

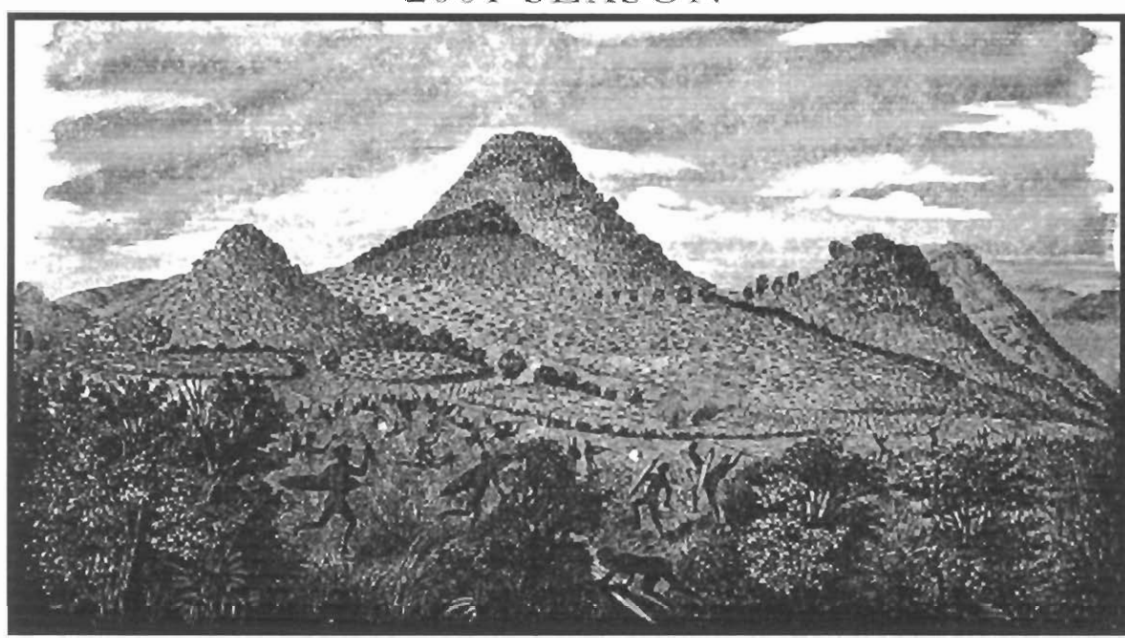
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UNIVERSITY OF SOUTH AFRICA
DEPARTMENT OF OLD TESTAMENT

MALEOSKOP ARCHAEOLOGICAL PROJECT

SAHRA PERMIT NO. 80/01/03/011/51

FIRST INTERIM REPORT:
2001 SEASON



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1. TERRAIN MOTIVATION

The farm Rietkloof 166 JS was originally registered during 1851 in the name of Willem Jacobus Grobler. In 1860 he sold the farm to the government of the Lydenburg Republic. In the Deed of Transfer the following statement is made: "De plaats genaamd Rietkloof gelegen naby en aan de oostsijde der Oliefantsrivier en bewoond wordende door de Kafferkapitein Maleeuw". According to oral tradition, the Ba-Kopa, of whom Boleu (Maleo) was the leader, settled in the area during the middle forties of the nineteenth century. However, it was after they purchased the farm, together with the neighbouring farm Weltevreden, that the Lydenburg government made the land formally available to the Ba-Kopa. The conditions for this arrangement were that the Ba-Kopa had to keep the laws of the state, including the payment of taxes.

The Ba-Kopa of Boleu, the Ndzundza-Ndebeles of Mabhogo and the BaPedi of Sekhukhune were the most prominent tribes resident in the area between Pretoria and Lydenburg, the capitals of two Boer republics respectively, during the middle decades of the 19th century. When two missionaries of the Berlin Missionary Society, Alexander Merensky and Heinrich Grützner (cf. Fig 2 and 3) arrived at Lydenburg, they hoped to establish a Mission station under the Swazi people, but the Swazi king was

not willing to accept them. As a result they approached Boleu to start their missionary activities under the Ba-Kopa, and they were accepted.

During August 1860 they arrived on the farm Rietkloof and established the first Berliner Mission Station north of the Vaal River, Gerlachshoop, on land given to them by Boleu. The relationships between Boleu and the missionaries fluctuated to a certain extent, but they survived. The situation became especially tense when Grützner encouraged the Ba-Kopa, who were Christians to stay away from traditional ceremonies organised by Boleu. Due to the worsening relationships between Boleu and the Boer republic, Boleu also suspected Grützner of cooperation with the Boers.

During 1863 a combined force of Pedi and Boer soldiers attacked the Ba-Kopa, but Boleu's men succeeded to drive the attackers back. On the 10th of May 1864, however, a Swazi army attacked Boleu, apparently on request of and in collaboration with the Boer Republic. The Swazis practically annihilated the Ba-Kopa: some 850 soldiers were killed and 2500 women and children were taken captive. Boleu himself was killed on Thabantsho, and the remnant of his people was dispersed over a wide area. One group, lead by Boleu's son Ramapudu, eventually settled at Botshabelo, a Mission Station situated close to the modern Middelburg. This branch of the tribe later, by the turn of the century, returned to Rietkloof and settled in the same area again, but the original kraal was not re-inhabited. The remains of that kraal, including numerous stonewalls and burnt hut floors, were left intact. An informant who was born on the farm during the twentieth century, before the Ba-Kopa were removed to Tafelkop during 1962, told me that they were not allowed to play on or close to Thabantsho, or Spitskop, where the original kraal of Boleu was situated.

Identification of the sites

The sites of Maleoskop were introduced to us, and previously to other archaeologists, by Mrs. Anina du Plessis, a then civilian worker at the training base. During our negotiations and excavations, she played a pivotal role in setting up meetings with the Kgoši and other dignitaries of the Ba-Kopa. She also liased on behalf of the excavation team with the police.

In his 1990 article on the "Kôpa-nedersetting van Boleu (Maleo) in Oos-Transvaal" J.S. Bergh refers to several factors concerning the Ba-Kopa, which are vague. One of these is the fact that the exact location of the Ba-Kopa settlement is not correctly described and indicated. He criticises previous historiographers (Van Rooyen and Van Jaarsveld) for their imprecise interpretation of sources, and he studies the booklet *Short history of the native tribes of the Transvaal* (1905) anew. He has drawn a map, with the farms Weltevrede, Rietkloof and Blaauwbank indicated, and situated the Ba-Kopa settlement in the southeastern corner of the farm Rietkloof. This indication is in line with the hilltop indicated as Maleoskop on modern maps (and it is a prominent hill, towering over much of the surrounding landscape), but I believe it is a misidentification. The hill with archaeological remains of the first kraal of Boleu is situated somewhat further north. It is less impressive than "Maleoskop", but:

1. it is indicated by modern informants as Thabantsho, the site of Boleu's kraal
2. it is lined with stone walls of different character and shape
3. it has the remains of burnt hut floors on the slope of the hill to the north
4. it is situated close to the remains of the Mission Station, separated only by a hill (cf Maleo en Sekoekoeni, p 41)
5. it fits the bill of *Lesjoegoeroe taba nkwanîe*, used by Wangemann and described as follows: "The hilltop is overgrown with thick bushes of aloes, sweet thorn and tree high Euphorbia, which is naturally impenetrable, but also fortified further by huge stone fortifications" (My translation)

2. HISTORICAL REVIEW

1. The Ba-Kopa.

After an 1859 agreement with the Lydenburg Republic, the Ba-Kopa tribe moved from De Oude Stadt near Groblersdal and settled on the farm Rietkloof. They settled on a hill flanked by two smaller hillocks in the centre of the farm and named the prominent central hill Thabantsho or Black Mountain. According to the documents of the missionaries who had worked in the area it was also called Lesjoeoeroe thaba nkwanĭ (cf. Fig 1) or Thicket Mountain.

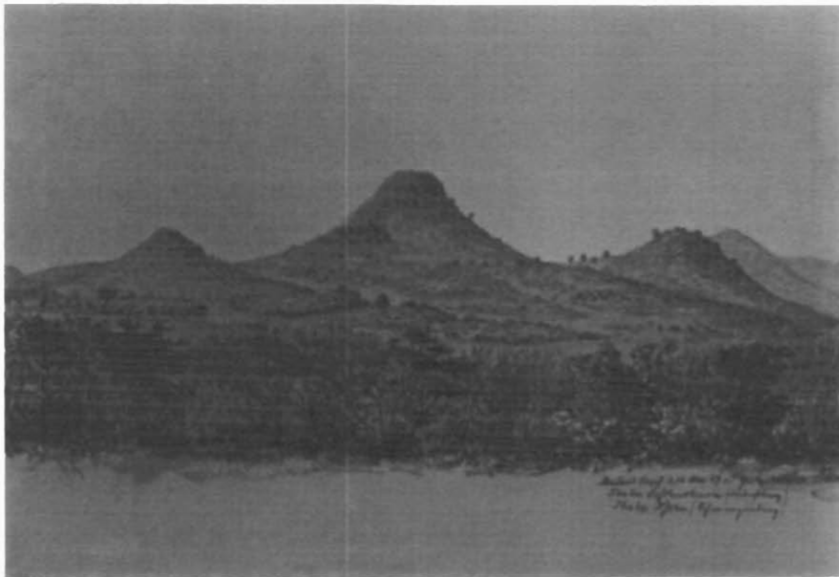


Figure 1: Thabantsho¹

The Ba-Kopa tribe split from the Kwena of Matshabela (approx. 1740) and settled at Moganyaka (Leeufontein). Before eventually relocating to Thabantsho in 1856 they first settled at De Oude Stadt to the west of modern Groblersdal.

In 1863 Maphogo of the Ndebele and Boleu (sometimes referred to as Maleo) of the Ba-Kopa decided to declare war on the Boers after the arrival of a commando consisting of 350 men. (The reason for the Boer patrol was the consistent cattle theft committed by the tribe.) The commando decided to attack the Ba-Kopa and not the Ndebele under Maphogo, because the latter were successfully fortified at Mapochskraal near modern Roossenekal. The attack was a dismal failure and due to internal strife in the Boer camp the ZAR decided to employ the Swazis as mercenaries.

Due to tribal tensions the tribe eventually split into two groups. On the 27th of January 1865 a group under Ramapudu moved away and settled near Botshabelo, in the Middelburg district while the other group joined up with Matsepe and moved to Leeufontein near Marble Hall.

¹ Archival Records: UNISA.

In recognition of their valuable assistance during the First Boer War, the ZAR allowed the tribe to move back to the farm Rietfontein. The Ba-Kopa settled at Thabantsho, now referred to as Maleoskop, from 1889 until 1962 when they were moved to Tafelkop.

2. The mission at Gerlachshoop.

The missionaries and the mission station at Gerlachshoop (cf. Fig 4) played an integral part in the history of Boleu and the Ba-Kopa. After receiving their orders from the executive council in Utrecht and accompanied by Ds van Heiningen (from Lydenburg), Field-Cornet JC Holtshausen and Commandant P Nel, Alexander Merensky and Albert Grützner journeyed to the settlement of Boleu. The missionaries came to an agreement with Boleu in which they were allowed to settle in the area and work with the tribe.



3. Alexander Merensky

Figure 2 Alexander Merensky²

² Grosskopf, JFW. 1957. Opposite p.24



Figure 3 Albert Grützner³

December 1861 saw the construction of the dower house as well as a water-furrow, which are still visible today. According to Wangemann, the house was 42 ft long and 18 ft wide and built with mud bricks. The foundation was laid out with the unusual black manganiferous boulders from Thabantsho. A church was constructed with the help of the local Christians and the first sermons were heard on the 20th of September 1863.

In May 1862, two new missionaries, Endeman and Albert Nachtigal, joined Grützner and Merensky. It was decided that Endeman and Grützner continue working with the tribe while Merensky and Nachtigal explore greener pastures. The latter two eventually established the mission station Botshabelo, which later would play an important role in the Ba-Kopa history.

³ Grosskopf, JFW. 1957. Opposite p.168



Figure 4: Gerlachsboop⁴

Although the missionary work prospered, it also caused discord between Boleu and the missionaries. The first important disagreement occurred during a time of conflict between Boleu and Sekhukuni, when the tribe of Boleu employed witchdoctors to strengthen his foot soldiers. The missionaries fervently opposed this practice and derided them for employing such heathen beliefs. The confrontation escalated in such a way that the settlers on the outlying farms had to come to the missions' defence.



Figure 5: Sekhukuni⁵

⁴ Archival Records: UNISA.

⁵ Grosskopf, JFW. 1957. Opposite p.104.

The derision gradually intensified which led to an attack on the tribe, in October 1863, led by 40 Boer commandos. The attack failed and gave Boleu the added determination to oust the missionaries from the area. Merensky and Nachtigal eventually returned in January 1864, which gave some respite in the ongoing confrontation. The conflict, nevertheless, continued and combined with other factors such as the continued cattle theft, led the combined Swazi/Boer attack on the 10th of May 1864.

The missionaries saw the fire on Thabantsho and realised that a major attack was in progress. Grützner rushed to assist the people of Boleu, but was stopped by Andries, an interpreter and one of the first Christians, after it became clear that the Swazi forces might also attack the mission station. The missionaries undertook necessary precautions to avert an attack. Boleu's surviving son informed Grützner of the intense battle, the ensuing conflagration and the fact that the king and most of his sons had been killed in battle.

