

**PHASE 1 HERITAGE IMPACT ASSESSMENT REPORT ON THE
REMAINDER OF PORTION 9 (WOUTERSPAN), PORTION 14
(STOFDRAAI) AND PORTION 16 (A PORTION OF PORTION 9) OF
THE FARM LANYON VALE 376, ON THE ORANGE RIVER
DOWNSTREAM OF DOUGLAS, KAROO DISTRICT MUNICIPALITY,
NORTHERN CAPE PROVINCE.**

Peter B Beaumont

c/o Archaeology Department

McGregor Museum

PO Box 316

8300 Kimberley

Tel 053 - 842 0986 or 053 - 839 2700

Fax 053 - 842 1433

e-mail se@museumsnc.co.za

FOR ATTENTION:

Roelien Oosthuizen

Rockwell Diamonds

PO Box 251

8375 Barkly West

Tel 053 – 531 9023 or 084 208 9088

Fax 053 – 531 9007

e-mail roelien@rockwell.diamonds.com

24 September 2007

EXECUTIVE SUMMARY

The purpose of this study was to establish if any heritage sites were present on the Remainder of Portion 9 (Wouterspan), Portion 14 (Stofdraai), and Portion 16 (a portion of Portion 9) of the farm Lanyon Vale 376, on the northern flank of the Orange River over 50 km WSW of Douglas, in the Karoo District Municipality of the Northern Cape. A foot survey of over 13 hours on Tuesday 7 August and Thursday 20 September 2007 of the 3980 ha covered by these portions revealed that large areas were covered by a sparse lithic scatter largely ascribable to the ESA, but nowhere did I see any archaeological sites, palaeontological bones or graves older than 60 years. It is consequently considered that the examined terrain has no heritage significance, and that ongoing drilling there to determine the extent of Older Gravel reserves, as also the mining of viable portions for diamonds, will have no impact on the heritage resources of the Northern Cape.

BACKGROUND INFORMATION

Over the past century and more the diamond – bearing gravels along the lower Vaal River have been largely mined away, thereby forcing inveterate diggers to move increasingly to the middle Orange River, where there are still very extensive deposits, particularly of the Older Gravels (Fig. 1).

This study is part of an EMP upgrade that is being prepared by Roelien Oosthuizen of the Lanyon Vale 376 holdings of HC van Wyk Diamonds, acting on behalf of the holding company Rockwell Diamonds, headed by J Bristow, formerly of De Beers.

REGIONAL ARCHAEOLOGY

There is said to be a handaxe site on a gravel exposure bordering an Orange River meander not far upstream of Prieska, some 50 km to the SW, and handaxes were long ago recovered from the spring at Griquatown, a similar distance to the north (e.g. Goodwin & van Riet Lowe 1929).

PROPERTY DESCRIPTION

The three inspected portions of Lanyon Vale 376 flank the Orange River at a point over 50 km WSW of Douglas in the Karoo District Municipality of the Northern Cape (Figs. 2 – 6). The terrain, extensively covered by thickets of *Acacia mellifera*, slopes down to the river at ~935 m from higher ground to the north – west at over 1020 m, as shown on the appended 1:50 000 map 2923AC Kalkkrans (Fig. 2). Over 13 hours was spent walking over random portions of the properties on Tuesday 7 August and on Thursday 20 September 2007, in the company of Annemarie van Heerden (McGregor Museum) and George Stevens (Rockwell) on the first visit, but with Ms van Heerden only on the second, when conditions were more arduous (up to 35°C).

SUPERFICIAL GEOLOGY

Systematic sediment coring over much of southern Portion 9, by way of drill – holes

at 50 m intervals, in lines 100 m apart, shows that normal Karoo shale bedrock there is overlain by calcified Older Gravels, that are up to ~10 m deep in old buried channelways. Typically capping those fluvial sediments are a ~1 m accumulation of Rooikoppie deposits, comprising rounded clasts in an unconsolidated matrix of red sand, followed, in place, by red aeolian Hutton Sands, which were nowhere seen to be more than a metre thick. Further upslope, at the northern end of Portions 9 & 14, small exposures of dolomite were seen at the crest of low hills, indicating that bedrock there belonged to the southern extremities of the Ghaap Plateau Dolomite Formation (Kent 1980).

HERITAGE FINDINGS

My protracted search indicated an absence of artefacts in or on the Hutton Sands, but showed that hillside rubbles, as also calcrete and Rooikoppie surfaces, were all covered by a low density of lithics. These varied from fresh to lightly smoothed, and are largely based on banded ironstone and jaspillite (Fig. 7), albeit with a fair portion of quartzite in some places, perhaps due to availability differences. The most advanced forms seen, a single largish blade and occasional prepared cores (Fig. 8), are taken to suggest that much of this material predates the Fauresmith, with an inferred age of over 0.6 Myr (Beaumont & Vogel 2006). Some time was spent at two Rooikoppie exposures, one in the mining area, at 29° 19' 15.5" S, 23° 11' 06.9" E (Fig. 9), and the other further north, at 29° 18' 38.3" S, 23° 09' 47.5" E (Fig. 10). Both yielded fresh – lightly smoothed artefacts, mainly in the form of thick irregular flakes on quartzite and banded ironstone, but including, at the latter locality, a few rough prepared cores, all of which indicates a close similarity to the surface finds (Figs. 11 & 12). I also examined the riverbank vicinity and, at one spot, noted a few flakes, including a blade, of likely MSA ascription, on the surface of a beige overbank silt terrace ca. 8 m or more above water – level (Fig. 13).

CONCLUSIONS

The inspected areas were covered by sparse stone artefact scatters, but nowhere did I see any archaeological sites, palaeontological bones, or graves of any sort. My

clusion is therefore that envisaged further open cast mining on the specified
ions of Lanyon Vale 376 will have no impact on the heritage resources of the
thern Cape.

