

EXP#22F07894 > MLM031C > POLENZ (21-26)
WESTERN CASCADES > SOUTHWESTERN WASHINGTON
22-OSU-01 (1B14-22) > Incremental Heating > Plagioclase > Dan Miggins

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

Project = **POLENZ (21-26)**
Sample = **MLM031C**
Material = **Plagioclase**
Location = **Southwestern Washington**
Region = **Western Cascades**
Analyst = **Dan Miggins**
Irradiation = **22-OSU-01 (1B14-22)**
Position = **X: 999 | Y: 999 | Z/H: 25.17538 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.52863 ± 0.00943**
FCT-NM J-value = **0.00162935 ± 0.00000161**
Air Shot 40Ar/36Ar = **299.6800 ± 0.3147**
Air Shot MDF = **0.99906446 ± 0.00036856 (LIN)**
Experiment Type = **Incremental Heating**
Extraction Method = **Undefined**
Heating = **0 sec**
Isolation = **6.00 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Undefined**
Age Classification = **Undefined**
IGSN = **Undefined**
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) = **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) (%n)	K/Ca ± 2σ
Age Plateau		0.40249 ± 0.01150 ± 2.86%	1.20 ± 0.03 ± 2.86%	1.13 34%	41.93 8	0.0291 ± 0.0060
			Full External Error ± 0.07	2.07	2σ Confidence Limit	
			Analytical Error ± 0.03	1.0624	Error Magnification	
Total Fusion Age		0.42492 ± 0.01198 ± 2.82%	1.27 ± 0.04 ± 2.82%		25	0.0244 ± 0.0000
			Full External Error ± 0.07			
			Analytical Error ± 0.04			
Normal Isochron	293.18 ± 6.84 ± 2.33%	0.41537 ± 0.02019 ± 4.86%	1.24 ± 0.06 ± 4.86%	0.92 48%	41.93 8	
			Full External Error ± 0.09	2.15	2σ Confidence Limit	
			Analytical Error ± 0.06	1.0000	Error Magnification	
Inverse Isochron	293.26 ± 6.84 ± 2.33%	0.41574 ± 0.02011 ± 4.84%	1.24 ± 0.06 ± 4.84%	0.94 46%	41.93 8	
			Full External Error ± 0.09	2.15	2σ Confidence Limit	
			Analytical Error ± 0.06	1.0000	Error Magnification	
				38%	Spreading Factor	

