













$^{40}\text{Ar}/^{39}\text{Ar}$ supplemental data for:

**Laramide evolution of the San Juan Basin, New Mexico and Colorado:
Paleocurrent and detrital-sanidine age constraints from the Paleocene
Nacimiento and Animas formations**

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Geosphere Ms. No. xxxx

Analytical Methods and Instrumentation

Sample preparation and irradiation:

K-feldspar separated by standard magnetic and heavy liquid techniques.

Chosen detrital grains were visibly clear when viewed under a binocular microscope or microtexture free when viewed with a polarizing microscope while immersed in wintergreen oil.

Samples were loaded into machined Al discs and irradiated in multiple packages

at the USGS TRIGA Reactor, Denver, CO.

Neutron flux monitor Fish Canyon Tuff sanidine (FC-2). Assigned age = 28.201 Ma (Kuiper et al., 2008).

Decay constant 5.463×10^{-10} /a (Min et al., 2000).

Instrumentation:

Thermo-Fisher Scientific ARGUS VI mass spectrometer on line with automated all-metal extraction system.

System = Jan

NM-254

Multi-collector configuration: 40Ar-H1, 39Ar-Ax, 38Ar-L1, 37Ar-L2, 36Ar-L3

Amplification: H1, L1, L2 1E12 Ohm Faraday, AX 1E13 Ohm Faraday, L3 - CDD ion counter, deadtime 14 ns.

NM-277, 284, 289

Multi-collector configuration: 40Ar-H1, 39Ar-Ax, 38Ar-L1, 37Ar-L2, 36Ar-L3

Amplification: H1, AX, L2 1E13 Ohm Faraday, L1 1E14 Ohm Faraday, L3 - CDD ion counter, deadtime 14 ns.

Laser single crystal total fusion.

Samples fused for 30 seconds at 3 W using a 75W Photon-Machines CO2 laser.

Reactive gases removed by 30-150 second reaction with 1 SAES NP-10 getter operated at 1.6 A

and 1 D-50 getter operated at room temperature.

Analytical parameters:

Mass spectrometer sensitivity = 5×10^{-17} mol/fA

Blank information.

NM-254: $12 \pm 1\%$, $0.10 \pm 20\%$, $0.03 \pm 200\%$, $0.15 \pm 15\%$, $0.04 \pm 0.7\%$, $\times 10^{-17}$ moles
for masses 40, 39, 38, 37, 36, respectively.

NM-277: $5 \pm 7\%$, $0.10 \pm 10\%$, $0.01 \pm 30\%$, $0.09 \pm 8\%$, $0.02 \pm 10\%$, $\times 10^{-17}$ moles
for masses 40, 39, 38, 37, 36, respectively.

NM-284: $3 \pm 4\%$, $0.4 \pm 4\%$, $0.03 \pm 25\%$, $0.11 \pm 12\%$, $0.01 \pm 6\%$, $\times 10^{-17}$ moles
for masses 40, 39, 38, 37, 36, respectively.

NM-289: $2 \pm 5\%$, $0.15 \pm 6\%$, $0.04 \pm 50\%$, $0.2 \pm 15\%$, $0.02 \pm 1\%$, $\times 10^{-17}$ moles
for masses 40, 39, 38, 37, 36, respectively.

J-factors determined to a precision of $\sim \pm 0.01$ - 0.08% by CO₂ laser-fusion of at least 6 single crystals from multiple radial positions around the irradiation tray.

Irradiation and Correction Factor information.

All sample irradiated at the Triga Reactor, USGS, Denver CO.

| | |
|--------|---|
| NM-254 | 40 hours $(^{39}\text{Ar}/^{37}\text{Ar})_{\text{Ca}} = 0.000698 \pm 0.000008$ $(^{36}\text{Ar}/^{37}\text{Ar})_{\text{Ca}} = 0.000273 \pm 0.0000002$ $(^{40}\text{Ar}/^{39}\text{Ar})_{\text{K}} = 0.008068 \pm 6.8 \times 10^{-5}$ |
| NM-277 | 16 hours $(^{39}\text{Ar}/^{37}\text{Ar})_{\text{Ca}} = 0.0007064 \pm 0.000004$ $(^{36}\text{Ar}/^{37}\text{Ar})_{\text{Ca}} = 0.0002731 \pm 0.0000005$ $(^{40}\text{Ar}/^{39}\text{Ar})_{\text{K}} = 0.00808 \pm 0.00041$ |
| NM-284 | 16 hours $(^{39}\text{Ar}/^{37}\text{Ar})_{\text{Ca}} = 0.0006946 \pm 0.000017$ $(^{36}\text{Ar}/^{37}\text{Ar})_{\text{Ca}} = 0.0002606 \pm 0.0000005$ $(^{40}\text{Ar}/^{39}\text{Ar})_{\text{K}} = 0.007531 \pm 0.000105$ |
| NM-289 | 16 hours $(^{39}\text{Ar}/^{37}\text{Ar})_{\text{Ca}} = 0.0006756 \pm 0.000001$ $(^{36}\text{Ar}/^{37}\text{Ar})_{\text{Ca}} = 0.000266 \pm 0.0000003$ $(^{40}\text{Ar}/^{39}\text{Ar})_{\text{K}} = 0.00812 \pm 0.0001$ |

Argon data for Horseshoe ash sanidine results.

| ID | Power (watts) | ⁴⁰ Ar/ ³⁹ Ar (%) | ³⁷ Ar/ ³⁹ Ar (%) | ³⁶ Ar/ ³⁹ Ar (x 10 ⁻³) | ³⁸ Ar/ ³⁹ Ar (x 10 ⁻¹⁵ mol) | K/Ca | ⁴⁰ Ar* (%) | Age (Ma) | ±1σ (Ma) |
|---|------------------|---|---|---|---|--------|--------------------------|-------------|-------------|
| SJ-ASH-2 , Sanidine, J=0.0095451±0.08%, IC=1.05594±0.0011243, NM-254C, Lab#=#61400, Argus VI | | | | | | | | | |
| SJ-ASH-2 , Sanidine, J=0.0095368±0.09%, IC=1.05728±0.001084, NM-254C, Lab#=#61401, Argus VI | | | | | | | | | |
| 11 | 3 | 5.173 | 0.0049 | 4.641 | 2.395 | 104.7 | 73.5 | 65.06 | 0.12 |
| 29 | 3 | 3.819 | 0.0022 | 0.0534 | 1.118 | 228.2 | 99.6 | 65.08 | 0.12 |
| 3 | 3 | 3.826 | 0.0071 | 0.0608 | 1.804 | 71.7 | 99.5 | 65.166 | 0.051 |
| 9 | 3 | 3.819 | 0.0032 | 0.0232 | 1.620 | 159.9 | 99.8 | 65.236 | 0.057 |
| 1 | 3 | 3.840 | 0.0030 | 0.0886 | 1.209 | 171.5 | 99.3 | 65.258 | 0.078 |
| 36 | 3 | 3.821 | 0.0025 | 0.0233 | 1.308 | 201.3 | 99.8 | 65.268 | 0.097 |
| 17 | 3 | 3.823 | 0.0055 | 0.0273 | 1.499 | 93.5 | 99.8 | 65.278 | 0.063 |
| 27 | 3 | 3.822 | 0.0050 | 0.0123 | 1.302 | 101.2 | 99.9 | 65.337 | 0.070 |
| 18 | 3 | 3.823 | 0.0049 | 0.0177 | 1.208 | 104.6 | 99.9 | 65.338 | 0.074 |
| 10 | 3 | 3.821 | 0.0038 | 0.0096 | 1.688 | 133.8 | 99.9 | 65.340 | 0.053 |
| 19 | 3 | 3.823 | 0.0048 | 0.0162 | 1.738 | 106.8 | 99.9 | 65.348 | 0.051 |
| 23 | 3 | 3.874 | 0.0030 | 0.1858 | 0.859 | 169.3 | 98.6 | 65.36 | 0.12 |
| 34 | 3 | 3.815 | 0.0025 | -0.0169 | 1.316 | 204.0 | 100.1 | 65.359 | 0.097 |
| 12 | 3 | 4.136 | 0.0348 | 1.078 | 1.354 | 14.7 | 92.4 | 65.378 | 0.098 |
| 38 | 3 | 3.827 | 0.0044 | 0.0201 | 1.558 | 116.5 | 99.9 | 65.380 | 0.082 |
| 2 | 3 | 3.829 | 0.0046 | 0.0281 | 1.341 | 111.7 | 99.8 | 65.389 | 0.068 |
| 16 | 3 | 3.821 | 0.0089 | 0.0110 | 0.516 | 57.6 | 99.9 | 65.39 | 0.24 |
| 41 | 3 | 3.828 | 0.0041 | 0.0157 | 1.926 | 125.7 | 99.9 | 65.432 | 0.069 |
| 4 | 3 | 3.842 | 0.0041 | 0.0610 | 1.071 | 123.9 | 99.5 | 65.445 | 0.087 |
| 13 | 3 | 3.825 | 0.0044 | 0.0093 | 1.163 | 116.5 | 99.9 | 65.46 | 0.10 |
| 16 | 3 | 3.839 | 0.0030 | 0.0451 | 1.466 | 172.2 | 99.7 | 65.460 | 0.065 |
| 23 | 3 | 3.832 | 0.0074 | 0.0332 | 0.579 | 69.1 | 99.8 | 65.46 | 0.22 |
| 35 | 3 | 3.829 | 0.0055 | 0.0093 | 1.616 | 92.0 | 99.9 | 65.469 | 0.078 |
| 20 | 3 | 3.830 | 0.0060 | 0.0253 | 1.304 | 85.2 | 99.8 | 65.472 | 0.098 |
| 01 | 3 | 3.826 | 0.0044 | 0.0084 | 1.512 | 116.6 | 99.9 | 65.480 | 0.082 |
| 25 | 3 | 3.890 | -0.0161 | 0.2101 | 0.135 | - | 98.4 | 65.48 | 0.60 |
| 20 | 3 | 3.834 | 0.0015 | 0.0211 | 1.173 | 338.7 | 99.8 | 65.489 | 0.075 |
| 30 | 3 | 3.834 | 0.0058 | 0.0228 | 1.538 | 87.4 | 99.8 | 65.490 | 0.082 |
| 39 | 3 | 3.832 | 0.0037 | 0.0163 | 2.213 | 137.7 | 99.9 | 65.493 | 0.060 |
| 33 | 3 | 3.834 | 0.0056 | 0.0232 | 1.633 | 90.7 | 99.8 | 65.496 | 0.079 |
| 14 | 3 | 3.828 | 0.0061 | 0.0005 | 1.621 | 83.8 | 100.0 | 65.504 | 0.059 |
| 31 | 3 | 3.834 | 0.0021 | 0.0185 | 1.286 | 239.0 | 99.9 | 65.512 | 0.099 |
| 6 | 3 | 3.856 | 0.0003 | 0.0837 | 0.778 | 1692.8 | 99.4 | 65.55 | 0.12 |
| 12 | 3 | 3.848 | 0.0024 | 0.0670 | 1.230 | 215.2 | 99.5 | 65.57 | 0.10 |
| 10 | 3 | 3.839 | 0.0052 | 0.0356 | 0.866 | 98.8 | 99.7 | 65.57 | 0.14 |
| 22 | 3 | 3.833 | 0.0034 | 0.0042 | 1.025 | 151.6 | 100.0 | 65.572 | 0.088 |
| 7 | 3 | 3.848 | 0.0040 | 0.0524 | 1.405 | 127.4 | 99.6 | 65.577 | 0.072 |
| 40 | 3 | 3.837 | 0.0040 | 0.0150 | 2.559 | 127.7 | 99.9 | 65.580 | 0.052 |
| 8 | 3 | 3.838 | 0.0044 | 0.0170 | 2.149 | 115.9 | 99.9 | 65.583 | 0.045 |
| 21 | 3 | 3.844 | 0.0057 | 0.0354 | 0.905 | 89.7 | 99.7 | 65.603 | 0.099 |
| 21 | 3 | 3.850 | 0.0059 | 0.0603 | 1.341 | 86.8 | 99.5 | 65.635 | 0.097 |
| 04 | 3 | 3.838 | 0.0055 | 0.0164 | 0.708 | 92.3 | 99.9 | 65.64 | 0.17 |
| 06 | 3 | 3.853 | 0.0048 | 0.0653 | 1.478 | 105.5 | 99.5 | 65.658 | 0.084 |
| 19 | 3 | 3.847 | 0.0097 | 0.0438 | 1.032 | 52.6 | 99.7 | 65.68 | 0.12 |
| 02 | 3 | 3.845 | 0.0039 | 0.0279 | 1.380 | 129.7 | 99.8 | 65.706 | 0.090 |
| 15 | 3 | 3.837 | 0.0057 | -0.0002 | 0.893 | 90.1 | 100.0 | 65.71 | 0.13 |
| 24 | 3 | 3.848 | 0.0037 | 0.0250 | 1.427 | 138.7 | 99.8 | 65.724 | 0.063 |
| 08 | 3 | 3.839 | 0.0042 | -0.0023 | 1.913 | 121.9 | 100.0 | 65.758 | 0.066 |
| 37 | 3 | 3.873 | 0.0015 | 0.1019 | 1.069 | 329.5 | 99.2 | 65.76 | 0.12 |
| 05 | 3 | 3.848 | 0.0065 | 0.0266 | 1.128 | 79.0 | 99.8 | 65.76 | 0.11 |
| 28 | 3 | 3.852 | 0.0042 | 0.0279 | 1.592 | 121.5 | 99.8 | 65.765 | 0.084 |
| 09 | 3 | 3.849 | 0.0033 | 0.0273 | 0.947 | 156.6 | 99.8 | 65.77 | 0.13 |
| 17 | 3 | 3.850 | 0.0064 | 0.0265 | 1.409 | 79.7 | 99.8 | 65.799 | 0.090 |
| 14 | 3 | 3.853 | 0.0060 | 0.0351 | 0.739 | 84.4 | 99.7 | 65.81 | 0.17 |
| 15 | 3 | 3.862 | 0.0013 | 0.0481 | 1.255 | 383.7 | 99.6 | 65.834 | 0.072 |
| 11 | 3 | 3.852 | 0.0071 | 0.0236 | 0.356 | 72.2 | 99.8 | 65.85 | 0.34 |
| 18 | 3 | 3.857 | 0.0087 | 0.0353 | 0.544 | 58.4 | 99.7 | 65.88 | 0.23 |
| 26 | 3 | 3.850 | 0.0015 | -0.0026 | 0.970 | 329.3 | 100.0 | 65.885 | 0.093 |
| x 03 | 3 | 3.866 | 0.0044 | 0.0281 | 0.315 | 117.0 | 99.8 | 66.05 | 0.38 |
| x 5 | 3 | 3.906 | 0.0035 | 0.0843 | 2.107 | 143.9 | 99.4 | 66.402 | 0.049 |
| x 32 | 3 | 3.891 | 0.0034 | 0.0308 | 1.991 | 150.1 | 99.8 | 66.417 | 0.066 |
| Mean age ± 1σ | | | | n=58 | MSWD=5.13 | | | 65.49 | 0.06 |

