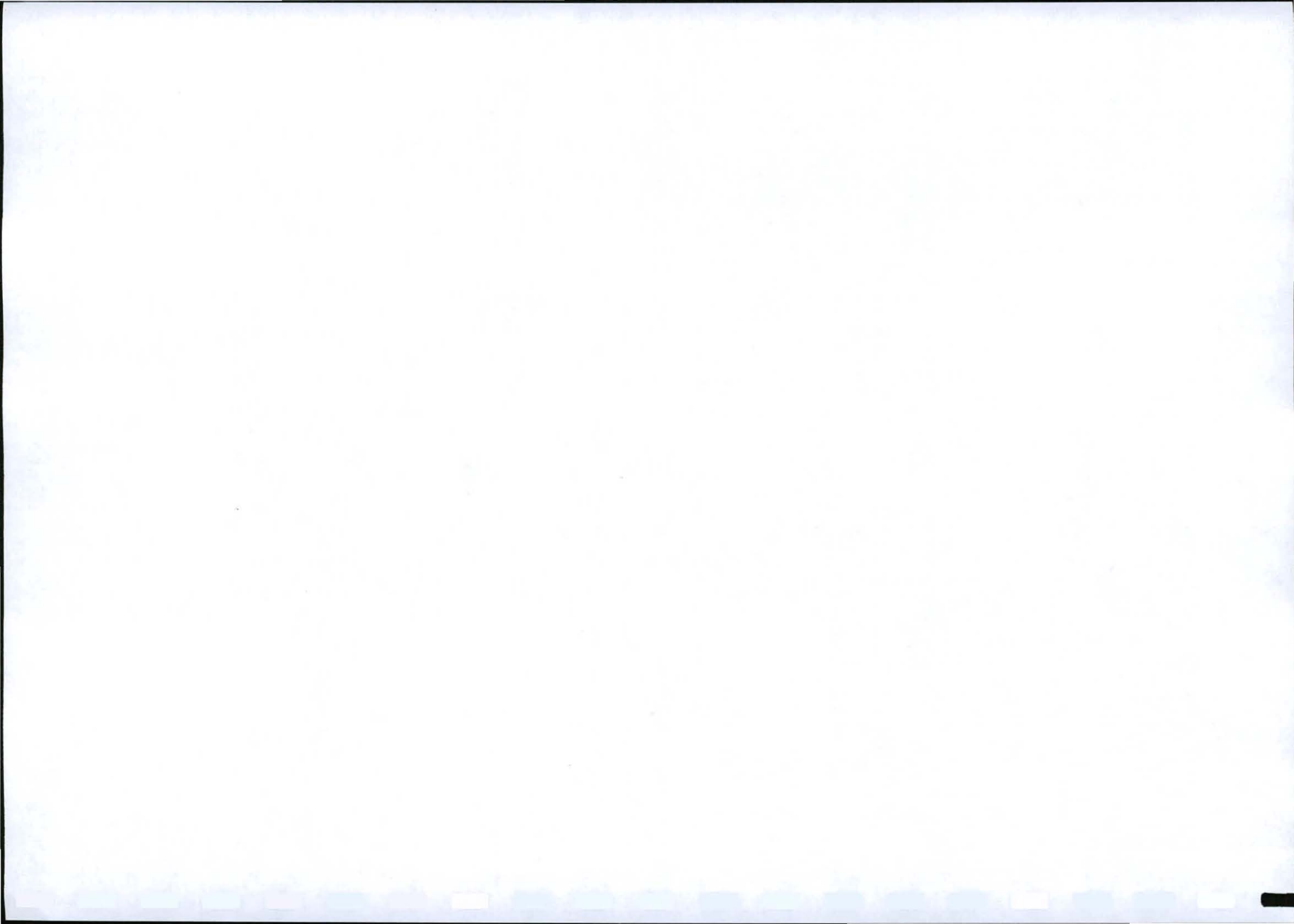
EDUCATION LEVELS

	AMOUNT	%	GRAPH																											
NO EDUCATION	18745	67.36	<p>Series1</p> <p>EDUCATION LEVELS</p> <table border="1"> <caption>Data for Education Levels Graph</caption> <thead> <tr> <th>Education Level</th> <th>Amount</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>NO EDUCATION</td> <td>18745</td> <td>67.36</td> </tr> <tr> <td>PRIMARY</td> <td>21510</td> <td>35.13</td> </tr> <tr> <td>SECONDARY</td> <td>9265</td> <td>15.13</td> </tr> <tr> <td>MATRIC</td> <td>2690</td> <td>4.39</td> </tr> <tr> <td>TERTIARY</td> <td>811</td> <td>1.32</td> </tr> <tr> <td>ED. OTHER</td> <td>151</td> <td>0.25</td> </tr> <tr> <td>ED. UNSPECIFIED</td> <td>1894</td> <td>3.09</td> </tr> <tr> <td>UNDER 5</td> <td>6140</td> <td>10.03</td> </tr> </tbody> </table>	Education Level	Amount	%	NO EDUCATION	18745	67.36	PRIMARY	21510	35.13	SECONDARY	9265	15.13	MATRIC	2690	4.39	TERTIARY	811	1.32	ED. OTHER	151	0.25	ED. UNSPECIFIED	1894	3.09	UNDER 5	6140	10.03
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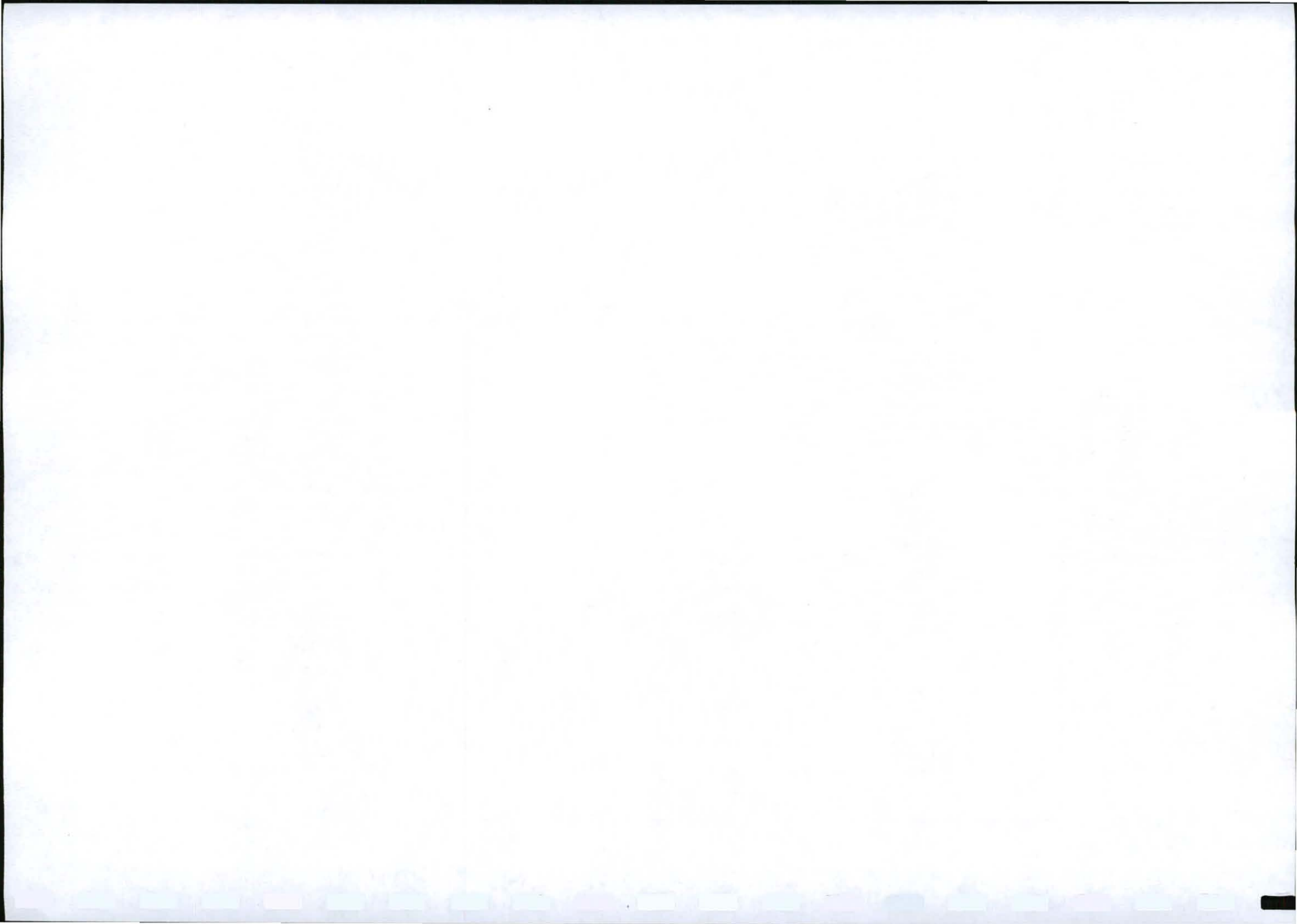
ANNUAL INDIVIDUAL INCOME

