

URBD 40220 GEOLOGY
DIRT BIKERS GUIDE TO ROSEBUD
STRATIGRAPHY, BENNETT, 8/21/92

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The Dirt Biker's Guide to ROSEBUD STRATIGRAPHY

(yet another prototype)

QUATERNARY (0-6 ma. ?)	Qal	alluvial deposits
	Qc	colluvial deposits
	Qlb	lake bed deposits
	Qls	land side deposits
	Qpg	pediment gravel deposits
	Qog	older gravel deposits

PERIOD OF EXTENSION AND REGIONAL TILTING, DEVELOPMENT OF THE BLACK ROCK STRUCTURAL BASIN, CONTINUED EROSION OF THE ANTELOPE AND KAMMA MOUNTAINS, IN-FILL OF THE BLACK ROCK BASIN, AND LIKELY PERIOD DURING WHICH ROSEBUD, OSCAR, (SULPHUR?), SAWTOOTH KNOB, AND LANTERN WERE ALTERED AND MINERALIZED.

LATE TERTIARY (6-12 ma ?)	Trd	Rhyolite dikes which cut Camel conglomerate at Sulphur (Wallace = Thd).
	Ths	Hot springs sinter deposits
	Teb	Eruptive breccia sequence at Oscar = Twb white breccia unit of Wallace.

TERTIARY (12-15 ma ?)	Tcc	Camel conglomerate = tilted, pebble conglomerates composed of well rounded clasts of Jurassic-Triassic and Cretaceous rocks including phyllite, slate, quartzite, granitic to mafic intrusive rocks, and bull quartz.
	Tfb	fissure basalt flows, thin basalt flows found at the northeast end of the Kamma Mountains.
	Tts	Tuffaceous sediments, clay rich, mainly siltstones and mudstones (probably lake bed sediments) as found at "Wiggle" survey control point (NE of Gator) and the small patch found southeast of KM-7.

Tbf Badger Formation which consists of a thick pile of volcaniclastic sediments including debris flows, laharic breccias, and epiclastic sediments.

Tli Latite dikes and plugs

Tcv Chocolate volcanics which generally consists of a thick pile of porphyritic quartz-latite to alkali rhyolite flows and pyroclastic breccia units which locally can be divided into three members:

Tcu Upper Chocolate flow and pyroclastic breccia member.

Tcm Middle Chocolate green pyroclastic breccia member.

Tcl Lower Chocolate flow and pyroclastic breccia member.

Tbv Genuine Bud volcanics is composed of up to 5 (or perhaps more?) members which commonly include three green pyroclastic breccia members separated by two fine-grained rhyolite flow members:

TERTIARY
(12-15 ma ?)

Tbup Upper Genuine Bud a generally thin bedded, green pyroclastic breccia member.

Tbuf Upper marker flow member

Tbmp Middle green pyroclastic breccia member

Tblf Lower marker flow member

Tblp Lower green pyroclastic breccia member

TWRV Wild Rose volcanics consist of at least three members including the upper and lower, flow and pyroclastic breccia members, and two discontinuous, thin bedded, green predominantly pyroclastic breccia members:

Twruf	Upper flow and pyroclastic breccia member
Twrmf	Middle green pyroclastic breccia member
Twrlf	Lower flow and pyroclastic breccia member
Twrlp	Lower green, thin bedded pyroclastic breccia member

Tdv Dozer volcanics probably represent an early rhyolitic flow dome complex. It appears that a considerable topographic relief was developed on top of the Dozer before the Wild Rose and later volcanic units were deposited.

Tfdb Flow dome breccia similar in nature to the Dozer flow dome sequence; however, are composed dominantly of monolithic dome-related breccia bodies and some related near vent flows and flow breccias. The best exposures of these rocks occur at the east end of Rosebud Canyon.

TERTIARY
(12-15 ma ?)

Tof Oscar Formation consists of a series of intermediate to mafic but predominantly andesitic volcanic flows and subordinate interbedded conglomerate (Jurassic-Triassic-Cretaceous clasts) and tufaceous sediment interbeds.

Ts sedimentary rocks generally consisting of sands, silts, grits and conglomerates which at Dozer Hill directly overlie the JTRa basement rocks and are presumed to be equivalent to the sedimentary portions of the Oscar Formation (Tof).

PRE-TERTIARY

JTRa

Auld Lang Syne Group

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