case ID: 965

Golder Associates

01 June 2009 Reference No. 11908-Let-106

The Provincial Manager

South African Heritage Resource Agency (SAHRA)
P.O. Box 1371
POLOKWANE
0700

Dear Sirs

ENVIRONMENTAL IMPACT ASSESSMENT FOR A NEW WATER TREATMENT PLANT AT TUBATSE CHROME NEAR STEELPOORT, LIMPOPO PROVINCE.

Tubatse Chrome is proposing to expand its existing water infrastructure, including the construction of a new reverse osmosis water treatment plant (WTP). The aim of the expansion is to improve the quality of re-circulated process water and remediate the current hexavalent chromium (Cr^{6+}) pollution plume in the Tubatse Chrome groundwater resource. The proposed WTP will remove Cr^{6+}, solids and salts from water entering the WTP and make the water fit for industrial use. Water from the proposed WTP could replace current water uses supplied from the Tubatse Dam to some extent, thereby contributing to water savings. The WTP will also result in lower volumes of water being abstracted from the Steelpoort River on a yearly basis.

It is important to note that approval has already been given by the Limpopo Department of Economic Development, Environment and Tourism (LDEDET) for the construction of the WTP to go ahead, even though the EIA for the WTP and associated infrastructure is currently in process. This approval was given in terms of remediation of an emergency situation under the National Water Act (Act 36 of 1998), Chapter 3 (5). The emergency situation in this case is the contamination of the Tubatse Chrome groundwater resource withCr^{6+}. It is of critical importance to intercept the pollution plume in the groundwater resource by means of abstraction boreholes and prevent it from expanding. The WTP is needed to treat the abstracted groundwater and make it fit for use by Tubatse Chrome. LDEDET has therefore given approval for construction to go ahead. The pollution plume is limited to Tubatse Chrome's groundwater resource only, but it is important to contain the pollution plume as soon as possible. Tubatse Chrome is committed to decontaminate the groundwater resource and restore it to its previous state. Accordingly, construction of the WTP started in January 2009 and the EIA is being done concurrently to this process, as advised by LDEDET, as follows:

"The Department hereby advises you to go ahead with emergency response for the construction of water treatment plant. Please note that the activity is listed in terms of NEMA regulations of 2006 and therefore legally requires Environmental Authorization. The EIA process must be done concurrently with the act of response to emergency".

Under normal circumstances various authorisations are required before a proposed project may go ahead and several regulatory processes need to be undertaken to obtain the relevant authorisations. One of the required processes is an Environmental Impact Assessment (EIA). This is being conducted by Golder Associates Africa, an independent environmental consulting company.The EIA meets the requirements of the National Environmental Management Act, Act 107 of 1998 (NEMA) and the National Water Act, Act 36 of 1998 (NWA).

A Heritage Impact Assessment (HIA), meeting the requirements of the National Heritage Resources Act, Act 25 of 1999 was undertaken. Please find enclosed herewith a copy of the Heritage Impact Assessment (HIA) that was undertaken for the proposed project of Tubatse Chrome for your comment.

Please do not hesitate to contact the undersigned, should you have any questions or require any additional information.

Pieter de Villiers
Environmental Consultant

Etienne Roux
Senior Environmental Consultant

Attachments: A PHASE I HERITAGE IMPACT ASSESSMENT (HIA) STUDY FOR A PROPOSED NEW WATER TREATMENT PLANT (WTP) FOR TUBATSE FERROCHROME IN THE STEELPOORT VALLEY IN THE LIMPOPO PROVINCE OF SOUTH AFRICA.

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Prepared for:
GOLDER ASSOCIATES
TUBATSE FERROCHROME

A PHASE I HERITAGE IMPACT ASSESSMENT (HIA) STUDY FOR A PROPOSED NEW WATER TREATMENT PLANT (WTP) FOR TUBATSE FERROCHROME IN THE STEELPOORT VALLEY IN THE LIMPOPO PROVINCE OF SOUTH AFRICA

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EXECUTIVE SUMMARY

This Phase I Heritage Impact Assessment (HIA) study for Tubatse Ferrochrome's proposed new Water Treatment Plant (WTP) on the farm Goudmyn 337 in the Steelpoort Valley in the Limpopo Province of South Africa was done in terms of Section 38 of the National Heritage Resources Act (Act 25 of 1999). The aims with this Phase I HIA study were the following:

- To establish whether any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) (Box 1) do occur in the Project Area and, if so, to determine the nature, the extent and the significance of these remains.
- To determine whether such remains will be affected by the proposed WTP Project and, if so, to evaluate what appropriate mitigation measures could be taken to reduce the impact of the development on such heritage resources.
- To propose management measures for those heritage resources that may be affected by the proposed WTP Project.

The Phase I HIA study for the Project Area revealed the following types of remains in the Project Area, namely:

- Remains from the recent past that consists of dilapidated mud and brick dwellings, cement foundations, upright stones in lines as well as piles of stone.

All the remains from the recent past were not geo-referenced or mapped. A single co-ordinate for the remains, which are spread across a wide area, is provided (Figures 3-4; Table 1). These remains are briefly described and are illuminated with photographs.

As these remains may be affected (destroyed) by the proposed WTP Project their significance are indicated and mitigation measures are recommended (Table 1).

The significance of the remains from the recent past

The significance of the remains from the recent past has to be determined as some of these remains may be affected (destroyed) by the proposed new WTP Project.

The remains of villages and smaller homesteads that date from the more recent past occur throughout the Steelpoort Valley. Most of these remains hold little cultural or historical significance as they are not older than sixty years.

Mitigating the remains from the recent past

The remains from the recent past have no historical or cultural significance and need no mitigation measures.

These remains can be destroyed without acquiring the necessary permit from the South African Heritage Resources Authority (SAHRA).

General

It is possible that this Phase I HIA study may have missed heritage resources in the Project Area as heritage remains may occur in thick clumps of vegetation while others may lie below the surface of the earth and may only be exposed once development commences.