The population dispersed after the battle. Some stayed on outlying farms while others went to the mission station for help. Although confusion reigned, the population eventually converged on the mission station. The Christians chose to follow Ramupudu, Boleu's only living son while those who chose the traditional belief system, followed Matsepe, Boleu's half-brother. Chaos and uncertainty prevailed in this time with instigators stirring rival clans prompting the January 1865 Maphogo attack on the Ba-Kopa. Alexander Merensky took it upon himself to mediate on behalf of the rival clans, which initiated the returning of the plundered goods and livestock.

Merensky decided to move to Botshabelo, where Ramupudu and his Christian contingent would join him. They arrived on the 27th January 1865. The tribe members who chose to follow Matsepe settled in Leeufontein. On the 13th of February, the missionaries left Gerlachshoop and joined Merensky at Botshabelo.

The mission station at Gerlachshoop continued to be owned by the Berlin Mission Society until 1964 when ownership was transferred to the South African government.

3. SURFACE STUDY

The primary research area is divided into three sub-areas, the central hill (cf. Fig. 6) known as Thabantsho, the western and northern hills and the living areas. They will be discussed and dealt with separately.

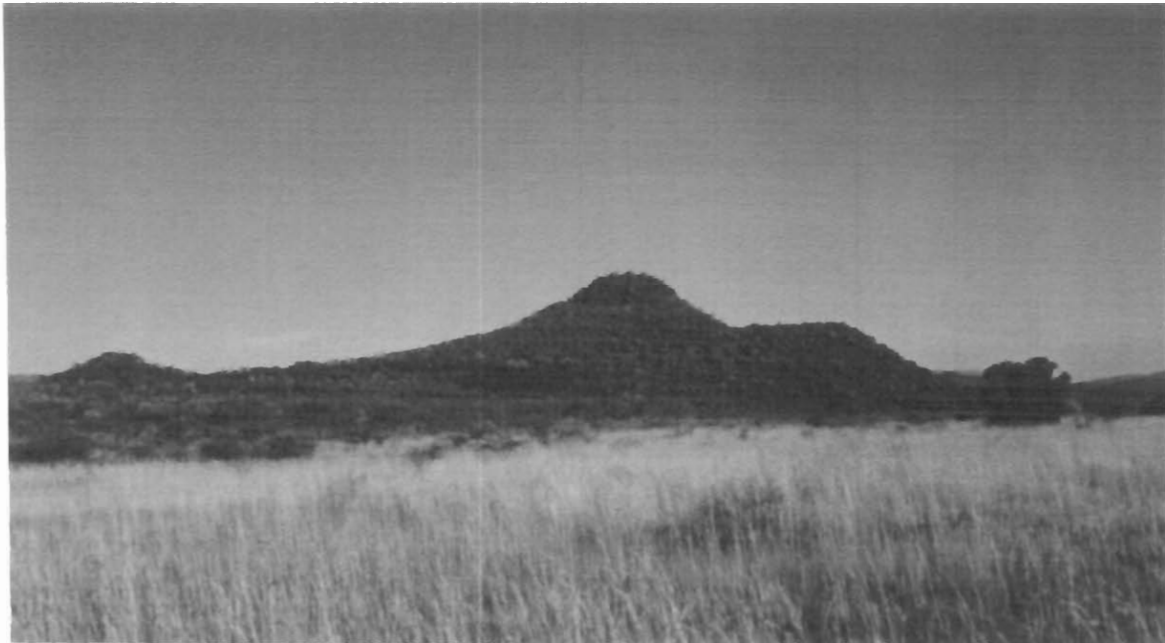


Figure 6: Thabantsho⁶

Thabantsho

Elaborate stonewalls are found on the top of the hill and covers the extent of the summit (cf. Fig 7). It includes a central courtyard area with smaller rooms extending to the western, southern and eastern sections of the hill. These have been extensively mapped.

⁶ 01/02 FKL 11/23. Thabantsho from the north-west. (Max Leonard)



Figure 7: Summit of Thabantsho⁷

Stonewalls are found lower down on the slope which form an open, grassy area which extends in a 180 degree arc (cf. Fig 8). These stonewalls form a continuous line around the hill and might have had a defensive function.

A number of circular stonewalls are found between the base of the hill and the stonewall above. These have been built using the heavy magnetite stones found in the area. It is possible that they represent livestock kraals.

⁷ 01/02 FKL 1/11. The summit of Thabantsho taken from the north-west. (Marissa Greeff)



Figure 8: Stonewalls which circle the summit⁸

Square structures that differ from the indigenous stonewall types, are found on the summit of the hill and further down the slope. The top structure forms a single square while 3 square rooms represent the lower structure. These have been built using mortar and clay bricks (cf. Fig 9). A further study of historical records might shed some light on the nature of these structures.



Figure 9: Mud bricks⁹

⁸ 01/02 FKL 1/13. The cleared strip near the summit of Thabantsho. (Marissa Greeff)

⁹ 01/03 FKL 4/36. Mud bricks used in the construction of this structure in the cleared area mentioned in the above footnote. (Max Leonard)

An excavation (Bol 1/1) has been conducted in the central courtyard and is represented by a 2 x 1m trench. It consists of 2 arbitrary layers of 10cm each and ended in a sterile layer. Some charcoal was found as well as a small amount of potsherds. After the completion of the excavation the test trench was refilled as a conservation procedure.

Two steel rods have been placed on the summit, Bol 1/1 on the western side and 32m to the east Bol 1/2. These markers constitute a base line that in turn, will form part of a trigonometrical triangle.

Northern and Western hills

Extensive stonewalls which circles the summits are found on both hills. A second set of stonewalls are found lower down to the base of the hills. These do not form a continuous line.

The circular stonewalls contains loopholes on both hills which indicates the use of guns in tribal wars. These and the above structures mentioned might represent defensive structures.

Living areas

The area comprises extensive hut floors, circular stone structures and debris, middens, broken grinding stones and remnants of military explosives used during police training. It must be mentioned that the surface artefacts, such as grinding stones are not representative, as some have been removed. The area can roughly be divided into separate living areas as indicated by the positions of groups of huts relative to each other.

The area at the base of the central hill comprises the most elaborate and extensive stonewall structures and extends from an area to the west along an arc to the eastern side of Thabantsho.

On the southern base of the central hill a single settlement is found which is not physically part of the other living areas. This area also comprises of stonewalls, hut floors, scattered pottery and levelled floors. Although no excavations were conducted in this area, the surface was extensively explored.

A living area is also present to the north of the Northern hill. This area is part of the living area found to the north of Thabantsho. No excavations were conducted in this area.

Three separate test trenches were excavated in the living areas to the north of Thabantsho.

A trench (Bol 1/3) was dug to expose a large midden in the sloping area between Thabantsho and the northern hill (cf. Fig 10). The trench constituted three squares each of 2 x 1m each in a north – south orientation. A representative amount of faunal remains, potsherds, cultural objects, beads and charcoal was unearthed during the excavation. After the excavations were completed the trench was refilled for conservational purposes.



Figure 10 Bol 1/3¹⁰

Burnt hut debris and scattered pottery gave an indication of a living area and thus prompted the location of the excavation at Bol 1/4. In the three separate trenches clear signs of red hut debris, the imprints of posts as well as broken pottery of which some were found in situ, was discovered (cf. Fig 11 and 12)

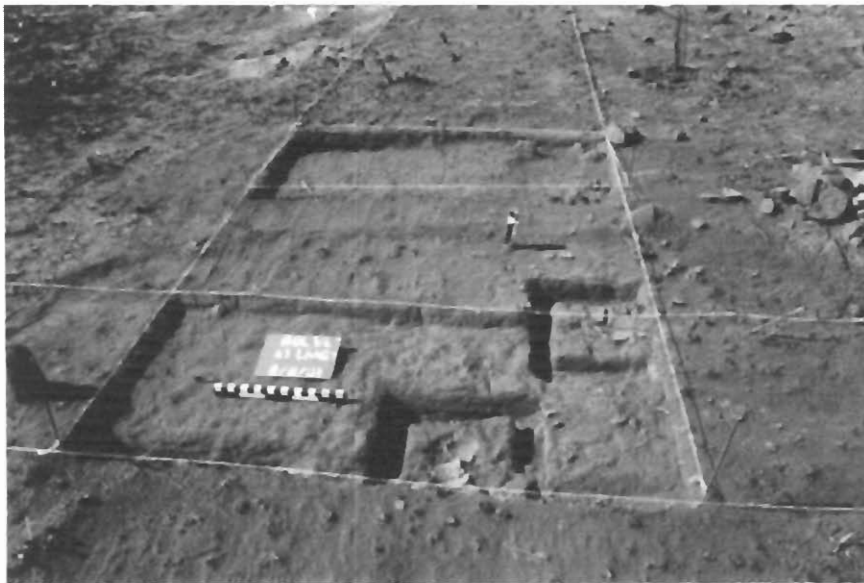


Figure 11: Bol 1/4 square A and C¹¹

¹⁰ 01/02 FKL 1/14. The midden excavation. (Marissa Greeff)

¹¹ 01/02 FKL 11/2. Bol 1/4 with square A and C. (Max Leonard)

A hut floor was identified. The excavation eventually passed the artefactual refuge and a sterile layer consisting of small stones was reached.

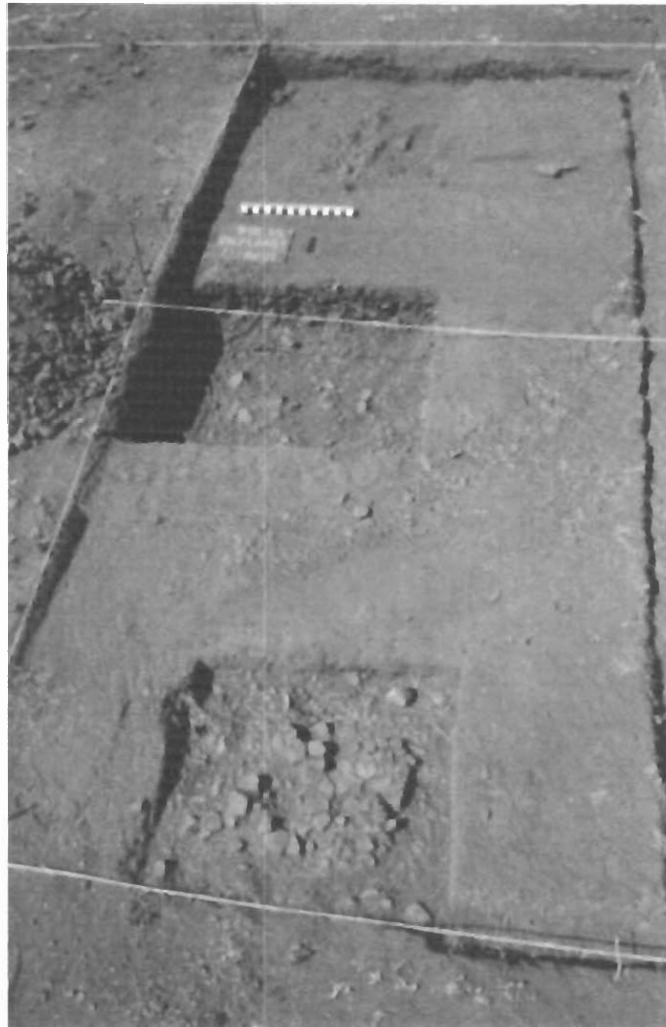


Figure 12: Bol 1/4 11-12-J1-J2¹²

The excavation designated Bol 1/5 was planned in a possible high status living area and is situated in the area between Thabantsho and the western hill. The discovery of an enclosed area (cf. Fig 13), as well as grinding stones, hut rubble and pottery pieces on the surface guided the choice of location. A substantial amount of charcoal was found as well a number of pots (cf. Fig 14), which the excavation team will be able to reconstruct. The square was eventually refilled. A steel rod has been placed in the vicinity of the kraal area, which will provide the basis for future excavations.

