

Expansion of the Discard MRD and the Met Grade Product Stockpile within the existing mining right area of the Dwarsrivier Chrome Mine (Pty) Ltd, near Steelpoort, Limpopo Province: Protocol for palaeontological finds.

The proposed impact area is underlain by palaeontologically insignificant intrusive igneous rocks (see Map, blue area) and there is also little chance of finding fossil material within intact superficial (geologically recent) overburden, mainly because of a lack of suitable alluvium in the area. However, any development occurring within 50 m of a river bank may affect suitably developed overbank sediments (superficial alluvial deposits) with a low to moderate likelihood that it could yield Quaternary vertebrate fossil remains. If, in the event that localized fossil material is discovered exposed or eroding out of intact superficial overburden during the development phase (**Fig. 1**), it will in all probability resemble modern-looking, but more or less lithified animal bones and teeth and it will most likely be those belonging to bovids (Bovidae: the biological family of ruminant mammals that includes wildebeest, buffalo, antelopes, etc.) (**Fig. 2 & 3**).

In the unlikely event of fossil discovery within previously undisturbed Quaternary overburden, a professional palaeontologist must be called in immediately to confirm and record the finds. In the meantime, *ex situ* remains must be wrapped in paper towels or heavy duty tin foil and stored in a safe place. The material should not be washed or cleaned in any way. *In situ* material must be kept in place and protected from further damage by covering it with light but rigid object like a box, bucket or metal sheet until further confirmation by the palaeontologist.