If any heritage resources of significance is exposed during the WTP Project the South African Heritage Resources Authority (SAHRA) should be notified immediately, all construction activities must be stopped and an archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) should be notify in order to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorisation (permits) from SAHRA to conduct the mitigation measures.

CONTENTS

1 INTRODUCTION

This document contains the report on the results for a Phase I Heritage Impact Assessment (HIA) study which was done for a proposed new Water Treatment Plant for Tubatse Chrome on the farm Goudmyn 337 in the Steelpoort Valley in the Limpopo Province of South Africa.

The Limpopo Province of South Africa has a rich heritage comprised of remains dating from the pre-historic and from the historical (or colonial) periods of South Africa. Various types and ranges of heritage resources that qualify as part of South Africa's 'national estate' (outlined in Section 3 of the National Heritage Resources Act, Act No 25 of 1999) occur in the Limpopo Province (see Box 1). Some of these heritage resources may exist in the Platinum Mine Project Area.

Box 1: Types and ranges of heritage resources (the national estate) as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999).

The National Heritage Resources Act (Act No 25 of 1999, Art 3) outlines the following types and ranges of heritage resources that qualify as part of the National Estate, namely:

(a) places, buildings structures and equipment of cultural significance;
(b) places to which oral traditions are attached or which are associated with living heritage;
(c) historical settlements and townscapes;
(d) landscapes and natural features of cultural significance;
(e) geological sites of scientific or cultural importance;
(f) archaeological and palaeontological sites;
(g) graves and burial grounds including-
(i) ancestral graves;
(ii) royal graves and graves of traditional leaders;
(iii) graves of victims of conflict;(iv) graves of individuals designated by the Minister by notice in the Gazette;
(v) historical graves and cemeteries; and
(vi) other human remains which are not covered by in terms of the Human Tissues Act, 1983 (Act No 65 of 1983);
(h) sites of significance relating to the history of slavery in South Africa;
(i) movable objects, including -
(i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
(ii) objects to which oral traditions are attached or which are associated with living heritage;
(iii) ethnographic art and objects;
(iv) military objects;
(v) objects of decorative or fine art;
(vi) objects of scientific or technological interest; and
(vii) books, records, documents, photographs, positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No 43 of 1996).

The National Heritage Resources Act (Act No 25 of 1999, Art 3) also distinguishes nine criteria for places and objects to qualify as 'part of the national estate if they have cultural significance or other special value ...'. These criteria are the following:

(a) its importance in the community, or pattern of South Africa's history;
(b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
(c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
(d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
(e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
(f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
(g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons; (h)
(h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa;
(i) sites of significance relating to the history of slavery in South Africa

2 AIMS WITH THIS REPORT

Tubatse Ferrochrome intends to establish a new Water Treatment Plant (WTP) on the farm Goudmyn 337 in the Steelpoort Valley in the Limpopo Province of South Africa. Activities relating to the establishment of the proposed new WTP (hereafter referred to as the WTP Project) may impact on any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No. 25 of 1999). Consequently, Golder Associates, who is responsible for compiling the Environmental Impact Assessment for the new WTP commissioned the author to undertake a Phase I HIA study for the WTP Project's development area (Project Area) with the following aims:

- To establish whether any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) (Box 1) do occur in the Project Area and, if so, to determine the nature, the extent and the significance of these remains.
- To determine whether such remains will be affected by the proposed WTP Project and, if so, to evaluate what appropriate mitigation measures could be taken to reduce the impact of the development on such heritage resources.
- To propose management measures for those heritage resources that may be affected by the proposed WTP Project.

3 METHODOLOGY

This Phase I HIA study was conducted by

- Surveying the proposed Project Area with a vehicle and selected spots in the study area on foot as well as surveying, where possible, areas adjoining the project area (peripheral or buffer areas which need not to be affected by the proposed new development).
- Briefly surveying literature relating to the pre-historical and historical context of the Project Area.
- Consulting maps of the proposed project area.
- Consulting archaeological (heritage) data bases.
- Consulting spokespersons regarding the possible presence of heritage resources such as graveyards.
- Synthesising all information obtained from the fieldwork survey, literature review, maps, heritage data bases and spokespersons into this report.

3.1 Fieldwork

The proposed new Project Area was surveyed with a vehicle where accessible routes existed while selected, sensitive spots in the project area were surveyed on foot.

3.2 Databases, literature survey and maps

Databases kept and maintained at institutions such as the Provincial Heritage Resources Agency and the Archaeological Data Recording Centre at the National Flagship Institute (Museum Africa) in Pretoria were consulted to determine whether any heritage resources of significance has been identified during earlier heritage surveys in or near the Project Area.

The author is not unacquainted with the project area at large as he had done several heritage impact assessment studies in the Steelpoort (see 'Select Bibliography', Part 8).

Literature relating to the pre-historical and the historical unfolding of the Steelpoort where the proposed new platinum mine will be established was reviewed (see Part 5, 'Contextualing the Project Area'). It is important to contextualise the pre-historical and historical background of the study area in order to comprehend the identity, meaning and significance of heritage resources in and near the project area (see Parts 5 & 8).

In addition, the Project Area was studied by means of the 1:50 000 topographical map on which the project area appears (2430CA Steelpoort: 1: 50 000 topographical map).

3.3 Assumptions and limitations

It is possible that this Phase I HIA study may have missed heritage resources in the Project Area as heritage remains may occur in thick clumps of vegetation while others may lie below the surface of the earth and may only be exposed once development commences.

If any heritage resources of significance is exposed during the WTP Project the South African Heritage Resources Authority (SAHRA) should be notified immediately, all construction activities must be stopped and an archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) should be notify in order to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorisation (permits) from SAHRA to conduct the mitigation measures.

3.4 Some remarks on terminology

Terms that may be used in this report are briefly outlined in Box 2.

