

Datafile: C:\Users\ablythe\Desktop\Ann-2019 samples\HG-2.fta

Title: Sample HG-2, Haida Gwai, CN-5 glass for monitor

NEW PARAMETERS - ZETA METHODEFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm²): 1.53E+06

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 46.10

ZETA FACTOR AND STANDARD ERROR (yr cm²): 359.00 10.00SIZE OF COUNTER SQUARE (cm²): 6.40E-07**GRAIN AGES IN ORIGINAL ORDER**

| Grain no. | RhoS (cm ⁻²) | (Ns) | Rhol (cm ⁻²) | (Ni) | Squares | U+/-2s | Grain Age (Ma) | Age | --95% CI-- |
|-----------|--------------------------|------|--------------------------|-------|---------|--------|----------------|-----|------------|
| 1 | 0.00E+00 | (0) | 3.13E+05 | (10) | 50 | 9 6 | 19.7 | 0.7 | 121.4 |
| 2 | 3.13E+04 | (1) | 1.66E+06 | (53) | 50 | 50 14 | 5.9 | 0.1 | 30.1 |
| 3 | 6.25E+04 | (2) | 8.75E+05 | (28) | 50 | 26 10 | 21.0 | 2.3 | 77.4 |
| 4 | 6.25E+04 | (2) | 1.81E+06 | (58) | 50 | 55 14 | 10.2 | 1.1 | 35.7 |
| 5 | 6.25E+04 | (2) | 1.28E+06 | (41) | 50 | 39 12 | 14.4 | 1.6 | 51.4 |
| 6 | 3.13E+04 | (1) | 5.94E+05 | (19) | 50 | 18 8 | 16.4 | 0.3 | 90.4 |
| 7 | 0.00E+00 | (0) | 9.06E+05 | (29) | 50 | 27 10 | 6.6 | 0.2 | 37.2 |
| 8 | 6.25E+04 | (2) | 1.69E+06 | (54) | 50 | 51 14 | 10.9 | 1.2 | 38.5 |
| 9 | 6.25E+04 | (2) | 1.34E+06 | (43) | 50 | 40 12 | 13.7 | 1.5 | 48.9 |
| 10 | 0.00E+00 | (0) | 1.53E+06 | (49) | 50 | 46 13 | 3.9 | 0.1 | 21.5 |
| 11 | 6.25E+04 | (2) | 1.41E+06 | (45) | 50 | 42 13 | 13.1 | 1.4 | 46.6 |
| 12 | 3.13E+04 | (1) | 6.25E+05 | (20) | 50 | 19 8 | 15.6 | 0.3 | 85.3 |
| 13 | 6.25E+04 | (1) | 1.88E+06 | (30) | 25 | 56 21 | 10.4 | 0.2 | 54.9 |
| 14 | 1.25E+05 | (2) | 1.88E+06 | (30) | 25 | 56 21 | 19.6 | 2.1 | 71.8 |
| 15 | 0.00E+00 | (0) | 7.50E+05 | (24) | 50 | 23 9 | 8.0 | 0.3 | 45.5 |
| 16 | 5.21E+04 | (1) | 1.04E+06 | (20) | 30 | 31 14 | 15.6 | 0.3 | 85.3 |
| 17 | 6.25E+04 | (1) | 3.13E+05 | (5) | 25 | 9 8 | 60.7 | 1.2 | 473.3 |
| 18 | 6.25E+04 | (2) | 1.38E+06 | (44) | 50 | 41 12 | 13.4 | 1.5 | 47.7 |
| 19 | 6.25E+04 | (1) | 1.50E+06 | (24) | 25 | 45 18 | 13.0 | 0.3 | 69.8 |
| 20 | 3.13E+04 | (1) | 1.06E+06 | (34) | 50 | 32 11 | 9.2 | 0.2 | 48.0 |

POOLED 4.26E+04(24) 1.17E+06(660) 880 35 3 10.0 6.3 15.0

CHI² PROBABILITY (%): 95.2>>> Beware: possible upward bias in Chi² probability due to low counts <<<

POOLED AGE W/ 68% CONF. INTERVAL(Ma): 10.0, 7.9 -- 12.5 (-2.1 +2.5)

95% CONF. INTERVAL(Ma): 6.3 -- 15.0 (-3.7 +5.0)

CENTRAL AGE W/ 68% CONF. INTERVAL(Ma): 10.0, 8.1 -- 12.3 (-1.9 +2.3)

95% CONF. INTERVAL(Ma): 6.6 -- 15.1 (-3.4 +5.1)

AGE DISPERSION (%): 0.1

*FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green***INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 1)**

| Peak #. | Peak Age | Theta | Fraction(%) | Count |
|---------|----------|-------|-------------|-------|
| 1. | 10.00 | 0.035 | 16.8 | 3.35 |

Total range for grain ages: 2.8 to 74.5 Ma

Number of active grains (Num. used for fit): 20

Number of removed grains: 0

Degrees of freedom for fit: 19

Average of the SE(Z)'s for the grains: 0.93

Estimated width of peaks in PD plot in Z units: 1.09

PARAMETERS FOR BEST-FIT PEAKS

* Standard error for peak age includes group error

* Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak Age(Ma) | 68%CI | 95%CI | W(Z) | Frac(%) | SE,% | Count |
|----|--------------|--------------|--------------|------|---------|------|-------|
| 1. | 10.0 | -1.9 ...+2.3 | -3.4 ...+5.1 | 1.08 | 100.0 | 0.0 | 20.0 |

Log-likelihood for best fit: -24.166

Chi-squared value for best fit: 10.029

Reduced chi-squared value: 0.528

Probability for F test: 0%

Condition number for COVAR matrix: 1.00

Number of iterations: 5



