

**BASELINE ARCHAEOLOGICAL RECONNAISSANCE REPORT ON THE
FARM LOMOTENG 669, NORTH OF POSTMASBURG IN THE SIYANDA
DISTRICT MUNICIPALITY OF THE NORTHERN CAPE PROVINCE.**

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INTRODUCTORY BACKGROUND

The 6404 ha farm Lomoteng 669, subdivided in the 1960's into three parts, Portion 1 (Fouross), Portion 2 (Mineraal), and Remaining Extent (Lomoteng), is situated some 30 km north of Postmasburg. Along the eastern edge of Portion 2 (Mineraal) is a low manganese-rich ridge, that was, when last seen about two years ago, being further worked by Andre Posthumus (my Phase 1 AIA dated 12 March 2010). He subsequently sold out to a Chinese-owned firm Main Street 811 (Pty.) Ltd., PO Box 1926 Kathu (tel. 053 723 1321), who have continued mining northwards on the farm Mineraal. They have latterly indicated a wish to sink 18 prospecting boreholes further west, in terms of their Mining Permit, which was issued for all of Lomoteng 669 by the Department of Mineral Resources in Kimberley. This baseline study, requested by M&S Consulting, was to evaluate to what extent that drilling was likely to impact on the heritage resources indicated by a preliminary reconnaissance of Lomoteng 669.

LEGISLATIVE REQUIREMENTS

Section 35 – 36 of the National Heritage Resources Act (no. 25 of 1999) protects all archaeological and palaeontological sites, as also any structures and human remains that are older than 60 years. Any mitigation of a heritage nature in the Northern Cape Province presently requires a permit issued by the South Africa Heritage Resources Agency, acting on an agency basis for the Provincial Heritage Agency.

REGIONAL HERITAGE

The nearest heritage site is on the adjacent farm Lohatlha (see my Phase 1 AIA dated 14 October 2008), where there are c. 400 graves, marked by oval piles of manganese clasts, which resulted from an outbreak of relapsing fever among that mine's work-force in the 1930's (Hocking 1983). Then, further along the manganese hills, a 1968 investigation (Beaumont 1973) recorded open pits for specularite on the farms Mount Huxley 15 and Gloucester 13, as also underground workings for that same mineral on the farm Paling M87, that may or may not have survived subsequent mining activities.

Still further south is Doornfontein 1, where extensive specularite mining caused capping calcrete to collapse over a >1000 m² area, except for one chamber on its south side, where a trench was sunk in the 1970's (Beaumont & Boshier 1974). The lower 1 m-deep mining rubble in this produced an assemblage of amorphous Later Stone Age material, thin-walled ceramics, ostrich eggshell beads, sheep / goat, cattle / buffalo, and Khoisan remains, dating back to ~1100 yrs BP (ibid.; Thackeray et al. 1983).

And near Postmasburg, is the Blinkklipkop / Tsantsabane specularite working visited and described by many early travelers (Beaumont & Morris 1990) where excavations in the large entrance chamber were undertaken by the Thackerays and I in 1980 (Thackeray et al. 1983). The lower levels of the ~3 m-deep deposit there yielded lithic assemblages with ceramics like those at Doornfontein and beginning by ~1220 yrs BP, while from its surface reaches came glass and other beads with ages ranging up to ~80 years ago (Beaumont & Morris 1990).

To the west of Lomoteng, close to the R385 between Beeshoek and Olifantshoek, there are two small Later Stone Age sites, Mamaghodi 1 and Venn 2, of which the former is of note in that it appears to be broadly covered with early 20th century bottle and ceramic fragments (my Phase 1 AIA dated 11 September 2007). And just west of Olifantshoek, on the farm Fuller 578, there is a ca. 0.8 Myr-old Late Acheulean occurrence in sediments flanking a small sand-clogged intermittent stream (my Phase 1 AIA dated 4 April 2007).

