

## Table of Argon Data

## Table: Ar-Ar data

Power <sup>a</sup>	Volume x10 <sup>-11</sup> cc	<sup>39</sup> Ar	<sup>36</sup> Ar/ <sup>39</sup> Ar	<sup>37</sup> Ar/ <sup>39</sup> Ar	<sup>38</sup> Ar/ <sup>39</sup> Ar	<sup>40</sup> Ar/ <sup>39</sup> Ar	% <sup>40</sup> Ar ATM	* <sup>40</sup> Ar/ <sup>39</sup> Ar	f <sub>39</sub> <sup>b</sup> (%)	Apparent Age Ma <sup>c</sup>
<b>01JM1399 Muscovite; J=.00290690 (Z7431; 45.9779°N 71.2781°E)</b>										
<i>Aliquot: A</i>										
2	0.0236	0.0719±0.089	26.833±13.94	0.123±0.068	123.647±20.32	21.8	96.647±25.184	0	446.68±103.28	
2.4	0.3101	0.0142±0.008	3.352±1.044	0.015±0.011	84.459±1.801	4.9	80.349±2.022	0.5	378.69±8.60	
2.8	1.0198	0.0012±0.003	1.028±0.680	-0.002±-0.011	91.645±0.899	0.3	91.340±1.159	1.7	424.83±4.80	
3	9.2711	0.0005±0.000	0.030±0.030	0.003±0.011	99.313±0.329	0.1	99.181±0.330	15.9	457.03±1.35	
3.5	3.9603	0.0007±0.000	0.582±0.075	0.003±0.011	101.628±0.599	0.2	101.446±0.613	6.8	466.22±2.48	
3.9	4.05	0.0009±0.000	0.215±0.108	0.003±0.011	101.849±0.382	0.2	101.597±0.397	6.9	466.84±1.61	
4.2	0.9966	0.0004±0.001	0.879±0.748	-0.002±-0.011	102.227±0.948	0	102.222±0.972	1.7	469.36±3.93	
5	7.3657	0.0012±0.000	0.197±0.031	0.002±0.011	102.012±0.346	0.4	101.655±0.349	12.6	467.07±1.41	
12	1.8798	0.0000±0.001	0.914±0.310	0.003±0.011	101.558±0.635	0	101.579±0.675	3.2	466.76±2.73	
<i>Aliquot: B</i>										
2	0.0435	0.0841±0.023	10.897±12.40	0.017±0.029	106.445±8.305	19.9	85.315±9.560	0.1	399.68±40.19	
2.4	0.2277	0.0079±0.006	2.486±2.127	0.002±0.012	87.592±1.550	1.3	86.466±2.282	0.4	404.51±9.56	
2.8	1.7732	0.0045±0.000	0.104±0.211	0.002±0.011	94.725±0.667	1.2	93.553±0.681	3	433.97±2.81	
3	14.7516	0.0010±0.000	0.412±0.179	0.003±0.011	100.508±0.537	0.3	100.227±0.548	25.2	461.28±2.23	
3.5	4.3437	0.0005±0.000	0.018±0.103	0.001±0.011	101.811±0.432	0.1	101.721±0.435	7.4	467.34±1.76	
3.9	4.7388	0.0002±0.000	0.194±0.089	0.002±0.011	101.689±0.365	0	101.696±0.371	8.1	467.24±1.50	
4.2	2.274	0.0011±0.000	0.128±0.150	0.001±0.011	101.716±0.575	0.2	101.506±0.578	3.9	466.47±2.34	
5	0.8125	0.0013±0.000	0.283±0.676	-0.002±-0.011	101.990±1.318	0	101.959±1.334	1.4	468.30±5.39	
12	0.6248	0.0000±0.001	0.012±0.727	-0.003±-0.011	101.499±1.197	0	101.455±1.224	1.1	466.26±4.96	

a: As measured by laser in % of full nominal power (10W)

b: Fraction <sup>39</sup>Ar as percent of total run

c: Errors are analytical only and do not reflect error in irradiation parameter J

d: Nominal J, referenced to FCT-SAN=28.03 Ma (Renne et al., 1994)

All uncertainties quoted at 2σ level

## ANALYTICAL PROCEDURES

Samples were processed for Ar isotopic analysis by standard mineral separation techniques, including hand-picking of clear, unaltered muscovite crystals in the size range of 0.5 to 1 mm. Individual mineral separates were loaded into aluminum foil packets along with a single grain of Fish Canyon Tuff Sanidine (FCT-SAN) to act as flux monitor (apparent age = 28.03 Ma; Renne et al., 1998). Laser  $^{40}\text{Ar}/^{39}\text{Ar}$  step-heating analysis was carried out at the Geochronology Laboratory of the Geological Survey of Canada (Ottawa). Details of Ar data collection protocols can be found in Villeneuve and MacIntyre (1997) and Villeneuve *et al.* (2000). Error analysis on individual steps follows numerical error analysis routines outlined in Scaillet (2000); error analysis on grouped data follows algebraic methods of Roddick (1988). Corrected isotopic data are presented here as spectra of gas release normalized to total amount of  $^{39}\text{Ar}$  released (Fig. 11) and include J-factor error of 0.6% (Table \*). All errors are reported at  $2\sigma$  level of uncertainty and do not include errors from primary calibration of standard or decay constants.

## REFERENCES

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