Notes:
Isotopic ratios corrected for blank, radioactive decay, and mass discrimination, not corrected for interfering reactions.
Errors quoted for individual analyses include analytical error only, without interfering reaction or J uncertainties.
Mean age is weighted mean age of Taylor (1982). Mean age error is weighted error of the mean (Taylor, 1982), multiplied by the root of the MSWD where MSWD>1, and also incorporates uncertainty in J factors and irradiation correction uncertainties.
Isotopic abundances after Steiger and Jäger (1977).
*-, K/Ca not determined due to non-detectable ³⁷Ar above blank level
x preceding sample ID denotes analyses excluded from mean age calculations.
IC = measured ⁴⁰Ar/³⁶Ar of air standard divided by 295.5
Ages calculated relative to FC-2 Fish Canyon Tuff sanidine interlaboratory standard at 28.201 Ma (Kuiper et al., 2008)
Decay Constant (LambdaK (total)) = 5.463e-10/a (Min et al., 2000)

Argon data for Wirt member samples.

| ID | Power | $^{40}\text{Ar}/^{39}\text{Ar}$ | $^{37}\text{Ar}/^{39}\text{Ar}$ | $^{36}\text{Ar}/^{39}\text{Ar}$ | $^{39}\text{Ar}_K$ | K/Ca | $^{40}\text{Ar}^*$ | Age | $\pm 1\sigma$ |
|---|---------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------|--------------------|--------|---------------|
| | (watts) | | | ($\times 10^{-3}$) | ($\times 10^{-15}$ mol) | | (%) | (Ma) | (Ma) |
| 6-2-15-A, Sanidine/Microcline, J=0.003821\pm0.03%, IC=1.029837\pm0.0011228, NM-277G, Lab#=63811, Argus VI | | | | | | | | | |
| 43 | 3 | 11.00 | 0.0042 | 0.2988 | 0.350 | 120.3 | 99.2 | 74.72 | 0.18 |
| 21 | 3 | 23.20 | 0.0049 | 0.6353 | 0.203 | 103.8 | 99.2 | 154.2 | 1.3 |
| 62 | 3 | 25.19 | -0.0025 | 0.2465 | 0.734 | - | 99.7 | 167.71 | 0.37 |
| 75 | 3 | 26.23 | 0.0104 | 1.824 | 0.212 | 49.1 | 97.9 | 171.3 | 1.2 |
| 24 | 3 | 26.69 | 0.0030 | 0.2391 | 0.477 | 168.8 | 99.7 | 177.24 | 0.68 |
| 07 | 3 | 28.16 | -0.0008 | 0.4927 | 0.396 | - | 99.5 | 186.10 | 0.64 |
| 28 | 3 | 28.38 | -0.0024 | 0.4290 | 0.344 | - | 99.6 | 187.62 | 0.87 |
| 16 | 3 | 29.00 | 0.0046 | 0.4507 | 0.282 | 112.1 | 99.5 | 191.49 | 0.98 |
| 36 | 3 | 28.99 | 0.0012 | 0.3118 | 0.770 | 418.8 | 99.7 | 191.67 | 0.44 |
| 69 | 3 | 29.18 | 0.0036 | 0.8320 | 0.145 | 142.1 | 99.2 | 191.9 | 2.2 |
| 72 | 3 | 29.34 | 0.0013 | 1.163 | 0.429 | 378.9 | 98.8 | 192.29 | 0.85 |
| 13 | 3 | 29.18 | 0.0005 | 0.1456 | 0.721 | 954.4 | 99.9 | 193.16 | 0.42 |
| 02 | 3 | 29.38 | 0.0026 | 0.3292 | 0.505 | 192.9 | 99.7 | 194.12 | 0.65 |
| 15 | 3 | 29.52 | 0.0015 | 0.6619 | 0.406 | 339.4 | 99.3 | 194.36 | 0.81 |
| 01 | 3 | 29.46 | -0.0016 | 0.2876 | 0.533 | - | 99.7 | 194.66 | 0.54 |
| 45 | 3 | 31.08 | -0.0039 | 0.5662 | 0.369 | - | 99.5 | 204.33 | 0.89 |
| 34 | 3 | 40.87 | 0.0048 | 0.1134 | 0.925 | 105.6 | 99.9 | 265.36 | 0.49 |
| 06 | 3 | 46.40 | -0.0013 | 0.2885 | 0.410 | - | 99.8 | 298.23 | 0.96 |
| 20 | 3 | 48.94 | -0.0003 | 0.2843 | 0.551 | - | 99.8 | 313.27 | 0.86 |
| 56 | 3 | 52.14 | -0.0044 | 0.6719 | 0.294 | - | 99.6 | 331.3 | 1.5 |
| 47 | 3 | 59.30 | 0.0015 | 0.3431 | 0.524 | 330.6 | 99.8 | 373.2 | 1.1 |
| 09 | 3 | 69.27 | 0.0007 | 0.2931 | 0.715 | 755.2 | 99.9 | 429.29 | 0.93 |
| 61 | 3 | 75.96 | -0.0014 | 0.3458 | 0.340 | - | 99.9 | 465.9 | 2.3 |
| 25 | 3 | 86.11 | 0.0017 | 0.3072 | 0.471 | 303.9 | 99.9 | 520.2 | 1.4 |
| 49 | 3 | 107.1 | 0.0047 | 0.2321 | 0.384 | 108.5 | 99.9 | 627.4 | 2.3 |
| 11 | 3 | 136.0 | 0.0006 | 0.3354 | 0.404 | 894.6 | 99.9 | 765.5 | 2.6 |
| 67 | 3 | 139.6 | -0.0017 | 0.5381 | 0.370 | - | 99.9 | 781.9 | 2.6 |
| 44 | 3 | 147.8 | 0.0012 | 0.2037 | 0.655 | 441.7 | 100.0 | 819.1 | 1.6 |
| 40 | 3 | 174.0 | 0.0028 | 0.4073 | 0.358 | 182.2 | 99.9 | 932.4 | 3.2 |
| 60 | 3 | 207.9 | 0.0008 | 0.2648 | 0.433 | 639.1 | 100.0 | 1069.9 | 2.8 |
| 65 | 3 | 215.6 | 0.0079 | 0.7654 | 0.265 | 64.2 | 99.9 | 1099.0 | 4.8 |
| 26 | 3 | 216.9 | 0.0168 | 1.756 | 0.157 | 30.4 | 99.8 | 1103.1 | 9.5 |
| 52 | 3 | 256.4 | -0.0019 | 0.6120 | 0.248 | - | 99.9 | 1249.4 | 5.9 |
| 70 | 3 | 261.6 | -0.0039 | 0.5888 | 0.302 | - | 99.9 | 1267.8 | 4.9 |
| 35 | 3 | 265.5 | 0.0018 | 0.5800 | 0.419 | 285.9 | 99.9 | 1281.3 | 3.1 |
| 6-2-15-B, Sanidine/Microcline, J=0.0038183\pm0.03%, IC=1.029837\pm0.0011228, NM-277G, Lab#=63813, Argus VI | | | | | | | | | |
| 67 | 3 | 9.569 | 0.0048 | 0.2587 | 0.405 | 106.7 | 99.2 | 65.12 | 0.14 |
| 55 | 3 | 9.646 | 0.0061 | 0.0726 | 0.817 | 83.4 | 99.8 | 66.014 | 0.073 |
| 35 | 3 | 9.765 | 0.0079 | 0.3130 | 0.859 | 64.4 | 99.1 | 66.339 | 0.073 |
| 63 | 3 | 9.745 | 0.0092 | 0.1448 | 0.616 | 55.5 | 99.6 | 66.540 | 0.098 |
| 57 | 3 | 9.968 | 0.0067 | 0.4757 | 0.822 | 75.7 | 98.6 | 67.383 | 0.077 |
| 30 | 3 | 11.43 | 0.0011 | 2.740 | 0.038 | 453.3 | 92.9 | 72.7 | 1.5 |
| 38 | 3 | 10.72 | 0.0045 | 0.0880 | 0.752 | 114.5 | 99.8 | 73.193 | 0.085 |
| 56 | 3 | 11.26 | 0.0062 | 0.1141 | 0.838 | 82.9 | 99.7 | 76.772 | 0.077 |
| 69 | 3 | 12.74 | 0.0021 | 0.3211 | 0.175 | 239.8 | 99.3 | 86.29 | 0.37 |
| 08 | 3 | 22.97 | 0.0015 | 0.2633 | 1.441 | 333.7 | 99.7 | 153.37 | 0.22 |
| 20 | 3 | 24.64 | 0.0034 | 0.4925 | 0.584 | 150.7 | 99.4 | 163.60 | 0.50 |
| 10 | 3 | 40.32 | -0.0064 | 0.3625 | 0.178 | - | 99.7 | 261.4 | 2.1 |
| 09 | 3 | 44.59 | -0.0035 | 0.6331 | 0.148 | - | 99.6 | 286.6 | 2.8 |
| 52 | 3 | 112.1 | -0.0008 | 0.4664 | 0.354 | - | 99.9 | 651.5 | 2.3 |
| 45 | 3 | 159.1 | 0.0041 | 1.044 | 0.131 | 123.1 | 99.8 | 867.5 | 8.2 |
| 64 | 3 | 159.6 | 0.0024 | 0.4322 | 0.561 | 216.6 | 99.9 | 870.4 | 2.1 |
| 46 | 3 | 177.0 | 0.0981 | 6.834 | 0.021 | 5.2 | 98.9 | 936.6 | 43.8 |

Argon data for Wirt member samples.