¹² 01/02 FKL 2/29. Taken from the north and showing test trenches, broken pottery pieces and hut rubble. (Marissa Greeff)



Figure 13 Enclosed area near Bol 1/5¹³

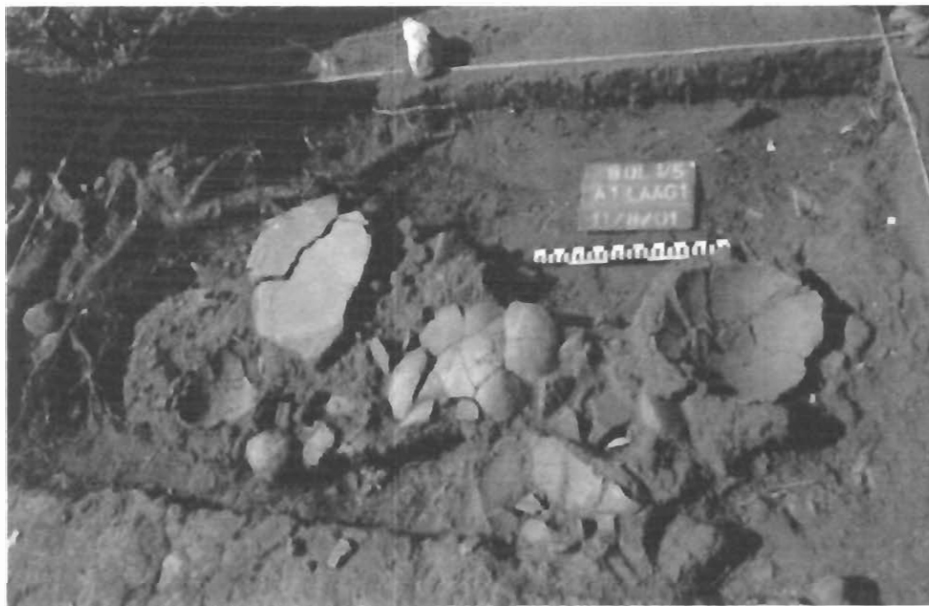


Figure 14: Bol 1/5 pottery in situ¹⁴

¹³01/02 FKL 3/26. Looking towards the north-west and showing the biggest enclosed structure in the area. (Marissa Greeff)

¹⁴01/02 FKL 2/34. Pottery found in situ in the Bol 1/5 square. (Marissa Greeff)

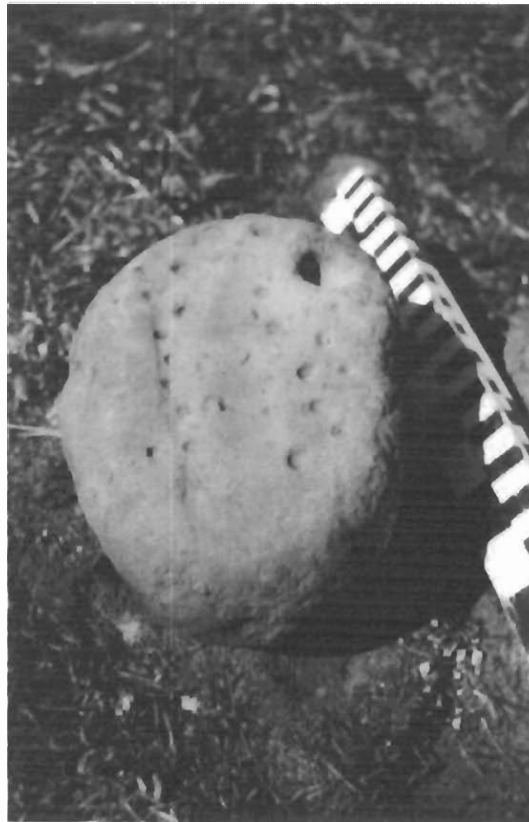


Figure 15: Stone artifact possibly used for sharpening tools or making fire.¹⁵

4. PRELIMINARY INTERPRETATIONS

- An extensive surface study is planned for the upcoming season with cartographers from the University of Pretoria. The purpose will be a spatial interpretation of the area with the mapping of the extensive stonewalls as well as features such as burials, middens and grinding stones.
- Results regarding the dating of the charcoal are expected in the near future and will be included in the final report.
- Further excavations in the living areas are planned for the upcoming season in August 2002.
- The interpretation of the pottery is in the process of being finalised.

¹⁵ 01/02 FKL. 3/8. Stone artefact found near Bol 1/5 with small indentations. Possibly used to sharpen metal tools. (Marissa Greeff)

- We believe that the actual site of the Ba-Kopa settlement, which was visited by the German missionaries and subsequently evacuated on The 10th of May 1864, was indeed the area found surrounding Thabantsho.
- Clear signs of fortification comparable with descriptions by the missionary, indications of higher and lower status as well as cattle kraals were found. Extensive surveying is necessary to complete the picture.

5. ACKNOWLEDGEMENTS

We would like to acknowledge the support and participation of various individuals and groups in the project. Mrs Anina du Plessis supplied us with the basic information and introduced us to Maleoskop and the history of Boleu. The OC of the police training base at Maleoskop, Kallie Schuld and Kgoši Boleu II of Tafelkop, rendered all possible assistance to enable us to do the work. Colleagues and friends, proff Andrie Meyer (UP), Frik de Beer (Unisa) and Coenie Scheepers (Unisa), drr Julius Pistorius (UP), Magdel le Roux (Unisa), Chris le Roux (Unisa), messrs Helgaard Prinsloo, Johan Nel (UP), Francois Erasmus (SAHRA), Johan Enslin and mss Kitty Schneider (Unisa), Loudine Philip (UP) and Erika Cruywagen (UP), as well as the Unisa group of students and volunteers of the Biblical Archaeology group, whom have contributed in different ways to the project. We also want to acknowledge the professional services of Shaw Badenhorst (Transvaal Museum), Joos Esterhuisen and Sanet Eksteen (UP) and Helgaard Prinsloo.

6. BIBLIOGRAPHY

- Beinart, W., Delius, P., Trapido, S (eds). 1986. *Putting a plough to the ground. Accumulation and dispossession in rural South Africa, 1850-1930*. Johannesburg: Ravan.
- Berg, J.S. 1990. Die Kōpa-nedersetting van Boleu (Maleo) in Oos-Transvaal. *Contree* 28,5-9.
- Berg, J.S. (red) 1999. *Geskiedenisatlas van Suid-Afrika: Die vier noordelike provinsies*. Pretoria: J.L. van Schaik.
- Bothma, C.V. 1957. Die verwantskapsbasis van die politieke strukture van die Bantshabeleng van Mothopong (Sekhukhuneland). Ongepubliseerde D.Phil- proefskrif. Pretoria: Universiteit van Pretoria.
- Bothma, C.V. 1962. *Ntshabeleng social structure: A study of a Northern Transvaal Sotho tribe*. (Ethnological publications no 48). Pretoria: Dept of Bantu Administration and Development.
- De Beer, F.C. 1979. Die sosiale eenhede van die Bakoni ba Dikgala wat die beginsel van verwantskap as basis het. Ongepubliseerde MA-verhandeling. Pretoria: Universiteit van Pretoria.
- Delius, P. 1983. *The land belongs to us. The Pedi polity, the Boers and the British in the nineteenth century Transvaal*. Johannesburg: Ravan.
- Du Plessis, A.C. 1998. Geskiedkundige erfenis, Maleoskop terrein. Ongepubliseerde navorsingsverslag.
- Grosskopf, J.F.W. 1957. *Maleo en Sekoekoeni*. (Vertaal uit die Duits van Th. Wangemann). Kaapstad: Van Riebeeck-Vereniging.
- Mönnig, H.O. 1967. *The Pedi*. Pretoria: J.L. Van Schaik.

- Report No. 80/1995. Portion 3 (A portion of portion 1) of Rietkloof 166 JS, District of Groblersdal, Province of Mpumalanga: Bakgaga Bakopa Tribe.
- Van Jaarsveld, A. 1986. Die Kopa van Malco en die Blankes in Transvaal, 1845-1864. *SAHJ* 18,147-156.
- Van der Merwe, D.W. 1987. *Die Berlynse Sendingsgenootskap en Kerkstigting in Transvaal, 1904-1962*, in: *Agti.f jaarboek vir Suid-Afrikaanse Geskiedenis* 50(2). Pretoria: Staatsdrukker.
- Van Rooyen, T.S. 1954. Die sendeling Alexander Merensky in die geskiedenis van die Suid-Afrikaanse Republiek, 1859-1882, in: *Agti.f jaarboek vir Suid-Afrikaanse Geskiedenis* 17(2). Pretoria: Staatsdrukker.
- Van Rooyen, T.S. 1951. Die verhoudinge tussen die Boere, Engelse en Naturelle in die geskiedenis van die Oos-Transvaal tot 1882, in: *Agti.f jaarboek vir Suid-Afrikaanse Geskiedenis* 14(1). Pretoria: Staatsdrukker.
- Wangemann, Th. 1868. *Ein Reise-Jahr in Süd-Afrika*. Berlin: Verlag des Missionshauses.
- Wangemann, Th. 1877. *Die Berliner Mission im Bassuto-Lande (Transvaal-Republik) mit Bildern* (4er Band: *Geschichte der Berliner Missionsgesellschaft und ihrer Arbeiten in Südafrika*). Berlin: Evangelische Missionshause.
- Wangemann, Th. 1886. *Ein zweites Reis Jahr in Süd-Afrika*. Berlin: Verlag des Missionshauses.
- Wangemann, Th. 1992. *Drawings of two mission journeys to South Africa*. Pretoria: National Cultural History Museum.
- Zöllner, L. & Heese, J.A. 1984. *Die Berlynse Sendelinge in Suid-Afrika*. Pretoria: RGN (Instituut vir Geskiedenisnavorsing).

**APPENDIX 1.
LIST OF FIGURES**

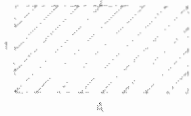
Figure	Reference number	Type	Description
Cover.	Wangemann 1	Sketch	Sketch of battle 10 May 1864.
1.	Archive 1/ UNISA	Sketch	Sketch of the central hill or Thabantsho.
2.	Wangemann 2	Sketch	Sketch of Alexander Merensky from JFW Grosskopf.
3.	Wangemann 3	B/W photograph	Photograph of Albert Grützer from JFW Grosskopf.
4.	Archive 2/ UNISA	Sketch	Sketch of Gerlachshoop.
5.	Wangemann 4	Sketch	Sketch of Sekhukuni kgosi of the Pedi.
6.	01/02 FKL 11/23	Colour photograph	Thabantsho from the northwest. (Max Leonard)
7.	01/02 FKL 1/11	Colour photograph	The summit of Thabantsho from the northwest. (Marissa Greeff)
8.	01/02 FKL 1/13	Colour photograph	The cleared strip near the summit of Thabantsho. (Marissa Greeff)
9.	01/03 FKL 4/36	Colour photograph	Mud bricks used in construction in the cleared strip mentioned above. (Max Leonard)
10.	01/02 FKL 1/14	Colour photograph	The Bol 1/3 midden excavation. (Marissa Greeff)
11.	01/02 FKL 11/2	Colour photograph	Bol 1/4 square A and C. (Max Leonard)
12.	01/02 FKL 2/29	Colour photograph	Bol 1/4 square I and J. (Marissa Greeff)
13.	01/02 FKL 3/26	Colour photograph	Enclosed stone structure near Bol 1/5. (Marissa Greeff)
14.	01/02 FKL 2/34	Colour photograph	Bol 1/5 with pottery in situ. (Marissa Greeff)
15.	01/02 FKL 3/8	Colour photograph	Stone artefact possibly used to sharpen tools. (Marissa Greeff)

APPENDIX 2.

GRID MAPS, EXCAVATION PLANS AND PROFILE SKETCHES.

BOL 1/1 Grid

Site BOL 1/1
Scale 1:50

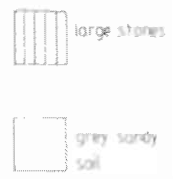
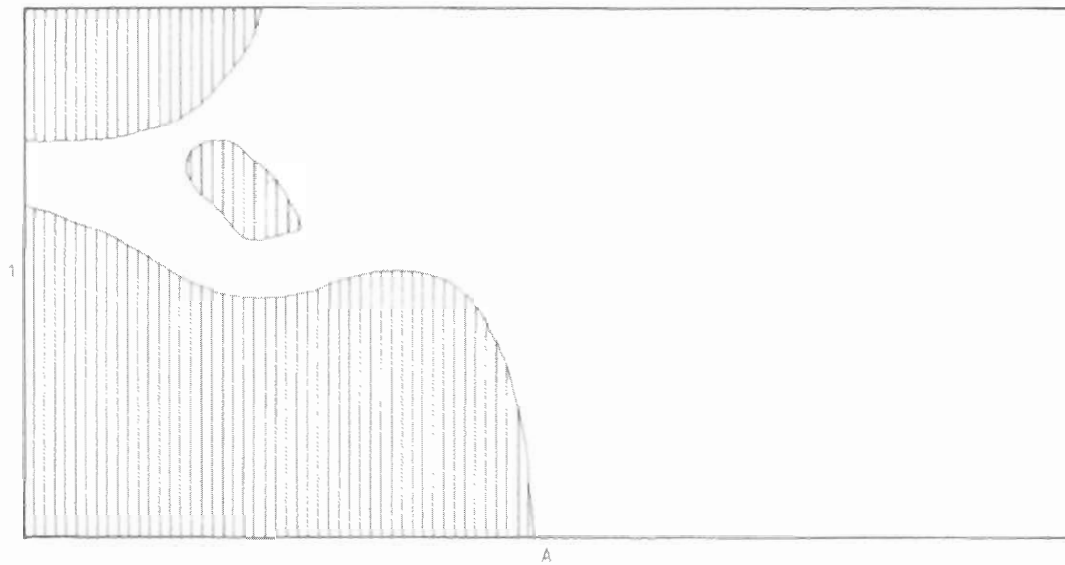


-  geographic data BOL 1/1
-  area to be excavated

BOL 1/1 Excavation Plan

Site BOL 1/1

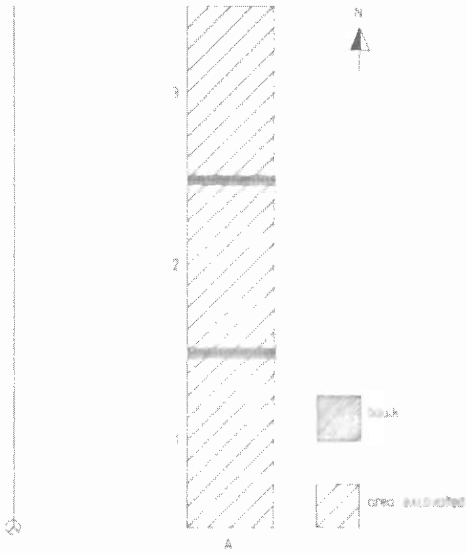
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BOL 1/3 Grid

