

Complete step-degassing results -- 04-SV-PIT20 Ne-21 measurements. Analyzed May-August 2010.

Sample name	Aliquot	Aliquot weight (g)	Heating temperature (deg C)	Heating time (hr)	Total <sup>20</sup> Ne released <sup>d</sup> (10 <sup>9</sup> atoms)	Total <sup>21</sup> Ne released <sup>d</sup> (10 <sup>9</sup> atoms)	<sup>21</sup> Ne / <sup>20</sup> Ne <sup>e</sup> (10 <sup>-3</sup> )	<sup>22</sup> Ne / <sup>20</sup> Ne <sup>e</sup> (10 <sup>-3</sup> )	Cosmogenic <sup>21</sup> Ne <sup>f</sup> This heating step (10 <sup>6</sup> atoms g <sup>-1</sup> )	Cosmogenic <sup>21</sup> Ne as % of <sup>21</sup> Ne released in this heating step	Percent of total cosmogenic <sup>21</sup> Ne released in this step	Total cosmogenic <sup>21</sup> Ne (10 <sup>6</sup> atoms g <sup>-1</sup> )	
PIT20-0-2	a	0.1547	390	0.2	0.745 +/- 0.019	8.918 +/- 0.25	11.933 +/- 0.336	115.6 +/- 3.1	43.56 +/- 1.66	76	40	108.4 +/- 3.4	
			780	0.2	2.927 +/- 0.038	17.576 +/- 0.547	5.997 +/- 0.144	105.1 +/- 1.3	57.69 +/- 2.84	51	53		
			1140	0.2	0.603 +/- 0.010	2.889 +/- 0.142	4.793 +/- 0.224	110.9 +/- 2.9	7.17 +/- 0.88	38	7		
	b	0.1544	390	0.2	0.470 +/- 0.014	7.635 +/- 0.24	16.292 +/- 0.627	116.8 +/- 5.1	40.60 +/- 1.59	82	34	117.8 +/- 2.8	
			780	0.2	3.008 +/- 0.028	19.756 +/- 0.466	6.572 +/- 0.105	106.8 +/- 0.9	70.64 +/- 2.15	55	60		
			1140	0.2	0.731 +/- 0.012	3.171 +/- 0.134	4.330 +/- 0.179	110.7 +/- 3.1	6.52 +/- 0.86	32	6		
	c	0.1637	390	0.2	2.062 +/- 0.042	13.817 +/- 0.334	6.712 +/- 0.155	104.7 +/- 2.4	47.45 +/- 2.19	56	36	131.4 +/- 3.3	
			780	0.2	3.457 +/- 0.040	22.596 +/- 0.542	6.551 +/- 0.101	105.0 +/- 0.9	76.13 +/- 2.32	55	58		
			1140	0.2	0.903 +/- 0.013	3.951 +/- 0.159	4.379 +/- 0.162	103.2 +/- 2.4	7.86 +/- 0.90	33	6		
PIT20-12-15	a	0.1574	390	0.2	0.338 +/- 0.015	10.660 +/- 0.355	31.487 +/- 1.553	135.8 +/- 7.4	61.61 +/- 2.28	91	49	124.6 +/- 3.1	
			780	0.2	1.576 +/- 0.022	13.831 +/- 0.387	8.766 +/- 0.178	110.5 +/- 1.5	58.34 +/- 1.97	66	47		
			1140	0.2	0.393 +/- 0.014	1.886 +/- 0.112	4.822 +/- 0.321	110.5 +/- 5.4	4.62 +/- 0.76	39	4		
	b	0.1581	390	0.2	0.268 +/- 0.011	11.362 +/- 0.332	42.534 +/- 1.972	142.7 +/- 9.1	67.10 +/- 2.12	93	49	136.1 +/- 2.8	
			780	0.2	1.700 +/- 0.016	15.279 +/- 0.365	8.995 +/- 0.150	106.8 +/- 2.0	65.13 +/- 1.74	67	48		
			1140	0.2	0.305 +/- 0.011	1.515 +/- 0.1	4.963 +/- 0.358	104.5 +/- 6.8	3.89 +/- 0.67	41	3		
	c	0.1451	390	0.2	0.925 +/- 0.030	10.776 +/- 0.3	11.669 +/- 0.430	112.1 +/- 4.7	55.61 +/- 2.17	75	43	128.1 +/- 3.2	
			780	0.2	1.556 +/- 0.022	14.512 +/- 0.387	9.343 +/- 0.192	107.9 +/- 1.5	68.70 +/- 2.28	69	54		
			1140	0.2	0.325 +/- 0.014	1.510 +/- 0.099	4.650 +/- 0.348	103.6 +/- 7.2	3.79 +/- 0.74	36	3		