Box 2- Terminology relevant to this report

The Heritage Impact Assessment (HIA) referred to in the title of this report includes a survey of heritage resources as outlined in the National Heritage Resources Act , Act 25 of 1999 (see Box 1).

Heritage resources include all human-made phenomena and intangible products that are the result of the human mind. Natural, technological or industrial features may also be part of heritage resources, as places that have made an outstanding contribution to the cultures, traditions and lifestyles of the people or groups of people of South Africa.

The term 'pre-historic' refers to the time before any historical documents were written or any written language developed in a particular area or region of the world. The historical period and historical remains refer, for the Project Area, to the first appearance or use of 'modern' Western writing brought to Lydenburg, Burgersfort and the Steelpoort by the first colonists who settled in this area after c. 1839.

The term 'relatively recent past' refers to the 20th century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains may, however, be almost sixty years old and these may qualify as heritage resources in the near future.

It is not always possible, based on observations alone, to distinguish clearly between archaeological remains and historical remains, or between historical remains and remains from the relatively recent past. Although certain criteria may help to make this distinction possible, these criteria are not always present, or, when they are present, they are not always clear enough to interpret with great accuracy. Criteria such as square floor plans (a historical feature) may serve as a guideline. However, circular and square floors may occur together on the same site.

The term 'sensitive remains' is sometimes used to distinguish graves and cemeteries, as well as ideologically significant features such as holy mountains, initiation sites or other sacred places. Graves in particular are not necessarily heritage resources if they date from the recent past and do not have headstones that are older than sixty years. The distinction between 'formal' and 'informal' graves in most instances also refers to graveyards that were used by colonists and by indigenous people. This distinction may be important, as different cultural groups may uphold different traditions and values with regard to their ancestors. These values have to be recognised and honoured whenever graveyards are exhumed and relocated.

The term 'Stone Age' refers to the prehistoric past, although Late Stone Age peoples lived in South Africa well into the historical period. The Stone Age is divided into an Earlier Stone Age (3 million years to 150 000 thousand years ago) the Middle Stone Age (150 000 years to 40 000 years ago) and the Late Stone Age (40 000 years to 200 years ago).

The term 'Iron Age' refers to the last two millennia and 'Early Iron Age' to the first thousand years AD. 'Late Iron Age' refers to the period between the 16th century and the 19th century and can therefore include the historical period.

Mining heritage sites refer to old, abandoned mining activities, underground or on the surface, which may date from the pre-historic, historical or the relatively recent past.

The term 'mining area' ('critical area') refers to the area where the developer wants to focus development activities.

The term 'peripheral area' refers to the area that will not be affected by the proposed new development activities.

The 'South Shaft 3 Project Area' refers to both the mining and peripheral areas.

Phase I studies refer to surveys using various sources of data in order to establish the presence of all possible types of heritage resources in any given area.

Phase II studies include in-depth cultural heritage studies such as archaeological mapping, excavating and sometimes laboratory work. Phase II work may include the documenting of rock art, engraving or historical sites and dwellings; the sampling of archaeological sites or shipwrecks; extended excavations of archaeological sites; the exhumation of bodies and the relocation of graveyards, etc. Phase II work may require the input of specialists and requires the cooperation and approval of SAHRA.

4 THE PROJECT AREA

4.1 Location

Tubatse Ferrochrome's proposed new Water Treatment Plant (WTP) is located on the farm Goudmyn 337 in the Steelpoort Valley in the Limpopo Province of South Africa (2430CA Steelpoort 1:50 000). The Project Area involves the following activities to be implemented, namely:

- The construction of the new WTP at the existing Treated Water Dam and Balancing Dam.
- The construction of new pipelines between various bore holes.
- Enlargement of the existing Storm Water Dam and the construction of new Evaporation Dams.

The Steelpoort Valley's name is derived from the Steelpoort (Tubatse) River, one of the main geographical features in this valley. The Steelpoort River is a southern tributary of the Olifants River. It flows from an altitude higher than 1 800m on the Highveld near Wonderfontein in the Belfast district northwards and then north-eastwards to join the Olifants River before the latter cuts through the Drakensberg to enter the Lowveld. Other prominent geographical and historical beacons in the wider study area include the Chromite Hills further to the north, the imposing Leolo Mountain range towards the west and the Tsjate Valley in the Leolo Mountains near the northern tip of the Steelpoort Valley. The majestic Leolo Mountain range is an important beacon in the origin history of the Pedi and other northern Sotho clans.

4.2 The developed nature of the Project Area

Formal and informal villages are scattered throughout the Steelpoort Valley. The communities and their antecedents have occupied the Steelpoort Valley without interruption for decades and perhaps even for centuries. During this long time span they have practised mixed farming as the primary mode of existence. This is

definitely the case for the village of Tsjate, one of the capitals of the Pedi chiefdom, as well as numerous other villages straggled along the Leolo Mountain range which already have existed in the late 18th century.

The Project Area therefore is not a pristine cultural landscape any longer as communities have occupied this valley, uninterruptedly, for centuries.

The archaeological remains in the Steelpoort Valley, as elsewhere in Sekhukhuneland, are being destroyed at an increasing rate as a result of four main activities, namely:

- Uncontrolled agricultural activities on valley floors where hundreds of archaeological sites have been under-ploughed, particularly from the time when diesel-driven tractors have replaced traditional cattle-drawn ploughs in agricultural practices in this part of the country.
- Erosion, which washes archaeological deposits away. Archaeological remains consisting of stone tools and potsherds that have been washed from archaeological sites and deposits can be seen in the numerous dongas that are scattered across the Steelpoort Valley.
- Settlements in Sekhukhuneland are established on top of older (archaeological and historical) settlements while expanding villages gradually incorporates older villages which are mainly located along the foot and foothills of the extensive mountain ranges in the Steelpoort.
- General developmental in the Steelpoort with mining activities heading the economic boom has already left a permanent scar on cultural landscapes in the Steelpoort during the last twenty years.