TERRAIN AND METHODOLOGY

On Wednesday 9 November 2011, ecologist Hennie Erasmus and I initially drove along an east – west public road intersecting Lomoteng 669 and agreed that it was divisible, on geomorphological / botanical grounds, into three broad north – south strips (Figs. 1 & 2). These were eastern hillslopes, their lower reaches densely covered by Black Thorn (*Acacia mellifera detinens*), an abutting flat sandy plain with scattered trees, usually Camel Thorn (*Acacia erioloba*) and a more hilly western sector with shallower soils that sustain a dominant cover of Camphor Bush (*Tarchonanthus camphoratus*). We then, during the rest of the day, and on the next one, successively met Arthur Shone, the present manager at Lomoteng Mine, Daan Koertzen, owner of Mineraal and WJ (Willie) Uys, owner of

Lomoteng, and, with their permission, examined the following representative portions of the three identified zones:

- Area 1 (Zone 1). Ridge crest, slopes, a valley, and an isolated hill stretching from the present mining limit to the north-eastern side of Mineraal (Fig. 3).
- Area 2 (Zone 1). Along a road through dense Black Thorn bush to where water was being pumped to the mine, on the eastern side of Fouross (Fig. 4).
- Area 3 (Zone 2). Along and adjacent to the farm road on Hutton sands leading to the Mineraal farmhouse (Fig. 5).
- Area 4 (Zone 3). The southern slopes of a sizeable hill immediately to the north of the Lomoteng farmhouse (Fig. 6).
- Area 5 (Zone 3). Slopes flanking a deeply incised 'sloot' downstream of an old earth dam across it near the Lomoteng farmhouse.
- Area 6 (Zone 3). A low rise with outcrops of red jasper not far to the north-east of the farmhouse at Lomoteng (Fig. 7).
- Area 7 (Zone 3). Along and adjacent to a farm road on shallow red sand some way to the north-east of the Lomoteng farmhouse (Fig. 8).
- Area 8 (Zone 2 / 3). Road along the north and eastern sides of Lomoteng.

GEOLOGICAL OBSERVATIONS

The surface of the Campbell Rand dolomites in the mining area was seen to be very unevenly weathered and to include pinnacles up to ~8 m high, with the directly overlying manganese consequently often in the form of isolated pockets that often require separate mining (Fig. 9). In Area 1, exposures of manganese, with surfaces formed of ~1 – 5 cm across subangular – subrounded weathered clasts, with minor interstitial sand (Fig. 10),

were noted to become increasingly sparse northwards, which, together with steep slopes, will make ore recover problematical there.

In contrast, Zone 2 is entirely covered by red aeolian Hutton sands, up to ~12 m deep, according to Daan Koertzen, which accumulated during single or multiple glacial intervals after ~0.65 Myr ago (Schefuß et al. 2003), when regional rainfall fell by up to ~60% (Johnson et al. 1997).

As for Zone 3, outcrops on the Area 4 hill are best assigned to basaltic andesites of the ~2.2 billion year-old Ongeluk Formation (Eriksson et al. 2006). Indeed, according to Fig 2, a geological map of the area, those rocks underlie all of the Remaining Extent portion of Lomoteng 669.

HERITAGE FINDINGS

Our search over two days within the selected areas on Lomoteng 669 produced only four artefacts (Fig. 11), of which details are as follows:

- In Area 1 an inspection of the lower slopes around an isolated quartzite hill produced a single fairly fresh core from which four irregular flakes had been detached.
- From Area 5 came a single heavily weathered / abraded irregular andesite flake with an arched platform formed by trimming along its entire breadth.
- In Area 6 the lower slopes of the rise yielded a single thickish irregular red jasper flake that is very slightly smoothed as a likely result of long exposure.
- The Area 7 roadside inspection generated a single largish blade distal portion of foreign jaspilite that likely came from below the superficial Hutton Sands there.

Of these specimens, the Area 1 quartzite core and the red jasper flake probably reflect sporadic use of suitable raw material exposures in Zone 3, whereas the other two are taken to represent between-site discard events.