REFERENCES

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

dwain A.J.H. and van Riet Lowe C. 1929. The Stone Age cultures of South Africa.
. *S. Afr. Mus.* **27**, 1 – 289.

t, L.E. (ed.). 1980. Stratigraphy of South Africa. Part 1. *Geol. Survey of S. Afr.*
Handbook 8: 1 - 690.

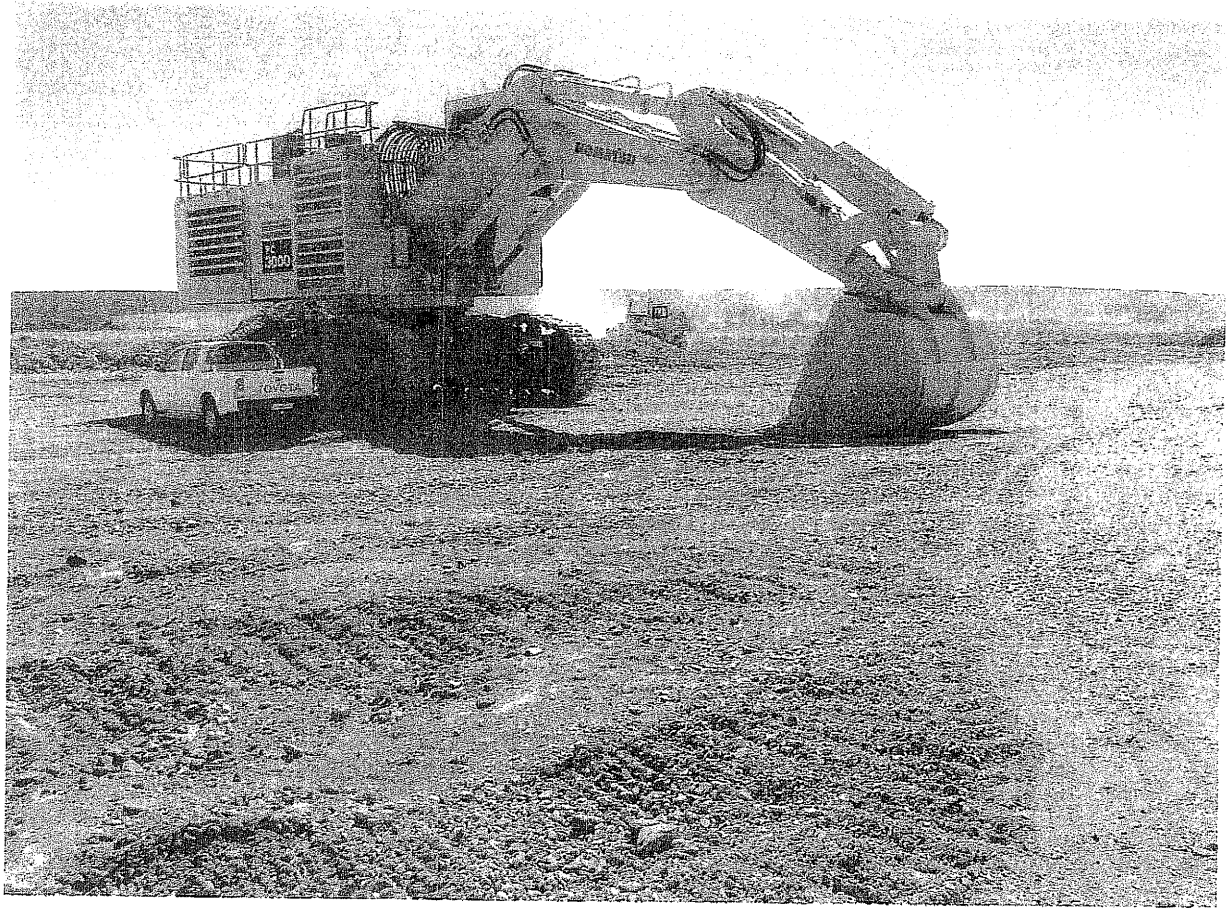


FIG 1. NEWLY-ASSEMBLED GIANT KOMATSU 'DIGGER'

H.C. VAN WYK DIAMONDS (PTY) LTD

SCALE 1 : 30 000

Northern Cape Province

Administrative District of Hay

PLAN PREPARED IN ACCORDANCE WITH
REGULATION 42

OF THE REGULATIONS PUBLISHED UNDER THE
MINING TITLES REGISTRATION ACT
(ACT 16 OF 1976)

DESCRIPTION OF LAND UNDER APPLICATION
FOR A

PROSPECTING RIGHT

AREA A, B, C, D, ORANGE RIVER, E AND A, REPRESENTS
1540.6412ha. SITUATED ON PORTION 14, OF THE FARM
LANYON VALE 378.

WGS 84 DATUM SURVEY SYSTEM WG 23

CO-ORDINATES:

A	Y-15 149.730	X+3 239 242.0DB
B	Y-19 474.803	X+3 238 047.202
C	Y-19 062.336	X+3 242 736.021
D	Y-19 489.508	X+3 243 332.174
E	Y-19 188.100	X+3 244 022.098

PLAN APPROVED: _____

REGIONAL MANAGER NORTHERN CAPE

DATE: _____

NAME OF APPLICANT: _____

SIGNED: _____

DATE: _____

NAME OF APPLICANT: M. G. BARTHOLOMEW

SIGNED: [Signature]