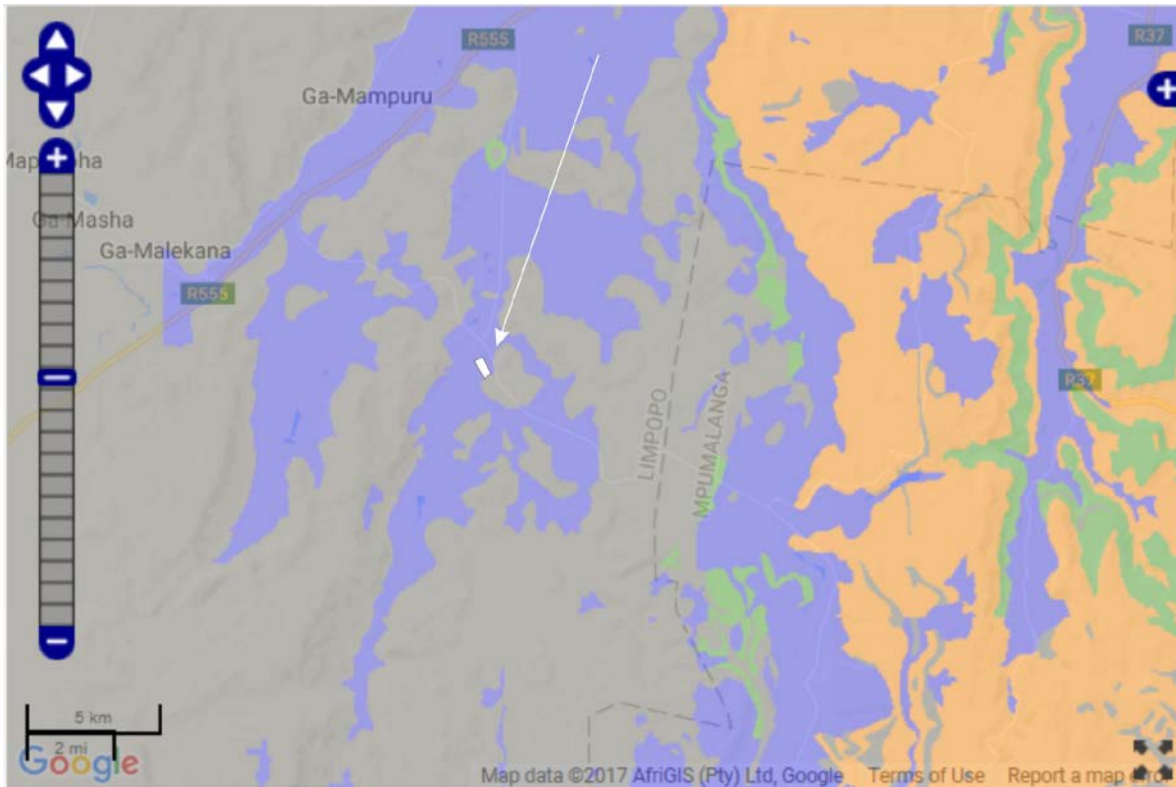
DECLARATION OF INDEPENDENCE

I, Lloyd Rossouw, declare that I act as an independent specialist consultant. I do not have or will not have any financial interest in the undertaking of the activity other than remuneration for work as stipulated in the terms of reference. I have no interest in secondary or downstream developments as a result of the authorization of this project and have no conflicting interests in the undertaking of the activity.



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SAHRIS PalaeoSensitivity Map 2017 (<http://www.sahra.org.za/sahris/map/palaeo>).

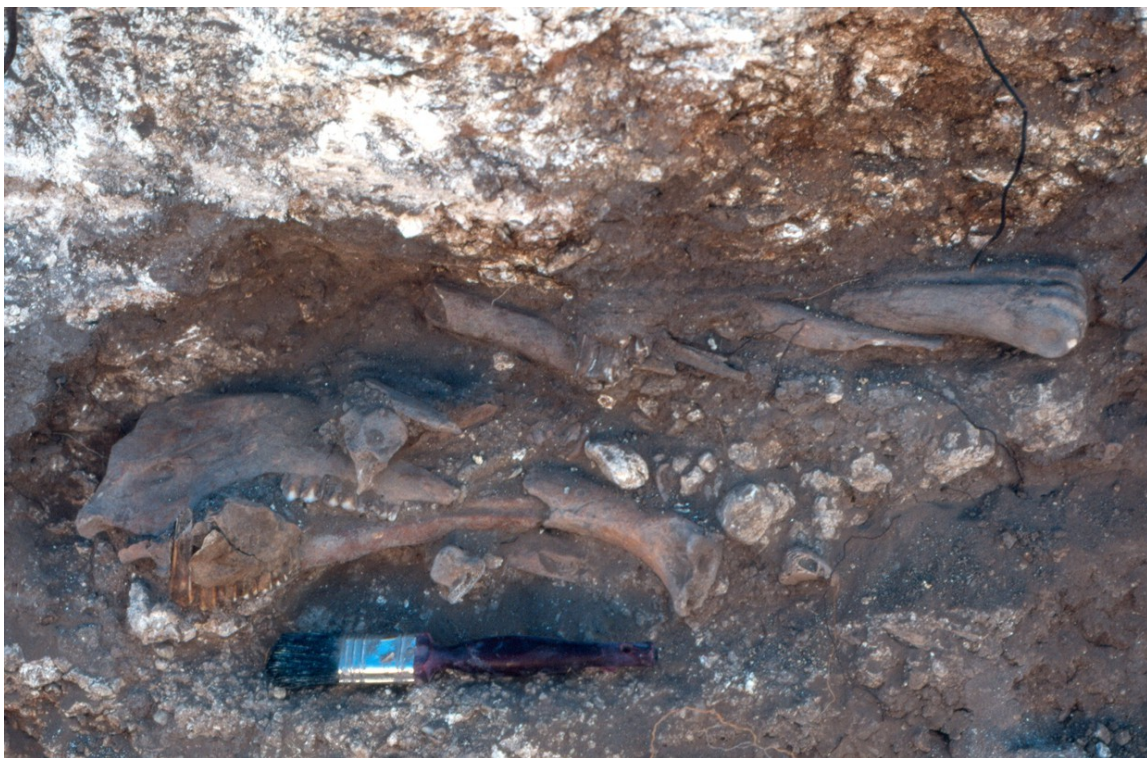


Figure 1. Example of intact bovid skeletal remains exposed within Quaternary overbank deposits (alluvium) from the Vaal River.



Figure 2. Side view (buccal view) of bovid lower dentition removed from jaw bone.



Figure 3. Example of post-cranial bovid skeletal elements including from left to right: femur, humerus, radius, tibia, scapula and vertebrae (x 3).