

EXP#16D31001 > 29-DWJ-14 > Hornblende > MCCLAUGHRY (15-17)
SW-COLOMBIA > DUFUR
16-OSU-07 (7A43-16) > Incremental Heating > Anthony Koppers

**Information on Analysis
and Constants Used in Calculations**

Project = MCCLAUGHRY (15-17)
Sample = 29-DWJ-14
Material = Hornblende
Location = Dufur
Region = SW-Colombia
Analyst = Anthony Koppers
Irradiation = 16-OSU-07 (7A43-16)
Position = X: 0 | Y: 0 | Z/H: 57.66 mm
FCT-NM Age = 28.201 ± 0.023 Ma
FCT-NM Reference = Kuiper et al (2008)
FCT-NM 40Ar/39Ar Ratio = 10.75549 ± 0.00710
FCT-NM J-value = 0.00146134 ± 0.00000096
Air Shot 40Ar/36Ar = 303.3630 ± 0.4550
Air Shot MDF = 0.99351176 ± 0.00068391 (LIN)
Experiment Type = Incremental Heating
Extraction Method = Undefined
Heating = 77 sec
Isolation = 3.00 min
Instrument = ARGUS-VI-D
Preferred Age = Undefined
Age Classification = Undefined
IGSN = 4.2
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined
Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Collector Calibrations = 36Ar
Decay 40K = 5.530 ± 0.048 E-10 1/a
Decay 39Ar = 2.940 ± 0.016 E-07 1/h
Decay 37Ar = 8.230 ± 0.012 E-04 1/h
Decay 36Cl = 2.257 ± 0.015 E-06 1/a
Decay 40K(εC,β*) = 0.580 ± 0.009 E-10 1/a
Decay 40K(β-) = 4.950 ± 0.043 E-10 1/a
Atmospheric 40/36(a) = 295.50
Atmospheric 38/36(a) = 0.1869
Production 39/37(ca) = 0.0006756 ± 0.0000089
Production 38/37(ca) = 0.0000718 ± 0.0000092
Production 36/37(ca) = 0.0002663 ± 0.0000004
Production 40/39(k) = 0.003823 ± 0.000102
Production 38/39(k) = 0.012031 ± 0.000019
Production 36/38(cl) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%n)	K/Ca ± 2σ
Age Plateau		3.05904 ± 0.03781	8.07 ± 0.10	2.54	86.22	0.0275 ± 0.0002
Error Mean		± 1.24%	± 1.24%	0%	13	
		Full External Error ± 0.21		1.82	2σ Confidence Limit	
		Analytical Error ± 0.10		1.5951	Error Magnification	
Total Fusion Age		3.13786 ± 0.02941	8.27 ± 0.08		27	0.0275 ± 0.0001
		± 0.94%	± 0.94%			
		Full External Error ± 0.20				
		Analytical Error ± 0.08				
Normal Isochron	297.32 ± 12.05	3.03739 ± 0.13438	8.01 ± 0.35	2.71	86.22	
Error Chron	± 4.05%	± 4.42%	± 4.42%	0%	13	
		Full External Error ± 0.40		1.85	2σ Confidence Limit	
		Analytical Error ± 0.35		1.6472	Error Magnification	
Inverse Isochron	298.00 ± 12.10	3.03292 ± 0.13396	8.00 ± 0.35	2.73	86.22	
Error Chron	± 4.06%	± 4.42%	± 4.41%	0%	13	
		Full External Error ± 0.40		1.85	2σ Confidence Limit	
		Analytical Error ± 0.35		1.6535	Error Magnification	
				28%	Spreading Factor	

