

EXP#23F01583 > BHM095 > POLENZ (22-26)
SOUTHERN CALIFORNIA > SE1/4 SEC. 24
22-OSU-05 (5C29-22) > Incremental Heating > Groundmass > Dan Miggins

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

Project = **POLENZ (22-26)**
Sample = **BHM095**
Material = **Groundmass**
Location = **SE1/4 sec. 24**
Region = **Southern California**
Analyst = **Dan Miggins**
Irradiation = **22-OSU-05 (5C29-22)**
Position = **X: 999 | Y: 999 | Z/H: 45.38535 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.71626 ± 0.00942**
FCT-NM J-value = **0.00159789 ± 0.00000155**
Air Shot 40Ar/36Ar = **304.9960 ± 0.5032**
Air Shot MDF = **0.99471770 ± 0.00047793 (LIN)**
Experiment Type = **Incremental Heating**
Extraction Method = **Bulk Laser Heating**
Heating = **50 sec**
Isolation = **6.00 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Mini Plateau**
Age Classification = **Eruption Age**
IGSN = **9.472**
Rock Class = **Undefined**
Lithology = **Undefined**
Lat-Lon = **Undefined - Undefined**
Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K(total) = **5.463 ± 0.107 E-10 1/a**
Decay 40K(EC,β⁺) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β⁻) = **4.884 ± 0.099 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**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
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**
Trapped 40/36(a) = **396.13 ± 18.54**
Trapped 38/36(a) = **0.1885 ± 0.0003**
Standard MDF 40/36(a) = **298.56 ± 0.31**
Standard MDF Reference = **Lee et al 2006**

Excess 40/36 = 396.13 ± 4.68 (%SD).

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%n)	K/Ca ± 2σ
Age Plateau		11.34024 ± 0.04646 ± 0.41%	32.87 ± 0.15 ± 0.45%	1.04 40%	42.57 17	0.0350 ± 0.0037
		Full External Error ± 1.71		1.71	2σ Confidence Limit	
		Analytical Error ± 0.13		1.0219	Error Magnification	
Total Fusion Age		14.14667 ± 0.07473 ± 0.53%	40.92 ± 0.23 ± 0.56%		33	0.0569 ± 0.0001
		Full External Error ± 2.13				
		Analytical Error ± 0.21				
Normal Isochron	429.77 ± 26.60 ± 6.19%	11.19306 ± 0.10960 ± 0.98%	32.45 ± 0.32 ± 0.99%	1.98 1%	42.57 17	
Error Chron		Full External Error ± 1.71		1.73	2σ Confidence Limit	
		Analytical Error ± 0.31		1.4059	Error Magnification	
Inverse Isochron	432.92 ± 27.17 ± 6.28%	11.18743 ± 0.11104 ± 0.99%	32.43 ± 0.33 ± 1.00%	2.05 1%	42.57 17	
Error Chron		Full External Error ± 1.71		1.73	2σ Confidence Limit	
		Analytical Error ± 0.32		1.4326	Error Magnification	
				16%	Spreading Factor	

