

rec. letter 6 7/2/032/100001
10-03-06

**ARCHAEOLOGICAL IMPACT ASSESSMENT AT AND IN THE
VICINITY OF A QUARTZITE QUARRY ON PORTION 4 OF THE
FARM DROOGEHOUT 442 NEAR UPINGTON**

Compiled by:

Peter B. Beaumont (B.Sc., M.A. [Archaeology])
c/o Archaeology Department
McGregor Museum
PO Box 316
KIMBERLEY
8301
R.S.A.
Tel: 053-842-0986(H)/053-839-2700
Fax: 053-842-1433
E-mail: se@museumsnc.co.za

On behalf of:

EKOIMPAC CC
Environmental Consultants
8 Conrad Street
New Park
KIMBERLEY
8301
R.S.A.
Tel/Fax: 053-832-7510
Cell: 083-262-3683
E-mail: ekoimpak@intekom.co.za

1. INTRODUCTION

Eko Impak contracted me to undertake an archaeological survey of a section of Portion 4 of the farm Droogehout 442, some 30km northwest of Upington and ± 1 km south of the N10 Route between Upington and the Namibian border at Nakop. This survey was undertaken on October 22, 2005. The area surveyed has been identified for stone mining for crushing purposes under a mining right application submitted to the Department of Minerals and Energy (Kimberley) by Idada Trading 5 (Pty) Ltd. An existing stone-quarry and crushing plant were found on the northern side of an isolated flat-topped hill, surrounded by plains that are covered in places by low linear dunes. This mesa is made up of an isolated remnant of subhorizontal quartzite that overlies the regional granite and gneisses, and is of economic interest in that it is the nearest source of crushed stone for infrastructural development in the Upington vicinity.

2. THE QUARRY AREA

Sections show that protracted weathering along bedding planes has broken the upper ± 3 m of the quartzites into a rubble, which has been ripped over a ca. 5ha area before removal for crushing, thereby leaving little in the way of undisturbed deposits.

3. THE MINERAL RIGHTS AREA

Some hours were spent driving slowly or walking over Portion 4 of the farm Droogehout 442, which, on the crest of the hill, is mainly flat terrain covered by quartzite rubble, or, in places, a thin coating of red aeolian sand. A sparse scatter of fresh, moderately abraded quartzite artefacts ascribable to the ESA was present everywhere, but viable densities were confined to the southern side of the hill, some 1 km due south of the quarry (FIGURE. 1). In that area we found two typical Victoria West 2 cores (PHOTO 1), a few giant flakes (± 20 cm long and wide) and one giant core (± 25 cm across), plus other flakes and cores of more usual size, but no formal tools, like hand axes.

As the sun was setting I also inspected a small pan on the plain, approximately 250m west of the road to the quarry (FIGURE 1; PHOTO 2), where a ± 30 m wide scatter of rock fragments included a fair number of fresh irregular flakes and small radically prepared cores (PHOTO 3). Of interest was the presence of at least one piece of red jasper, the nearest occurrence of which, to my knowledge, is in the hills east of Postmasburg which lies about 250km away in a straight line from Droogehout.

4. CONCLUSIONS

- (a). The open Late Acheulean? site on the pan, associated with unutilized red jasper, should not be disturbed, and, if any further drilling for water is undertaken there, this should be done with an archaeologist present, to ensure that the site is not damaged.
- (b). The hillcrest artefacts represent lower intensity workshop activities at this quartzite source during the Victoria West phase of the Middle Acheulean of the central-west portion of South Africa, at a time here tentatively set at 0.9 million years (myr) ago. Occurrences of this primal Levallois manifestation are rare and it is therefore recommended that any extension of the current quarry should be mitigated by work directed at recovering a viable sample of this unique ESA material.
- (c). As regards the present quarry area, this is highly disturbed with no heritage potential, and the ongoing utilization of the quartzite there will have no impact on the archaeological resources of the Northern Cape.