Site BOL 1/3

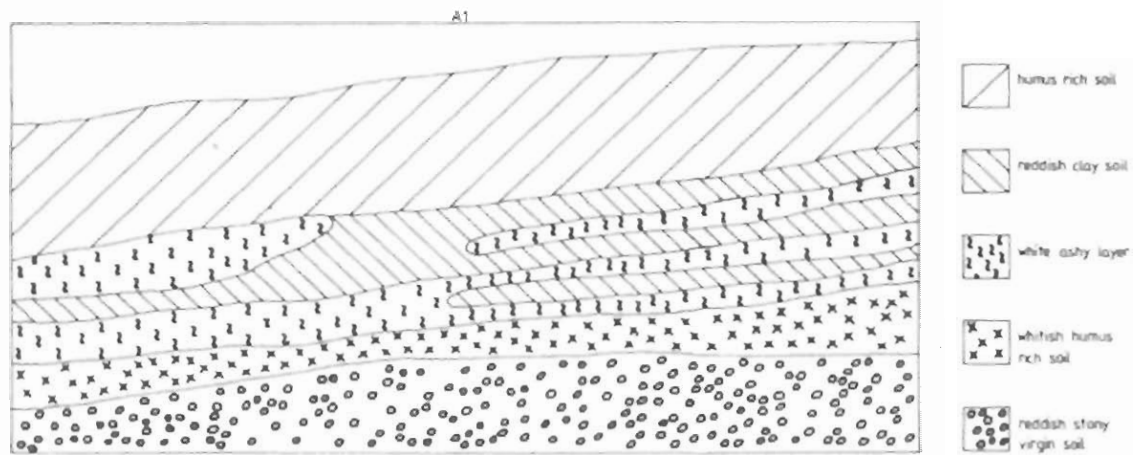
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BOL 1/3 Test Trench Profile A1 - East

Site BOL 1/3

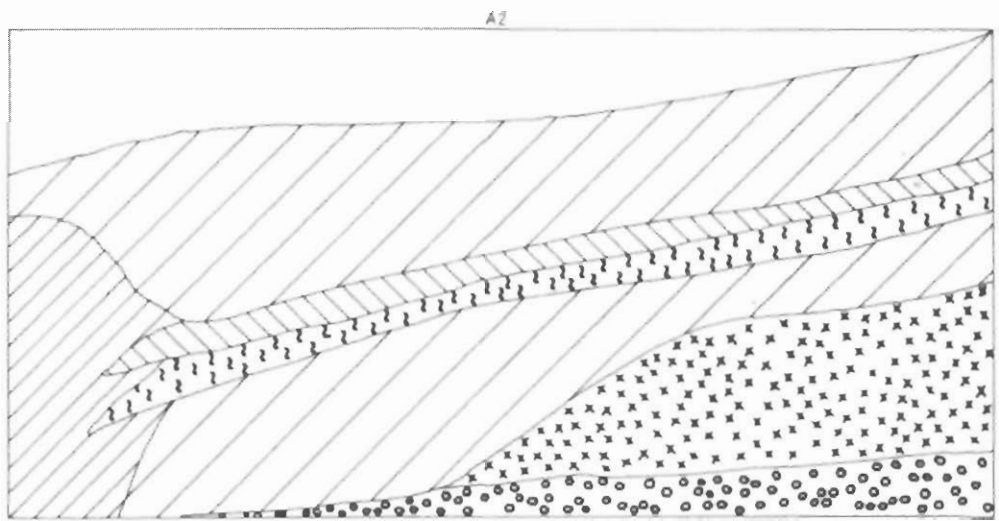
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BOL 1/3 Test Trench Profile A2 - East

Site BOL 1/3

Scale 1:10

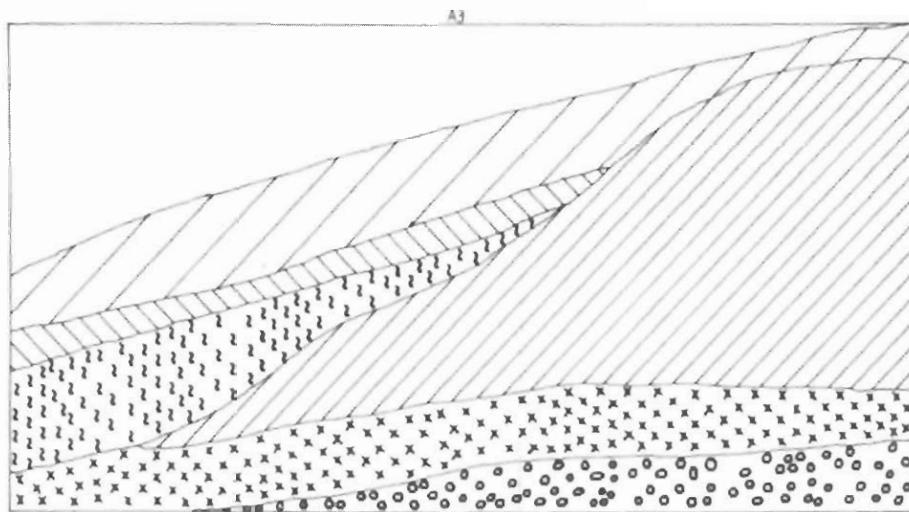


-  humus
-  humus rich soil
-  reddish clay soil
-  white ashy layer
-  whitish humus rich soil
-  reddish stony virgin soil

BOL 1/3 Test Trench Profile A3 - East

Site BOL 1/3

Scale 1:10

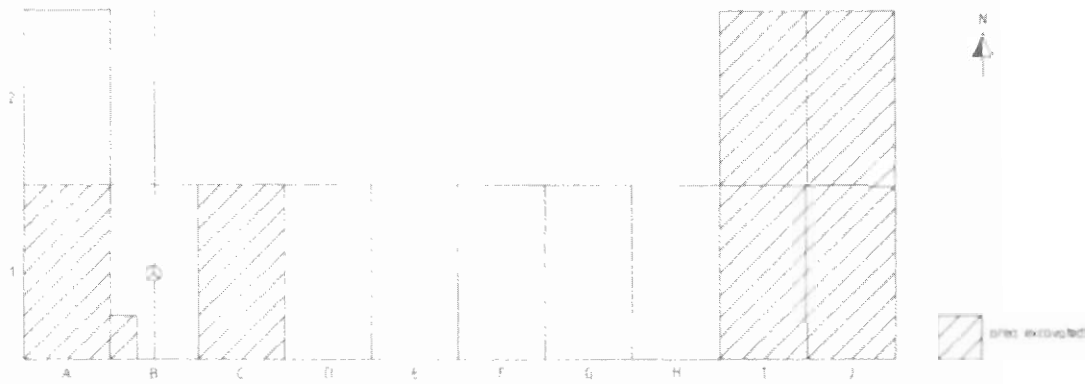


-  humus
-  humus rich soil
-  reddish clay soil
-  white ashy layer
-  whitish humus rich soil
-  reddish stony virgin soil

BOL 1/4 Grid

Site BOL 1A

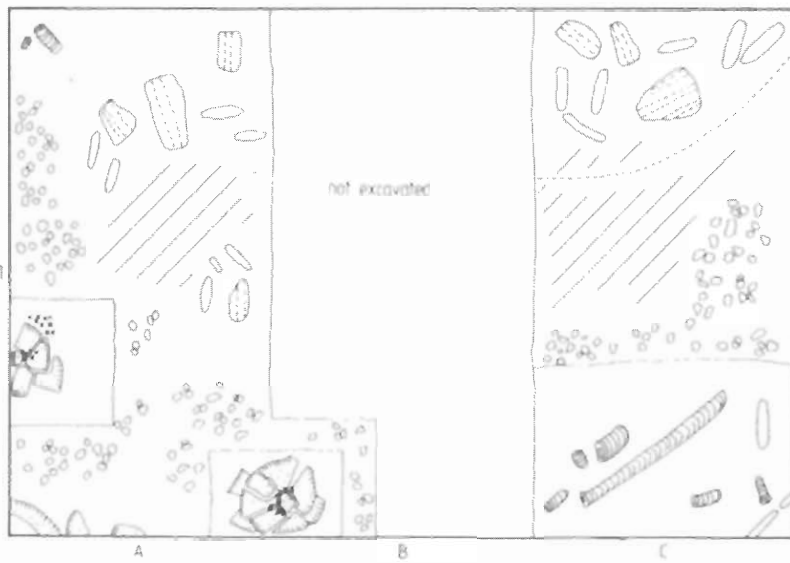
Scale 1" = 50'



BOL 1/4 Excavation Plan A1, B1 and C1

Site BOL 1/4

Scale 1:20



-  hard red soil
-  charcoal
-  potsherd
-  hut rubble
-  pale imprint in red clay
-  small stones
-  carbonated organic matter
-  clear demarcation
-  vague demarcation

BOL 1/4 Excavation Plan I1-I2

Site BOL 1/4
 Scale 1:20

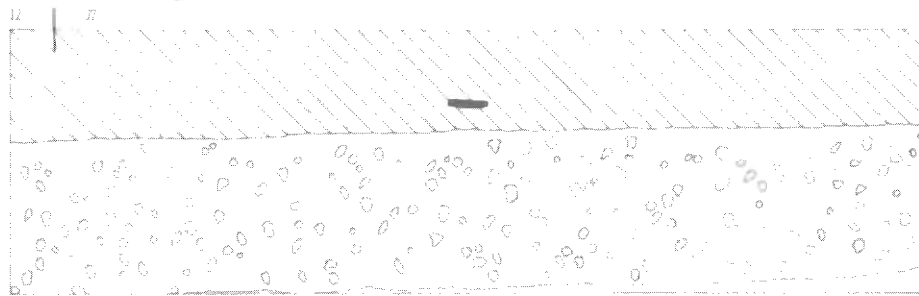


- soil sample
- organic matter
- hard red clay surface
- red stony soil
- small gravel stones
- fragmented floor surface
- large stones
- charcoal
- pale imprint in red clay
- clear demarcation of test trenches
- vague demarcation of features

BOL 1/4 Test Trench Profile I1 - I2 - Northern Bank

Site BOL 1/4

Scale 1:5 0 5 10 cm



red clay soil

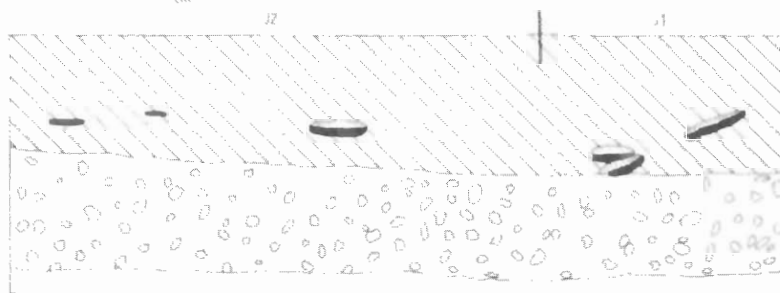
black floor surface

red stony soil

BOL 1/4 Test Trench Profile I1-I2 - Eastern Bank

Site: BOL 1/4

Scale: 1:5

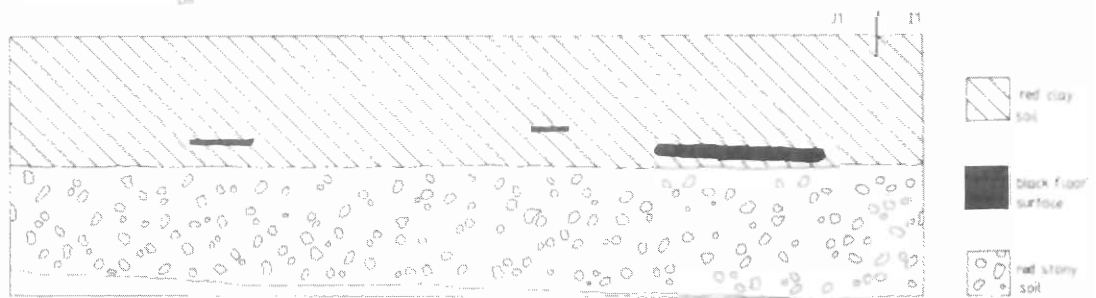


-  red clay soil
-  yellow floor surface
-  black floor surface
-  red stony soil

BOL 1/4 Test Trench Profile I1-I2 - Southern Bank

Site BOL 1/4

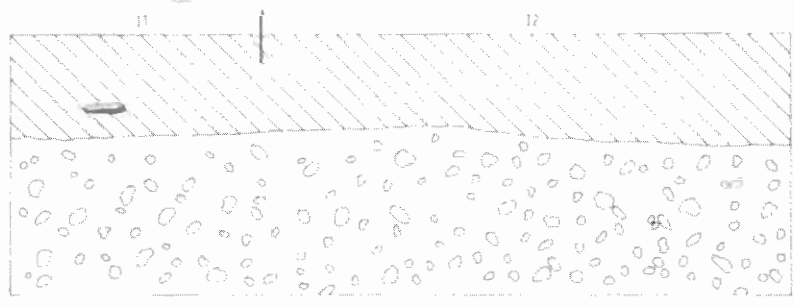
Scale 1:5 



BOL 1/4 Test Trench Profile I1-I2 - Western Bank

Site BOL 1/4

Scale 1:5

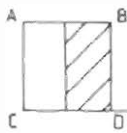


-  red clay soil
-  yellow floor surface
-  black floor surface
-  red stony soil

BOL 1/5 Grid

Site BOL 1/5

Scale 1:150



geographical
peg BOL 1/5

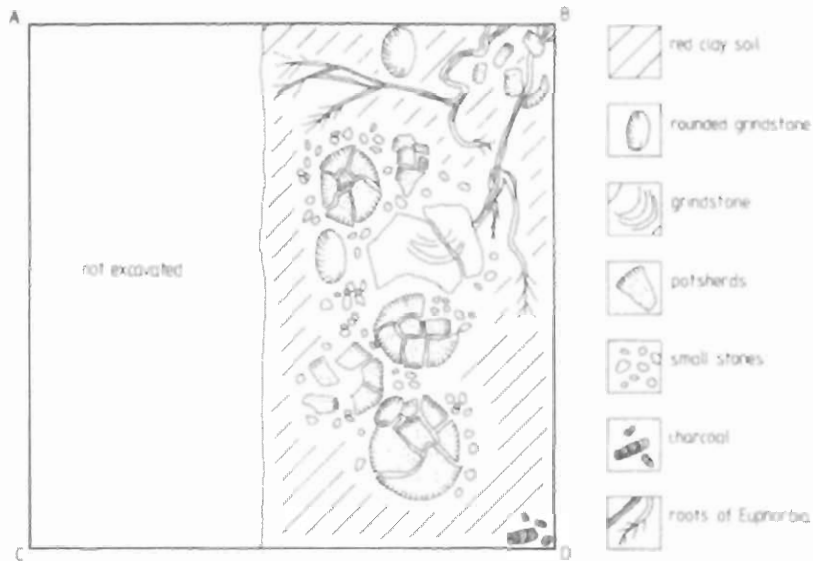


area
excavated



BOL 1/5 Excavation Plan

Site BOL 1/5
Scale 1:25



Appendix 3. Artifact Review.

