

Complete step-degassing results -- 04-LWV-PIT26 Ne-21 measurements. Analyzed May-August 2010.

Sample name	Aliquot	Aliquot weight (g)	Heating temperature (deg C)	Heating time (hr)	Total ²⁰ Ne released ² (10 ⁹ atoms)	Total ²¹ Ne released ³ (10 ⁹ atoms)	²¹ Ne / ²⁰ Ne ⁴ (10 ⁻³)	²² Ne / ²⁰ Ne ⁴ (10 ⁻³)	Cosmogenic ²¹ Ne ⁵ This heating step (10 ⁶ atoms g ⁻¹)	Cosmogenic ²¹ Ne as % of ²¹ Ne released in this heating step	Percent of total cosmogenic ²¹ Ne released in this step	Total cosmogenic ²¹ Ne (10 ⁶ atoms g ⁻¹)
PIT26-8-10	a	0.1601	390	0.2	3.206 +/- 0.036	11.430 +/- 0.385	3.547 +/- 0.091	103.5 +/- 0.8	11.81 +/- 1.84	17	38	31.4 +/- 3.6
			780	0.2	7.501 +/- 0.096	24.862 +/- 0.652	3.313 +/- 0.053	100.7 +/- 1.3	16.65 +/- 2.52	11	53	
			1140	0.2	3.193 +/- 0.038	9.925 +/- 0.35	3.105 +/- 0.090	101.0 +/- 1.2	2.92 +/- 1.81	5	9	
	b	0.1688	390	0.2	2.805 +/- 0.025	10.406 +/- 0.273	3.675 +/- 0.071	103.4 +/- 1.5	11.94 +/- 1.18	19	36	33.4 +/- 3.6
			780	0.2	9.052 +/- 0.051	30.050 +/- 0.774	3.285 +/- 0.059	99.8 +/- 0.6	17.52 +/- 3.15	10	53	
			1140	0.2	2.670 +/- 0.018	8.655 +/- 0.261	3.205 +/- 0.077	102.5 +/- 1.1	3.91 +/- 1.22	8	12	
	c	0.1482	390	0.2	3.470 +/- 0.050	12.044 +/- 0.319	3.468 +/- 0.074	103.7 +/- 1.4	11.96 +/- 1.74	15	29	41.9 +/- 3.9
			780	0.2	7.198 +/- 0.086	24.951 +/- 0.608	3.467 +/- 0.065	100.4 +/- 1.0	24.76 +/- 3.17	15	59	
			1170	0.2	3.156 +/- 0.039	10.085 +/- 0.267	3.200 +/- 0.071	103.8 +/- 1.2	5.14 +/- 1.52	8	12	
PIT26-16-18	a	0.1575	390	0.2	1.033 +/- 0.014	4.786 +/- 0.169	4.609 +/- 0.131	97.7 +/- 1.8	10.87 +/- 0.87	36	38	28.3 +/- 2.0
			780	0.2	4.203 +/- 0.048	14.525 +/- 0.391	3.455 +/- 0.056	100.7 +/- 0.8	13.28 +/- 1.51	14	47	
			1140	0.2	1.326 +/- 0.020	4.577 +/- 0.175	3.453 +/- 0.116	102.4 +/- 1.8	4.17 +/- 0.98	14	15	
	b	0.1461	390	0.2	0.837 +/- 0.010	4.583 +/- 0.161	5.422 +/- 0.169	106.0 +/- 2.3	14.16 +/- 0.99	45	47	29.9 +/- 2.6
			780	0.2	5.023 +/- 0.031	17.066 +/- 0.438	3.358 +/- 0.060	101.3 +/- 0.8	13.76 +/- 2.06	12	46	
			1140	0.2	1.192 +/- 0.014	3.857 +/- 0.184	3.200 +/- 0.144	101.0 +/- 1.9	1.98 +/- 1.18	8	7	
	c	0.1605	390	0.2	1.313 +/- 0.028	5.924 +/- 0.185	4.509 +/- 0.142	105.1 +/- 2.5	12.72 +/- 1.19	34	37	34.4 +/- 2.6
			780	0.2	5.460 +/- 0.065	19.142 +/- 0.45	3.505 +/- 0.060	100.9 +/- 0.8	18.63 +/- 2.05	16	54	
