

2008-12-05

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RE: LETTER OF RECOMMENDATION
Exemption from Phase 1 Heritage Impact Assessment (HIA) for the Salt River Resources Prospecting Program
(Portions of the Farm Adjoining Geelvloer, Remainder & Portion 1 of the Farm Graafwater, Gannapoort, Lovedale, Quagga Maag, Hartebeestvlei and Vaal Kop), Kenhardt District, Northern Cape, South Africa

o INTRODUCTION: THE SALT RIVER RESOURCES PROSPECTING PROGRAMME

The proposed Salt River Resources Prospecting Program is to be located on 7 farms comprising a development area of approximately 44,832ha, including Portions of the Farm Adjoining Geelvloer, Remainder & Portion 1 of the Farm Graafwater, Gannapoort, Lovedale, Quagga Maag, Hartebeestvlei and Vaal Kop, located approximately 100km west [W] of Kenhardt in the Northern Cape province, South Africa.

The development area can be divided into 3 portions namely:

- | | | |
|-----------------------|--|------------------------|
| 1) Salt River | - Remainder of the Farm Adjoining Geelvloer No 197 | Total area: ± 3,037ha |
| 2) Salt River Central | - Graafwater No 198; &
- Adjoining Geelvloer No 197/2 | Total area: ± 8,998ha |
| 3) Salt River West | - Gannapoort No 202;
- Lovedale No 201;
- Quagga Maag No 200;
- Hartebeestvlei No 199; &
- Vaal Kop No 225 | Total area: ± 32,517ha |

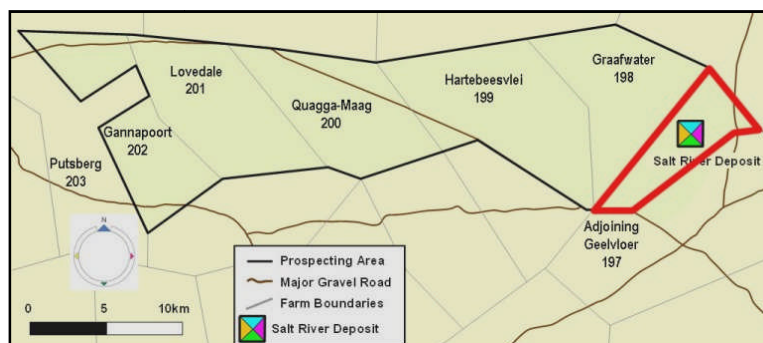


Figure 1: The Salt River development area

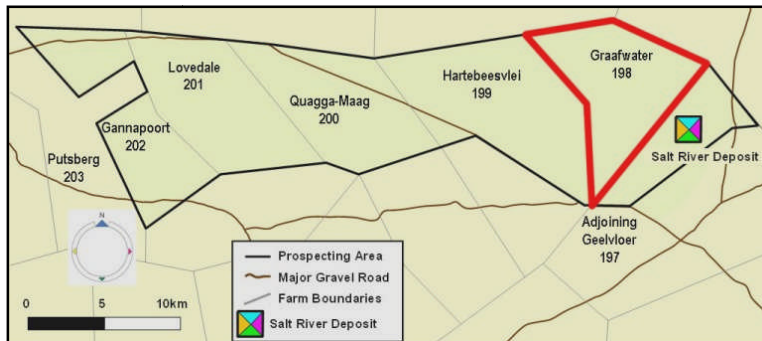


Figure 2: The Salt River Central development area

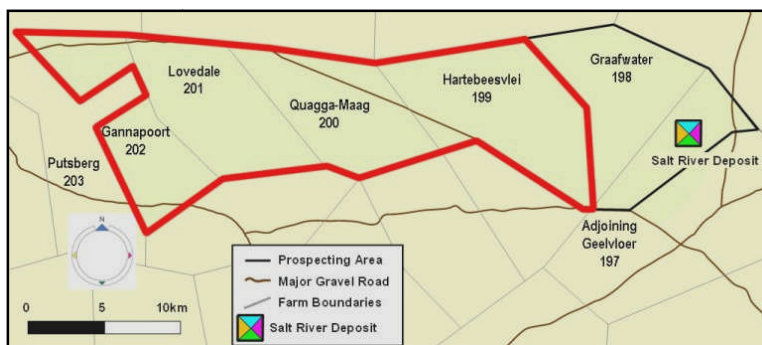


Figure 3: The Salt River West development area

The proposed Salt River Resources Prospecting Program will comprise of geological field mapping, geochemical and geophysical sampling and diamond drilling. Salt River Resources does not intend to carry out any excavations, trenching, pitting, bulk sampling or testing for the duration of the Prospecting Right.