A. Pottery sherds

Registration Number	Provenience	Description	Amount
02/01/21 - 1	Bol 1/1 layer 0	Pottery sherds	3
02/01/21 - 2	Bol 1/1 layer 0	Pottery sherds	6
01/08/06 - 3	Surface - northern hill	Pottery sherds	3
01/08/08 - 4	Bol 1/1 layer 0	Pottery sherds	1
01/08/08 - 5	Bol 1/1 layer 0	Pottery sherds	1
01/08/09 - 6	Bol 1/1 layer 0	Pottery sherds	1
01/08/08 - 7	Bol 1/1 layer 1	Clay object	1
01/08/08 - 8	Bol 1/1 layer 1	Pottery sherds	5
01/08/08 - 9	Bol 1/1 layer 2	Pottery sherds	5
01/09/23 - 10	Bol 1/1 layer 0	Pottery sherds	1
01/11/29 - 11	Bol 1/3 A1 layer 0	Pottery sherds	1
01/08/06 - 12	Bol 1/3 A1 layer 0	Pottery sherds	3
01/08/07 - 13	Bol 1/3 A1 layer 1	Pottery sherds	1
01/08/07 - 14	Bol 1/3 A1 layer 2	Pottery sherds	8
01/08/07 - 15	Bol 1/3 A1 layer 2	Clay object	2
01/08/08 - 16	Bol 1/3 A1 layer 3	Pottery sherds	7
01/08/08 - 17	Bol 1/3 A1 layer 4	Pottery sherds	6
01/08/09 - 18	Bol 1/3 A1 layer 5	Pottery sherds - reconstructable	-
01/08/09 - 19	Bol 1/3 A1 layer 6	Pottery sherds - reconstructable	-
01/08/06 - 20	Bol 1/3 A2 layer 0	Pottery sherds	1
01/08/06 - 21	Bol 1/3 A2 layer 1	Pottery sherds	1
01/08/07 - 22	Bol 1/3 A2 layer 1	Pottery sherds	1
01/08/07 - 23	Bol 1/3 A2 layer 2	Pottery sherds	2
01/08/08 - 24	Bol 1/3 A2 layer 2	Pottery sherds	2
01/08/08 - 25	Bol 1/3 A2 layer 3	Pottery sherds	2

01/08/09 – 26	Bol 1/3 A2 layer 4	Pottery sherds – reconstructable	-
01/08/09 – 27	Bol 1/3 A2 layer 5	Pottery sherds – reconstructable	-
01/08/06 – 28	Bol 1/3 A3 layer 0	Pottery sherds	3
01/08/07 – 29	Bol 1/3 A3 layer 1	Pottery sherds	1
01/08/07 – 30	Bol 1/3 A3 layer 1	Pottery sherds	6
01/08/07 – 31	Bol 1/3 A3 layer 2	Pottery sherds	4
01/08/08 – 32	Bol 1/3 A3 layer 3	Pottery sherds	2
01/08/08 – 33	Bol 1/3 A3 layer 3	Clay object	2
01/08/09 – 34	Bol 1/3 A3 layer 4	Pottery sherds - reconstructable	-
01/08/09 – 35	Bol 1/3 A3 layer 5	Pottery sherds	2
01/08/06 – 36	Bol 1/4 A1 layer 0	Pottery sherds	2
01/08/07 – 37	Bol 1/4 A1 layer 0	Pottery sherds	11
01/08/07 – 38	Bol 1/4 A1 layer 1	Pottery sherds	1
01/08/08 – 39	Bol 1/4 A1 layer 1	Pottery sherds - reconstructable	-
01/08/11 – 40	Bol 1/4 A1 layer 1	Pottery sherds - reconstructable	-
01/08/11 – 41	Bol 1/4 A1 layer 1	Pottery sherds - reconstructable	-
01/08/11 – 42	Bol 1/4 A1 layer 1	Pottery sherds - reconstructable	-
01/08/11 – 43	Bol 1/4 A1 layer 1	Pottery sherds - reconstructable	-
01/08/07 – 44	Bol 1/4 I1 layer 0	Pottery sherds	-
01/08/07 – 45	Bol 1/4 I2 layer 0	Pottery sherds	1
01/08/07 – 46	Bol 1/4 A1 layer 1	Pottery sherds - reconstructable	-
01/08/07 – 47	Bol 1/4 A1 layer 1	Pottery sherds - reconstructable	-
01/08/08 – 48	Bol 1/4 A1 layer 1	Pottery sherds - reconstructable	-
01/08/11 – 49	Bol 1/4 A1 layer 1	Pottery sherds - reconstructable	-
01/08/11 – 50	Bol 1/5 layer 0	Pottery sherds - reconstructable	-
01/08/10 – 51	Bol 1/5 layer 0	Pottery sherds	-
01/08/11 – 52	Bol 1/5 layer 0	Pottery sherds	-
01/08/11 – 53	Bol 1/5 layer 0	Pottery sherds - reconstructable	-
01/08/11 – 54	Bol 1/5 layer 0	Pottery sherds - reconstructable	-
01/08/11 – 55	Bol 1/5 layer 0	Pottery sherds - reconstructable	-
01/09/23 – 56	New Terrain	Pottery sherds	-

01/08/05 – 57	Bol 1/6 layer 0	Pottery sherds	-
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B. Metal objects

Registration Number	Provenience	Description	Amount
01/08/09 – 58	Bol 1/3 A1 layer 5	Tuyere	-
01/08/07 – 59	Bol 1/3 A2 layer 1	Metal object/s	-
01/08/07 – 60	Bol 1/3 A2 layer 1	Metal object/s	-
01/08/07 – 61	Bol 1/3 A2 layer 1	Metal object/s	-
01/08/08 – 62	Bol 1/3 A2 layer 2	Metal object/s	-
01/08/08 – 63	Bol 1/3 A2 layer 2	Metal strips	± 10
01/08/08 – 64	Bol 1/3 A2 layer 3	Metal object/s	-
01/08/08 – 65	Bol 1/3 A2 layer 3	Metal strips	± 10
01/08/09 – 66	Bol 1/3 A2 layer 4	Metal fragment	1
01/08/09 – 67	Bol 1/3 A2 layer 4	Metal object/s	-
01/08/09 – 68	Bol 1/3 A2 layer 4	Metal object/s	-
01/08/09 – 69	Bol 1/3 A2 layer 5	Metal object/s	-
01/08/09 – 70	Bol 1/3 A2 layer 5	Metal strips	3
01/08/09 – 71	Bol 1/3 A2 layer 5	Metal object/s	-
01/08/07 – 72	Bol 1/3 A3 layer 1	Metal object/s	-
01/08/07 – 73	Bol 1/3 A3 layer 1	Metal object/s	1
01/08/07 – 74	Bol 1/3 A3 layer 1	Metal object	1
01/08/07 – 75	Bol 1/3 A3 layer 1	Metal object/s	-
01/08/09 – 76	Bol 1/3 A3 layer 4	Metal object/s	2
01/08/08 – 77	Diepkloof 44 JS	Slag	5

C. Charcoal

Registration Number	Provenience	Description	Amount
01/08/08 – 78	Bol 1/1 layer 2	Dateable charcoal	-
01/08/09 – 79	Bol 1/3 A1 layer 2	Dateable charcoal	-
01/08/10 – 80	Bol 1/4 C1 layer 1	Dateable charcoal	-
01/08/11 – 81	Bol 1/5 layer 2	Dateable charcoal	-

D. Beads, glass, plastic and other historical objects

Registration Number	Provenience	Description	Amount
01/08/08 – 82	Surface find	20mm cannon bullet	1
01/08/06 – 83	Bol 1/3 A1 layer 0	Beads	7
01/08/06 – 84	Bol 1/3 A1 layer 1	Beads	1
01/08/07 – 85	Bol 1/3 A1 layer 1	Beads	9
01/08/07 – 86	Bol 1/3 A1 layer 2	Beads	5
01/08/07 – 87	Bol 1/3 A1 layer 2	Porcelain fragment	1
01/08/07 – 89	Bol 1/3 A1 layer 2	Folded aluminum	1
01/08/08 – 90	Bol 1/3 A1 layer 3	Beads	1
01/08/08 – 91	Bol 1/3 A1 layer 4	Fragmented beads	8
01/08/09 – 92	Bol 1/3 A1 layer 5	Beads	2
01/08/09 – 93	Bol 1/3 A1 layer 5	Ceramic piece	1
01/08/06 – 94	Bol 1/3 A2 layer 0	Blank cartridge	1
01/08/06 – 95	Bol 1/3 A2 layer 0	Beads	1
01/08/06 – 96	Bol 1/3 A2 layer 0	Beads	1
01/08/06 – 97	Bol 1/3 A3 layer 0	Blank cartridge	1
01/08/07 – 98	Bol 1/3 A2 layer 1	Beads	1
01/08/07 – 99	Bol 1/3 A2 layer 2	Beads	6

01/08/07 – 100	Bol 1/3 A2 layer 2	Beads	5
01/08/08 – 101	Bol 1/3 A2 layer 3	Button fragment	1
01/08/09 – 102	Bol 1/3 A2 layer 4	Beads	2
01/08/09 – 103	Bol 1/3 A2 layer 4	Metal fragment	-
01/08/09 – 104	Bol 1/3 A2 layer 4	Plastic strips	-
01/08/09 – 105	Bol 1/3 A2 layer 4	Button fragment	-
01/08/09 – 106	Bol 1/3 A2 layer 4	Beads	2
01/08/09 – 107	Bol 1/3 A2 layer 5	Beads	1
01/08/07 – 108	Bol 1/3 A3 layer 1	Spent cartridge	1
01/08/07 – 109	Bol 1/3 A3 layer 1	Beads	9
01/08/07 – 110	Bol 1/3 A3 layer 2	Glass fragments	2
01/08/08 – 111	Bol 1/3 A3 layer 2	Beads	3
01/08/08 – 112	Bol 1/3 A3 layer 2	Glass fragments	3
01/08/09 – 113	Bol 1/3 A3 layer 4	Beads	1
01/08/09 – 114	Bol 1/3 A3 layer 4	Glass fragment	1
01/08/09 – 115	Bol 1/3 A3 layer 4	Beads	3
01/08/09 – 116	Bol 1/3 A3 layer 5	Plastic pieces	-
01/08/09 – 117	Bol 1/4 I2 layer 1	Beads	1
01/08/10 – 118	Bol 1/5 layer 1	Metal belt buckle	1

E. Clay artifacts

Registration Number	Provenience	Description	Amount
01/08/10 – 119	Bol 1/4 (A1 layer 1)	Clay pieces: mud wall	-
01/08/11 – 120	Bol 1/4 (A1 layer 1)	Clay pieces: with possible twig imprints	-
01/08/11 – 121	Bol 1/4 (A1 layer 1)	Clay pieces: with pole imprints	-
01/08/07 – 122	Bol 1/4 (C1 test)	Clay pieces: with pole imprints	-
01/08/10 – 123	Bol 1/4 (C1 layer 2)	Hut rubble	-
01/08/10 – 124	Bol 1/4 (C1 layer 2)	Hut rubble	-
01/08/07 – 125	Bol 1/4 (I1 layer 0)	Clay pieces: with pole imprints	-

01/08/07 – 126	Bol 1/4 (11 layer 0)	Burnt hut floor	-
01/08/07 – 127	Bol 1/4 (11 layer 1)	Hut rubble	-
01/08/07 – 128	Bol 1/4 (11 layer 1)	Hut rubble	-
01/08/07 – 129	Bol 1/4 (12 layer 1)	Hut rubble	-
01/08/07 – 130	Bol 1/4 (12 layer 1)	Hut rubble	-
01/08/07 – 131	Bol 1/4 (12 layer 1)	Hut rubble	-
01/08/07 – 132	Bol 1/5	Hut floor imprints	-

