



17 July 2023

Att : Ms Natasha Higgitt
South African Heritage Resources Agency
PO Box 4637
Cape Town
8001

Dear Ms Higgitt,

RECOMMENDED EXEMPTION FROM FURTHER ARCHAEOLOGICAL STUDIES, PROSPECTING RIGHT APPLICATION ON REMAINDER OF FARM VILANDER NO. 318, PORTION 1 OF FARM VILANDER NO. 318, PORTION 112 OF FARM KALAHARI-WES NO. 251, & PORTION 159 OF FARM KALAHARI-WES NO. 251, DAWID KRUIPER LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE

1. Introduction

The application entails a Prospecting Right to be lodged over three pans (Vilander Pan, Witpan & Goeboegoeboe Pan), located north of Upington in the Dawid Kruiper Municipality, in the Northern Cape Province (Figures 1 & 2).

`Section 1' comprising Re of Farm Vilander No. 318 and Portion 1 of Farm Vilander No. 318, measures ± 2353ha in extent, while `Section 2' comprising Portion 112 of Farm Kalahari-West No. 251 and Portion 159 of Farm Kalahari West No. 251, measures about 980ha in extent (Figures 3 & 4).

Site Plan Consulting is the appointed, Environmental Assessment Practitioner (EAP) responsible for facilitating environmental authorisation for the project. A Basic Environmental Assessment (BA) Process will be followed in this application.

The Department of Mineral Resources (DMR) is the decision-making authority in this application.

2. Description of the proposed activity

It is proposed that nine holes be drilled to a depth of 10m on the pan floor. Six holes will be drilled in Section 1 (Vilander & Witpan), and three in Section 2 (Goeboegoeboe) (Figures 5 & 6). The diameter of each drill hole will be 20cm, while the disturbed area will be 0.315m³ of material per hole. Nine drill holes will therefore disturb a total area of about 2.83m³ (Site Plan Consulting 2023). Drillers will be accompanied by 1-2 persons who will be responsible for measuring and recording depth to brine and taking water samples for laboratory analysis. All the drill holes will be rehabilitated. Should the brine prove to be of sufficient quality, then an additional application will be lodged to allow for mining of the site. There are already existing access roads to the three affected pans, and therefore no new roads to the drill sites will need to be constructed. There will be no disturbance of the natural vegetation surrounding the pans, either (Site Plan Consulting 2023).

3. Environmental context

The study site is located in the Kalahari Basin, a flat, sand covered, semi-desert area about 100kms north of Upington in the Northern Cape. The area is characterised by a number, of large pans surrounded by higher lying red longitudinal sand dunes typical of the Kalahari



Agency for Cultural Resource Management

Specialists in Archaeological Studies and Heritage Resource Management

area. The pans are extremely isolated and, non-natural land uses are sparse with isolated farmsteads, and stock collection and watering points (mainly for cattle). There are some fences and pipelines on the pans, but none of these will be disturbed by proposed activities. There is an existing Salt Works on the Vryout Pan, about 5km northwest of Goeboegoeboe Pan. The pans are not located within a National Park or any formally protected area (Site Plan Consulting 2023).

4. Archaeological context

The archaeological record of the Northern Cape region reflects the entire human history from Early Stone Age (ESA) times (more than one million years ago), through the Middle Stone Age/MSA (about 300 000-40 000 years ago), to the Later Stone Age/LSA (the last 10 000 years of precolonial history in southern Africa). The last 2000 years particularly was a period of increasing social complexity to the east, with the appearance of herding and farming, and of ceramic and metallurgical (Iron Age) technologies alongside an older continuing trajectory of LSA hunting and gathering and stone tool-based technologies (Morris & Henderson 2019). In these far northern drier areas, it is likely that hunting and gathering persisted into the colonial era.

A search of SAHRIS has shown that little archaeological work has been conducted in this vast arid region north of the Northern Cape. Most, of the work has been done by commercial archaeologists, working in the contract archaeology industry. The literature survey has shown that several Archaeological Impact Assessment (or AIAs), around some of these large pans north of Upington, have been conducted in recent times (Figure 7).

Low density surface scatters of MSA artefacts were first recorded at proposed salt prospecting areas at Bettastadt and Tsonga Pan on the Farm Gemsbok Horn 242, about 80kms southeast of the Vilander study area (Morris & Henderson 2019). The significance of the impact on archaeological heritage resources at these two pans, was determined to be Low, however.

Low densities scatters, of weathered, MSA and LSA remains (chips, chunks & flakes), were also recorded during a Heritage Impact Assessment (or HIA) for the proposed Bloupan Salt Mine on the Farm Annesley 338 about 60kms northwest of Vilander Pan and about 50kms southwest of Goeboegoeboe (Engelbrecht 2018). The remains were also graded as having Low (IVC) local archaeological significance.

