

**PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT REPORT ON  
AREAS AT HOTAZEL MINE ON THE FARM HOTAZEL 280,  
KGALAGADI DISTRICT MUNICIPALITY, NORTHERN CAPE  
PROVINCE.**

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## **EXECUTIVE SUMMARY**

The purpose of this study was to determine if any heritage sites were present in four areas at the Hotazel Mine, on the farm Hotazel 280, about 60 km north – west of Kuruman, in the Kgalagadi District Municipality of the Northern Cape Province. These portions of mine property, with a total extent of ~27 ha, were covered by grass, bush, acacia trees and, in places, a fair amount of modern garbage, while a few sections indicate 2 – 3 m or more of underlying mustard – coloured sand. A foot survey over their full extent on Wednesday 14 May 2008 revealed a total absence of stones, let alone artefacts, and certainly no lithic sites, fossil bones, or early structures / graves. That finding leads me to conclude that the inspected terrains have no heritage potential and that their proposed use for staff housing will have no impact on the heritage resources of the Northern Cape.

## **BACKGROUND INFORMATION**

This report is part of an EIA that is being compiled by Marquerite Geldenhuys of MEG Environmental Impact Studies at the request of Mr Dirk Slabbert, who is co-ordinating planned infrastructural expansion at Hotazel. This includes a large growth in staff accommodation on currently unused mine ground adjacent to existing housing, as part of an overall drive to increase manganese output. My terms of reference were to detail observations based on a field survey of affected areas to assess the significance of any heritage impacts, should the development go ahead. Such a report is required by the National Heritage Resources Act (no. 25 of 1999), which states that no development may normally take place without heritage assessment and approval.

## **REGIONAL ARCHAEOLOGY**

Hotazel, situated near the eastern edge of the Kalahari sand sea, an archaeologically under – explored region in which the nearest major sites are on the Tswalu Kalahari Reserve, about 40 km to the west. As yet unpublished fieldwork by the author has documented the presence there of a number of engraving sites, often dominated by cupules, a Ceramic LSA? locality with stone walling, and two Acheulean occurrences. And ~55 km to the south is Kathu Pan, where excavations, beginning in 1978, revealed a number of stratified successions ranging back from surface Ceramic LSA to basal Acheulean at about 0.8 Myr ago (Beaumont & Morris 1990; Beaumont & Vogel 2006). The deduction to be drawn from those findings is not that this region is exceptionally rich in archaeological remains, but rather that human occupations there were, perforce, confined in that arid landscape to the very few points near permanent water.

## **PROPERTY DESCRIPTION**

The ~27 ha area that was inspected consisted of four closeby portions within the Hotazel settlement, on the farm Hotazel 280 in the Kgalagadi District Municipality of the Northern Cape (Figs. 1 & 2). The first is a narrow and slightly curved strip of

ground lying between housing to the north and a dirt road in the south, with its north – east edge at 27° 12' 05.6" S, 22° 57' 36.3" E (Fig. 2). The second, of irregular shape, runs from just east of Area 1, on the south – eastern side of the main extant housing, with a south – eastern edge of 27° 12' 07.6" S, 22° 58' 01.5" E (Fig. 2). The third, of triangular shape, is intersected by a railway line, has mine dumps flanking its eastern side, and has a midpoint at 27° 12' 16.3" S, 22° 57' 50.2" E (Fig. 2). And the last area, roughly rectangular, lies immediately west of area 3 and north of existing housing, with a midpoint at about 27° 12' 24.3" S, 22° 57' 44.4" E (Fig. 2). All of these four portions are flat, at about 1070 m, with a slight increase in altitude to the east, and support a cover of grass, bush, patches of swarthaak (*Acacia dentinens*) and a scatter of acacia trees (Figs. 3 – 5). Wednesday 14 May 2008 was spent, in the company of Marquerite Geldenhuys and botanist Noel van Rooyen, walking over their full extent, with geographical co-ordinates being taken, when deemed necessary, with a Garmin GPS.