F. Stone artifacts

Registration Number	Provenience	Description	Amount
01/08/11 – 133	Bol 1/5 layer 1	Grinding stone (1)	1
01/08/11 – 134	Bol 1/5 layer 1	Grinding stone (2)	1
01/08/11 – 135	Bol 1/5 layer 1	Grinding stone (3)	1
01/08/06 – 136	Living area	Stone artifact	1

G. Bone and shell fragments

Registration Number	Provenience	Description	Amount
01/08/06 – 137	Bol 1/3 A1 layer 0	Human teeth	2
01/08/06 – 138	Bol 1/3 A1 layer 0	Shells	5
01/08/06 – 139	Bol 1/3 A1 layer 0	Bone fragments	±20
01/08/07 – 140	Bol 1/3 A1 layer 1	Teeth	2
01/08/07 – 141	Bol 1/3 A1 layer 1	Bone	±40
01/08/07 – 142	Bol 1/3 A1 layer 2	Shell fragments	2
01/08/07 – 143	Bol 1/3 A1 layer 2	Bone	4
01/08/07 – 144	Bol 1/3 A1 layer 2	Shell	±60
01/08/07 – 145	Bol 1/3 A1 layer 3	Bone	2
01/08/08 – 146	Bol 1/3 A1 layer 3	Bone	±30

01/08/08 – 147	Bol 1/3 A1 layer 4	Teeth	2
01/08/08 – 148	Bol 1/3 A1 layer 4	Shell	1
01/08/08 – 149	Bol 1/3 A1 layer 4	Bone	±20
01/08/08 – 150	Bol 1/3 A1 layer 5	Teeth	2
01/08/09 – 151	Bol 1/3 A1 layer 5	Shell	5
01/08/09 – 152	Bol 1/3 A1 layer 5	Bone	±80
01/08/09 – 153	Bol 1/3 A1 layer 5	Bone	3
01/08/09 – 154	Bol 1/3 A1 layer 5	Bone implement	1
01/08/09 – 155	Bol 1/3 A1 layer 6	Shell	3
01/08/09 – 156	Bol 1/3 A1 layer 6	Bone	±40
01/08/06 – 157	Bol 1/3 A1 layer 0	Bone and shell	8
01/08/06 – 158	Bol 1/3 A2 layer 1	Bone	2
01/08/07 – 159	Bol 1/3 A2 layer 1	Bone	±20
01/08/07 – 160	Bol 1/3 A2 layer 2	Shells	2
01/08/07 – 161	Bol 1/3 A2 layer 2	Bone	±15
01/08/08 – 162	Bol 1/3 A2 layer 2	Shell	7
01/08/08 – 163	Bol 1/3 A2 layer 2	Bone	±20
01/08/08 – 164	Bol 1/3 A2 layer 3	Mouse skeleton	1
01/08/08 – 165	Bol 1/3 A2 layer 3	Shell	3
01/08/08 – 166	Bol 1/3 A2 layer 3	Bone	±20
01/08/09 – 167	Bol 1/3 A2 layer 4	Bone fragments	6
01/08/09 – 168	Bol 1/3 A2 layer 4	Shell	8
01/08/09 – 169	Bol 1/3 A2 layer 4	Bone	±80
01/08/09 – 170	Bol 1/3 A2 layer 5	Bone	±70
01/08/06 – 171	Bol 1/3 A3 layer 0	Bone fragments	±60
01/08/07 – 172	Bol 1/3 A3 layer 1	Shells	5
01/08/07 – 173	Bol 1/3 A3 layer 1	Teeth	4
01/08/07 – 174	Bol 1/3 A3 layer 1	Bone	±80
01/08/07 – 175	Bol 1/3 A3 layer 2	Shell	3
01/08/08 – 176	Bol 1/3 A3 layer 2	Teeth	1
01/08/08 – 177	Bol 1/3 A3 layer 2	Bone	±80

01/08/08 – 178	Bol 1/3 A3 layer 3	Shell	4
01/08/08 – 179	Bol 1/3 A3 layer 3	Bone	±40
01/08/09 – 180	Bol 1/3 A3 layer 4	Bone fragment	2
01/08/09 – 181	Bol 1/3 A3 layer 4	Bone	±20
01/08/09 – 182	Bol 1/3 A3 layer 5	Bone	±15
01/08/08 – 183	Bol 1/1 A1 layer 1	Bone	1
01/08/08 – 184	Bol 1/5 D4	Ostrich shell	1
01/08/09 – 185	Bol 1/4 C1 layer 1	Bone fragments	±10
01/08/08 – 186	Diepkloof 44 JS	Fossilised bone	5

H. Organic material

Registration Number	Provenience	Description	Amount
01/08/08 – 187	Bol 1/3 A1 layer 3	Organic seeds	1
01/08/09 – 188	Bol 1/3 A1 layer 6	Carbonised seeds	-
01/08/07 – 189	Bol 1/3 A2 layer 1	Organic seeds	2
01/08/08 – 190	Bol 1/3 A2 layer 2	Organic seeds	7
01/08/08 – 191	Bol 1/3 A2 layer 3	Organic seeds	5
01/08/07 – 192	Bol 1/3 A3 layer 1	Organic seeds	1
01/08/07 – 193	Bol 1/3 A3 layer 1	Organic seeds	1
01/08/08 – 194	Bol 1/3 A3 layer 3	Organic seeds	2

APPENDIX 4: FAUNA REVIEW

BOLEU: FAUNAL ANALYSIS FROM A 19TH CENTURY SITE IN THE GROBLERSDAL AREA, MPUMALANGA, SOUTH AFRICA

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ABSTRACT

Faunal remains from kgoši Boleu's village in the Groblersdal area, Mpumalanga, South Africa were analysed. The site dates to the terminal Late Iron Age. The sample provided information about the economical strategies employed by the inhabitants. Herding appeared to be very important, and cattle remains dominate the faunal sample. German missionaries lived amongst Boleu's people and their reports provided important information about the economy of the people.

INTRODUCTION

Kgoši Boleu (known to the Boers as Maléo) and about 3000 of his northern Basotho followers of the Bakopa tribe settled on a rocky hill called Lesjoegoeroe taba nkwanie (Wangemann 1868) (or Thabantsho) in the Groblersdal district of the Mpumalanga Province, South Africa in the mid 1800's.

Missionaries from the Berlin Missionary Society worked amongst Boleu's people from a small house close to the mountain village. The two young missionaries, Alexander Merensky and Heinrich Grütznert, were in contact with the director of the Society, Theodor Wangemann, whom expected regular reports and diaries from all the missionary stations on the subcontinent (Wangemann 1868). Many of these reports were published, introducing the reader to the various missionary stations, the local people and their customs, the successes and failures of the missionaries, and the experiences of those who accepted the Christian faith (Wangemann 1868).

The Zuid-Afrikaansche Republiek (ZAR) was administrating the Swazi Kingdom and on 10 May 1864, with the ZAR's consent, the Swazi's attacked Boleu's mountain village. The kgoši as well as most of his people were massacred and the village was abandoned (Wangemann 1868).

The first archaeological excavations of the site by the Biblical Archaeology Task Group of the University of South Africa under Prof. Willem Boshoff commenced in August 2001. Four different areas were excavated on and around Thabantsho (W. Boshoff, personal communication). At the Bol 1/1 excavation, on the summit of Thabantsho, a 2X1 m square with two arbitrary layers of 10 cm each was exposed. At the Bol 1/3 midden on the northern slope of Thabantsho three blocks, A1, A2 and A3 were excavated. A 10 cm beam divided the three blocks. Each block is 2X1 m large. The arbitrary layers were 10 cm thick and square A1, A2 and A3 have six, five and five layers respectively. Four squares, A1 (2X1 m), A3 (2X1 m), I1 (2X2 m) and I2 (2X2 m) were excavated at the Bol 1/4 dwellings on the northern side of Thabantsho. A 2.5X2.5 m square in a neck of Thabantsho at Bol 1/5 was excavated. The single layer from this square was 10 cm thick.

THE FAUNAL SAMPLE

The faunal remains from Boleu's village were identified at the Transvaal Museum in Pretoria according to accepted procedures. The total sample consisted of 1439 bone and shell artifacts with a mass of 4886,5g, of which 242 specimens or 16,8% of the total sample were identified to species or size level (Table 1). Number of Identified Skeletal (or Specimen) Parts (NISP) and Minimum Number of Individuals (MNI) were used to quantify the faunal remains. Even though all the remains from each square and level were analysed separately, the remains from the excavated squares A1, A2 and A3 were combined for this report. The species list follows the classifications of Meester *et al.* (1986) for mammals and Connolly (1939) for molluscs.

Five fossilized bone and ivory were also submitted for identification, and will be dealt with separately in this report (see appendix).

RESULTS

SPECIES PRESENT

Most of the faunal remains were retrieved from the Bol 1/3 excavation. Apart from the three ostrich eggshell fragments, no other faunal remains were retrieved from the Bol 1/5 Square D layer 1 excavation. The Bol 1/1 square A1 layer 1 excavation yielded a single bone fragment. A variety of animal species was identified from the submitted faunal sample and includes both wild and domestic macro mammals, as well as a rodent, human, ostrich, tortoise, terrestrial gastropods and freshwater mussels (Table 2).

Domesticated animals dominate the sample with 76 fragments (31,4% of NISP). Cattle were the single largest contributor with 63 fragments (26% of NISP). Most of the bone specimens, 148 fragments (61,2% of the NISP) were bovid, and only five (2,1% of NISP) were equids. Molluscs constitute 62 fragments (25,6% of NISP).

A human (*Homo sapiens sapiens*) is represented by a single deciduous premolar fragment. The common duiker (*Sylvicapra grimmia*) mandible did not have a second premolar.

TAPHONOMY

Taphonomical processes affects bone matrix between the death of the organism and the time of its recovery. During the faunal analysis of the sample, different alterations were recorded on the bone fragments. A total of 706 or 49% of the total sample were burnt, and the colours ranged from light and darker brown, black, and blue, gray to white. Cut and chop marks was visible on 12 bone fragments respectively. Three ostrich eggshell from the only excavated layer at Bol 1/5 were weathered to a greater extent than the rest of the sample. Carnivore chew marks were noted on 18 bones, whilst three were gnawed by small rodents the size of a mouse or rat. Rootlet etch

marks were recorded on 211 bone fragments and occurred throughout the deposits. The bushveld gerbil identified from the Bol 1/3 excavation was fresher than the rest of the bone sample. Bone tools and modified shell remains were recovered from the Bol 1/3 excavation and are listed in Table 3. Extra bone growth was noted on a third phalanx of an aged *Bos taurus* from A1 layer 6.

BOVID SKELETAL PART REPRESENTATION AND ANIMAL AGES

The bovid skeletal part representation is listed in Table 4. The age classification for cattle (*Bos taurus*) and sheep/goat (*Ovis/Capra*) teeth proposed by Voigt (1983:47-48, 53) were used. The only sheep/goat tooth was assigned to age class V, whilst those for cattle (*Bos taurus*) are listed in Table 5. The postcranial remains were predominantly of adult animals.

DISCUSSION AND CONCLUSION

Faunal remains from archaeological sites dating from the southern African Late Iron Age are usually dominated by domesticated animals, especially cattle (e.g. Badenhorst and Plug, 2001), except where the distribution of tsetse flies prohibited this. Cattle were central to the communities' ritual and social life, and this practice survived well to the present day (e.g. Schapera and Goodwin, 1953:138). Boleu is no exception to this pattern.

The faunal remains indicate a community relying mainly on herding as domestic animals, especially cattle, dominates the sample.

According to Wangemann (1868), the Basotho practiced herding, hunting and agriculture. The Basotho had a limited amount of guns in their possession, and pitfalls were also used to hunt. Game was still abundant, and elephants, buffalos, lions, jackals, giraffe, hippos and other animals were hunted. Hunting contributed to the diet, although in a lesser degree than herding. Burchell's zebra, bushpig, duiker and steenbok were all hunted or perhaps trapped.

The leopard tortoise, ostrich eggs and freshwater mussel were collected and supplemented the diet.

Some of the giant African land snail remains were modified, indicating that at least some of these shells are contemporary with the inhabitation of the site. These snails aestivate during the dry periods and their presence in an archaeological deposit can be ambiguous (Plug, 1990).

The human remains; bushveld gerbil and the small terrestrial molluscs did not contribute to the protein diet of the inhabitants. The single human deciduous premolar could possibly be of a disturbed grave, but this seems unlikely, since the isolated fragment is from a midden. It would rather seem as if this tooth fragment was simply discarded. Gerbils burrow in soft deposits and were self-introduced. The small terrestrial molluscs are too small to be a source of protein and were also self-introduced.

All the mammal and reptile species identified from the sample occurred in the vicinity of the site either in historical times or the present day (Du Plessis 1969; Smithers 1983; Branch 1988). The species identified from this sample have been identified from archaeological sites in the vicinity of Boleu's village within the last 500 years (Plug and Badenhorst 2001).

The colour of the burnt bone fragments indicates the temperature of the heat source. Grey and white calcined bone was exposed to temperatures above 420°C (Gilchrist and Mytum 1986). This suggests direct exposure to fire or very hot coals, rather than to warm ash disposed of on a midden.