	AMOUNT	%	GRAPH
NONE	41243	67.36	<p>ANNUAL INDIVIDUAL INCOME</p>
R 1 – 18000	15359	25.09	
R 30001 – 72000	1172	1.91	
R 72001 – 132000	212	0.35	
R 132001 – 192000	44	0.07	
OVER 192000	56	0.09	
OTHER	3116	5.09	



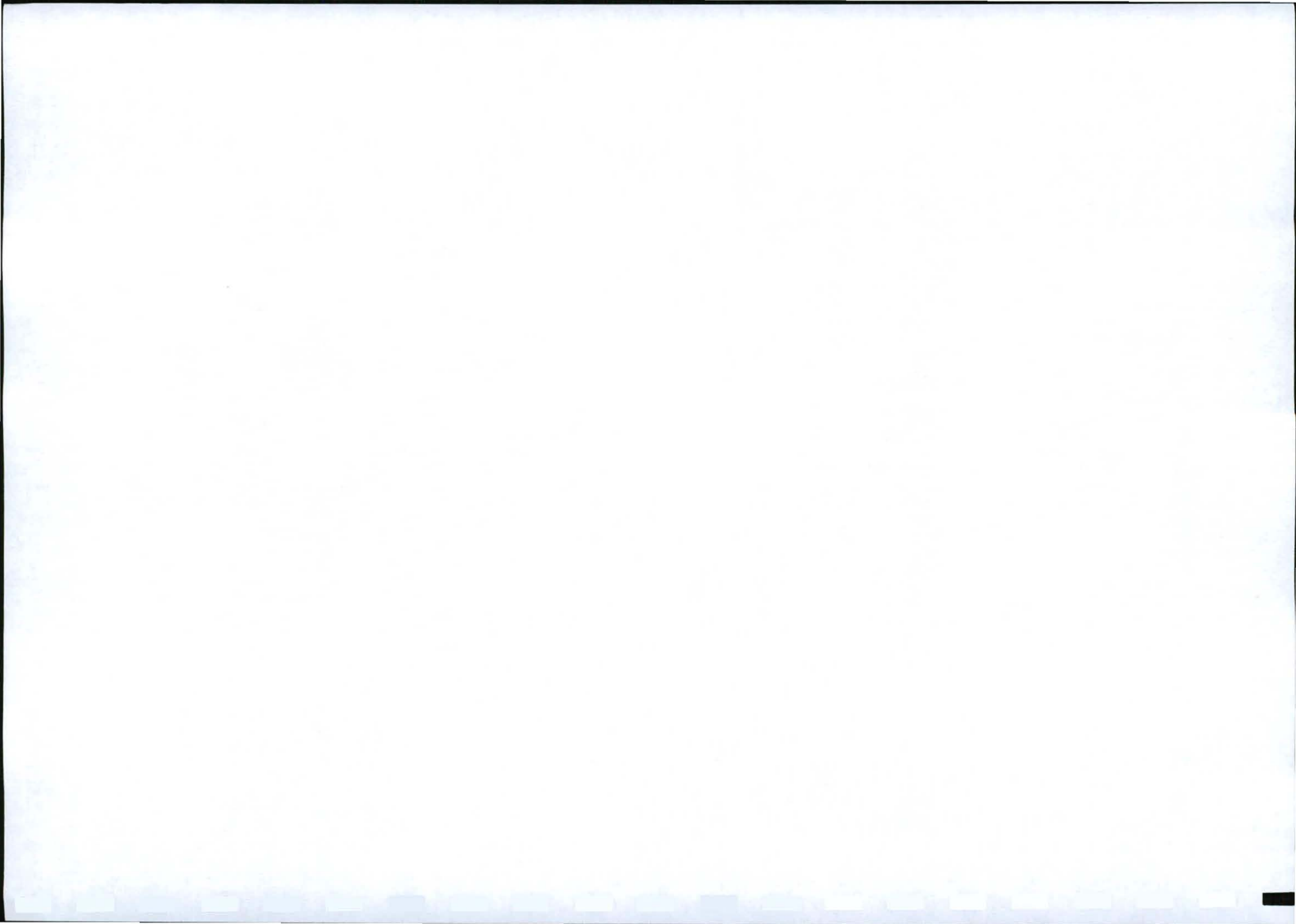
ANNUAL HOUSEHOLD INCOME

	AMOUNT	%	GRAPH
R 1 - 18000	8449	65.88	<p>Series 1</p> <p>ANNUAL HOUSEHOLD INCOME</p>
R 30001 - 72000	828	5.47	
R 72001 - 132000	285	2.22	
R 132001 - 192000	72	0.56	
OVER 192000	83	0.65	
OTHER	757	5.90	

