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**ARCHAEOLOGICAL ASSESSMENT FOR THE RHINO  
ANDALUSITE MINE**

A Phase 1 report prepared for Rhino Minerals

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## INTRODUCTION

The Rhino Andalusite Mine, a division of Rhino Minerals, intends to explore for andalusite on the farms Buffelsfontein 350 KQ and Tygerkloof 354 KQ near Thabazimbi in the Limpopo Province. The exploration involves clearing a road and drilling, in order to follow the ore body along the sides of a small range of hills.

Neighbours of the mine called attention to the existence of a possible 'ancient working' in the area and a cave that could have archaeological interest. As a result, Rhino Minerals commissioned Archaeological Resources Management (ARM) to examine the area. In keeping with various Minerals, Environmental and Heritage legislation, ARM was also asked to examine the area designated for bush clearance and drilling.

## METHOD

One ARM staff visited the project area on 22 November 2004. Mr. K Makotore from the mine acted as guide. Sites were recorded with a hand-held GPS instrument and then transferred to the 1 : 50 000 maps 2427 CA Kaaldraai and 2427 CB Thabazimbi.

Site significance was determined by standard criteria, including integrity (primary vs. secondary deposit), depth of deposit, number and variety of features, uniqueness and the potential to answer present research questions. Sites with no significance do not require further attention, low to medium significance may require mitigation, while sites with high significance should not be disturbed at all.

## RESULTS

### *Ancient Working*

**Site 1**, the 'ancient working', stretches from 24 42 42.9S 27 16 12.4E to 24 42 39.3S 27 15 56.3E (Figure 1). It consists of a long open trench and an under ground stope with at least four ventilation shafts about 20m apart, sealed off in recent times with metal grids (Figure 2). The trench and stope are unquestionably the result of Pre-Colonial mining. The miners may have been after tin, but further investigation is necessary to determine the type of ore and date of mining.

These workings appear largely undisturbed. Since the other known ancient tin mines have been largely destroyed, this mine is virtually unique. The site therefore has high significance.

### *Cave*

**Site 2**, the cave (24 43 12.4S 27 14 12E), is located near the new power line. It occurs in a tufa deposit on the steep slope of a low hill. Recent flowstone covers most walls, and small stalagmites hang from the drip line. The cave itself is about 10m wide and 4m deep, with a flat floor. A few potsherds lie on the floor. Stone artefacts are not obvious, but a Stone Age deposit could be covered by flowstone. Some walls appear to retain the vestiges of red ochre painting, and there is one crude yellow figure. Presumably, the cave had ritual significance to early black farmers in the area.

Because of the power line, the cave is well away from the mining zone, and mining activities do not pose a threat.

### *Road and Drill Zone*

The remains of a Late Iron Age settlement, **Site 3**, occur at the junction of Mining Sections 8 and 9 (24 42 56.1S 27 15 18.6E). The remains include upper and lower grindstones and at least four, burnt daga (mud and dung mixture) structures, two of which were living huts. The pottery from these structures belongs to the *Icon facies* of the Moloko group (Figure 3), the style of pottery made by Sotho-Tswana people. *Icon*