| ID | Power (watts) | $^{40}\text{Ar}/^{39}\text{Ar}$ | $^{37}\text{Ar}/^{39}\text{Ar}$ | $^{36}\text{Ar}/^{39}\text{Ar}$ ($\times 10^{-3}$) | $^{39}\text{Ar}_K$ ($\times 10^{-15}$ mol) | K/Ca | $^{40}\text{Ar}^*$ (%) | Age (Ma) | $\pm 1\sigma$ (Ma) |
|---|------------------|---------------------------------|---------------------------------|---|--|--------|---------------------------|-------------|-----------------------|
| 6-2-15-B, Sanidine/Microcline, J=0.0038183\pm0.03%, IC=1.029837\pm0.0011228, NM-277G, Lab#=63813, Argus VI | | | | | | | | | |
| 49 | 3 | 182.9 | -0.0002 | 0.4396 | 0.819 | - | 99.9 | 968.8 | 1.5 |
| 47 | 3 | 227.3 | -0.0424 | 6.265 | 0.014 | - | 99.2 | 1136.6 | 92.2 |
| 6-2-15-B, Sanidine/Microcline, J=0.0038176\pm0.03%, IC=1.022159\pm0.003528, NM-277G, Lab#=63814, Argus VI | | | | | | | | | |
| 18 | 4 | 11.02 | 0.0230 | 0.5298 | 0.272 | 22.2 | 98.6 | 74.36 | 0.37 |
| 37 | 4 | 11.80 | -0.0012 | 0.9548 | 0.453 | - | 97.6 | 78.73 | 0.22 |
| 26 | 4 | 12.15 | 0.0145 | 0.6697 | 0.232 | 35.2 | 98.4 | 81.60 | 0.43 |
| 36 | 4 | 12.25 | 0.0021 | 0.4810 | 1.023 | 239.3 | 98.8 | 82.666 | 0.099 |
| 31 | 4 | 13.10 | 0.0070 | 0.3854 | 0.323 | 72.7 | 99.1 | 88.52 | 0.31 |
| 14 | 4 | 23.71 | 0.0134 | 1.447 | 0.150 | 38.0 | 98.2 | 155.8 | 1.6 |
| 46 | 4 | 25.62 | 0.0064 | 0.6810 | 0.411 | 79.6 | 99.2 | 169.51 | 0.72 |
| 32 | 4 | 27.28 | 0.0009 | 0.4180 | 0.637 | 543.5 | 99.5 | 180.49 | 0.51 |
| 45 | 4 | 30.63 | 0.0554 | 2.739 | 0.079 | 9.2 | 97.4 | 197.3 | 3.5 |
| 43 | 4 | 33.82 | -0.0102 | 0.2731 | 0.310 | - | 99.8 | 221.7 | 1.1 |
| 35 | 4 | 41.50 | 0.0008 | 0.5395 | 0.568 | 609.6 | 99.6 | 268.20 | 0.61 |
| 27 | 4 | 44.41 | -0.0092 | 1.550 | 0.149 | - | 99.0 | 283.9 | 3.0 |
| 09 | 4 | 48.44 | 0.0110 | 3.108 | 0.262 | 46.4 | 98.1 | 305.1 | 1.8 |
| 29 | 4 | 86.27 | 0.0008 | 0.5871 | 0.264 | 654.2 | 99.8 | 520.1 | 3.2 |
| 28 | 4 | 99.44 | -0.0078 | 0.4335 | 0.378 | - | 99.9 | 588.4 | 2.1 |
| 13 | 4 | 118.8 | -0.0088 | 0.6907 | 0.253 | - | 99.8 | 683.6 | 3.6 |
| 39 | 4 | 122.8 | -0.0074 | 0.4825 | 0.436 | - | 99.9 | 703.2 | 2.5 |
| 16 | 4 | 125.5 | -0.0115 | 3.287 | 0.157 | - | 99.2 | 712.0 | 5.0 |
| 11 | 4 | 146.6 | -0.0024 | 0.5612 | 0.425 | - | 99.9 | 812.9 | 1.9 |
| 44 | 4 | 237.2 | -0.0013 | 0.1553 | 0.262 | - | 100.0 | 1179.9 | 4.5 |
| 24 | 4 | 291.6 | -0.0015 | 0.2866 | 0.720 | - | 100.0 | 1369.4 | 2.3 |
| 21 | 4 | 322.2 | 0.0015 | 1.733 | 0.190 | 332.4 | 99.8 | 1466.4 | 6.8 |
| 6-2-15-B, Sanidine/Microcline, J=0.0039347\pm0.01%, IC=1.004012\pm0.0013619, NM-284C, Lab#=65072, Argus VI | | | | | | | | | |
| 02 | 4 | 10.73 | 0.0031 | 0.0229 | 0.631 | 163.5 | 99.9 | 75.59 | 0.12 |
| 03 | 4 | 11.59 | 0.0046 | 0.1639 | 0.368 | 110.8 | 99.6 | 81.26 | 0.12 |
| 09 | 4 | 12.14 | 0.0013 | 0.1966 | 0.936 | 396.2 | 99.5 | 84.995 | 0.056 |
| 07 | 4 | 12.21 | 0.0122 | 0.1512 | 0.108 | 41.7 | 99.6 | 85.56 | 0.40 |
| 06 | 4 | 12.62 | 0.0038 | 1.264 | 0.155 | 132.9 | 97.0 | 86.09 | 0.29 |
| 04 | 4 | 25.05 | 0.0048 | 0.0749 | 1.263 | 105.3 | 99.9 | 171.87 | 0.45 |
| 05 | 4 | 35.39 | 0.0010 | 1.125 | 0.666 | 533.1 | 99.1 | 236.5 | 1.1 |
| 01 | 4 | 64.07 | 0.0060 | 0.1262 | 0.799 | 84.4 | 99.9 | 411.3 | 1.3 |
| 08 | 4 | 252.2 | 0.0028 | 0.6366 | 0.913 | 180.1 | 99.9 | 1260.9 | 2.8 |
| 6-2-15-C, Sanidine/Microcline, J=0.0038166\pm0.02%, IC=1.029837\pm0.0011228, NM-277G, Lab#=63815, Argus VI | | | | | | | | | |
| 19 | 3 | 9.589 | 0.0021 | 0.2074 | 0.513 | 242.6 | 99.4 | 65.33 | 0.12 |
| 22 | 3 | 9.993 | 0.0083 | 0.1000 | 0.598 | 61.4 | 99.7 | 68.268 | 0.090 |
| 27 | 3 | 10.80 | 0.0048 | 0.0584 | 0.496 | 107.0 | 99.8 | 73.78 | 0.11 |
| 32 | 3 | 10.94 | -0.0006 | 0.1246 | 0.399 | - | 99.7 | 74.57 | 0.13 |
| 08 | 3 | 11.35 | 0.0119 | 0.8805 | 0.144 | 42.8 | 97.7 | 75.83 | 0.36 |
| 11 | 3 | 11.94 | 0.0002 | 0.8923 | 0.398 | 2436.5 | 97.8 | 79.78 | 0.14 |
| 04 | 3 | 12.05 | 0.0021 | 0.7150 | 0.403 | 247.9 | 98.2 | 80.87 | 0.14 |
| 46 | 3 | 12.02 | 0.0063 | 0.1547 | 0.460 | 81.1 | 99.6 | 81.73 | 0.12 |
| 26 | 3 | 13.13 | 0.0054 | 0.4228 | 0.491 | 94.6 | 99.1 | 88.59 | 0.11 |
| 16 | 3 | 13.61 | 0.0064 | 0.3979 | 0.190 | 80.2 | 99.1 | 91.86 | 0.29 |
| 61 | 3 | 14.88 | -0.0032 | 0.4293 | 0.093 | - | 99.1 | 100.24 | 0.86 |
| 37 | 3 | 16.27 | 0.0005 | 2.701 | 0.414 | 1017.6 | 95.1 | 104.98 | 0.27 |
| 35 | 3 | 16.00 | 0.0113 | 0.3424 | 0.241 | 45.0 | 99.4 | 107.82 | 0.37 |
| 44 | 3 | 16.31 | 0.0154 | 0.2656 | 0.529 | 33.1 | 99.5 | 109.99 | 0.18 |

Argon data for Wirt member samples.

| ID | Power | $^{40}\text{Ar}/^{39}\text{Ar}$ | $^{37}\text{Ar}/^{39}\text{Ar}$ | $^{36}\text{Ar}/^{39}\text{Ar}$ | $^{39}\text{Ar}_K$ | K/Ca | $^{40}\text{Ar}^*$ | Age | $\pm 1\sigma$ |
|---|---------|---------------------------------|---------------------------------|---------------------------------|--------------------------|--------|--------------------|---------|---------------|
| | (watts) | | | ($\times 10^{-3}$) | ($\times 10^{-15}$ mol) | | (%) | (Ma) | (Ma) |
| 6-2-15-C, Sanidine/Microcline, J=0.0038166\pm0.02%, IC=1.029837\pm0.0011228, NM-277G, Lab#=63815, Argus VI | | | | | | | | | |
| 66 | 3 | 16.58 | -0.0002 | 0.6267 | 0.875 | - | 98.9 | 111.02 | 0.12 |
| 06 | 3 | 16.70 | 0.0103 | 0.1719 | 0.194 | 49.8 | 99.7 | 112.76 | 0.48 |
| 58 | 3 | 18.84 | -0.0112 | 0.1441 | 0.084 | - | 99.8 | 126.7 | 1.1 |
| 23 | 3 | 19.91 | -0.0007 | 0.7580 | 0.170 | - | 98.9 | 132.57 | 0.62 |
| 63 | 3 | 19.88 | 0.0045 | 0.1305 | 0.148 | 113.7 | 99.8 | 133.54 | 0.68 |
| 14 | 3 | 20.91 | 0.0024 | 0.7752 | 0.572 | 213.7 | 98.9 | 139.01 | 0.21 |
| 28 | 3 | 25.63 | -0.0014 | 0.2854 | 0.485 | - | 99.7 | 170.27 | 0.35 |
| 49 | 3 | 27.42 | 0.0142 | 1.495 | 0.036 | 36.0 | 98.4 | 179.4 | 3.5 |
| 25 | 3 | 27.13 | -0.0023 | 0.2986 | 0.603 | - | 99.7 | 179.75 | 0.22 |
| 20 | 3 | 29.72 | -0.0079 | 1.156 | 0.071 | - | 98.8 | 194.5 | 2.4 |
| 07 | 3 | 34.01 | 0.0074 | 0.1837 | 0.441 | 69.3 | 99.8 | 223.04 | 0.34 |
| 65 | 3 | 37.91 | 0.0027 | 0.1737 | 0.777 | 187.8 | 99.9 | 247.00 | 0.22 |
| 52 | 3 | 43.67 | 0.0093 | 0.3793 | 0.109 | 55.1 | 99.7 | 281.5 | 1.9 |
| 15 | 3 | 45.13 | 0.0058 | 0.8626 | 0.481 | 88.4 | 99.4 | 289.33 | 0.42 |
| 47 | 3 | 45.86 | 0.0051 | 0.9044 | 0.361 | 99.9 | 99.4 | 293.61 | 0.60 |
| 29 | 3 | 46.48 | -0.0141 | 2.083 | 0.048 | - | 98.7 | 295.2 | 4.6 |
| 55 | 3 | 53.44 | 0.0032 | 0.5430 | 0.478 | 159.4 | 99.7 | 338.80 | 0.52 |
| 40 | 3 | 54.35 | 0.0057 | 1.378 | 0.687 | 89.7 | 99.3 | 342.66 | 0.40 |
| 10 | 3 | 61.48 | 0.0064 | 0.2856 | 0.290 | 80.3 | 99.9 | 385.33 | 0.99 |
| 59 | 3 | 62.72 | 0.0053 | 0.3678 | 0.531 | 96.2 | 99.8 | 392.16 | 0.50 |
| 50 | 3 | 66.00 | 0.0088 | 0.2504 | 0.281 | 58.2 | 99.9 | 410.81 | 0.94 |
| 12 | 3 | 68.38 | -0.0049 | 0.2549 | 0.266 | - | 99.9 | 424.0 | 1.0 |
| 48 | 3 | 69.81 | 0.0012 | 0.2696 | 0.406 | 438.2 | 99.9 | 431.90 | 0.71 |
| 54 | 3 | 76.41 | 0.0067 | 0.1248 | 0.432 | 76.4 | 100.0 | 468.17 | 0.67 |
| 45 | 3 | 92.22 | 0.0011 | 0.7045 | 0.628 | 462.6 | 99.8 | 550.88 | 0.62 |
| 33 | 3 | 92.37 | 0.0040 | 0.5714 | 0.436 | 128.6 | 99.8 | 551.89 | 0.84 |
| 09 | 3 | 96.72 | 0.0013 | 0.8169 | 0.389 | 396.6 | 99.8 | 573.82 | 0.98 |
| 64 | 3 | 103.6 | 0.0024 | 1.127 | 0.343 | 215.5 | 99.7 | 608.1 | 1.2 |
| 60 | 3 | 105.1 | 0.0086 | 0.3869 | 0.466 | 59.4 | 99.9 | 616.71 | 0.83 |
| 21 | 3 | 116.2 | 0.0042 | 0.4283 | 0.580 | 121.4 | 99.9 | 671.11 | 0.74 |
| 42 | 3 | 119.1 | 0.0032 | 0.2288 | 0.592 | 161.7 | 99.9 | 685.72 | 0.67 |
| 43 | 3 | 119.3 | 0.0032 | 0.2220 | 0.624 | 161.0 | 99.9 | 686.42 | 0.76 |
| 70 | 3 | 120.5 | 0.0048 | 0.1726 | 0.716 | 106.7 | 100.0 | 692.13 | 0.67 |
| 68 | 3 | 121.2 | 0.0003 | 0.3930 | 0.185 | 2028.6 | 99.9 | 695.5 | 2.4 |
| 71 | 3 | 127.9 | -0.0013 | 1.475 | 0.428 | - | 99.7 | 725.8 | 1.3 |
| 17 | 3 | 128.6 | -0.0001 | 0.2312 | 0.736 | - | 99.9 | 730.39 | 0.65 |
| 69 | 3 | 155.4 | 0.0117 | 1.838 | 0.220 | 43.5 | 99.7 | 850.2 | 2.1 |
| 62 | 3 | 156.8 | 0.0020 | 0.3884 | 0.366 | 253.1 | 99.9 | 858.2 | 1.3 |
| 57 | 3 | 160.4 | 0.0068 | 0.8672 | 0.322 | 75.6 | 99.8 | 873.1 | 1.9 |
| 34 | 3 | 160.7 | 0.0032 | 0.9023 | 0.600 | 161.1 | 99.8 | 874.4 | 1.0 |
| 30 | 3 | 176.0 | 0.0035 | 0.2258 | 0.451 | 146.0 | 100.0 | 940.4 | 1.4 |
| 05 | 3 | 180.5 | 0.0045 | 0.2308 | 0.354 | 113.5 | 100.0 | 959.1 | 1.5 |
| 36 | 3 | 185.9 | 0.0061 | 0.9264 | 0.459 | 84.1 | 99.9 | 980.3 | 1.3 |
| 51 | 3 | 186.3 | 0.0045 | 0.0996 | 1.237 | 114.1 | 100.0 | 983.11 | 0.63 |
| 56 | 3 | 187.7 | 0.0011 | 0.3463 | 0.364 | 461.6 | 99.9 | 988.4 | 1.6 |
| 39 | 3 | 188.6 | 0.0002 | 0.7981 | 0.728 | 2650.4 | 99.9 | 991.61 | 0.91 |
| 24 | 3 | 196.1 | 0.0009 | 0.3101 | 0.580 | 570.4 | 100.0 | 1022.2 | 1.1 |
| 38 | 3 | 197.1 | 0.0095 | 0.2620 | 0.182 | 53.6 | 100.0 | 1026.2 | 3.4 |
| 02 | 3 | 207.9 | 0.0005 | 0.3804 | 1.003 | 949.7 | 99.9 | 1068.66 | 0.79 |
| 31 | 3 | 209.8 | 0.0049 | 0.1856 | 0.661 | 105.1 | 100.0 | 1076.52 | 0.90 |
| 18 | 3 | 242.5 | 0.0081 | 0.4561 | 0.181 | 63.1 | 99.9 | 1198.8 | 3.3 |
| 13 | 3 | 247.4 | 0.0017 | 0.3679 | 0.301 | 303.0 | 100.0 | 1216.6 | 2.4 |
| 67 | 3 | 261.4 | 0.0027 | 0.1269 | 0.175 | 189.8 | 100.0 | 1266.4 | 3.8 |

