

35TH INTERNATIONAL GEOLOGICAL CONGRESS

27 AUGUST - 4 SEPTEMBER 2016 | CAPE TOWN, SOUTH AFRICA



PRE 7

Eastern Limb of the Bushveld Complex

Field Trip Leader: Roger Scoon



The 2.055 Ga–old Bushveld Complex is situated in the north-eastern part of South Africa. Three distinct groups of rocks make up the Complex but this excursion is directed primarily at the layered ultramafic-mafic rocks. We will, however, briefly examine the roof rocks, the older felsite and younger granite and granophyre, as well as the floor rocks, metasediments of the Transvaal Supergroup and Bushveld sills. The eastern limb reveals spectacular outcrops which are ascribed to the uplift and subsequent erosion of the interior plateau of southern Africa.

The excursion will encompass the five zones into which the layered sequence is subdivided. The Critical Zone is emphasized as this is where layering is most intricate and where many of the mineralized reefs occur. Underground and surface visits to chromite and platinum mines are envisaged, as well as historical declines on the Merensky Reef close to the discovery site. Field traverses of the chromitite layers are a highlight, as is Dwarsrivier where layers of chromitite and anorthosite are superbly exposed. The uniquely zoned Driekop and Onverwacht pipes and a discordant body of iron-rich ultramafic pegmatite complete some of the unusual features of the Critical Zone.

Traverses of the Lower Zone to examine layers of dunite, harzburgite and bronzitites, as well as of layers of Ti-magnetite, anorthosite, and ferrogabbro in the Upper Zone are also included, as is an opportunity to examine some of the more discrete layering of the Main Zone.

Field Trip Leader: Roger Scoon

Start: Johannesburg

End: Johannesburg

Dates: 6 days, Monday 22nd to Saturday 27th August 2016

ITINERARY

DATE	ROUTING
22 – 27 August 2016	Gethlane Lodge

Meal Key

BB Bed and Breakfast

22-Aug-16 Monday	Johannesburg – Rooiberg Felsites – Granophyre roof rocks – UG1 National Monument
	Overland Touring by Springbok Atlas Charter in 1 or 2 x 32 seater vehicle Lunch (Clients arriving off flight) - EXCLUDED Dinner (excluding beverages)
In : 22-Aug-16 Out : 27-Aug-16	Overnight at Gethlane Lodge on BB Standard Room basis (or similar)
23-Aug-16 Tuesday	Traverse of lower zone and critical zone (LG4 + LG6) – Olifants River
	Overland Touring by Springbok Atlas Charter in 1 or 2 x 32 seater vehicle Lunch en-route (excluding beverages) Dinner (excluding beverages)

24-Aug-16	Wednesday	Tweefontein open pit and field traverse – Footwall sills – Main Magnetite layer
		Overland Touring by Springbok Atlas Charter in 1 or 2 x 32 seater vehicle <i>Lunch en-route (excluding beverages)</i> <i>Dinner (excluding beverages)</i>
25-Aug-16	Thursday	Underground visit Madikwe Mine (UG2) – Onverwacht pipe
		Overland Touring by Springbok Atlas Charter in 1 or 2 x 32 seater vehicle <i>Lunch en-route (excluding beverages)</i> <i>Dinner (excluding beverages)</i>
26-Aug-16	Friday	Mooihoek pipe – Historical declines and field traverse of Merensky – Marula mine – drill core sections of critical and main zones
		Overland Touring by Springbok Atlas Charter in 1 or 2 x 32 seater vehicle <i>Lunch en-route (excluding beverages)</i> <i>Dinner (excluding beverages)</i>
27-Aug-16	Saturday	Black granite quarry – Belfast - Johannesburg
		Overland Touring by Springbok Atlas Charter in 1 or 2 x 32 seater vehicle <i>Lunch en-route (excluding beverages)</i>

Vehicle Size: (Vehicle size is subject to road conditions allowing)

Based on : 18 people travelling – 1 x 32 seater vehicle and 36 people travelling – 2 x 32 seater vehicles

Vehicle costs are based on an average of 400km per day.

All excursions/sightseeing listed are time and weather permitting on the day of travel.

Minimum Persons 17

Maximum Persons 35

COST INCLUDES:

- 5 nights' accommodation at Gethlane Lodge on a BB basis
- 5 x lunches (excluding beverages)
- 5 x dinners (excluding beverages)
- Transport in private touring vehicles
- Local English speaking driver on all transfers
- Driver meals & accommodation where necessary

COST EXCLUDES

- All airfares, air reservations and airport taxes
- All other accommodation
- Entrance fees, conservation fees and park fees en-route
- All other meals
- All other transport
- All sightseeing
- Any other services not mentioned above