Historically, the people who occupied the Steelpoort, practised hunting, gathering, cultivating and stock farming for many centuries. Many of the people who occupy the area today still depend on agriculture and stock farming for a livelihood. Agricultural plots are still utilized by local communities. In the past, chiefs allocated pieces of land to the heads of wards that then provided plots to

married men. The sizes of plots were determined by the number of wives a man had, but each plot was usually 1 to 2 hectares, which is the maximum that a woman could cultivate using a hoe. The introduction of the plough allowed families to cultivate larger areas of land, up to about 4, 5 hectares.

Crops included sorghum (*mabele*) and millet (*letsoa*), which were later largely replaced by maize (*mahea*) as a staple food. Supplementary crops included pumpkins (*marotse*), various varieties of gourd (*maraka*), beans (*dinawa*) and a type of groundnut (*ditloo*). Tobacco and sugarcane were also planted.

Although each person usually possessed his own stock, pasturage was used on a communal basis. At a fixed time the tribal ruler declared the reaped grain fields open for use as winter grazing. Grazing cattle in particular disturbs heritage resources, as deposits on sites are churned underhoof and low stone foundations are broken and scattered.

4.3 In a cultural landscape

The proposed new WTP Project is located close to the extensive Leolo Mountain range is located in the heartland and sphere of influence of the pre-historical and historical Pedi chiefdom. This cultural region is associated with a wide range of heritage resources although in many instances affected by the developments that have been outlined above.

It is therefore necessary that the archaeological and historical significance of this cultural landscape be described and explained in more detail before the results of the Phase II HIA study is discussed (see Part 5, 'Contextualising the Project Area').

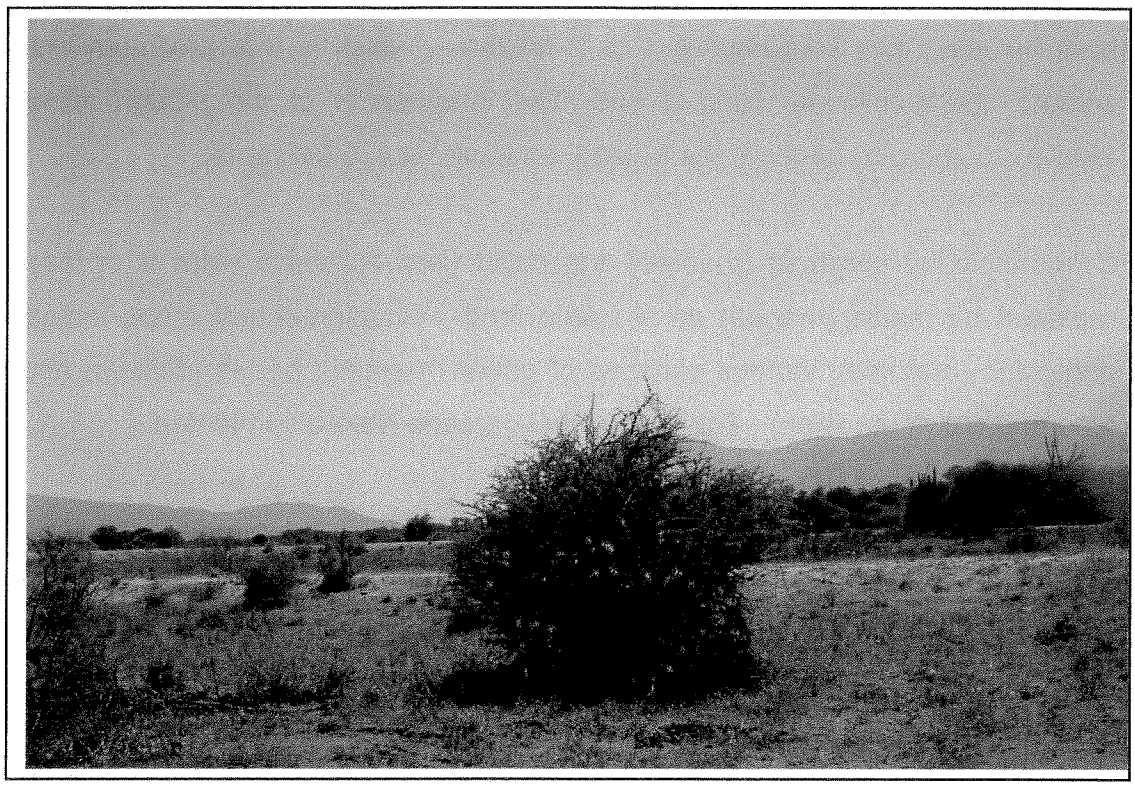

Fig 1 & 2- The existing Storm Water Dam (above) will be enlarged and open space where the new Water Treatment Plant will be established (below).

5 CONTEXTUALISING THE PROJECT AREA

5.1 Pre-historical context

Stone Age sites are scattered in the extensive network of dongas which occur across the wide valleys floors between the Leolo and other mountain ranges in the northern part of the Steelpoort Valley. Some sites have been observed by the author on farms such as Hendriksplaats 281, Derde Gelid 278, Onverwacht 292, Winterveld 293, Annex Grootboom 335, Grootboom 336 and Apiesboomen 295. These stone tools date from the Early Stone Age (500 000 to 200 000 years ago), the Middle Stone Age (200 000 to 40 000 years ago) and from the Late Stone Age (40 000 to 200 years ago).

However, no archaeological survey for Stone Age sites as part of any extensive or in-depth Stone Age research project has to the knowledge of this author been done in the Steelpoort area as yet.

5.2 Pre-historical and early historical period

The origins of the first Bantu-Negroid farming communities who practised agriculture, live-stock herding and metal working can be traced to the Steelpoort Valley. These Early Iron Age farming communities whose settlements have been recorded on amongst others Hendriksplaats 281 and Derde Gelid 278 were related to Early Iron Age communities who, contemporaneously, AD500 to AD900 settled further towards the east in the Lydenburg Valley. One of the settlements belonging to the Early Iron Age Lydenburg culture won international acclaim as the Lydenburg clay masks were discovered at this site next to the Sterkspruit, south of Lydenburg.