Small numbers of weathered ESA and MSA resources (of Low significance) were also recorded by Morris (2006) at Eenzaamheid Pan, and Hakskeen Pan (Morris 2016).

A Recommended Letter of Exemption (LOE) for proposed mining of salt on the Farm Groot Witpan (Kaplan 2022), southwest of Vilander, was supported by SAHRA Northern Cape.

Overall, the various salt pan studies surrounding Vilander, Witpan and Goeboegoeboe Pan appear, to indicate a paucity of archaeological traces in these dry arid areas, where archaeological resources are more likely to appear on dune crests on the margins of pans, springs, and streams (Kiberd 2001; Masson 2006; Morris 2006, 2016; Smith 1995).

5. Conclusion

The Prospecting Application which entails the proposed drilling of nine test holes on the Farm Vilander 318 (n = 3), Witpan (n = 3), and Kalahari-West 159 (n = 3) north of Upington are not considered to pose a serious threat to local archaeological heritage because of the following considerations:



Agency for Cultural Resource Management

Specialists in Archaeological Studies and Heritage Resource Management

- Apart from the small drill holes (20cm in diameter), no further disturbance or activities are anticipated or expected.
- The Impact of drilling on the Heritage `Sense of Place' is rated as Low.
- The literature study indicates that the various salt pans surrounding Vilander, Witpan and Goeboegoeboe cannot be considered sensitive or threatened archaeological landscapes
- The DEA Screening Tool notes a Low sensitivity in respect of Archaeological and Cultural Heritage Impact.

6. Recommendations

It is recommended that exemption from further specialist archaeological studies be granted for the Vilander prospecting application, as no important Stone Age or historical archaeological resources are likely to be impacted by the Prospecting Right application.

Yours sincerely

Jonathan Kaplan
Director: Agency for Cultural Resource Management



7. References

Englebrecht, J. 2018. Proposed Salt Mine on Bloupan, located on the Remainder of the Farm Annesley No. 338, situated within the Dawid Kruiper Local Municipality, ZF Mgcawu District Municipality, Northern Cape Province. Report prepared for Van Zyl Environmental Consultants. Ubique Heritage Consultants, Askham.

Kaplan, J. 2022. Recommended exemption form further archaeological studies, consolidation of salt mining rights under one Mining Right: Portions 10, 13, 18 & 20 of the Farm Groot Witpan No. 327, Gordonia RD, Dawid Kruiper Local Municipality, Northern Cape Province. Letter submitted to SAHRA Northern Cape. ACRM, Cape Town

Kiberd, P. 2001. Bundu Farm. A Middle and Later Stone Age Pan Site, Northern Cape, South Africa. Preliminary results of fieldwork 1998-2000. *Nyame Akuma* 55: 51-55.

Masson, J. 2006. Archaeology and geomorphology: Eensaamheid Pan, Northern Cape. *The Digging Stick* 23 (1): 15 -18.

Morris, D. 2016. Heritage Impact Assessment, Hakskeen Pan, in the Dawid Kruiper Local Municipality, Northern Cape, in relation to tourism and event-related development: Final Report (Revised). Report prepared for EnviroAfrica cc. McGregor Museum, Kimberley.

Morris, D. 2006. Report on a Phase 1 Archaeological Assessment of proposed Salt Works areas on the Eenzaamheid Pan north of Upington, Northern Cape. McGregor Museum, Kimberley.

Morris, D. & Henderson, A. 2019. Heritage Impact Assessment of proposed prospecting drilling sites at two pans on Gemsbok Horn 242 in the Dawid Kruiper Local Municipality, Northern Cape. Report prepared for Site Plan Consulting. McGregor Museum, Kimberley.

Site Plan Consulting, 2023. Vilander Pans Salt Prospect. Draft Basic Assessment Report and Environmental Management Programme Report. Report #: 2859/PR/D-BAR.

Smith, A.B. 1995. Archaeological Observations along the Orange River and its Hinterland. In: Smith, A.B. (ed). *Eniqualand: Studies of the Orange River Frontier*: 265-300. Rondebosch: UCT Press.



Figure 1. Locality Map: Section 1 and Section 2.



Figure 2. Google Earth satellite map indicating the location of the study area Section 1 & Section 2 (yellow pin) northwest of Upington. Note the high concentration of saltpans north west of the area.



Figure 3. Google Earth satellite map. Close up of Section 1



Figure 4. Google Earth satellite map. Close up of Section 2



Figure 5. Proposed drill holes in Section 1



Figure 6. Proposed drill holes in Section 2



Figure 7. Google Earth satellite map indicating the location of saltpans (red pins) mentioned in the text.