

EXP#22F07837 > MLM065 B3 > POLENZ (21-26)
WESTERN CASCADES > SOUTHWESTERN WASHINGTON
22-OSU-01 (1B17-22) > Incremental Heating > Plagioclase > Dan Miggins

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

Project = **POLENZ (21-26)**
Sample = **MLM065 B3**
Material = **Plagioclase**
Location = **Southwestern Washington**
Region = **Western Cascades**
Analyst = **Dan Miggins**
Irradiation = **22-OSU-01 (1B17-22)**
Position = **X: 999 | Y: 999 | Z/H: 29.96684 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.58050 ± 0.00939**
FCT-NM J-value = **0.00162053 ± 0.00000159**
Air Shot 40Ar/36Ar = **299.7140 ± 0.3147**
Air Shot MDF = **0.99903617 ± 0.00036852 (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 = **Crystallization Age**
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 (ka)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		0.11173 ± 0.00732 ± 6.55%	331.4 ± 21.7 ± 6.55%	1.34 12%	100.00 25	0.0662 ± 0.0135
			Full External Error ± 27.7 Analytical Error ± 21.7	1.58 1.1578	2σ Confidence Limit Error Magnification	
Total Fusion Age		0.10949 ± 0.00754 ± 6.89%	324.8 ± 22.4 ± 6.89%		25	0.0529 ± 0.0000
			Full External Error ± 28.0 Analytical Error ± 22.4			
Normal Isochron	297.91 ± 1.91 ± 0.64%	0.10635 ± 0.00755 ± 7.10%	315.5 ± 22.4 ± 7.10%	1.25 19%	100.00 25	
			Full External Error ± 27.8 Analytical Error ± 22.4	1.59 1.1176	2σ Confidence Limit Error Magnification	
Inverse Isochron	297.84 ± 2.00 ± 0.67%	0.11300 ± 0.00740 ± 6.55%	335.2 ± 22.0 ± 6.55%	1.37 11%	100.00 25	
			Full External Error ± 28.0 Analytical Error ± 21.9	1.59 1.1702	2σ Confidence Limit Error Magnification Spreading Factor	