DATE: 22/11/05

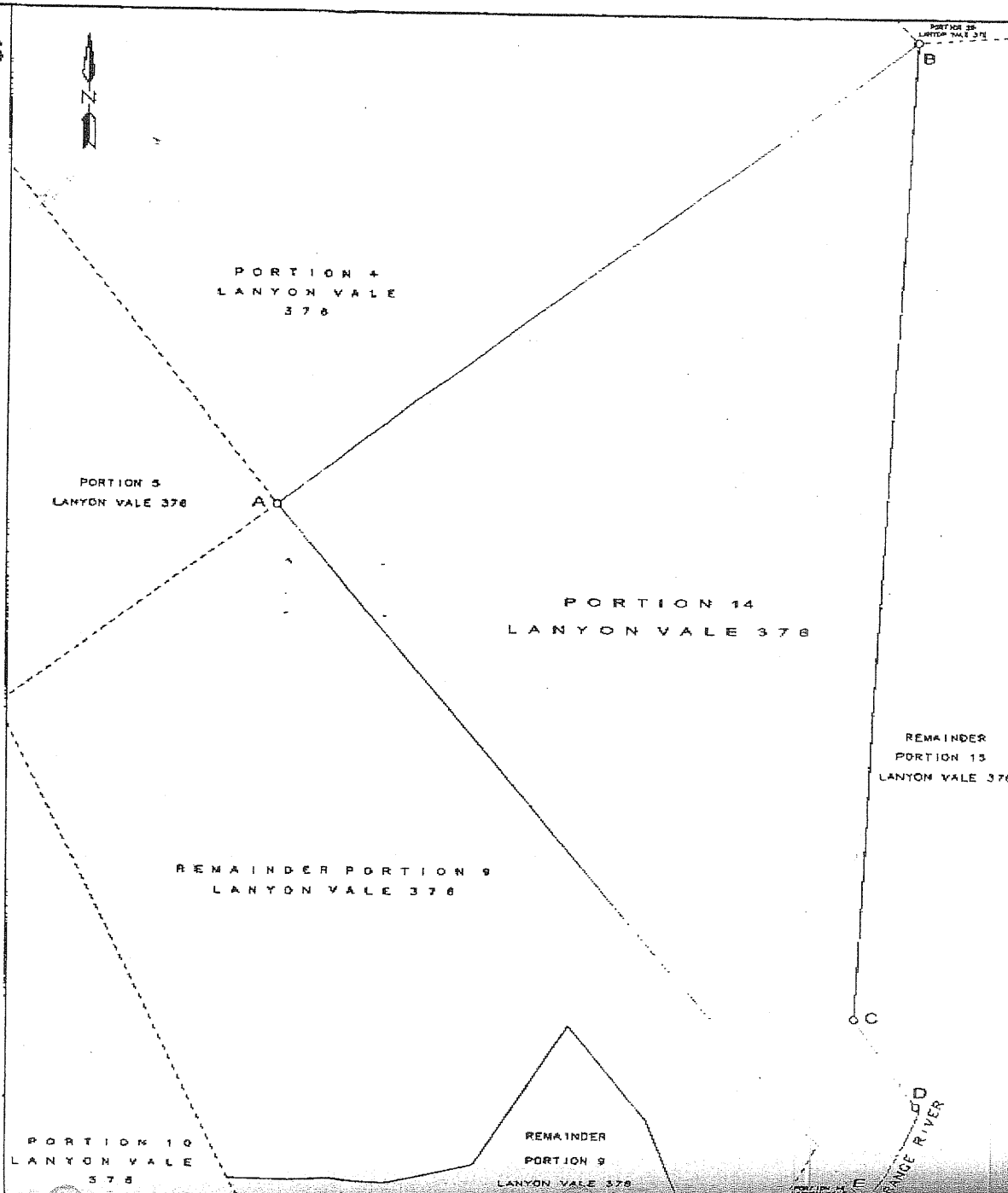
REGISTERED: _____

DATE: [Signature]

FOR THE: _____

DATE: _____

[Signature]



MPT NUMBER:

REMAINDER
PORTION 15
LANYON VALE 378

REMAINDER PORTION 9
LANYON VALE 378

PORTION 10
LANYON VALE
378

REMAINDER
PORTION 9
LANYON VALE 378

PORTION 4
LANYON VALE
378

PORTION 5
LANYON VALE 378

PORTION 14
LANYON VALE 378

PORTION 20
LANYON VALE 378

ORANGE RIVER

[Handwritten notes]

H.C. VAN WYK DIAMONDS (PTY) LTD

SCALE 1 : 25 000
Northern Cape Province

Administrative District of Hay

PLAN PREPARED IN ACCORDANCE WITH
REGULATION 42
OF THE REGULATIONS PUBLISHED UNDER THE
MINING TITLES REGISTRATION ACT
(ACT 16 OF 1976)

DESCRIPTION OF LAND UNDER APPLICATION
FOR A

PROSPECTING RIGHT

AREA A, B, C, D, E, F, G, H, I, J, K, L AND A,
REPRESENTS 1369,9544ha. SITUATED ON REMAINDER
PORTION 9, OF THE FARM LANYON VALE 376.

WGS 84 DATUM SURVEY SYSTEM WG 23

CO-ORDINATES:

A	Y-13	264.800	X+3	240	834.394
B	Y-15	149.715	X+3	239	242.040
C	Y-18	830.136	X+3	243	619.918
D	Y-18	108.091	X+3	245	197.788
E	Y-18	032.320	X+3	245	161.880
F	Y-17	760.000	X+3	244	775.000
G	Y-18	070.000	X+3	244	380.000
H	Y-17	670.000	X+3	243	450.000
I	Y-17	140.000	X+3	242	800.000
J	Y-16	510.000	X+3	243	770.000
K	Y-15	920.000	X+3	243	910.000
L	Y-14	826.161	X+3	243	878.180

