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**A BRIEF HERITAGE REPORT ON POSSIBLE GRAVES IN SASOL'S  
BORROW PIT 07 ON THE EASTERN HIGHVELD IN THE  
MPUMALANGA PROVINCE**

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## **1 INTRODUCTION**

Sasol Mining intends to develop eight borrow pits along the Impumelelo conveyor route which runs from the Impumeleleo Shaft (west) to Sasol Synfuels (east) on the Eastern Highveld in the Mpumalanga Province. A Phase I HIA which was done for the proposed Sasol Project revealed the following types and ranges of heritage resources outside the Sasol Project Area, namely:

- The remains of historical houses.
- Informal and formal graveyards.

The heritage resources were geo-referenced, tabulated and mapped whilst their significance was indicated as well as the significance of any impact on these remains by the Sasol Project (see below):

- Pistorius, J.C.C. 2012. A Phase I Heritage Impact Assessment study for Sasol Mining's proposed borrow pits on the Eastern Highveld in the Mpumalanga Province. Unpublished report prepared for JMA Consulting (Pty) Ltd and Sasol Mining.

## **2 METHODOLOGY**

The Phase I HIA study was amongst others conducted by means of the following:

### **2.1 Desktop study**

Literature relating to the pre-historical and the historical unfolding of the Eastern Highveld was reviewed. The desktop study also involved consulting heritage data banks maintained at institutions such as the Mpumalanga Provincial Heritage Resources Agency in Barberton, the Archaeological Data Recording Centre at the National Flagship Institute (Museum Africa) in Pretoria and the national heritage resources register at the South African Heritage Resources Agency (SAHRIS) in Cape Town.

In addition, the Sasol Project Area was also studied by means of maps on which it appears (2628DB Willemsdal, 1:50 000 topographical map; 2628 East Rand 1: 250 000 map and Google imagery).

## **2.2 Field survey**

The larger Sasol Project Area (or area stretching from one borrow pit to the next) was surveyed with a vehicle as the borrow pits are located close to a dirt road along which the borrow pits will be developed. The positions and surroundings of the various borrow pits were surveyed by means of a pedestrian survey. The aim with the fieldwork was to geo-reference, describe and photograph heritage resources in these critical areas.

The Sasol Project Area was also surveyed on several other occasions in the past, namely when surveys were conducted for the following projects, namely:

- Pistorius, J.C.C. 2008. A Phase I Heritage Impact Assessment (HIA) study for Sasol's proposed new gas and liquid pipelines (along a corridor) from Sasol Synfuels in Secunda (Mpumalanga) to Sasol Infrachem and Natref in Sasolburg (Free State) on the Highveld in the Republic of South Africa. Unpublished report for Nature and Business Alliance Africa (Pty) Ltd.
- Pistorius, J.C.C. 2008. A Phase I Heritage Impact Assessment (HIA) study for Sasol's proposed new conveyor belt running from the Strybult Shaft Complex to the Sasol Secunda Plant on the Eastern Highveld in the Mpumalanga Province of South Africa. Unpublished report for Clean Stream Environmental Services.
- Pistorius, J.C.C. 2012. A Phase I Heritage Impact Assessment study for Sasol Mining's proposed borrow pits on the Eastern Highveld in the Mpumalanga Province. Unpublished report prepared for JMA Consulting (Pty) Ltd and Sasol Mining.
- Pistorius, J.C.C. 2013(a). A (Revised) Phase I Heritage Impact Assessment study for the proposed Sasol Shondoni Conveyor Amendment Project on the Eastern Highveld in the Mpumalanga Province. Unpublished report prepared for JMA Consulting (Pty) Ltd and Sasol Mining.

- Pistorius, J.C.C. 2013(b). A (Revised) baseline heritage study for Sasol's Mining's proposed Sasol Shondoni Project and for the Block 8 reserves on the Eastern Highveld in the Mpumalanga Province. Unpublished report prepared for JMA Consulting (Pty) Ltd and Sasol Mining.

Notwithstanding all these surveys it is possible that heritage resources may not be detected during surveys as a result of the fact that project areas cannot be surveyed in detail as a result of time and budgetary constraints. Heritage resources may also be missed as some heritage resources may occur beneath the surface, are unmarked, inconspicuous or eroded whilst others may be covered by vegetation. Human failure may also be a cause which may deter that all heritage resources are recognised in any given area, etc.).

### **3 OBSERVATIONS MADE IN BORROW PIT 07**

Construction activities for the use of Borrow Pit 07 (BP07) have commenced. This requires that the top soil of this feature has to be removed. This resulted in the partially clearing and flattening of the former lush grass cover which occurred across the surface of the borrow pit, primarily as a result of vehicles which traverse the surface of the borrow pit. The dense grass cover which existed when the original survey was conducted more than a year ago now also has receded as a result of the winter's effects on the Eastern Highveld.

The various activities which are conducted in the preparation of BP07 lead to the precise demarcation of the borrow pit's boundary and also in clearing the surface of this feature which allowed for more clear observations of possible features and structures on the surface of the borrow pit which could not be observed in the tall grass cover when the initial survey was conducted.

