

Our Ref: 8090

Enquiries: Ragna Redelstorff
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CaseID: 8090

Date: Thursday July 16, 2015

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Letter

In terms of Section of the National Heritage Resources Act (Act 25 of 1999)

Attention: Dr Julien Benoit
University of the Witwatersrand
Evolutionary Studies Institute (ESI); School of Geosciences, University of the Witwatersrand, Braamfontein,
2050, Johannesburg, South Africa

The objective is to bring the four skulls of mammal-like reptiles (Therapsida) to the highly powerful and accurate synchrotron scanning facility in Grenoble (France) in order to CT-scan them and obtain the best pictures of the inside of these specimens. The ultimate aim is to produce a 3D digital model of their fossil brain (endocranial cast) and to measure, for the first time, the size of the brain in our therapsid ancestors with a software (Aviso 8.0 VSG software). The reason I need a permit is because the scan will take place at the European Synchrotron Radiation Facility (ESRF), 71 Avenue des Martyrs, 38000 Grenoble, France. This project was approved by the scientific committee of the ESRF, and the scan is scheduled in October 2015.

Drs. Bruce Rubidge and Julien Benoit are borrowing cranial material of rare specimens of *Moschops capensis* (Dinocephalia) (AM4550), *Lemurosaurus* sp. (Biarmosuchia) (NMQR1702), nov. sp. (Biarmosuchia) (SAM-PK-11112) and *Hipposaurus* (Biarmosuchia) (WB123) from Albany Museum Grahamstown, National Museum Bloemfontein, Iziko Museum Cape Town and Council for Geosciences Pretoria, respectively. The purpose of the temporary export is to analyse the brain size in therapsids using high-resolution Synchrotron scanning.

Dear Drs. B. Rubidge and J. Benoit,

Thank you for your application to export 4 skulls from different South African collection for scanning and rendering an endocranial cast, to be undertaken at the ESRF (European Synchrotron Radiation Facility), Grenoble, France. SAHRA has reviewed the application and has decided to approve it.

We wish you every success with this project.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully



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an agency of the
Department of Arts and Culture

Ragna Redelstorff
Heritage Officer
South African Heritage Resources Agency

Colette Scheermeyer
SAHRA Head Archaeologist
South African Heritage Resources Agency

ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/314909>

Terms & Conditions:

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
3. SAHRA reserves the right to request additional information as required.



The South African Heritage Resources Agency

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