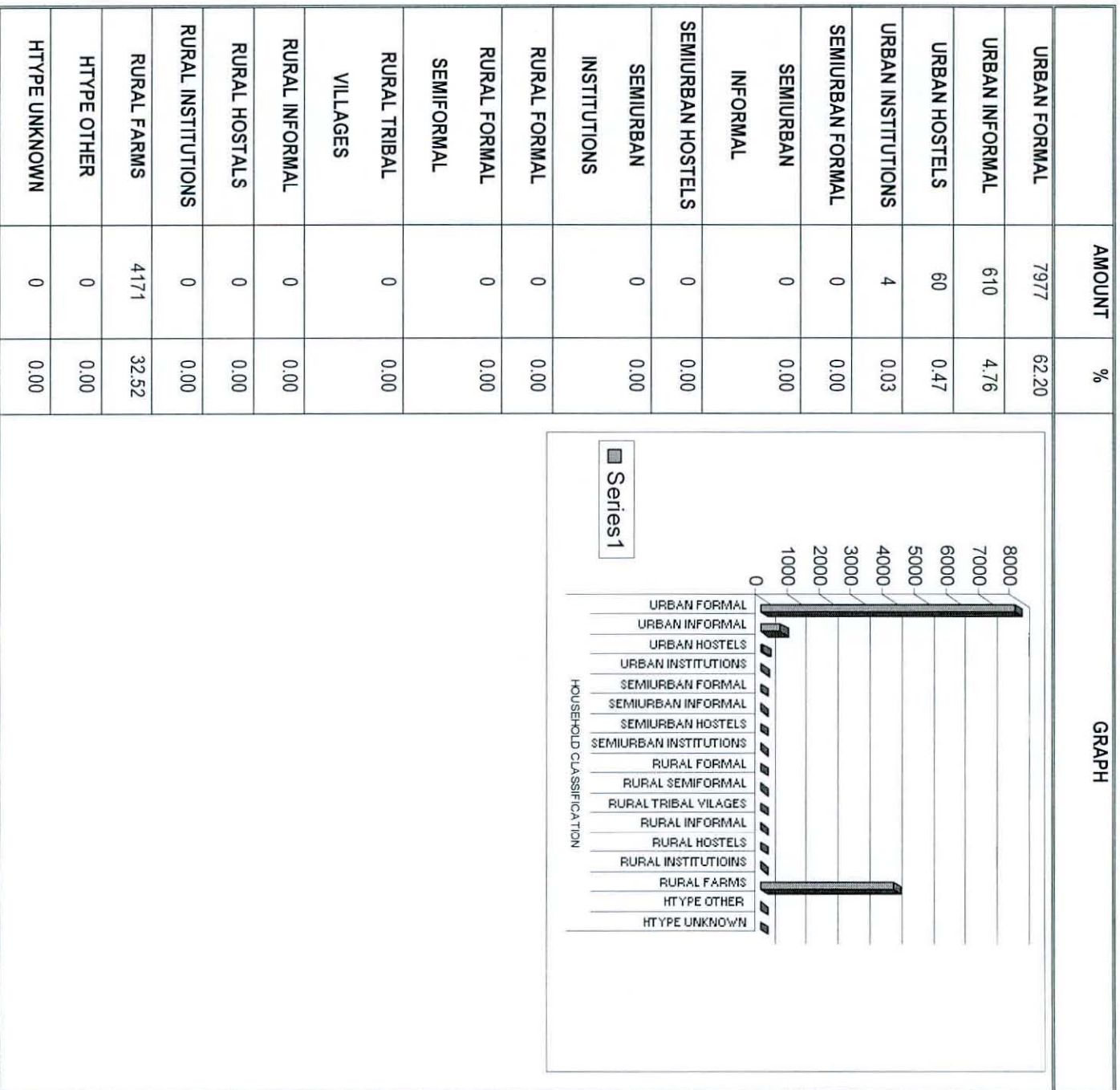


DWELLING TYPES

	AMOUNT	%	GRAPH
HOUSE SITE	6463	50.39	<p align="center">DWELLING TYPES</p>
TRADE DWELLING	1478	11.52	
FLAT	87	0.68	
TOWNHOUSE	35	0.27	
RETIREMENT VILLAGE	28	0.22	
BUILDING BACKYARD	183	1.43	
INFORMAL BACKYARD	455	3.55	
INFORMAL OTHER	3866	30.14	
ROOM / FLAT LET SHARED	79	0.62	
CARAVAN / TENT	4	0.03	
NONE / HOMELESS	2	0.02	
OTHER	42	0.33	
UNSPECIFIED	87	0.68	
INSTITUTIONAL HOSTEL	12	0.09	