The subsequent observation of a number of compilations of stones (rudimentary stone piles) on the exposed surface of BP07 alerted the geo-hydrologist who informed Sasol's environmental officer of her observations. Mr. Kobus du Plessis of JMA Consulting (Pty) Ltd requested the archaeologist to contact Mr. Bheki Mndawe

of Sasol who requested the archaeologist to do a site investigation and too make recommendations in a report.

This report therefore complies too these requests.

### The compilations of stones

An investigation of the eleven compilations of stones (rudimentary stone piles) indicated that these features occur in a relatively straight line which stretches for approximately 60m across the surface of BP07. The compositions of stone revealed particular characteristics and features, namely:

- The stone compilations have various shapes and sizes.
- The stone compilations were constructed with stones which vary in sizes and types (small, medium and large; conglomerate, sandstone, dolerite, ferricrete).
- The most conspicuous feature was the fact that the stone compilations occur in a relatively straight line.
- At least one of the stone compilations represented what seems like a short wall ( $\pm$  3m in length)

The characteristics of the stone piles are described in Table 01. The distances between the compilations of stone appear in brackets.

### Obvious difference with graves

Obvious differences between the stone piles and any possible graves are the following:

- A number of informal graves which occur together normally do not occur in a straight line but rather follows a haphazard pattern.
- A number of graveyards (formal and informal) already occur in the general area. It is therefore highly likely that all the people who lived in the area would have been interred in these graveyards.
- The custom of the use of graveyards is well established in the area.

The stone piles were also geo-referenced and tabulated (Table 01).



**Figures 1, 2 & 3- Three collections of stones (in no particular order) which were documented in BP07 (above, centre and below). Feature 07 (centre) has the closest resemblance to a possible grave than all the features that were recorded.**



**Figures 4 & 5- Two more compilations of stones (in no particular order) which were documented in BP07 (above and below).**



Feature	Coordinates		Remarks
01	26° 31.554's	29° 2.235'e	Circular shaped mostly larger stones
02 (16m)	26° 31.562's	29° 2.236'e	Elongated 1m diameter mainly composed of small stones
03 (10m)	26° 31.566's	29° 2.239'e	Random cluster of medium sized stones
04 (3m)	26° 31.568's	29° 2.240'e	Random scatter of limited number of large stones
05 (11m)	26° 31.572's	29° 2.243'e	Random scattering of large stones
06 (8m)	26° 31.577's	29° 2.245'e	Seven medium- sized stones arranged close to each other
07 (11m)	26° 31.581's	29° 2.247'e	Prominent collection of medium-sized stones in an elongated shape.
08	26° 31.585's	29° 2.248'e	Elongated shaped collection of medium sized stones.
09 (7m)	26° 31.589's	29° 2.250'e	Random collection of larger stones
10 (11m)	26° 31.594's	29° 2.253'e	Prominent collection of mixed sized stones
11 (7m)	26° 31.600's	29° 2.257'e	Resembles short stretch of a wall.

**Table 1- Coordinates for eleven compilations of stones (features) that ran from the north to the south across BP07 (above).**



**Figure 6- A wide angle view of the compilations of stones indicates the relatively straight line along which the composition of stones stretches across the surface of BP07 (above and below).**



**Figure 7- Three of the compilations of stone (top, centre and bottom) which were plotted on Google Maps collate with what seems to be an old abandoned border fence which ran from the north to the south across the surface of BP07 (above).**

#### **4 CONCLUSION AND RECOMMENDATIONS**

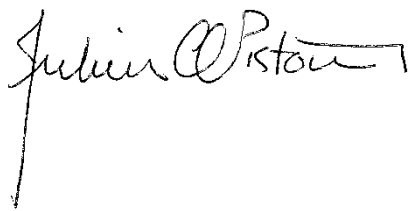
The following provisional recommendations were made during and after the site visit were completed, namely:

- The construction activities must continue. An 'island' roughly measuring 60mx5m can be demarcated around the features with red cautionary tape. When construction approaches the 'island' and the removal of the first (or later features) reveal the presence of human remains borrowing activities on the 'island' must be stopped. The 'island' can then be left unscathed so that an archaeologist can conduct mitigation measures. The work around the 'island' can continue and needs not to be affected by the rescue work that is conducted on the 'island'.

The confusion regarding the meaning and significance of the compilations of stones was cleared when the coordinates for these features were plotted on Google Maps (see Figure 7).

The eleven features appear in a straight line on the Google image which again collate with what seems like a (former) fence which used to stretch from the north to the south across the surface of Borrow Pit 07. It therefore appears as if the stone features may have served as some form of support for posts (possibly made from wood) on which a wire fence was erected.

The provisional recommendations that were made therefore no longer suffice: Construction activities at BP07 can continue and should only be stopped when any archaeological or human remains are exposed during the preparation, utilization and eventually closure of BP07.

A handwritten signature in black ink, appearing to read 'Julius CC Pistorius', with a long vertical line extending downwards from the 'P'.

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