

SECOND PHASE PALAEOLOGICAL REPORT OF THE EXTENSION TO THE  
LANDFILL SITE AT SENEKAL, FREE STATE

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### **Executive Summary**

The purpose of the work was an emergency rescue operation. A previous environmental impact assessment of the landfill site outside Senekal, Free State had not been properly completed and numerous tree fossils were thus destroyed during excavation of the landfill site or removed by members of the public. Once the situation was known, an emergency rescue operation was conducted to remove all fossils from the site as quickly as possible. The fossils were repositied in the National Museum, Karoo Palaeontology fossil collection in Bloemfontein.

### **Background Information on the Project**

An Environmental Impact Assessment was conducted at the proposed site by Cobus Dreyer Pr Archaeologist/Heritage Specialist on 14 June 2006. The area was examined and Cobus Dreyer found that no archaeological or cultural remains were found in the proposed area of development. A palaeontological assessment was not conducted. Cobus Dreyer recommended that the proposed development proceed. During November 2006, a Senekal resident informed me that fossils were being removed and/or destroyed at the landfill site. I contacted members of SAHRA and I accompanied them to the site to examine the situation. Numerous fragments of fossilized trees were found at the site.

### **Name and Geographical Location of the Site**

Located east of the town Senekal on the right of an entrance road to the industrial area, at a turn off from the N5 road to Paul Roux, Senekal District, Free State Province.

GPS co-ordinates:

East 28°19'25"S 27 38'41"E

West 28°19'19"S 27 38'32"E

South 28°19'24"S 27 38'30"E

(co-ordinates taken from original report; see original report for location maps)

### **Description of the Work Done**

This was purely a rescue operation to retrieve the broken remains of the fossilized trees from the landfill site. Three visits were made to the site and all visible fossils were retrieved. The fossils have been repositied in the National Museum's Karoo Palaeontology fossil collection in Bloemfontein.

### **Description of Artefacts, Faunal, Botanical, Other Remains / or Fossils**

The remains consist of fossilized trees. All remains are fragmentary due to the disturbed nature of the site. Fragments range from 5 cm in length to approximately 1.5 m. These fossils are from the *Cynognathus* Assemblage Zone, Beaufort Group, Karoo Supergroup, South Africa and are approximately 245 million years old.

### **Recommendations and Conclusions**

As all visible fossils were removed and the area is disturbed, no recommendations for the conservation of this site are suggested. However, it is my professional opinion that this disaster could have been prevented if a proper Environmental Impact Assessment had been conducted. As so many fossils have now been lost to science, it is my recommendation that Cobus Dreyer NOT be used for any further Environmental Impact Assessments.