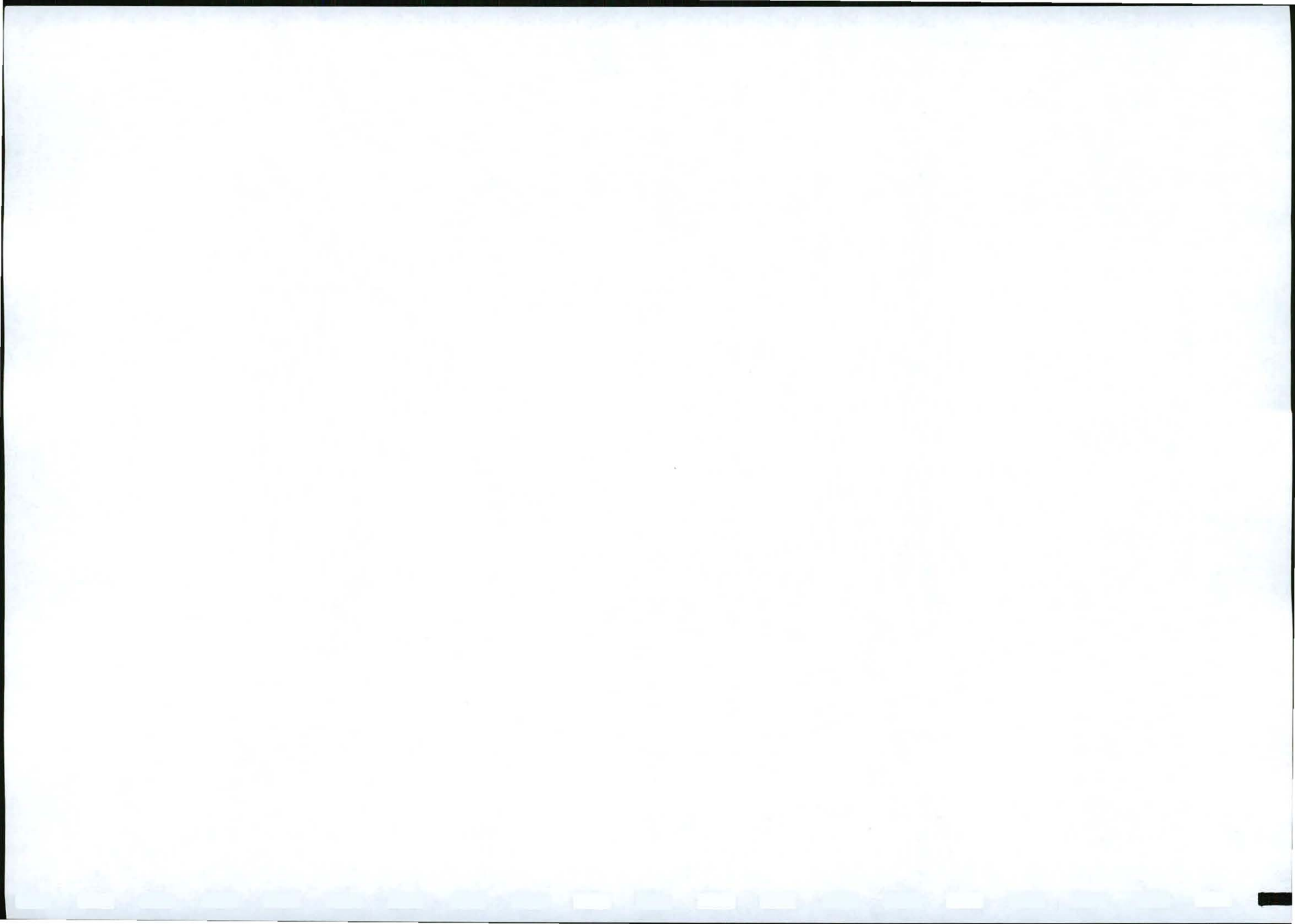
HOUSEHOLD CLASSIFICATIONS





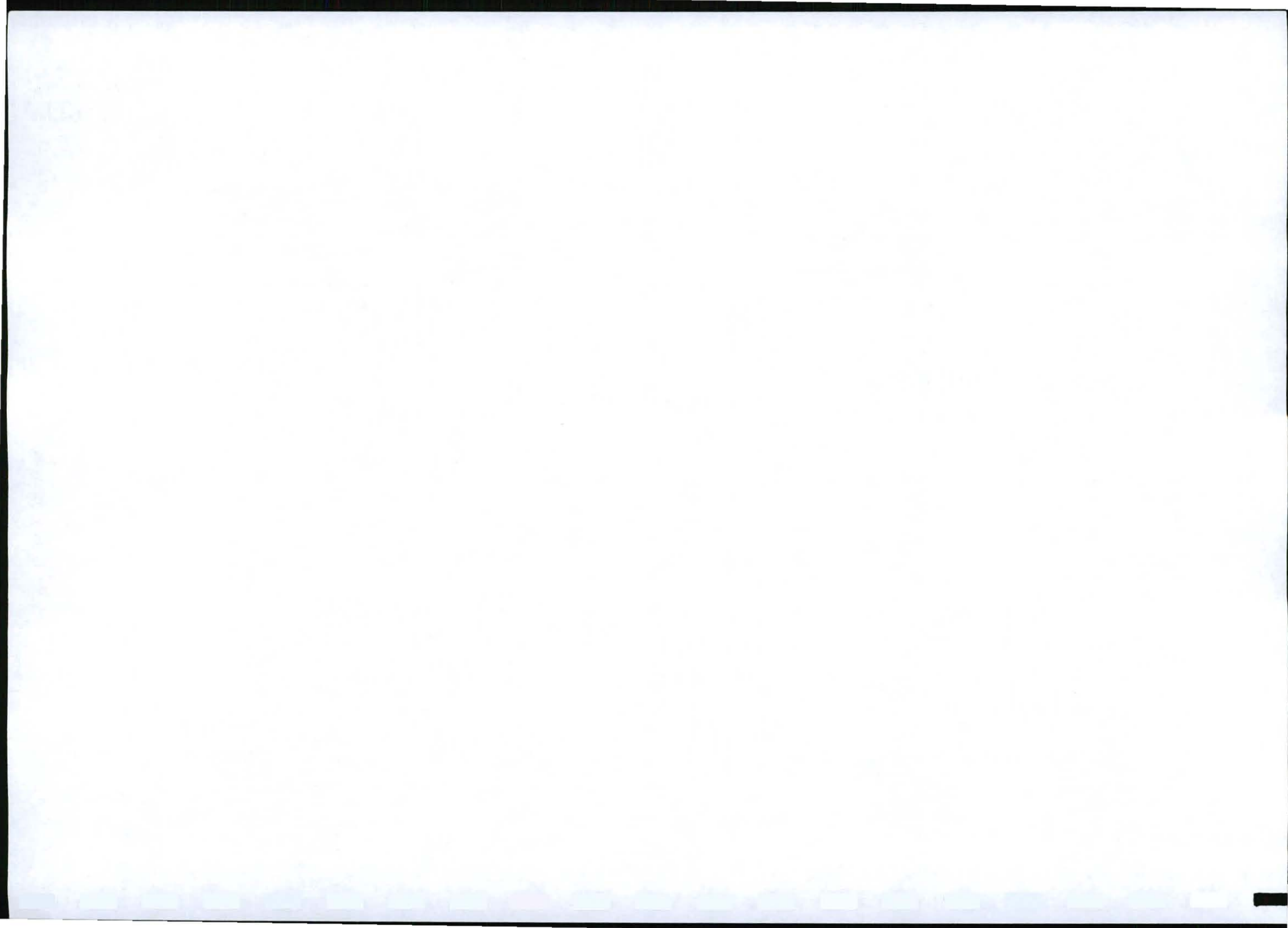
WATER

	AMOUNT	%	GRAPH
DWELLING	3362	26.21	<p>WATER</p>
ONSITE	6595	51.42	
PUBLIC TAP	1154	9.00	
TANKER	112	0.87	
BOREHOLE	1377	10.74	
NATURAL	132	1.03	
OTHER	42	0.33	
UNSPECIFIED	51	0.40	



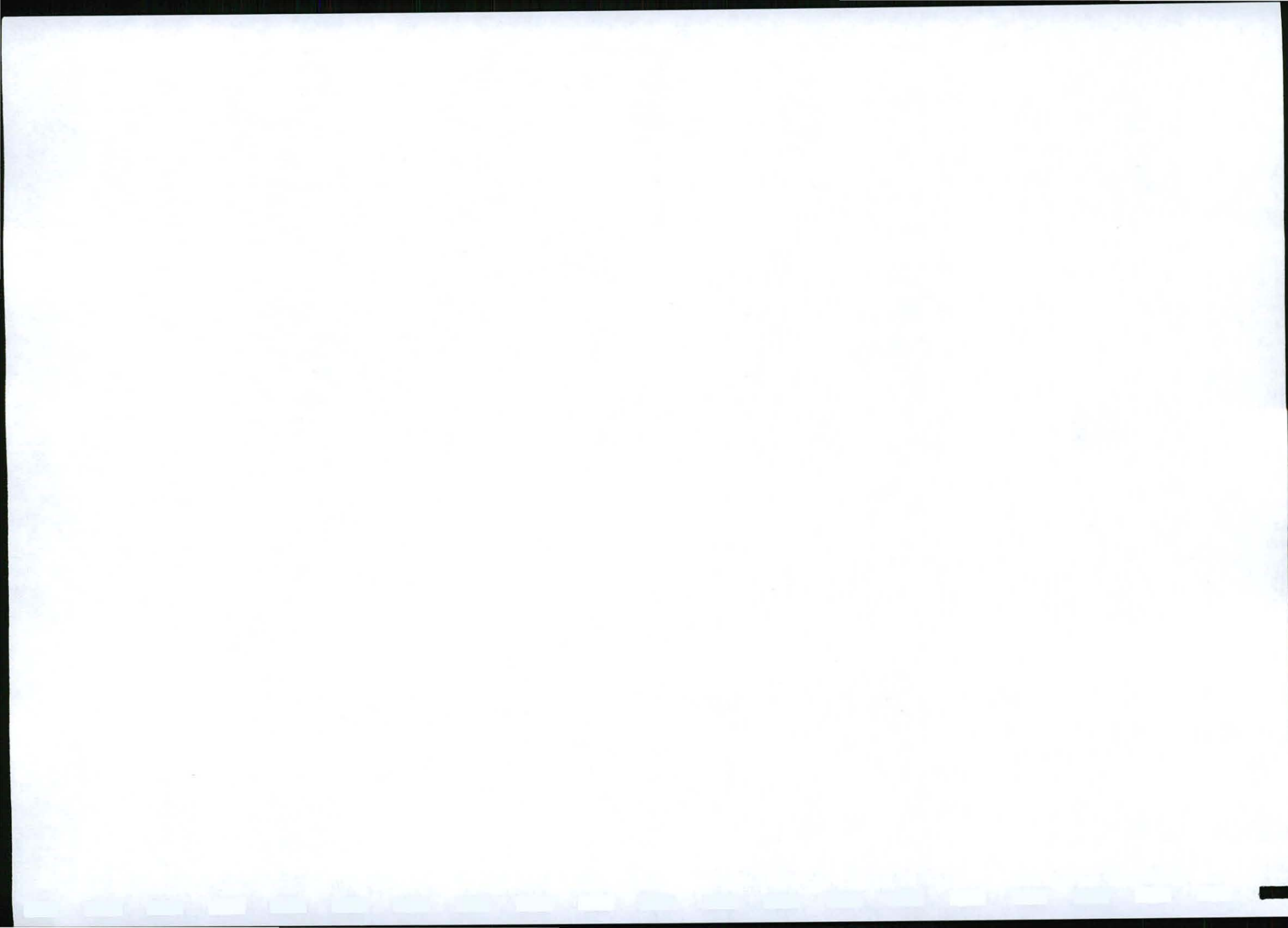
ELECTRICITY

	AMOUNT	%	GRAPH
MUNICIPALITY	7825	61.01	<p>The bar chart displays the distribution of electricity sources. The vertical axis (y-axis) is labeled from 0 to 8000 in increments of 1000. The horizontal axis (x-axis) lists the categories: MUNICIPALITY, MUNICIPALITY OTHER, GAS, PARAFFIN, CANDLES, OTHER SOURCE, and UNSPECIFIED. The bars represent the following values: MUNICIPALITY (7825), MUNICIPALITY OTHER (50), GAS (29), PARAFFIN (621), CANDLES (4218), OTHER SOURCE (1), and UNSPECIFIED (81). A legend on the right side of the chart shows a square symbol for 'Series 1'.</p>
MUNICIPALITY OTHER	50	0.39	
GAS	29	0.23	
PARAFFIN	621	4.84	
CANDLES	4218	32.89	
OTHER SOURCE	1	0.01	
UNSPECIFIED	81	0.63	