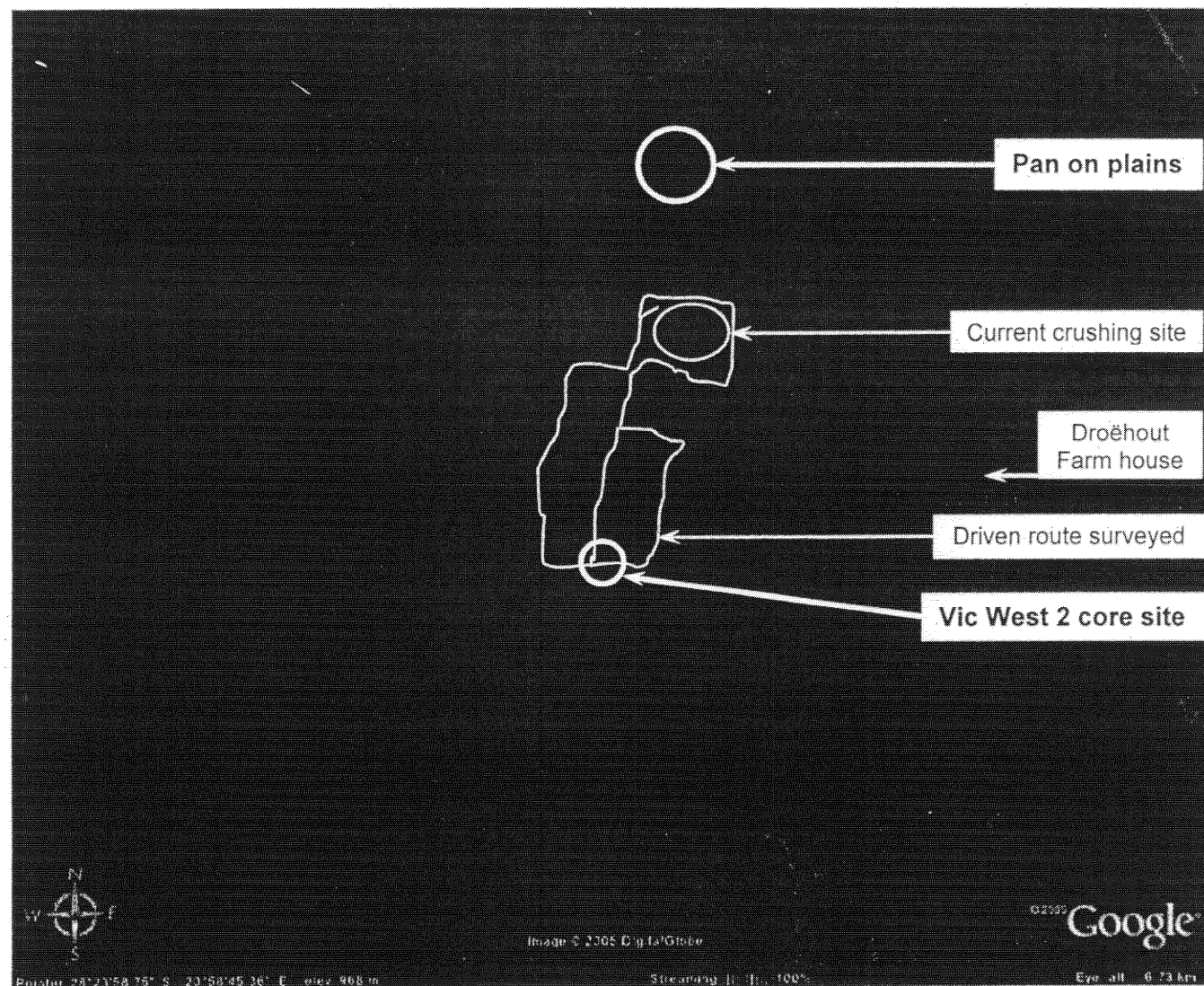


FIGURE 1: Satellite image indicating the archaeological sites on the plateau and surrounding plains on the section of Portion 4 of the farm Droogehout 442 surveyed.

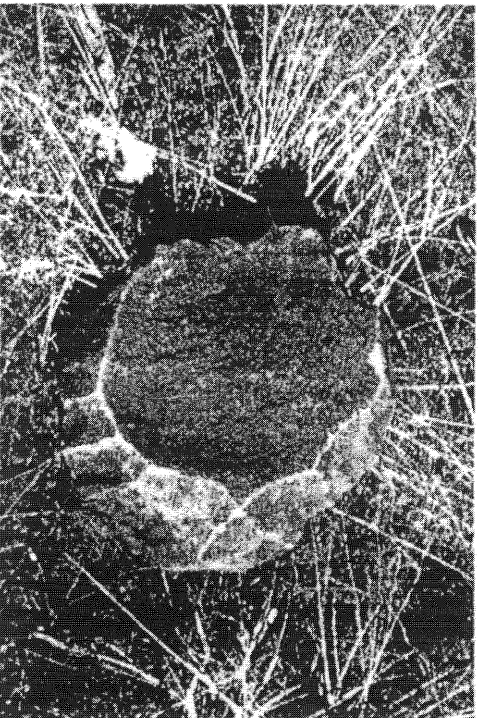


PHOTO 1: Typical Victoria West core found on Portion 4 of the farm Droogehout 442, ± 1 km south of quarry and crusher plant.



PHOTO 2: Small pan on the plain, ± 250 m west of the road to the quarry

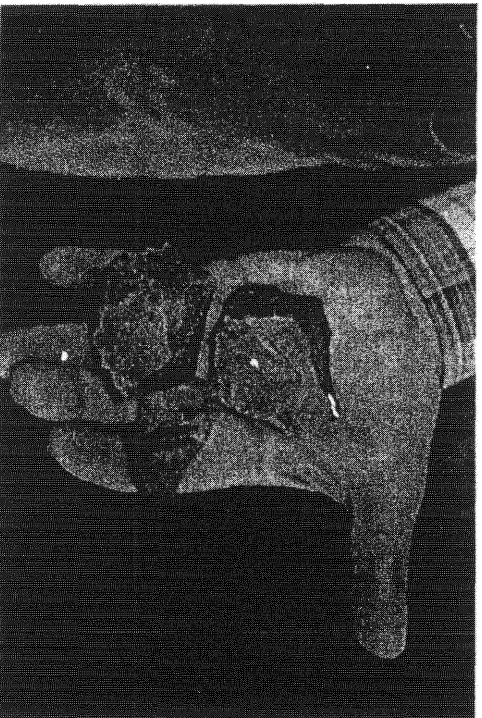


PHOTO 3: Fresh irregular flakes and small radically prepared cores found in the small pan illustrated in PHOTO 2. Note the piece of red jasper.



MINING RIGHT APPLICATION

ENVIRONMENTAL IMPACT ASSESSMENT

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REPORT

**PROPOSED MINING OF AGGREGATE FOR
CRUSHING PURPOSES ON THE FARM
DROOGEHOUT 442, UPINGTON, NORTHERN CAPE**

CLIENT: IDADA TRADING 5 (PTY) LTD

DME FILE REFERENCE: 30/5/1/1/2/060MR

JANUARY 2006

Compiled by:

C Benade

EKO-IMPAK cc

8 Conrad Street

New Park

KIMBERLEY

8301

R.S.A.

Tel./Fax: (053) 832-7510

Cell: 083-262-3683

E-mail: ekoimpak@intekom.co.za