PIT20-22-30	a	0.169	390	0.2	0.964 +/- 0.016	10.148 +/- 0.287	10.521 +/- 0.226	112.4 +/- 2.1	43.28 +/- 1.48	72	33	130.8 +/- 3.7	
			780	0.2	3.930 +/- 0.049	25.092 +/- 0.694	6.376 +/- 0.121	104.9 +/- 1.2	79.75 +/- 3.01	54	61		
			1140	0.2	0.836 +/- 0.019	3.767 +/- 0.243	4.523 +/- 0.296	114.3 +/- 3.3	7.77 +/- 1.48	35	6		
	b	0.1746	390	0.2	1.245 +/- 0.013	12.710 +/- 0.341	10.107 +/- 0.210	110.7 +/- 2.1	51.18 +/- 1.59	70	38	134.4 +/- 3.5	
			780	0.2	4.585 +/- 0.029	26.878 +/- 0.719	5.802 +/- 0.113	102.3 +/- 1.2	74.91 +/- 3.01	49	56		
			1140	0.2	1.212 +/- 0.009	5.089 +/- 0.188	4.150 +/- 0.135	103.7 +/- 2.0	8.30 +/- 0.95	28	6		
	PIT20-39-41	a	0.1522	390	0.2	1.307 +/- 0.024	9.271 +/- 0.296	7.093 +/- 0.195	106.0 +/- 2.0	35.61 +/- 1.80	58	28	127.0 +/- 3.8
				780	0.2	4.449 +/- 0.056	25.792 +/- 0.649	5.790 +/- 0.088	103.9 +/- 1.2	83.04 +/- 2.77	49	65	
				1140	0.2	1.189 +/- 0.055	4.781 +/- 0.232	4.039 +/- 0.259	115.8 +/- 5.7	8.33 +/- 1.87	27	7	
b		0.1749	390	0.2	1.629 +/- 0.016	10.601 +/- 0.305	6.447 +/- 0.148	104.4 +/- 1.7	32.60 +/- 1.42	54	25	129.8 +/- 3.0	
			780	0.2	5.473 +/- 0.034	32.106 +/- 0.719	5.805 +/- 0.074	103.3 +/- 0.9	89.38 +/- 2.38	49	69		
			1140	0.2	1.351 +/- 0.012	5.441 +/- 0.215	3.973 +/- 0.143	104.9 +/- 1.7	7.86 +/- 1.11	25	6		
c		0.1626	390	0.2	1.849 +/- 0.030	9.910 +/- 0.263	5.370 +/- 0.121	106.7 +/- 2.3	27.51 +/- 1.45	45	21	131.6 +/- 3.2	
			780	0.2	4.815 +/- 0.058	29.532 +/- 0.667	6.142 +/- 0.080	104.4 +/- 0.8	94.63 +/- 2.64	52	72		
			1170]	0.2	1.182 +/- 0.023	5.038 +/- 0.196	4.261 +/- 0.161	108.8 +/- 2.4	9.50 +/- 1.19	31	7		
PIT20-49-53	a	0.1401	390	0.2	0.266 +/- 0.012	7.933 +/- 0.321	29.854 +/- 1.650	134.7 +/- 7.5	51.20 +/- 2.31	90	47	110.0 +/- 3.1	
			780	0.2	1.385 +/- 0.020	11.672 +/- 0.321	8.416 +/- 0.167	104.7 +/- 1.6	54.14 +/- 1.83	65	49		
			1140	0.2	0.225 +/- 0.017	1.315 +/- 0.1	5.863 +/- 0.619	112.0 +/- 10.1	4.65 +/- 0.80	50	4		
	b	0.1508	390	0.2	0.302 +/- 0.009	8.905 +/- 0.266	29.177 +/- 1.082	138.4 +/- 7.6	53.32 +/- 1.78	90	46	116.8 +/- 2.7	
			780	0.2	1.670 +/- 0.015	14.138 +/- 0.374	8.375 +/- 0.165	107.6 +/- 1.6	60.19 +/- 1.91	64	52		
			1140	0.2	0.332 +/- 0.010	1.479 +/- 0.098	4.397 +/- 0.312	103.9 +/- 5.8	3.31 +/- 0.68	34	3		

c	0.1408	390	0.2	0.321 +/- 0.021	7.329 +/- 0.25	22.865 +/- 1.594	127.4 +/- 10.0	45.47 +/- 1.84	87	40	113.2 +/- 3.2
		780	0.2	1.462 +/- 0.021	13.311 +/- 0.387	9.103 +/- 0.224	109.1 +/- 1.9	64.02 +/- 2.51	68	57	
		1170	0.2	0.264 +/- 0.012	1.302 +/- 0.095	4.933 +/- 0.408	109.7 +/- 8.4	3.71 +/- 0.72	40	3	

Notes:

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

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

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

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