

INVESTIGATION REPORT OF EXPOSED HUMAN SKELETAL MATERIAL DURING MINING OPERATIONS AT BLAAUWBOSCH (KOPHIA) DIAMOND MINE, BOSHOF DISTRICT, FREE STATE PROVINCE

EXECUTIVE SUMMARY

In request of SAHRA, the mining site was visited on 7 March 2018 to investigate the nature and extent of human skeletal material unearthed during mining activities.

Prior to the visit the investigating police removed skeletal material from two of the three affected mining areas. Some of the skeletal material (as per Fig 13 on Pg 12 and Fig 17 on page 13) was taken to the forensic unit at Bloemfontein and the remainder left at the mining offices. Although mining activities were stopped in all three areas (Attachment A), on archaeological investigation it was found that only one of the three areas contained human skeletal material.

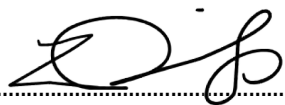
According to the police report (Attachment B), based on an interview with unidentified local informants, the skeletal material belongs to mine workers who died during 1914 (purportedly of a flu epidemic) and were buried in a mass grave. Even if it is assumed that this refers to the Spanish influenza epidemic of September to October 1918 (also referred to as Black October), the exposed skeletal material includes both adults and children and there is no indication of a mass grave. The nature of the dislodged skeletal material connects it to partially *in situ* individual graves with the exception of one that might have been completely removed or alternatively the skeletal material belongs to an adjacent grave.

This does not exclude the possibility of the graves being connected to mine workers and/or their families as this farm has more than a 100 years' history of mining. A thorough background study should be able to shed light on this.

Skeletal material unearthed in the other two excavated areas is not of human origin and, accordingly, the exposed human skeletal material is concentrated in one area only.

It should also be mentioned that although the skeletal material is well preserved, it is not unlikely to predate the beginning of historic mining in this area as the soil conditions are highly favourable for the preservation of organic material.

It is recommended that the mining activities in the other two areas as indicated as second and third mining area in this report, continue and that only the buffer zone indicated in the human skeletal area (mining area 1) be left undisturbed for the grave specialists to investigate and decide on a course to take to investigate for any further graves not currently visible on the surface.