## **SUPERFICIAL SEDIMENTS**

All of the areas had a surface of fine beige – reddish sand, with sections on the north side of the railway line in Area 3, and at an old sand quarry on the south – central side of Area 4 (Fig. 5), indicating that those sands extend down to at least 3 – 4 m. This sand sheet compares with the 5 m deep one described at Mumatwan mine, some 20 km to the south – west, where OSL dates indicate its accretion between 60 and 14 kyr ago, with one reading suggesting reactivation during the early Holocene (Bateman *et al.* 2003).

## **HERITAGE FINDINGS**

My search over the modern surface in all four areas produced not a single artefact and there were certainly no lithic sites, fossil bones or early structures / graves there.

## CONCLUSIONS

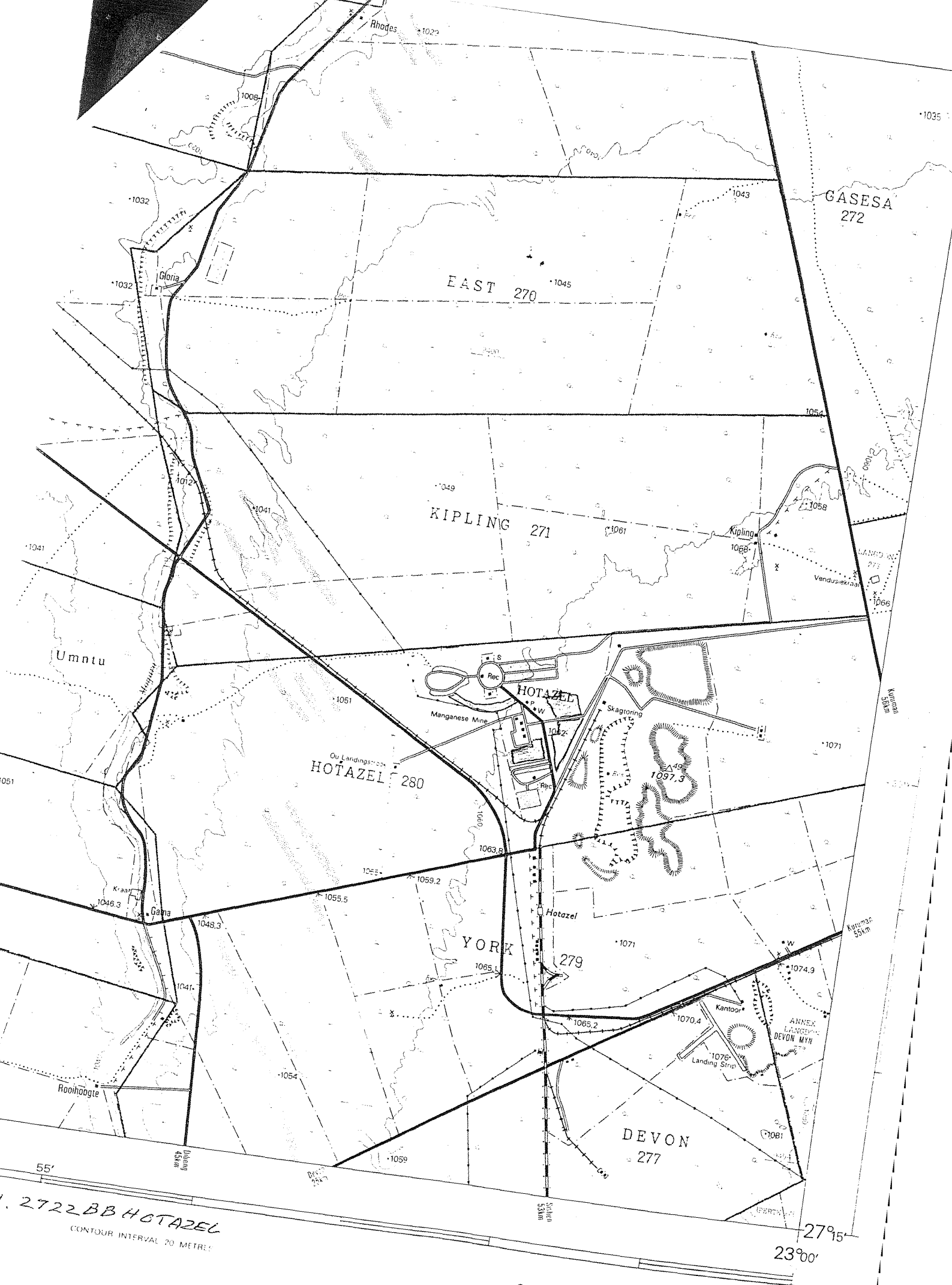
My conclusion is therefore that the inspected areas contain no heritage material and that their proposed use for staff housing will have no impact on the heritage resources of the Northern Cape Province.