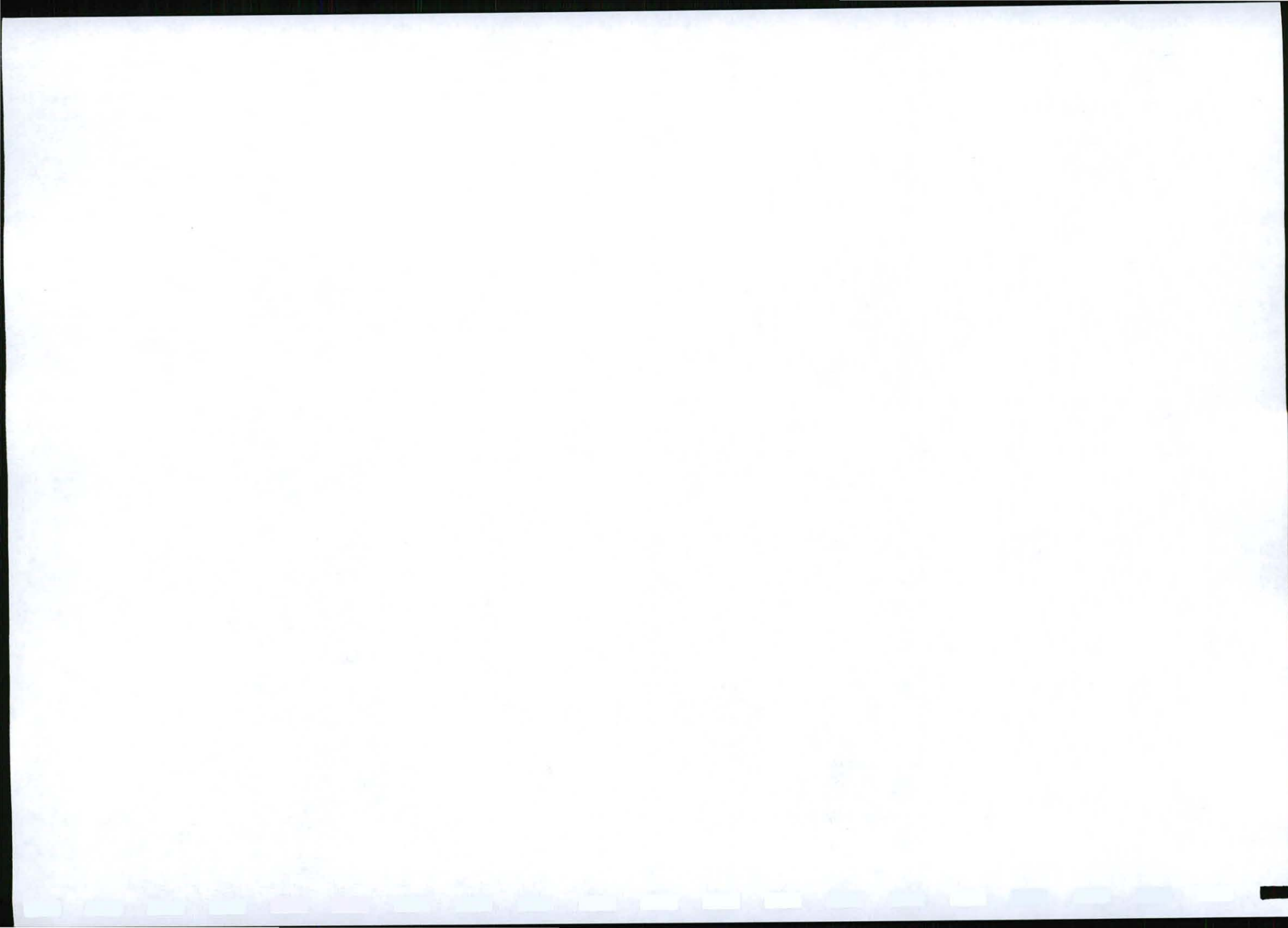
SANITATION

	AMOUNT	%	GRAPH												
FLUSH	2939	22.92	<p>The bar chart displays the following data:</p> <table border="1"> <thead> <tr> <th>SANITATION</th> <th>AMOUNT</th> </tr> </thead> <tbody> <tr> <td>FLUSH</td> <td>2939</td> </tr> <tr> <td>PIT LATRINE</td> <td>2056</td> </tr> <tr> <td>BUCKET LATRINE</td> <td>6271</td> </tr> <tr> <td>NONE</td> <td>1515</td> </tr> <tr> <td>UNSPECIFIED</td> <td>44</td> </tr> </tbody> </table>	SANITATION	AMOUNT	FLUSH	2939	PIT LATRINE	2056	BUCKET LATRINE	6271	NONE	1515	UNSPECIFIED	44
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BUCKET LATRINE	6271	48.90													
NONE	1515	11.81													
UNSPESIFIED	44	0.38													



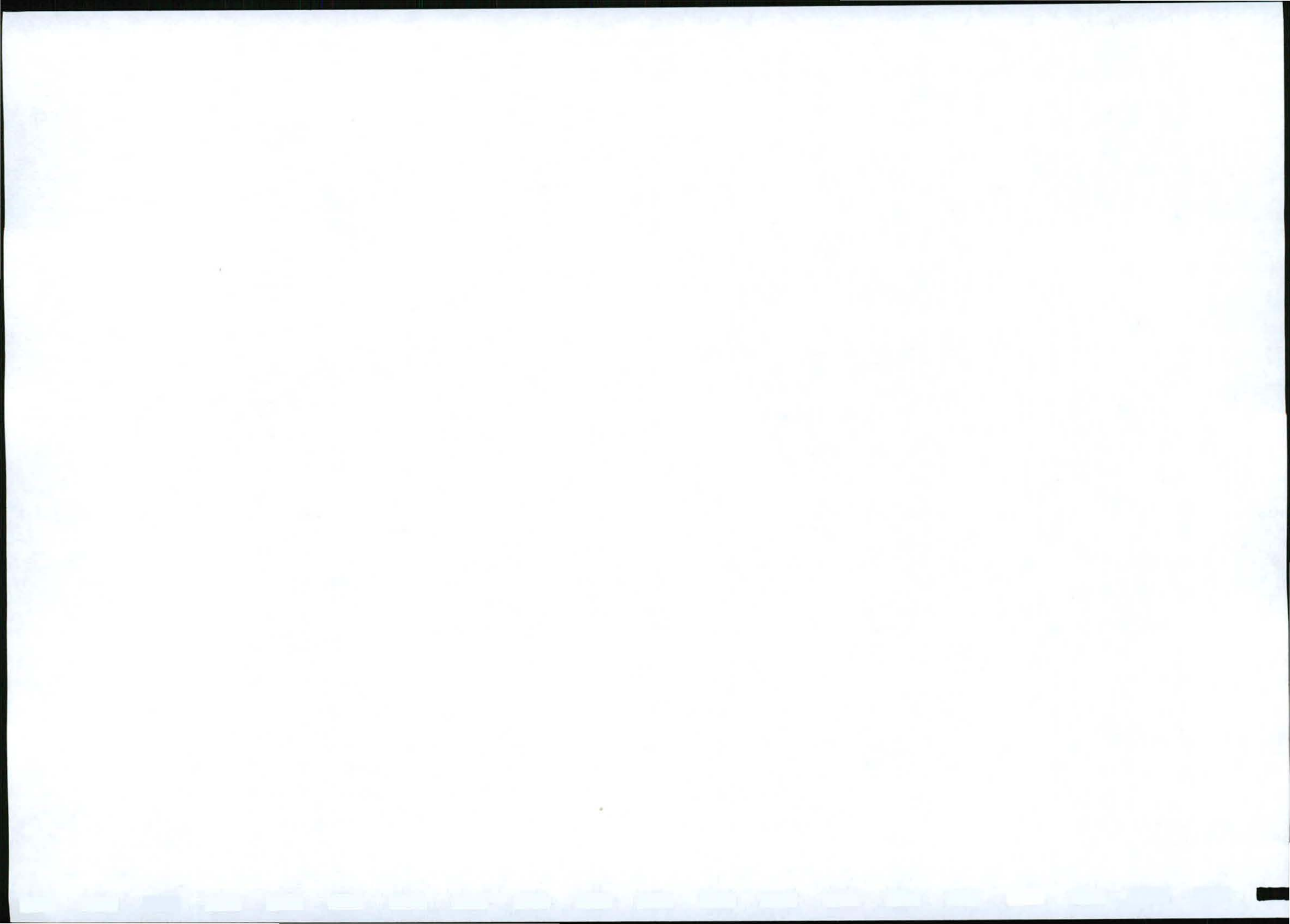
REFUSE REMOVAL

	AMOUNT	%	GRAPH																
MUNICIPALITY WEEKLY	7282	56.78	<p>The bar chart displays the following data points:</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>MUNICIPALITY WEEKLY</td> <td>7282</td> </tr> <tr> <td>MUNICIPALITY OTHER</td> <td>615</td> </tr> <tr> <td>COMMUNAL DUMP</td> <td>1018</td> </tr> <tr> <td>OWN DUMP</td> <td>3288</td> </tr> <tr> <td>NO DISPOSAL</td> <td>467</td> </tr> <tr> <td>OTHER</td> <td>1</td> </tr> <tr> <td>UNSPECIFIED</td> <td>154</td> </tr> </tbody> </table>	Category	Amount	MUNICIPALITY WEEKLY	7282	MUNICIPALITY OTHER	615	COMMUNAL DUMP	1018	OWN DUMP	3288	NO DISPOSAL	467	OTHER	1	UNSPECIFIED	154
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OWN DUMP	3288	25.64																	
NO DISPOSAL	467	3.64																	
OTHER	1	0.01																	
UNSPECIFIED	154	1.20																	