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LOCATION OF INVESTIGATED AREA ON THE BLAAUWBOSCH DIAMOND MINE AREA

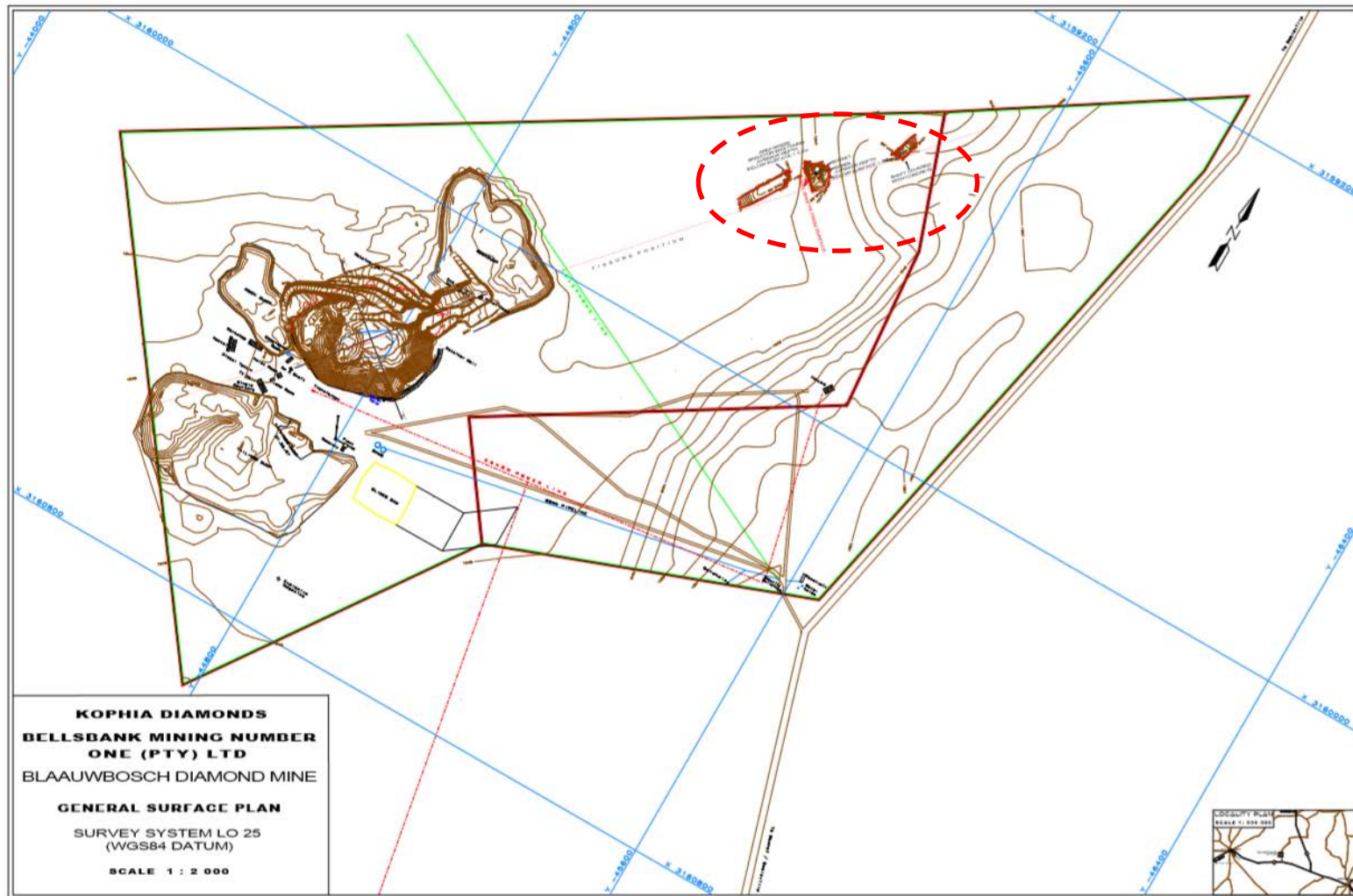


FIGURE 1: INVESTIGATION AREA CIRCLED

LOCATION OF BLAAUWBOSCH DIAMOND MINE ON FARM

Form No. 34.

AMENDED SURVEY.

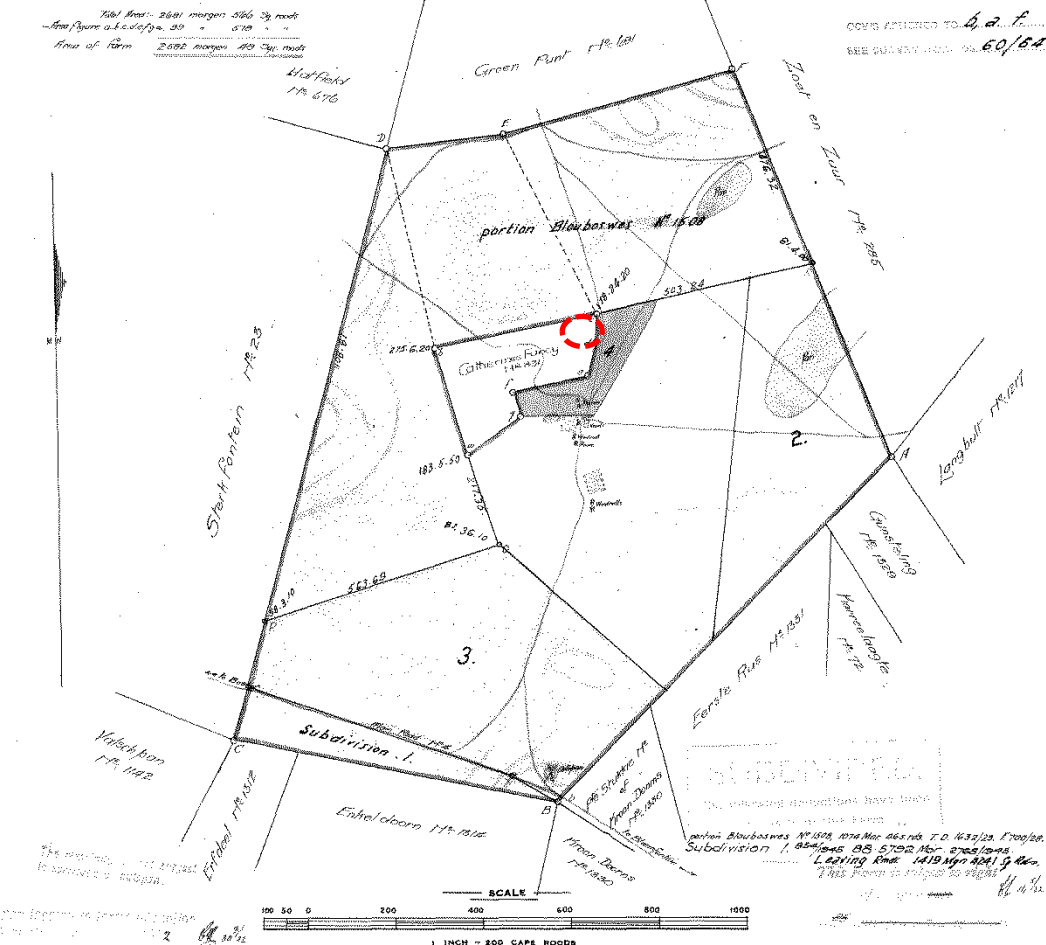
For New Title.