Argon data for Wirt member samples.

| ID | Power | $^{40}\text{Ar}/^{39}\text{Ar}$ | $^{37}\text{Ar}/^{39}\text{Ar}$ | $^{36}\text{Ar}/^{39}\text{Ar}$ | $^{39}\text{Ar}_K$ | K/Ca | $^{40}\text{Ar}^*$ | Age | $\pm 1\sigma$ |
|--|---------|---------------------------------|---------------------------------|---------------------------------|--------------------------|--------|--------------------|--------|---------------|
| | (watts) | | | ($\times 10^{-3}$) | ($\times 10^{-15}$ mol) | | (%) | (Ma) | (Ma) |
| 6-2-15-C, Sanidine/Microcline, J=0.0038164\pm0.02%, IC=1.022159\pm0.003528, NM-277G, Lab#=63816, Argus VI | | | | | | | | | |
| 24 | 4 | 11.95 | 0.0028 | 0.4504 | 0.222 | 180.2 | 98.9 | 80.72 | 0.45 |
| 07 | 4 | 14.28 | -0.0011 | 0.4797 | 0.517 | - | 99.0 | 96.11 | 0.45 |
| 14 | 4 | 15.77 | -0.0015 | 0.7980 | 0.706 | - | 98.5 | 105.37 | 0.44 |
| 16 | 4 | 16.28 | 0.0022 | 1.822 | 0.670 | 233.8 | 96.7 | 106.72 | 0.47 |
| 06 | 4 | 18.90 | 0.0072 | 1.172 | 1.054 | 70.4 | 98.2 | 125.19 | 0.30 |
| 31 | 4 | 21.41 | 0.0007 | 0.5282 | 0.831 | 729.9 | 99.3 | 142.69 | 0.46 |
| 11 | 4 | 23.48 | 0.0002 | 1.499 | 0.438 | 3010.1 | 98.1 | 154.20 | 0.80 |
| 36 | 4 | 24.04 | 0.0112 | 0.6938 | 0.204 | 45.5 | 99.2 | 159.3 | 1.6 |
| 27 | 4 | 26.15 | 0.0125 | 2.671 | 0.197 | 40.7 | 97.0 | 169.1 | 1.9 |
| 25 | 4 | 32.43 | 0.1068 | 12.49 | 0.069 | 4.8 | 88.6 | 190.5 | 5.4 |
| 13 | 4 | 29.96 | 0.0063 | 0.2542 | 0.605 | 80.5 | 99.8 | 197.62 | 0.75 |
| 29 | 4 | 35.16 | 0.0055 | 2.014 | 0.844 | 93.3 | 98.3 | 226.79 | 0.72 |
| 19 | 4 | 35.12 | -0.0025 | 1.374 | 0.409 | - | 98.8 | 227.7 | 1.2 |
| 15 | 4 | 36.65 | 0.0088 | 0.7023 | 0.994 | 58.3 | 99.4 | 238.30 | 0.51 |
| 30 | 4 | 37.18 | 0.0092 | 1.057 | 0.585 | 55.2 | 99.2 | 240.94 | 0.76 |
| 10 | 4 | 38.36 | 0.0137 | 1.820 | 0.320 | 37.1 | 98.6 | 246.8 | 1.6 |
| 35 | 4 | 44.53 | 0.0310 | 3.697 | 0.130 | 16.4 | 97.6 | 280.8 | 4.4 |
| 04 | 4 | 51.71 | 0.0029 | 0.7634 | 0.433 | 173.2 | 99.6 | 328.3 | 2.0 |
| 21 | 4 | 71.96 | -0.0020 | 1.204 | 0.282 | - | 99.5 | 442.2 | 3.0 |
| 39 | 4 | 72.35 | 0.0048 | 1.622 | 0.190 | 106.7 | 99.3 | 443.7 | 4.9 |
| 02 | 4 | 76.57 | -0.0032 | 0.3644 | 0.678 | - | 99.9 | 468.7 | 1.5 |
| 18 | 4 | 84.58 | 0.0020 | 0.5577 | 0.865 | 253.8 | 99.8 | 511.2 | 1.0 |
| 38 | 4 | 85.17 | 0.0149 | 1.280 | 0.566 | 34.3 | 99.6 | 513.1 | 2.1 |
| 05 | 4 | 97.09 | 0.0091 | 0.4203 | 0.759 | 56.3 | 99.9 | 576.3 | 1.3 |
| 20 | 4 | 98.40 | -0.0019 | 1.205 | 0.280 | - | 99.6 | 581.8 | 4.6 |
| 23 | 4 | 105.2 | 0.0126 | 1.759 | 0.264 | 40.6 | 99.5 | 615.3 | 4.2 |
| 28 | 4 | 114.6 | 0.0087 | 1.957 | 0.199 | 58.9 | 99.5 | 661.5 | 6.6 |
| 17 | 4 | 119.0 | 0.0010 | 0.7931 | 0.719 | 486.5 | 99.8 | 684.1 | 2.2 |
| 37 | 4 | 163.6 | 0.0039 | 0.6275 | 0.337 | 131.5 | 99.9 | 887.2 | 4.8 |
| 34 | 4 | 168.2 | -0.0038 | 0.4058 | 0.894 | - | 99.9 | 907.2 | 1.8 |
| 12 | 4 | 172.9 | -0.0205 | 2.421 | 0.171 | - | 99.6 | 924.6 | 8.3 |
| 22 | 4 | 174.1 | 0.0041 | 1.029 | 0.717 | 124.1 | 99.8 | 931.1 | 2.1 |
| 26 | 4 | 229.7 | 0.0035 | 3.277 | 0.465 | 145.2 | 99.6 | 1148.7 | 3.9 |
| 08 | 4 | 273.9 | 0.0035 | 0.2707 | 0.646 | 146.7 | 100.0 | 1309.6 | 3.2 |
| 6-2-15-C, Sanidine/Microcline, J=0.0039346\pm0.01%, IC=1.00454\pm0.002106, NM-284C, Lab#=65071, Argus VI | | | | | | | | | |
| 244 | 4 | 9.320 | 0.0086 | 0.1441 | 0.469 | 59.5 | 99.5 | 65.583 | 0.089 |
| 171 | 4 | 9.341 | 0.0083 | 0.0957 | 0.424 | 61.6 | 99.7 | 65.823 | 0.096 |
| 80 | 4 | 10.23 | 0.0027 | 0.0748 | 0.259 | 188.2 | 99.8 | 72.06 | 0.11 |
| 265 | 4 | 10.58 | 0.0039 | 0.7192 | 0.669 | 130.7 | 98.0 | 73.140 | 0.048 |
| 82 | 4 | 10.39 | 0.0032 | 0.0730 | 0.984 | 160.4 | 99.8 | 73.166 | 0.033 |
| 107 | 4 | 10.65 | 0.0110 | 0.0604 | 0.321 | 46.5 | 99.8 | 74.940 | 0.089 |
| 05 | 3.5 | 10.82 | 0.0078 | 0.3341 | 0.164 | 65.6 | 99.1 | 75.61 | 0.37 |
| 236 | 4 | 10.79 | 0.0100 | 0.1866 | 0.307 | 51.2 | 99.5 | 75.654 | 0.097 |
| 15 | 3.5 | 10.83 | 0.0053 | 0.0815 | 0.514 | 95.8 | 99.8 | 76.17 | 0.12 |
| 79 | 4 | 10.83 | 0.0066 | 0.0376 | 0.459 | 77.1 | 99.9 | 76.252 | 0.066 |
| 215 | 4 | 10.92 | 0.0117 | 0.1997 | 0.189 | 43.5 | 99.5 | 76.58 | 0.15 |
| 105 | 4 | 11.36 | 0.0026 | 1.644 | 0.651 | 196.2 | 95.7 | 76.644 | 0.053 |
| 264 | 4 | 11.12 | 0.0040 | 0.6991 | 0.193 | 128.1 | 98.1 | 76.94 | 0.15 |
| 137 | 4 | 11.28 | 0.0039 | 1.095 | 0.822 | 129.8 | 97.1 | 77.218 | 0.044 |
| 172 | 4 | 11.13 | 0.0057 | 0.0963 | 0.406 | 89.8 | 99.7 | 78.238 | 0.079 |
| 230 | 4 | 11.22 | 0.0061 | 0.0663 | 0.394 | 83.7 | 99.8 | 78.873 | 0.078 |
| 96 | 4 | 15.18 | -0.0617 | 13.40 | 0.029 | - | 73.9 | 79.0 | 4.1 |
| 126 | 4 | 11.76 | 0.0022 | 0.9739 | 0.868 | 228.1 | 97.6 | 80.772 | 0.043 |

Argon data for Wirt member samples.