In order to determine if such a low lithic density was in any way abnormal, and analysis was undertaken of the material found during fieldwork at nine other like-sized farm areas on the same plain, but further to the west and south-west, concerning which details are as follows (my Phase 1 AIA dated 11 September 2007):

- Beeshoek 448: 17 artefacts, based on quartzite chert, and jaspilite.
- Aucampsrus 447: 9 artefacts, based on quartzite, chert, and jaspilite.
- Doornfontein 446: 6 artefacts, based on quartzite, chert?, and jaspilite.
- Vlakfontein 433: 3 artefacts, all based on quartzite.
- Langverwacht 432: 7 artefacts, all based on banded ironstone.
- Makganyene 667: 4 artefacts, all based on banded ironstone.
- Metsentsididi 666: 10 artefacts, based on brown and red jasper.
- Mapedi 653: 16 artefacts, based on red and brown jasper and banded ironstone.
- Compass 665: 6 artefacts, based on lava and red jasper.

As can be seen, the similarly-sized inspected areas on these other nine farms all show the same low artifact densities, which may therefore be taken to be typical of this region, reflecting as they do an almost total lack of surface water, which must have been a major impediment to early humans. As a consequence, no sign of an archaeological site was seen on Lomoteng 669.

As for structures and graves older than 60 years, Willie Uys did show me a small isolated store-room, still in use and recently re-plastered (Fig. 12), that may qualify, and also a row of six cobble-covered graves, two with unmarked natural slab headstones. These, situated not far north of the farmhouse, at 28° 00' 41.7" S, 22° 57' 36.7" E, were already there when he bought the farm over a decade ago. I was also told by Daan Koertzen that there were no graves on Fouross and Mineraal, which is, in the latter case, not unexpected as he is still building his permanent homestead there.

CONCLUSIONS

My field observations indicate that cultural material of value on Lomoteng 669, apart from above-cited finds in farmhouse vicinities, is likely confined to a very sparse scatter of unstratified stone artifacts, reflecting sporadic flaking or discard events, that are of no archaeological significance. It is consequently most unlikely that the proposed sinking of

18 boreholes in Zones 2 and 3 of that farm will have any significant impact on the heritage resources of the Northern Cape. However, should that drilling result in findings that justify new mining, a more detailed archaeological study of the precise area to be impacted would certainly be required by SAHRA. Also pertinent in that regard is a recent ruling (Mathews 2011) by the Supreme Court that all mining operations 'are breaking the law if they operate on land zoned for other purposes'. And that, in terms of the Land Use Planning Ordinance, 'only the owner of the land can apply for its rezoning'.

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LOMOTENG 669

THE FIGURE REPRESENTS THE
FARM LOMOTENG 669
WHICH CONSIST OF
REMAINING EXTENT OF THE
FARM LOMOTENG 669
PORTION 1 (FOUROSS) OF THE
FARM LOMOTENG 669
PORTION 2 (MINERAAL) OF THE
FARM LOMOTENG 669
IN EXTENT: 6404,046ha

	CO-ORDINATES	
	EAST	SOUTH
A	22°56'43.327"	27°59'58.727"
B	23°15'2.195"	27°59'57.856"
C	22°13'7.96"	28°33'8.085"
D	22°56'33.017"	28°13'4.607"