TELEPHONE

	AMOUNT	%	GRAPH	
DWELLING	2240	17.47	<p>TELEPHONE</p>	
NEIGHBOUR	1241	9.68		
PUBLIC PHONE	5376	41.92		
OTHER NEARBY	1567	12.22		
NOT NEARBY	495	3.86		
NO ACCESS	1850	14.42		
INSTITUTIONS	8	0.06		
NONE	1	0.01		
UNSPECIFIED	47	0.37		



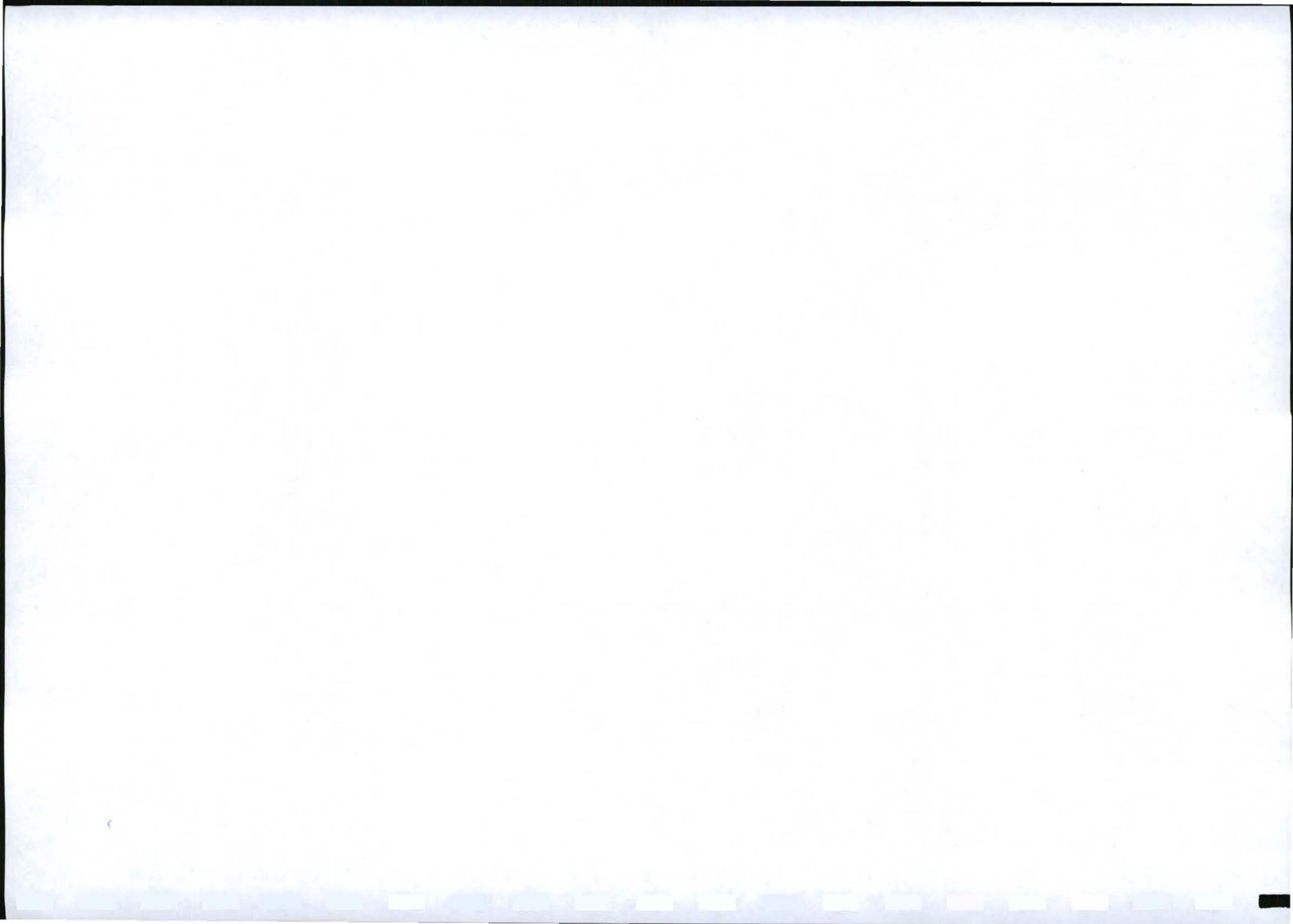
5. **AN ASSESSMENT OF THE NATURE, EXTENT, DURATION, PROBABILITY AND SIGNIFICANCE OF THE IDENTIFIED POTENTIAL ENVIRONMENTAL, SOCIAL AND CULTURAL IMPACTS OF THE PROPOSED MINING OPERATIONS, INCLUDING THE CUMULATIVE ENVIRONMENTAL IMPACTS**

It can be anticipated that the proposed mining activities will have a negative impact on the environment. The mining method that will be employed will be the opencast mining method that disturbs the surface and has a negative impact on the environment. Some portions of the surface of the property is un-rehabilitated. The applicant can conduct his mining activities in such a manner to include these un-rehabilitated portions in his planning to rehabilitate the surface of the property.

The estimated impact can be broken down in categories as mentioned below:

Geology

The impact on the geology will be significant. There will be a removal of mineral and geological material during the mining process. The geology will be disturbed. Proper rehabilitation will minimize this negative impact.



Climate

We understand that climate is the average weather condition in a region or place while temperature is the degree of heat. Evaporation is when a liquid converts into a damp form and is the main reason for rain. This industry has a limited effect if any on the above mentioned parameters' seeing that it is only small-scale alluvial diamond mining.

Topography

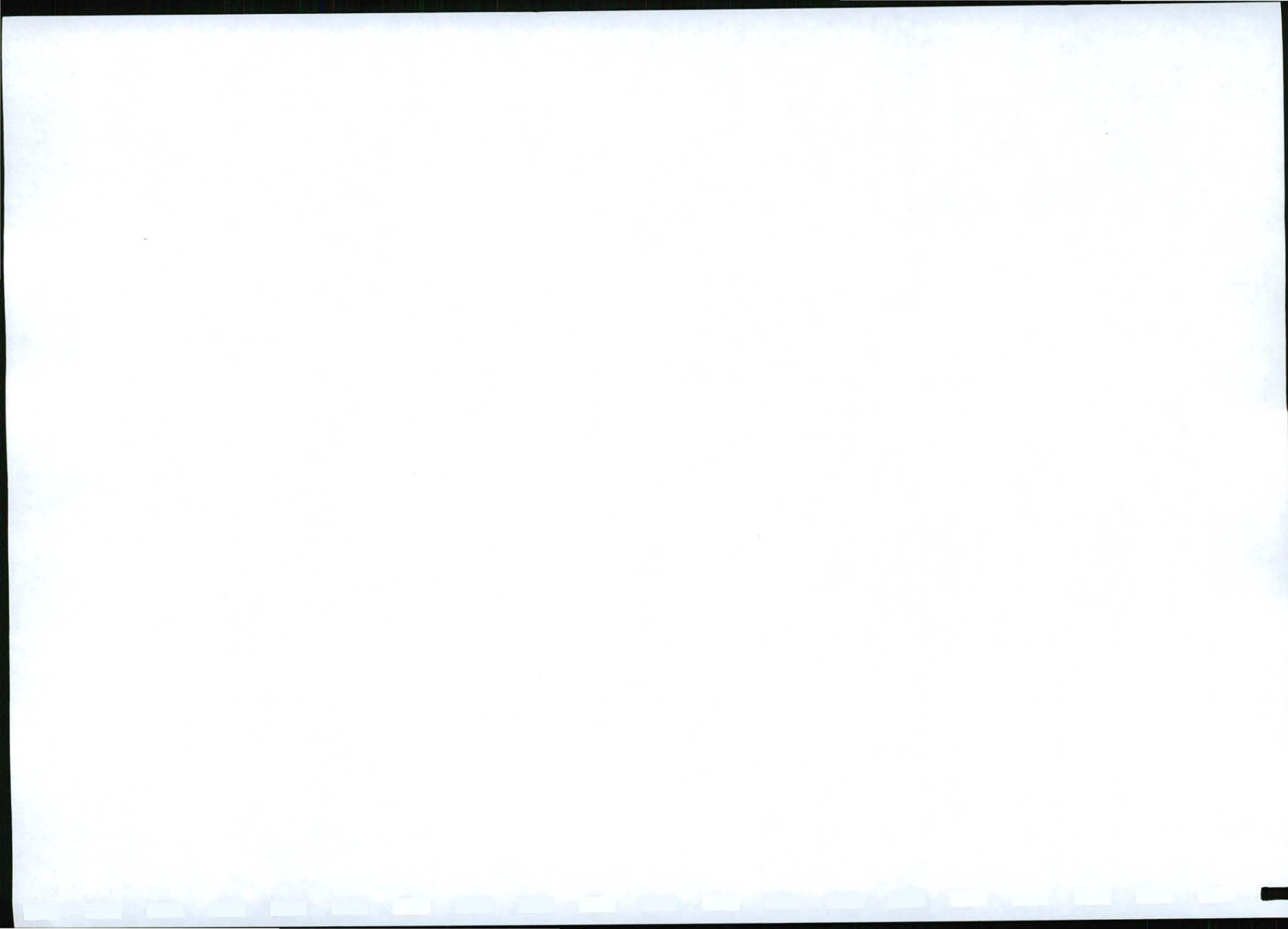
The impact on the topography will be significant. Proper rehabilitation can ensure that the topography is flattened to its natural state.