| ID | Power | $^{40}\text{Ar}/^{39}\text{Ar}$ | $^{37}\text{Ar}/^{39}\text{Ar}$ | $^{36}\text{Ar}/^{39}\text{Ar}$ | $^{39}\text{Ar}_K$ | K/Ca | $^{40}\text{Ar}^*$ | Age | $\pm 1\sigma$ |
|---|---------|---------------------------------|---------------------------------|---------------------------------|--------------------------|--------|--------------------|--------|---------------|
| | (watts) | | | ($\times 10^{-3}$) | ($\times 10^{-15}$ mol) | | (%) | (Ma) | (Ma) |
| 6-2-15-C, Sanidine/Microcline, J=0.0039346\pm0.01%, IC=1.00454\pm0.002106, NM-284C, Lab#=65071, Argus VI | | | | | | | | | |
| 23 | 3.5 | 11.69 | 0.0099 | 0.5575 | 0.583 | 51.4 | 98.6 | 81.14 | 0.11 |
| 219 | 4 | 11.59 | 0.0071 | 0.0884 | 0.456 | 71.9 | 99.8 | 81.399 | 0.070 |
| 252 | 4 | 11.71 | 0.0033 | 0.4269 | 0.715 | 155.9 | 98.9 | 81.549 | 0.049 |
| 52 | 3.5 | 11.98 | 0.0021 | 1.160 | 0.789 | 247.4 | 97.1 | 81.913 | 0.091 |
| 59 | 4 | 11.72 | 0.0026 | 0.2163 | 0.691 | 198.1 | 99.5 | 82.014 | 0.048 |
| 78 | 4 | 11.83 | 0.0027 | 0.3919 | 0.595 | 186.6 | 99.0 | 82.456 | 0.055 |
| 261 | 4 | 11.93 | 0.0027 | 0.5681 | 0.735 | 191.3 | 98.6 | 82.761 | 0.048 |
| 83 | 4 | 12.06 | 0.0065 | 0.7883 | 0.421 | 78.4 | 98.1 | 83.180 | 0.080 |
| 85 | 4 | 12.04 | 0.0019 | 0.4356 | 0.489 | 262.2 | 98.9 | 83.807 | 0.063 |
| 72 | 4 | 12.19 | -0.0012 | 0.3016 | 0.457 | - | 99.3 | 85.063 | 0.070 |
| 142 | 4 | 12.13 | 0.0028 | 0.0755 | 0.642 | 179.8 | 99.8 | 85.163 | 0.052 |
| 108 | 4 | 12.52 | 0.0080 | 0.7442 | 0.479 | 63.7 | 98.2 | 86.487 | 0.069 |
| 117 | 4 | 13.15 | 0.0029 | 0.7351 | 0.748 | 178.9 | 98.3 | 90.786 | 0.049 |
| 198 | 4 | 13.21 | 0.0078 | 0.1592 | 0.238 | 65.6 | 99.6 | 92.38 | 0.14 |
| 08 | 3.5 | 13.40 | -0.0015 | 0.7376 | 0.723 | - | 98.4 | 92.533 | 0.097 |
| 128 | 4 | 14.09 | 0.0065 | 0.7997 | 0.527 | 79.0 | 98.3 | 97.078 | 0.071 |
| 60 | 4 | 16.20 | 0.0540 | 5.854 | 0.066 | 9.4 | 89.3 | 101.3 | 2.0 |
| 58 | 3.5 | 14.76 | 0.0003 | 0.7650 | 0.541 | 1779.0 | 98.5 | 101.77 | 0.48 |
| 69 | 4 | 15.80 | 0.0194 | 0.1578 | 0.411 | 26.3 | 99.7 | 110.05 | 0.36 |
| 113 | 4 | 17.56 | 0.0126 | 1.505 | 0.611 | 40.4 | 97.5 | 119.22 | 0.31 |
| 118 | 4 | 17.55 | -0.0002 | 0.7670 | 0.820 | - | 98.7 | 120.65 | 0.24 |
| 205 | 4 | 18.27 | 0.0087 | 0.5928 | 0.585 | 58.9 | 99.0 | 125.86 | 0.34 |
| 164 | 4 | 18.63 | 0.0308 | 1.414 | 0.268 | 16.6 | 97.8 | 126.63 | 0.71 |
| 17 | 3.5 | 19.35 | 0.0034 | 1.378 | 0.636 | 150.5 | 97.9 | 131.57 | 0.52 |
| 135 | 4 | 19.87 | -0.0078 | 1.003 | 0.578 | - | 98.5 | 135.73 | 0.29 |
| 124 | 4 | 21.06 | -0.0035 | 1.172 | 0.722 | - | 98.4 | 143.36 | 0.24 |
| 225 | 4 | 21.70 | -0.0011 | 0.5182 | 0.590 | - | 99.3 | 148.90 | 0.42 |
| 222 | 4 | 22.30 | 0.0070 | 0.5849 | 0.799 | 72.5 | 99.2 | 152.73 | 0.30 |
| 129 | 4 | 23.21 | 0.0065 | 1.255 | 0.184 | 78.3 | 98.4 | 157.44 | 0.96 |
| 237 | 4 | 23.72 | 0.0008 | 0.1900 | 0.348 | 645.6 | 99.8 | 162.91 | 0.53 |
| 19 | 3.5 | 23.98 | 0.0040 | 0.2622 | 0.734 | 128.8 | 99.7 | 164.47 | 0.46 |
| 161 | 4 | 25.56 | 0.0050 | 0.5390 | 0.521 | 101.9 | 99.4 | 174.33 | 0.50 |
| 253 | 4 | 26.59 | 0.0057 | 0.9957 | 0.471 | 89.4 | 98.9 | 180.20 | 0.68 |
| 160 | 4 | 27.42 | -0.0074 | 0.8006 | 0.150 | - | 99.1 | 185.9 | 1.8 |
| 165 | 4 | 28.65 | 0.0126 | 0.4769 | 0.689 | 40.6 | 99.5 | 194.58 | 0.42 |
| 24 | 3.5 | 29.03 | -0.0013 | 0.2451 | 0.633 | - | 99.8 | 197.47 | 0.83 |
| 35 | 3.5 | 29.51 | -0.0041 | 0.9738 | 0.313 | - | 99.0 | 199.2 | 1.9 |
| 246 | 4 | 30.51 | 0.0123 | 1.243 | 0.409 | 41.6 | 98.8 | 205.09 | 0.61 |
| 28 | 3.5 | 30.52 | -0.0003 | 0.6873 | 0.431 | - | 99.3 | 206.2 | 1.3 |
| 259 | 4 | 30.43 | 0.0057 | 0.1890 | 0.616 | 89.1 | 99.8 | 206.59 | 0.52 |
| 213 | 4 | 30.91 | -0.0026 | 0.2125 | 1.062 | - | 99.8 | 209.66 | 0.35 |
| 64 | 4 | 32.48 | 0.0092 | 0.0784 | 0.455 | 55.2 | 99.9 | 219.96 | 0.62 |
| 111 | 4 | 33.37 | 0.0107 | 0.5146 | 0.697 | 47.5 | 99.5 | 224.83 | 0.49 |
| 71 | 4 | 33.62 | -0.0042 | 0.2056 | 0.747 | - | 99.8 | 226.95 | 0.42 |
| 251 | 4 | 34.03 | 0.0280 | 0.2267 | 0.400 | 18.2 | 99.8 | 229.54 | 0.81 |
| 84 | 4 | 34.47 | 0.0071 | 0.6439 | 0.383 | 71.4 | 99.4 | 231.56 | 0.67 |
| 193 | 4 | 34.99 | 0.0059 | 0.4556 | 0.667 | 85.8 | 99.6 | 235.22 | 0.43 |
| 133 | 4 | 35.33 | 0.0188 | 0.7857 | 0.346 | 27.1 | 99.3 | 236.72 | 0.81 |
| 94 | 4 | 35.53 | 0.0007 | 0.1654 | 0.535 | 751.0 | 99.9 | 239.19 | 0.56 |
| 26 | 3.5 | 35.76 | 0.0042 | 0.4141 | 0.190 | 120.1 | 99.7 | 240.1 | 3.2 |
| 03 | 3.5 | 35.90 | 0.0052 | 0.6995 | 0.713 | 97.9 | 99.4 | 240.5 | 1.0 |
| 169 | 4 | 36.80 | 0.0035 | 0.2175 | 0.815 | 146.8 | 99.8 | 247.08 | 0.48 |
| 100 | 4 | 37.04 | 0.0254 | 0.7273 | 0.472 | 20.1 | 99.4 | 247.67 | 0.79 |
| 183 | 4 | 37.24 | 0.0572 | 1.215 | 0.070 | 8.9 | 99.0 | 248.0 | 3.5 |

Argon data for Wirt member samples.

| ID | Power | $^{40}\text{Ar}/^{39}\text{Ar}$ | $^{37}\text{Ar}/^{39}\text{Ar}$ | $^{36}\text{Ar}/^{39}\text{Ar}$ | $^{39}\text{Ar}_K$ | K/Ca | $^{40}\text{Ar}^*$ | Age | $\pm 1\sigma$ |
|---|---------|---------------------------------|---------------------------------|---------------------------------|--------------------------|--------|--------------------|--------|---------------|
| | (watts) | | | ($\times 10^{-3}$) | ($\times 10^{-15}$ mol) | | (%) | (Ma) | (Ma) |
| 6-2-15-C, Sanidine/Microcline, J=0.0039346\pm0.01%, IC=1.00454\pm0.002106, NM-284C, Lab#=65071, Argus VI | | | | | | | | | |
| 204 | 4 | 37.52 | 0.0127 | 0.7695 | 0.312 | 40.0 | 99.4 | 250.6 | 1.0 |
| 150 | 4 | 38.87 | -0.0008 | 0.2902 | 0.867 | - | 99.8 | 259.92 | 0.37 |
| 87 | 4 | 40.10 | 0.0116 | 0.4019 | 0.613 | 44.1 | 99.7 | 267.38 | 0.40 |
| 115 | 4 | 40.35 | 0.0083 | 1.161 | 0.566 | 61.6 | 99.2 | 267.57 | 0.59 |
| 40 | 3.5 | 41.89 | -0.0024 | 1.528 | 0.619 | - | 98.9 | 276.4 | 1.3 |
| 09 | 3.5 | 42.47 | -0.0007 | 0.0067 | 0.328 | - | 100.0 | 282.8 | 2.1 |
| 159 | 4 | 43.26 | -0.0095 | 0.7664 | 0.558 | - | 99.5 | 286.25 | 0.76 |
| 101 | 4 | 43.26 | 0.0047 | 0.4969 | 0.812 | 108.2 | 99.7 | 286.79 | 0.43 |
| 110 | 4 | 43.80 | -0.0008 | 0.7849 | 0.553 | - | 99.5 | 289.57 | 0.59 |
| 166 | 4 | 44.16 | -0.0059 | 0.5114 | 0.390 | - | 99.7 | 292.31 | 0.94 |
| 104 | 4 | 45.33 | 0.0110 | 0.2088 | 1.016 | 46.2 | 99.9 | 299.99 | 0.38 |
| 43 | 3.5 | 49.34 | 0.0007 | 0.6769 | 0.711 | 743.3 | 99.6 | 323.5 | 1.5 |
| 93 | 4 | 50.86 | 0.0432 | 0.7735 | 0.121 | 11.8 | 99.6 | 332.5 | 3.3 |
| 92 | 4 | 51.50 | -0.0216 | 2.629 | 0.224 | - | 98.5 | 333.0 | 1.8 |
| 67 | 4 | 52.53 | 0.0172 | 2.107 | 0.121 | 29.7 | 98.8 | 340.1 | 4.0 |
| 250 | 4 | 53.38 | -0.0035 | 0.4719 | 0.509 | - | 99.7 | 348.12 | 0.80 |
| 89 | 4 | 53.40 | -0.0005 | 0.4392 | 0.421 | - | 99.8 | 348.26 | 0.95 |
| 54 | 3.5 | 54.66 | -0.0006 | 1.116 | 0.840 | - | 99.4 | 354.5 | 1.2 |
| 254 | 4 | 54.48 | -0.0046 | 0.4851 | 0.837 | - | 99.7 | 354.62 | 0.50 |
| 168 | 4 | 55.67 | 0.0011 | 0.2959 | 0.402 | 445.9 | 99.8 | 362.0 | 1.3 |
| 200 | 4 | 56.63 | 0.0016 | 1.627 | 0.348 | 311.6 | 99.2 | 365.3 | 1.1 |
| 47 | 3.5 | 57.86 | 0.0113 | 0.9978 | 0.671 | 45.1 | 99.5 | 373.7 | 1.5 |
| 01 | 3.5 | 58.31 | 0.0121 | 0.4697 | 0.569 | 42.0 | 99.8 | 377.2 | 1.9 |
| 221 | 4 | 58.44 | 0.0014 | 0.3696 | 0.691 | 355.5 | 99.8 | 378.16 | 0.62 |
| 140 | 4 | 59.08 | 0.0027 | 0.2718 | 0.528 | 187.7 | 99.9 | 382.07 | 0.79 |
| 44 | 3.5 | 59.45 | 0.0005 | 0.3016 | 0.440 | 988.8 | 99.9 | 384.2 | 2.4 |
| 130 | 4 | 63.07 | 0.0032 | 0.3513 | 0.661 | 157.2 | 99.8 | 405.10 | 0.70 |
| 217 | 4 | 63.80 | 0.0025 | 0.3952 | 0.936 | 201.7 | 99.8 | 409.26 | 0.57 |
| 22 | 3.5 | 65.80 | 0.0007 | 0.9572 | 0.705 | 727.6 | 99.6 | 419.8 | 1.9 |
| 57 | 3.5 | 66.31 | -0.0292 | 0.8923 | 0.168 | - | 99.6 | 422.8 | 6.9 |
| 139 | 4 | 67.87 | -0.0015 | 0.6755 | 0.831 | - | 99.7 | 432.09 | 0.67 |
| 102 | 4 | 67.78 | 0.0070 | 0.1822 | 0.503 | 72.6 | 99.9 | 432.4 | 1.2 |
| 149 | 4 | 68.80 | -0.0351 | 1.704 | 0.046 | - | 99.3 | 435.6 | 9.5 |
| 202 | 4 | 68.55 | -0.0006 | 0.3764 | 0.358 | - | 99.8 | 436.5 | 1.5 |
| 216 | 4 | 68.67 | 0.0039 | 0.3721 | 0.357 | 131.6 | 99.8 | 437.1 | 1.3 |
| 73 | 4 | 68.93 | 0.0178 | 0.5944 | 0.199 | 28.6 | 99.7 | 438.3 | 2.7 |
| 103 | 4 | 69.04 | 0.0057 | 0.5094 | 0.770 | 90.3 | 99.8 | 438.98 | 0.83 |
| 30 | 3.5 | 69.09 | -0.0208 | 0.3609 | 0.217 | - | 99.8 | 439.5 | 5.2 |
| 77 | 4 | 69.58 | 0.0199 | 0.5269 | 0.454 | 25.6 | 99.8 | 442.02 | 0.97 |
| 210 | 4 | 72.85 | 0.0128 | 0.2273 | 0.573 | 39.8 | 99.9 | 461.0 | 1.3 |
| 29 | 3.5 | 73.53 | 0.0015 | 0.1622 | 0.657 | 339.7 | 99.9 | 464.8 | 1.9 |
| 194 | 4 | 74.66 | -0.0014 | 0.2549 | 0.743 | - | 99.9 | 470.99 | 0.88 |
| 187 | 4 | 76.35 | 0.0192 | 0.8166 | 0.529 | 26.6 | 99.7 | 479.4 | 1.1 |
| 156 | 4 | 76.36 | 0.0062 | 0.8014 | 0.550 | 82.8 | 99.7 | 479.56 | 0.90 |
| 11 | 3.5 | 76.83 | 0.0036 | 0.8368 | 0.449 | 140.2 | 99.7 | 482.1 | 3.2 |
| 243 | 4 | 77.41 | 0.0075 | 0.2688 | 1.052 | 68.0 | 99.9 | 486.21 | 0.72 |
| 13 | 3.5 | 77.58 | 0.0056 | 0.5558 | 0.589 | 91.8 | 99.8 | 486.7 | 2.5 |
| 132 | 4 | 78.82 | 0.0005 | 0.9512 | 0.843 | 1133.0 | 99.6 | 492.85 | 0.77 |
| 74 | 4 | 79.39 | -0.0011 | 0.1751 | 0.885 | - | 99.9 | 497.29 | 0.72 |
| 127 | 4 | 80.59 | 0.0037 | 0.4059 | 0.596 | 137.4 | 99.9 | 503.5 | 1.0 |
| 223 | 4 | 84.59 | 0.0079 | 0.6509 | 0.464 | 64.9 | 99.8 | 524.8 | 1.3 |
| 257 | 4 | 85.28 | 0.0098 | 0.3487 | 0.604 | 51.9 | 99.9 | 529.0 | 1.1 |
| 196 | 4 | 86.91 | 0.0021 | 1.075 | 0.697 | 246.7 | 99.6 | 536.7 | 1.2 |
| 242 | 4 | 89.96 | 0.0089 | 0.9046 | 0.222 | 57.1 | 99.7 | 553.3 | 3.2 |