Proposed prospecting is preceded in the area by programs conducted by Phelps Dodge (1970's), Union Corporation & Gencor (1980's) and Goldfields (1990's) and comprised of geological exploration & soil sampling, geochemical & geophysical surveying, trenching and percussion & diamond drilling. High impact exploration activities (trenching) were restricted to the properties Gannapoort & Lovedale. To date Salt River Resources has acquired all previous exploration and prospecting data on the relevant properties from the Department of Geosciences, Pretoria, and has focussed on the re-interpretation thereof and the integration of results with recent spatial data.

Future prospecting, planned for the period 2009-2012, under a Department of Minerals & Energy (DME) Prospecting Right (2008-2012) will comprise of:

1. Geological mapping & geochemical soil sampling: Soil samples will be carried out on traverses spaced at 100m intervals. Traverses are expected to be approximately 0.5-1km long. Soil samples will be collected at 25m intervals on the traverses;
2. The subsequent drilling program is directly dependant on results of the geochemical sampling & a preliminary drilling program (less than 30 boreholes) conducted August 2005 - October 2006 on the property Remainder of Adjoining Geelvloer No 197. Drilling is scheduled for the last 3 years of the Prospecting Right duration (2009-2012).
 - o Only 1 diamond drilling machine will be employed during the proposed Prospecting Right drilling program (due to drilling water having to be supplied by wind pumps / boreholes on the property and the Orange River located approximately 100km to the north east [NE]).
 - o Direct surface impact areas will be dependant on the internal diameter of the drill bit used (varying from 44-60.81mm) with associated secondary / waste surface impact not exceeding an approximate 7x7m area at each borehole. It is estimated that 25 boreholes / 10 million tons of orebody will be drilled, with required quantities subject to change depending on the orebody.

o HERITAGE COMPLIANCE IN ACCORDANCE WITH THE NATIONAL HERITAGE RESOURCES ACT, No 25 OF 1999

A Phase 1 Heritage Impact Assessment (HIA) was requested by the South African Heritage Resources Agency (SAHRA), mandatory responsible for the National Heritage Resources Act, Act No 25 of 1999 (NHRA 1999), to be conducted across the areas for which a Prospecting Right is either held or being applied for. In response thereto a postponement of the HIA was requested by Salt River Resources, based on the grounds that no excavations, trenching or pitting will be carried out for the duration of the Prospecting Right. SAHRA agreed to the postponement request provided they receive a letter from an Association of Southern African Professional Archaeologists (ASAPA) accredited Cultural Resources Management (CRM) practitioner, indicating that prospecting work carried out will not be to the detriment of any heritage resources.

The Phase 1 HIA was requested as specialist sub-section to the Environmental Impact Assessment (EIA) in compliance with requirements of the Mineral and Petroleum Resources Development Act, No 28 of 2002 (MPRDA 2002), the National Environmental Management Act, No 107 of 1998 (NEMA 1998) and associated regulations (2006), and the NHRA 1999 and associated regulations (2000).

➤ INTRODUCTION TO THE SOUTHERN AFRICAN CULTURAL ENVIRONMENT

The southern African cultural environment can roughly be divided into the Stone Age, the Iron Age and the Colonial Period. This cultural division has a rough temporal association beginning with the Stone Age, followed by the Iron Age and the Colonial Period. The division is based on the identified primary technology used. The hunter-gatherer lifestyle of the Stone Age is identified in the archaeological record through stone being the primary raw material used to produce tools, but including early pastoralist or African Neolithic societies. Iron Age people, known for their skill to work iron and other metal, also practised agriculture and animal husbandry. Kingships and civilizations associated with the Iron Age are indicative of a complex social hierarchy. The Colonial Period is marked by the advent of writing, in southern Africa primarily associated with the first European travellers.