Soil

The impact can be drastic on the topsoil if it is not removed and stored separately. The topsoil differs in dept between 0.3m to 4m.

Land Capability

The land capability should not be affected by the mining operations. After rehabilitation it should still be classified as a class 2, grazing land.



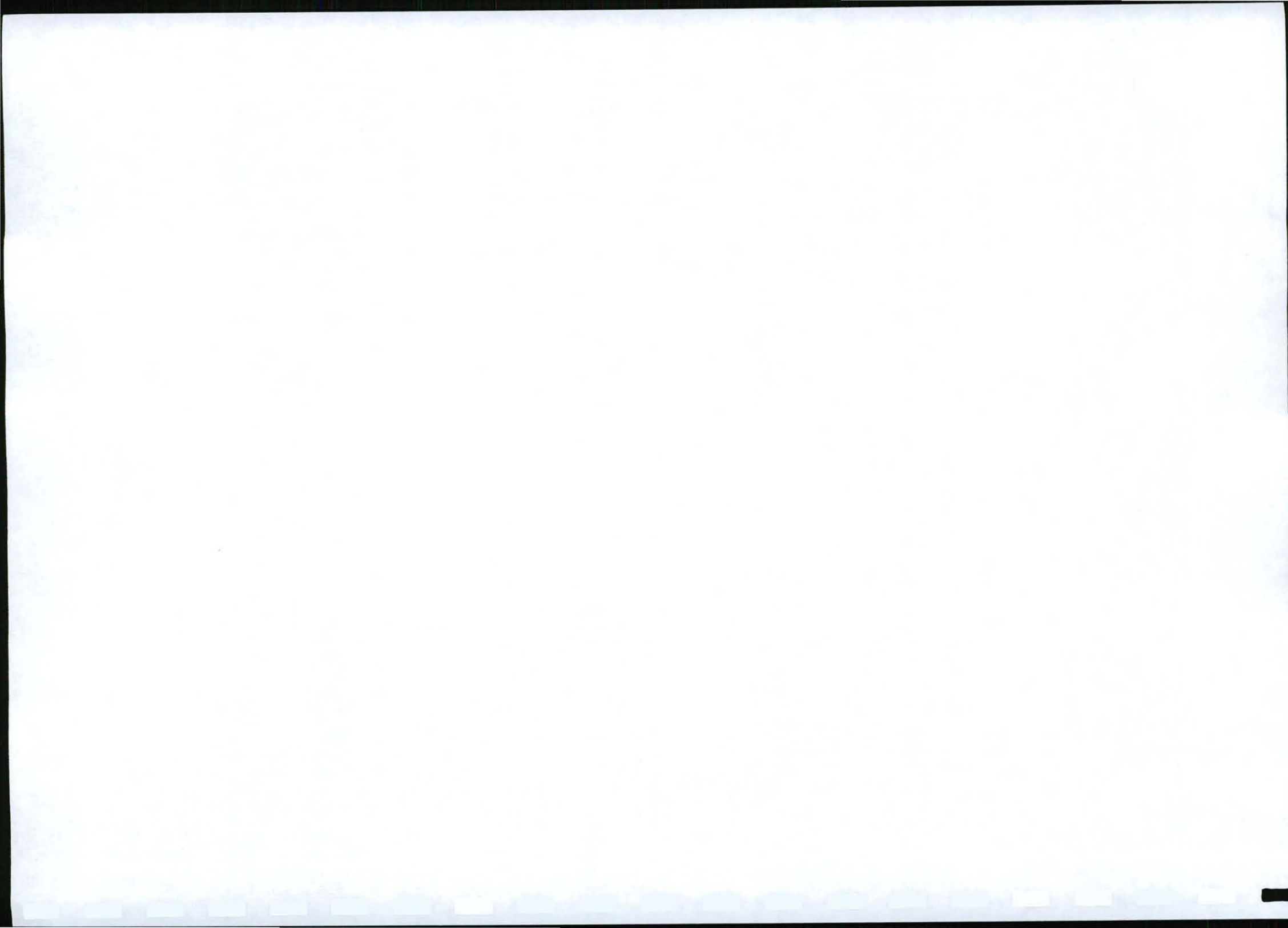
Ground Water

The impact will be moderate. There is currently boreholes on the relevant piece of land that will be used for mining activities. Groundwater rest levels are fluctuating depending on the topography. Water will be extracted from the channel for the mining operations. Furthermore the registration document is annexed.

Air Quality

The impact on the air quality will be short term and minor. In a rural context the degrading of air quality will be insignificant, and the only impact will be due to The area surrounding the farm are characterised mostly farming activity. Limit mining occurs in the direct vicinity of the farm. Ploughing and harvesting of croplands are a seasonable source of dust. Roads in the area are predominantly gravelled and generate considerable dust through daily use.

Vehicle emission and dust from mining and raw material handling. The impact will take place below detectable levels. Using dust masks, protective glasses and a water cart dampening the soil will minimize the degrading of air quality.



Noise

Existing noise levels in the area are mainly generated from cars on the roads, surrounding agricultural and mining activities. Similar noise levels than conventional farming equipment operating in the district will take place. The workers could be issued with earplugs for their protection if the noise levels are unacceptable.

