

10 August 1981

Mr. H.D. Pilkington
AMAX Exploration, Inc.
Geothermal Branch
7100 West 44th Ave.
Wheatridge, Colorado 80033

re: W.O. #3-5403-122

Dear Mr. Pilkington:

We have completed the analysis of your sample submitted for K/Ar age determination. The results for the analysis are as follows:

Isotopes Sample #	Your Sample #	Isotopic Age (m.y.)	scc Ar ⁴⁰ Rad/gmx10 ⁻⁵	% Ar ⁴⁰ Rad	% K
KA81-182	Twin Bottles	40.1 ± 2.0	1.05	71.4	6.70
	B ₄ #25		1.05	71.3	6.70
					6.61

The analysis was performed on a biotite separate.

The constants for the age calculation are: $\lambda_{\beta} = 4.962 \times 10^{-10} \text{yr}^{-1}$,
 $\lambda = 0.581 \times 10^{-10} \text{yr}^{-1}$, $K^{40} = 1.167 \times 10^{-4}$ atom per atom of natural potassium.
(Convention on decay constants, Subcommittee on Geochronology, 25th International Geological Congress, 1976).

The error indicated for the reported ages consists of a summation of all analytical errors. The argon extraction spike calibration against standard biotite limits the accuracy to 5%. Therefore, we have selected 5% as our minimum analytical error for samples with sufficient radiogenic argon. All samples are done in duplicate. The precision of the duplicate analysis is calculated. If the sum of the errors of the potassium and argon measurements exceeds 5%, the summation is reported as the analytical error.

If you have any questions concerning these results, please do not hesitate to contact me.

We look forward to being of further service to you.

Very truly yours,

Georgiana Kalechitz
Georgiana Kalechitz
Geochronometry Section.

GK:bm