## REFERENCES

Bateman, M.D., Thomas, D.S.G. & Singhvi, A.K. 2003. Extending the aridity record of the southwest Kalahari: current problems and future perspectives. *Quat. Intern.* **111**, 37 – 49.

Beaumont P. and Morris D. 1990. *Guide to archaeological sites in the Northern Cape*. McGregor Museum. Kimberley.

Beaumont, P.B. & Vogel, J.C. 2006. On a timescale for the past million years of human history in central South Africa. *S. Afr. J. Sci.* **102**, 217 - 228.



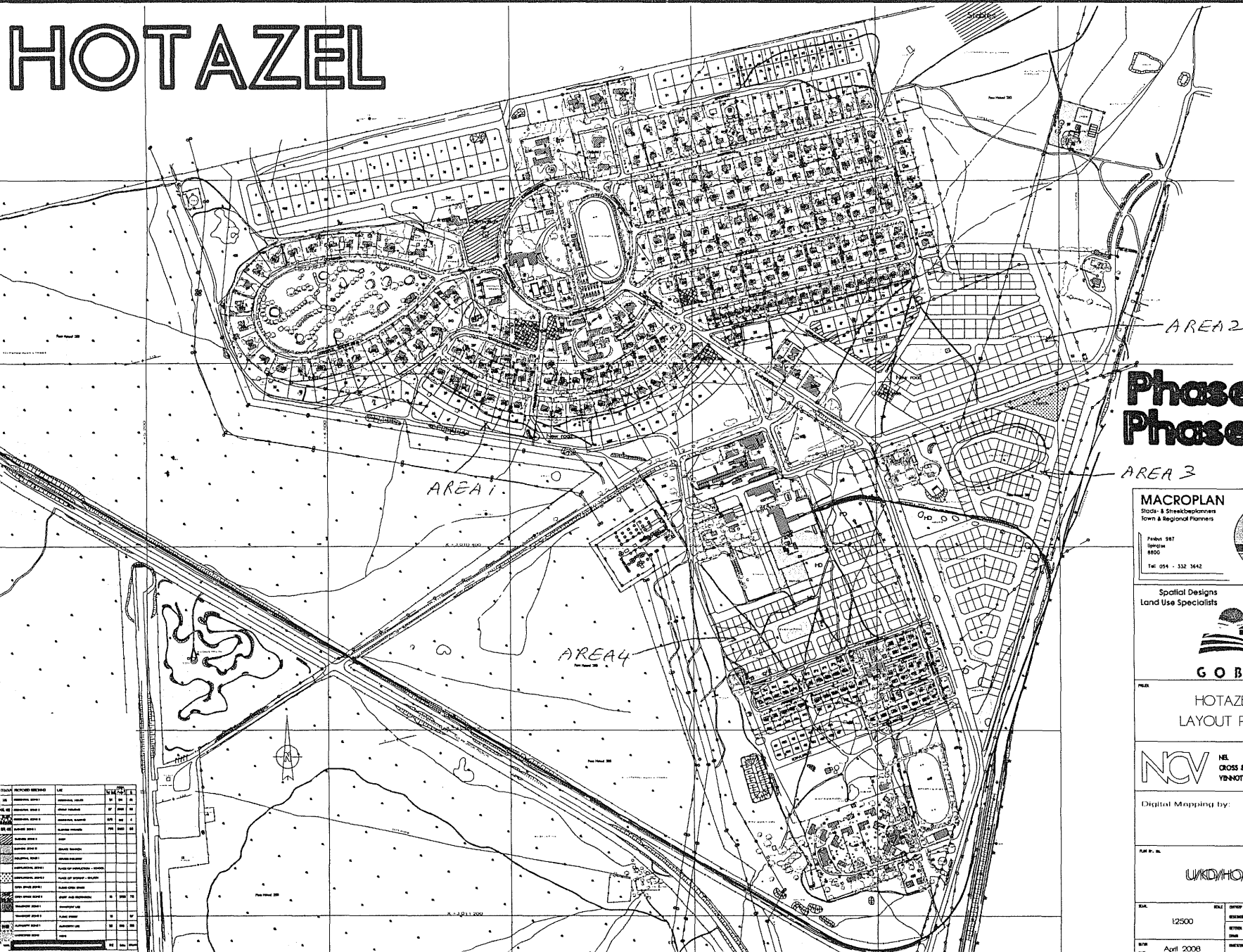
2722 BB HOTAZEL  
 CONTOUR INTERVAL 20 METRES