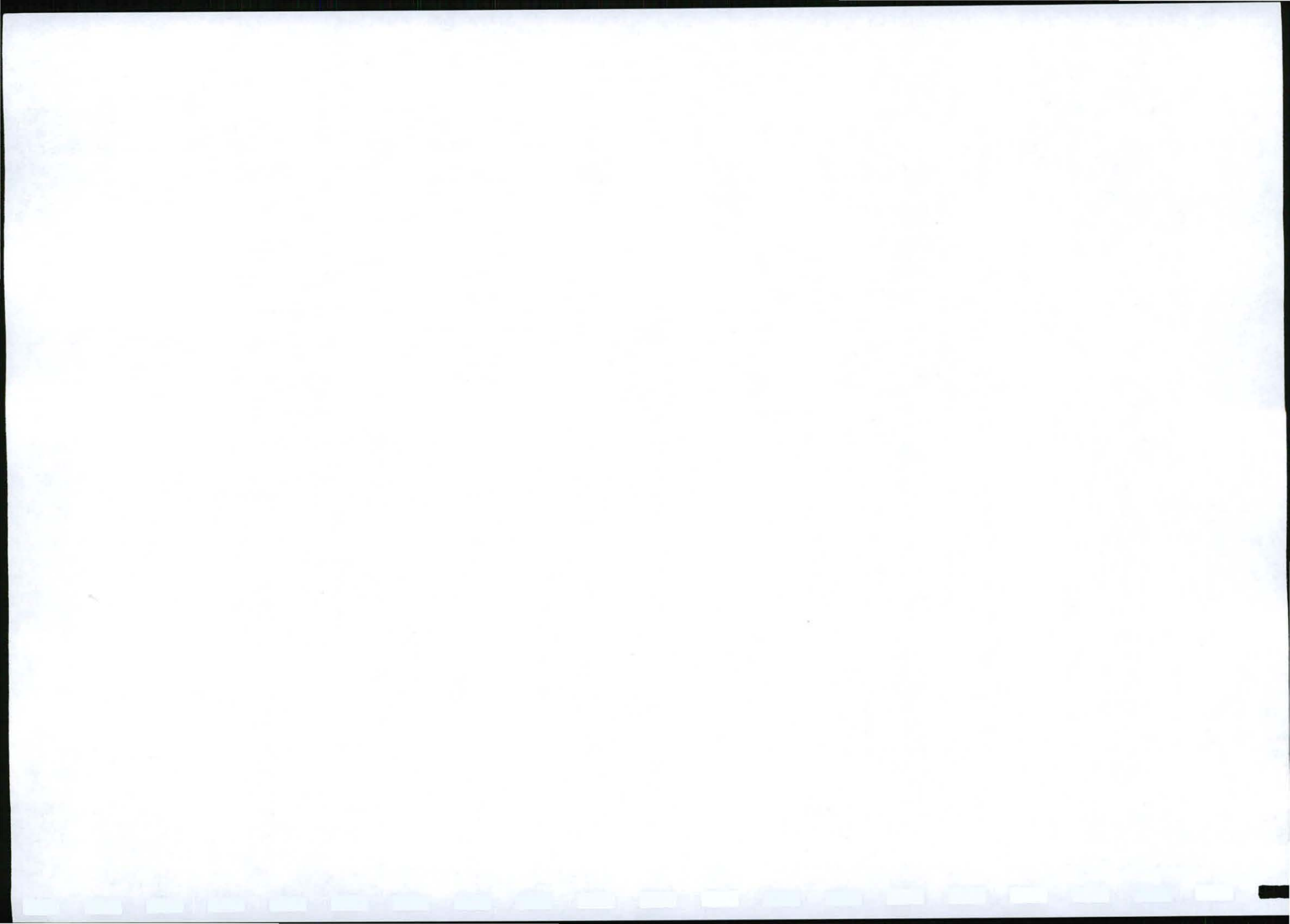
Archaeological and Cultural Interest

There were no archaeological and cultural interests that could be affected found.

Two graveyards is identified which dated since 1970 until 2000 according the dates on the tombstones..

Sensitive Landscapes

A Glazier floor is found near the river, this area is outside the planned mining area, and will be protected in all cases.

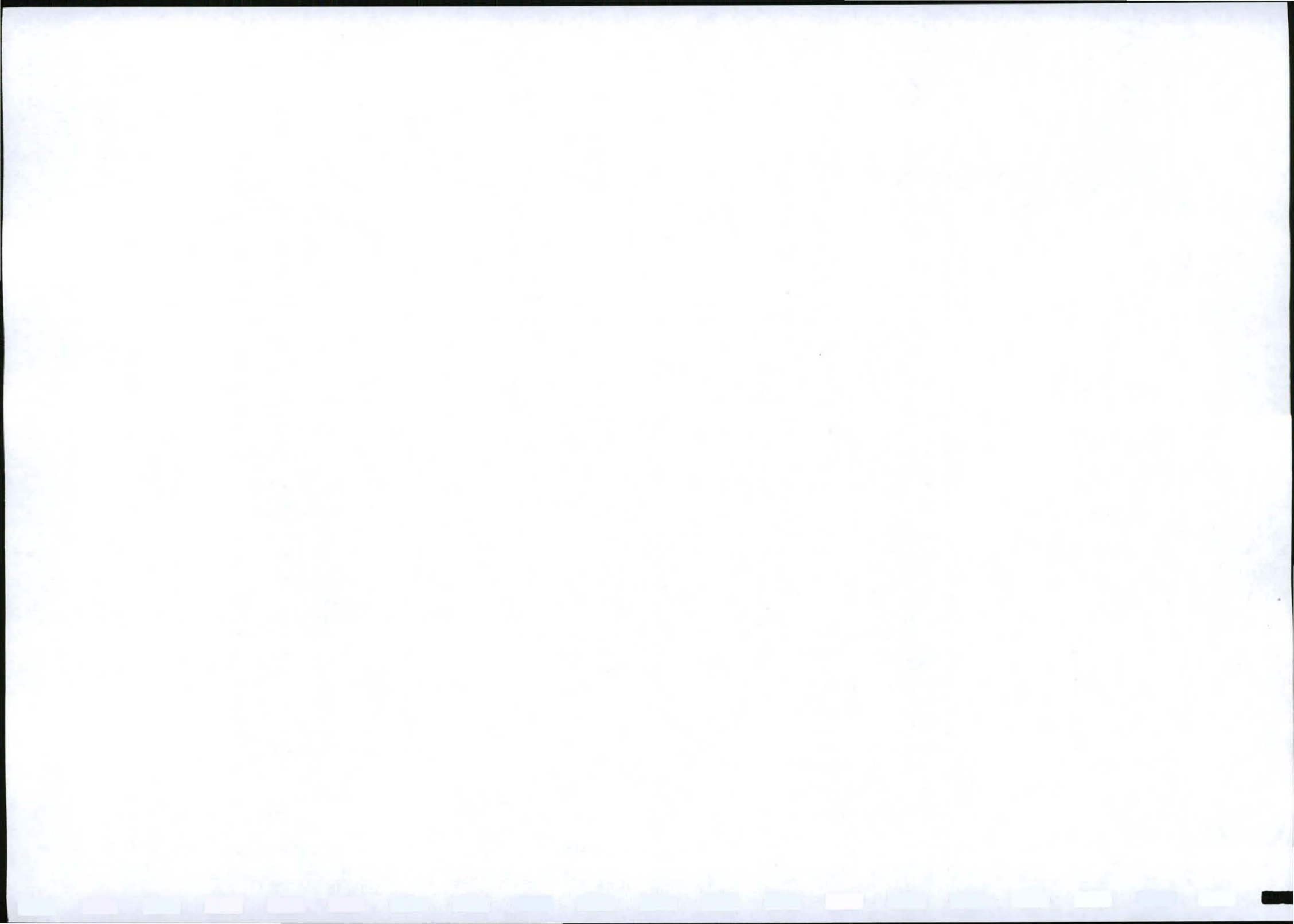


Visual Aspects

The site is visible from the Barkly West - Riverton tar road. Visual disturbances will occur in an unacceptable manner in the natural landscape of an open cast-mining environment.

The social and cultural impacts are discussed together. The applicant has submitted a social and labour plan as part of his application for a mining right. In the social and labour plan the following positive impacts are identified:

- The development of a Human and Resources Development;
- A Skills Development Plan;
- A Employment Equity plan;
- A Labour Plan for protection of workers during downscaling and retrenching of workers;
- A Local Economic Development Plan, to develop an infrastructure for the Barkly West community;
- A Housing and Living conditions plan to improve the housing and living conditions of the Barkly West community;
- A Procurement Progression Plan to see that preferred supplier is given to HDSA'S;
- The promote employment and advance social and economic welfare of all South Africans;



- The contributing to the transformation of the mining industry.
- A detailed plan to contribute towards the social and economic development of the Barkly West and more specifically to the surrounding communities.
 - Creation of 20-30 new jobs
 - Creation of 200 new indirect job opportunities;
 - Duration of career opportunities;
 - Local economic stimulation
 - The development of new technologies;
 - Resource utilization;
 - Land-use planning;
 - Research opportunities;
 - Longer term environmental monitoring

Judging the cumulative effects of the positive impacts it is certain that the positive impacts will increase. The cumulative effect of the negative impact will be managed to limit the detrimental environmental aspects of the opencast mining method.

5.1 The ultimate depth of the mining operation

The ultimate depth level will be 1,5 to 4 meters.