

**PART II - CORE #2 (3345-3346 m) AND JUNK SUB SAMPLE (3173 m)****INTRODUCTION**

A section of Core #2 was analysed for K-Ar age determination and magnetic susceptibility measurements.

**PROCEDURE**

A visual examination of the core suggested that the rock was fairly homogeneous and so two thin sections, from 3345.1 m and 3345.8 m, were prepared (TSC 45791, 45792).

Microscopic examination of the sections indicated that the core was unsuitable for geochronology. An attempt was then made to date a sample of basalt submitted earlier (Junk Sub. 3173 m). This sample was originally rejected for dating because it contained carbonate and chloritic alteration but re-evaluation of the thin section suggested that much of the alteration to chlorite was from a non K-bearing phase (possibly olivine). The loss of argon due to alteration of the primary phases may therefore not have been as severe as originally thought.

A total rock sample was prepared by crushing the rock and screening out the 0.85-0.25 mm fraction. In an attempt to remove any surface or exposed vein carbonate before analysis, this fraction was washed in dilute hydrochloric acid, rinsed in water and dried. A portion of the 0.85-0.25 mm fraction was pulverised and analysed for K. The remaining material was analysed for radiogenic argon.

**MAGNETIC SUSCEPTIBILITY**

Several measurements of magnetic susceptibility were made at 0.1 m intervals along the core. These measurements fall into two groups, listed below in Table 1:

Table 1: Magnetic Susceptibility Measurements (SI Units)

Uppermost 0.1 m	:	65-85 x 10 <sup>-6</sup>
Remaining core	:	150-250 x 10 <sup>-6</sup>

**PETROGRAPHIC DESCRIPTIONS**

Yolla No. 1, 3345-3346 m, TSC 45971, 45972

Rock Name: Altered amygdaloidal basalt.

The two samples, from 3345.1 and 3345.8 m are similar in most respects and a single description of the two samples is given, with special mention being made of features present in only one of the sections.

The rock is so extensively altered that virtually none of the primary mineral phases remain. However, many of the original textures can still be distinguished. The rock is basaltic in nature and shows amygdaloidal, porphyritic and fluidal textures.