PLAN APPROVED: _____

REGIONAL MANAGER NORTHERN CAPE

DATE: 22/11/05

NAME OF APPLICANT: _____

SIGNED: _____

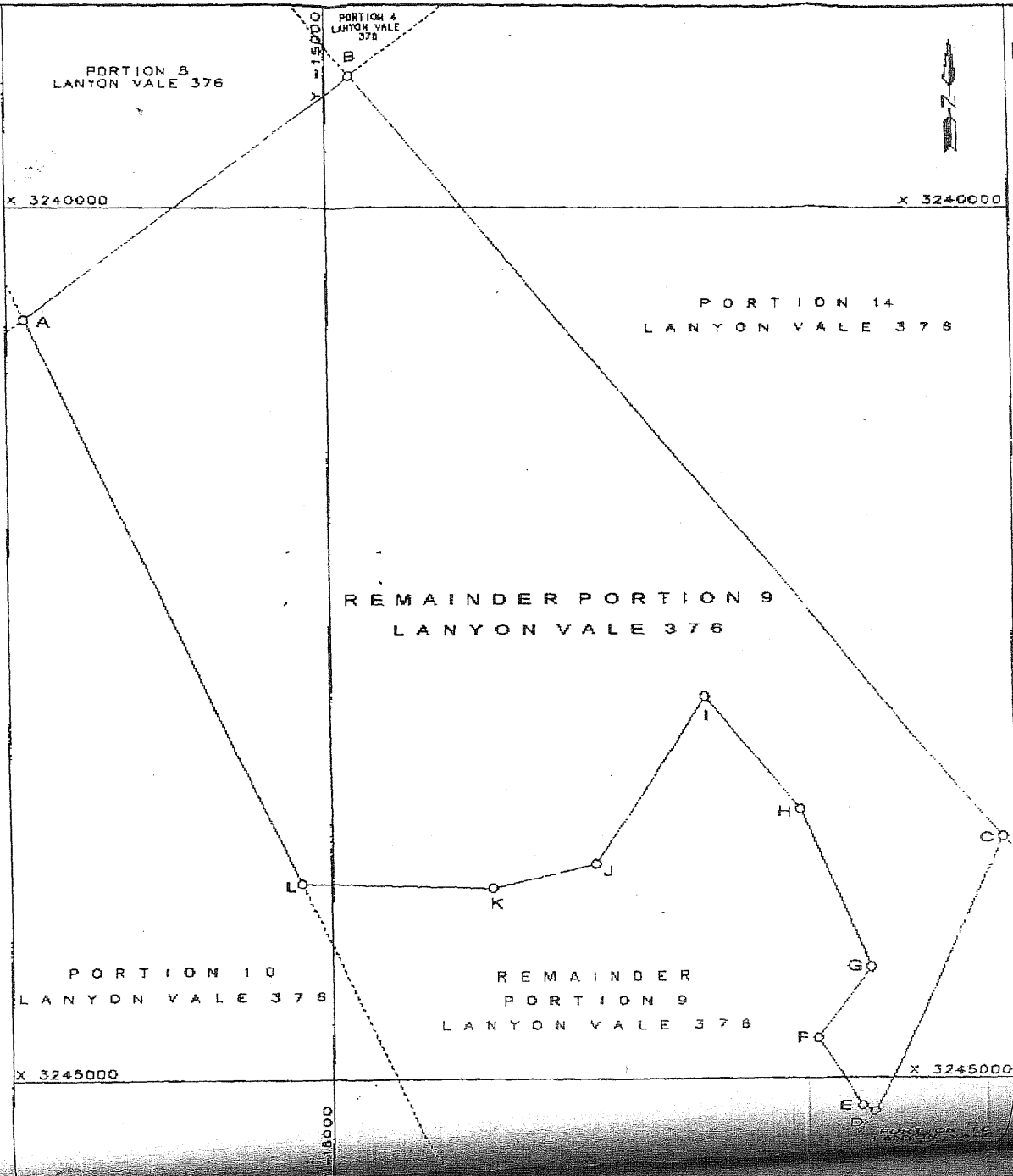
DATE: _____

NAME OF APPLICANT: H.C. BARTHOLOMEW

SIGNED: [Signature]

DATE: 22/11/05

[Signature]



MPT NUMBER:

OKAPI DIAMONDS (PTY) LTD

SCALE 1 : 20 000

Northern Cape Province
Administrative District of Hay

PLAN PREPARED IN ACCORDANCE WITH
REGULATION 42

OF THE REGULATIONS PUBLISHED UNDER THE
MINING TITLES REGISTRATION ACT
(ACT 16 OF 1976)

DESCRIPTION OF LAND UNDER APPLICATION
FOR A
PROSPECTING RIGHT

THE FIGURE L, K, J, I, H, G, F, E, D, D1, D2 AND L,
REPRESENTS 779.0389ha.
SITUATED ON A PORTION OF REMAINDER PORTION 9 OF
THE FARM LANYON VALE 376.

WGS 84 DATUM SURVEY SYSTEM WG 23

CO-ORDINATES:

L	Y-14 826 181	X+3 243 878.180
K	Y-15 920.000	X+3 243 910.000
J	Y-16 510 000	X+3 243 770 000
I	Y-17 140.000	X+3 242 800.000
H	Y-17 670.000	X+3 243 450.000
G	Y-18 070.000	X+3 244 380.000
F	Y-17 760.000	X+3 244 775 000
E	Y-18 032.320	X+3 245 181.860
D	Y-18 108.091	X+3 245 197.788
D'	Y-17 433.979	X+3 246 670.871
D2	Y-16 639 375	X+3 247 643 952