The historical period in the Steelpoort Valley is associated with the second millennium AD when a predominantly Northern Sotho-speaking population occupied the Steelpoort. These people are part of a larger Northern Sotho-speaking community who occupy a vast area between the Limpopo River in the north, the Drakensberg in the east and the Sekhukhune Mountains in the west. Although they share a common language and certain traditions and customs, these people have never shown an awareness of a national identity. Numerous divisions and groups or clans therefore occupy this vast region. The history of the people of this area can be divided into several periods:

The earliest period of settlement is characterized by small groups of Bantu people who started to drive the San and Khoi Khoi from the area and who are difficult to identify. From approximately AD1700 ancestral groupings of the present inhabitants of the land began to arrive in the area. Groups that can be distinguished include:

- A large group of Sotho who came from the north-eastern parts of the Lowveld and who settled on the plateau to the north and to the south of the Strydpoortberge.
- Small groups of Kgatla and Huruthshe-Kwena origin moved from the Tswana area (Brits and Rustenburg) into the territory. Amongst them were the present Pedi (or Rota) who moved into what is now Sekhukhuneland, where they subjected the Sotho already living there.
- During these times Sekhukhuneland was also penetrated by Sotho arriving from the south-east.
- After AD1600 the Northern Ndebele arrived from the south-east and settled in what is now the Mokerong district.

It is assumed that during the period from AD1700 to AD1826 the Pedi took political control over the territory previously known as Lebowa, but to the south of

the Strydpoortberge. The Pedi chiefdom reached its zenith during the reign of Thulare who died in 1824.

During the disruption of the *difaqane* (1822 to 1828) Mzilikazi attacked the Pedi from the south-east in 1826 and in 1827/1828. This caused large-scale depopulation of the southern part of the Northern Sotho territory. The Pedi sought refuge in the Soutpansberg in 1822 and only returned in 1828.

After the wars with Mzilikazi there were wars with the Swazi. The Voortrekkers arrived in the Steelpoort area in the late 1840's. Several armed struggles between the Voortrekkers and the Pedi ensued (see below).

5.3 The Historical Period

After the British annexed the Transvaal (1877 to 1881) the Pedi was subjugated by the British who were supported by the Swazi during the war of Sekhukhune in 1879 (see more detail below).

In 1842 Andries Hendrik Potgieter wished to move from the British sphere of influence and to establish trade relations with Delagoa Bay. He moved with his followers from Potchefstroom to the Eastern Transvaal and founded Andries Ohrigstad (named after himself and Gergios Gerhardus Ohrig, a merchant from Amsterdam who was well disposed towards the Voortrekkers). The name was later abbreviated to Ohrigstad. The town also served as the seat of the Volksraad.

During 1848 to 1849 Ohrigstad was abandoned when many people died of malaria. The town of Lydenburg was founded further to the south near the confluence of the Sterkspruit and the Spekboom River. This area was located on higher ground and was therefore healthier than Ohrigstad.

The railway line between Steelpoort and Lydenburg was constructed in 1924 due to an increase in the mining of platinum and magnetite. The name Steelpoort is derived from a hunting expedition that took place either in the late 19th century or the early 20th century. When a group of Voortrekkers from Natal under Frans Joubert had settled there, a man called Scholtz shot an elephant at dusk and on returning next morning found that the tusks had been removed. When the wagons were searched, the tusks were found in the possession of a man called Botha, after which the farm Bothashoek was named. Because an elephant had been killed there, the poort was named Olifantspoort. The river flowing through the poort was called Steelpoort River ('steel' meaning steal).

The Pedi were governed by Thulare until his death in 1824. His main village was Monganeng on the banks of the Tubatse River. His son, Sekwati, fled to the Soutpansberg in the north during the raids of Mzilikazi in 1822. He returned in 1828 and occupied the mountain fortress Phiring, his capital from where he united the Pedi.

The Pedi initially maintained good relations with the Voortrekkers who arrived in Ohrigstad from 1845. However, after a clash with Andries Hendrik Potgieter in 1852 Sekwati moved his capital to Thaba ya Mosego. Border disputes with the Zuid-Afrikaansche Republiek (ZAR) were settled in 1857 with an accord that stated that the Steelpoort River served as the border between Pedi land and the Lydenburg Republic.

Sekwati gave the Berlin Missionary Society permission to establish the Maandagshoek missionary station in Pedi territory. After Sekwati's death in 1861, his son Sekhukhune succeeded his father and also established his village at Thaba ya Mosego. He ordered the Berlin Missionary Society to discontinue their work and the mission station was burn down. Alexander Merensky, one of the missionaries, thereafter established the well-known Botšabelo missionary station at Middelburg.

The good relationship between the ZAR and the Pedi was gradually weakened. The period from 1876 to 1879 was one of conflict and war, first with the ZAR and then with the British who annexed the Transvaal in 1877. During the First Sekhukhune War in August 1876, the Voortrekkers attacked Thaba ya Mosego and partly destroyed the settlement.

The Second Sekhukhune War followed in November 1879 during which Sekhukhune was captured in the Mamatamageng cave and sent to prison in Pretoria. Two divisions attacked the Pedi. The main division, comprised of 3 000 whites and 2 500 black allies, attacked from the north-east. The Lydenburg division consist of 5 000 to 8 000 Swazi impis, 400 other black allies and 400 white soldiers who attacked from Burgersfort in the south. The Second Sekhukhune War is associated with the settlements of Thaba ya Mosego and Tsjate, a new village established by Sekhukhune close to Thaba ya Mosego.