Argon data for Wirt member samples.

| ID | Power | $^{40}\text{Ar}/^{39}\text{Ar}$ | $^{37}\text{Ar}/^{39}\text{Ar}$ | $^{36}\text{Ar}/^{39}\text{Ar}$ | $^{39}\text{Ar}_K$ | K/Ca | $^{40}\text{Ar}^*$ | Age | $\pm 1\sigma$ |
|---|---------|---------------------------------|---------------------------------|---------------------------------|--------------------------|--------|--------------------|--------|---------------|
| | (watts) | | | ($\times 10^{-3}$) | ($\times 10^{-15}$ mol) | | (%) | (Ma) | (Ma) |
| 6-2-15-C, Sanidine/Microcline, J=0.0039346\pm0.01%, IC=1.00454\pm0.002106, NM-284C, Lab#=65071, Argus VI | | | | | | | | | |
| 42 | 3.5 | 90.17 | 0.0128 | 0.9540 | 0.463 | 40.0 | 99.7 | 554.3 | 2.7 |
| 186 | 4 | 90.29 | 0.0027 | 1.108 | 0.490 | 186.3 | 99.6 | 554.7 | 1.2 |
| 201 | 4 | 90.48 | -0.0016 | 0.2993 | 1.223 | - | 99.9 | 556.94 | 0.61 |
| 61 | 4 | 90.88 | 0.0129 | 0.3949 | 0.199 | 39.4 | 99.9 | 559.0 | 3.5 |
| 53 | 3.5 | 91.86 | -0.0018 | 0.8327 | 0.847 | - | 99.7 | 563.4 | 1.5 |
| 76 | 4 | 91.92 | 0.0050 | 0.6725 | 0.547 | 101.7 | 99.8 | 564.0 | 1.1 |
| 55 | 3.5 | 93.03 | -0.0124 | 0.2522 | 0.480 | - | 99.9 | 570.5 | 2.4 |
| 120 | 4 | 94.47 | 0.0093 | 0.8843 | 0.522 | 54.7 | 99.7 | 577.1 | 1.5 |
| 98 | 4 | 94.60 | 0.0156 | 0.1653 | 0.409 | 32.6 | 99.9 | 578.9 | 1.7 |
| 68 | 4 | 96.06 | 0.0013 | 1.174 | 0.688 | 392.9 | 99.6 | 585.0 | 1.2 |
| 16 | 3.5 | 97.51 | 0.0024 | 0.7783 | 0.239 | 212.8 | 99.8 | 593.2 | 5.5 |
| 143 | 4 | 98.78 | 0.0126 | 1.060 | 0.450 | 40.6 | 99.7 | 599.4 | 1.5 |
| 240 | 4 | 98.64 | 0.0037 | 0.3974 | 0.371 | 138.2 | 99.9 | 599.6 | 2.0 |
| 37 | 3.5 | 98.87 | 0.0118 | 0.8012 | 0.386 | 43.2 | 99.8 | 600.3 | 4.2 |
| 06 | 3.5 | 100.7 | -0.0052 | 0.6011 | 0.631 | - | 99.8 | 610.2 | 2.5 |
| 125 | 4 | 103.9 | 0.0782 | 1.219 | 0.139 | 6.5 | 99.7 | 625.7 | 4.7 |
| 154 | 4 | 104.0 | 0.0029 | 0.3093 | 0.951 | 174.4 | 99.9 | 627.35 | 0.83 |
| 241 | 4 | 104.1 | 0.0065 | 0.6867 | 1.081 | 78.0 | 99.8 | 627.57 | 0.73 |
| 134 | 4 | 104.1 | -0.0085 | 0.4722 | 0.477 | - | 99.9 | 627.8 | 1.9 |
| 209 | 4 | 105.8 | 0.0077 | 0.2639 | 0.627 | 66.4 | 99.9 | 636.8 | 1.2 |
| 153 | 4 | 108.0 | 0.0045 | 0.3406 | 0.905 | 113.8 | 99.9 | 647.63 | 0.95 |
| 214 | 4 | 108.3 | 0.0444 | 0.9579 | 0.222 | 11.5 | 99.7 | 648.3 | 3.5 |
| 176 | 4 | 109.3 | 0.0030 | 0.5999 | 0.527 | 169.9 | 99.8 | 654.1 | 1.4 |
| 75 | 4 | 109.8 | 0.0028 | 0.6347 | 0.290 | 185.4 | 99.8 | 656.2 | 2.0 |
| 49 | 3.5 | 110.3 | 0.0027 | 0.4702 | 0.786 | 187.9 | 99.9 | 659.0 | 2.1 |
| 18 | 3.5 | 110.3 | 0.0024 | 0.2730 | 0.513 | 208.6 | 99.9 | 659.2 | 2.8 |
| 212 | 4 | 111.4 | 0.0182 | 0.5197 | 0.352 | 28.0 | 99.9 | 664.4 | 1.9 |
| 182 | 4 | 113.0 | -0.0133 | 1.530 | 0.551 | - | 99.6 | 671.3 | 1.6 |
| 167 | 4 | 115.1 | 0.0074 | 0.3228 | 0.919 | 68.6 | 99.9 | 683.2 | 1.0 |
| 188 | 4 | 116.4 | 0.0066 | 0.7572 | 0.649 | 77.6 | 99.8 | 689.1 | 1.4 |
| 97 | 4 | 117.7 | 0.0059 | 0.2372 | 0.517 | 86.5 | 99.9 | 696.4 | 1.5 |
| 144 | 4 | 119.4 | 0.0079 | 0.3684 | 0.448 | 64.8 | 99.9 | 704.4 | 1.7 |
| 62 | 4 | 119.7 | 0.0118 | 0.8105 | 0.822 | 43.3 | 99.8 | 705.0 | 1.1 |
| 148 | 4 | 120.0 | -0.0034 | 0.3435 | 0.694 | - | 99.9 | 707.1 | 1.1 |
| 21 | 3.5 | 120.6 | -0.0036 | 1.085 | 0.418 | - | 99.7 | 709.2 | 3.4 |
| 239 | 4 | 122.0 | 0.0154 | 1.742 | 0.144 | 33.1 | 99.6 | 714.9 | 5.1 |
| 226 | 4 | 124.0 | 0.0136 | 0.3948 | 0.438 | 37.6 | 99.9 | 726.9 | 2.2 |
| 231 | 4 | 124.9 | 0.0023 | 0.1990 | 0.804 | 218.8 | 100.0 | 731.3 | 1.2 |
| 32 | 3.5 | 125.9 | 0.0004 | 0.3513 | 0.534 | 1229.7 | 99.9 | 736.2 | 3.0 |
| 170 | 4 | 127.6 | 0.0091 | 0.1791 | 0.689 | 55.9 | 100.0 | 744.3 | 1.2 |
| 256 | 4 | 129.0 | 0.0020 | 0.6124 | 0.720 | 254.6 | 99.9 | 750.3 | 1.3 |
| 31 | 3.5 | 131.9 | -0.0047 | 0.9391 | 0.554 | - | 99.8 | 764.1 | 3.0 |
| 86 | 4 | 133.2 | 0.0007 | 0.1805 | 0.860 | 726.8 | 100.0 | 771.3 | 1.1 |
| 123 | 4 | 133.9 | 0.0002 | 0.5858 | 0.716 | 3285.3 | 99.9 | 773.9 | 1.5 |
| 121 | 4 | 134.8 | -0.0043 | 1.197 | 0.378 | - | 99.7 | 777.0 | 2.1 |
| 179 | 4 | 135.5 | 0.0139 | 0.7023 | 0.302 | 36.8 | 99.8 | 781.3 | 3.0 |
| 248 | 4 | 136.0 | 0.0163 | 0.1815 | 0.452 | 31.4 | 100.0 | 784.1 | 1.6 |
| 207 | 4 | 137.3 | 0.0119 | 1.241 | 0.174 | 42.7 | 99.7 | 788.8 | 5.9 |
| 232 | 4 | 140.0 | 0.0070 | 0.2287 | 0.836 | 73.1 | 100.0 | 802.9 | 1.0 |
| 173 | 4 | 140.3 | 0.0079 | 1.079 | 0.820 | 64.8 | 99.8 | 803.3 | 1.2 |
| 218 | 4 | 143.4 | -0.0238 | 0.3509 | 0.176 | - | 99.9 | 818.6 | 4.9 |
| 136 | 4 | 144.3 | 0.0007 | 0.5972 | 1.053 | 768.6 | 99.9 | 822.43 | 0.96 |
| 63 | 4 | 145.1 | -0.0085 | 0.6781 | 0.164 | - | 99.9 | 825.7 | 4.0 |
| 141 | 4 | 145.5 | 0.0009 | 1.271 | 0.396 | 586.4 | 99.7 | 827.0 | 2.1 |

Argon data for Wirt member samples.