PLAN APPROVED: _____

REGIONAL MANAGER NORTHERN CAPE

DATE _____

NAME OF APPLICANT: _____

SIGNED: _____

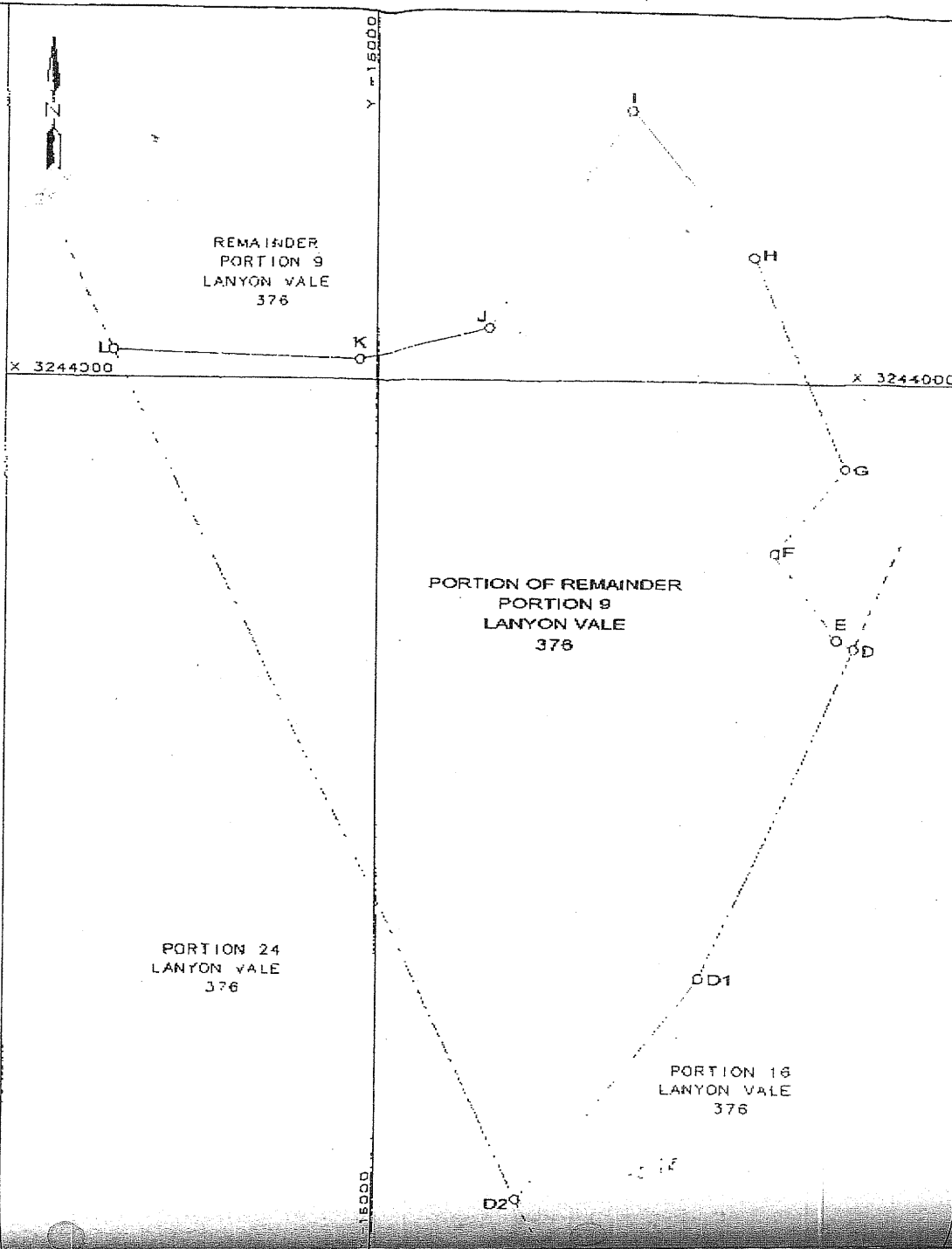
DATE _____

NAME OF APPLICANT: _____

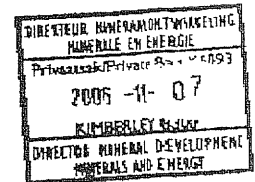
SIGNED: _____

DATE _____

Adub...



MPT NUMBER:



5
715 5

**FARHOM MINING & CONSTRUCTION
(PTY) LTD**

SCALE 1 : 50 000

Northern Cape Province

Administrative District Hay

PLAN PREPARED IN ACCORDANCE WITH

REGULATION 42

OF THE REGULATIONS PUBLISHED UNDER
THE MINING TITLES REGISTRATION ACT
(ACT 16 OF 1967)

DESCRIPTION OF LAND UNDER APPLICATION
FOR A

MINING PERMIT

THE AREA LETTERED :
A , B, C, D, E, F, G, H, J

REPRESENTS AN AREA OF LAND
IN EXTENT 188,7789 Hectares
PORTION 16 OF A PORTION
OF PORTION 9 OF THE
FARM LANYON VALE No. 376

WGS 84 DATUM

SURVEY SYSTEM WG 23

CO-ORDINATES :

Name	Y	X
A	-18543 77	3244248 00
B	-18829 20	3244438 79
C	-17845 25	3247112 47
D	-16904 23	3247988 39
E	-16647 42	3247662 00
F	-16684 37	3247651 63
G	-18584 14	3247705 11
H	-17506 40	3248701 08
J	-17443 43	3248650 13

PLAN APPROVED :

REGIONAL MANAGER NORTHERN CAPE
DATE :

NAME OF APPLICANT :

SIGNED :
DATE :

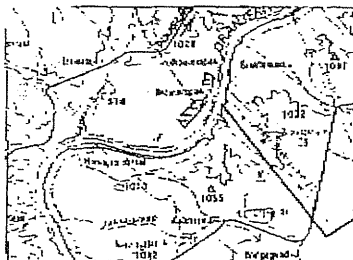
NAME OF APPLICANT :

SIGNED :
DATE :

DRAWN BY : J. Grivalnis
SURVEYED BY : J. Grivalnis
Registration No : 0235 Professional Land Surveyor