27°15'  
 23°00'

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Prys per...

# HOTAZEL



SYMBOL	DESCRIPTION	SCALE
[Symbol]	Residential Area 1	1:1000
[Symbol]	Residential Area 2	1:1000
[Symbol]	Residential Area 3	1:1000
[Symbol]	Residential Area 4	1:1000
[Symbol]	Commercial Area	1:1000
[Symbol]	Industrial Area	1:1000
[Symbol]	Public Open Space	1:1000
[Symbol]	Water Bodies	1:1000
[Symbol]	Transportation	1:1000
[Symbol]	Utilities	1:1000
[Symbol]	Other	1:1000

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for use with  
Surveysystem

TEL: (012) 8030346

LAND/HOMOR

SCALE: 1:2500

DATE: April 2008

DESIGNER: L.J. Fourie

CLIENT: Thys Needs

FIG 2



FIG 3. GENERAL VIEW, AREA 1.

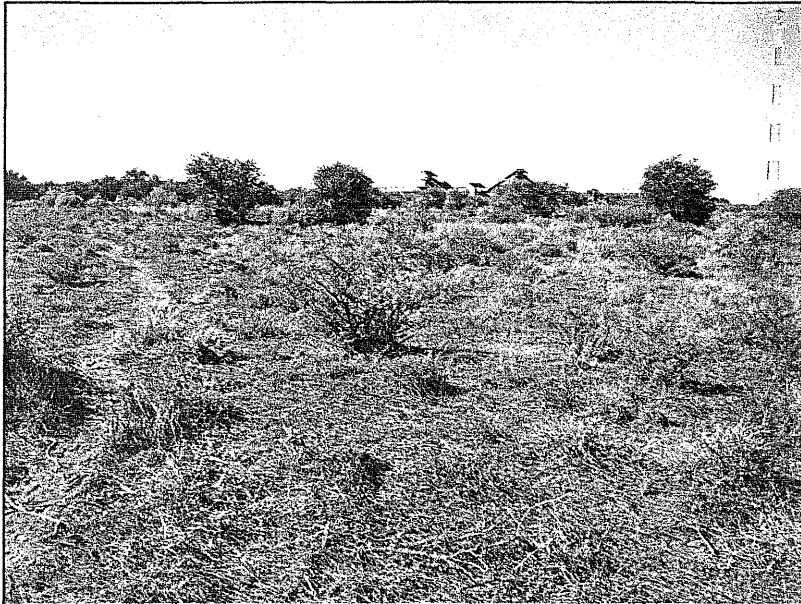


FIG 4. VIEW TO E, AREA 2. PLANT HEADGEAR IN DISTANCE



FIG 5. VIEW TO S, AREA 4. OLD SAND QUARRY ON RIGHT.