| ID | Power | $^{40}\text{Ar}/^{39}\text{Ar}$ | $^{37}\text{Ar}/^{39}\text{Ar}$ | $^{36}\text{Ar}/^{39}\text{Ar}$ | $^{39}\text{Ar}_K$ | K/Ca | $^{40}\text{Ar}^*$ | Age | $\pm 1\sigma$ |
|---|---------|---------------------------------|---------------------------------|---------------------------------|--------------------------|--------|--------------------|---------|---------------|
| | (watts) | | | ($\times 10^{-3}$) | ($\times 10^{-15}$ mol) | | (%) | (Ma) | (Ma) |
| 6-2-15-C, Sanidine/Microcline, J=0.0039346\pm0.01%, IC=1.00454\pm0.002106, NM-284C, Lab#=65071, Argus VI | | | | | | | | | |
| 163 | 4 | 146.0 | 0.0054 | 0.8286 | 0.177 | 95.2 | 99.8 | 829.6 | 5.7 |
| 20 | 3.5 | 147.8 | 0.0060 | 0.5952 | 0.415 | 84.5 | 99.9 | 838.3 | 5.0 |
| 185 | 4 | 150.1 | -0.0048 | 0.6639 | 0.713 | - | 99.9 | 848.6 | 1.4 |
| 262 | 4 | 150.3 | 0.0005 | 0.9975 | 0.459 | 971.4 | 99.8 | 849.1 | 1.7 |
| 184 | 4 | 151.9 | 0.0060 | 0.4124 | 0.719 | 85.3 | 99.9 | 857.3 | 1.4 |
| 146 | 4 | 152.4 | 0.0079 | 0.9429 | 0.671 | 64.5 | 99.8 | 858.8 | 1.7 |
| 258 | 4 | 154.1 | 0.0154 | 1.106 | 0.537 | 33.1 | 99.8 | 866.2 | 1.6 |
| 36 | 3.5 | 154.2 | 0.0025 | 0.3466 | 0.654 | 205.0 | 99.9 | 867.6 | 3.4 |
| 255 | 4 | 155.5 | -0.0161 | 1.060 | 0.279 | - | 99.8 | 872.3 | 3.3 |
| 162 | 4 | 156.1 | 0.0057 | 0.2995 | 0.570 | 90.3 | 99.9 | 876.1 | 1.7 |
| 224 | 4 | 157.6 | -0.0034 | 1.234 | 0.143 | - | 99.8 | 881.7 | 5.5 |
| 229 | 4 | 163.1 | 0.0377 | 0.6852 | 0.126 | 13.5 | 99.9 | 906.5 | 7.2 |
| 263 | 4 | 163.3 | 0.0038 | 0.1611 | 0.702 | 132.6 | 100.0 | 908.1 | 1.1 |
| 234 | 4 | 164.4 | 0.0181 | 0.3263 | 0.389 | 28.1 | 99.9 | 912.7 | 3.0 |
| 191 | 4 | 166.2 | 0.0086 | 0.3178 | 0.636 | 59.2 | 99.9 | 920.6 | 1.6 |
| 181 | 4 | 167.1 | 0.0034 | 0.4724 | 1.018 | 150.6 | 99.9 | 924.27 | 0.94 |
| 88 | 4 | 167.8 | 0.0039 | 0.4256 | 0.546 | 130.5 | 99.9 | 927.5 | 1.6 |
| 65 | 4 | 172.7 | 0.0048 | 0.7298 | 0.659 | 106.6 | 99.9 | 948.2 | 1.5 |
| 174 | 4 | 174.9 | 0.0017 | 0.1774 | 0.643 | 304.2 | 100.0 | 958.4 | 1.8 |
| 106 | 4 | 175.4 | -0.0009 | 0.2287 | 0.937 | - | 100.0 | 960.3 | 1.3 |
| 152 | 4 | 176.0 | -0.0104 | 0.5496 | 0.285 | - | 99.9 | 962.3 | 2.3 |
| 109 | 4 | 176.6 | -0.0033 | 1.146 | 0.359 | - | 99.8 | 964.1 | 3.0 |
| 151 | 4 | 177.4 | 0.0004 | 0.2727 | 0.753 | 1145.5 | 100.0 | 968.8 | 1.4 |
| 227 | 4 | 179.9 | 0.0099 | 0.1708 | 0.370 | 51.3 | 100.0 | 979.4 | 2.4 |
| 51 | 3.5 | 181.2 | 0.0131 | 0.2976 | 0.357 | 38.8 | 100.0 | 985.0 | 5.5 |
| 90 | 4 | 181.5 | 0.0026 | 0.4511 | 0.474 | 197.9 | 99.9 | 986.1 | 2.4 |
| 41 | 3.5 | 181.9 | -0.0050 | 0.1970 | 0.398 | - | 100.0 | 987.7 | 5.5 |
| 138 | 4 | 182.1 | 0.0066 | 0.1952 | 1.057 | 76.9 | 100.0 | 988.9 | 1.0 |
| 66 | 4 | 182.7 | 0.0002 | 0.4316 | 0.818 | 2419.2 | 99.9 | 990.8 | 1.4 |
| 220 | 4 | 185.4 | -0.0024 | 0.9051 | 0.529 | - | 99.9 | 1001.8 | 1.6 |
| 99 | 4 | 185.7 | 0.0046 | 0.1959 | 0.734 | 110.8 | 100.0 | 1003.8 | 1.4 |
| 04 | 3.5 | 187.0 | 0.0101 | 0.3571 | 0.305 | 50.3 | 99.9 | 1009.0 | 5.6 |
| 27 | 3.5 | 188.1 | -0.0017 | 0.3598 | 0.238 | - | 99.9 | 1013.5 | 8.3 |
| 249 | 4 | 189.1 | 0.0094 | 0.6144 | 0.431 | 54.0 | 99.9 | 1017.3 | 3.0 |
| 91 | 4 | 189.9 | 0.0139 | 0.1457 | 0.605 | 36.8 | 100.0 | 1021.1 | 1.7 |
| 10 | 3.5 | 190.3 | -0.0042 | 1.319 | 0.478 | - | 99.8 | 1021.4 | 4.8 |
| 07 | 3.5 | 192.2 | 0.0142 | 0.6368 | 0.410 | 36.0 | 99.9 | 1029.9 | 4.8 |
| 175 | 4 | 192.5 | -0.0153 | 0.7921 | 0.237 | - | 99.9 | 1031.1 | 4.5 |
| 50 | 3.5 | 199.2 | 0.0080 | 1.099 | 0.424 | 63.9 | 99.8 | 1058.1 | 4.5 |
| 208 | 4 | 202.2 | 0.0043 | 0.6696 | 0.346 | 119.5 | 99.9 | 1070.6 | 3.4 |
| 178 | 4 | 203.2 | 0.0048 | 0.4323 | 0.574 | 106.4 | 99.9 | 1074.8 | 2.1 |
| 245 | 4 | 204.6 | 0.0157 | 0.9953 | 0.407 | 32.4 | 99.9 | 1079.7 | 2.5 |
| 119 | 4 | 206.9 | 0.0027 | 0.2614 | 0.314 | 186.3 | 100.0 | 1090.0 | 4.7 |
| 157 | 4 | 208.1 | -0.0077 | 0.2439 | 0.572 | - | 100.0 | 1094.6 | 1.7 |
| 33 | 3.5 | 209.1 | 0.0053 | 0.6822 | 0.326 | 95.5 | 99.9 | 1097.9 | 7.0 |
| 206 | 4 | 215.8 | 0.0022 | 0.4219 | 0.730 | 236.3 | 99.9 | 1124.6 | 1.7 |
| 233 | 4 | 215.8 | -0.0080 | 0.2836 | 0.627 | - | 100.0 | 1125.0 | 1.4 |
| 95 | 4 | 217.4 | 0.0335 | 0.0851 | 0.185 | 15.2 | 100.0 | 1131.5 | 6.4 |
| 70 | 4 | 217.5 | 0.0041 | 0.1035 | 0.947 | 125.7 | 100.0 | 1131.64 | 0.99 |
| 197 | 4 | 220.3 | -0.0014 | 0.3726 | 0.446 | - | 100.0 | 1142.1 | 2.4 |
| 158 | 4 | 222.1 | 0.0095 | 0.2134 | 0.860 | 53.9 | 100.0 | 1149.1 | 1.4 |
| 122 | 4 | 224.8 | 0.0074 | 0.4431 | 0.510 | 68.7 | 99.9 | 1159.5 | 2.3 |
| 199 | 4 | 232.5 | -0.0007 | 0.2151 | 0.484 | - | 100.0 | 1189.0 | 2.7 |
| 247 | 4 | 233.3 | -0.0081 | 0.4220 | 0.246 | - | 99.9 | 1191.7 | 5.0 |

Argon data for Wirt member samples.

| ID | Power | $^{40}\text{Ar}/^{39}\text{Ar}$ | $^{37}\text{Ar}/^{39}\text{Ar}$ | $^{36}\text{Ar}/^{39}\text{Ar}$ | $^{39}\text{Ar}_K$ | K/Ca | $^{40}\text{Ar}^*$ | Age | $\pm 1\sigma$ |
|---|---------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------|--------------------|--------|---------------|
| | (watts) | | | ($\times 10^{-3}$) | ($\times 10^{-15}$ mol) | | (%) | (Ma) | (Ma) |
| 6-2-15-C, Sanidine/Microcline, J=0.0039346\pm0.01%, IC=1.00454\pm0.002106, NM-284C, Lab#=65071, Argus VI | | | | | | | | | |
| 177 | 4 | 233.6 | 0.0071 | 0.2912 | 0.646 | 71.4 | 100.0 | 1192.8 | 1.7 |
| 189 | 4 | 237.9 | -0.0122 | 0.4312 | 0.297 | - | 99.9 | 1208.9 | 3.7 |
| 147 | 4 | 240.6 | -0.0010 | 1.614 | 0.855 | - | 99.8 | 1217.7 | 1.3 |
| 260 | 4 | 240.4 | 0.0058 | 0.4412 | 0.350 | 88.7 | 99.9 | 1218.1 | 3.3 |
| 116 | 4 | 242.1 | 0.0081 | 0.7807 | 0.669 | 62.9 | 99.9 | 1224.0 | 1.6 |
| 14 | 3.5 | 242.6 | 0.0019 | 0.4071 | 0.604 | 272.4 | 100.0 | 1226.3 | 4.6 |
| 02 | 3.5 | 255.7 | 0.0017 | 0.0861 | 0.926 | 307.5 | 100.0 | 1274.4 | 3.1 |
| 25 | 3.5 | 272.7 | 0.0157 | 3.615 | 0.318 | 32.4 | 99.6 | 1330.6 | 8.6 |
| 39 | 3.5 | 276.4 | -0.0086 | 0.1593 | 0.572 | - | 100.0 | 1346.9 | 4.4 |
| 12 | 3.5 | 279.5 | 0.0036 | 0.2486 | 0.687 | 143.6 | 100.0 | 1357.6 | 4.3 |
| 114 | 4 | 290.1 | 0.0115 | 1.034 | 0.168 | 44.2 | 99.9 | 1392.8 | 6.6 |
| 131 | 4 | 296.0 | 0.0098 | 3.878 | 0.084 | 52.0 | 99.6 | 1409.9 | 14.4 |
| 112 | 4 | 319.3 | -0.0103 | 3.797 | 0.092 | - | 99.6 | 1486.0 | 14.3 |
| 6-2-15-C, Sanidine/Microcline, J=0.0037788\pm0.01%, IC=1.006702\pm0.0010652, NM-289F, Lab#=65506, Argus VI | | | | | | | | | |
| 26 | 5 | 9.633 | 0.0043 | 0.0525 | 0.417 | 118.8 | 99.8 | 65.293 | 0.088 |
| 35 | 5 | 9.789 | 0.0039 | 0.5317 | 0.148 | 131.6 | 98.4 | 65.39 | 0.25 |
| 55 | 5 | 9.701 | 0.0027 | 0.0495 | 0.327 | 186.8 | 99.9 | 65.75 | 0.12 |
| 47 | 5 | 9.720 | 0.0064 | 0.0525 | 0.434 | 79.3 | 99.8 | 65.877 | 0.087 |
| 82 | 5 | 9.924 | 0.0108 | 0.0491 | 0.121 | 47.2 | 99.9 | 67.24 | 0.31 |
| 01 | 5 | 11.12 | 0.0182 | 1.341 | 0.124 | 28.1 | 96.5 | 72.70 | 0.32 |
| 79 | 5 | 10.80 | 0.0093 | 0.2137 | 0.123 | 54.9 | 99.4 | 72.73 | 0.32 |
| 45 | 5 | 10.79 | 0.0042 | 0.0218 | 0.603 | 122.8 | 99.9 | 73.065 | 0.068 |
| 13 | 5 | 10.84 | 0.0058 | 0.1110 | 0.142 | 88.1 | 99.7 | 73.19 | 0.27 |
| 54 | 5 | 10.86 | 0.0071 | 0.0389 | 0.494 | 72.2 | 99.9 | 73.484 | 0.086 |
| 02 | 5 | 10.91 | 0.0068 | 0.1277 | 0.523 | 74.9 | 99.7 | 73.648 | 0.081 |
| 80 | 5 | 10.90 | 0.0067 | 0.0514 | 0.319 | 76.2 | 99.9 | 73.71 | 0.13 |
| 32 | 5 | 10.94 | 0.0046 | 0.0371 | 0.341 | 110.0 | 99.9 | 74.01 | 0.12 |
| 108 | 5 | 10.96 | 0.0069 | -0.0384 | 0.495 | 73.8 | 100.1 | 74.288 | 0.086 |
| 05 | 5 | 11.00 | 0.0041 | 0.0943 | 0.538 | 124.6 | 99.7 | 74.337 | 0.079 |
| 72 | 5 | 11.05 | 0.0065 | 0.2372 | 0.704 | 78.2 | 99.4 | 74.346 | 0.063 |
| 37 | 5 | 11.33 | -0.0100 | 1.149 | 0.066 | - | 97.0 | 74.41 | 0.61 |
| 91 | 5 | 10.96 | 0.0264 | -0.1337 | 0.059 | 19.3 | 100.4 | 74.50 | 0.66 |
| 109 | 5 | 11.02 | 0.0049 | 0.0167 | 0.423 | 104.3 | 100.0 | 74.590 | 0.097 |
| 12 | 5 | 11.06 | 0.0092 | 0.1291 | 0.334 | 55.6 | 99.7 | 74.62 | 0.13 |
| 16 | 5 | 11.07 | 0.0067 | 0.1664 | 0.389 | 76.0 | 99.6 | 74.64 | 0.10 |
| 89 | 5 | 11.07 | 0.0062 | 0.0909 | 0.378 | 82.9 | 99.8 | 74.81 | 0.11 |
| 62 | 5 | 11.09 | 0.0029 | 0.0261 | 0.556 | 179.0 | 99.9 | 75.038 | 0.075 |
| 06 | 5 | 11.23 | 0.0008 | 0.1057 | 0.160 | 619.7 | 99.7 | 75.80 | 0.25 |
| 11 | 5 | 11.23 | 0.0049 | 0.0789 | 0.455 | 103.2 | 99.8 | 75.876 | 0.093 |
| 61 | 5 | 11.23 | 0.0091 | 0.0526 | 0.290 | 55.9 | 99.9 | 75.92 | 0.14 |
| 18 | 5 | 11.24 | 0.0071 | 0.0504 | 0.589 | 71.9 | 99.9 | 76.010 | 0.069 |
| 63 | 5 | 11.26 | 0.0062 | 0.0573 | 0.601 | 82.8 | 99.9 | 76.080 | 0.069 |
| 85 | 5 | 11.27 | 0.0040 | 0.1009 | 0.434 | 128.8 | 99.7 | 76.090 | 0.095 |
| 03 | 5 | 11.28 | 0.0044 | 0.1193 | 0.439 | 116.3 | 99.7 | 76.096 | 0.096 |
| 10 | 5 | 11.26 | 0.0042 | 0.0251 | 0.512 | 122.3 | 99.9 | 76.166 | 0.085 |
| 65 | 5 | 11.30 | 0.0067 | -0.0008 | 0.444 | 76.0 | 100.0 | 76.480 | 0.095 |
| 103 | 5 | 11.27 | 0.0111 | -0.1738 | 0.100 | 45.9 | 100.5 | 76.62 | 0.40 |
| 92 | 5 | 11.35 | 0.0155 | 0.0583 | 0.111 | 33.0 | 99.9 | 76.74 | 0.40 |
| 43 | 5 | 11.43 | 0.0065 | 0.2994 | 0.492 | 78.0 | 99.2 | 76.781 | 0.090 |
| 88 | 5 | 11.43 | 0.0185 | 0.1799 | 0.044 | 27.6 | 99.5 | 77.03 | 0.97 |
| 83 | 5 | 11.47 | 0.0033 | 0.0465 | 0.118 | 154.7 | 99.9 | 77.55 | 0.33 |
| 39 | 5 | 11.50 | 0.0046 | 0.1188 | 0.425 | 111.0 | 99.7 | 77.60 | 0.10 |
| 07 | 5 | 11.56 | 0.0091 | 0.0009 | 0.548 | 56.4 | 100.0 | 78.182 | 0.075 |