			1170	0.2	2.038 +/- 0.026	6.512 +/- 0.183	3.199 +/- 0.077	101.9 +/- 1.3	3.06 +/- 0.98	8	9	
PIT26-32-35	a	0.1449	390	0.2	0.835 +/- 0.013	3.870 +/- 0.176	4.613 +/- 0.190	102.8 +/- 1.9	9.56 +/- 1.11	36	39	24.2 +/- 2.8
			780	0.2	4.048 +/- 0.046	13.699 +/- 0.44	3.384 +/- 0.080	101.9 +/- 0.7	11.91 +/- 2.26	13	49	
			1140	0.2	1.308 +/- 0.022	4.269 +/- 0.175	3.265 +/- 0.123	98.9 +/- 2.0	2.77 +/- 1.11	9	11	
	b	0.1428	390	0.2	0.801 +/- 0.013	3.903 +/- 0.143	4.826 +/- 0.169	106.9 +/- 2.9	10.51 +/- 0.97	38	32	33.4 +/- 2.0
			780	0.2	4.259 +/- 0.024	15.286 +/- 0.362	3.547 +/- 0.052	100.1 +/- 0.8	17.60 +/- 1.55	16	53	
			1140	0.2	1.338 +/- 0.012	4.756 +/- 0.144	3.516 +/- 0.087	100.6 +/- 2.0	5.24 +/- 0.82	16	16	
	c	0.1681	390	0.2	1.112 +/- 0.025	4.944 +/- 0.19	4.444 +/- 0.172	99.3 +/- 2.6	9.86 +/- 1.16	34	34	29.2 +/- 2.3
			780	0.2	5.162 +/- 0.060	18.095 +/- 0.414	3.504 +/- 0.056	103.2 +/- 0.9	16.80 +/- 1.74	16	58	
			1170	0.2	1.641 +/- 0.023	5.266 +/- 0.181	3.213 +/- 0.102	100.4 +/- 1.6	2.49 +/- 1.00	8	9	
PIT26-55-58	a	0.1436	390	0.2	0.480 +/- 0.014	3.002 +/- 0.123	6.233 +/- 0.277	102.8 +/- 4.3	10.99 +/- 0.99	53	40	27.5 +/- 2.2
			780	0.2	3.654 +/- 0.041	12.941 +/- 0.344	3.537 +/- 0.059	100.4 +/- 0.8	14.75 +/- 1.51	16	54	
			1140	0.2	1.196 +/- 0.019	3.793 +/- 0.193	3.174 +/- 0.152	101.0 +/- 2.0	1.80 +/- 1.27	7	7	
	b	0.1405	390	0.2	0.809 +/- 0.010	3.782 +/- 0.141	4.633 +/- 0.158	106.1 +/- 2.4	9.67 +/- 0.92	36	36	26.6 +/- 2.5
			780	0.2	4.078 +/- 0.022	14.278 +/- 0.394	3.460 +/- 0.070	101.1 +/- 0.8	14.59 +/- 2.05	14	55	
			1140	0.2	1.367 +/- 0.013	4.422 +/- 0.177	3.198 +/- 0.116	103.2 +/- 2.1	2.33 +/- 1.13	7	9	
	c	0.147	390	0.2	0.672 +/- 0.019	3.707 +/- 0.125	5.514 +/- 0.214	110.2 +/- 4.2	11.72 +/- 1.04	46	39	30.4 +/- 2.6
			780	0.2	4.002 +/- 0.049	14.108 +/- 0.381	3.527 +/- 0.078	101.7 +/- 1.2	15.53 +/- 2.15	16	51	
			1170	0.2	1.048 +/- 0.018	3.559 +/- 0.142	3.398 +/- 0.133	99.5 +/- 2.5	3.14 +/- 0.95	13	10	
PIT26-68-71	a	0.1395	390	0.2	1.157 +/- 0.016	4.764 +/- 0.205	4.104 +/- 0.155	101.1 +/- 1.7	9.53 +/- 1.30	28	38	25.0 +/- 2.7
			780	0.2	5.996 +/- 0.067	19.312 +/- 0.496	3.216 +/- 0.048	100.9 +/- 0.6	11.10 +/- 2.07	8	44	
			1140	0.2	2.033 +/- 0.025	6.623 +/- 0.192	3.258 +/- 0.071	103.1 +/- 1.2	4.38 +/- 1.03	9	18	