S.G. No. F. 699/29

Examⁿ No. 1105/29

Sides.	Angles.	Co-ordinates.
		Y X
A.B.	109° 13'	112. 29. 05
B.C.	72° 19'	125. 19. 30
C.D.	103° 21'	105. 21. 30
D.E.	111° 17'	111. 17. 30
E.F.	99° 27'	109. 27. 05
F.A.	85° 36'	105. 36. 05
A.B.	109° 13'	112. 29. 05
B.C.	72° 19'	125. 19. 30
C.D.	103° 21'	105. 21. 30
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C.D.	103° 21'	105. 21. 30
D.E.	111° 17'	111. 17. 30
E.F.	99° 27'	109. 27. 05
F.A.	85° 36'	105. 36. 05

Data of Catherine's Fancy No 891.



The above figure A.B.C.D.E.F.A. excluding the figure abcdef.g.h. represents 2582 Morgen 49 Square Rods of land being the farm BLAAUWBOSCHFONTEIN No 229 registered in the name of P. S. Z. Coetzee Situate in the DISTRICT of BOSHOF Orange Free State Surveyed in May 1928 by me M. Y. S. van Niekerk Government Land Surveyor.

Examined and Approved Surveyor-General O.F.S. Bloemfontein.	This diagram is annexed to Certificate of Amended Title No. 1631/29 dated 27.4.29. Bloemfontein.	S.G. File No. <u>322/29</u> Map Sec. <u>21</u> Compilation <u>Bank of J.</u> GOSC BOSHOF 229
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FOR CERTIFICATIONS, COMPUTATIONS AND MEASUREMENTS, SEE REVERSE SIDE.

FIGURE 2: POSITION OF INVESTIGATION AREA CIRCLED ON FARM CATHERINE'S FANCY NO 891 SUBDIVIDED IN 1928 FROM FARM BLAAUWBOSCHFONTEIN NO 229, BOSHOF DISTRICT, FREE STATE,