During the latter part of the Later Stone Age (LSA) hunter-gatherers shared the cultural landscape with both pastoralists and Early Iron Age people, while the advent of the Colonial Period is marked by a complex cultural mosaic of people; including LSA hunter-gatherers, Later Iron Age farming communities and colonial occupation.

➤ CULTURAL HERITAGE SENSITIVITY ASSESSMENT OF THE SALT RIVER RESOURCES DEVELOPMENT AREA

PERIOD	PROBABILITY ASSESSMENT		DESCRIPTION OF CONTRIBUTION
	PROBABILITY	SIGNIFICANCE	
Hominid / Human	Low	High	Expansion of fossil evidence for human origins and evolution
STONE AGE			
Earlier Stone Age	Medium	Medium – High	Assessment of distribution of early Homo; occupation of selected biomes and adaptation patterns
Middle Stone Age	Medium	Medium – High	Assessment of distribution of Homo Sapiens; occupation of selected biomes / adaptation patterns; early modern behaviour
Later Stone Age:			
- Hunter-gatherer	High	High	Modern behaviour; ethno-archaeology; cultural interaction between LSA hunter-gatherers, pastoralists and Colonial cultures. Linguistics
- Pastoralist	High	High	Pastoralist migration & adaptation patterns, cultural interaction with LSA hunter-gatherer and Colonial cultures
- Rock Art	High	Medium – High	Spread of KhoiSan people and related adaptation. Possibility of art by other cultural groups. Alternative documentation relating to acculturation. Socio-economic pressure / Religion / Myth
IRON AGE			
Early Iron Age	Not expected	N/A	Known extent of occupation not applicable to the study area
Middle Iron Age	Not expected	N/A	Known extent of occupation not applicable to the study area
Later Iron Age	Low	Low – Medium	Known extent of occupation not applicable to the study area
Post Mfecane	Medium	Medium	Socio-economic cultural change; Migrant Iron Age / Colonial contact; cultural adaptation (including responses by local LSA hunter-gatherer and pastoralist communities)
HISTORICAL / COLONIAL PERIOD			
Historical Period	High	High	Colonial – LSA - Migrant Iron Age contact. Western cultural integration, responses to political dominance / changing socio-cultural environment

Table 1: Probability assessment of the cultural heritage sensitivity: Proposed Salt River Resources Prospecting Program, Kenhardt District, NC

The known extent of pre-historic and historic occupation in southern Africa allows for the above cultural heritage sensitivity assessment pertaining to the proposed Salt River Resources development area.

Fossil finds relating to the early evolution of humankind (*Australopithecus*, *Paranthropus* and early *Homo*) is at present dominated by specimens from the Cradle of Humankind sites, with prominent later *Homo Sapiens* find from Klasies River Mouth (EC) and Border Cave (KZN). The Taung (NW) and Canteen Koppie skulls (NC) are indicative of the closest known proximities of palaeoanthropological finds and located more than 450km east north east [ENE] of the proposed development area.

Stone Age sites are well known from across the Northern Cape province with Wonderwerk Cave near Kuruman displaying one of the longest continuous culture-stratigraphic sequences ($\pm 1-1.5\text{My}$) internationally known and very similar to Skhul and Jebel Qafzeh, Israel. Early Stone Age (ESA) sites have been identified at a number of locales with Doornlaagte, Canteen Koppie and Victoria West to name a few. Known Middle Stone Age (MSA) sites include Bundu, with a number more documented through more recent Phase 1 AIA's including localities as close to the development area as Van Wyksvlei. Recorded ESA and MSA sites in the Northern Cape are more than often large open air sites, with site extends of up to 800x200m recorded at DK and M4, Rooipoort (Van Ryneveld: excavation reports in progress). Later Stone Age (LSA) sites are often smaller and more prominently, though not exclusively, confined to the few restricted shelters offered by the Northern Cape geography. LSA rock art is dominated by rock engravings, rather than paintings. Engravings are often located in close proximity to water such as at Bushmansfontain, Driekopseiland and Nootgedaght, where engravings are found on glacial pavements (Pers comm.: D. Morris). Closer to the development area a number of LSA sites and pastoralist remains have been recorded in the Augrabies National Park (Pers comm.: P. Burkholtz), a cultural pattern demonstrated by the work of Beaumont and Morris between Onseepkans and Vioolsdrift (Pers comm.: D. Morris).