5.4 Historical beacons near the Project Area

Several outstanding significant historical beacons are located in or near the Leolo Mountain range and in the peripheral area outside the Platinum Mine Project Area which deserves specific reference, namely:

- The mountain Thaba ya Mosego is part of the Leolo Mountain range. It was here that the British and their allies subjugated the Pedi of Sekhukhune in 1879 during the Battle of Sekhukhune. The Sekhukhune Wars of 1876 and 1879 were both fought near/on this mountain (and in the Leolo Mountain range) where the Pedi chiefs Sekwati and Sekhukhune also established their mountain fortresses. Sekwati is buried on Thaba ya Mosego.
- One of the main Pedi villages (*mošate*) during this war, namely Tsjatse, is also located along the foot of the Leolo Mountain range.

- The missionary station known as Maandagshoek (or Ratagou) was established in the middle of the 19th century on Maandagshoek, to the south of the Project Area.
- Two mountains in the Leolo Mountain chain are known as 'Modimolle'. The name 'modimolle' implies that these mountains are sacred places. It is possible that Pedi chiefs (and possibly their wives as well) were buried near one or both of these mountains. (These mountains are probably still sacred places nowadays). The spirits of deceased chiefs (*badimo*) are venerated at these places and sacrifices are made annually at such places.
- The mountain Monganeng on Winterveld 293 may be where Thulare - one of the greatest Pedi chiefs of all time - lived during the early 19th century. The remains of his villages may be located near the Tubatse (Steelpoort) River.
- Names such as 'Badimo' and 'Badimong' are recorded on a mountain close to Monganeng. These names refer to forefathers ('*badimo*') and the place of the forefathers ('*badimong*') and therefore possibly to important settlements and graveyards that have important significance in the origin history of the Pedi.

6 THE PHASE I HERITAGE IMPACT ASSESSMENT

6.1 Types and ranges of heritage resources

The Phase I HIA study for the Project Area revealed the following types of remains in the Project Area, namely:

- Remains from the recent past that consists of dilapidated mud and brick dwellings, cement foundations, upright stones in lines as well as piles of stone.

All the remains from the recent past were not geo-referenced or mapped. A single co-ordinate for the remains, which are spread across a wide area, is provided (Figures 3-4; Table 1). These remains are briefly described and are illuminated with photographs.

As these remains may be affected (destroyed) by the proposed WTP Project their significance are indicated and mitigation measures are recommended (Table 1).

	REMAINS FROM THE RECENT PAST	**COORDINATES**	**SIGNIFICANCE**
RRP01	Dilapidated mud and brick dwellings	24° 44.437'S; 30° 11.401'E	**LOW**

Table 1- Coordinates for remains from the recent past in the Project Area (above).

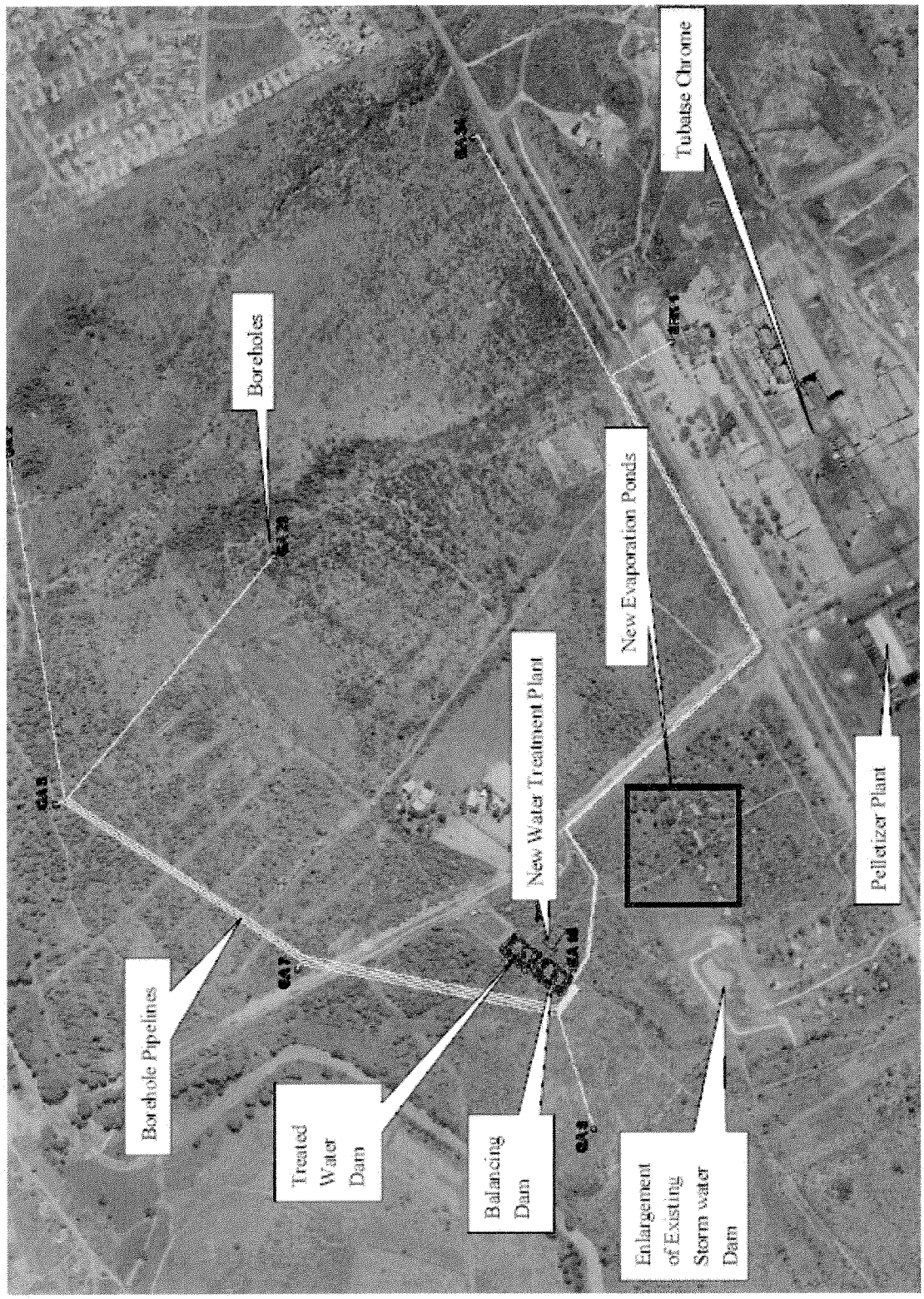

Figure 3- Tubatse Ferrochrome's new Water Treatment Project on the farm Goudmyn 337 in the Steelpoort (above).