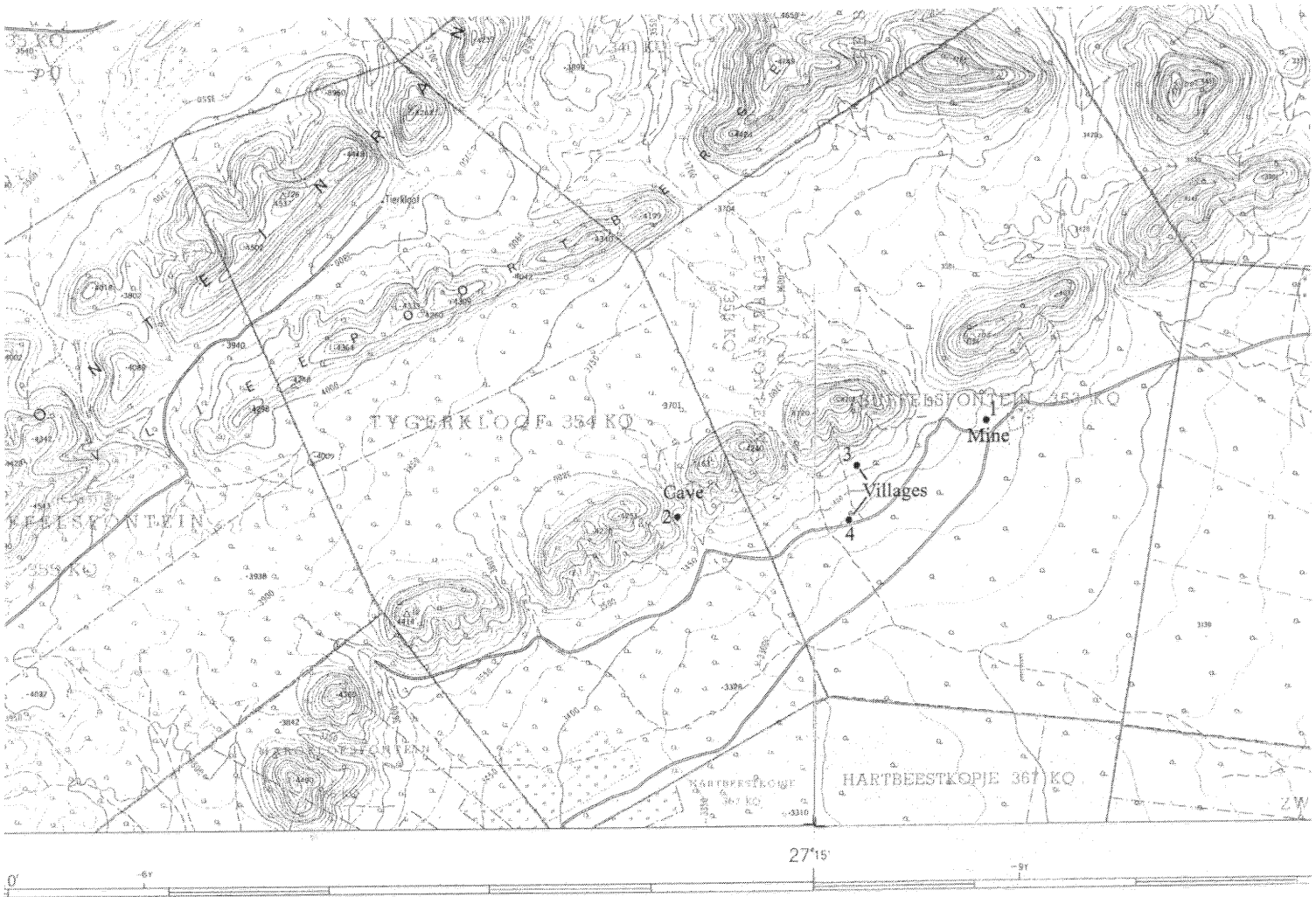


Figure 1. Archaeological sites recorded during the assessment on maps 2427CA and 2427CB.

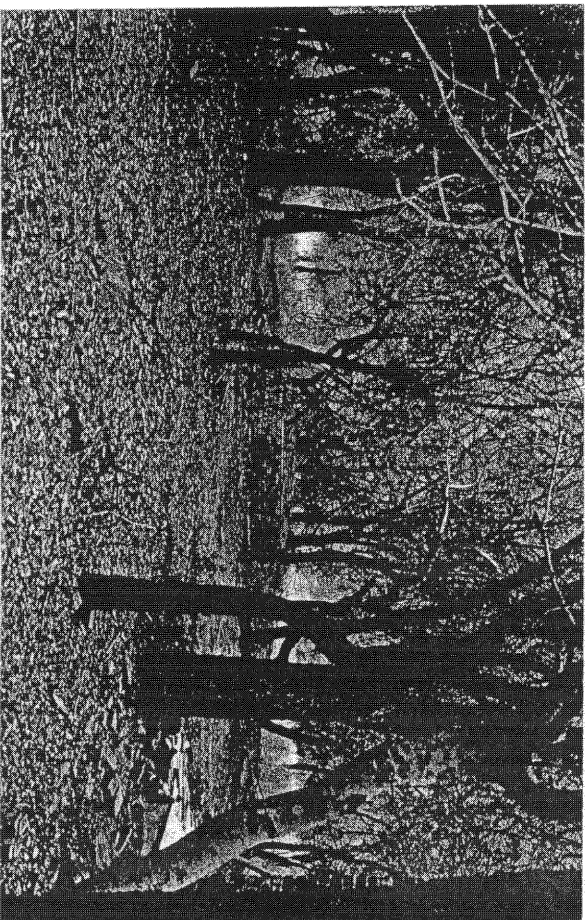
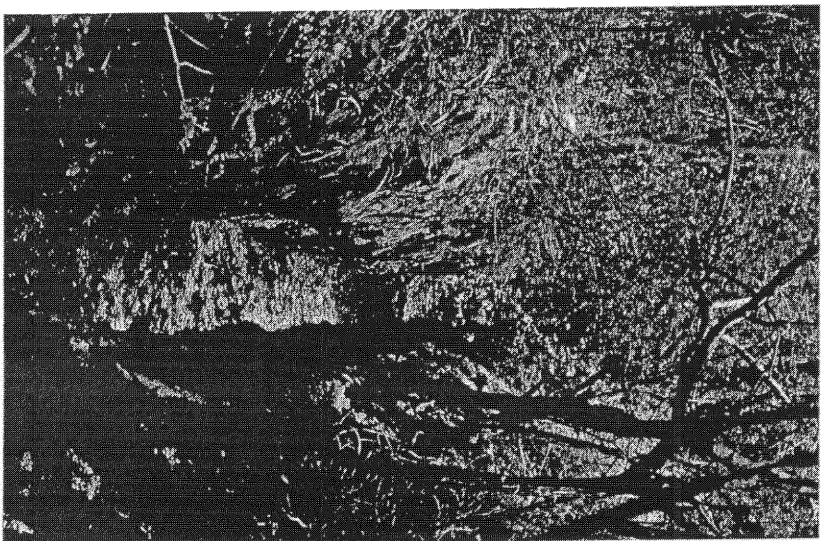


Figure 2. Site 1, ancient working. Open trench (above), ventilation shaft protected by bricks and grid (below).