SIGNED :
DATE : 13. 06. 2005

**LOCALITY SKETCH
SCALE 1 : 250 000**



MPT NUMBER :

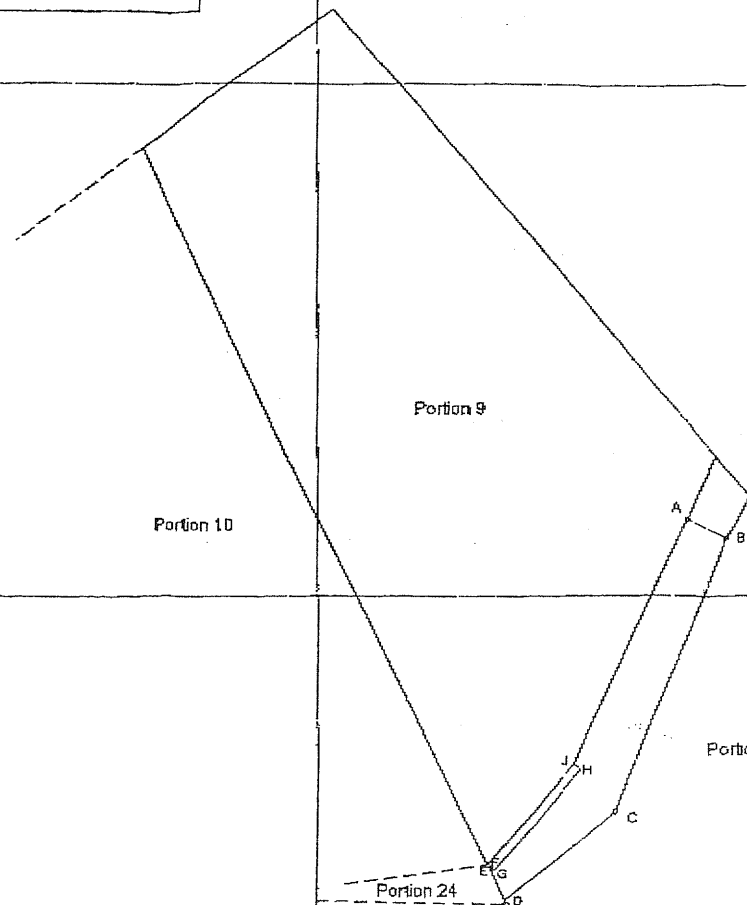
+ 3240000 X

+ 3245000 X

000 Y

000 Y

000 Y



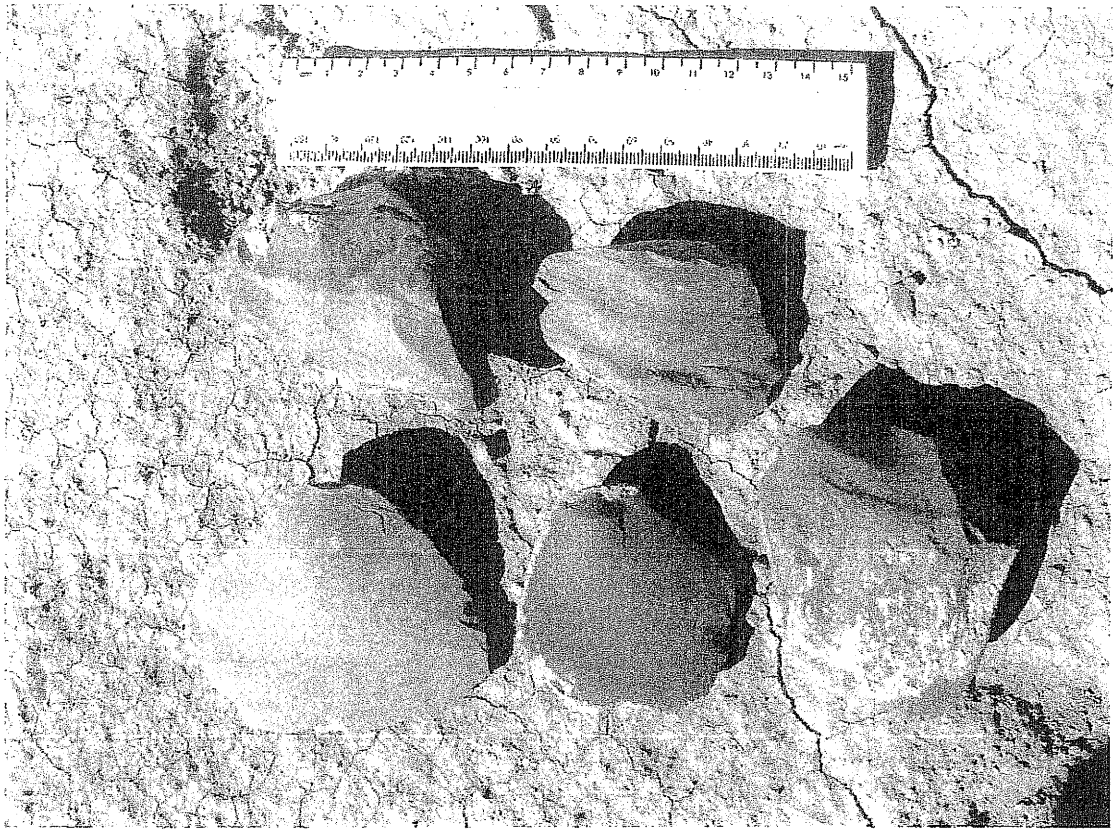


FIG 7. SAMPLE FROM AREA 1 (FIG 2)