6.1.1 Remains from the recent past

Remains from the recent past occur scattered across a wide area where the new Evaporation Ponds will be established. Part of these remains may be destroyed when this infrastructure is established.

The remains from the recent past mainly consist of dilapidated mud and brick dwellings, cement foundations, upright stones in lines and haphazard piles of stone.

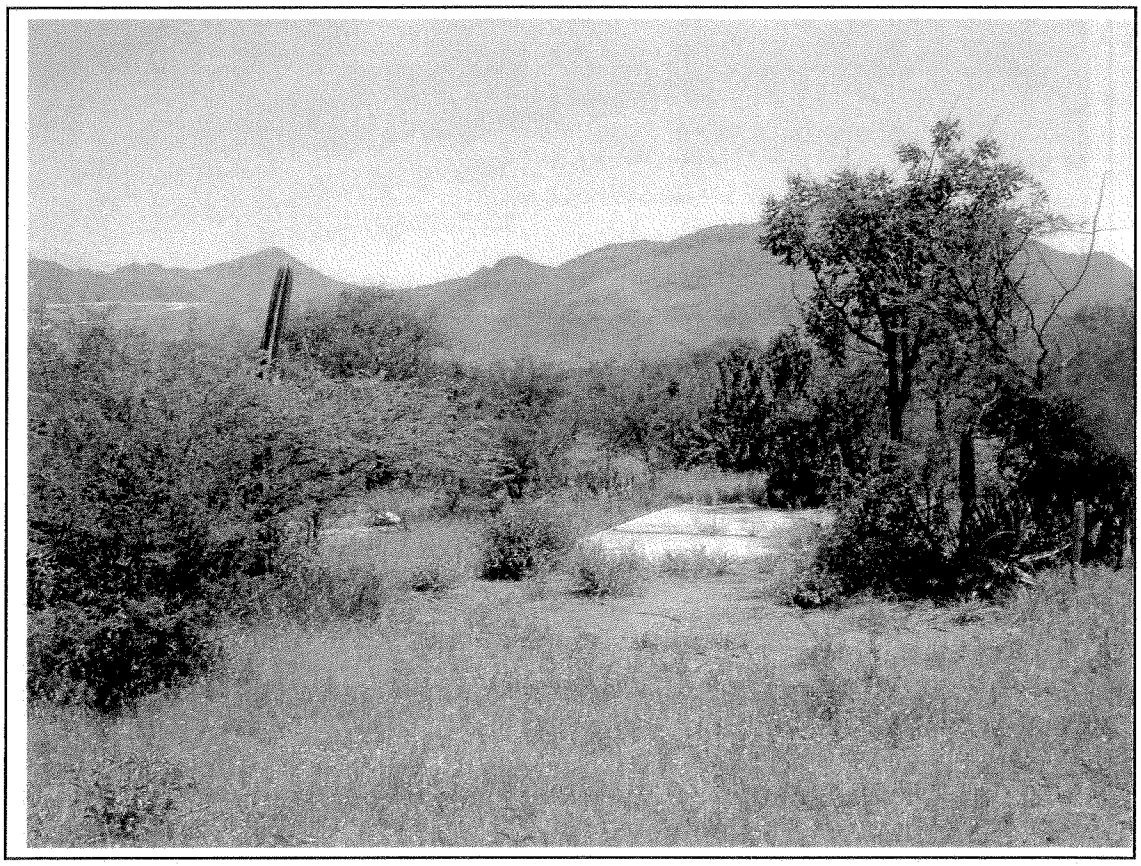

Figure 4- Remains from the recent past consisting of cement foundations in close proximity of the new Evaporation Ponds (above).

