

**EXP#16D30957 > 212-DFWJ-14 > Hornblende > MCCLAUGHRY (15-17)**  
**SW-COLOMBIA > DUFUR**  
**16-OSU-07 (7A40-16) > Incremental Heating > Anthony Koppers**

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

Project = MCCLAUGHRY (15-17)  
Sample = 212-DFWJ-14  
Material = Hornblende  
Location = Dufur  
Region = SW-Colombia  
Analyst = Anthony Koppers  
Irradiation = 16-OSU-07 (7A40-16)  
Position = X: 0 | Y: 0 | Z/H: 51.91 mm  
FCT-NM Age = 28.201 ± 0.023 Ma  
FCT-NM Reference = Kuiper et al (2008)  
FCT-NM 40Ar/39Ar Ratio = 10.60292 ± 0.00710  
FCT-NM J-value = 0.00148236 ± 0.00000099  
Air Shot 40Ar/36Ar = 303.5120 ± 0.5494  
Air Shot MDF = 0.99339206 ± 0.00072679 (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 = 14.8  
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(ε,β<sup>+</sup>) = 0.580 ± 0.009 E-10 1/a  
Decay 40K(β<sup>-</sup>) = 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		3.27184 ± 0.01931	8.75 ± 0.05	5.59	78.37	0.0297 ± 0.0006
Error Mean		± 0.59%	± 0.60%	0%	12	
		Full External Error ± 0.20		1.85	2σ Confidence Limit	
		Analytical Error ± 0.05		2.3638	Error Magnification	
Total Fusion Age		3.33700 ± 0.00924	8.92 ± 0.03		27	0.0302 ± 0.0001
		± 0.28%	± 0.31%			
		Full External Error ± 0.20				
		Analytical Error ± 0.02				
Normal Isochron	332.71 ± 21.98	3.20708 ± 0.03965	8.58 ± 0.11	2.68	78.37	
Error Chron	± 6.61%	± 1.24%	± 1.24%	0%	12	
		Full External Error ± 0.22		1.89	2σ Confidence Limit	
		Analytical Error ± 0.11		1.6366	Error Magnification	
Inverse Isochron	332.84 ± 22.49	3.20856 ± 0.04047	8.58 ± 0.11	2.72	78.37	
Error Chron	± 6.76%	± 1.26%	± 1.27%	0%	12	
		Full External Error ± 0.22		1.89	2σ Confidence Limit	
		Analytical Error ± 0.11		1.6481	Error Magnification	
				17%	Spreading Factor	