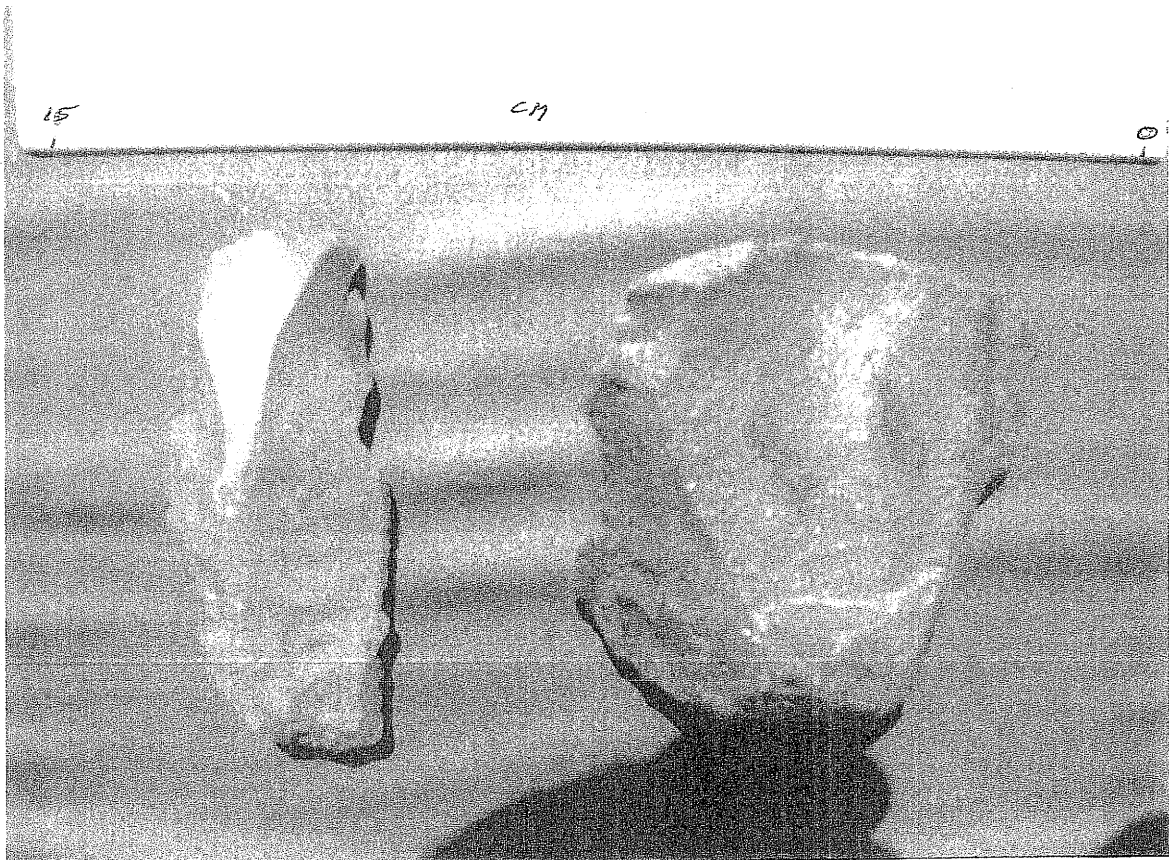


FIG 8 BLADE + PREPARED CORE

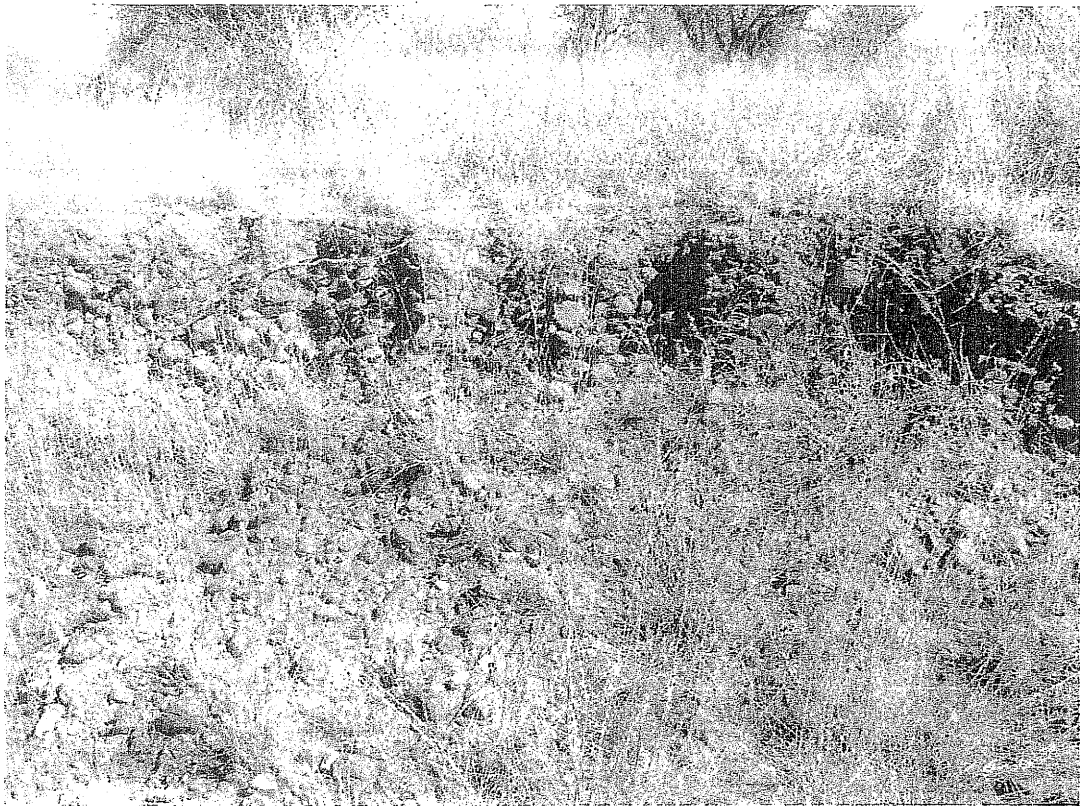


FIG 9. ROOIKOPPIE SECTION, AREA 2 (FIG 2)