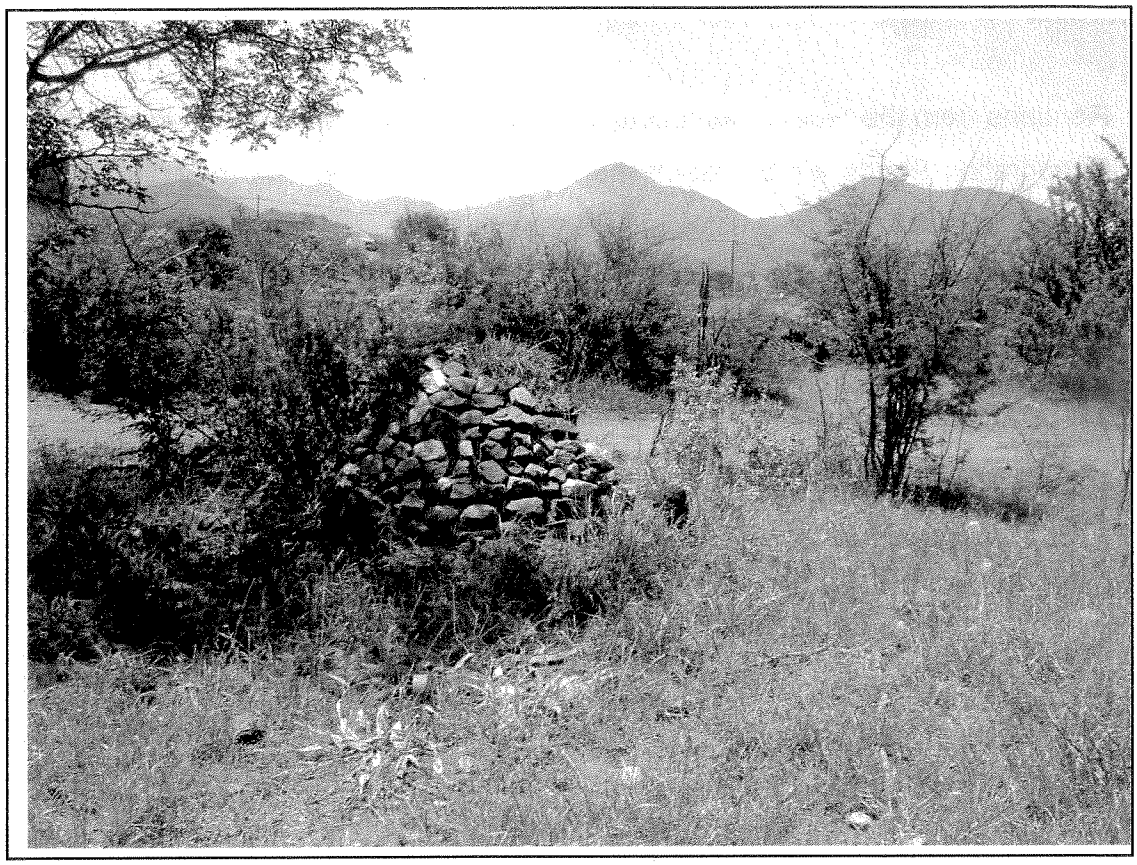

Figure 5- A pile of stones which probably served as a pillar in a homestead which dates from the recent past (above).

6.2 The significance of the remains from the recent past

The significance of the remains from the recent past has to be determined as some of these remains may be affected (destroyed) by the proposed new WTP Project.

The remains of villages and smaller homesteads that date from the more recent past occur throughout the Steelpoort Valley. Most of these remains hold little cultural or historical significance as they are not older than sixty years.

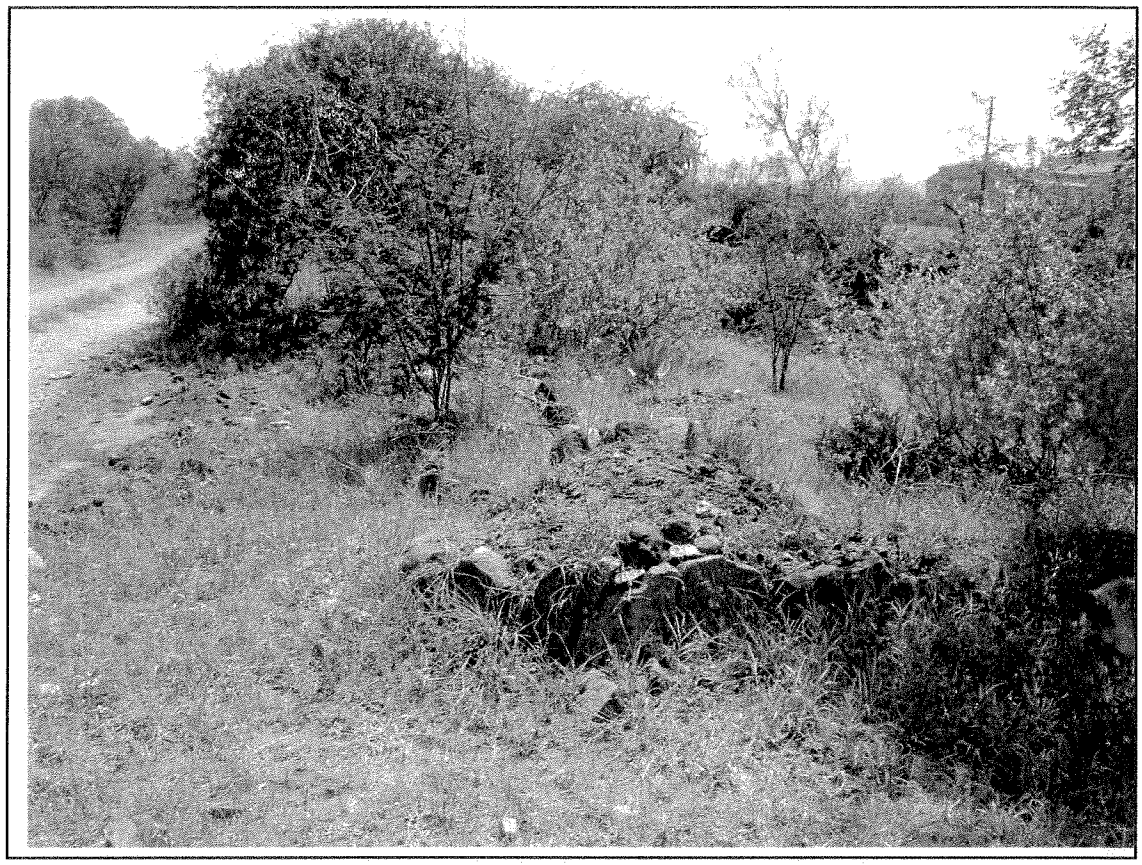

Figure 6- Upright stones in a line which represent remains from the recent past in close proximity of the new Evaporation Ponds (above).

6.3 Mitigating the remains from the recent past

The remains from the recent past have no historical or cultural significance and need no mitigation measures.

These remains can be destroyed without acquiring the necessary permit from the South African Heritage Resources Authority (SAHRA).

7 CONCLUSION AND RECOMMENDATIONS

The Phase I HIA study for the Project Area revealed the following types of remains in the Project Area, namely:

- Remains from the recent past that consists of dilapidated mud and brick dwellings, cement foundations, upright stones in lines as well as piles of stone.

All the remains from the recent past were not geo-referenced or mapped. A single co-ordinate for the remains, which are spread across a wide area, is provided (Figures 3-4; Table 1). These remains are briefly described and are illuminated with photographs.

As these remains may be affected (destroyed) by the proposed WTP Project their significance are indicated and mitigation measures are recommended (Table 1).

The significance of the remains from the recent past

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These remains can be destroyed without acquiring the necessary permit from the South African Heritage Resources Authority (SAHRA).

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