INVESTIGATION AREA

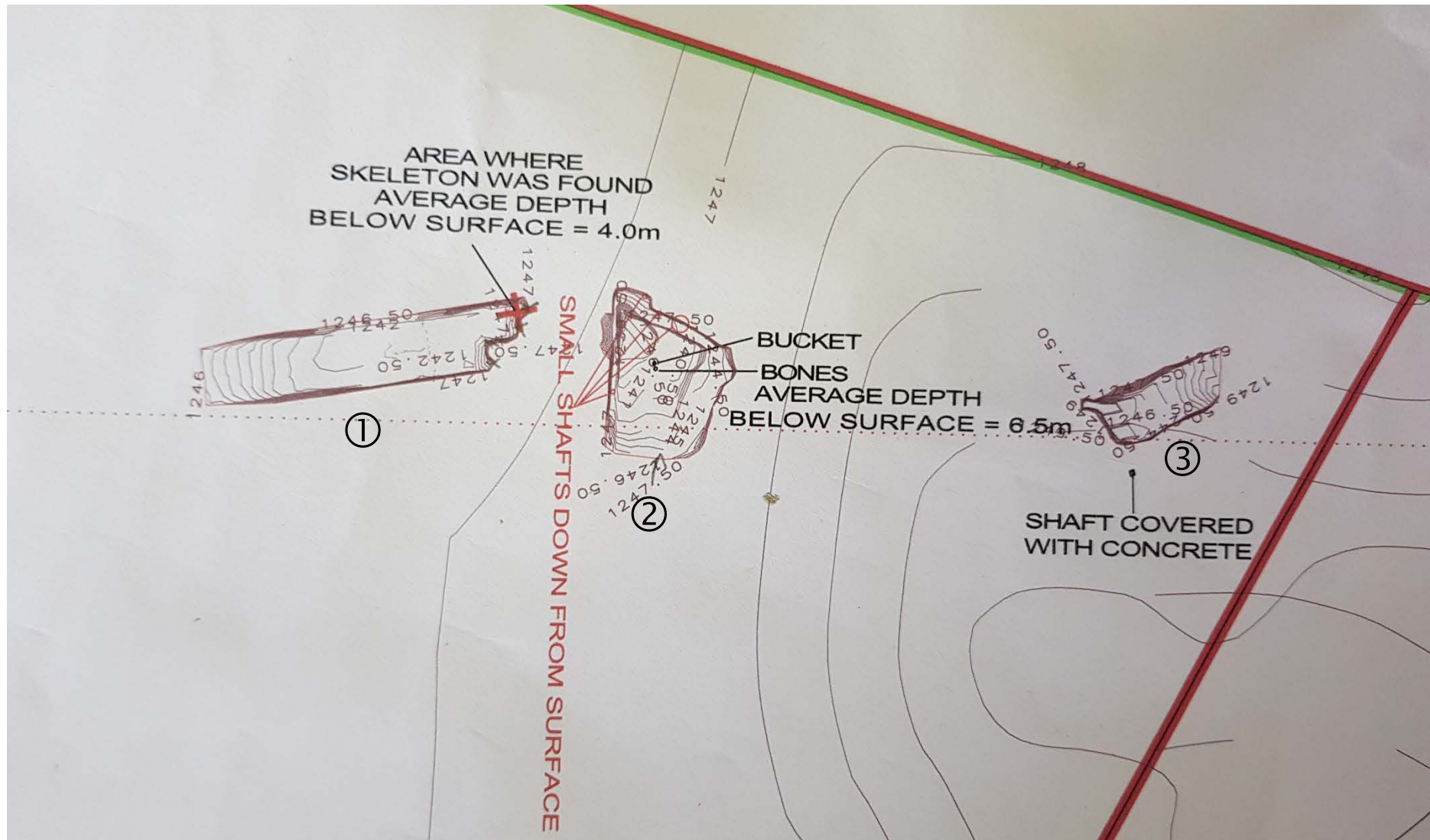
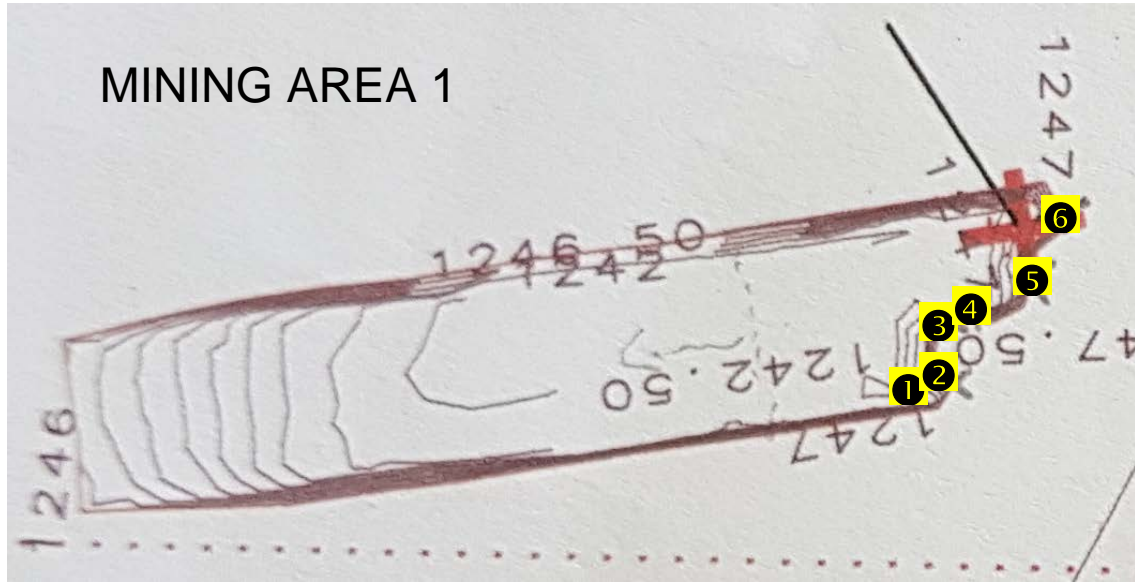


FIGURE 3: SURVEYOR DRAWING OF EXCAVATED AREAS AS IT WAS AT THE TIME OF THE VISIT TO THE MINE. THE FOLLOWING PAGES WILL FOCUS ON EACH SECTION MARKED AS 1 TO 3 INDIVIDUALLY

MINING AREA 1



Description of skeletal remains found at mining area ①:

This section of the report covers the physical investigation of the grave area and skeletal material collected from the surface of the excavated soil during this time (refer to photographic collage on page 5)

AREA (GRAVE?) 1 (REFER TO PAGE 6)

No discernible *in situ* grave. Skeletal material scattered on surface of excavated material. There is a strong likelihood that the remainder of the skeleton might be buried within the excavated soil that is not yet removed.