FIG 10. ROOIKOPPIE EXPOSURE, AREA 3 (FIG 2)

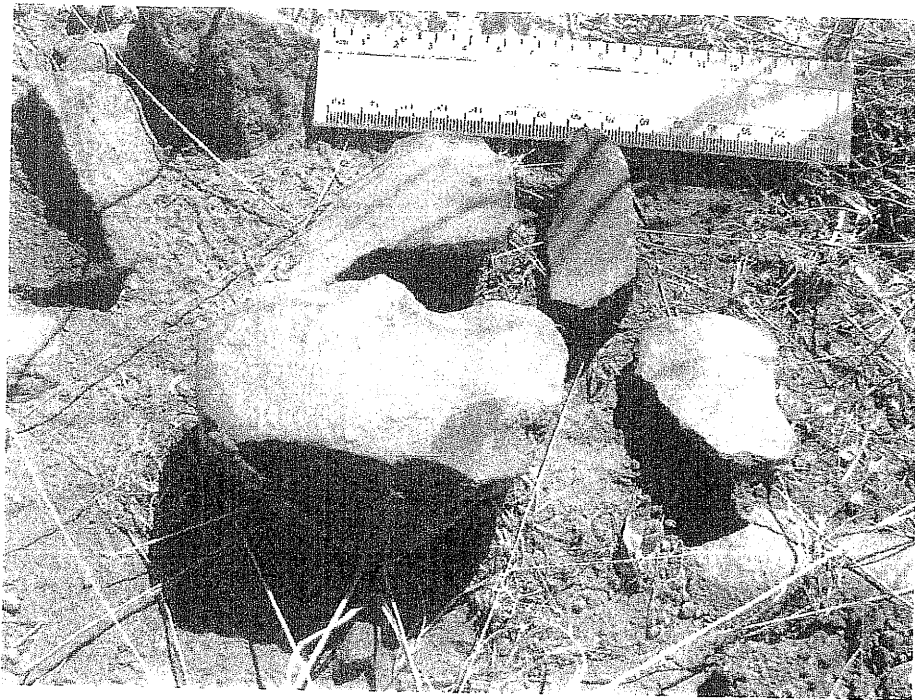


FIG 11: LITHIC SAMPLE
FROM AREA 2 (FIG 2)

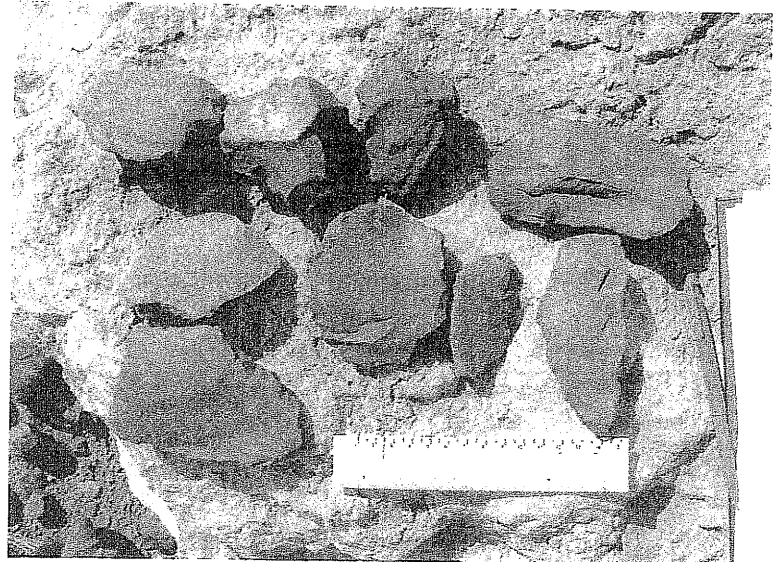


FIG 12: LITHIC SAMPLE
FROM AREA 3 (FIG 2)

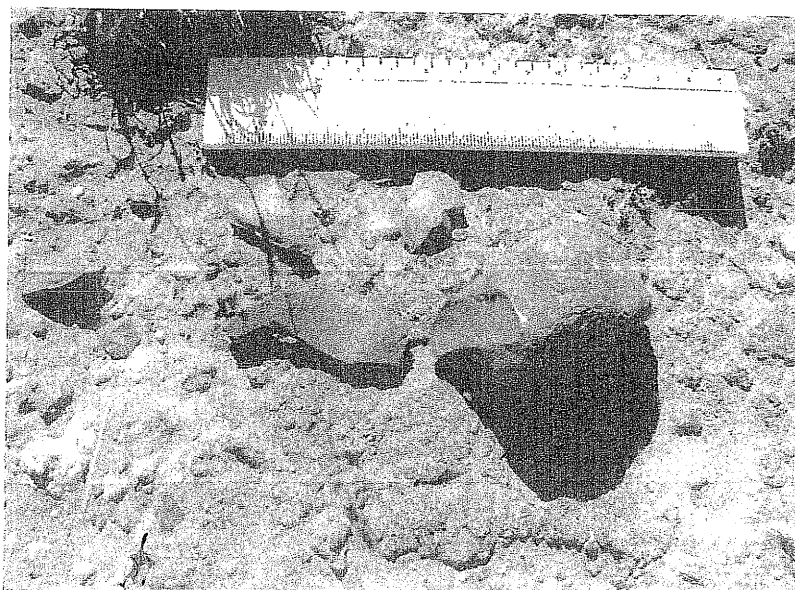


FIG 13. MSA? ARTEFACTS
FROM AREA 4 (FIG 2)