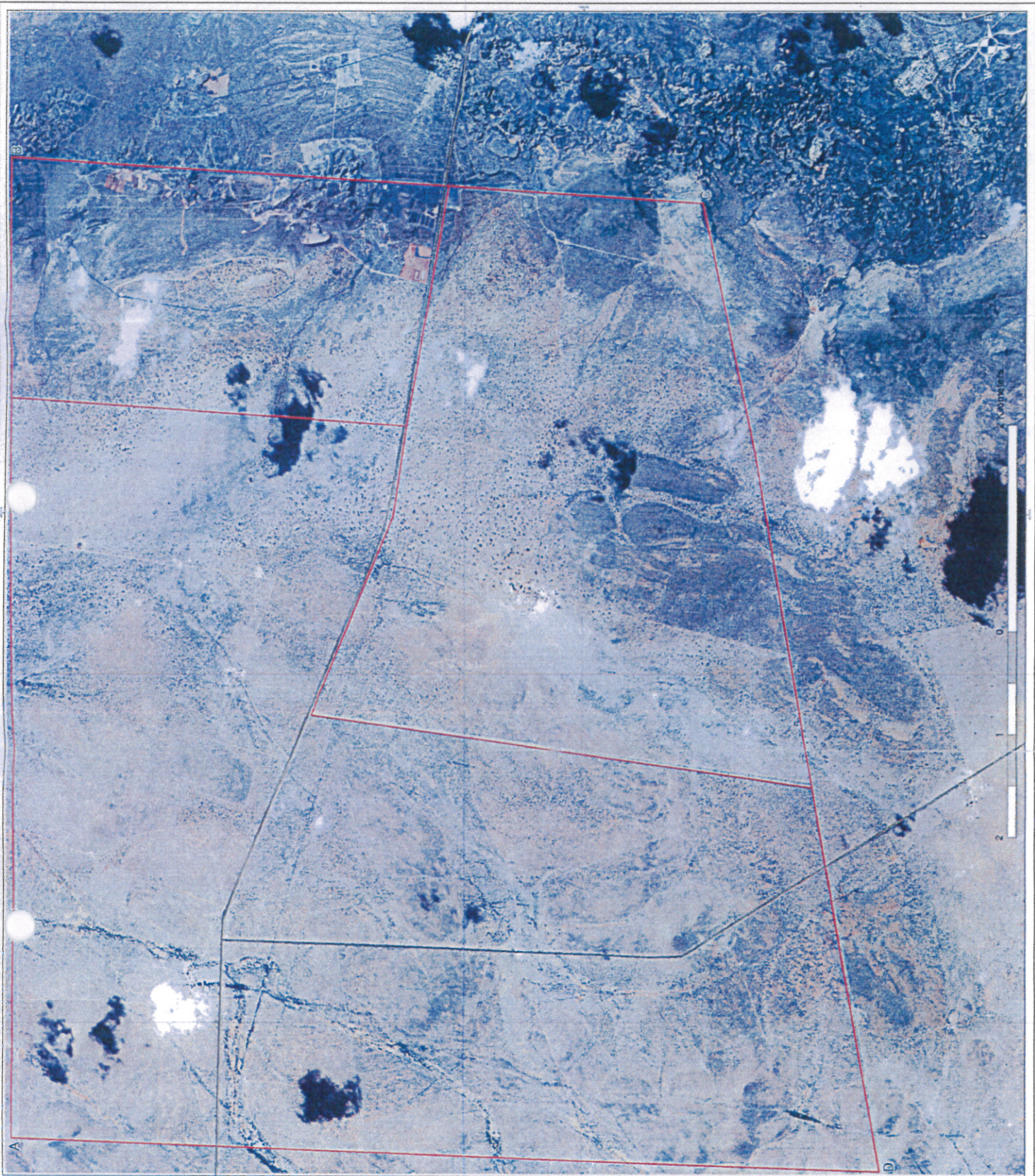


Fig 1.

Legend

- RAILWAYS
- ROADS
- LOMOTENG 669



Figure 3. View of plain to the west from Area 1.



Figure 4. View from hillside with Black Torn in Area 2.



Figure 5. Tree-straddled flat grassland in Area 2.



Figure 6. Looking south from lower hillside in Area 4.



Figure 7. Red jasper fragments on Area 6 rise.



Figure 8. Zone 3 with grass and Camphor Bush cover.



Figure 9. Mining between dolomite outcrops in Area 1.



Figure 10. Weathered manganese rubble surface in Zone 1.



Figure 11. The four stone artefacts that were found.



Figure 12. Old store-room near Lomoteng farmhouse.