FIGURE 4: THE HUMERUS INDICATES A HEIGHT OF BETWEEN 1.55 AND 1.58 DEPENDING ON THE GENDER OF THE INDIVIDUAL

GRAVE 2

Partially *in situ* grave with only the lower body of an adult from the femurs to the feet still *in situ*. Carpel -, Metacarpal bones and phalanges resting on upper end of femur. Body most likely buried in a horizontal position on the back with the hands folded onto the legs. No evidence of a wooden coffin and the body was covered with what appears to be three layers of flat metal sheeting.



FIGURE 5: WELL-PRESERVED HANDBONES CLEARLY VISIBLE

GRAVES 3 & 4

Both these graves are of a similar size and are likely (on account of the size of the coffin) to be those of very young children or infants. A wooden section that was found on the surface below grave three appears to be the side of the coffin which indicates that the skeletal material inside (if well-preserved) will still be intact.



FIGURE 6: THE HIGH POSITION OF THE GRAVES FROM THE BOTTOM OF THE EXCAVATED AREA AND THE INSTABILITY OF THE TOP SOIL MADE CLOSER INSPECTION IMPOSSIBLE



FIGURE 7: IN SITU GRAVE 3 WITH MATCHING SIDE PANEL RETRIEVED FROM FLOOR OF THE EXCAVATED AREA BENEATH GRAVE 3

GRAVE 5

This grave also shows signs of a wooden coffin. Due to the relatively small size of the burial area, this might be the grave of the juvenile skeleton retrieved by the police.



FIGURE 8: PARTIALLY *IN SITU* GRAVE OF POTENTIALLY A CHILD

GRAVE 6

One of the two adult skulls recovered earlier might belong to this grave. Mainly head and neck vertebrae removed with the remainder of the skeleton most likely still *in situ*. Body buried in a wooden coffin. Jaw discovered on the surface directly below this grave matches one of the adult skulls retrieved by the police.



FIGURE 2: LARGELY *IN SITU* SKELETON INDICATES A BURIAL POSITION IN A HORIZONTAL POSITION FACING UPWARD.



FIGURE 10: JAW COLLECTED DURING INVESTIGATION



FIGURE 11: JAW FITTED TO SKULL RETRIEVED BY POLICE

SKELETAL MATERIAL COLLECTED PRIOR TO ARCHAEOLOGICAL INVESTIGATION

Exposed skeletal material were collected and kept in a bag at the on-site mine office. A small selection of skeletal material was taken by the police and is currently at the forensic department in Bloemfontein. The skeletal material that remained at the office were examined and photographed by the archaeologist and then wrapped in foil and boxed to limit further deterioration due to the sudden change in temperature and humidity. This was left at the mine due to the fact that the National Museum in Bloemfontein does not have a permit to store human remains.



FIGURE 12: THE TWO BONES MARKED IN THE PHOTOGRAPH ARE NOT OF HUMAN ORIGIN AND WERE MOST LIKELY FROM THE SURFACE OR TOPSOIL JUDGED BY ITS WEATHERED CONDITION

The skeletal collection represents a minimum of three individuals. Two of the skulls show fully erupted 1st, 2nd and 3rd molars (i.e. adults), with a third jaw bone that of a juvenile (approximately between 5 and 7 years?). The jawbone collected by the archaeologist from the area underneath grave 6 corresponds with one of the adult skulls previously collected as indicated in Figure 11.



FIGURE 13: SKELETAL MATERIAL REMOVED BY THE POLICE AND TAKEN TO THE FORENSIC UNIT IN BLOEMFONTEIN

Description of skeletal remains found at mining area ②:

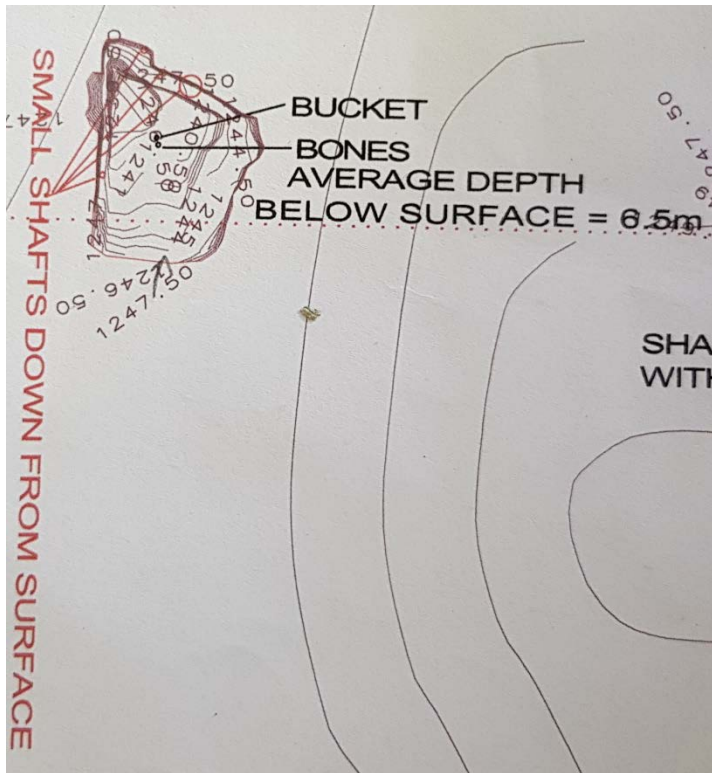


FIGURE 14: THIS AREA SHOWS SIGNS OF HISTORIC MINING ACTIVITIES (SMALL SHAFTS VISIBLE IN WALL AS INDICATED ON DRAWING EXCERPT)

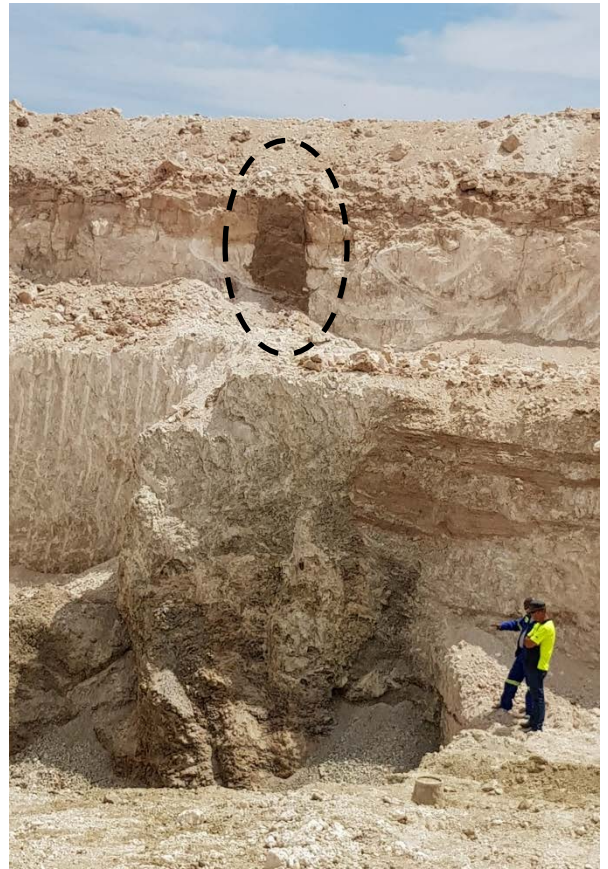


FIGURE 15: HISTORICAL SHAFT INFILLED WITH SOIL CIRCLED



FIGURE 16: BUCKET - MOST LIKELY USED IN HISTORICAL MINING ACTIVITIES



FIGURE 17: NON-HUMAN SKELETAL MATERIAL RETRIEVED BY THE POLICE - CURRENTLY AT THE FORENSIC UNIT IN BLOEMFONTEIN

This farm has been mined since the late 1800s and numerous small mine shafts will be a common occurrence. The skeletal material collected by the police, however, is not of human origin and the weathering indicates that it was most likely lying on the surface for some time. The section between this mining area and the graves area, however, should be considered as a no-go zone as there is a strong possibility that it might contain more graves.

THIRD MINING AREA

During the archaeological site investigation surface bones (not human) were collected. This area, too, shows signs of earlier mining activities.