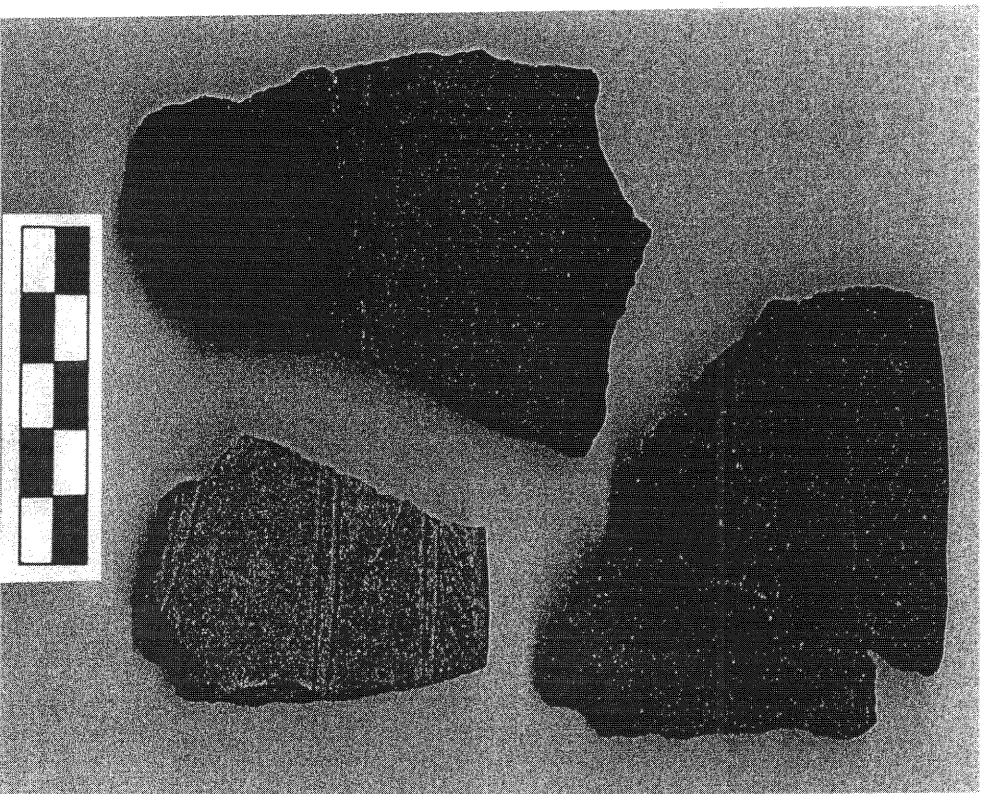


Figure 3. *Ieon* pottery from site 3.

pottery dates to between AD 1300 and 1500, and represents the first movement of Sotho-Tswana into this area.

The variety of features and good preservation gives Site 3 medium significance.

A second Moloko settlement (24 43 17.7S 27 15 12.8E), Site 4, lies exposed in a farm road a few hundred metres below the first village. The pottery appears to be the same. Pottery, stone and daga are scattered along the road for about 50m. A small piece of slag from iron smelting is also associated.

Site 4 stands outside the project area and is not in further danger.

## RECOMMENDATIONS

The remains of the Moloko villages emphasize the need to examine the rest of the proposed mining area before work begins. Most of this area, however, is covered in thick stands of *Dichrostachys*, a particularly difficult bush to penetrate. Consequently, the drilling programme should proceed first so that the new road system can make a representative sample of the mining zone available for archaeological assessment.

Depending on the results, the first Moloko village, Site 3, may require mitigation. If it is the best example, some of the huts should be excavated to provide architectural details, ceramic and other artefact samples and charcoal for radiocarbon dating. The best examples of other time periods should receive the same treatment.

Mining does not endanger the cave, but visitors pose a threat to the flowstone. Perhaps the cave should be fenced and a small notice board erected warning visitors about the fragile nature of the formation.

The ancient working is worthy of official recognition as a heritage site. Although it lies outside the mining zone, it nevertheless needs protection against accidental damage and other unforeseen dangers. A fence is an appropriate measure. Furthermore, the impact of blasting on the underground stope needs to be monitored by specialists.

If these recommendations are accepted, there is no archaeological reason why the mining project should not continue.