PIT26-81-84	b	0.1687	390	0.2	1.556 +/- 0.011	6.229 +/- 0.199	3.966 +/- 0.104	102.9 +/- 1.4	9.32 +/- 0.96	25	26	35.5 +/- 2.5
			780	0.2	7.376 +/- 0.041	25.347 +/- 0.585	3.402 +/- 0.045	101.7 +/- 0.5	19.42 +/- 1.97	13	55	
			1140	0.2	2.424 +/- 0.023	8.404 +/- 0.243	3.428 +/- 0.080	103.0 +/- 1.4	6.76 +/- 1.16	14	19	
	c	0.1762	390	0.2	1.195 +/- 0.026	5.027 +/- 0.208	4.204 +/- 0.175	102.8 +/- 2.7	8.47 +/- 1.21	30	36	23.7 +/- 2.2
			780	0.2	5.568 +/- 0.066	18.757 +/- 0.414	3.370 +/- 0.053	100.5 +/- 0.6	13.05 +/- 1.67	12	55	
			1170	0.2	1.459 +/- 0.022	4.694 +/- 0.139	3.220 +/- 0.088	100.6 +/- 2.2	2.16 +/- 0.73	8	9	
	a	0.1473	390	0.2	0.781 +/- 0.017	3.688 +/- 0.14	4.706 +/- 0.171	103.2 +/- 2.5	9.30 +/- 0.93	37	29	31.5 +/- 3.4
			780	0.2	5.617 +/- 0.067	18.803 +/- 0.581	3.348 +/- 0.075	101.6 +/- 0.6	14.89 +/- 2.88	12	47	
			1140	0.2	2.087 +/- 0.026	7.252 +/- 0.267	3.476 +/- 0.108	100.8 +/- 1.1	7.35 +/- 1.54	15	23	
b	0.1201	390	0.2	0.541 +/- 0.009	2.859 +/- 0.146	5.234 +/- 0.261	105.1 +/- 3.4	10.28 +/- 1.19	43	32	32.5 +/- 3.5	
		780	0.2	5.456 +/- 0.031	18.509 +/- 0.509	3.358 +/- 0.067	100.3 +/- 0.6	18.20 +/- 3.06	12	56		
		1140	0.2	1.810 +/- 0.014	5.904 +/- 0.194	3.226 +/- 0.089	103.0 +/- 1.2	4.03 +/- 1.35	8	12		
c	0.1433	390	0.2	0.753 +/- 0.020	4.015 +/- 0.179	5.326 +/- 0.252	106.9 +/- 3.7	12.51 +/- 1.32	45	41	30.7 +/- 3.1	
		780	0.2	5.376 +/- 0.063	18.047 +/- 0.437	3.361 +/- 0.064	101.5 +/- 0.6	15.12 +/- 2.40	12	49		
		1170	0.2	1.587 +/- 0.022	5.134 +/- 0.21	3.236 +/- 0.126	100.3 +/- 1.6	3.08 +/- 1.40	9	10		

Notes:

² Computed by comparison to ²⁰Ne signal in air pipettes. 1-sigma uncertainty includes measurement uncertainty of ²⁰Ne signal in this analysis and the reproducibility of the air pipette signal

³ Computed by comparison to ²¹Ne signal in air pipettes. 1-sigma uncertainty includes measurement uncertainty of ²¹Ne signal in this analysis and the reproducibility of the air pipette signal

⁴ Isotope ratio measured internally during each analysis; does not involve normalization to the Ne isotope signals in the air pipettes.

⁵ Analyses where cosmogenic ²¹Ne was not distinguishable from zero at 1 sigma are not shown. Cosmogenic ²¹Ne concentrations were calculated by normalization to either the ²⁰Ne or ²¹Ne signal in the air pipettes, depending on which method yielded better precision.