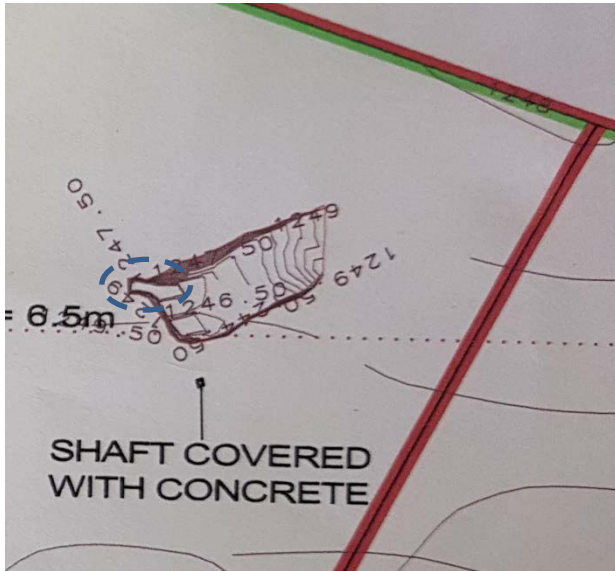


FIGURE 18: AREA 3



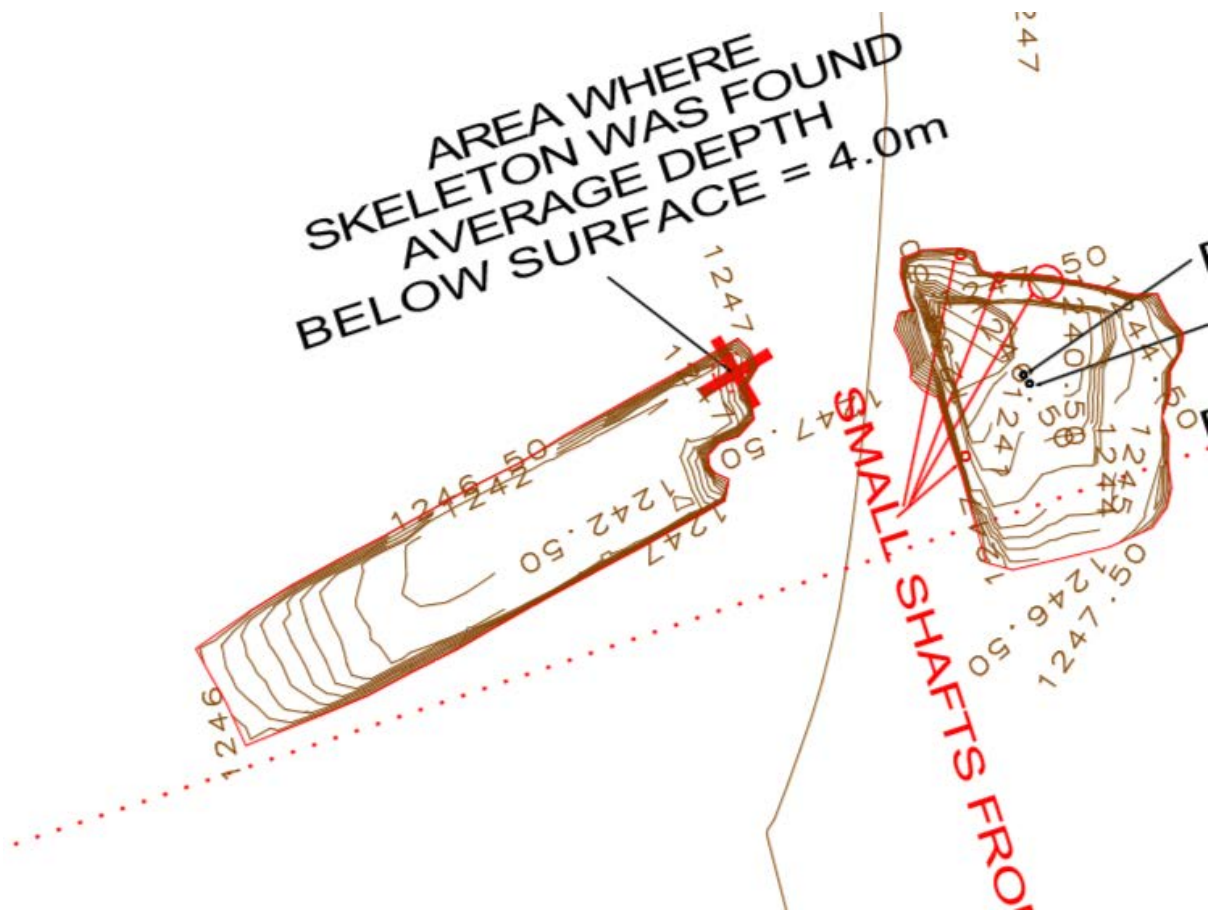
FIGURE 19: NON-HUMAN SKELETAL MATERIAL COLLECTED FROM THE SURFACE AT THE LIP OF THE EXCAVATION AREA



FIGURE 20: CLOSE-UP VIEW OF CIRCLED AREA IN FIGURE 18

RECOMMENDATIONS

Until such time as an ASAPA accredited grave specialist has been contracted for the exhumation and retrieval of the remainder of the human skeletal material, a buffer zone of between 25 and 50 m radius from the red cross in figure 21 should be put in place and not further disturbed. Continuation of mining activities in the remainder areas, however, should not have a negative impact on the grave area.



