

**EXP#23F01632 > BHM084 > POLENZ (22-26)**  
**SOUTHERN CALIFORNIA > NW 1/4 SEC. 14**  
**22-OSU-05 (5C30-22) > Incremental Heating > Plagioclase > Dan Miggins**

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

Project = **POLENZ (22-26)**  
Sample = **BHM084**  
Material = **Plagioclase**  
Location = **NW 1/4 sec. 14**  
Region = **Southern California**  
Analyst = **Dan Miggins**  
Irradiation = **22-OSU-05 (5C30-22)**  
Position = **X: 999 | Y: 999 | Z/H: 47.05367 mm**  
FCT-NM Age = **28.201 ± 0.023 Ma**  
FCT-NM Reference = **Kuiper et al (2008)**  
FCT-NM 40Ar/39Ar Ratio = **9.75061 ± 0.00946**  
FCT-NM J-value = **0.00159226 ± 0.00000154**  
Air Shot 40Ar/36Ar = **304.9370 ± 0.5153**  
Air Shot MDF = **0.99476511 ± 0.00048634 (LIN)**  
Experiment Type = **Incremental Heating**  
Extraction Method = **Bulk Laser Heating**  
Heating = **50 sec**  
Isolation = **6.00 min**  
Instrument = **ARGUS-VI-F**  
Preferred Age = **Plateau Age**  
Age Classification = **Eruption Age**  
IGSN = **14.374**  
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<sup>+</sup>) = **0.580 ± 0.014 E-10 1/a**  
Decay 40K(β<sup>-</sup>) = **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) = **298.56 ± 0.31**  
Trapped 38/36(a) = **0.1885 ± 0.0003**  
Standard MDF 40/36(a) = **298.56 ± 0.31**  
Standard MDF Reference = **Lee et al 2006**

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (% <sub>n</sub> )	K/Ca ± 2σ
Age Plateau		13.10668 ± 0.01193 ± 0.09%	37.81 ± 0.08 ± 0.21%	1.60 6%	66.69 17	0.0271 ± 0.0002
		Full External Error ± 1.96		1.71	2σ Confidence Limit	
		Analytical Error ± 0.03		1.2657	Error Magnification	
Total Fusion Age		13.08110 ± 0.00879 ± 0.07%	37.73 ± 0.08 ± 0.20%		31	0.0270 ± 0.0000
		Full External Error ± 1.95				
		Analytical Error ± 0.03				
Normal Isochron	178.07 ± 88.08 ± 49.46%	13.09997 ± 0.00998 ± 0.08%	37.79 ± 0.08 ± 0.21%	0.57 90%	66.69 17	
		Full External Error ± 1.96		1.73	2σ Confidence Limit	
		Analytical Error ± 0.03		1.0000	Error Magnification	
Inverse Isochron	466.27 ± 217.73 ± 46.70%	13.11186 ± 0.01565 ± 0.12%	37.82 ± 0.09 ± 0.23%	1.35 16%	66.69 17	
Clustered Points		Full External Error ± 1.96		1.73	2σ Confidence Limit	
		Analytical Error ± 0.04		1.1630	Error Magnification	
				2%	Spreading Factor	