The cut and chop marks noted on some of the specimens are a result of skinning and butchering practices.

The unmodified weathered ostrich eggshell were exposed to the elements longer than the rest of the specimens.

The carnivore chew marks are consistent with those made by dogs. Virtually all Iron Age people kept dogs and chew marks by dogs are therefore not unusual.

The single cattle distal phalanx that has extra bone growth is from aged individual and could be the result of old age, disease or trauma, or a combination thereof.

All the bone tools identified from the sample can be regarded as non-formal bone tools. According to Voigt (1983:109), "These [are] not bone tools in the sense that they had been shaped for a specific purpose, but rather pieces of bone (often bone flakes or ribs) which had been picked up and used for a short time for a specific job before being discarded. The most common type of utilisation was polishing and in these cases sharp or natural edges had been smoothed by abrasion. Occasionally, abrasion would form a very rough point but more usually it merely smoothed the edge of the piece into a convex line."

In modern times, bone knives made of cattle ribs similar to those identified from the sample, are used in the production of marula beer. The bone knives are used to prick the marula fruit in order to remove the fleshy pit and to extract the juice (Moifatswane 1990). It is also possible that some of the bone tools from the sample have probably been used in the hide working process. Similar bone tools have been identified from other Iron Age sites, such as Bôitsemagano in the Rustenburg district, South Africa (Badenhorst and Plug 2000).

The tibia shaft of a Bovid I size animal of which both ends were snapped and polished, is similar to bone flutes still in use today.

Some of the giant African land snail shell fragments were utilised as either scoops or in the pottery manufacturing process, in addition to their possible exploitation as food source (Voigt 1983:120). The freshwater mussels, also possibly used as food source, were sometimes used to burnish pots (Voigt 1983:120). This type of utilisation was noted, for example, from a military outpost dating from the South African (or Anglo-Boer) War in the Kruger National Park, South Africa (Badenhorst et al. In prep). From Bol 1/3 square A3 layer 3 the freshwater mussel fragment with smoothed edges and a hole drilled through near the rim was probably strung on a leather thong and worn as decoration.

The bovid skeletal part representation does not suggest any unusual trends. Teeth have a high survival rate and the adult bovid have 32 permanent teeth. It is therefore to be expected that teeth should dominate the bovid skeletal list.

Although very few cattle teeth were identified, the majority of the postcranial material is from adult animals.

The environment seems to have been optimal for domestic stock herding. Tsetse has not been present in this part of South Africa during historical times (Fuller 1923), and the dominance of cattle remains supports this.

ACKNOWLEDGEMENTS

We would like to thank Prof. Willem Boshoff for making the material available for study, Miss Stephany Potze from the Transvaal Museum who identified the rodent material and Miss Tersia Perregil from the Transvaal Museum library for providing some of the literature.

REFERENCE

- Badenhorst, S. and Plug, I. 2000. An archaeofaunal investigation of a Late Iron Age site, Bóitsemagano from the North West Province, South Africa. Unpublished research report, Pretoria, Transvaal Museum.
- Badenhorst, S. and Plug, I. 2001. Appendix: The faunal remains from Mmatshetshele, a Late Iron Age site in the Rustenburg district. In: Pistorius, J. C. C. Late Iron Age sites on Mmatshetshele Mountain in the central Bankeveld of the North West Province, South Africa. *South African Archaeological Bulletin* 56(173-174): 46-56.
- Badenhorst, S., Plug, I., Pelsler, A. J. & Van Vollenhoven, A. C. In preparation. Faunal analysis from Steinaecker's Horse northernmost military outpost, Kruger National Park. *Annals of the Transvaal Museum*.
- Branch, B. 1988. Field guide to the snakes and other reptiles of southern Africa. Cape Town, Struik.
- Connolly, M. 1939. A Monographic survey of South African non-marine Mollusca. *Annals of the South African Museum* 33:1-660.
- Du Plessis, S. F. 1969. The past and present geographical distribution of the Perissodactyla and Artiodactyla in southern Africa. Unpublished M.Sc dissertation, University of Pretoria, Pretoria.
- Fuller, C. 1923. Tsetse in the Transvaal and surrounding territories. *Entomology Memoirs* no. 1, Department of Agriculture, Union of South Africa.
- Gilchrist, R. and Mytum, H. C. 1986. Experimental archaeology and burnt animal bone from archaeological sites. *Circaea* 4(1): 29-38.
- Meester, J. A. J., Rautenbach, I. L., Dippenaar, N. J. & Baker, C. M. 1986. Classification of southern African Mammals. *Transvaal Museum Monograph* no. 5, Pretoria, Transvaal Museum.
- Moifatswane, S. 1990. Die gebruik van marula in Noord-Transvaal deur die Sotho. *Museum Memo* 18(3):31-36.
- Plug, I. 1990. Terrestrial molluscs and archaeological stratigraphy: a cautionary tale. *South African Journal of Science* 86(4): 204-205.
- Plug, I. and Badenhorst, S. 2001. The distribution of macromammals in southern Africa over the past 30 000 years as reflected in animal remains from archaeological sites. *Transvaal Museum Monograph* no. 12, Pretoria, Transvaal Museum.
- Schapera, I. and Goodwin, A. J. H. 1953. Work and wealth. In: Schapera, I. (ed) *The Bantu-speaking tribes of South Africa. An ethnographical survey*. London, Routledge & Kegan Paul LTD.
- Smithers, R. H. N. 1983. *The mammals of the southern African subregion*. University of Pretoria, Pretoria.
- Voigt, E. A. 1983. Mapungubwe: an archaeozoological interpretation of an Iron Age community. *Transvaal Museum Monograph* no. 1, Pretoria, Transvaal Museum.

Wangemann, T. 1868. *Maléo und Sekukuni*. (Translated by Grosskopf, J. F. W. 1957. *Maléo en Sekoekoeni*. Cape Town, Van Riebeeck-Vereniging.)

Table 1: Boleu: total faunal sample.

	Bol 1/1	Bol 1/3	Bol 1/4	Bol 1/5	Total
UNIDENTIFIED BONE					
Enamel	-	18	-	-	18
Skull	-	33	-	-	33
Vertebrate	-	23	-	-	23
Rib	-	201	-	-	201
Miscellaneous	-	646	13	-	659
Bone flakes	-	245	-	-	245
Polished	-	18	-	-	18
TOTAL: UNIDENTIFIED BONE	-	1184	13	-	1197
TOTAL: IDENTIFIED BONE AND SHELL	1	238	-	3	242
TOTAL SAMPLE	1	1422	13	3	1439
MASS IDENTIFIED SAMPLE (g)	0,9	2246,9	-	0,9	2248,7
MASS UNIDENTIFIED SAMPLE (g)	-	2633,0	4,8	-	2637,8
TOTAL MASS (g)	0,9	4879,9	4,8	0,9	4886,5

Table 2: Boleu: species present (NISP/MNI).

Species	Boleu 1/1	Boleu 1/3	Boleu 1/5
<i>Homo sapiens sapiens</i> human		1/1	
<i>Equus burchelli</i> Burchell's zebra		5/1	
<i>Potamochoerus porcus</i> bush pig		1/1	
BOS TAURUS CATTLE		63/4	
<i>Ovis aries</i> sheep		3/1	
OVIS/CAPRA SHEEP/GOAT		10/-	
<i>Sylvicapra grimmia</i> common duiker		14/1	
<i>Raphicerus campestris</i> steenbok		15/2	
Bovidae I		12/-	
Bovidae II	1/1	19/3	
Bovidae III		11/-	
<i>Tatera leucogaster</i> bushveld gerbil		16/1	
<i>Struthio camelus</i> ostrich		2/1	3/1
<i>Geochelone pardalis</i> leopard tortoise		4/1	
<i>Achatina</i> cf <i>zebra</i> giant African land snail		4/2	
<i>Achatina</i> sp. giant African land snail		19/2	
<i>Euonyma</i> sp. terrestrial gastropod		10/10	
<i>Xerocerastus/Edouardia</i> sp. terrestrial gastropod		2/2	
<i>Biomphalaria/Segmentina</i> sp. terrestrial gastropod		4/4	
Small terrestrial gastropod		1/-	
Freshwater gastropod		4/1	
<i>Unio caffer</i> freshwater mussel		18/1	
Total	1/1	238/40	3/1

Table 3: Boleu: modified bone and shell fragments.

Location	Length (mm)	Skeletal Part	Notes
Boleu 1/3, Square A1			
Layer 3	112	Bovid II tibia shaft	Both ends of the shaft snapped and polished
Layer 4	48	Freshwater mussel shell	Rim and outer shell surface smoothed
	97	Bovid III lumbar vertebrae	Polished at end of transverse process where it attaches to the body
	49	Rib fragment	Polished at one end
	45	Rib fragment	One end polished convex
	103	Rib fragment	Polished at one end and partly one side
	45	Rib fragment	Polished at one end
Layer 5	62	Rib fragment	One end polished into a point like shape
	45	Rib fragment	Polished at one end
	38	Bone flake	Polished at one end
Layer 6	42	Land snail shell	Outer lip of shell smoothed
Boleu 1/3, Square A2			
Layer 2	34	Freshwater mussel shell	Shell rim and outer surface smooth
	30	Freshwater mussel shell	Shell rim and outer surface smooth
Layer 3	67	Rib fragment	Polished at one end
Layer 4	30	Freshwater mussel shell	Shell rim and outer surface smooth
	12	Freshwater mussel shell	Shell rim and outer surface smooth
	18	Freshwater mussel shell	Shell rim and outer surface smooth
	52	Bovid II radius	Shaft polished into point like shape
	62	Rib fragment	Polished at one end
	16	Scapula blade	Polished at one end
Layer 5	47	Rib fragment	Polished at one end
	28	Rib fragment	Polished at one end into a convex line
	161	Rib fragment	Polished at one end into a convex line
Boleu 1/3, Square A3			
Layer 2	170	Rib fragment	One end polished into a convex line
	151	Rib fragment	Polished at one end into a point like shape
	58	Rib fragment	Polished at one end
	44	Land snail shell	Outer lip of shell smoothed
	52	Cattle mandible ascending ramus	Part of ascending ramus below condyle/neck polished into flat line
Layer 3	176	Rib fragment	Both ends polished convex
	16	Freshwater mussel shell	Shell rim and outer surface smoothed with small hole drilled through near rim

Table 4: Boleu: bovid skeletal part representation.

Skeletal Part	Bovid I	Bovid II	Bovid III	Total	Total %
Horn core			4	4	2,7
Skull & mandibles	7	5	14	26	17,5
Teeth	23	4	8	35	23,5
Scapula	2	2	2	6	4,1
Humerus	1	1	2	4	2,7
Radius	1	4		5	3,4
Ulna		4	1	5	3,4
Pelvis			6	6	4,1
Femur	3		7	10	6,8
Tibia	2	5	4	11	7,4
Metacarpus			4	4	2,7
Metatarsus	1	3	2	6	4,1
Metapodial			3	3	2,0
Os carpi			3	3	2,0
Os tarsi	1		1	2	1,4
Sesamoid, Patella		1	2	3	2,0
Proximal Phalanges		1	5	6	4,1
Medial Phalanges		3	3	6	4,1
Distal phalanges		1	2	3	2,0
Total	41	34	73	148	
Percentage (%)	27,7	23,0	49,3		100

Table 5: Boleu: cattle age class representation per NISP/MNI.

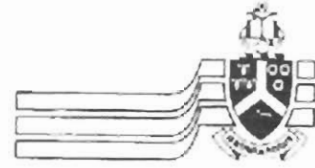
Age Class	NISP
III	3/1
VII	1/1
VIII	3/1

APPENDIX: FOSSILS

Five fossilized bones, exposed by farmer Jan Hessels on his cultivated land on the farm Diepkloof in the Groblersdal district, were also submitted for identification. These were a complete left astragalus of the extinct horse, *Equus capensis*, that had a wide distribution across southern Africa before it became extinct between 10 000 and 8000 BP (Plug and Badenhorst 2001). Three ivory incisor fragments were from a hippo (*Hippopotamus amphibius*). A large post cranial bone fragment could not be identified. The few fossils do not provide information about the nature of the deposit, and this site awaits further investigation.

APPENDIX 5.

XRF REPORT:



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Faculty of Science

XRD & XRF Laboratory

Department of Earth Sciences

Tel: (012) 420 2137

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e-mail: mloub@scientia.up.ac.za

CLIENT: Monica van der Merwe

DATE: 31 October 2001

SAMPLES: Soils and Brick Fragments

ANALYSIS: The samples were ground to $<75\mu\text{m}$ in a Tungsten Carbide milling vessel, roasted at 1000°C to determine Loss On Ignition value and after adding 1g sample to 6g $\text{Li}_2\text{B}_4\text{O}_7$ fused into a glass bead. Major element analysis were executed on the fused bead using the ARL9400XP+ spectrometer. Another aliquot of the sample was pressed in a powder briquette for trace element analyses. Results for elements indicated with an * should be considered semi-quantitative.

