

**EXP#22F07797 > MLM065 B2 > POLENZ (21-26)**  
**WESTERN CASCADES > SOUTHWESTERN WASHINGTON**  
**22-OSU-01 (1B16-22) > Incremental Heating > Plagioclase > Dan Miggins**

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

Project = **POLENZ (21-26)**  
Sample = **MLM065 B2**  
Material = **Plagioclase**  
Location = **Southwestern Washington**  
Region = **Western Cascades**  
Analyst = **Dan Miggins**  
Irradiation = **22-OSU-01 (1B16-22)**  
Position = **X: 999 | Y: 999 | Z/H: 28.15128 mm**  
FCT-NM Age = **28.201 ± 0.023 Ma**  
FCT-NM Reference = **Kuiper et al (2008)**  
FCT-NM 40Ar/39Ar Ratio = **9.55965 ± 0.00937**  
FCT-NM J-value = **0.00162407 ± 0.00000159**  
Air Shot 40Ar/36Ar = **299.8150 ± 0.3118**  
Air Shot MDF = **0.99895217 ± 0.00036663 (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<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) = **281.51 ± 1.06**  
Trapped 38/36(a) = **0.1885 ± 0.0003**  
Standard MDF 40/36(a) = **298.56 ± 0.31**  
Standard MDF Reference = **Lee et al 2006**

Sub-atmospheric 40/36 = 281.51 ± 0.38 (%SD).

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (ka)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		0.13123 ± 0.00567 ± 4.32%	390.1 ± 16.9 ± 4.32%	0.57 89%	83.82 15	0.134 ± 0.038
			Full External Error ± 26.4 Analytical Error ± 16.8	1.76 1.0000	2σ Confidence Limit Error Magnification	
Total Fusion Age		0.14485 ± 0.00594 ± 4.10%	430.6 ± 17.7 ± 4.10%		25	0.097 ± 0.000
			Full External Error ± 28.5 Analytical Error ± 17.6			
Normal Isochron	281.41 ± 1.86 ± 0.66%	0.13121 ± 0.01212 ± 9.24%	390.0 ± 36.0 ± 9.24%	1.07 38%	83.82 15	
			Full External Error ± 41.4 Analytical Error ± 36.0	1.78 1.0358	2σ Confidence Limit Error Magnification	
Inverse Isochron	281.41 ± 1.85 ± 0.66%	0.13138 ± 0.01189 ± 9.05%	390.5 ± 35.3 ± 9.05%	1.07 38%	83.82 15	
			Full External Error ± 40.8 Analytical Error ± 35.3	1.78 1.0322	2σ Confidence Limit Error Magnification Spreading Factor	