Known geographical confines of the Early and Middle Iron Age largely exclude the Northern Cape area with the closest recorded being Middle Iron Age Toutswe related sites from Botswana. Dithakong demarcates the locality of the western most known large Later Iron Age Tswana mega city in South Africa. The Iron Age in the Northern Cape is temporally restricted to the Later Iron Age encountered to the north [N] and north east [NE] of the province. Later Iron Age *post-Mfecane* acculturation is interestingly well presented by the number of migrant labourers that fluxed to the province during the Colonial Period and relationships with resident San and Khoe populations.

Colonial Period archaeology in the Northern Cape is closely tied to early socio-political events in the Southern Cape reaching its height with the discovery of diamonds near Kimberley in the 1860's. The discovery of diamonds and resultant mining industry, with associated large scale influx of migrant workers had a definite effect on resident San, Khoe and Iron Age populations.

Cultural heritage sites that may thus well be encountered in the proposed Salt River Resources development area include Stone Age inclusive of LSA San & pastoralist sites, Later Iron Age *post-Mfecane* and Colonial / Contact Period sites.

➤ CONCLUSION

In conclusion, the proposed Salt River Resources Prospecting Program will have an overall localized and light-weight impact on the total of the proposed 44,832ha development area. Prospecting will comprise of geological field mapping, geochemical and geophysical sampling and diamond drilling. Salt River Resources does not intend to carry out any excavations, trenching, pitting, bulk sampling or testing for the duration of the Prospecting Right.

Proposed prospecting is preceded by almost 30 years of prospecting by a number of companies. To date no archaeological resources have been reported on by former prospectors.

However, Stone Age, Later Iron Age *post-Mfecane* and Colonial / Contact Period cultural remains may well be present. ESA and MSA sites in the interior of the Northern Cape are as a norm rather extensive and expected prospecting impact on such sites will be extremely limited. LSA, pastoralist, Later Iron Age *post-Mfecane* and Colonial / Contact Period sites may well be smaller but are often more visible and more easily identifiable.

o RECOMMENDATIONS

1. **It is recommended that the proposed Salt River Resources Prospecting Program** to be located on Portions of the Farm Adjoining Geelvloer, Remainder & Portion 1 of the Farm Graafwater, Gannapoort, Lovedale, Quagga Maag, Hartebeestvlei and Vaal Kop (44,832ha) **be exempted from a Phase 1 HIA for purposes of a Prospecting Right.**

Cultural heritage resources that may well be present include Stone Age, Later Iron Age *post-Mfecane* and Colonial / Contact Period sites. Proposed prospecting is interpreted as overall localized and with a light-weight impact on the development area. Prospecting will comprise of geological field mapping, geochemical and geophysical sampling and diamond drilling only. Salt River Resources does not intend to carry out any excavations, trenching, pitting, bulk sampling or testing for the duration of the Prospecting Right. Should any heritage resources be present proposed light impact prospecting activities is not envisioned as to the detriment of their (total) conservation, future identification and interpretation and possible further mitigation / research.

- o Should any heritage resources (which may well comprise of plant and animal fossils, knapped stone tools, rock art, ceramic, porcelain, metal, residential / architectural remains, faunal remains, graves etc) be encountered during the course of the prospecting program, the developer should cease work in the immediate vicinity and report the site to SAHRA and an ASAPA accredited CRM archaeologist.
2. **It is recommended that a Phase 1 HIA be conducted across the total of the identified mining area, as determined through the prospecting program, prior to mining impact.**

I trust you will consider the above recommendations in the affirmative.

Yours sincerely,

Karen van Ryneveld

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