

is a common interstitial replacement mineral and also occurs as patches which may represent small (100 microns) altered phenocrysts. Irregularly shaped patches of dolomite are common in the basalt. The alteration products and the presences of carbonate make the basaltic phase unsuitable for dating.

3142-3151 m

These chips are predominantly fine-grained, plagioclase-rich basalt. Plagioclase laths, generally less than 100 microns in length and small pyroxene grains up to 40 microns in size are set in a feldspathic matrix. Chlorite is common throughout the rock and perhaps also as a replacement of phenocrysts. Small opaque Fe oxide granules are common.

Calcite occurs both as veins and associated with chloride as a phenocryst replacement.

The sample is too altered to be used for dating.

Bulk Magnetic Susceptibility

The bulk susceptibility of the three samples between 3034 and 3151 m are given in Table 1.

Table 1: Bulk Magnetic Susceptibility

Sample	Bulk Magnetic Susceptibility (SI Units)
3034-3043 m	700×10^{-5}
3061-3070 m	1200×10^{-5}
3142-3151 m	2000×10^{-5}

Geochronology

The K and Ar analyses and calculated K-Ar age for biotite from 2612-2621 m are given in Table 2. The age of 23.8 Ma falls on the Oligocene-Miocene boundary.

Table 2: Potassium-Argon Results

Sample	%K	$^{40}\text{Ar}^*$ ($\times 10^{-10}$ moles/g)	$^{40}\text{Ar}^*/^{40}\text{Ar}$ Total	Age**
Biotite 2612-2621 m	6.37 6.38	2.6508	0.823	23.8 ± 0.2

* Denotes radiogenic ^{40}Ar .

** Age in Ma with error limits given for the analytical uncertainty at one standard deviation.

Constants: ^{40}K = 0.01167 atom %
 λ = $4.962 \times 10^{-10} \text{y}^{-1}$
 ϵ = $0.581 \times 10^{-10} \text{y}^{-1}$