%	GSNcert	GSN	Collehone Excavation dirt	ROOIDRI FT Soil Survey	SPITSKOP North Slope Brick Fragment	Mission Station Brick Fragment
SiO ₂	65.80	65.06	39.35	60.71	75.85	63.29
TiO ₂	0.68	0.65	8.11	1.06	0.44	0.67
Al ₂ O ₃	14.67	14.25	10.07	15.54	9.52	12.72
Fe ₂ O ₃	3.75	3.66	32.27	10.13	3.75	6.15
MnO	0.06	0.05	0.27	0.15	0.07	0.12
MgO	2.30	2.26	0.59	0.87	2.21	2.06
CaO	2.50	2.49	0.46	1.39	3.37	5.15
Na ₂ O	3.77	3.80	0.38	1.31	0.85	1.41
K ₂ O	4.63	4.62	1.28	2.28	0.80	1.61
P ₂ O ₅	0.28	0.29	0.10	0.03	0.07	0.05
Cr ₂ O ₃	0.0080	<0.01	0.03	<0.01	0.17	0.04
NiO	0.0043	<0.01	<0.01	<0.01	<0.01	0.01
V ₂ O ₅	0.0116	<0.01	0.18	0.03	<0.01	0.02
ZrO ₂	0.0317	0.03	0.04	0.03	0.02	0.02
LOI	1.32	1.29	4.89	5.31	1.50	5.25
TOTAL	99.82	98.48	98.02	98.87	98.64	98.58

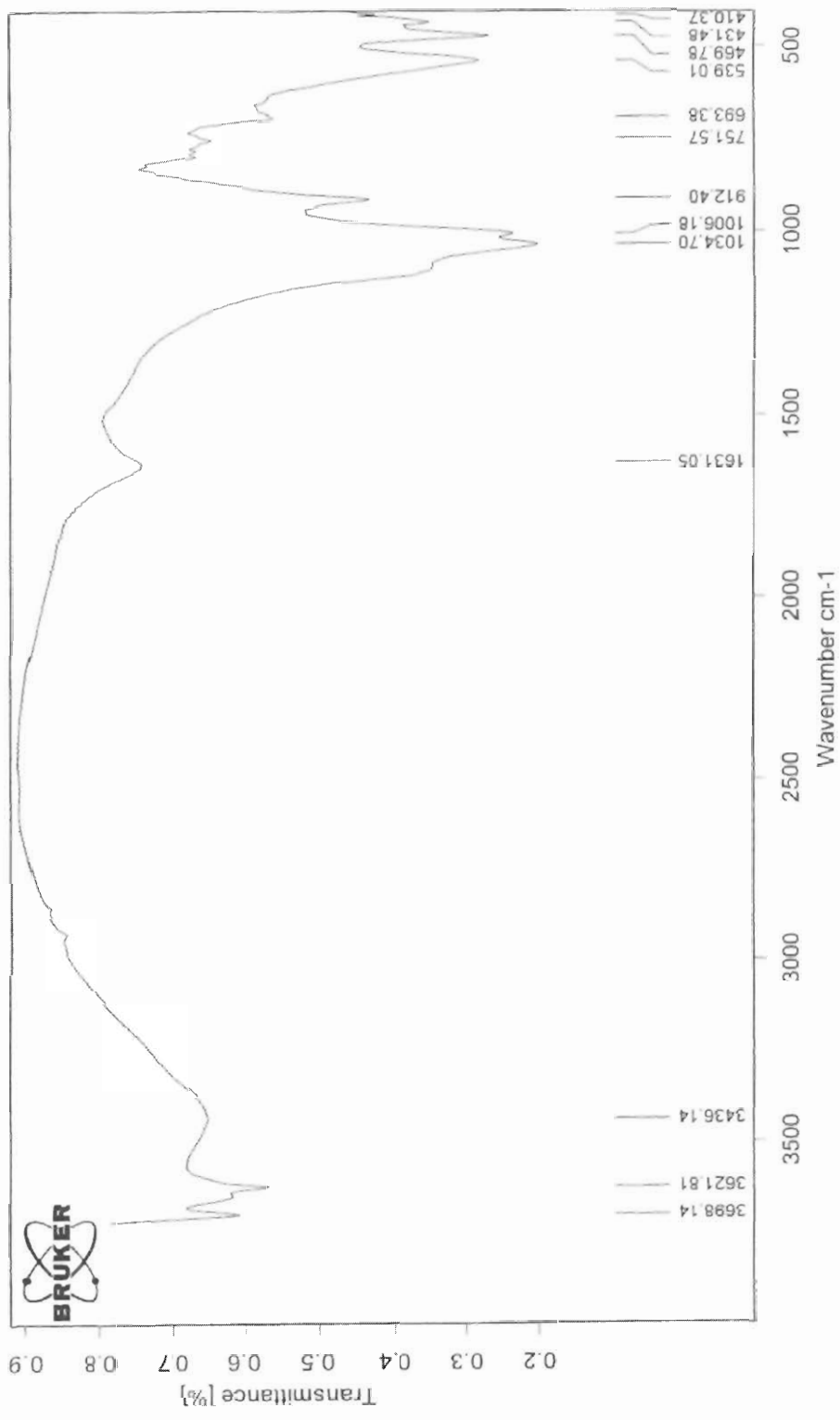
ppm	GSNcert	GSN	COLLCHON E	ROOIDRIF T	SPITSK OP	MIS-STAT
As	1.6	<3	<3	<3	5	<3
Cu	20	25	87	65	32	42
Ga	22	21	24	22	11	14
Mo	1.2	<1	2	<1	<1	<1
Nb	21	23	21	11	6	9
Ni	34	34	136	70	88	62
Pb	53	54	19	17	8	12
Rb	185	186	67	96	27	58
Sr	570	576	46	93	98	161
Th	42	46	7	9	6	9
U	8	10	<3	<3	<3	<3
W*	490	428	49	17	259	232
Y	19	20	24	28	8	20
Zn	48	47	165	92	38	167
Zr	235	226	459	194	198	218
Cl*	450	852	526	2686	252	702
Co	65	57	133	69	58	69
Cr	55	52	175	41	961	227
F*	1050	4226	<100	<100	<100	<100
S*	140	169	69	76	43	51
Sc	7	7	33	29	12	18
V	65	62	730	199	76	125

If you have any further queries, kindly contact the laboratory.

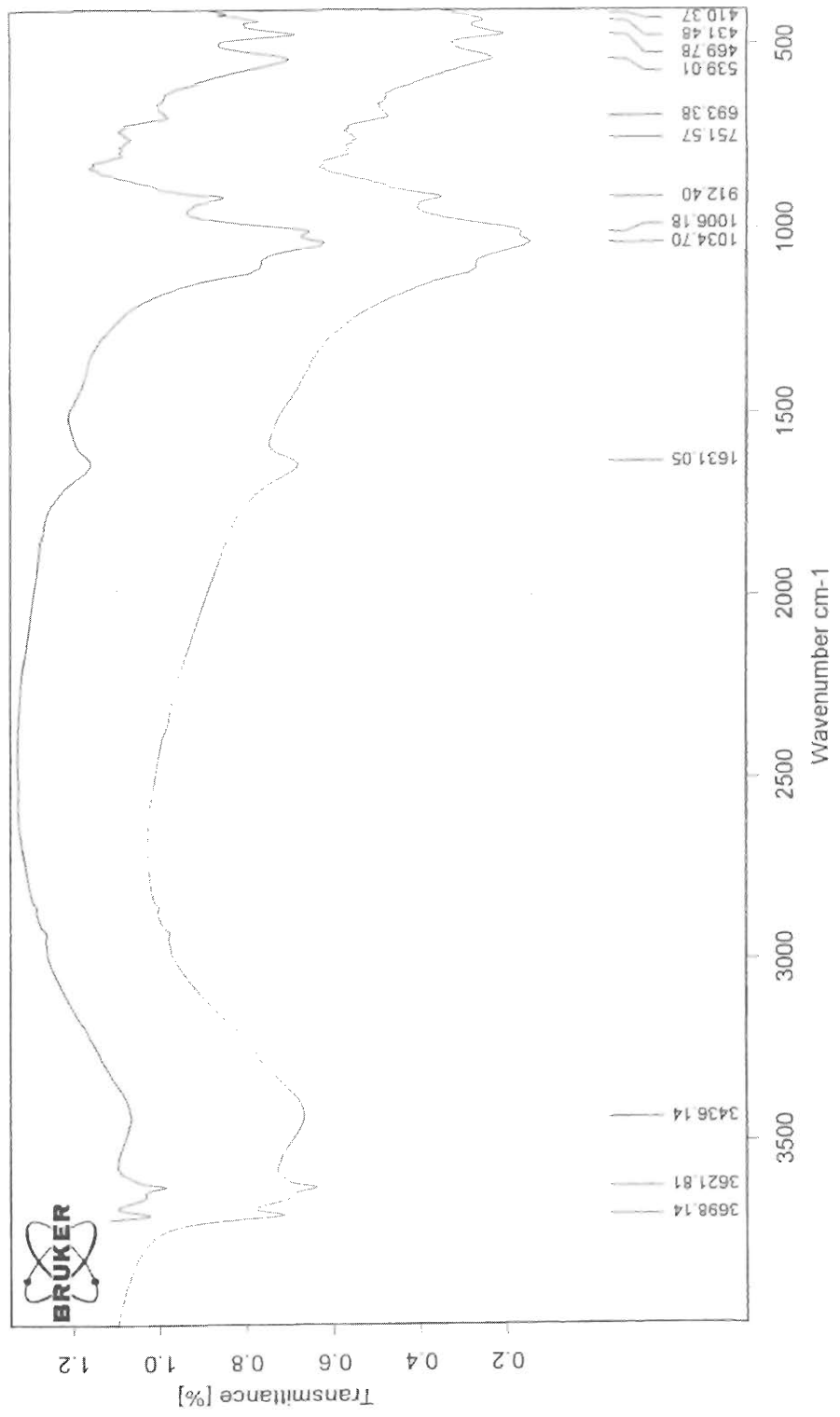
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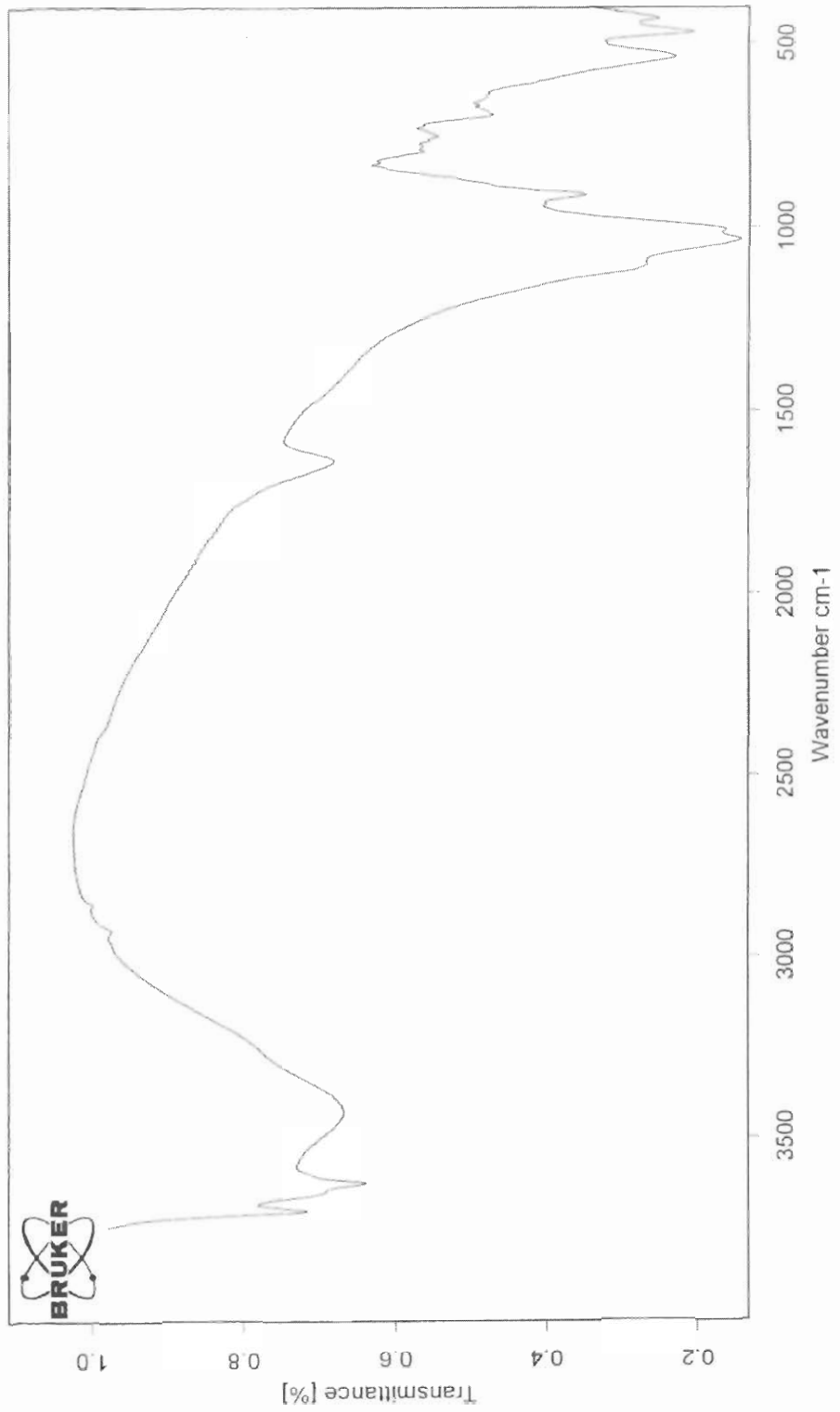
M.Loubser



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