SECTION 54



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

FREE STATE REGION

REF. NO: SPK / Kofia Diamond / 01-03-2018

NOTICE OF ORDERS, SUSPENSIONS AND INSTRUCTIONS IN TERMS OF SECTIONS 54(1)(a) AND 54(1)(b) OF THE MINE HEALTH AND SAFETY ACT, 1996 (ACT 29 OF 1996), AS AMENDED.

Employer Representative: Mr. HERMAN OLIVIER

Mine: KOPHIA DIAMONDS (PTY) LTD

Section: Blaauwbosch Diamonds Mine **Shaft:** Blaauwbosch Diamonds Mine

Date: 2018-03-01

A. List the Dangerous Occurrence/Practice/Conditions observed:

- Following the incident of the 23 February 2018 where by Mr Thomas Taylor, 3.1.(a) Appointee reported the discovery of Human remains (bones) in the northern portion of the old Blaauwbosch open pit. The incident was reported to the police and the Principal Inspector of Mines office on the same day. An inspector was send out for further investigation on Saturday, the 24th February 2018. No written instruction was issued by the inspector on Saturday the 24th to the manager then. The manager was only verbally instructed to stop digging further on the side where the bones were discovered until a complete investigation and the following information had been forwarded to the office of the Principal inspector:
 1. The previous plans that reveal the previous worked out areas (both underground workings and the pit)
 2. Manager's sworn statement about the incident from the police.
 3. Police Case Number.
- On Monday the 26th February 2018, I further discussed the matter with the Principal Inspector of Mines and the Regional Manager at the office where they agreed that we must do the joint inspection with Officers from Mineral Regulations.
 1. On site we found that the mine had stopped the area where they were mining and moved to another site. The manager also reported that another set of Human remains (bones) were exposed in the same area on Monday

the 26th February 2018 and the manager reported the matter to the Principal Inspector of Mines.

B. The instruction(s) and/or order(s) given:

Stop all the mining work (digging) on the Northern portion of the farm area until:

1. Such time that the employer had presented the requested documents as mentioned on Saturday to the DMR regional office.
2. A full mining methods and plans had also been discussed with the Regional Manager and the Principal Inspector of mines and agreed with.
3. South African Heritage Resource Agency had been involved and their report had been submitted with your presentation.
4. Please comply with the bottom instructions.

The employer is further instructed to, jointly with member(s) of health and safety committee or unions, fix the deviation(s), conduct a comprehensive audit for similar deviation(s), investigate reasons for system failure and institute an action plan to prevent further recurrence of system failures. This instruction shall remain in force until such time that the employer has complied with the instruction and a presentation made to the office of the Principal Inspector of Mines by the said employer and the member(s) of health and safety committee or unions.

In terms of section 54(6), the instruction(s) take effect on (date) 2018-03-01 at 12h30 (time)



SP KAMBULA
Inspector of Mines



MG MULAUDZI
Assistant Director MEM



KC MPHAPHULI
Assistant Director ME



Employer Representative

.....
H&S/Union Representative

In terms of section 54 (5), the instruction(s) is/are confirmed/~~varied~~/~~set aside~~.

.....
IT NYAQELA
Principal Inspector of Mines

.....
01/03/2018
Date

South African Police Service



Suid-Afrikaanse Polisie diens

Tshebeletso ' Sepolesa Afrika Borwa

Posbus 37
 Privaatsak
 Mokotla' Poso

My reference:
 Verwys nr:

OFFICE OF THE STATION COMMANDER
 KANTOOR VAN DIE STASIEKOMMISSARIS
 SOUTH-AFRICAN POLICE SERVICE

Enquiries: W/O MOKHUOANE
 Navrae

SUID-AFRIKAANSE POLISIEDIENS
 BOSHOF
 8340

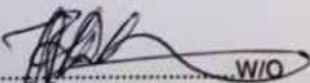
Telephone no: 053-5412011
 Fax no: 053-5412001



THE MANAGER
 BLOUBOSCH MINE
 BOSHOF

THE HUMAN BEING REMAINS FOUND AT THE MINE: BOSHOF

1. Enquiries was done in the vicinity about the remains, and was found to be of the workers of the mine. Who were diagnosed of the flue epidemic during 1914. These workers were buried in a "mass grave".
2. There are no crime committed for the SAPS to be engaged.
3. The remains will dealt with by the Florisbad Resea - Mrs Phillips.
4. Hope you find this in order.


 W/O

DETECTIVE COMMANDER: BOSHOF

Z T MOKHUANE

DATE: 2018-03-06