

Datafile: C:\Users\ablythe\Desktop\Ann-2019 samples\HG-28.fta

Title: Sample HG-28, Haida Gwai, CN-5 glass for monitor

**NEW PARAMETERS - ZETA METHOD**EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 1.47E+06

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 46.10

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 359.00 10.00SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 6.40E-07**GRAIN AGES IN ORIGINAL ORDER**

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	Rhol (cm <sup>-2</sup> )	(Ni)	Squares	U+/-2s	Grain Age (Ma)	Age	--95% CI--
1	0.00E+00	( 0)	4.38E+05	( 14)	50	14 7 13.4	0.5 79.1		
2	0.00E+00	( 0)	6.25E+05	( 16)	40	20 10 11.7	0.4 68.1		
3	3.47E+04	( 2)	5.03E+05	( 29)	90	16 6 19.5	2.1 71.6		
4	0.00E+00	( 0)	2.50E+05	( 8)	50	8 5 23.8	0.8 152.8		
5	3.13E+04	( 1)	5.31E+05	( 17)	50	17 8 17.6	0.4 98.4		
6	0.00E+00	( 0)	4.06E+05	( 13)	50	13 7 14.4	0.5 86.1		
7	6.25E+04	( 1)	5.63E+05	( 9)	25	18 11 32.9	0.7 208.3		
8	0.00E+00	( 0)	2.50E+05	( 8)	50	8 5 23.8	0.8 152.8		
9	9.38E+04	( 3)	9.38E+05	( 30)	50	29 11 27.6	5.2 84.4		
10	0.00E+00	( 0)	4.06E+05	( 13)	50	13 7 14.4	0.5 86.1		
11	0.00E+00	( 0)	6.25E+05	( 10)	25	20 12 18.9	0.7 116.7		
12	0.00E+00	( 0)	2.19E+05	( 7)	50	7 5 27.4	1.0 180.6		
13	1.95E+04	( 1)	3.91E+05	( 20)	80	12 5 15.0	0.3 82.0		
14	2.60E+04	( 1)	2.08E+05	( 8)	60	7 4 37.0	0.7 241.6		
15	3.13E+04	( 1)	3.75E+05	( 12)	50	12 7 24.8	0.5 147.0		
16	0.00E+00	( 0)	3.44E+05	( 11)	50	11 6 17.1	0.6 104.3		
17	1.88E+05	( 3)	1.44E+06	( 23)	25	45 19 35.9	6.6 113.0		
18	0.00E+00	( 0)	2.50E+05	( 8)	50	8 5 23.8	0.8 152.8		
19	3.13E+04	( 1)	5.94E+05	( 19)	50	19 8 15.8	0.3 86.8		
20	0.00E+00	( 0)	5.00E+05	( 16)	50	16 8 11.7	0.4 68.1		
21	3.13E+04	( 1)	3.44E+05	( 11)	50	11 6 27.1	0.6 163.1		
22	6.25E+04	( 2)	4.69E+05	( 15)	50	15 7 37.4	3.9 149.6		
23	0.00E+00	( 0)	3.44E+05	( 11)	50	11 6 17.1	0.6 104.3		
24	0.00E+00	( 0)	3.75E+05	( 12)	50	12 7 15.7	0.6 94.3		
25	0.00E+00	( 0)	4.38E+05	( 7)	25	14 10 27.4	1.0 180.6		
26	0.00E+00	( 0)	6.56E+05	( 21)	50	21 9 8.9	0.3 50.5		
27	0.00E+00	( 0)	3.13E+05	( 10)	50	10 6 18.9	0.7 116.7		
28	3.13E+04	( 1)	3.75E+05	( 12)	50	12 7 24.8	0.5 147.0		
29	3.13E+04	( 1)	4.69E+05	( 15)	50	15 7 19.9	0.4 113.4		
30	0.00E+00	( 0)	2.50E+05	( 4)	25	8 7 49.7	1.7 388.0		

POOLED 2.05E+04( 19) 4.42E+05( 409) 1445 14 1 12.4 7.3 19.4

CHI^2 PROBABILITY (%): 92.3

&gt;&gt;&gt; Beware: possible upward bias in Chi^2 probability due to low counts &lt;&lt;&lt;

POOLED AGE W/ 68% CONF. INTERVAL(Ma): 12.4, 9.4 -- 15.8 ( -2.9 +3.5)

95% CONF. INTERVAL(Ma): 7.3 -- 19.4 ( -5.1 +7.0)

CENTRAL AGE W/ 68% CONF. INTERVAL(Ma): 12.2, 9.7 -- 15.5 ( -2.6 +3.3)

95% CONF. INTERVAL(Ma): 7.7 -- 19.5 ( -4.5 +7.2)

AGE DISPERSION (%): 0.6

*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.	12.40	0.045	12.2	3.67

Total range for grain ages: 6.1 to 46.4 Ma

Number of active grains (Num. used for fit): 30

Number of removed grains: 0

Degrees of freedom for fit: 29

Average of the SE(Z)'s for the grains: 1.21

Estimated width of peaks in PD plot in Z units: 1.41

**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.	12.2	-2.6 ...+3.3	-4.5 ...+7.2	1.50	100.0	0.0	30.0

Log-likelihood for best fit: -26.411

Chi-squared value for best fit: 18.946

Reduced chi-squared value: 0.653

Probability for F test: 0%

Condition number for COVAR matrix: 1.00

Number of iterations: 5