Argon data for Wirt member samples.

| ID | Power | $^{40}\text{Ar}/^{39}\text{Ar}$ | $^{37}\text{Ar}/^{39}\text{Ar}$ | $^{36}\text{Ar}/^{39}\text{Ar}$ | $^{39}\text{Ar}_K$ | K/Ca | $^{40}\text{Ar}^*$ | Age | $\pm 1\sigma$ |
|---|---------|---------------------------------|---------------------------------|---------------------------------|--------------------------|--------|--------------------|--------|---------------|
| | (watts) | | | ($\times 10^{-3}$) | ($\times 10^{-15}$ mol) | | (%) | (Ma) | (Ma) |
| 6-2-15-C, Sanidine/Microcline, J=0.0037788\pm0.01%, IC=1.006702\pm0.0010652, NM-289F, Lab#=65506, Argus VI | | | | | | | | | |
| 56 | 5 | 11.63 | 0.0012 | 0.0411 | 0.281 | 429.7 | 99.9 | 78.59 | 0.15 |
| 76 | 5 | 12.05 | 0.0049 | 0.0611 | 0.488 | 103.9 | 99.9 | 81.335 | 0.096 |
| 44 | 5 | 12.26 | 0.0039 | 0.0505 | 0.229 | 130.2 | 99.9 | 82.75 | 0.20 |
| 107 | 5 | 12.26 | 0.0006 | 0.0259 | 0.617 | 909.3 | 99.9 | 82.771 | 0.082 |
| 25 | 5 | 12.75 | 0.0060 | 0.4535 | 0.137 | 84.9 | 99.0 | 85.19 | 0.32 |
| 104 | 5 | 13.43 | -0.0744 | 0.4772 | 0.021 | - | 98.9 | 89.6 | 9.3 |
| 21 | 5 | 26.17 | 0.0480 | 1.119 | 0.036 | 10.6 | 98.8 | 170.5 | 10.9 |
| 52 | 5 | 27.63 | 0.0032 | 0.5998 | 0.630 | 160.3 | 99.4 | 180.62 | 0.94 |
| 71 | 5 | 28.04 | -0.0033 | 0.4283 | 0.490 | - | 99.5 | 183.5 | 1.1 |
| 36 | 5 | 29.11 | 0.0110 | 0.2495 | 0.388 | 46.5 | 99.7 | 190.6 | 1.1 |
| 48 | 5 | 29.16 | 0.0115 | 0.1544 | 0.767 | 44.3 | 99.8 | 191.02 | 0.76 |
| 78 | 5 | 30.26 | 0.0037 | 0.3796 | 0.570 | 138.2 | 99.6 | 197.45 | 0.92 |
| 60 | 5 | 31.51 | 0.0008 | 0.1184 | 0.307 | 647.4 | 99.9 | 205.6 | 1.6 |
| 87 | 5 | 36.45 | -0.0031 | 0.1491 | 0.391 | - | 99.9 | 235.9 | 1.4 |
| 31 | 5 | 37.55 | 0.0103 | 0.3111 | 0.212 | 49.5 | 99.8 | 242.3 | 2.4 |
| 53 | 5 | 43.24 | -0.0006 | 0.1296 | 0.421 | - | 99.9 | 276.8 | 1.4 |
| 28 | 5 | 48.18 | 0.0170 | 0.1726 | 0.103 | 29.9 | 99.9 | 305.8 | 6.8 |
| 40 | 5 | 50.41 | -0.0063 | 0.3628 | 0.304 | - | 99.8 | 318.5 | 2.7 |
| 58 | 5 | 52.40 | -0.0057 | 0.1559 | 0.349 | - | 99.9 | 330.4 | 2.6 |
| 23 | 5 | 53.66 | -0.0033 | 0.2722 | 0.438 | - | 99.8 | 337.5 | 2.5 |
| 46 | 5 | 54.90 | -0.0085 | 0.9034 | 0.130 | - | 99.5 | 343.5 | 7.2 |
| 09 | 5 | 59.57 | 0.0126 | 0.1334 | 0.199 | 40.6 | 99.9 | 371.4 | 5.8 |
| 08 | 5 | 70.82 | 0.0026 | 0.3283 | 0.228 | 195.7 | 99.9 | 433.5 | 4.9 |
| 29 | 5 | 80.34 | 0.0154 | 0.9678 | 0.381 | 33.2 | 99.6 | 483.7 | 2.3 |
| 84 | 5 | 86.08 | 0.0030 | 0.9084 | 0.876 | 172.6 | 99.7 | 514.1 | 1.8 |
| 50 | 5 | 89.03 | -0.0028 | -0.0854 | 0.263 | - | 100.0 | 530.9 | 3.4 |
| 20 | 5 | 90.19 | 0.0025 | 0.9166 | 0.283 | 203.3 | 99.7 | 535.4 | 4.1 |
| 04 | 5 | 92.81 | -0.0003 | 0.9228 | 0.241 | - | 99.7 | 548.9 | 5.2 |
| 19 | 5 | 96.80 | 0.0090 | 0.3483 | 0.439 | 56.7 | 99.9 | 570.0 | 2.9 |
| 42 | 5 | 104.5 | 0.0003 | 1.409 | 0.110 | 1979.1 | 99.6 | 606.9 | 11.6 |
| 69 | 5 | 114.1 | 0.0017 | 0.1425 | 0.815 | 297.5 | 100.0 | 656.2 | 2.3 |
| 86 | 5 | 115.6 | 0.0024 | -0.0894 | 0.747 | 210.2 | 100.0 | 663.7 | 2.1 |
| 14 | 5 | 117.9 | -0.0025 | 0.1761 | 0.797 | - | 100.0 | 674.4 | 2.3 |
| 15 | 5 | 127.5 | 0.0017 | 0.9547 | 0.247 | 308.7 | 99.8 | 718.3 | 6.9 |
| 110 | 5 | 127.8 | 0.0003 | 1.166 | 0.102 | 1597.9 | 99.7 | 719.8 | 15.7 |
| 67 | 5 | 134.1 | 0.0026 | 0.1168 | 0.394 | 193.0 | 100.0 | 750.0 | 5.1 |
| 75 | 5 | 135.9 | 0.0022 | 0.1823 | 0.590 | 230.5 | 100.0 | 758.2 | 2.7 |
| 27 | 5 | 136.5 | 0.0039 | 0.9210 | 0.289 | 132.1 | 99.8 | 760.3 | 6.0 |
| 33 | 5 | 137.7 | 0.0000 | 0.4580 | 0.825 | - | 99.9 | 766.0 | 2.7 |
| 64 | 5 | 138.1 | 0.0127 | 0.5141 | 0.282 | 40.3 | 99.9 | 768.2 | 7.0 |
| 41 | 5 | 143.4 | -0.0022 | 0.4686 | 0.216 | - | 99.9 | 792.1 | 10.2 |
| 106 | 5 | 147.6 | 0.0012 | 0.7354 | 0.853 | 409.2 | 99.9 | 810.2 | 2.5 |
| 30 | 5 | 149.1 | 0.0017 | 0.3689 | 0.589 | 306.7 | 99.9 | 817.7 | 3.8 |
| 17 | 5 | 151.0 | 0.0026 | 0.4521 | 0.678 | 192.8 | 99.9 | 825.7 | 2.9 |
| 34 | 5 | 165.2 | 0.0045 | 0.2735 | 0.195 | 113.0 | 100.0 | 887.5 | 11.6 |
| 93 | 5 | 171.6 | -0.0008 | 1.967 | 0.675 | - | 99.7 | 912.4 | 2.8 |
| 51 | 5 | 187.7 | 0.0029 | 0.1893 | 0.121 | 177.1 | 100.0 | 981.0 | 16.2 |
| 74 | 5 | 191.9 | -0.0015 | 0.4739 | 0.355 | - | 99.9 | 997.7 | 6.7 |
| 90 | 5 | 192.0 | 0.0083 | 0.6307 | 0.380 | 61.6 | 99.9 | 997.9 | 6.6 |
| 22 | 5 | 207.3 | 0.0075 | 0.7550 | 0.123 | 67.8 | 99.9 | 1057.9 | 14.7 |
| 73 | 5 | 216.2 | -0.0007 | 0.2790 | 0.470 | - | 100.0 | 1092.8 | 5.2 |
| 68 | 5 | 226.3 | 0.0021 | 0.2732 | 0.588 | 238.1 | 100.0 | 1130.7 | 4.7 |
| 81 | 5 | 242.5 | 0.0044 | 0.3459 | 0.570 | 114.8 | 100.0 | 1190.1 | 4.2 |
| 66 | 5 | 245.2 | -0.0011 | 0.0687 | 0.833 | - | 100.0 | 1200.2 | 2.5 |

Argon data for Wirt member samples.

| ID | Power | $^{40}\text{Ar}/^{39}\text{Ar}$ | $^{37}\text{Ar}/^{39}\text{Ar}$ | $^{36}\text{Ar}/^{39}\text{Ar}$ | $^{39}\text{Ar}_K$ | K/Ca | $^{40}\text{Ar}^*$ | Age | $\pm 1\sigma$ |
|---|---------|---------------------------------|---------------------------------|---------------------------------|--------------------------|-------|--------------------|--------|---------------|
| | (watts) | | | ($\times 10^{-3}$) | ($\times 10^{-15}$ mol) | | (%) | (Ma) | (Ma) |
| 6-2-15-C, Sanidine/Microcline, J=0.0037788\pm0.01%, IC=1.006702\pm0.0010652, NM-289F, Lab#=65506, Argus VI | | | | | | | | | |
| 59 | 5 | 246.0 | 0.0047 | 0.6675 | 0.252 | 108.8 | 99.9 | 1202.4 | 10.3 |
| 24 | 5 | 250.1 | 0.0088 | 1.175 | 0.259 | 58.1 | 99.9 | 1216.7 | 9.6 |
| 70 | 5 | 253.3 | 0.0024 | 0.6224 | 0.367 | 210.5 | 99.9 | 1228.6 | 6.6 |
| 77 | 5 | 254.6 | 0.0045 | 0.7589 | 0.520 | 113.3 | 99.9 | 1233.0 | 4.9 |
| 38 | 5 | 262.0 | 0.0047 | 0.5123 | 0.277 | 107.7 | 99.9 | 1259.2 | 9.2 |
| 57 | 5 | 270.5 | 0.0017 | 0.6369 | 0.393 | 296.3 | 99.9 | 1288.4 | 5.9 |

Notes:

Isotopic ratios corrected for blank, radioactive decay, and mass discrimination, not corrected for interfering reactions.

Errors quoted for individual analyses include analytical error only, without interfering reaction or J uncertainties.

Mean age is weighted mean age of Taylor (1982). Mean age error is weighted error

of the mean (Taylor, 1982), multiplied by the root of the MSWD where MSWD>1, and also

incorporates uncertainty in J factors and irradiation correction uncertainties.

"-". K/Ca not determined due to non-detectable ^{37}Ar above blank level

IC = measured $^{40}\text{Ar}/^{36}\text{Ar}$ of air standard divided by 295.5

Isotopic abundances after Steiger and Jäger (1977).

Data shown in red are analyses used to determine maximum deposition age.

Ages calculated relative to FC-2 Fish Canyon Tuff Sanidine interlaboratory standard at 28.201 Ma (Kuiper et al., 2008)

Decay Constant (λ_K (total)) = $5.463\text{e-}10$ /a (Min et al., 2000)